

MICROMETERS

All micrometers, unless otherwise indicated, are supplied with:

- Satin-Chrome Finish Sleeve and Thimble
- Fitted Case
- Appropriate Standards

OUTSIDE MICROMETERS AND MICROMETER SETS



SERIES 196:



MEDA micrometers from 0-1 through 3-4 have forged steel frames and plastic insulating plates; micrometers from 4-5 through 11-12 have lightweight enamel frames.

- Carbide tipped measuring faces.
- Locknut
- Ratchet Stop

INCH	Grad. .0001"	
Range	Order No.	Price
0-1"	4753010	
1-2	4753020	
2-3	4753030	
3-4	4753040	
4-5	4753050	
5-6	4753060	
6-7	4753070	
7-8	4753080	
8-9	4753090	
9-10	4753100	
10-11	4753110	
11-12	4753120	

METRIC	Grad. .01mm	
Range (mm)	Order No.	Price
0-25	1960025	
25-50	1962550	
50-75	1965075	
75-100	1967510	
100-125	1961012	
125-150	1961215	
150-175	1961517	
175-200	1961720	
200-225	1962022	
225-250	1962225	
250-275	1962527	
275-300	1962730	

SETS of above micrometers in fitted cases.



INCH SETS

Range	Grad.	Order No.	Price
0-3"	.0001"	4750401	
0-6	.0001"	4750402	
6-12	.0001"	4750403	
0-12	.0001"	4750404	

METRIC SETS

Range	Grad.	Order No.	Price
0-75	.01mm	1960075	
0-150	.01mm	1960150	
150-300	.01mm	1961530	
0-300	.01mm	1960300	

OUTSIDE MICROMETERS

MIT SERIES 101:



MITUTOYO's Series 101 Micrometers are one of the basic and most popular of all micrometers because of their functional and balanced design.



FEATURES

- Carbide-tipped anvil and spindle, micro-lapped for high degree of flatness and parallelism, greater accuracy and tool life.
- Deep U-throat design for greater work clearance.
- Ratchet Stop or Friction Thimble for consistent repetitive measuring pressure.
- Positive and wear-adjustable spindle lock.
- Standard Bar furnished for micrometers with ranges 2" (50mm) and more.
- Supplied with fitted carrying case.
- Satin-chrome finish throughout.
- Fraction to decimal table on frame (.0001" reading micrometers up to 2" range only).

INCH

Range	Order No.	Grad.	Type	Price
0-1	101105	.001"	Ratchet Stop	
0-1	101109	.001"	Friction Thimble	
0-1	101113	.0001"	Ratchet Stop	
0-1	101117	.0001"	Friction Thimble	
1-2	101106	.001"	Ratchet Stop*	
1-2	101110	.001"	Friction Thimble*	
1-2	101114	.0001"	Ratchet Stop*	
1-2	101118	.0001"	Friction Thimble*	
2-3	101119	.0001"	Ratchet Stop*	
3-4	101120	.0001"	Ratchet Stop*	

*With Standard

OUTSIDE MICROMETERS

MIT SERIES 102:



102 Series Micrometers are the deluxe version of the 101 Series. A pair of black heat insulating grip plates are attached on the frame. The micrometer comes with a friction thimble or ratchet stop to assure consistent measuring pressure, and reduce discrepancies in final readings from one inspector to another. The friction thimble has a speeder to quickly open and close the spindle.

NOTE: 102 Series inch models are featured with fraction to decimal equivalent tables. Metric models have no engravings on the heat-insulating grip plates.

INCH

Range	Order No.	Price	Grad.	Type
0-1	102327		.0001"	Ratchet
1-2	102328		.0001"	Ratchet w/Standard

METRIC

Range	Order No.	Price	Grad.	Type
0-25mm	102307		0.001mm	Ratchet
25-50mm	102308		0.001mm	Ratchet w/Standard

0-1" AND 0-25mm OUTSIDE MICROMETER CALIPERS

STARRETT SERIES 230:



Starrett



English & Metric

With Lock Nut and carbide measuring faces. Satin chrome finish - no glare, balanced designed. Mirror lapped finish on anvil and spindle faces. One-piece extra rigid spindle. Hardened threads - ground from the solid. Rigid one piece frame - drop forged steel. Quick reading figures - every thousandth numbered (English reading models).
R = Ratchet Stop F = Friction Thimble

Catalog No.	EDP No.	Range	Graduation	Price
T230XRL	50944	0-1"	.0001"	
T230XFL	50947	0-1"	.0001"	
V230MXRL	56017	0-25mm	0.001mm	
V230MXFL	56016	0-25mm	0.001mm	
910	55397	Case only		

Sent without case unless otherwise ordered.

PROTECTIVE CASES FOR OUTSIDE MICROMETERS



Starrett



Catalog No.	EDP No.	Description	Price
910	55397	1"/ 25mm	
913	55400	2"/ 50mm	
436ZZ-3	55222	3"/ 75mm	
436ZZ-4	55223	4"/ 100mm	
436ZZ-5	55224	5"/ 125mm	
436ZZ-6	55225	6"/ 150mm	
436ZZ-7	55276	7"/ 175mm	
436ZZ-8	55277	8"/ 200mm	
436ZZ-9	55278	9"/ 225mm	
436ZZ-10	55279	10"/ 250mm	
436ZZ-11	55280	11"/ 275mm	
436ZZ-12	55281	12"/ 300mm	

MICROMETER STAND

SERIES 345:



PANA VISE

- Delrin® contact pads firmly hold your micrometer.
- Knob adjustment controls the holding pressure.
- Sturdy die-cast aluminum head with 5/8" diameter post.
- Base permits 90° tilt, 360° turn and 360° rotation
- Base has three 1/4" countersunk holes on a 4-5/16" bolt circle for easy attachment to work benches.



Order No. 3450391
Price

364

OUTSIDE MICROMETERS (0-6", 0-150mm RANGE)

STARRETT SERIES 436:

Starrett



Precision performance combined with strength, rigidity, lightness and moderate price. Forged frames, ribbed for extra strength, have black enamel finish and are tapered for use in narrow slots and tight places. Good balance, easy handling. Satin chrome finish on sleeve and thimble. Staggered lines and distinct figures on sleeve. Quick-reading figures on thimble with every thousandth numbered. Micro-lapped finish on anvil and spindle faces. One-piece hardened spindle with threads ground from the solid and stabilized. Convenient decimal equivalents on the thimble. 1 - 6" & 25 - 150mm models sent in fitted plastic case.

INCH

Range	Grad.	Description	Catalog No.	EDP No.	Price
0 - 1"	.001"	Plain	436.1P-1	67990	
0 - 1	.001		436.1RL-1	67993	
1 - 2	.001	With ratchet stop, lock nut	436.1RL-2	9968002	
2 - 3	.001		436.1RL-3	9968010	
3 - 4	.001		436.1RL-4	9968017	
5 - 6	.001		436.1RL-5	68023	
5 - 6	.001		436.1RL-6	68029	

CARBIDE MEASURING FACES AND LOCK NUT

Range	Grad.	Description	Catalog No.	EDP No.	Price
0 - 1"	.0001"	R = With Ratchet Stop	T436.1XRL-1	67997	
1 - 2	.0001		T436.1XFL-1	67999	
1 - 2	.0001	F = With Friction Thimble	T436.1XRL-2	968005	
			T436.1XFL-2	968007	
2 - 3	.0001		T436.1XRL-3	68013	
			T436.1XFL-3	968015	
3 - 4	.0001		T436.1XRL-4	68019	
			T436.1XFL-4	68021	
4 - 5	.0001	T436.1XRL-5	68025		
		T436.1XFL-5	68027		
5 - 6	.0001	T436.1XRL-6	68031		
		T436.1XFL-6	68033		

METRIC

Range mm	Description	Grad.	Catalog No.	EDP No.	Price
0-25	Friction Thimble, Lock Nut, Carbide Faces	0.01mm	436.1MXFL-25	68050	
25-50	Ratchet Stop, Lock Nut, Carbide Faces	0.01mm	436.1MXRL-50	68053	
25-50		0.001mm	V436.1MXRL-50	68054	
50-75	Ratchet Stop, Lock Nut, Carbide Faces	0.01mm	436.1MXRL-75	68056	
50-75		0.001mm	V436.1MXRL-75	968057	
75-100	Ratchet Stop, Lock Nut, Carbide Faces	0.01mm	436.1MXRL-100	68059	
75-100		0.001mm	V436.1MXRL-100	968060	
100-125	Ratchet Stop, Lock Nut, Carbide Faces	0.01mm	436.1MXRL-125	68062	
100-125		0.001mm	V436.1MXRL-125	68063	
125-150	Ratchet Stop, Lock Nut, Carbide Faces	0.01mm	436M.1XRL-150	68065	
125-150		0.001mm	V436.1MXRL150	68066	

MICROMETER WITH INSULATED FRAME

STARRETT SERIES 231:



Range: 0-1", Graduation: .0001"

- Slightly heavier micrometer with thermal insulators mounted on the frame front and rear.
- Quick-reading features – every thousandth numbered.
- Ring-type knurled lock nut for quick and sure locking.
- Combination ratchet and speeder.
- Carbide measuring faces.

Catalog No.	EDP No.	Price
T231XRL	63967	

0-24", 0-600mm OUTSIDE MICROMETER CALIPERS SETS

STARRETT SERIES 436:



Recommended for mechanics, automotive service and machine shops, tool rooms, inspection departments and wherever gaging involves a wide range of measurements. All sets come in an attractive, protective case which keeps micrometers and standards together readily accessible.

Ratchet stop except where noted (*).

Catalog No.	EDP No.	Range	Graduation	Price
WITH LOCKNUT, RATCHET STOP*, CARBIDE FACES				
ST436.1AXRLZ	68037	0-3"	.0001"	
ST436.1AXFLZ*	68038	0-3"	.0001"	
S436.1MAXRLZ	68068	0-75mm	0.01mm	
SV436.1MAXRLZ	68069	0-75mm	0.001mm	
ST436.1BXRLZ	68041	0-4"	.0001"	
S436.1MBXRLZ	68071	0-100mm	0.01mm	
SV436.1MBXRLZ	68072	0-100mm	0.001mm	
ST436.1CXRLZ	68045	0-6"	.0001"	
ST436.1CXFLZ*	68046	0-6"	.0001"	
S436.1MCXRLZ	68074	0-150mm	0.01mm	
SV436.1MCXRLZ	968075	0-150mm	0.001mm	
ST436.1DXRLZ	64465	6-12"	.0001"	
S436.1MDXRLZ	64461	150-300mm	0.01mm	
ST436.1EXRLZ	52030	0-12"	.0001"	
S436.1MEXRLZ	52014	0-300mm	0.01mm	
S436.1FXRLZ	64466	12-24"	.001"	
S436.1MFXRLZ	64462	300-600mm	0.01mm	

OUTSIDE MICROMETERS (7-12", 150-300mm RANGE)

STARRETT SERIES 436:



Micrometers have no-glare satin chrome finish on sleeves and thimbles and black wrinkled finish on frames which are perforated for lightness. Thimbles are large, well balanced, and have quick-reading figures with every thousandth numbered. .300" Diameter anvils and spindles have micro-lapped measuring faces. One piece spindles are hardened with threads ground from the solid and stabilized.

Range	Grad.	Description	Catalog No.	EDP No.	Price
6 - 7"	.001"	With ratchet stop, lock nut	436RL-7	51684	
7 - 8	.001	With ratchet stop, lock nut	436RL-8	51712	
8 - 9	.001	With ratchet stop, lock nut	436RL-9	51740	
9 - 10	.001	With ratchet stop, lock nut	436RL-10	51768	
10 - 11	.001	With ratchet stop, lock nut	436RL-11	51796	
11 - 12	.001	With ratchet stop, lock nut	436RL-12	51824	



Starrett

Outside Micrometers 13-24" available; please inquire.

Range mm	Description	Grad.	Catalog No.	EDP No.	Price
150-175		0.01mm	436MXRL-175	51706	
175-200		0.01mm	436MXRL-200	51734	
200-225	Ratchet Stop,	0.01mm	436MXRL-225	51762	
225-250	Lock Nut,	0.01mm	436MXRL-250	51790	
250-275	Carbide Faces	0.01mm	436MXRL-275	51818	
275-300		0.01mm	436MXRL-300	51846	

Starrett

Outside Micrometers 325 - 600mm available; please inquire.



Quality Precision Tools

MEGA
Superior Import

Mitutoyo

Starrett

The Choice Is Yours!!!

OUTSIDE MICROMETERS Mitutoyo

MIT SERIES 103:



103126

- Carbide faces.
- Positive locking clamp.
- Friction Thimble or Ratchet Stop for exact repetitive readings.
- Hammertone-green, baked enamel finished frame.
- Clear graduations on satin-chrome finish.
- Complete with fitted carrying case.

INCH				
Range	Order No.	Price	Graduation	Type
0-1	103127		.001	Friction
0-1	103259		.001	Ratchet
0-1	103135		.0001	Friction
1-2	103128		.001	Friction
1-2	103136		.0001	w/Standard Friction w/Standard
METRIC				
0-25mm	103125		0.01mm	Friction
0-25mm	103133		0.001mm	Friction
25-50mm	103126		0.01mm	Friction
25-50mm	103134		0.001mm	w/Standard Friction w/Standard

PRECISION TOOLS

OUTSIDE MICROMETERS Mitutoyo

MIT SERIES 103:

RATCHET STOP TYPE

Among the many series listed in this catalog, the 103 Series is the workhorse of the micrometers. Up to 12" or 300mm, 103 Series micrometers are automatically supplied with a standard bar.



While we show the most popular MITUTOYO items, we can supply their entire range of products; please inquire.



103177



103260



103217

INCH	Graduation .001"	
Range	Order No.	Price
0-1	103177	
1-2	103178	
2-3	103179	
3-4	103180	
4-5	103181	
5-6	103182	
6-7	103183	
7-8	103184	
8-9	103185	
9-10	103186	
10-11	103187	
11-12	103188	

INCH	Graduation .0001"	
Range	Order No.	Price
0-1	103260	
1-2	103262	
2-3	103217	
3-4	103218	
4-5	103219	
5-6	103220	
6-7	103221	
7-8	103222	
8-9	103223	
9-10	103224	
10-11	103225	
11-12	103226	

METRIC	Graduation .01mm	
Range	Order No.	Price
0-25mm	103137	
25-50mm	103138	
50-75mm	103139	
75-100mm	103140	
100-125mm	103141	
125-150mm	103142	
150-175mm	103143	
175-200mm	103144	
200-225mm	103145	
225-250mm	103146	
250-275mm	103147	
275-300mm	103148	

LARGE OUTSIDE MICROMETERS (INCH)

Supplied with fitted case, but without standard.

Graduation .001"

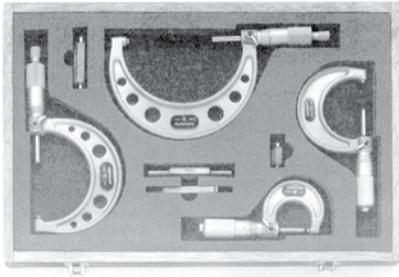
Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price
12-13	103189		19-20	103196		26-27*	103203		33-34	103210	
13-14	103190		20-21	103197		27-28*	103204		34-35	103211	
14-15	103191		21-22	103198		28-29	103205		35-36*	103212	
15-16	103192		22-23	103199		29-30*	103206		36-37*	103213	
16-17	103193		23-24	103200		30-31	103207		37-38*	103214	
17-18	103194		24-25	103201		31-32*	103208		38-39*	103215	
18-19	103195		25-26	103202		32-33*	103209		39-40	103216	

*Includes standard.

MICROMETER SETS *Mitutoyo*

MIT SERIES 103:

Micrometer sets are supplied with all necessary standards and wrenches in a double-latched, foam padded wooden case.



INCH SETS .001" GRADUATION INDIVIDUAL MICROMETERS

Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price
0-12" Set (with 11 Standards)	103905		0-3" Set (with 2 Standards)	103929		0-1	103177	
						1-2	103178	
						2-3	103179	
0-12" Set (with 11 Standards)	103905		0-6" Set (with 5 Standards)	103904		0-1	101105	
						1-2	101106	
						2-3	103179	
			6-12" Set (with 6 Standards)	103906		3-4	103180	
						4-5	103181	
						5-6	103182	
			6-7	103183				
			7-8	103184				
			8-9	103185				
			9-10	103186				
			10-11	103187				
			11-12	103188				

INCH SETS .0001" GRADUATION INDIVIDUAL MICROMETERS

Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price
0-12" Set (with 11 Standards)	103908		0-3" Set (with 2 Standards)	103922		0-1	103135	
						1-2	103136	
						2-3	103217	
0-12" Set (with 11 Standards)	103908		0-6" Set (with 5 Standards)	103907		0-1	103135	
						1-2	103136	
						2-3	103217	
			6-12" Set (with 6 Standards)	103909		3-4	103218	
						4-5	103219	
						5-6	103220	
			6-7	103221				
			7-8	103222				
			8-9	103223				
			9-10	103224				
			10-11	103225				
			11-12	103226				



METRIC SETS 0.01mm GRADUATION INDIVIDUAL MICROMETERS

Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price
0-300mm SET (with 11 Standards)	103914		0-75mm Set (with 2 Standards)	103927		0-25mm	103137	
						25-50mm	103138	
						50-75mm	103139	
0-300mm SET (with 11 Standards)	103914		0-150mm Set (with 5 Standards)	103913		0-25mm	103137	
						25-50mm	103138	
						50-75mm	103139	
			150-300mm Set (with 6 Standards)	103915		75-100mm	103140	
						100-125mm	103141	
						125-150mm	103142	
			150-175mm	103143				
			175-200mm	103144				
			200-225mm	103145				
			225-250mm	103146				
			250-275mm	103147				
			275-300mm	103148				

DIGITAL OUTSIDE MICROMETERS



SERIES 199:

The digital counter indicates direct reading in 1/1000; "tenths" are read by means of a clearly marked vernier scale.

- Carbide tipped measuring faces.
- Locknut
- Ratchet Stop



INCH

Range	Grad.	Order No.	Price
0-1	.0001	1450601	
1-2	.0001	1450602	
2-3	.0001	1450603	
3-4	.0001	1450604	

Set of above in fitted case.

0-3	.0001	1450649	
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DIGITAL OUTSIDE MICROMETERS

STARRETT SERIES 216:



Digital micrometers make readings faster and easier. Thousandths of an inch are read directly from a counter. Ten-thousandths of an inch are taken from a quick-reading vernier scale on the micrometer sleeve. The frame-mounted counter saves considerable handling time since its numbers can be read without removing fingers from thimble or micrometer from hand.

Available with ratchet stop or friction thimble to assure repeat accuracy of readings and with lock nut to secure the spindle at any reading. Micro-lapped anvil and spindle faces. Carbide measuring faces. Hardened threads ground from the solid and stabilized. Balanced design throughout with rugged one-piece frame of drop-forged steel to assure stability. Micrometers have no-glare black finish frame with satin chrome finish on thimble and sleeve. Case must be ordered separately

- .001" or .01 mm is read directly from the counter.
- .0001" or .001 mm is read from the vernier scale on the micrometer sleeve.

RATCHET STOP

Range	Catalog No.	EDP No.	Price
Graduation .001"			
0 - 1"	216XRL-1	55955	
Graduation .0001"			
0 - 1"	T216XRL-1	55959	
1 - 2"	T216XRL-2	56156	
2 - 3"	T216XRL-3	63491	
3 - 4"	T216XRL-4	63492	
4 - 5"	T216XRL-5	63493	
5 - 6"	T216XRL-6	63494	
Graduation 0.01mm			
0-25mm	216MXRL-25	55983	
25-50mm	216MXRL-50	65602	
50-75mm	216MXRL-75	65603	
75-100mm	216MXRL-100	65604	
100-125mm	216MXRL-125	64351	
125-150mm	216MXRL-150	9964352	
Graduation 0.001mm			
0-25mm	V216MXRL-25	56037	
25-50mm	V216MXRL-50	64348	
50-75mm	V216MXRL-75	64349	
75-100mm	V216MXRL-100	64350	

FRICTION THIMBLE

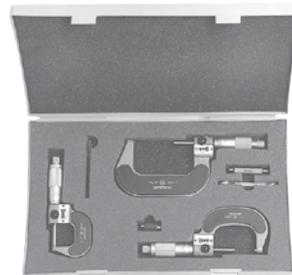
Range	Catalog No.	EDP No.	Price
Graduation .001"			
0 - 1"	216XFL-1	55956	
Graduation .0001"			
0 - 1"	T216XFL-1	55960	
1 - 2"	T216XFL-2	56157	
2 - 3"	T216XFL-3	63634	
3 - 4"	T216XFL-4	63635	
Graduation 0.01mm			
0-25mm	216MXFL-25	55984	
Graduation 0.001mm			
0-25mm	V216MXFL-25	56036	

Digital micrometers 6-12" and 175-300mm available; please inquire.



DIGIT-OUTSIDE MICROMETERS Mitutoyo

MIT SERIES 193:



FEATURES:

- Mechanical counter for quick and error-free reading.
 - Direct readout on the counter to .001"/0.01mm.
 - Carbide-tipped measuring faces.
 - Supplied with all necessary standards.
- Although conventional thimble and sleeve may not be read frequently, they are incorporated in this series to verify the digital counter's readings and to indicate accuracy.

INCH Friction Thimble

Range	Order No.	Graduation	Price
0-1	193201	.001	
0-1	193211	.0001	

INCH Ratchet Stop

Range	Order No.	Graduation	Price
1-2	193212	.0001	
2-3	193213	.0001	
3-4	193214	.0001	
4-5	193415	.0001	
5-6	193416	.0001	
6-7	193417	.0001	
7-8	193418	.0001	
8-9	193419	.0001	
9-10	193420	.0001	
10-11	193421	.0001	

DIGIT MICROMETER SETS - INCH (in fitted case)

Range	Order No.	Graduation	Price
0-3	193923	.0001	
0-6	193930	.0001	

METRIC Ratchet Stop

Range	Order No.	Graduation	Price
0-25mm	193101	0.01mm	
0-25mm	193111	0.001mm	
25-50mm	193102	0.01mm	
25-50mm	193112	0.001mm	
50-75mm	193103	0.01mm	
50-75mm	193113	0.001mm	
75-100mm	193104	0.01mm	
75-100mm	193114	0.001mm	
100-125mm	193305	0.01mm	
125-150mm	193306	0.01mm	
150-175mm	193307	0.01mm	
175-200mm	193308	0.01mm	
200-225mm	193309	0.01mm	
225-250mm	193310	0.01mm	

DIGIT MICROMETER SETS - METRIC (in fitted case)

Range	Order No.	Graduation	Price
0-75mm	193901	0.01mm	
0-75mm	193915	0.001mm	
0-150mm	193908	0.01mm	

ELECTRONIC MICROMETERS

STARRETT SERIES 795:
STARRETT SERIES 796:



Starrett 795 and 796 Electronic Micrometers provide an IP67 level of protection against coolant, water, chips, dirt, dust, and other contaminants in hostile shop environments.

The 795 includes an RS232 output port for data transmission and works well with Starrett DataSure® Wireless Data Collection Systems. The 796 has all of the features of the 795 except it does not include output.

Features and Specifications

- Large, easy-to-read (.275"/7mm), high-contrast LCD digital readout
- Smooth friction thimble for uniform pressure
- Two 3-volt batteries included for more than one year of normal usage
- Micro-lapped carbide measuring faces
- Automatic OFF after 20 minutes of nonuse
- Instant inch/millimeter conversion
- Measurement HOLD button
- Ability to zero tool at any position as well as retain and return to the true zero reading of the micrometer
- Resolution: .00005" (0.001mm)
- Accuracies: Inch: ±.0001"
Metric: ±.002mm

Range	Description	Catalog No.	EDP No.	Price
0-1"/0-25mm	Friction Thimble, spindle lock, carbide faces, shell & thimble inch grads., with output & case	795XFL-1	67827	
0-1"/0-25mm	Ratchet stop, lock nut, carbide faces, shell & thimble inch grads., with output & case	795XRL-1	69085	
0-25mm"/0-.984"	Friction Thimble, spindle lock, carbide faces, shell & thimble metric grads., with output & case	795MEXFL-25	69077	
0-1"/0-25mm	Friction Thimble, spindle lock, carbide faces, shell & thimble inch grads., with case, no output	796XFL-1	67828	
0-1"/0-25mm	Ratchet stop, lock nut, carbide faces, shell & thimble inch grads. with case, no output	796XRL-1	69089	
0-25mm	Friction Thimble, spindle lock, carbide faces, shell & thimble metric grads., with case, no output	796MXFL-25	69084	



DIGITAL ELECTRONIC OUTSIDE MICROMETERS



SERIES 725:

- 5 keys Positive-designed electronic micrometer
- Large and clear LCD.
- Absolute and incremental conversion.
- Friction thimble.
- Data hold and Tolerance set.
- SPC output



Range	Graduation	Order No.	Price
0-1"/0-25mm	.00005"/.001mm	7250001	
1-2"/25-50mm	.00005"/.001mm	7250012	
2-3"/50-75mm	.00005"/.001mm	7250023	

ELECTRONIC DIGITAL OUTSIDE MICROMETER (WITHOUT OUTPUT)



STARRETT SERIES 3732:

This tool is a basic electronic micrometer. It has no output but has all the ease of handling and accuracy features of No. 733 full function micrometer (see next page).



Accuracy: ±.0001", ±0.002mm

- Instant inch/millimeter conversion.
- ON/OFF button (auto off after 30 minutes of non-use).
- Ability to zero tool at any position as well as retain and return to the true zero reading of the micrometer
- Large, high-contrast LCD readout.
- Balanced frame and smooth friction thimble with satin chrome finish.
- Extremely hard, stable, one-piece spindle for superb accuracy.
- Micro-lapped carbide measuring faces.
- Ring-type knurled locking mechanism.
- Includes fitted plastic case.

Catalog No.	EDP No.	Resolution		Range		Price
		Inch	mm	Inches	mm	
3732XFL-1	912268	.00005	0.001	0-1	0-25	
PT99492	65650	One 3-Volt Battery No. CR2032				

MDC-LITE DIGITAL MICROMETER - WITHOUT SPC OUTPUT

MIT SERIES 293:

FEATURES

- Inch/Metric Key
- The world's lightest digital micrometer.
- Made slim for easy access to stepped feature.
- Measuring Range through 1"/25.4mm with resolution to .00005"/0.001mm
- Accuracy ±.0001/ ±.2µm • Measuring faces carbide tipped.
- Includes a zero-set key for easy origin setting.
- A ratchet stop or friction thimble for a constant measuring force.
- Measurement readout with large characters on the LCD screen.
- The display stays on for the entire battery life (approx. 1.2 years).
- Battery: SR44 (1pc.) (Part No. 541980).
- No spindle clamp, no data output.



Ratchet Stop



Friction Thimble

MDC-Lite is an economy version Digimatic Micrometer with a slimmer design and lighter weight than other models. It reduces operator fatigue, and measures in areas other micrometers can't touch.

Order No.	Remarks	Price
293831	Ratchet Stop	
293832	Friction Thimble	

ELECTRONIC DIGITAL OUTSIDE MICROMETERS - WITH OUTPUT

STARRETT SERIES 733:



This is the new Starrett No. 733 full function electronic digital outside micrometer with all the features and controls you need to measure, analyze and record the information you want. The anvil and spindle diameter is .250" (6.35mm). Micrometers are furnished in protective cases except for the 25mm model. Standards not furnished and must be ordered separately.

READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

EASE-OF-HANDLING, ACCURACY AND LONG-LIFE FEATURES

- Balanced frame design for comfortable and accurate measuring
- Ring-type knurled lock nut for quick and sure locking
- Smooth friction thimble for uniform pressure
- Gracefully designed tapered frame for use in narrow slots and tight places
- ±.0001" or ±0.002mm Accuracy
- Extremely hard and stable one-piece spindle
- Micro-lapped carbide measuring faces
- Starrett designed electronic microprocessor
- One battery for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Easiest keyboard control by use of the new SHIFT button
- Instant inch/millimeter conversion.
- "ME" Millimeter Models turn on in millimeter mode after installation of new battery.
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits, except on straight metric models
- Output jack allows data transmission to the following peripherals for analysis, data collection and hard copy documentation:

Starrett 772 Series Advanced Data Collection Systems
 Starrett 761 Series Data Multiplexers
 Other devices that support RS232-C



While we show the most popular **Starrett** items, we can supply their entire range of products; please inquire.

With standard inch graduations on shell and thimble.

Range	Resolution	Catalog No.	EDP No.	Price
0-1"/0-25mm	.00005"/0.001mm	733XFL-1	64239	
1-2"/25-50mm	.00005"/0.001mm	733XFLZ-2	64241	
2-3"/50-75mm	.00005"/0.001mm	733XFLZ-3	64242	
3-4"/75-100mm	.00005"/0.001mm	733XFLZ-4	64243	
4-5"/100-125mm	.0001"/0.001mm	733XFLZ-5	64244	
5-6"/125-150mm	.0001"/0.001mm	733XFLZ-6	64245	
6-7"/150-175mm	.0001"/0.001mm	733XFLZ-7	64246	
7-8"/175-200mm	.0001"/0.001mm	733XFLZ-8	64247	
8-9"/200-225mm	.0001"/0.001mm	733XFLZ-9	64248	
9-10"/225-250mm	.0001"/0.001mm	733XFLZ-10	64249	
10-11"/250-275mm	.0001"/0.001mm	733XFLZ-11	64250	
11-12"/275-300mm	.0001"/0.001mm	733XFLZ-12	64251	
12-13"/300-325mm	.0001"/0.001mm	733XFLZ-13	64415	
13-14"/325-350mm	.0001"/0.001mm	733XFLZ-14	64416	
14-15"/350-375mm	.0001"/0.001mm	733XFLZ-15	64417	
15-16"/375-400mm	.0001"/0.001mm	733XFLZ-16	64418	
16-17"/400-425mm	.0001"/0.001mm	733XFLZ-17	64419	
17-18"/425-450mm	.0001"/0.001mm	733XFLZ-18	64420	
18-19"/450-475mm	.0001"/0.001mm	733XFLZ-19	64421	
19-20"/475-500mm	.0001"/0.001mm	733XFLZ-20	64422	
20-21"/500-525mm	.0001"/0.001mm	733XFLZ-21	64423	
21-22"/525-550mm	.0001"/0.001mm	733XFLZ-22	64424	
22-23"/550-575mm	.0001"/0.001mm	733XFLZ-23	64425	
23-24"/575-600mm	.0001"/0.001mm	733XFLZ-24	64426	

With standard millimeter graduations on shell and thimble.

Range	Resolution	Catalog No.	EDP No.	Price
0-25mm	0.001mm/.0001"	733MEXFL-25	65440	
25-50mm	0.001mm/.0001"	733MEXFLZ-50	65441	
50-75mm	0.001mm/.0001"	733MEXFLZ-75	66079	
75-100mm	0.001mm/.0001"	733MEXFLZ-100	66080	
100-125mm	0.001mm/.0001"	733MEXFLZ-125	66081	
125-150mm	0.001mm/.0001"	733MEXFLZ-150	66082	
150-175mm	0.001mm/.0001"	733MEXFLZ-175	66083	
175-200mm	0.001mm/.0001"	733MEXFLZ-200	66084	
200-225mm	0.001mm/.0001"	733MEXFLZ-225	66085	
225-250mm	0.001mm/.0001"	733MEXFLZ-250	66086	
250-275mm	0.001mm/.0001"	733MEXFLZ-275	66087	
275-300mm	0.001mm/.0001"	733MEXFLZ-300	66088	
300-325mm	0.001mm/.0001"	733MEXFLZ-325	66089	
325-350mm	0.001mm/.0001"	733MEXFLZ-350	66090	
350-375mm	0.001mm/.0001"	733MEXFLZ-375	66091	
375-400mm	0.001mm/.0001"	733MEXFLZ-400	66092	
400-425mm	0.001mm/.0001"	733MEXFLZ-425	66093	
425-450mm	0.001mm/.0001"	733MEXFLZ-450	66094	
450-475mm	0.001mm/.0001"	733MEXFLZ-475	66095	
475-500mm	0.001mm/.0001"	733MEXFLZ-500	66096	
500-525mm	0.001mm/.0001"	733MEXFLZ-525	66097	
525-550mm	0.001mm/.0001"	733MEXFLZ-550	66098	
550-575mm	0.001mm/.0001"	733M3XFLZ-575	66099	
575-600mm	0.001mm/.0001"	733MEXFLZ-600	66100	

Accessories/Parts

Description	Catalog No.	EDP No.	Price
0-25mm Deluxe Padded Case	949	63874	
Adapter from No. PT22938	PT61768	66454	
Cable to IBM-PC (RS232C)			
Shielded Cable to Nos. 761/772 Series Starrett Modules, No. 768 Remote Display, No. PT61768 Adapter	PT22938	64059	
One 3-volt Battery No. CR2450	PT61120	65446	
Computer Interface Cable complete to IBM-PC (RS232C)	PT61963	66636	

QUICKMIKE WITH ABSOLUTE ENCODER

MIT SERIES 293:

The Quickmike is a revolution in digital micrometer technology from Mitutoyo the world leader in precision measuring instruments and tools. Because of its extraordinary features the Quickmike allows high accuracy measurements to be performed even by unskilled operators in drastically reduced inspection time.

FEATURES:

- Quick non-rotating 1.2" (30mm) stroke spindle... the spindle advances .4" (10mm) per thimble rotation- no-torsion on the workpiece, reducing inspection time.
- Absolute Encoder... set the origin only once! The absolute linear scale tracks the origin throughout the life of battery, meaning no more zero setting, pre-setting or overspeed errors.
- IP-54 protection... resist water splash & shop floor contaminants for safe operation in harsh machine shop environments (when not connected with data output cable).
- Large LCD readout for easy reading.
- SPC data output.
- Fitted Case



SPECIFICATIONS

Resolution: .00005"/0.001mm (.00012" or less on 293-679)

Measuring Faces: Carbide

FUNCTIONS:

- Origin setting
- Data Hold
- Inch/Metric Conversion
- SPC output
- Low battery voltage alarm.
- Scale contamination alarm.

Order No.	Range	Price
293-676	0-1.2"/0-30mm	
293-677	1-2.2"/25-55mm	
293-678	2-3.2"/50-80mm	
293-679	3-4.2"/75-105mm	

STANDARD ACCESSORIES:

Silver oxide cell (SR-44) 1pc, necessary standard, fitted case

For SPC output order connecting cable 937387 (1m) or 965013(2m).

Replacement Battery: 541980 (1pc.), 541980-10(10pcs/SET).

DIGIMATIC MICROMETERS

MIT SERIES 293:

WITH SPC OUTPUT

INCH/METRIC

Order No.	Range	Resolution	Accuracy	Remarks	Price
293-330	0-1" 0-25.4mm	.00005" 0.001mm	±.00005	with SPC output Ratchet Stop, IP 65*	
293-331	1-2" 25.4-50.8mm	.00005" 0.001mm	±.00005	with SPC output and Standard Ratchet Stop, IP 65*	
293-332	2-3" 50.8-76.2mm	.00005" 0.001mm	±.00005	with SPC output and Standard Ratchet Stop, IP 65*	
293-333	3-4" 76.2-101.6mm	.00005" 0.001mm	±.0001	with SPC output and Standard Ratchet Stop, IP65*	
293-350-10	4-5" 101.6-127.0mm	.0001" 0.001mm	±.0001	with SPC output and Standard Ratchet Stop	
293-351-10	5-6" 127.0-152.4mm	.0001" 0.001mm	±.0001	with SPC output and Standard Ratchet Stop	
293-352-10	6-7" 152.4-177.8mm	.0001" 0.001mm	±.00015"	with SPC output and Standard Ratchet Stop	
293-353-10	7-8" 177.8-203.2mm	.0001" 0.001mm	±.00015	with SPC output and Standard Ratchet Stop	
293-354-10	8-9" 203.2-228.6mm	.0001" 0.001mm	±.00015	with SPC output and Standard Ratchet Stop	
293-355-10	9-10" 228.6-254.0mm	.0001" 0.001mm	±.0002	with SPC output and Standard Ratchet Stop	
293-356-10	10-11" 254.0-279.4mm	.0001" 0.001mm	±.0002	with SPC output and Standard Ratchet Stop	
293-357-10	11-12" 279.4-304.8mm	.0001" 0.001mm	±.0002"	with SPC output and Standard Ratchet Stop	
293-771	12-13" 304.8-330.2mm	.0001" 0.001mm	±.00025"	with SPC output and Standard Ratchet Stop	
293-772	13-14" 330.2-355.6mm	.0001" 0.001mm	±.00025"	with SPC output and Standard Ratchet Stop	
293-773	14-15" 355.6-381.0mm	.0001" 0.001mm	±.00025"	with SPC output and Standard Ratchet Stop	
293-774	15-16" 381.0-406.4mm	.0001" 0.001mm	±.0003"	with SPC output and Standard Ratchet Stop	
293-775	16-17" 406.4-431.8mm	.0001" 0.001mm	±.0003"	with SPC output and Standard Ratchet Stop	
293-776	17-18" 431.8-457.2mm	.0001" 0.001mm	±.0003"	with SPC output and Standard Ratchet Stop	
293-777	18-19" 457.2-482.6mm	.0001" 0.001mm	±.00035"	with SPC output and Standard Ratchet Stop	
293-778	19-20" 482.6-508.0mm	.0001" 0.001mm	±.00035	with SPC output and Standard Ratchet Stop	
293-335	0-1" 0-25.4mm	.00005" 0.001mm	±.00005"	with SPC output and Standard Friction Thimble, IP 65*	
293-336	1-2" 25.4-50.8mm	.00005" 0.001mm	±.00005"	with SPC output and Standard Friction Thimble, IP 65*	

New Ratchet-Friction Thimble



293-344

Ratchet Stop



293-340



293-771



Standard Friction Thimble
293-348

FEATURES

- Extra large LCD readout.
- Lightweight design and digital display allow measurements to be taken with the micrometer held in one hand.
- Two measuring modes-ABS (absolute) and INC (incremental)-for efficient measurement (with SPC output Model).
- Functions available: Origin setting, Inch/mm selection, Zero-setting, Data Hold only with SPC Models, Error alarm, Auto-sleep, Data output.
- Can be linked to the SPC system.
- Three types of constant-force devices are available: ratchet stop, ratchet-friction thimble, and friction thimble.
- Carbide-tipped measuring faces.
- Micrometers of ranges up to 4"(100mm) are "One-touch preset type", whereas those of ranges exceeding 4"(100mm) are "All-digit preset type".
- Origin setting function (ABS mode): The origin point value can be displayed with a touch of the ORIGIN button. (It is also possible to set any value as the origin.)
- Zero setting function (INC mode)

*IP 65 Dust/Water Protection Level

(Continued)

DIGIMATIC MICROMETERS (Continued)

MIT SERIES 293:

WITH AND WITHOUT SPC OUTPUT



293-344
NEW RATCHET - FRICTION THIMBLE



293-340
RATCHET STOP



293-348
STANDARD FRICTION THIMBLE

INCH/METRIC IP 65 Dust/Water Protection Level **WITHOUT SPC OUTPUT**

Order No.	Range	Resolution	Accuracy	Remarks	Price
293-340	0-1" 0-25.4mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet Stop	
293-341	1-2" 25.4-50.8mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet Stop	
293-342	2-3" 50.8-76.2mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet Stop	
293-343	3-4" 76.2-101.6mm	.0001" 0.001mm	±.00001"	Without SPC output Ratchet Stop	
293-344	0-1" 0-25.4mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet-Friction Thimble	
293-345	1-2" 25.4-50.8mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet-Friction Thimble	
293-346	2-3" 50.8-76.2mm	.00005" 0.001mm	±.00005"	Without SPC output Ratchet-Friction Thimble	
293-347	3-4" 76.2-101.6mm	.00005" 0.001mm	±.0001"	Without SPC output Ratchet-Friction Thimble	
9293-348	0-1" 0-25.4mm	.00005" 0.001mm	±.00005"	Without SPC output Friction Thimble	
293-349	0-1" 0-25.4mm	.0001" 0.001"	±.0001"	Without SPC output Ratchet-Friction Thimble	

SETS INCH/METRIC *IP 65 Dust/Water Protection Level **WITH SPC OUTPUT**

Order No.	Range	Resolution	Remarks	Price
293-960	0-3" (3 pcs set) 0-76.2mm	.00005" 0.001mm	With SPC output & Standards (3 pcs Micrometer SET) Ratchet Stop	
293-961	0-4" (4 pcs set) 0-25.4mm	.00005" 0.001"	With SPC output & Standards (4 pcs Micrometer SET) Rathchet Stop	

Metric Only Reading (No Inch/mm function, metric thimble)

WITHOUT SPC OUTPUT

Order No.	Range	Resolution	Accuracy	Remarks	Price
293-240	0-25mm	0.001mm	±.001mm	Without SPC output, Ratchet Stop	
293-241	25-50mm	0.001mm	±.001mm	Without SPC output, Ratchet Stop	
293-242	50-75mm	0.001mm	±.001mm	Without SPC output, Ratchet Stop	
293-243	75-100mm	0.001mm	±.002mm	Without SPC output, Ratchet Stop	
293-244	0-25mm	0.001mm	±.001mm	Without SPC output, Ratchet-Friction Thimble	
293-245	25-50mm	0.001mm	±.001mm	Without SPC output, Friction Thimble	
293-246	50-75mm	0.001mm	±.001mm	Without SPC output, Friction Thimble	
293-247	75-100mm	0.001mm	±.002mm	Without SPC output, Friction Thimble	
293-248	0-25mm	0.001mm	±.001mm	Without SPC output, Friction Thimble	

Replacement Battery: **541980** (1 pc.), **541980-10** (10 pcs./set)

MICROMETER STANDARDS

SERIES 196:



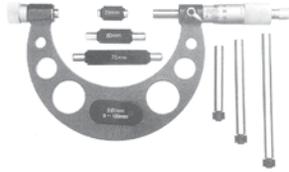
Size Inch	Order No.	Price	Size mm	Order No.	Price
1"	1960011		25mm	1960026	
2"	1960012		50mm	1960050	
3"	1960013		75mm	1960076	
4"	1960014		100mm	1960100	
5"	1960015		125mm	1960125	
6"	1960006		150mm	1960151	
7"	1960007		175mm	1960175	
8"	1960008		200mm	1960200	
9"	1960009		225mm	1960225	
10"	1960010		250mm	1960250	
11"	1960111		275mm	1960275	

Mitutoyo & Starrett
STANDARDS available.
See our website
or inquire.



**INTERCHANGEABLE ANVIL
OUTSIDE MICROMETERS**

SERIES 203:



- Ratchet stop and lock nut
- High accuracy interchangeable anvils
- Carbide measuring faces
- Laser engraved graduations
- Enamel frame
- With standards in a fitted case

Range	Grad	Order No.	Price
0-6"	.001"	9030006	
6-12"	.001"	2030612	

**INTERCHANGEABLE ANVIL
OUTSIDE MICROMETERS**

OVER 12" / 300MM LONG RANGE MODEL
SERIES 203:



FEATURES: Pipe Construction

- Pipe combined steel frame provides lightness plus extreme rigidity for perfect balance
- Carbide measuring faces
- With standards in a fitted case
- Rapid stop and lock nut

Range	Graduation	Order No.	Price
12-16"	.001"	201216	
16-20"	.001"	9201620	
20-24"	.001"	202024	

**DIGITAL ELECTRONIC
INTERCHANGEABLE ANVIL
MICROMETERS**

SERIES 725:



FEATURES

- Friction Thimble
- With 5 key deluxe micrometer head
- Carbide Measuring Faces
- With Standards
- Fitted Case

Range	Graduation	Order No.	Price
0-6"/0-150mm	0.00005"/0.001mm	7256006	
6-12"/150-300mm	0.00005"/0.001mm	7256612	

**7 - PC. PRECISION
MICROMETER
ATTACHMENT KIT**

SERIES 197:



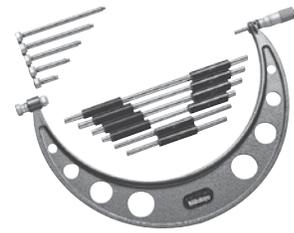
Anvil Type	Specifications
Disc	.500
Ball	.200
Spline	.100
Super Spline	.050
Comparator	.040 Face x 30°
Blade	.030
Knife	.020 Face x 30°

All anvils are held on with its own individual boot. Hardened and ground. Finest quality steel. Highest quality surface finish. Each anvil hand inspected. Plastic case. Micrometer not included.

Order No.	5250007
Price	

**WIDE RANGE
OUTSIDE MICROMETERS**

MIT SERIES 104:
WITH INTERCHANGEABLE ANVILS



Furnished anvils are quickly interchanged, and are etched with length. Adjustable stopper on the anvil permits calibration of the overall dimension at the anvil. The .315" (8mm) diameter anvil is microlapped but not carbide tipped. The spindle diameter is .250" (up to 12") and .315" (over 12"). The spindles are carbide tipped and microlapped for lasting accuracy. Appropriate standards supplied.

Resolution .001"

Remarks	Range	Order No.	Price
Six Anvils	0-6"	104137	
	6-12	104138	
	12-18	104201	
	18-24	104202	
	24-30	104203	
	30-36	104204	
Four Anvils	36-42	104205	
	12-16	104152	
	16-20	104153	
	20-24	104154	
	24-28	104155	
	28-32	104156	
	32-36	104157	
	36-40	104158	

Resolution 0.01mm

Remarks	Range (mm)	Order No.	Price
Four Anvils	300-400	104142	
	400-500	104143	
	500-600	104144	
	600-700	104145	
Six Anvils	0-150	104135	
	150-300	104136	

**MICROMETER BALL ATTACHMENT
SERIES 197:**

- Measures curved surfaces
- Hardened chrome ball
- Reinforced band
- Precision molded neoprene
- Ball Diameter .200"
- Fits all Micrometers up to 12"



Order No.	5250001	Price	
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ELECTRONIC DIGITAL INTERCHANGEABLE ANVIL MICROMETERS (WITH OUTPUT)

STARRETT SERIES: 714:



Each micrometer is equipped with a series of easily interchangeable anvils, thus providing the full range in steps of one inch with a single micrometer. Suitable wrenches are furnished to make necessary adjustments. The larger sizes have .300" (7.6mm) anvil and spindle diameters for ease of use on larger work.

READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Conventional graduations also standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- Starrett designed electronic microprocessor
- One battery for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Easiest keyboard control by use of the new SHIFT button
- Instant inch/millimeter conversion
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- Output data to Starrett SPC Plus hardware and software and to IBM PCs
- Includes protective case and all standards

With Standard Inch Graduations on shell and thimble.

Range	Resolution	Catalog No.	EDP No.	Price
0-4"/ 0-100mm	.00005"/0.001mm	714AAFLZ	64427	
2-6"/ 50-150mm		714AFLZ	64428	
6-9"/ 150-225mm		714BFLZ	64429	
6-12"/ 150-300mm		714GFLZ	64430	
9-12"/ 250-300mm	.0001"/0.001mm	714CFLZ	64431	
12-16"/300-400mm		714DFLZ	64432	
16-20"/400-500mm		714EFLZ	64433	
20-24"/500-600mm		714JFLZ	64434	

With Standard Millimeter Graduations on shell and thimble.

Range (mm)	Resolution	Catalog No.	EDP No.	Price
0-100mm/0-4"	0.001mm/.00005"	714MEAAFLZ	66108	
50-150mm/2-6"		714MEAFLLZ	66109	
150-300mm/6-12"		714MEGFLZ	66111	
300-400mm/12-16"	0.001mm/.0001"	714MEDFLZ	66112	
400-500mm/16-20"		714MEEFLZ	66113	
500-600mm/20-24"		714MEJFLZ	66110	

Accessories/Parts

Part No.	EDP No.	Description	Price
PT61768	66454	Adapter from PT22938 cable to IBM-PC(RS232C)	
PT22938	64059	Shielded cable to 761/772 Series Starrett Modules, 768 Remote Display & No. PT61768 Adapter	
PT61120	65446	One 3-volt Battery No. CR2450	
PT61963	66636	Computer Interface Cable Complete to IBM-PC (RS232C)	

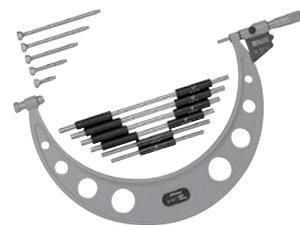
Starrett



DIGIMATIC WIDE RANGE OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

Mitutoyo

MIT SERIES 340:



FEATURES

- Wide measuring range with interchangeable anvils.
- Carbide-tipped spindle.
- The 340 series can be linked to the SPC system.
- Provided with Ratchet Stop for constant force.

ACCURACY

- Flatness: within .000024" /0.6µm for up to 12"/300mm within .00004"/1µm for up to 40"/1000mm
- Parallelism: .00008"
- Measuring Accuracy: ± .0002"

DIGIMATIC FUNCTIONS

Models 340-751 & 752

- Inch/mm • Preset • Zero/ABS • Data Send/Hold

Models 340-713, 714, 715 & 716

- Hold • Inch/mm • On/Off • Preset • Zero/ABS • Data Send

Order No.	Range	LCD Resolution	Remarks	Price
340-351	0-6"/ 0-152.4mm	.00005" 0.0001mm	with 6 Anvils & 5 Standards	
340-352	6-12"/ 152.4-304.8mm	.0005" 0.001mm	with 6 Anvils & 6 Standards	
340-713	12-18"/ 304.8-457.2mm	.0001 0.001mm	with 6 Anvils & 6 Standards	
340-714	18-24"/ 457.2-609.6	.0001 0.001mm	with 6 Anvils & 6 Standards	
340-715	24-30"/ 609.6-762.0mm	.0001 0.001mm	with 6 Anvils & 6 Standards	
340-716	30-36"/ 762.0-914.4	.0001 0.001	with 6 Anvils & 6 Standards	

For SPC output order connecting cable 937387(1m) or 965013(2m). Replacement Battery: 541980 (1pc), 541980-10 (10pcs/SET).

MICROMETER STAND SERIES 197:

MEGA Superior Import

- Designed to allow bench-top use with hand micrometers or other gages which have frame area sufficient to grab onto.
- For 0-4"/100mm micrometers.
- Adjustable to any position and angle
- Attractive finish.



Order No. 5252000

Price:

MUL-T-ANVIL MICROMETERS
STARRETT SERIES 220:



- With round and flat anvils and carbide faced spindle
- Quick-reading figures .001" or 0.01mm
- Handles wide variety of measurements which are impossible to obtain with conventional micrometers.
- Balanced frame and thimble design insure easy handling.
- Anvils are quickly interchanged by single lock screw adjustment.
- Accurate to $\pm .0002"$ or ± 0.004 mm
- Design provides precise and easy readability.
- Ratchet Stop, Lock Nut

Catalog No.	Range	EDP No.	Price
220XRL-1	0-1"	66430	
220XRL-2	1-2"	66432	
220MXRL-25	0-25mm	65050	
220MXRL-50	25-50mm	66434	

DIGITAL ELECTRONIC MULTI-ANVIL MICROMETERS
SERIES 725:



- 5 key Deluxe Model micrometer head
- Friction thimble for exact repetitive readings.
- Chrome-Plated frame.
- Carbide-tipped spindle.
- Interchangeable anvils permit quick accurate measurement of tubing, cylindrical walls, from a hole or slot to an edge, and many hard-to-reach locations.

Range	Graduation	Order No.	Price
0-1"/0-25mm	0.00005"/0.001mm	7254001	
1-2"/25-50mm	0.00005"/0.001mm	7254012	

UNI-MIKE

MIT SERIES 117, 317:



INTERCHANGEABLE ANVIL TYPE



- Measures hard-to-reach locations, such as from a hole or slot to an edge, small tube wall thickness, shoulder to an edge, etc.
- Carbide tipped spindle face. Graduation .0001" or 0.01mm.
- Appropriate standards. Fitted case.

The **MITUTOYO** Uni-Mike has a vise-like special frame, which is designed to hold interchangeable anvils. Two anvils-Flat Anvil (No. 201216) and Rod Anvil (No. 201217) are supplied with Uni-Mike. Three other anvils are available to facilitate special measurements.

Among the supplied anvils, the Rod Anvil with its .118" diameter is useful in checking small tube thicknesses or checking the distance between a drilled hole to the edge of the workpiece. The Flat Anvil is .059" in thickness, and is used to measure shoulders, lands, fins, etc., as well as regular outside dimensions.

Range	Order No.	Price	Remarks
0-1"	117107		Friction Thimble
1-2"	117108		Friction Thimble
0-25mm	117101		Ratchet Stop
25-50mm	117102		Ratchet Stop

DIGIMATIC UNI-MIKE



The 317 Series provides digital readout to .00005"/0.001mm and can be linked to the SPC system. Digimatic functions same as the Digimatic Outside Micrometer **MITUTOYO** Series 293 in the beginning pages of this section.

Range	Order No.	Price	Remarks
0-1"/0-25.4mm	317-351		Friction Thimble
1-2"/25.4-50.8mm	317-352		Friction Thimble

For SPC output order connecting cable **937387** (1m) or **965013** (2m).
Replacement Battery: **541980** (1 pc), **541980-10** (10 pcs/SET)



While we show the most popular **Mitutoyo** items, we can supply their entire range of products; please inquire.

ELECTRONIC DIGITAL MULTI-ANVIL MICROMETERS (0 – 1" and 0 – 25mm)

STARRETT SERIES 790:



Interchangeable anvil micrometer permits quick, accurate measurements of tubing, cylindrical walls, from a hole or slot to an edge, and in many other hard-to-reach places. Two anvils are furnished with the tool – a round anvil, approximately .120" diameter; and a flat anvil, approximately .125" diameter and .060" in thickness. Anvils are rigidly held in a vise-type frame that allows for quick changes by a single lock screw.

- Output capability to Starrett SPC Plus hardware and software and to IBM compatible PCs
- High-contrast LCD readout with large numbers
- Auto shutdown after 30 minutes of idle time
- One-year working battery life
- Error and flashing out-of-tolerance displays
- Zero setting at any location
- Instant inch/mm conversion
- High-low limit settings
- Zero setting at any spindle location
- Limits mode for entering product specifications
- Non-glare satin chrome finish on thimble and sleeve
- Friction thimble
- Ring-type lock nut
- Rigid frame construction and balanced feel

With standard inch graduations on shell and thimble

Range	Catalog Resolution	EDP No.	No.	Price
0-1"/0-25mm .001mm	.00005"/ .001mm	790AFL-1	64048	

With standard millimeter graduations on shell and thimble

0-25mm/0-1"	.001mm/ .00005"	790MEAFL-25	66071	
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Cable Information

Part No.	EDP No.	Price	Description
61768	66454		Adapter and disc from No. PT22938 cable to IBM-PC (RS232C)
PT 22938	64059		Shielded cable to Nos. 761/772 Series Starrett modules, No. 768 remote display and No. PT61768 Adapter
PT61120	65446		One 3-volt battery No. CR2450
PT61963	66636		Computer Interface Cable complete to IBM-PC (RS232C)



While we show the most popular **Starrett** items, we can supply their entire range of products; please inquire.



V-ANVIL MICROMETERS STARRETT SERIES 483, 485:



For checking out-of-roundness in centerless grinding and other machining operations; also for measuring odd-fluted taps, milling cutters, reamers. Direct reading. Carbide facings on spindle and anvils. Anvils match index of cutter teeth. Hardened, ground-from-the-solid spindle threads for accurate reading. No glare satin chrome finish. Quick-reading – every thousandth numbered.

With ratchet stop and lock nut.

Range	Grad.	No. of Flutes Will Measure	Catalog No.	EDP No.	Price
.093 – 1"	.0001"	3	T483XRL-1	52491	
1 – 2"	.0001	3	T483XRL-2	52494	
.078 – 1"	.0001	5	T485XRL	52497	
2-25mm	.01mm	3	483MXRL-25	56046	
2-25mm	.01mm	5	485MXRL	56047	

Fitted cases available, please inquire.

SHEET METAL MICROMETERS STARRETT SERIES 222:



These micrometers reach over the edge of sheet metal and take measurements away from the edge toward the center. Also for other gaging jobs where a deep throat micrometer is needed. Rounded anvil on 1"/25mm size gives a point contact for more accurate gaging; flat anvil also available. 1/2"/ 13mm micrometers have Satin Chrome Finish; 1" micrometer frames have black wrinkle finish.

Grad	Description	Catalog No.	EDP No.	Price
2" Throat Depth; 0 - 1/2" range				
.001"	Ratchet stop, lock nut	222XRL-1/2	50757	
6" Throat Depth; 0 - 1" range				
.001	Ratchet stop, no lock nut	222AXR-1	50762	
50mm Throat Depth; 0 - 13 mm range				
0.01mm	Ratchet stop lock nut	222MRL-13	50758	
150mm Throat Depth; 0 - 25 mm range				
0.01mm	Ratchet stop no lock nut	222MAXR-25	66435	

BLADE TYPE MICROMETERS

STARRETT
SERIES 486:



Starrett



Blade type anvil and spindle for measuring circular form tools, diameter and depth of narrow grooves, slots, keyways, recesses, shallow depths, between lands and fins. Non-rotating spindle prevents blade turning. Blades .030" thick, measure depths to 5/16". Speeder on end of thimble for faster settings and measurements. Specially forged, black enameled frame with satin chrome finish on sleeve and thimble.

Range	Graduation	Catalog No.	EDP No.	Price
0 - 1"	.001"	486P-1	52499	
1 - 2	.001	486P-2	52501	
2 - 3	.001	486P-3	52503	
3 - 4	.001	486P-4	52505	
4 - 5	.001	486P-5	52507	
5 - 6	.001	486P-6	52509	
0-25mm	0.01mm	486MP-25	64257	
25-50mm	0.01mm	486MP-50	64258	
50-75mm	0.01mm	486MP-75	64259	
75-100mm	0.01mm	486MP-100	64260	
100-125mm	0.01mm	486MP-125	64261	
125-150mm	0.01mm	486MP-150	64262	

Sent without case unless otherwise ordered. Attractive, protective case available by ordering No. 436ZZ and one size larger than the micrometer. Example: For No. 486P-2, order 436ZZ-3.

DIGITAL ELECTRONIC BLADE MICROMETERS

SERIES 725:

- Friction thimble
- Chrome-plated frame.
- 5 key deluxe micrometer head.

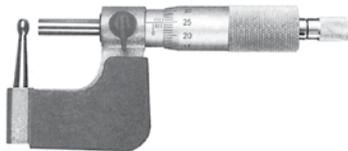


MEJA
Superior Import

Range	Graduation	Order No.	Price
0-1"/0-25mm	0.00005"/0.001mm	7257001	

TUBE MICROMETER

SERIES 203:



MEJA
Superior Import

FEATURES

- Ratchet stop
- Carbide-tipped spindle
- Laser engraved graduations
- Enamel frame

Range	Graduation	Order No.	Price
0-1"	.0001"	1462020	

BLADE MICROMETERS

MIT SERIES 122:
NON-ROTATING SPINDLE

Mitutoyo



- For measurements of narrow grooves, key-ways and other hard to reach dimensions.
- Blade dimensions - .030" wide x .250" long.
- Decimal equivalents marked on frame (1" models 122-125).
- Hammertone green frame finish on 2", 3" and 4" models.
- Quick zero adjustment on the sleeve.
- Appropriate standards supplied.

Graduation .0001" or 0.01mm

Range	Order No.	Price
0-1"	122125	
1-2"	122126	
2-3"	122127	
3-4"	122128	
0-25 mm	122101	
25-50 mm	122102	
50-75 mm	122103	
75-100 mm	122104	

DIGIMATIC BLADE MICROMETERS

MIT SERIES 422:
NON-ROTATING SPINDLE

Mitutoyo



(Functions same as Mitutoyo Series 293 Outside Micrometers shown at the beginning of this section.)

INCH/METRIC
Resolution .00005"/0.001mm

Range	Order No.	Price
0-1" 0-25.4mm	422330	
1-2" 25.4-50.8mm	422331	
2-3" 50.8-76.2mm	422332	
3-4" 76.2-101.6mm	422333	

For SPC output order connecting cable 937387 (1m) or 965013 (2m).

Replacement Battery:
541980 (1 pc), 541980-10 (10 pc/set)

METRIC ONLY
Resolution 0.001mm

Range	Order No.	Price
0-25mm	422230	
25-50mm	422231	
50-75mm	422232	
75-100mm	422233	

DISC MICROMETERS (GEAR TOOTH)

SERIES 203:



SPECIAL FEATURES :

- Anvil and spindle hardened and precision ground — micro-lap finish on measuring faces.
- Quick and easy zero adjustment.
- Every thousandth is numbered micro-fine for easy reading.
- Deluxe heat-insulator on satin chrome finished forged steel frame, tapered for hard to get at places.
- Disc type anvil and spindle - simplifies measuring thicknesses of difficult, closely spaced sections, ribs, keys, fins, cutting edges on forming tools, chordal thickness of gear teeth, etc.
- Positive locking clamp.
- Large diameter, disc will enter inaccessible places such as narrow grooves, slots and recesses over .030" width.

Range	Graduation	Order No.	Price
0-1"	.001"	1475901	
1-2"	.001"	1475902	
0-25 mm	.01mm	1475903	
25-50 mm	.01mm	1475904	

DISC TYPE MICROMETERS

STARRETT SERIES 256:



Starrett



Anvil and spindle discs – 1/2" (12.7mm) diameter, tapering to .015" (0.4mm) edge thickness – enter narrow grooves, slots and recesses to measure work sections such as ribs, lands, fins; cutting edges on forming tools, and chordal thickness of gear teeth. 0 -1 inch /0-25mm size is also useful for measuring the thickness of paper, cardboard, rubber and sheet plastic. Satin chrome finish on reading surfaces. Rotating spindle except where noted.

Graduation .001" or 0.01mm

Range	Description	Catalog No.	EDP No.	Price
0-1"	With ratchet stop, lock nut	256RL-1	51236	
1-2"	With ratchet stop, lock nut	256RL-2	55940	
2-3"	With ratchet stop, lock nut	256RL-3	55941	
0-1"	Non - Rotating Spindle	256PN-1	56469	
0-25mm	With ratchet stop, lock nut	256MRL-25	51238	
25-50mm	With ratchet stop, lock nut	256MRL-50	55942	
50-75mm	With ratchet stop, Locknut	256MRL-75	55943	
0-25mm	Non-Rotating Spindle	256MPN-25	56470	

1" and 25mm sent in fitted case. Deluxe case available by ordering No. 910. 2" and 50mm and above are packed one in a box without case. Deluxe cases available by ordering No. 912 for the 2" and 50mm sizes and No. 256ZZ-3 for the 3" and 75 mm sizes.

378

DISC MICROMETERS

MIT SERIES 123, 223:

ROTATING SPINDLE TYPE

Mitutoyo



The thin measuring discs, with .030" edge thickness, enter narrow grooves, slots and recesses, to take measurements on work sections such as ribs, lands, fins, cutting edges on form tools and chordal thickness on gear teeth.

- Measuring discs are hardened, ground and micro-lapped for greater accuracy.
- Extra-large disc, .787" in diameter, with .030" edge thickness to enter narrow recesses.
- With heat-insulating grip cover on frame.
- Appropriate standards supplied.
- Supplied with fitted carrying case.

Graduation .001" or 0.01mm

Range	Order No.	Price
0-1"	123125	
1-2"	123126	
2-3"	123127	
3-4"	123128	
0-1"	223125*	
0-25mm	123101	
25-50mm	123102	
50-75mm	123103	
75-100mm	123104	
0-25mm	223101*	

* With Digital Counter



See next page for Mitutoyo
Digimatic Disc Micrometers

DIGITAL ELECTRONIC DISC MICROMETER

SERIES 725:

MEGA Superior Import



- Friction thimble.
- Chrome-plated frame.
- With 5 key deluxe model micrometer head.

Range	Graduation	Order No.	Price
0-1"/0-25mm	.00005"/.001mm	7253001	

ELECTRONIC DIGITAL DISC TYPE MICROMETER

STARRETT
SERIES 756:



For applications where the thickness of lands or sections bounded by grooves or slots are as narrow as .015". The thin, tapered anvil and spindle discs measure 1/2" (12.7mm) in diameter tapering to .015"(0.4mm) edge thickness permitting entrance to such spaces. In addition, the large anvil is also suitable for measuring sheet materials.

- Output capability to Starrett SPC Plus hardware and software and to IBM-compatible PCs
- High-contrast LCD readout with large numbers
- Auto shutdown after 30 minutes of idle time
- One-year working battery life
- Error and flashing out-of-tolerance displays
- Zero setting at any location
- Instant inch/mm conversion
- High-low limit settings
- Zero setting at any spindle location
- Limits mode for entering product specifications
- Non-glare satin chrome finish on thimble and sleeve
- Friction thimble
- Ring-type lock nut
- Rigid frame construction and balanced feel
- Resolution: -.00005" and 0.001mm

With standard Inch graduation on shell and thimble.

Catalog No.	EDP No.	Description	Price
756FL-1	64042	0-1" / 0-25mm Range, without case	

With standard mm graduations on shell and thimble.

Catalog. No	EDP No.	Description	Price
756MEFL-25	66134	0- 25mm/0-1" Range, without case	

Cable Information and Case

Catalog No.	EDP No.	Description	Price
PT61768	66454	Adapter from No.PT22938 to IBM-PC (RS232C)	
PT22938	64059	Shielded cable to Nos. 761/772 Series Starrett Modules, No. 768 Remote Display and No. PT61768 Adapter	
PT61120	65446	One 3-Volt Battery No. CR2450	
949	63874	Case	
PT61963	66636	Computer Interface Cable complete to IBM-PC (RS232C)	

DIGIMATIC DISC MICROMETERS

MIT SERIES 323:

ROTATING SPINDLE TYPE



(Functions same as Mitutoyo Series 293 Outside Micrometers shown at the beginning of this section.)

DIGIMATIC DISC MICROMETERS

Range	Resolution	Order No.	Price
Inch/Metric			
0-1"/0-25.4mm	.00005"/0.001mm	323350	
1-2"/25.4-50.8 mm	.00005"/0.001mm	323351	
2-3"/50.8-76.2 mm	.00005"/0.001mm	323352	
3-4"/76.2-101.6 mm	.00005"/0.001mm	323353	
Metric			
0-25 mm	0.001 mm	323250	
25-50 mm	0.001 mm	323251	

For SPC output order connecting cable
937387 (1m) or 965013 (2m).

Replacement Battery:
541980 (1 pc), 541980-10 (10 pc/set)

POINT MICROMETERS

MIT SERIES 112:



For measurements of small grooves, keyways and other hard-to-reach dimensions. The measuring points have approximately .012" radius, and are available with or without carbide tips.

Graduation .001" or 0.01mm

Range	Order No.	(A)	(L)	Price
0-1"	112177*	15°	.394"	
0-1"	112225*	30°	.430"	
1-2"	112178*	15°	.394"	
1-2"	112226*	30°	.430"	
0-1"	112189**	15°	.394"	
0-1"	112237**	30°	.430"	
1-2"	112190**	15°	.394"	
1-2"	112238**	30°	.430"	
0-25mm	112153*	15°	10mm	
0-25mm	112201*	30°	11mm	

* Without Carbide Measuring Points.

** With Carbide Measuring Points.



Mitutoyo Digimatic Point Micrometers available; please inquire.

INDICATING MICROMETERS

SERIES 209:



SPECIAL FEATURES :

Pinion and Gear are hardened. The anvil withdraws .079" to insert or extract the object being measured. Every thousandth is numbered for easy setting. All parts subject to wear fully hardened. Retracting button convenient to operator's thumb. Uniform pressure is exerted at all times. Tolerance hands can be set as desired. Wider graduation for easy reading. Quick and easy zero adjustment. Tool operates as a go/no-go gage and as a limited run, sensitive, indicating micrometer. Hammertone gray baked enamel finished frame. After setting the micrometer, spindle can be locked. Indicating accuracy to .00004" or .001mm. Minimum dial reading .0001" or .002mm. Carbide faces. Jeweled bearings. Spindle diameter .315" (8mm). Anvil and spindle hardened and precision ground - with micro-lap finish on measuring faces. Spindle clamp ring. Indicating range .001" or .02mm. Includes fitted case.

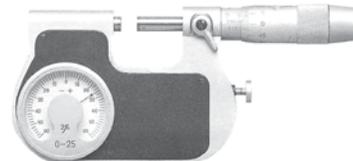


INDICATOR MICROMETERS

SERIES 203:



- Carbide faces
- Chrome-plated frame
- Premium quality
- Can be used as Go/No Go gage



Range	Graduation	Order No.	Price
INCH			
0-1"	.00005"	2030005	
1-2"	.00005"	2030009	
METRIC			
0-25mm	.001mm	2030007	

INCH Grad. .0001"

Range	Order No.	Price
0-1"	5101001	
1-2"	5101002	

Limited Quantity Available

METRIC Grad. .01mm

Range	Order No.	Price
0-25mm	2245101	

INDICATING MICROMETERS

MIT SERIES 510:



- Tool operates as a Go/No-Go Gage and as a limited run, sensitive, indicating micrometer.
- Indicating accuracy to .00008".
- Minimum dial reading .0001" or .001mm.
- Carbide faces.
- Jeweled bearings.
- Vernier scale on barrel.
- Spindle diameter .315" (8mm).
- Anvil and spindle hardened and precision ground - with micro-lap finish on measuring faces.
- Spindle clamping ring.
- Clear graduations on satin-chrome finish.
- Every thousandth is numbered for easy setting.
- All parts subject to wear fully hardened.
- Retracting button convenient to operator's thumb.
- Tolerance hands can be set as desired.
- Wider graduation for easy reading.
- Quick and easy zero adjustment.
- Complete with fitted carrying case.



SCREW THREAD COMPARATOR MICROMETERS

STARRETT SERIES 210:

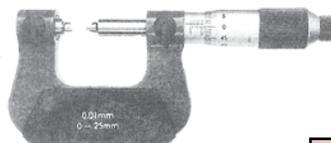


Designed for comparing threads, measuring in grooves, recesses and other applications. (Will not measure pitch diameter.) Conical anvil and spindle faces with 1/64"(0.4mm) flats on points. Black enamel frame. Satin chrome finish on sleeve and thimble. Hardened threads ground from the solid. Fitted Case. No Ratchet or Lock Nut

Range	Graduation	Catalog No.	EDP No.	Price
0 - 7/8"	.001"	210AP	50731	
0 - 22mm	0.01mm	210MAP	64334	

SCREW THREAD MICROMETERS

SERIES 203:



- Ratchet Stop
- Laser engraved graduations.
- Enamel frame.
- V-Anvils included: 64-48, 44-34, 28-20, 18-12, 11-7, 6-4.5 TPI
- Graduation .001" or .01mm

Range	Order No.	Price
INCH		
0-1"	2030001	
1-2"	2030002	
2-3"	2030003	
3-4"	2030004	
METRIC		
0-25mm	9030025	

Range	Order No.	Price	Grad. of Head	Range of Indicator	Depth of Frame
INCH					
0-1	510131		.0001	±.001	.7"
1-2	510132		.0001	±.001 with standard	1.06
2-3	510133		.0001	±.001 with standard	1.54
3-4	510134		.0001	±.001 with standard	2.15
METRIC					
0-25	510121		.01mm	±0.02mm	18mm
25-50	510122		.01mm	±0.02mm w/ standard	27mm

SCREW THREAD MICROMETERS

MIT SERIES 126, 326:

Each anvil can be used for both metric and unified external threads. The correct pair of anvils must be selected and inserted in the hollow micrometer spindle and anvil. The micrometer anvil is fully adjustable by the knurled knob located on the anvil side of the frame. Zero set the micrometer with this knob whenever the anvil is interchanged.

INTERCHANGEABLE V-ANVIL TYPE FOR MEASURING PITCH DIAMETER



- 60 degree V-Anvil and Conical Spindle are made of high-grade special steel, hardened and precision ground.
- Ratchet stop facilitates uniform and consistent measurements.
- Furnished complete with fitted carrying case and appropriate standards.
- Graduation .001" or 0.01mm

No Anvils			With Anvil Set		
Range	Order No	Price	Range	Order No	Price
0-1	126137		0-1	126901	
1-2	126138		1-2	126902	
2-3	126139		2-3	126903	
3-4	126140		3-4	126904	
4-5	126141		4-5	126905	
5-6	126142		5-6	126906	
0-25mm	126125				
25-50mm	126126				

DIGIMATIC SCREW THREAD MICROMETERS



- The 326 Series provides digital readout to .00005"/0.0001mm and can be linked to the SPC system.
- Digimatic functions same as the Digimatic Outside Micrometers Series 293 at the first pages of this section.

Inch/Metric (No Anvils)

Range	LCD Resolution	Order No.	Price
0-1" 0-25.4mm	.00005" 0.001mm	326-351	
1-2" 25.4-50.8mm	.00005" 0.001mm	326-352	
2-3" 50.8-76.2mm	.00005" 0.001mm	326-353	
3-4" 76.2-101.6mm	.00005" 0.001mm	326-354	

For SPC output order connecting cable 937387 (1m) or 965013 (2m). Replacement Battery: 541980 (1 pc), 541980-10 (10 pcs/SET)

Individual 60° Anvils for Unified Screw Threads

Threads per Inch	Pitch	Order No. (Pair)	Price
64-48 Threads (M1)	.016-.019"/0.4-0.5mm	126801	
44-28 Threads (M2)	.024-.035"/0.6-0.9mm	126802	
24-14 Threads (M3)	.04-.068"/1.0-1.75mm	126803	
13-9 Threads (M4)	.079-.118"/2.0-3.0mm	126804	
8-5 Threads (M5)	.138-.196"/3.5-5.0mm	126805	
4.5-3.5 Threads (M6)	.217-.275"/5.5-7.0mm	126806	
64-3 Threads	.016-.275"/0.4-7.0mm	126800*	

* Anvil Set

Mitutoyo

ELECTRONIC DIGITAL SCREW THREAD COMPARATOR MICROMETER

STARRETT SERIES 760:

Starrett



Micrometer has 60 degree conical anvil and spindle faces with 1/64" (0.4mm) flats on the ends of the points. This allows measuring in small grooves, recesses, and many other applications that conventional micrometers are not suited for. (Will not measure pitch diameter).

- Output capability to Starrett SPC Plus hardware and software and to IBM compatible PCs
- High-contrast LCD readout with large numbers
- Auto shutdown after 30 minutes of idle time
- One-year working battery life
- Error and flashing out-of-tolerance displays
- Zero setting at any location
- Instant inch/mm conversion
- High-low limit settings
- Zero setting at any spindle location
- Limits mode for entering product specifications
- Non-glare satin chrome finish on thimble and sleeve
- Friction thimble
- Ring-type lock nut
- Rigid frame construction and balanced feel
- Resolution: -.00005" and 0.001mm

With standard Inch graduations on shell and thimble

Catalog No.	EDP No.	Description	Price
760FL	64051	0-1"/0-25mm Range without case	

With standard millimeter graduations on shell and thimble.

Catalog No.	EDP No.	Description	Price
760MEFL	66135	0-25mm/0-1" Range, without case	

Catalog No.	EDP No.	Description	Price
Cable Information			
PT61768	66454	Adapter from No. PT22938 Cable to IBM-PC (CRS232C)	
PT22938	64059	Shielded Cable to Nos. 761/772 Series Starrett Modules No. 768 Remote Display and No. PT61768 Adapter	
PT61120	65446	One 3-Volt Battery No. CR2450	
PT61963	66636	Computer Interface Cable complete to IBM-PC (RS232C)	

Case available by ordering No. 733ZZ-2

SCREW THREAD MICROMETERS FOR MEASURING PITCH DIAMETER

STARRETT SERIES 575, 585:



For measuring V, American National, Unified and Unified J series screw threads. These micrometers have a pointed spindle and a double V-anvil, both shaped to contact the screw thread at the pitch diameter. The micrometer reading therefore gives the true pitch diameter which equals the outside diameter of the screw minus the depth of one thread. Frames are rigid, one-piece drop forged steel with no-glare satin chrome finish all over. One-piece hardened spindle with threads ground from the solid. Furnished with fixed (non-rotating) anvil, without ratchet stop or lock nut, and appropriate standards.



INSIDE MICROMETERS SERIES 203:

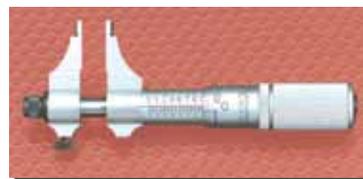


- Graduations .001" or .01mm
- Caliper type jaws.
- Chrome-plated
- Carbide measuring faces.
- Ratchet stop for exact repetitive readings.
- Complete with fitted case.

Range	Order No.	Price
0.2-1.2"	2050212	
1-2"	2051020	
5-30mm	2050530	
25-50mm	2052550	

INSIDE MICROMETER CALIPERS

STARRETT SERIES 700:



Caliper type jaws permit quick inside measurements with micrometer accuracy. Jaws are hardened and ground on a radius for accurate feel without cramping. Satin chrome finish – no glare, resists rust. Friction Thimble. Lock Screw.

Range	Grad.	Description	Catalog No.	EDP No.	Price
.200 – 1.200"	.001"	With lock screw	700A	52909	
1 – 2"	.001"	With lock screw	700B	52911	
5 - 30mm	0.01mm	With lock screw	700MA	56063	
25- 50mm	0.01mm	With lock screw	700MB	9956064	

Sent without case. Case available by ordering Catalog No. 940 (EDP No. 55359)

DIGITAL ELECTRONIC INSIDE MICROMETERS

SERIES 725:



- Graduation .00005"/.001mm
- With 5 key deluxe model micrometer head

Range	Order No.	Price
0.2-1.2"/5-30mm	7250212	
1-2"/25-50mm	7251021	

GROOVE MICROMETERS

STARRETT SERIES 260:



Widths of either internal or external grooves and lands can be quickly measured. Graduated in .001" (0.01mm) and has a reach of 1-5/8" (41mm) maximum hole depth. Each measuring disc is 9/32" (7mm) O.D., .025" (0.63mm) thick and hardened, ground and lapped. With ratchet stop. Satin chrome finish with quick-reading, staggered graduations. Furnished with case.

Range Groove Widths	Range Land Widths	Grad.	Catalog No.	EDP No.	Price
.050 – 1.050"	0 – 1.000"	.001"	260Z	67987	
1.27-26.27mm	0-25mm	0.01mm	260MZ	67988	

SOLID ROD INSIDE MICROMETERS

STARRETT SERIES 124:

- For Measuring inside diameters of cylinders and rings, parallel surfaces etc.
- Quick reading figures - every thousandth numbered.
- Each rod is solid, marked with length, and assembled on one side of micrometer head.
- Rods have individual length adjustment.
- Heads and rods have hardened and ground anvils.
- Non-glare satin chrome thimble and sleeve.
- Furnished in case with rods, tools, and adjusting wrenches



Graduation .001" or .01mm

Range	No. of Meas. Rods	Catalog No.	EDP No.	Price
2-8"	6	124AZ	50542	
2-12"	10	124BZ	50546	
50-200mm	6	124MAZ	56141	
50-300mm	10	124MBZ	56142	

INSIDE MICROMETERS

MIT SERIES 141:

INTERCHANGEABLE ROD TYPE

The 141 Series Inside Micrometers are probably the most frequently used inside measuring instruments because of their wide range and simplicity in measuring operation.

To provide point contact, all contact points are made spherical and hardened for extra long tool life. The overall accuracy is .0004" up to 12" , .001" thereafter to 40".

- Each interchangeable rod is marked with its measuring range.
- Both micrometer head and furnished rods are satin-chrome finished throughout.
- Positive locking clamp attached on No. 141101 and 141102. No lock on the larger sizes.
- Supplied with fitted carrying case.

For closer tolerance work it is recommended that the micrometer with a rod inserted be calibrated with a known size such as a ring gage. The setting ring for "Holtest" would be an ideal choice.

Graduation .001"

Range (Inches)	Order No.	Travel of Micrometer Head	Price	No. of Rods	Spacing Collar
1-2	141102	.250		2	.250
2-8	141208	.500		6	.500
2-12	141233	.500		10	.500
4-20	141121	1		3	1,2
4-40	141122	1		8	1,2

Graduation .01mm

Range (mm)	Order No.	Travel of Micrometer Head	Price	No. of Rods	Spacing Collar
25-50	141101	7.0mm		2	6.0mm
50-200	141205	13.0mm		6	12.0mm
50-300	141206	13.0mm		10	12.0mm
200-500	141117	25.0mm		3	25,50mm
200-1000	141118	25.0mm		8	25,50mm

TUBULAR INSIDE MICROMETERS

STARRETT SERIES 823:

Available in nine sizes which will measure down to 1-1/2" or 40mm minimum and with extension rods up to 40" or 1000mm maximum inclusive. Graduation of .001" or 0.01mm. The extension rods are made of steel tubing, centerless ground. Rods are approximately 3/8" (9.5mm) diameter and have thermal insulators. By removing the hardened and ground anvil ends (end caps) of the micrometer head, the rods may be attached to either or both ends of the micrometer as preferred. Each rod is marked with the length and may be individually adjusted for wear by the hardened and ground anvil at the end. Furnished in case.



Range	Movement of Screw	Description	Catalog No.	EDP No.	Price
Graduation .001"					
1-1/2 - 8"	1/2"	With 5 rods and handle	823AZ	53050	
1-1/2 - 12	1/2"	With 8 rods and handle	823BZ	53052	
4 - 24	1	With 7 rods	823CZ	53054	
4 - 32	1	With 8 rods	823DZ	53055	
4 - 40	1	With 10 rods	823EZ	53056	
1-1/2 - 32	1/2 & 1 (2heads)	With 10 rods and handle	823FZ	53058	
Graduation 0.01mm					
40-200mm	13mm	With 6 rods and handle	823MAZ	53051	
40-300mm	13mm	With 6 rods and handle	823MBZ	53053	
100-1000mm	25mm	With 10 rods	823MEZ	53057	

INSIDE MICROMETERS

MIT SERIES 137:

EXTENSION TYPE

Wide range of ID measurements by combining extension rods with micrometer head.

Series 137 features Rods with internal standards as compared to the tubular construction Series 139 and 140.

Micrometer Head Stroke : .5" or 13.0mm

MICROMETER SETS Graduation .001"

Range	Order No.	Price	No. Rods
2-12	137212		5
2-40	137214		8

MICROMETER SETS Graduation .01mm

Range	Order No.	Price	No. Rods
50-300mm	137202		5
50-1000mm	137204		8
50-500mm	137208		6



Digimatic Inside Micrometers with inch/metric graduations available; please inquire.

TUBULAR INSIDE MICROMETERS

MIT SERIES 139, 140:

HEAVY DUTY TYPE, MIT SERIES 139:

- Diameter of Extension Tubes: .669".
- Travel of Micrometer Head: 1".
- Graduation .001"

EXTRA-HEAVY DUTY TYPE, MIT SERIES 140:

- Diameter of Extension Tubes: 1.26".
- Travel of Micrometer Head: 2".
- Graduation .001"



TAPER (BORE) GAGE

SERIES 247:



- Handy gage for measuring cylindrical bores, bearing work and for gaging slots.
- Made from polished stainless steel
- Clearly etched graduations for precise measurement. (Inch one side, mm's on the other)

Order No.	Range		Price
	Inch	mm	
2470115	1/32-5/8"	1 to 15	

DIAL BORE GAGE SETS

SERIES 567:



For close tolerance I.D. measurements. Sets include dial indicator with protective cover, anvils, and spacers, in a fitted case.

INCH Graduation .0005"

Range	Bore Depth	Order No.	Price
.25 - .40"	1.57	5670010	
.40 - .70"	4	5670018	
.7 - 1.5"	5	5670035	
1.4 - 2.4"	6	5670060	
2.0 - 6.0"	6	5670150	

METRIC Graduation .01mm

Range	Bore Depth	Order No.	Price
6-10mm	40mm	5670610	
10-18mm	100mm	5671018	
18-35mm	125mm	5671835	
35-50mm	150mm	5673550	
50-100mm	150mm	5675010	
50-160mm	150mm	5675016	

METRIC: 38 - 308mm Range

Total Range with Extensions	Dial Indicator Graduation	Catalog No.	EDP No.	Price
Max. Bore Depth 100mm				
Max. Plunger Travel 0.76mm				
38-76.2mm	0.002mm	84MZ-161-4J	64922	
38-76.2mm	0.01mm	84MZ-181-4J	64923	
Max. Bore Depth 150mm				
Max. Plunger Travel 0.9mm				
76.2-131.75mm	0.002mm	84MZ-161-5J	64924	
76.2-131.75mm	0.01mm	84MZ-181-5J	64925	
127-206.37mm	0.002mm	84MZ-161-6J	64926	
127-206.37mm	0.01mm	84MZ-181-6J	64927	
Max. Bore Depth 175mm				
Max. Plunger Travel 0.9mm				
203.2-308mm	0.002mm	84MZ-161-75	64928	
203.2-308mm	0.01mm	84MZ-181-75	64929	

INSIDE DIAMETER MICROMETERS

LARGE RANGE TUBULAR TYPE

SERIES 203:



- Carbide measuring faces
- Laser engraved graduations
- Thermal insulator on each rod
- Each rod marked with length
- Laser engraved grads.
- Carbide measuring faces
- Chrome-plated



Range	Graduation	Order No.	Price
2-10"	.001"	203210	
4-36"	.001"	203436	
6-55"	.001"	203655	

DIAL BORE GAGES WITH 3-POINT CONTACT

STARRETT SERIES 84:

For inspecting bores and checking hole size. An adjusting range screw with positive locking feature and two centralizing plungers provides three-point contact for true alignment. The gaging contact and centralizing plungers are hardened tool steel, spring loaded for sensitivity and repeatability, and travel in bronze bushings. The range screw, also hardened tool steel, is inserted in a steel sleeve. Housing and knurled handle are aluminum with black finish. Furnished in case.



INCH: 1-1/2 - 12-1/8" Range

Total Range with Extensions	Dial Indicator Graduation	Catalog No.	EDP No.	Price
Max. Bore Depth 4" – Max. Plunger Travel .030"				
1-1/2 – 3"	.0001"	84Z-111-4J	56264	
1-1/2 – 3"	.0005	84Z-134-4J	56270	
Max. Bore Depth 6" – Max. Plunger Travel .035"				
3 – 5-13/16	.0001	84Z-111-5J	50386	
3 – 5-13/16	.0005	84Z-134-5J	50392	
5 – 8-1/8	.0001	84Z-111-6J	50388	
5 – 8-1/8	.0005	84Z-134-6J	50394	
Max. Bore Depth 7" – Max. Plunger Travel .035"				
8 – 12-1/8"	.0001	84Z-111-7J	50390	
8 – 12-1/8"	.0005	84Z-134-7J	50396	

DIAL BORE GAGE SETS

STARRETT SERIES 82:

- Split-ball contact is self-centering for rapid in-process and final inspection.
- Graduation is .0001".
- Interchangeable probes are hard chrome plated and polished.
- Sets include dial indicator, body and actuating rod, and probes in attractive, protective case.
- Two-point contact useful for detecting hole geometry problems like taper, bell-mouth and out-of-roundness.



INCH

Total Range	No. of Probes	Max. Bore Depth	Catalog No.	EDP No.	Price
.107-.266"	5	13/16"	82AZ	55791	
.217-.594"	6	1 3/4"	82BZ	55792	
.560-1.565"	8	5"	82CZ	55793	

* Includes insertion of gage body into bore.

METRIC

Total Range	No. of Probes	Max. Bore Depth	Catalog No.	EDP No.	Price
2.7-6.76mm	5	20.6mm	82MAZ	66010	
5.5-15.1 mm	6	44mm	82MBZ	66011	
14.2-39.75mm	8	125mm*	82MCZ	66012	

* Includes insertion of gage body into bore.

DIGITAL BORE GAGE

SERIES 567:

- For inside measurements
- Zero setting at any position
- With data output interface
- Metric/Inch system conversion at any position

Range	Resolution	Order No.	Price
2"-4"/50-100mm	0.005"/0.01mm	5670204	
2"-6.125"/50-160mm	0.005"/0.01mm	5670206	
4"-6.125"/100-160mm	0.005"/0.01mm	5670406	
6.125"-10"/160-250mm	0.005"/0.01mm	5671610	



BORE GAGES

MIT SERIES 511:



MITUTOYO offers a complete selection of Dial Bore Gages, all of them with interchangeable anvils and necessary accessories to perform close tolerance I.D. measurements. Some of the larger 511 Series Bore Gages are equipped with a unique guiding device which facilitates accurate measurement of the bore because it is self-centering. The supplied AGD Series 2 Dial Indicator is fully protected by a rugged cover.



- All MITUTOYO Dial Bore Gages are supplied with AGD Series 2 Dial Indicator and fitted carrying case.
- Dial Protection cover is supplied as standard (Part No. 950658).
- A reference chart is furnished which indicates the spacer and rod sizes to be selected for the specific range.
- Extension collars and rods available to increase Measuring Range; please inquire.

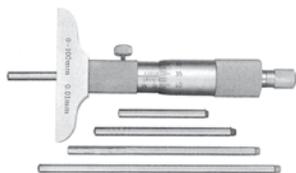
Order No.	Probe Depth	Graduation	No. of Anvils	No. of Spacers	Price
INCH SETS -					
		Grad. .0005" with 2922FB Dial Indicator			
		Grad. .0001" with 2923FB-10 Dial Indicator			
511911	4 / 6"	.0005 (2922)	25	7	
511912	4 / 6"	.0001 (2923)	25	7	
METRIC SETS -					
		Grad. 0.01mm with 2046FB Dial Indicator			
		Grad. 0.001mm with 2109FB Dial Indicator			
511-901	100/150mm	0.01mm	26 pcs	7	
511-902	100/150mm	0.001mm	26 pcs	7	

Order No.	Range	Probe Depth	Grad.	No. of Anvils	No. of Spacers	Price
INCH - Graduation .0001" with 2923FB-10 Dial Indicator						
511212	.24 - .4	2"	.0001	9	-	
9511206	.4 - .74	4	.0001	9	1	
511163	.74 - 1.4	4	.0001	8	3	
511164	1.4 - 2.5	6	.0001	6	4	
511166	2.0 - 6.0	6	.0001	11	4	
511187	4.0 - 6.5	6	.0001	13	4	
511188	6.5 - 10.0	10	.0001	6	6	
511189	10.0 - 16.0	10	.0001	5	6	
INCH - Graduation .0005" with 2922FB Dial Indicator						
511213	.24 - .4	2"	.0005	9	-	
511207	.4 - .74	4	.0005	9	1	
511159	.74 - 1.4	4	.0005	8	3	
511160	1.4 - 2.5	6	.0005	6	4	
511162	2.0 - 6.0	6	.0005	11	4	
511184	4.0 - 6.5	6	.0005	13	4	
511185	6.5 - 10.0	10	.0005	6	6	
511186	10.0 - 16.0	10	.0005	5	6	

Order No.	Range	Probe Depth	Grad.	No. of Anvils	No. of Spacers	Price
METRIC - Graduation 0.01mm with 2046FB Dial Indicator						
511-204	10-18.5mm	90mm	0.01mm	9 pcs.	1	
511-171	18-35mm	100mm	0.01mm	9 pcs.	2	
511-172	35-60mm	150mm	0.01mm	6 pcs.	4	
511-173	50-100mm	150mm	0.01mm	11 pcs.	4	
511-174	50-150mm	150mm	0.01mm	11 pcs.	4	
511-175	100-160mm	150mm	0.01mm	13 pcs.	4	
511-176	160-250mm	250mm	0.01mm	6 pcs.	7	
511-177	250-400mm	250mm	0.01mm	5 pcs.	7	
METRIC - Graduation 0.001mm with 2109FB Dial Indicator						
511-203	10-18.5mm	90mm	0.001mm	9 pcs.	1	
511-167	18-35mm	100mm	0.001mm	9 pcs.	2	
511-168	35-60mm	150mm	0.001mm	6 pcs.	4	
511-169	50-100mm	150mm	0.001mm	11 pcs.	4	
511-170	50-150mm	150mm	0.001mm	11 pcs.	4	
511-178	100-160mm	150mm	0.001mm	13 pcs.	4	
511-179	160-250mm	250mm	0.001mm	6 pcs.	7	
511-180	250-400mm	250mm	0.001mm	5 pcs.	7	

DEPTH MICROMETERS

SERIES 207:



Range	Length of Base	No. of Rods	Order No.	Price
0-4"	2-1/2"	4	5001502	
0-4"	4"	4	5001503	
0-6"	4"	6	5001504	

Range	Length of Base	No. of Rods	Order No.	Price
0-100mm	63mm	4	5001100	
0-100mm	101.5mm	4	5001125	
0-150mm	101.5mm	6	5001150	

Rods are easily interchangeable and adjustable. Base fully hardened and lapped for highest accuracy. All surfaces are satin-chrome plated. Ratchet stop. Graduated in .001" or .01mm.

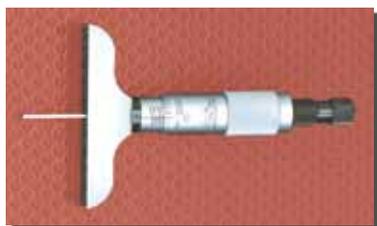
Quality Precision Tools



The Choice Is Yours!!!

MICROMETER DEPTH GAGES WITH NON-ROTATING BLADES

STARRETT SERIES 449:



Non-rotating, blade-type rods approximately .045" thick x 1/8" wide (1.2 X 3.2mm). By holding the base in one hand, the blade can be turned with the fingers and positioned at any angle relative to the base. The blade does not turn, but moves perpendicularly only, permitting depth measurement of narrow shoulders without the blade rolling off. The micrometer screw is precision ground. Bases and rods are hardened, ground and lapped. Rods have individual length adjustment. Added features include no-glare satin chrome finish. Graduation is .001" or 0.01mm. With ratchet stop, no lock nut in case.

Range	Base Length	No. of Rods	Rod Size	Catalog No.	EDP No.	Price
INCH						
0 - 3"	2-1/2"	3	.045 X 1/8"	449AZ-3R	52318	
0 - 6"	2-1/2"	6		449AZ-6R	52320	
0 - 3"	4"	3		449BZ-3R	52322	
0 - 6"	4"	6		449BZ-6R	52324	
METRIC						
0-75mm	63.5mm	3	1.2 x 3.2 mm	449MAZ-75R	56636	
0-150mm	63.5mm	6		449MAZ-150R	56637	
0-75mm	100mm	3		449MBZ-75R	56638	
0-750mm	100mm	6		449MBZ-150R	56639	

MICROMETER DEPTH GAGES

STARRETT SERIES 440, 445:



The depths of holes, slots, shoulders, and projections can be measured to .001" or 0.01mm with these fine tools.

The No. 440 gages are furnished with a 2-1/2" (63mm) base and 1/8" (3.2mm) diameter measuring rods.

The No. 445 gages are furnished with choices of 3"(75mm), 4" (100mm), and 6" (150mm) bases and have 5/32" (4mm) diameter measuring rods.

- A base shape design that will automatically position the fingers so that the base is easily held in place for measuring stability.
- All precision screws are ground and lapped.
- All bases and rods are hardened ground, and lapped for permanent accuracy.
- All reading surfaces have a satin chrome finish that resists rust and provides a non-glare background for the sharp lines and figures.
- All measuring rods are adjustable.
- The combination ratchet and speeder for uniform pressure and quicker adjustment.
- Ring-type lock nut for quick and sure locking.

INCH - Graduation .001"

Range	Base	No. Rods	Description	Catalog No.	EDP No.	Price
0-3"	2 1/2"	3	With lock nut, in case	440Z-3L	52113	
0-6"	2 1/2"	6		440Z-6L	52117	
0-9"	2 1/2"	9		440Z-9L	52121	
0-3"	2 1/2"	3	With ratchet stop, lock nut in case	440Z-3RL	52115	
0-6"	2 1/2"	6		440Z-6RL	52119	
0-9"	2 1/2"	9		440Z-9RL	52123	
0-3"	3"	3		445AZ-3RL	52208	
0-6"	3"	6		445AZ-6RL	52212	
0-9"	3"	9		445AZ-9RL	52216	
0-3"	4"	3	With ratchet stop, lock nut, in case	445BZ-3RL	52220	
0-6"	4"	6		445BZ-6RL	52224	
0-9"	4"	9		445BZ-9RL	52228	
0-3"	6"	3		445DZ-3RL	52244	
0-6"	6"	6		445DZ-6RL	52248	
0-9"	6"	9		445DZ-9RL	52252	

METRIC - Graduation 0.01mm

Range	Base	No. Rods	Description	Catalog No.	EDP No.	Price
0-75mm	63.5mm	3	With ratchet stop, lock nut, in case	440MZ-75RL	52116	
0-150mm	63.5mm	6		440MZ-150RL	52120	
0-225mm	63.5mm	9		440MZ-225RL	52124	
0-75mm	75mm	3	With ratchet stop, lock nut, in case	445MAZ-75RL	52209	
0-150mm	75mm	6		445MAZ-150RL	52213	
0-225mm	75mm	9		445MAZ-225RL	52217	
0-75mm	100mm	3	With ratchet stop, lock nut, in case	445MBZ-75RL	52221	
0-150mm	100mm	6		445MBZ-150RL	52225	
0-225mm	100mm	9		445MBZ-225RL	52229	
0-75mm	150mm	3		445MDZ-75RL	52245	
0-150mm	150mm	6		445MDZ-150RL	52249	
0-225mm	150mm	9		445MDZ-225RL	52253	

DIGIT DEPTH MICROMETERS

MIT SERIES 229:



INTERCHANGEABLE ROD TYPE

The Digital Counter of this depth micrometer provides clear, accurate readings in thousandths.

Conventional models with reversed thimble and sleeve were rather awkward and took extra attention and a long time to read.



With **MITUTOYO's** Digit Depth Micrometers, the reading is shown in decimals to thousandths of an inch.

- Conventional Sleeve / Thimble is still provided to double check the digital counter.
- Interchangeable rod diameter .157".
- Clear crisp graduations on the thimble. No-glare satin-chrome finish.
- Complete with fitted carrying case.

Graduation .001"

Range	Order No.	Price	Base Length	No. of Rods
0-4	229127		2-1/2	4
0-6	229128		2-1/2	6
0-4	229131		4	4
0-6	229132		4	6

MICROMETER DEPTH GAGES

WITH HALF BASE

STARRETT SERIES 443:



Half base of 2" (50mm) permits measuring depths of holes, and slots close to shoulders and between obstructions. Quick reading graduations, every thousandth numbered. No-glare satin chrome finish. Graduation in .001". 5/32" rod diameter. Rods have individual length adjustment.

Range	No. Rods	Description	Catalog No.	EDP No.	Price
0 - 3"	3	With ratchet stop, lock nut, in case	443Z-3RL	52171	
0 - 6	6	With ratchet stop, lock nut, in case	443Z-6RL	52173	
0 - 9	9	With ratchet stop, lock nut, in case	443Z-9RL	52175	

DIGITAL ELECTRONIC DEPTH MICROMETER

SERIES 725:



- 5 key Deluxe Model micrometer head
- Spherical rod end
- High accuracy interchangeable rods
- Friction thimble
- .00005"/.001mm
- 4" Base



Range	No. of Rods	Order No.	Price
0-6"/0-150mm	6	7258001	

DEPTH MICROMETERS

MIT SERIES 129:



INTERCHANGEABLE ROD TYPE

The extra rigid MITUTOYO Depth Micrometer is one of the basic measuring tools selected by machinists. The width of the base, .63", by far the widest available in the market, provides extra stability in depth gaging. The entire bottom surface is micro-lapped to achieve a higher degree of accuracy. Completely satin-chrome finished.



- Ratchet stop for consistent and repetitive measurements.
- .157" DIA. interchangeable rods, with lapped measuring end, are calibrated and tested at the factory. The rod length can be adjusted, to compensate wear on the measuring tip, with two supplied wrenches.
- Crisp clear graduations on the thimble.
- Graduation .001" or 0.01mm.
- Complete with fitted carrying case.

Range	Order No.	Base Length	No. of Rods	Price
INCH				
0-4"	129127	2-1/2	4	
0-6"	129128	2-1/2	6	
0-12"	129149	2-1/2	12	
0-4"	129131	4	4	
0-6"	129132	4	6	
0-12"	129150	4	12	
METRIC				
0-50mm	129109	63.5mm	2	
0-100mm	129111	63.5mm	4	
0-150mm	129112	63.5mm	6	
0-100mm	129115	101.6mm	4	
0-150mm	129116	101.6mm	6	

DIGITAL MICROMETER DEPTH GAGES

STARRETT SERIES 446:



.001" or 0.01mm are read directly from the counter – without reference to direction of numbers on a graduated sleeve. Measuring speed is increased since dimensions are read without having to remove fingers from thimble or tool from work. The digital readout displays white numbers on a black background.



- 3" (75mm) base
- Measuring Rods are 5/32" (4mm) rod diameter and are adjustable.
- A base shape design that will automatically position the fingers so that the base is easily held in place for measuring stability.
- All precision screws are ground and lapped.
- All bases and rods are hardened ground, and lapped for permanent accuracy.
- All reading surfaces have a satin chrome finish that resists rust and provides a non-glare background for the sharp lines and figures.
- All measuring rods are adjustable.
- The combination ratchet and speeder for uniform pressure and quicker adjustment.
- Ring-type lock nut for quick and sure locking.

No. Range	Rods	Description	Catalog No.	EDP No.	Price
0 - 3"	3		446AZ-3RL	56288	
0 - 6"	6	With ratchet stop, lock nut, in case.	446AZ-6RL	56289	
0-75mm	3		446MAZ-75RL	56294	
0-150mm	6		446MAZ-150RL	56295	



ELECTRONIC DIGITAL MICROMETER DEPTH GAGES (WITH OUTPUT)

STARRETT SERIES 749:

The Starrett No. 749 Electronic Depth Micrometer has a wide 0-6" (0-150 mm) range for measuring the depth of most holes, slots, shoulders, and projections. The 4" (100 mm) base is hardened, ground, and lapped for long-lasting precision.



READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Resolution - .0001" (0.001 mm)
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

EASE-OF-HANDLING FEATURES

- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment

ACCURACY AND LONG-LIFE FEATURES

- Ground and lapped one-piece spindle (the heart of Starrett's accuracy)
- Base length 4" (100 mm); rod diameter 5/32" (4 mm); all measuring rods are adjustable
- Starrett designed electronic microprocessor
- One battery for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse
- Starrett workmanship

FULL-FUNCTION ACTION FEATURES

- Easiest keyboard control by use of the new SHIFT button
- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- Output data to Starrett SPC Plus® hardware and software and to IBM compatible PCs

Furnished in a protective case.

Description	Catalog No.	EDP No.	Price
0-6" / 0-150mm Range with Standard Inch Graduations on Shell and Thimble	749BZ-6RL	65063	
0-150mm/0-6" Range with Standard Millimeter Graduations on Shell and Thimble	749MEBZ-150/6	66124	
Cable Information			
Adapter from No. PT22938 Cable to IBM-PC (RS232C)	PT61768	66454	
Shielded Cable to Nos. 761/772 Series Modules, No. 768 Remote Display and No. PT61768	PT22938	64059	
One 3-Volt Battery No. CR2450	PT61120	65446	
Computer Interface Cable complete to IBM-PC (RS232C)	PT61963	66636	

PRECISION TOOLS

DIGIMATIC DEPTH MICROMETERS

MIT SERIES 329:

FEATURES

- Preset capability. Set any desired measurement on the display and recall that measurement.
- Instant in/mm conversion
- Measurement hold key
- Zero-Set key allows for setting zero measurement at any point along spindle. Each unit comes complete with battery (offers 6 months of life under normal use), key spanner, other adjusting wrenches, fitted carrying case, manual.
- SPC output provided.
- Data Send button for transmitting readings to SPC systems.
- Measuring force: 6-10N
- Locking clamp.
- Runs off single SR44 battery.
- Automatic power-off after 20 min. idle time.



INCH/METRIC

Order No.	Range	LCD Resolution	Remarks	Price
329-350	0-6" 0-152.4mm	.00005" 0.001mm	With SPC output With Interchangeable Rods: 6 pcs	
329-351	0-12" 0-304.8mm	.0001 .001mm	With SPC output With interchangeable Rods:12 pcs	

METRIC

Order No.	Range	LCD Resolution	Remarks	Price
329-250	0-150mm	0.001mm	With SPC output With Interchangeable Rods: 6 pcs	

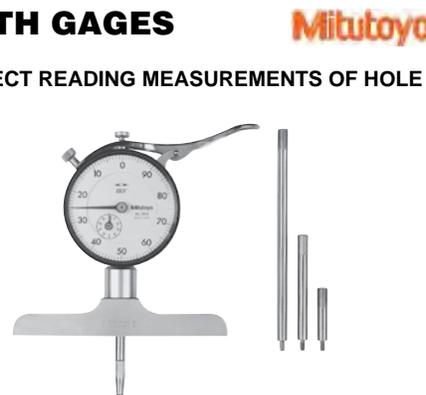
For SPC output order Connecting Cable 937387 (1m) or 965013 (2m). Replacement Battery: 541980 (1pc), 541980-10 (10pcs/SET).

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DIAL DEPTH GAGES

MIT SERIES 7:

FOR RAPID, DIRECT READING MEASUREMENTS OF HOLE DEPTH.



- The Dial Indicator has a precision-ground, hard-chrome-plated stem with a standard AGD 3/8" diameter. Contact point is hardened, ground and chrome-plated steel. Spindle rack, pinions and pivots are hardened stainless steel to insure long wear and continuing accuracy. Bezel is cleanly knurled and smoothly adjustable with a clamping screw for positive settings. Accuracy of the Dial Indicator exceeds Federal Specifications.
- Rods may be connected for depths up to 8".
- Spindle lifting lever for raising and lowering spindle is maintained under spring pressure.
- Bottom surface of the base is hardened, ground and lapped for the highest degree of flatness.
- Complete with fitted carrying case.
- The Dial Indicator is attached to the base by a clamping screw and readily interchangeable with any other standard AGD dial indicator.

Graduation .001" or 0.01mm

Range	Order No.	Price	Dial Range	Base Length	Note
0-8"	7217		0-1"	2-1/2"	with 1,2,4" rods
0-8"	7218		0-1"	4"	with 1,2,4" rods
0-200mm	9997212		0-10mm	101.6mm	with 10,20,30, 40mm rods

DIAL DEPTH GAGES

STARRETT SERIES 640, 643, 644:



640JZ 643JZ 644JZ

- Hardened and ground flat base positions on the surface of the work and the gage head is pushed down.
- Dial Indicator is a Starrett No. 25-441.
- Readings are obtained quickly and conveniently from these direct reading tools that are referenced from their hardened and ground bases.
- Bases are 2 1/2" (64mm) long.
- Fitted Case

No. 640J features:

- The top button is depressed to contact the work and obtain the measurement directly.
- Starrett No. 25-431 AGD dial indicator.

No. 643J features:

- Knife-edge base and a needle point contact that has been hardened and ground.
- The base has a cutout so that the conical point can be precisely positioned for close work.
- Point is 1/2" 12.7mm long with a 40° included angle.
- Starrett No. 25-131 AGD dial indicator.

No. 644J Features:

- These gages are for longer ranges, and are accurate and simple to use.
- The gages are furnished with three rounded-end contact points to cover the range.
- Gage features a Starrett No. 25-441 Dial Indicator

Range	Grad.	Dial Reading	With Case		Price
			Catalog No.	EDP No.	
0 - 1/2"	.0005	0-50	640JZ	52705	
0 - .125"	.0005"	0-25-0	643JZ	52714	
0 - 10mm	.01mm	0-100	640MJZ	55997	
0 - 3"	.001"	0-100	644JZ	52718	
0 - 75mm	.01mm	0-100	644MJZ	56027	

DIAL DEPTH GAGES

MIT SERIES 527:



Easier and faster reading Depth Gage with dial reading in .001" or 0.05mm.

- Made of hardened stainless steel.
- Base and measuring surfaces are hardened and micro-lapped.
- 4" standard base size
- Wider extension bases are available as optional item.
- With fine-adjustment feature.
- Complete with fitted carrying case.
- Graduation .001" or .05mm

Inch			Metric		
Range	Order No.	Price	Range	Order No.	Price
0-6"	527311		0-150mm	527301	
0-12"	527313		0-200mm	527302	
			0-300mm	527303	

Starrett



VERNIER DEPTH GAGES

STARRETT SERIES 448:



Starrett



Designed for measuring depth of holes, slots and recesses, heads are hardened, ground and lapped and the blades are hardened and ground. Blades have sharp, clean-cut, highly accurate machine divided graduations on one side only. Gages in English measure are quick reading. Maximum accuracy and easy adjustment are insured by tight, smoothly fitted vernier slides. Vernier plates are adjustable. Graduation .001" and 0.02mm. Furnished in case.

Inch Reading / Graduation .001"

Range	Base Length x Width	Blade Size	Catalog No.	EDP No.	Price
0 - 6"	2-3/4 x 1/4	6"	448Z-6	52306	
0 - 12	2-3/4 x 1/4	12	448Z-12	52308	
0 - 12	2-3/4 x 1/4	6 & 12	448Z-612	52310	

Inch and Millimeter Reading/ Graduation -.001" and 0.002 mm- Both Edges

Range	Base Length x Width	Blade Size	Catalog No.	EDP No.	Price
0-6"/150mm	70 x 6.35mm	150mm/6"	448Z-6ME	52312	
0-12"/300mm	70 x 6.35mm	300mm/12"	448Z-12ME	52314	
0-12"/300mm	70 x 6.35mm	6"/150mm & 12"/300mm	448Z-612ME	52316	

VERNIER DEPTH GAGES

MIT SERIES 527:



Mitutoyo

- Designed for measuring depth of holes, slots and recesses.
- Highly accurate with fine adjustment, for use in toolrooms and inspection departments on jig, fixture or die work.
- Maximum accuracy and easy adjustments are insured by tight, smoothly fitted vernier scales.
- Clear .001" or 0.02mm graduations on satin-chrome finish.
- Hardened stainless steel.
- All bases are hardened and micro-lapped.
- 4" standard base size. Wider extension bases (widths - 7", 10" and 12")* are available at additional cost.
- Complete with fitted carrying case.

*OPTIONAL EXTENSION BASES

Order No.	Price	Base Sizes
900367		7"
900368		10"
900369		12"

NOTE : These bases will fit all styles of MITUTOYO Depth Gages.

Inch			Metric		
Range	Order No.	Price	Range	Order No.	Price
0-6"	527111		0-150mm	527101	
0-8"	527112		0-200mm	527102	
0-12"	527113		0-300mm	527103	



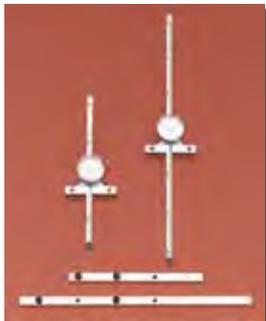
While we show the most popular **Starrett** and **Mitutoyo** items, we can supply their entire range of products. See our website or inquire.

DIAL DEPTH GAGES

STARRETT SERIES 450,450M:



Dial depth gages are easy to read. All readings are taken directly from the bar and the dial indicator. Designed for measuring depths of holes, slots and recesses. Easily removable hook permits measuring internal and external slots. Base extensions can be used to increase the base span to 7"(175mm) or 12"(300mm) on both models. Made of hardened stainless steel. Has positive split gear anti-backlash control. Graduation .001" or .02mm. .100" or 2mm in one revolution.



DIGIMATIC DEPTH GAGES WITH ABSOLUTE ENCODER

(with SPC Output)

MIT SERIES 571:



- No rack, no pinion, no glass scale. Linear Scale is safely embedded in the hardened stainless steel blade.
- Sliding LCD unit offers push button control for in/mm selection, absolute zero setting and turning the display on and off. Battery life is approximately two years with normal use.
- LCD unit displays "E-o5" for movement error and "B" for battery replacement. Note: sliding unit can be moved as fast as 40" per second.
- Power supply: Silver oxide cell (SR-44 1 pc.) 541980

INCH / METRIC Resolution .0005"/0.01mm

Order No.	Range	Accuracy	Remarks	Price
571-211	0-6"/ 0-150mm	±.001"	With SPC output Absolute Function Type	
571-212	0-8"/ 0-200mm	±.001"	With SPC output Absolute Function Type	
571-213	0-12"/ 0-300mm	±.0015"	With SPC output Absolute Function Type	
571-214	0-18"/ 0-450mm	±.002"	With SPC output	

SPC Output order Connecting Cable **905338**(1m) or **905409** (2m) for 571-214.
SPC Output order Connecting Cable **959149** (1m) or **959150** (2m) for Absolute Function Type.

Size	Description	Catalog No.	EDP No.	Price
0-6"	Depth Gage without case	450-6	56766	
0-12"	Depth Gage without case	450-12	56768	
0-300mm without case	300mm Gage	450M-300	64276	

Description	Catalog No.	EDP No.	Price
7"/175mm base extension	PT22287	65861	
12"/300mm base extension	PT22288	65862	
6"(150mm) case only	450ZZ-6	56776	
12"(350mm) case only	450ZZ-12	56777	

ELECTRONIC DIGITAL DEPTH GAGE

STARRETT SERIES 3753:



ACCURACY/DESIGN FEATURES:

- Linear accuracy is ±.001" (±0.03mm)
- Resolution .0005" (0.01mm)
- Exclusive Starrett designed microprocessor chip
- Hardened stainless steel body and slide for long life
- Fine adjustment thumb roll for precision measurements
- Lock to hold the slide in position
- Hardened base is 2-3/4" (70mm) long
- Hook attachment makes possible readings from the edge of a workpiece to edges of slots, grooves, shoulder, and other I.D. length dimensioning



ELECTRONIC FEATURES:

- Inch/millimeter conversion
- Zero at any position
- Hold readout at any position
- Manual ON/OFF, plus a built-in automatic OFF after 15 minutes of non-use
- One-year minimum battery life
- Shift button to easily use more functions
- Out-of-limits readings with flashing display

3753 Depth gages are light and easy to use for depth measurements in its range and feature an easy to read display with large, clear figures.

Description	Catalog No.	EDP No.	Price
3753 Electronic Depth Gages in Case			
0-6"/150mm Range	3753A-6/150	12258	
0-8"/200mm Range	3753A-8/200	12259	
0-12"/300mm Range	3753A-12/300	912260	
Accessories and Cable Information for Electronic Depth Gages			
180mm Base Extension	3648-180	912261	
260mm Base Extension	3648-260	9912262	
320mm Base Extension	3648-320	912263	
Two 3-Volt Batteries. CR2032	PT99492	65650	

PRECISION VERNIER CALIPERS WITH LOCKING SCREW
SERIES 214:



PRECISION VERNIER CALIPERS Mitutoyo

MIT SERIES 530, 531, 532:
THE FINEST OF VERNIER CALIPERS FOR ACCURATE WORK, WITH MITUTOYO'S EXCLUSIVE "QUADRI" 4-WAY MEASURING FEATURE.



Series 530
Plain and basic vernier caliper with locking screw atop the moving slider.



Series 532
With fine-adjustment for precise measurement.



Series 531
With thumb clamp. The jaw can be moved only when spring loaded thumb clamp is depressed.



No. 530-314
Outside jaws of No. 530-314 are carbide faced for measurements of abrasive products.

SPECIAL FEATURES:

All measurements can be read directly from vernier scale. Micro-fine black graduation on a satin chrome finish for easy reading. Jaws designed for outside, inside, and step measurement. Satin chrome finish with clear black engravings. Made of fully hardened stainless steel throughout. Includes fitted case.

Range	Vernier Scale		Order No.	Price
	Top	Bottom		
150mm/6"	1/1000"	.02 mm	1480106	
200mm/8"	1/1000"	.02 mm	1480108	
300mm/12"	1/1000"	.02 mm	1480112	

The MITUTOYO line of precision vernier instruments offer a wide range of precise tools for measuring accurately in inches and millimeters. All MITUTOYO Instruments are precisely made of the best quality hardened stainless steel throughout, to insure long life and continuous precision.

- Graduation photo engraved from a glass master plate for maximum accuracy.
- Made of fully hardened stainless steel throughout.
- Satin-chrome finish.
- Raised sliding surfaces prevent defacement and wear of the graduations; clear black engravings.
- All measuring surfaces are ground and lapped for extreme accuracy.
- Jaws designed for outside, inside and step measurements.
- All calipers are supplied in a fitted case.

PRECISION VERNIER CALIPER WITH THUMB LOCK
SERIES 214:



All the features of the Locking Screw calipers. The jaw can be moved only when spring loaded thumb clamp is depressed.

Range	Vernier Scale		Order No.	Price
	Top	Bottom		
150mm/6"	1/1000"	1/20mm	1485106	

Series	Order No.	Lower Price	Range		Vernier Reading	
			Upper Scale	Lower Scale	Upper Scale	Scale
530	530101		150mm	—	0.05mm	—
	530105		6"	6"	.001"	1/128"
	530116		8"	8"	.001"	1/128"
	530118		200mm	8"	0.02mm	.001"
	530312		150mm	6"	0.02mm	.001"
531	530314*		6"	6"	.001"	1/128"
	531107		150mm	6"	0.05mm	1/128"
	531108		200mm	8"	0.05mm	1/128"
	531113		6"	6"	.001"	1/128"
	531114		8"	8"	.001"	1/128"
532	531128		150mm	6"	0.02mm	.001"
	531129		200mm	8"	0.02mm	.001"
	532104		5"	5"	.001"	1/128"
	532105		7"	7"	.001"	1/128"
	532106		11"	11"	.001"	1/128"
532	532119		130mm	5"	0.02mm	.001"
	532120		180mm	7"	0.02mm	.001"
	532121		280mm	11"	0.02mm	.001"

* With OD Carbide Jaw

PRECISION VERNIER CALIPERS WITH FINE ADJUSTMENT
SERIES 214:



All the features of the Locking Screw Calipers with additional fine adjustment feature.

For precise measurement.

Range	Vernier Scale		Order No.	Price
	Top	Bottom		
150mm/6"	1/1000"	.02mm	2140006	
200mm/8"	1/1000"	.02mm	2140008	
300mm/12"	1/1000"	.02mm	2140012	

MICROMETER & CALIPER HOLSTERS



SERIES 215:

- High quality leather
- For machinists on the go
Micrometers and caliper not included.



Micrometer & Caliper Holder
Order No. 6000039
Price <input type="text"/>
Micrometer Holster
Order No. 6000038
Price <input type="text"/>

HEAVY DUTY CHROME FINISHED VERNIER CALIPERS

SERIES 211:



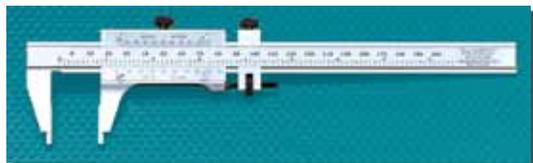
SPECIAL FEATURES :

- Machine divided and engraved from master for extreme accuracy.
- Made of hardened stainless steel throughout, ground and lapped for accuracy.
- Stepped jaws for inside measurements.
- "Double Spaced" vernier scales with easy to read, clear graduations on satin chrome finish.
- Longer jaws permit greater accessibility and simpler measurement of larger work-pieces.
- Fine adjustment screw.
- Fitted case.

Measuring Range	Jaw Depth	Vernier Scale		Order No.	Price
		Top	Bottom		
12"/300mm	4"	1/50mm	1/1000"	5301012	
18"/450mm	4	1/50mm	1/1000"	5301018	
24"/600mm	4	1/50mm	1/1000"	5301024	
40"/1000mm	6-1/2	1/50mm	1/1000"	5301040	
60"/1500mm	8	1/50mm	1/1000"	5301060	
80"/2000mm	8	1/50mm	1/1000"	5301080	
120"/3000mm	8	1/50mm	1/1000"	5300118	

MASTER VERNIER CALIPERS

STARRETT SERIES 123:



Starrett



50-division vernier scales with widely spaced graduations simplify settings and readings without the use of a magnifying glass. Flush fitting vernier scales eliminate reading errors caused by parallax. The long length of the adjusting jaw provides a longer bearing surface on the hardened and stabilized master bar, thereby insuring squareness with the solid jaw and extra resistance to springing. Satin chrome finish reduces glare for easier reading. Includes Finished Wood Case.

Range	Grad.	Approx Jaw Depth	Catalog No.	EDP No.	Price
0 - 12"	.001"	2-5/16"	123Z-12	50526	
0 - 24	.001	2-5/16"	123Z-24	50528	
0 - 36	.001	3"	123Z-36	50530	
0 - 48	.001	3"	123Z-48	50532	
0 - 60	.001	3"	L123Z-60	63189	
0 - 72	.001	3"	L123Z-72	63190	
0-150mm	0.02mm	34mm	123M-150	56099	
0-300mm	0.02mm	58mm	123MZ-300	56102	
0-600mm	0.02mm	58mm	123MZ-600	56104	

VERNIER CALIPERS -

HEAVY DUTY

MIT SERIES 160:

Mitutoyo



When the two outside jaws are closed, the nib width is smaller than the dimension listed.

To measure the smallest measurable inside dimensions, the jaws must be opened, leaving a space between the jaws.

All **MITUTOYO** Vernier Calipers meet or exceed Federal Specifications for accuracy.

- Machine divided and engraved from master for extreme accuracy.
- Made of hardened stainless steel throughout, ground and lapped for accuracy.
- Scale surface is satin-chrome finished.
- Raised sliding surface prevents defacement and wear of graduations.
- Long 50-division vernier scales have wide spaced easy-to-read, clear, crisp graduations on satin-chrome finish.
- Easy wear adjustment of vernier scales.
- Optional fitted carrying cases available :
413042 for 18" / 450mm size
413043 for 24" / 600 mm size

INCH Graduation .001"

Range	Order No.	Price	Depth of Jaw	Max. Nib Width
12"	160124		3"	.3937"
18	160116		4	.5826"
24	160102		4	.5826"
40	160105		5-1/2	.6693"
60	160111		7	.7480"
80	160114		7	.9055"

INCH / METRIC Graduation .001" x 0.02mm

Range	Order No.	Price	Depth of Jaw	Max. Nib Width
12" x 300mm	160125		3"	.3937"
18 x 450mm	160118		4	.5826"
24 x 600mm	160103		4	.5826"
40 x 1000mm	160106		5-1/2	.6693"
60 x 1500mm	160112		7	.7480"
80 x 2000mm	160115		7	1"

METRIC Graduation 0.02mm

Range	Order No.	Price	Depth of Jaw	Max. Nib Width
300mm	160127		75mm	10mm
450mm	160128		100mm	15mm
600mm	160101		100mm	15mm
1000mm	160104		140mm	17mm
1500mm	160110		180mm	19mm
2000mm	160113		180mm	23mm



While we show the most popular **MITUTOYO** items, we can supply their entire range of products. See our website or inquire.

VERNIER CALIPERS - LONG JAWS, HEAVY DUTY
MIT SERIES 534:



DIAL CALIPERS
SERIES 215:



- Made of full hardened stainless steel.
- Scale surface is satin-chrome finished.
- Raised sliding surface prevents defacement and wear of clear, black engraved graduations.
- All measuring faces are ground and lapped for ultimate accuracy.
- Extra long jaws permit greater accessibility and simpler measurement of large work-pieces.
- Adjustable vernier plates.
- Complete with fitted carrying case.



Of stainless steel, hardened throughout with satin-chrome finish. Suitable for outside, inside, depth and step measurement. Thumb roll. Direct reading in .001" or .02mm with adjustable dial setting and locknut. Covered rack for longer life. Fitted case. .100" or 2mm per revolution.

INCH Graduation .001"

Range	Order No.	Price	Depth of Jaw	Max. Nib Width
12"	534117		3.5"	.3"
20"	534118		7.8"	.8"
30"	534119		7.8"	.8"
40"	534120		7.8"	.8"

INCH / METRIC Graduation .001" x 0.02mm

Range	Order No.	Price	Depth of Jaw	Max. Nib Width
12" x 300mm	534105		90mm	10mm
20" x 500mm	534106		200mm	20mm
30" x 750mm	534107		200mm	20mm
40" x 1000mm	534108		200mm	20mm

INCH

Range	White Face		Black Face	
	Order No.	Price	Order No.	Price
0 - 4"	1495004		-	
0 - 6"	1495106		1495206	
0 - 8"	1495108		1495208	
0 - 12"	1495112		1495212	
0 - 18"	1495118		-	
0 - 24"	1495124		-	

METRIC

Range	Order No.		Price
	White Face	Black face	
0-150mm	1495306	2155150	
0-200mm	2150200	-	
0-300mm	2150300	-	

INCH AND METRIC COMBINATION DIAL CALIPER
SERIES 215:



Range	Graduation	Order No.	Price
0 - 6"/0-150mm	.001"/.02mm	2156150	

UNIVERSAL CALIPER ACCESSORY KIT



SERIES 215:

- Fits Dial Calipers & Verniers 4-6-8 In. Range
- Measures, slots, grooves, webs, shoulders, holes, pockets, etc.
- Saves Time and Money
- Will not scar or mar Jaws
- Adapts to all brands
- Measures hard to reach places



KIT CONTAINS :

- 2 Universal Jaw Clamp Ons
- 8 Accessory Points (4pair) 2 ea.
- Flat - Conical - Stem - Ball End
- User friendly Instructions
- All parts packaged in a high impact clear box

Order No. 1495000	Price

(Caliper not included)

CENTERLINE GAGE SETS

SERIES 215:

- Designed for dial, vernier, and digital calipers to measure centerline distance.
- Sold in pairs, these gages quickly adapt to most calipers.
- Centerline measurements read in exact figures; no adding or subtracting is required.
- The 60 degree conical probe fits snugly into holes. Takes guesswork away from center distance measurements or to edge from a hole.



SHOCK / DUST PROOF & TIN COATED DIAL CALIPERS

SERIES 215:



- Manufactured to close tolerances for excellent repeatability and accuracy
- Smooth movement
- Swiss design casing



- Titanium nitride coating provides superior wear and corrosion resistance
- Swiss design metal casing

.001" Per Revolution / Stainless Steel

Range	Graduation	Order No.	Price
0 - 6"	.001"	2155006	
0 - 8"	.001"	2155008	
0 - 12"	.001"	2155012	
0 - 6" TIN	.001"	1495600	

- Constructed of high quality alloy steel hardened to 50 RC, black oxide finished.
- Outside diameter and cone ground for accuracy.
- Each probe has two small holding nuts and is supplied with a hex wrench.



Description	Diameter	Length	Jaw Thick.	Order No.	Price
For 4", 6", 8" calipers	.375"	2.195"	.155"	1495001	
For 10", 12" calipers	.500"	2.750"	.188"	1495004	

PRECISION TOOLS

DIAL CALIPERS STARRETT SERIES: 120:



DIAL CALIPERS MIT SERIES 505:



Calipers have
"white face"
unless otherwise
specified.

A
.200" Per One
Revolution

C
1mm Per One
Revolution

B
.100" Per One
Revolution

D
2mm Per One
Revolution

- Hardened stainless steel bar, measuring surfaces, rack and gears.
- Sharp black bar graduations on a no-glare satin finish.
- Positive split-gear anti-backlash control.
- Rack teeth point down to shed foreign matter more easily.
- Knife-edge contacts for inside and outside measurements.
- Thumb-operated fine adjust roll.
- Sharp clear dial graduations of .001" or 0.02mm - .100" or 2mm in one revolution

Graduation .001"

Range	Dial Color	Catalog No.	EDP No.	Price
0-6"	White	120A-6	64514	
0-6"	White	120X-6	65909*	
0-6"	Black	B120A-6	64515	
0-6"	Red	R120A-6	64516	
0-9"	White	120AZ-9	64520	
0-9"	White	120A-9	64517**	
0-12"	White	120Z-12	56693	
0-12"	White	120-12	56694**	

Graduation 0.02mm

0-150mm	Yellow	120AM-150	66295	
0-150mm	Yellow	120MX-150	65910*	
0-225mm	Yellow	120MZ-225	64508	
0-225mm	Yellow	120M-225	64509**	
0-300mm	Yellow	120MZ-300	64510	
0-300mm	Yellow	120M-300	64511**	

Accessories and Cases Only

Center Distance Attachment	PT26151	64440	
Depth Attachment for 6", 9", and 150mm	PT22431	64640	
Detachable Depth rod for 12" Dial Calipers	PT26091	65100	
Deluxe padded case for 6" or 150 mm dial calipers.	120ZZ-6	55971	
Finished wood case 9" Dial Calipers	120ZZ-9	63878	
Finished wood case 12" Dial Calipers	120ZZ-12	56695	
Leather Holster for 6" or 150mm Dial Calipers	915	64166	

*Carbide Faces
** Without Case

Order No.	Range	Range per/Rev.	Dial Face	Remarks	Depth of Jaw	Price
Inch Graduation .001"						
505-716	0-4"	.20"	A		1.57"	
505-717	0-6"	.20"	A		1.57"	
505-675	0-6"	.10"	B		1.57"	
Do not include the "5" in the Order No.'s below when ordering.						
505-675-51	0-6"	.10"	B	Blue face	1.57"	
505-675-52	0-6"	.10"	B	Purple face	1.57"	
505-675-53	0-6"	.10"	B	Green face	1.57"	
505-675-54	0-6"	.10"	B	Red face	1.57"	
505-675-55	0-6"	.10"	B	Orange face	1.57"	
505-675-56	0-6"	.10"	B	Black face	1.57"	
505-675-66	0-6"	.10"	B	Black face w/ Ratchet stop	1.57"	
505-718	0-6"	.20"	A	OD Carbide Jaw	1.57"	
505-708	0-6"	.10"	B	OD Carbide Jaw	1.57"	
505-712	0-6"	.10"	B	OD, ID Carbide Jaw	1.57"	
505-689	0-6"	.10"	B	Extra smooth movement	1.57"	
505-690	0-8"	.10"	B	Extra smooth movement	1.97"	
505-719	0-8"	.20"	A		1.97"	
505-676	0-8"	.10"	B		1.97"	
505-709	0-8"	.10"	B	OD Carbide Jaw	1.97"	
505-713	0-8"	.10"	B	OD, ID Carbide Jaw	1.97"	
505-720	0-12"	.20"	A		2.52"	
505-721	0-12"	.20"	A	OD Carbide Jaw	2.52"	
505-677	0-12"	.10"	B		2.52"	
505-710	0-12"	.10"	B	OD Carbide Jaw	2.52"	
505-714	0-12"	.10"	B	OD, ID Carbide Jaw	2.52"	

Metric Graduation - .01mm

505-680	0-100mm	1.0mm	C		40	
505-681	0-150mm	1.0mm	C		40	
505-682	0-150mm	1.0mm	C		50	

Metric Graduation - .02mm

505-671	0-150mm	2.0mm	D		40	
505-707	0-150mm	2.0mm	D	OD Carbide Jaw	40	
505-711	0-150mm	2.0mm	D	OD, ID Carbide Jaw	40	
505-683	0-150-mm	2.0mm	D	Extra smooth movement	40	
505-672	0-200mm	2.0mm	D		50	
505-684	0-200mm	2.0mm	D	Extra smooth movement	50	
505-673	0-300mm	2.0mm	D		64	

While we show the most popular **Starrett** items, we can supply their entire range of products; please inquire.

ELECTRONIC CALIPERS
SERIES 725:



Rugged construction of stainless steel with no rack, no pinion, and no glass scale.



Description	Order No.	Price
4" Caliper	7251004	
6" Caliper	7251006	
8" Caliper	7251008	
12" Caliper	7251012	
20" Caliper	7255500	

- FEATURES:**
- 5 Digit high contrast display
 - Inch / Metric switch
 - Floating "Zero" reference point
 - Resolution ± .0005" / 0.01mm
 - Accuracy .001"
 - SPC Output
 - Four way measurement
 - Includes: fitted case / battery

ELECTRONIC CALIPERS
STARRETT SERIES 799:



Range: 0-40" / 0-1000mm

Starrett's 799 Series Electronic Calipers are light, comfortable, easy-to-use, and constructed with features that have made Starrett slide calipers the machinist's first choice for many years.

The 799 offers a slim, streamlined profile, a large, clear, easy-to-read LCD display, long battery life, and function buttons for zero and inch/mm.

799 calipers are available in 0-6", 0-8", and 0-12" sizes and the newly available Extended Range 24" and 40". All sizes furnished in a fitted, protective case.

Features (all sizes)

- Lightweight, ergonomic design
- Inch/millimeter conversion reads .0005" or 0.01mm
- Easy access to the single, long-life battery
- Last measuring position retained when shut off
- Hardened stainless steel body for long life
- Fine adjustment thumb wheel
- Lock screw to hold the slide in position
- Resolution is .0005" (0.01mm)
- Zero at any position
- **6", 8" & 12" Calipers Only**
- Large easy-to-read LCD, .32" high characters
- Automatic shut-off after 5 minutes of nonuse
- Linear accuracy meets DIN862
- Integrated depth rod
- **Extended Range 24" & 40" Calipers**
- Preset and hold feature
- Minimum and maximum limits set
- I.D. jaw dimension is 0.800"/20.32mm
- LCD characters are .50" high
- Auto shut-off after 30 minutes of non-use

ELECTRONIC CALIPERS
HEAVY DUTY TYPE WITH FINE
ADJUSTMENT AND EXTERNAL UPPER JAWS
SERIES 725:



- Inch/mm conversion.
- Resolution .0005"/.01mm
- Manual power on / off
- Zero settings at any position.
- SPC output



Range	4" Jaw Length Order No.	6" Jaw Length Order No.	8" Jaw Length Order No.	Price
24"/600mm	7255600			
40"/1000mm		7251000	-	
60/1500mm		7251500	-	
80"/2000mm			7252000	

ELECTRONIC CALIPER
STARRETT SERIES 798B: WITH OUTPUT



Non-Output Calipers available; please inquire.



Coolant & Water Resistant - Protects Against Chips, Dust etc.

The new Starrett 798 electronic caliper provides an IP67 level of protection against foreign matter in hostile shop environments. They are coolant and water resistant and offer excellent protection against chips, dirt, dust, and other contaminants.

Extra large LCD (character height .310") makes the 798 exceptionally easy to read.

Features:

- Induction type linear encoder system
- Hardened stainless steel measuring surface
- Depth rod with available attachment to seat the tool for more accurate measurements on all sizes
- Fine adjustment for precision measurements
- Lock to hold the slide in position
- Linear accuracy meets DIN862
- Resolution is .0005" (0.01 mm)
- Long life CR2032 3V battery
- In/mm conversion
- Zero at any position
- Automatic off after 30 minutes of non-use
- Capable of outputting data for analysis and data collection to RS232 devices
- Fitted plastic case

Range	Catalog No.	EDP	Price
0-6"/150mm	798B-6/150	912521	
0-8"/200mm	798B-8/200	12523	
0-12"/300m	798B-12/300	12525	

Range	Description	Catalog No.	EDP	Price
0-6" (150mm)	Caliper in Fitted Plastic Case	799A-6/150	67410	
0-8" (200mm)	Caliper in Fitted Plastic Case	799A-8/200	67412	
0-12" (300mm)	Caliper in Fitted Plastic Case	799A-12/300	67621	
0-24" (600mm)	Caliper in Fitted Plastic Case	799AZ-24/600	11978	
0-40" (1000mm)	Caliper in Fitted Plastic Case	799AZ-40/1000	11979	

Accessories and Case Information

Description	Catalog No.	EDP	Price
6", 8" & 12" Calipers Only	Center Distance Attachment	PT26151	64440
	Depth Attachment	PT22431	64640
	3 Volt Battery. CR2032	PT99492	65650
	Deluxe Padded Case for 0-6" (150mm) Calipers	723ZZ-6	57070
	Finished Wood Case for 0-8" (200mm) Calipers	950	63878
	Finished Wood Case for 0-12" (300mm) Calipers	946	56695

Quality Precision Tools

The Choice Is Yours!!!

PRECISION TOOLS

DIGIMATIC SOLAR POWERED CALIPER-WITH ABSOLUTE ENCODER

WITH OR WITHOUT SPC OUTPUT
MIT SERIES 500:



500-464

FEATURES

- The Absolute Encoder eliminates the need for zero setting each time the caliper is turned on.
- The Solar Absolute MyCAL will always turn on showing its true position.
- Memory of the origin point which will not be lost when power is cut off even if the caliper is left in complete darkness for extended periods.
- Unlimited response speed which means no more over-speed errors.
- An incremental measurement function for comparison measurements.
- The battery life has been greatly extended with the power-conserving design permitting 3.5 years (20,000 hours) continuous with a single battery.

Power is supplied by built-in solar cells which operate even in low light conditions down to 60 Lux.

INCH/METRIC

Order No.	Range	Accuracy	Remarks	Price
500-463	0-4" 0-100mm	±.001"	.075" Round Depth Bar with SPC output	
500-464	0-6" 0-150mm	±.001"	with SPC output	
500-465	0-8" 0-200"mm	±.001"	with SPC output	
500-473	0-4" 0-100mm	±.001"	.075 Round Depth Bar without SPC output	
500-474	0-6" 0-150mm	±.001"	without SPC output	
500-475	0-8" 0-200m	±.001"	without SPC output	

For SPC output order Connecting Cable: 959149 (1m) 959150 (2m)
Note: Solar Cells should be maintained over 60 lux.

Mitutoyo

DIGIMATIC CALIPER WITH ABSOLUTE ENCODER

MIT SERIES 500:

Mitutoyo



The world's first
Coolant Proof Caliper

Introducing Mitutoyo's Coolant-Proof caliper, the world's first digital caliper sealed against fluids and contaminants!

Mitutoyo introduces the toughest digital caliper in the world - the first that's IP-66 rated: coolant-proof, dust-proof, chip-proof. Use it anywhere in the shop. It also includes Mitutoyo's patented absolute encoder technology, the "Set 'n Forget" origin set-up feature. Now you can take digital measurements in places you never could before! Models available with SPC output.

Technical Data

Quantizing Error:	±1 Count.
Repeatability:	.0005"/0.01mm
Display:	LCD (Character height: .3" / 7.5mm)
Functions:	Origin / setting, Automatic power on/off, Inch/mm conversion, Data output
Dust/Water Protection Level:	IP66 (IEC 60529)
Battery:	SR44 (1pc.) up to 8" (2pc.) for 12"
Battery Life (0-6"):	Approx. 3-year under normal use
Battery Life (0-12"):	Approx. 1-year under normal use
Measuring system:	Electromagnetic induction type absolute linear encoder
Response Speed:	Unlimited

Order No.	Range	Accuracy	Remarks	Price
500-752	0-6" 0-150mm	± .001"		
500-762	0-6" 0-150mm	± .001"	with SPC output	
500-753	0-8" 0-200"	± .001"		
500-763	0-8" 0-200mm	±.001"	with SPC output	
500-754	0-12" 0-300mm	±.0015"		
500-764	0-12" 0-300m	±.0015"	with SPC output	

DATA INPUT TOOL

MIT SERIES 264:

Input Tool For Personal Computer Mitutoyo's Input Tool is a simple 1-channel interface unit that allows measurement data to be easily sent to a PC-based spread sheet such as MS-Excel, Lotus 1-2-3, etc., in just one step .

Mitutoyo



FEATURES

- Measurement data from Mitutoyo Digimatic gage can be input to a software spread sheet by just one touch of a data button.
- Small enough to fit in the palm of your hand. By connecting the input tool to a laptop computer, a portable measurement station is created.
- Easy to connect to a PC via the supplied cable that connects to any IBM PC compatible.
- No battery or AC power is needed. Power is supplied from the PC through the input tool's own connecting cable.
- Measurements are automatically line-fed with every transmission so there is no need to manually group data.

Connecting cable (optional accessory) is required for a connection to a digimatic measuring tool.

Product	Order No.	PC Requirements	Outside Dim.	Weight	Price
Input Tool For Keyboard	264-005	IBM PC compatible with PS/2 style keyboard interface (including laptops) Connects to keyboard port on CPU		2.7oz. 78g including cable and connector	
Input Tool For RS232C	264-007	IBM PC compatible (including laptops) with RS232C interface Connects to RS232C port on CPU (D-sub 9 pin connector)	2.4"(H)x 1.5"(W)x .9"(D) 60(H)x 37(W)x 22(D)mm	3oz. 87g including cable and connector	
Input Tool For USB	264-012	PC Compatible (including laptops) with USB 2.0 or 1.1 port		2.6 oz (74g) including cable and connector.	

- When using a IBM Think Pad Series, a commercial keyboard adapter is required.
- When using AT style keyboard, adapter for conversion is required.
- Ms-Excel, Lotus 1-2-3 are Trademarks of Microsoft and Lotus Development corporations respectively

DIGIMATIC CALIPERS WITH ABSOLUTE ENCODER - WITH SPC

MIT SERIES 500:

Featuring Position Memory and 3.5 Year Battery life



- MITUTOYO's new Absolute Encoder Digimatic Caliper offers special functions which allow it to always remember its measuring position even after the gage has been switched off.
- Origin: Allows setting of an origin starting point to be used as reference in subsequent measurements (generally set to closed jaw position). Once set, the Absolute Encoder caliper will switch on showing its true position from the origin point rather than 0.0000 as with standard models.
- Zero/ABS: Allows the display to be Zero-Set at any point along the slider for incremental comparison measurements. This switch will also allow return to the absolute mode and display of the true position from the origin point.
- Also provided is inch/mm conversion and SPC data output. Another outstanding feature of the Absolute Encoder Digimatic Caliper is 3.5 years of use under normal working conditions from just a single SR44 battery cell. (541980)

INCH/METRIC Resolution .0005"/0.01mm

Order No.	Range	Accuracy	Remarks	Price
500-170	0-4" 0-100mm	±.001"	With SPC output .075" Round Depth Bar	
500-171	0-6" 0-150mm	±.001"	With SPC output	
500-172	0-8" 0-200mm	±.001"	With SPC output	
500-173	0-12" 0-300mm	±.0015"	With SPC output	

METRIC Resolution 0.01mm

Order No.	Range	Accuracy	Remarks	Price
500-150	0-100mm	±0.02mm	With SPC output 2mm Round Depth Bar	
500-151	0-150mm	±0.02mm	With SPC output	
500-152	0-200mm	±0.02mm	With SPC output	
500-153	0-300mm	±0.03mm	With SPC output	

METRIC Resolution 0.01mm

Order No.	Range	Accuracy	Remarks	Price
9500-500	0-450mm	±0.05mm	With SPC output Without Depth Bar	
9500-501	0-600mm	±0.05mm	With SPC output Without Depth Bar	

INCH/METRIC Resolution .0005"/0.001mm

Order No.	Range	Accuracy	Remarks	Price
500-174	0-6" 0-150mm	±0.001"	With SPC output with OD Carbide Jaw	
500-175	0-6" 0-150mm	±0.001"	With SPC output with ID, OD Carbide Jaw	
500-176	0-8" 0-200mm	±0.001"	With SPC output with OD Carbide Jaw	
500-177	0-8" 0-200mm	±0.001"	With SPC output with ID, OD Carbide Jaw	
500-167	0-12" 0-300mm	±.0015"	With SPC output with OD, Carbide Jaw	
500-168	0-12" 0-300mm	±.0015"	With SPC output with ID, OD Carbide Jaw	
500-178	0-6" 0-150mm	±0.001"	With SPC output .075 Round Depth Bar	
500-505	0-18" 0-450mm	±0.002"	With SPC output Without Depth Bar	
500-506	0-24" 0-600mm	±0.002"	With SPC output Without Depth Bar	
500-507	0-40" 0-1,000mm	±0.003"	With SPC output Without Depth Bar	

Mitutoyo

DIGIMATIC CALIPERS WITH ABSOLUTE ENCODER WITHOUT SPC MIT SERIES 500:

Mitutoyo



- Introducing the new Digimatic Mycal E-Z Caliper featuring ABSOLUTE LINEAR ENCODER technology. It has achieved superior cost performance and ease of use by featuring only essential functions.

FEATURES

- The Absolute MyCal E - Z allows direct measurements from power on. You can forget the time consuming origin setup which otherwise is required each time the power is turned on.
- Zero-setting of the display is also possible at any slider position for easy comparison measurements (incremental mode).
- Large LCD digits allow measurement results to be at a glance.
- A scale contamination detection function is implemented to detect contamination of surface and display the error message (ErrC) on the LCD. The correct value is only displayed when the contamination is removed.
- The battery life has been greatly extended with the power-conserving design permitting 3.5 years (20,000 hours) continuous with a single battery.

INCH/METRIC Resolution .0005"/0.01mm

Order No.	Measuring Range	Accuracy	Remarks	Price
500-195	0-4" 0-100mm	± .001"		
500-196	0-6" 0-150mm	± .001"		
500-159	0-6" 0-150mm	±.001"	With OD, Carbide Jaw	
500-160	0-6" 0-150mm	±.001"	With OD, ID Carbide Jaws	
500-197	0-8" 0-200mm	±.001"		
500-163	0-8" 0-200mm	±.001"	With OD, Carbide Jaw	
500-164	0-8" 0-200mm	± .001"	With OD, ID Carbide Jaws	
500-193	0-12" 0-300mm	± .0015"		
500-165	0-12" 0-300mm	± .0015"	With OD, Carbide Jaw	
500-166	0-12" 0-300mm	± .0015"	With OD, ID Carbide Jaws	

Replacement Battery: 541980 (1 Pc.) 541980-10 (10 pcs./SET)

MYCAL LITE DIGIMATIC CALIPER ECONOMY VERSION

Mitutoyo

MIT SERIES 700:

- MyCal Lite is an innovative, new Digimatic Caliper which is economically priced to allow everyone to benefit from the advantages. Large LCD digits ensure error free reading in either inch or mm mode. Additionally, the zero point can be set anywhere to allow quick comparison measurements.



Technical Data

- Response Speed: 63"/s (1,600mm/s)
- Battery: Silver oxide cell SR-44 (1pc.) #541980
- Battery Life: Approx: two years (under normal use)
- Display: LCD 4-digit (-) sign. Character height: .295"
- Alarm: Battery voltage low. Over spec.

INCH/METRIC

Order No.	Range	Accuracy	Remarks	Price
700-113	0-6" 0-150mm	±005" ±0.2mm	No SPC output Depth Bar Provided	
700-123	0-8" 0-200mm	±005" ±0.2mm	No SPC output Depth Bar Provided	

VERNIER HEIGHT GAGES

SERIES 216:

Amply proportioned measuring beams and bases for extra rigidity.

- Satin - chrome Finish
- Double Spaced Vernier
- Vernier Scale : 1/1000" x 1/50mm
- Magnifying Glass
- Fitted Case

Sliding scale permitting all measurement to start from an even reference point.

Range	Order No.	Price
0-12"/0-300mm	1500112	
0-18"/0-450mm	1500118	
0-24"/0-600mm	1500124	



FLUSH READING VERNIER HEIGHT GAGES

STARRETT SERIES 255:



Combines the right balance and weight for applications where a heavy duty gage is not practical. Features long 50-division vernier with widely spaced, easy-to-read graduations for simplified settings and readings without a magnifying glass. Open-face design with flush fitting of the vernier scale to the main scale, both the same plane, eliminates parallax. Satin chrome finish eliminates glare and improves readability. Surfaces hard chrome plated for resistance to rust and stain. Bar and vernier scale machine divided. Hardened and stabilized bar features straight and angular ways for positive alignment and easy adjustment. A hand-fitting natural grip base design permits direct readings from base over full range without calculations. Scriber has rounded point and cuts clean, sharp lines with minimum pressure. Furnished in case.



MASTER VERNIER HEIGHT GAGES

STARRETT SERIES 254:

- Exceptionally stable and accurate with easy-reading vernier style.
- Long, 50-division vernier scales permit half as many graduations as single vernier tools.
- Widely spaced graduations make easy reading to .001" or 0.02mm without needing a magnifying glass.
- Flush fitting of the vernier scale to the main scale means that these are in the same plane, which eliminates parallax.
- Extremely fine adjustments are achieved by a knob located on the base.
- Quick-adjust release on the slide allows for fast positioning.
- Special master bar design and the balanced design and weight of the base eliminates vibration.
- Vertical bar is positioned near the center of the base for balance and stability.
- Versatile tool will scribe lines, mount dial indicators or electronic probes and accept depth attachments.
- Base is hardened, ground and lapped square.
- Fitted Case, Scriber.



Range	Graduation	Catalog No.	EDP No.	Price
0 - 12"	.001"	255Z-12	51229	
0 - 18"	.001"	255Z-18	51231	
0 - 300mm	0.02mm	255MZ-300	56218	
0 - 18"/450mm	.001"/0.02mm	255EMZ-18	65160	

DOUBLE BEAM HEIGHT GAGES WITH COUNTER

SERIES 216:



Furnished with two error proof digital counters which can be reset individually anywhere within the range for quick and easy upward and downward reading. The last digit on the counter is .1" or 1.0mm. The dial face is graduated in .001" or .01mm.

- Bottom surface of the base is stainless steel, hardened and ground
- With fine-adjusting wheel and lock
- Carbide tipped scriber



INCH			METRIC		
Range	Order No.	Price	Range	Order No.	Price
0-12"	2160000		0-300mm	2160003	
0-18"	2160001		0-450mm	2160004	
0-24"	2160002		0-600mm	2160005	

INCH READING - Graduation - .001"

METRIC READING - Graduation - 0.02mm

Range	Catalog No.	EDP No.	Price
0-12"	254Z-12	51219	
0-18"	254Z-18	51220	
0-24"	254Z-24	51221	
0-36"	254Z-36	51222	
0-48"	254Z-48	51223	
0-300mm	254MZ-300	56214	
0-450mm	254MZ-450	56215	
0-600mm	254MZ-600	56216	
0-900mm	254MZ-900	56217	
0-12"/300mm	254EMZ-12	51224	
0-18"/450mm	254EMZ-18	51225	
0-24"/600mm	254EMZ-24	51226	

Quality Precision Tools

The Choice Is Yours!!!

SERIES ELECTRONIC HEIGHT GAGE

STARRETT SERIES 3751:

0-6" / 150mm (without output)

This height gage is light, portable and easy to use for vertical measurements within its range.

Readability Features

- Easy-to-read LCD .32" high characters
- **Accuracy and Long Life Design Features**
- Hardened, stainless steel bar for long life
- Depth attachment PT08680A available for measuring depth of holes, slots, and recesses
- Fine adjustment thumb roll for precision measurements
- Rounded nose scriber cuts clean, sharp lines with smoothness and less pressure
- Lock to hold the slide in position
- Hardened, ground, and lapped base with finger grooves provides ease of movement
- Vertical bar is back from the edge of the nose for better stability
- Scribe can reference zero from the bottom of the base to get the full 6" (150mm) usable range

Action Features with Three Control Buttons

- Inch-millimeter conversion
- Zero at any position
- Manual ON/OFF plus a built in automatic OFF after 5 minutes of nonuse

(0-6"/150mm Range)			
Catalog No.	EDP	Description	Price
3751AZ-6/150	912221	Height Gage, in Case	
Accessories and Cables for 3751 Electronic Height Gage			
PT99492	65650	One 3-Volt Batteries, CR2032	
PT08680A	51383	Depth Attachment	



• Linear Accuracy: ±.001" (± 0.02mm)
• Resolution: .0005" (0.01mm)

ELECTRONIC DIGITAL DOUBLE BEAM HEIGHT GAGES

SERIES 725:

MADE OF STAINLESS STEEL

FEATURES

- Rigid twin column structure
- 6 digit LCD display and minus sign (-)
- Large size feed wheel
- Lock on measuring slider
- Battery furnished
- Carbide tipped scriber

FUNCTIONS

- Zero setting,
- Inch/mm conversion
- Data hold
- Plus/minus presetting



Range	Graduation	Order No.	Price
0-12"/0-300mm	.001"/.01mm	7255012	
0-18"/0-450mm	.001"/.01mm	7255018	
0-24"/0-600mm	.001"/.01mm	7255024	

DIGITAL COUNTER TYPE HEIGHT GAGES

MIT SERIES 192:

FEATURES

- Easy and error-free reading with both up and down digital counters as well as a dial.
- The counters and dial can be zero-set at any scriber position.
- Provided with a feed wheel for easy coarse feeding.
- Carbide-tipped scriber.

INCH

Order No.	Range	Accuracy	Price
192-150	0-12"	±.0015"	
192-151	0-18"	±.002"	
192-152	0-24"	±.002"	
192-153	0-40"	±.003"	

Digital Counter Graduation: .1" (Dual Reading)

Dial Graduation: .001"

Standard Accessories: Scriber 900258 Scriber Clamp 901385

METRIC

Order No.	Range	Accuracy	Price
192-130	0-300mm	±0.03mm	
192-131	0-450mm	±0.05mm	
192-132	0-600mm	±0.05mm	
192-133	0-1000mm	±0.07mm	

Digital Counter Graduation: 1.0mm" (Dual Reading)

Dial Graduation: 0.01mm"

Standard Accessories: Scriber 07GZA000, Scriber Clamp 07GZA002



DIGIMATIC HEIGHT GAGES

MIT SERIES 192:

Self-contained Electronic Inch/Metric Display.

FEATURES

- Easy-to-use design.
- Double-column structure ensures high measuring accuracy.
- Display: LCD Height .394", 6 digits and a minus sign (-).
- Carbide-tipped scriber.
- Dust/water protection level conforms to IP-40 standards.
- Optional wooden case available.

FUNCTIONS

- Zero/ABS Setting (ABS and INC modes)
- Preset Value Memory (ABS mode)
- Data Hold
- Presetting (ABS and INC modes)
- ±Counting Direction Changeover
- Inch/mm Conversion
- Coarse/Fine Feed Switching
- Over-speed Alarm
- Low Battery Alarm.



INCH/METRIC

Order No.	Range	Accuracy	Price
192-630	0-12"/0-304.8mm	±.001"	
192-631	0-18"/0-457.2mm	±.002"	
192-632	0-24"/0-609.6mm	±.002"	
192-633	0-40"/0-1016mm	±.003"	

Resolution: .0005"/0.01mm

Quantizing Error: ± 1 count

Response Speed: 19.69"/s (500mm/s)

Power Supply: One CR2032 Lithium cell 05SAA217

Standard Accessories: Scriber 900258, Scriber clamp 901385, One CR2032 Lithium Cell 05SAA217

ELECTRONIC HEIGHT GAGES SERIES 725:

Rugged construction of stainless steel with no rack, no pinion, and no glass scale.

FEATURES:

- 5 Digit high contrast display
- Inch / Metric switch
- Floating "Zero" reference point
- Resolution $\pm .0005"$ / 0.01mm
- Accuracy .001"
- Includes: fitted case / battery



Range	Order No.	Price
0-12"/0-300mm	7251112	
0-18"/0-450mm	7251118	
0-24"/0-600mm	7251124	

HEAVY DUTY DIGIMATIC HEIGHT GAGES MIT SERIES 192:

MIT SERIES 192:

FEATURES

- Two measuring modes, ABS (absolute) and INC (incremental), for increased inspection efficiency.
- Rigid construction ensures repeatable measurements.
- Bi-directional touch signal probe for improved efficiency and reliability of measurement. (192-008) Optional Accessory below
- Display: LCD, Height .394", 6 digits and a minus sign (-).

FUNCTIONS

- Zero/ABS setting (ABS and INC modes)
- Origin restoration
- Presetting (ABS and INC modes)
- Preset value memory (ABS mode)
- Data hold
- Inch/mm conversion
- Coarse/Fine Feed switching
- Counting direction
- Error alarm, Low battery alarm.
- Provided with a data output port for connection with the SPC system.
- Standard scriber and optional long scriber (5.90") both carbide-tipped.

CONTROL PANEL FEATURES

- On/Off switch • Inch/Metric switch • Zero/ABS switch
- Data/Hold switch • Preset switch (for all digits)
- Counting direction switch



Shown with 192-008 Probe

INCH/METRIC

Order No.	Range	Accuracy	Price
192-670	0-12"/ 0-304.8mm	$\pm .001"$	
192-671	0-18"/ 0-457.2mm	$\pm .0015"$	
192-672	0-24"/ 0-609.6mm	$\pm .0015"$	
192-673	0-40"/ 0-1016mm	$\pm .0025"$	

Resolution: .0005"/0.01mm

Quantizing: ± 1 count

Response Speed: 19.69"/s (500mm/s)

Power Supply: One CR2032 Lithium cell No. 05SAA217

Data Output: Digimatic code output.

Standard Accessories: Scriber 905201, Scriber Clamp 901385

One CR2032 Lithium cell 05SAA217

Optional Accessories: Two-Directional Touch Probe 192008*

For SPC output order Connecting Cable No. 905338 (1m) or 905409 (2m)

*TOUCH PROBE

Measuring Direction:	Two-Directions
Over Travel:	.06" (1.5mm)
Repeatability:	.00008" (2 μ m)
Measuring Force:	0.4N
Contact Point:	.12" (3mm) carbide ball

Order No. 192-008	Price:	
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HDS DIGIMATIC HEIGHT GAGES WITH ABSOLUTE ENCODER MIT SERIES 570:

MIT SERIES 570:

FEATURES:

- Can easily measure the height of small parts.
- Feed Wheel.
- Display: Easy-to-read large LCD display, 6 digit and minus sign (-)
- Absolute encoder for direct measurement from power on.
- Economical energy-saving design.
- Unlimited response speed.

	570-312*	570-313*	570-314*
Measuring Range	0-12"/300mm	0-18"/450mm	0-24"/600mm
Resolution	.0005"/0.01mm		
Accuracy	$\pm .0015"$		$\pm .002"$
Repeatability	.0005" (0.01mm)		
Power Supply	Silver oxide cell (SR-44) 1pc 541980		
Data Output	Digimatic code output (SPC output)		
Mass	10.12 lbs	12.98 lbs	14.08 lbs
Standard Accessories	Scriber 900258 Scriber Clamp 901385 SR-44 battery 1 pc.		

* For SPC output order connecting cable 905338 (1m) or 905409 (2m). Replacement battery: 541980 (1pc.), 541980-10 (10 pcs./SET)



- Functions include: Zero-setting (ABS and INC modes), Presetting (ABS and INC modes), Hold / Data button, Counting direction changeover, Inch/mm conversion, Data output, Inch/mm conversion, Data output, Error alarm, Low battery alarm, On/Off, Origin.
- Provided with a data output port for connection with the SPC system.*
- Battery Life: (Approx.) 20,000 hours of continual use.

Order No.	Price
570-312	
570-313	
570-314	

Mitutoyo

Mitutoyo

ELECTRONIC HEIGHT GAGES
STARRETT SERIES 3752:



The 3752 Electronic Height Gage is a full featured, versatile and economic solution for most height measurement applications. All measuring information from these tools can be entered directly into Starrett Data Collection Systems for analysis, data collection and hard copy documentation. They are available in 0-12" and 0-24" ranges.

Readability and Control Features

- Clear bar graduations in .100" and 5mm increments
- Large (.380"/9.65mm), easy-to-read LCD display reads to .0005" or 0.01mm
- Instant inch-millimeter conversion
- Carrier and scribe designed to read from zero
- "Hold" control feature retains a reading at any position
- Plus or minus indication allows reading in proper direction
- Ability to set zero at any position
- Manual on/off plus a built-in automatic off after 30 minutes of nonuse

Full Function Action Features

- Large positive action keypad
 - Ability to retain and return to the true zero reading of the height gage
 - PRESET button to install any reading at any position
 - Ability to install minimum and maximum limits
 - RS232 data output port
 - Works well with Starrett Datasure® Wireless Data Collection Systems
- Battery Life**
- 1-1/2+ years battery life. Two 3-volt batteries furnished (CR2450)



• Linear Accuracy: ±.001" (±0.02mm)
• Resolution: .0005" (0.01mm)

Height Gage shown with optional Auxilliary Circular Carbide Scriber, PT 28131. Gages are furnished with Auxilliary Straight Carbide Scriber, TP 22357.

Specifications for 3752 Electronic Height Gages	
Resolution	.0005" (0.01mm)
Graduations	.100" (5mm)
Overall Accuracy	±.0015" (.04mm) 0-18" (0-450mm) ±.002" (.05mm) 18-24" (450-600mm)
Battery Life	Over 1-1/2 Years Average Use

3752 Electronic Height Gages				
Range	Description	Catalog No.	EDP	Price
0-12" (300mm)	Height Gage without Case	3752-12/300	68815	
0-24" (600mm)		3752-24/600	68816	
Cables, Accessories, Cases				
Description	Catalog No.	EDP	Price	
Shielded Cable to Starrett 761/772 Series Modules, PT61768 Adaptor	PT22938	64059		
Interface Adaptor for Starrett Tools to PC	PT61768	66454		
3-Volt Battery, CR2450 (2) Required	PT61120	65446		
Wood Case Only for 12" Gage	928	55249		
Wood Case Only for 24" Gage	945	56684		

Furnished without case unless otherwise ordered.



While we show the most popular **Starrett** items, we can supply their entire range of products; please inquire.

DIAL TRAVEL INDICATORS
SERIES 220:



These Indicators are graduated in .001" or .01mm with the second hand reading every .010" or .1mm. Range per revolution .10" or 1.0mm. Reading 0-100. Back has clamping lug.

Travel	White Face		Black Face	
	Order No.	Price	Order No.	Price
1/4"	1530025		-	
1/2"	1530005		-	
1"	1530010		1530011	
2"	1530020		1530021	
10mm	1530000		-	
25mm	1530100		-	

MAGNETIC BASE & INDICATOR SETS
SERIES 221:



Magnetic Base	Indicator	Order No.	Price
Standard	1" Travel	1540001	
Fine/Adj.	1" Travel	1540006	

MAGNETIC BACK FOR DIAL INDICATOR
SERIES 221:

Product Description

- Permanent powerful magnet
- Attaches to the back of 2" diameter AGD dial indicators



Diameter		Thickness	
in.	mm	in.	mm
2-1/4"	57	1/2"	12.5

Order No.:	2210000
Price	

DIAL INDICATORS - MINIATURE
STARRETT SERIES 80:



Starrett AGD dial indicators have a hardened stainless steel rack, pinions and gears which resist shock and extend wear life to a remarkable degree. These moving parts are finished to extremely fine tolerances, delivering a smooth, sensitive action that minimizes friction and lost motion and insures precise repetitive readings.

MINIATURE DIAL INDICATORS - 1-1/4" DIAL DIAMETER, 7/32" STEM

Similar in design to AGD dial indicators, these miniatures are built for measuring bed travel on machines, gaging fixtures and for gaging dimensions in tight places. Equipped with high precision, low friction movements, they are made in three models, all with frictionally adjustable bezels for quick, positive zero setting. No glare, white eggshell finish dials, black bezel, satin chrome finish on case, furnished with balanced dial, jeweled bearings and lug-on-center back.

Grad.	Reading	Total Range	Range One Rev.	Catalog No.	EDP No.	Price
.001"	0-20-0	.100"	.040"	80-144J	55893	
.0005"	0-10-0	.050"	.020"	80-134J	55892	
.0001"	0-2-0	.010"	.004"	80-114J	55891	

DIAL INDICATORS - AGD GROUP 1



STARRETT SERIES 81:

Furnished with lug-on-center back and jewel bearings.

Anti-magnetic and nonshock mechanisms available on all models.

SPECIFICATIONS -

1-11/16" DIAL DIAMETER, .375" STEM



DIAL INDICATORS - AGD GROUP 2



STARRETT SERIES 25:



Furnished with lug-on-center back and with jewel bearings. Anti-magnetic and special nonshock mechanisms available on all models listed. Indicators marked with an (*) conform to AGD specifications except for range.

SPECIFICATIONS - 2-1/4" DIAL DIAMETER, .375" STEM

Grad.	Dial Reading	Range One Rev.	Range Total	Catalog No.	EDP No.	Price
INCH MODELS						
.001"	0-10-0	.020"	.050"	81-142J	53402	
.001"	0-20	.020"	.050"	81-242J	53430	
.001"	0-15-0	.030"	.075"	81-143J	53404	
.001"	0-30	.030"	.075"	81-243J	53432	
.001"	0-20-0	.040"	.100"	81-144J	53408	
.001"	0-40	.040"	.100"	81-244J	53434	
.001"	0-25-0	.050"	.125"	81-145J	53410	
.001"	0-50	.050"	.125"	81-245J	53436	
.001	0-50-0	.100	.250	81-141J	53400	
.001	0-100	.100	.250	81-241J	53428	
.0001"	0-5-0	.010"	.025"	81-111J	53378	
.0001"	0-10	.010"	.025"	81-211J	53414	
.00025"	0-5-0	.010"	.025"	81-124J	53384	
.00025"	0-10	.010"	.025"	81-224J	53416	
.00025"	0-10-0	.020"	.050"	81-128J	53386	
.00025"	0-20	.020"	.050"	81-228J	53418	
.0005"	0-10-0	.20"	.050"	81-134J	53390	
.0005"	0-20	.20"	.050"	81-234J	53422	
.0005"	0-15-0	.30"	.075"	81-136J	53392	
.0005"	0-30	.30"	.075"	81-236J	53424	
.0005"	0-20-0	.040"	.100"	81-138J	53398	
.0005"	0-40	.040"	.100"	81-238J	53426	
.0005"	0-25-0	.050"	.125"	81-131J	53388	
.0005"	0-50	.050	.125"	81-231J	53420	
MILLIMETER MODELS						
0.01mm	0-100	1.0mm	10mm	25-481J	53297	
0.01mm	0-50-0	1.0mm	25mm	25-781J	53305	
0.01mm	0-100	1.0mm	25mm	25-881J	53307	
0.01mm	0-50-0	1.0mm	10mm	25-381J	53289	

PRECISION TOOLS

MILLIMETER MODELS

.002mm	0-10-0	0.2mm	0.5mm	81-161J*	56043	
.002mm	0-10-0	0.2mm	0.5mm	81-161J-8**	64643	
.002mm	0-20	0.2mm	0.5mm	81-261J*	56045	
.002mm	0-20	0.2mm	0.5mm	81-261J-8**	64644	
.01mm	0-50-0	1.0mm	2.5mm	81-181J*	53412	
.01mm	0-50-0	1.0mm	2.5mm	81-181J-8**	64645	
.01mm	0-100	1.0mm	2.5mm	81-281J*	53438	
.01mm	0-100	1.0mm	2.5mm	81-281J-8**	64646	

* .375" Stem Diameter

** 8mm Stem Diameter

LONG RANGE DIAL INDICATORS



STARRETT SERIES 655, 656:

- Stem cap supplied as standard
- Continuous reading double dial with direct reading count hands
- Jewel bearings and lug-on-center back

Inch Model	Dial Diameter	Metric Model	Dial Diameter
655-2041J	2 3/4"	655-2081J	70mm
656-3041J	3 5/8"	655-3081J	70mm



Grad.	Reading	Range	Catalog No.	EDP No.	Price
.001"	0-100	2.000"	655-2041J	53619	
.001"	0-100	3.000"	656-3041J	53800	
.01mm	0-100	50mm	655-2081J	56230	
.01mm	0-100	75mm	655-3081J	56231	

DIAL INDICATORS - AGD GROUP 3



STARRETT SERIES 25:



Furnished with lug-on-center back, shockless hardened steel gear train and jewel bearings.

SPECIFICATIONS - 2-3/4" DIAL DIAMETER, .375" STEM

Grad.	Dial Reading	Range One Rev.	Range Total	Catalog No.	EDP No.	Price
Inch Models						
.0001"	0-10	.010"	.200"	655-611J	53617	
.001"	0-50-0	.100"	.500"	655-341/5J	53607	
.001"	0-100	.100"	.500"	655-441/5J	53611	
.001"	0-50-0	.100"	1.000"	655-341J	53609	
.001"	0-100	.100	1.000"	655-441J	53613	
Millimeter Models						
.01mm	0-100	1.0mm	25mm	655-881J*	56229	
.01mm	0-100	1.0mm	25mm	655-881J-8**	64869	

* .375" Stem Diameter

** 8mm Stem Diameter

DIAL INDICATORS

MIT SERIES 1, 2, 3, 4:

MITUTOYO offers dial indicators in the four basic AGD Series, with inch and metric graduations. These instruments conform to the three specifications governing dial indicators: American Gage Design, Military, and ANSI. This scope of available ranges and graduations is such that MITUTOYO is now one of the largest producers of dial indicators.

DIAL INDICATORS / GROUP 0



Mitutoyo

INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.0001"	.01"	1927-10	.004	0-2-0	8192710	
.0001"	0.25"	1925-10	.01"	0-5-0	8192510	
.0005"	.05"	1923	.02"	0-10-0	5581923	
.001"	.1"	1921	.04"	0-20-0	5581921	

METRIC-Standard (Stem Diameter 8mm)

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.002mm	0.05mm	1913-10	0.2mm	0-100-0	8191310	
0.01mm	2.5mm	1911	1mm	0-50-0	5581911	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 1927B-10.

-10 Indicates Jewel Bearings

DIAL INDICATORS / GROUP 1



Mitutoyo

INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.0001"	.025"	1802-10	.01	0-10	8180210	
.0001"	.025"	1803-10	.01	0-5-0	8180310	
.00025"	.05"	1470S	.02"	0-20	5581470	
.00025"	.05"	1471S	.02"	0-10-0	5581471	
.0005"	.125"	1506S	.05"	0-50	5581506	
.0005"	.125"	1507S	.05"	0-25-0	5581507	
.001"	.125"	1780	.05"	0-50	5581780	
.001"	.125"	1781S	.05"	0-25-0	5581781	
.001"	.25"	1410S	.1"	0-100	5581410	
.001"	.25"	1410S10	.1"	0-100	0141010	
.001"	.25"	1411	.1"	0-50-0	5581411	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 1927B-10.

(Continued)

-10 Indicates Jewel Bearings

DIAL INDICATORS / GROUP 1

(Continued)



Mitutoyo

METRIC-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.002mm	0.5mm	1010S-11	0.2mm	0-20	8101011	
0.002mm	0.5mm	1011S-11	0.2mm	0-10-0	8101111	
0.01mm	2.5mm	1230S-01	1mm	0-100	8123001	
0.01mm	2.5mm	1231S-01	1mm	0-50-0	8123101	
0.01mm	5mm	1044S-01	1mm	0-100	8104401	
0.01mm	5mm	1045S-01	1mm	0-50-0	8104501	

METRIC-Standard (Stem Diameter 8mm)

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.001mm	1mm	1109S	0.2mm	0-20	5581109	
0.002mm	1mm	1013S	0.2mm	0-10-0	5581013	
0.005mm	3.5mm	1124S	1mm	0-100	5581124	
0.001mm	3.5mm	1040S	1mm	0-50-0	5581040	
0.001mm	3.5mm	1041S	1mm	0-100	5581041	
0.001mm	4mm	1003	1mm	0-50-0	5581003	
0.001mm	5mm	1044S	1mm	0-100	5581044	
0.001mm	5mm	1045S	1mm	0-50-0	5581045	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 1003B.

-11 Indicates Jewel Bearings

DIAL INDICATORS / GROUP 2



Mitutoyo

INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.0001"	.025"	2802S-10	.01	0-10	8280210	
.0001"	.025"	2803S-10	.01	0-5-0	8280310	
.0001"	.05"	2804S-10	.01	0-10	8280410	
.0001"	.05"	2805S-10	.01	0-5-0	8280510	
.0001"	.1"	2806S-10	.01	0-10	8280610	
.0005"	.075"	2570S-10	.03	0-30	8257010	
.0005"	1"	2776S	.05	0-50	5582776	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 2937SB-10.

-10 Indicates Jewel Bearings

(Continued)

DIAL INDICATORS / GROUP 2

(Continued)



INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.001"	.25"	2410S	.1"	0-100	5582410	
.001"	.25"	2410S-10	.1"	0-100	8241010	
.001"	.25"	2919S-10	.1"	0-100	8291910	
.001"	.25	2411S	.1"	0-50-0	5582411	
.001"	.25	2411S-10	.1"	0-50-0	8241110	
.001"	.5	2414S	.1"	0-100	5582414	
.001"	.5	2414S-10	.1"	0-100	8241410	
.001"	.5	2415S	.1"	0-50-0	5582415	
.001"	.5	2415S-10	.1"	0-50-0	8241510	
.001"	1"	2416S	.1"	0-100	5582416	
.001"	1"	2416S-06	.1"	0-100	8241606	
.001"	1"	2416S-10	.1"	0-100	8241610	
.001"	1"	2417S	.1"	0-50-0	5582417	
.001"	2"	2424S-19	.1"	0-100	8242410	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 2410SB-10.

-10 Indicates Jewel Bearings

-06 Indicates Black Dial Face With Orange Hands



METRIC-ANSI Standard (Stem Diameter 3/8")

With Yellow Dial Face

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.001mm	1mm	2109S-11	0.2mm	0-100-0	8210911	
0.01mm	10mm	2046S-01	1mm	0-100	8204601	
0.01mm	10mm	2046S-11	1mm	0-100	8204611	
0.01mm	10mm	2047S-01	1mm	0-50-0	8204701	
0.01mm	10mm	2047S-11	1mm	0-50-0	8204711	
0.01mm	10mm	2048S-11	1mm	0-100	8204811	
0.01mm	20mm	2050S-01	1mm	0-100	8205001	
0.01mm	20mm	2050S-11	1mm	0-100	8205011	
0.01mm	25mm	2056S-01	1mm	0-100	8205601	

Metric-Standard (Stem Diameter 8mm)

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.01mm	5mm	2044S	1mm	0-100	5582044	
0.01mm	5mm	2045S	1mm	0-50-0	5582045	
0.01mm	10mm	2046S	1mm	0-100	5582046	
0.01mm	10mm	2310S-10	1mm	0-100	5582310	
0.01mm	20mm	2320S-10	1mm	0-100	5582320	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 2046SB-11.

-10 Indicates Jewel Bearings

-11 Indicates Jewel Bearings

DIAL INDICATORS/ GROUP 3



INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.0001"	0.25"	3802S-10	.01"	0-10	8380210	
.0001"	0.25"	3803S-10	.01"	0-5-0	8380310	
.0005"	0.75"	3570S-10	.03"	0-30	5583570	
.001"	.25"	3410	.1"	0-100	5583410	
.001"	.5"	3414S	.1"	0-100	5583412	
.001"	.4"	3413	.1"	0-50-0	5583413	
.001"	1"	3416S	.1"	0-100	5583416	
.001"	1"	3417S	.1"	0-50-0	5583417	
.001"	2"	3424S-19	.1"	0-100	8342410	
.001"	4"	3428S-10	.1"	0-100	8342810	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 3802SB-10.

-10 INDICATOR JEWEL BEARINGS



METRIC - ANSI Standard (Stem Diameter 3/8")

With Yellow Dial Face

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.002mm	0.5mm	3010-11	.02mm	0-20	8301011	
0.01mm	30mm	3052S-11	1mm	0-100	8305211	
0.01mm	50mm	3058S-11	1mm	0-100	8305811	

Metric - Standard (Stem Diameter 8mm)

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.001mm	1mm	3109S-10	0.2mm	0-100-0	5583109	
0.01mm	10mm	3046S	1mm	0-100	5583046	
0.01mm	10mm	3047S	1mm	0-50-0	5583047	
0.01mm	20mm	3050S	1mm	0-100	5583050	
0.01mm	50mm	3058S-19	1mm	0-10	5583058	
0.01mm	80mm	3060S-19	1mm	0-100	5583060	
0.01mm	100mm	3062S-19	1mm	0-100	5583062	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 3046SB.

-11 Indicates Jewel Bearings

DIAL INDICATORS

MIT SERIES 1, 2, 3, 4:

DIAL INDICATORS / GROUP 4



Mitutoyo

INCH-ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.0001"	.025"	4802-10	.01"	0-10	0480210	
.0001"	.025"	4803-10	.01"	0-5-0	8480310	
.0005"	.075"	4570S-10	.03"	0-30	5584570	
.001"	.25"	4410S	.1"	0-100	5584410	
.001"	3"	4887S-19	.1"	0-100	5584887	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 4802B-10.

-10 Indicates Jewel Bearings



While we show the most popular Mitutoyo items, we can supply their entire range of products; please inquire.



Metric-Standard (Stem Diameter 8mm)

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
0.01mm	10mm	4046S	1mm	0-100	5584046	

Lug back is standard; for flat-back version add 'B' to the number, e.g. 4046SB.

ELECTRONIC INDICATOR

SERIES 725:

Range : 0 - .5" / 0 - 12.7mm
Resolution : 0.0005" / 0.01mm

Functions include: in/mm conversion, zero-set, SPC output, tolerance set, auto power off, data hold.



MEDA Superior Import

Order No. 7250102 Price

ELECTRONIC INDICATORS

SERIES 725:

FEATURES:

- Zero setting at any position
- Auto power on/off
- Data output
- Metric/Inch system conversion at any position

MEDA Superior Import



Range	Resolution	Order No.	Price
0-0.4"/0-10mm	.0005"/0.01mm	7250104	
0-1.2"/0-30mm	.0005"/0.01mm	7250105	
0-2"/0-50mm	.0005"/0.01mm	7250106	
0-.6"/0-15mm	.00005"/0.001mm	7250107	

IDU DIGIMATIC INDICATOR WITH ABSOLUTE ENCODER

MIT SERIES 575:

FUNCTIONS

- ON/OFF
- Origin Setting
- Data output and SPC Digimatic Output*
- Inch/mm conversion (for Inch/Metric models)
- +/- Direction Changeover
- Error alarm
- Low battery alarm

FEATURES

- Compact and economical design.
- Provided with a data output port for connection with the SPC system.
- Power supply: One SR-44 battery (541980)
- Operating temperature: 0°C - 40°C
- Membrane sealed face helps keep out contaminants.



Mitutoyo

Order No.	Range	Resolution	Accuracy	Stem Diameter	Price
575-123 Inch/Metric Model	0-1"/ 0-25.4mm	.0005"/ 0.01mm	.0008"/ 0.02mm	.375	
575-121 (Metric Model)	0-25.4mm	0.01mm	0.02mm	8.0mm	

Measuring Force: (Downward): 1.8N or Less

Standard Accessories: Lifting Lever (137693)

Silver-Oxide Cell SR-44 (541980)

Protection Level: IP-42

Battery life: 20,000 hrs.

* For SPC output order Connecting Cable 905338 (1m) or 905409 (2m)

Note: No lug back is available for these indicators.



ELECTRONIC DIGITAL INDICATORS

STARRETT SERIES 2600:

Electronic indicators with a Starrett designed microprocessor are offered in Basic and Full-function models, all in 1" range. Indicators feature a large, easy-to-read LCD digital display and most models have data output capability to Starrett computer hardware and data collection systems for SPC analysis and documentation.



DESIGN FEATURES (Both Models)

- 1" (25mm) range
- Conforms to dimensions of AGD size Group 2
- Available with either a .375" (9.5 mm) stem or a .315" (8 mm) stem; .375" (9.5mm) furnished unless otherwise specified.
- Readout available to .0005" and 0.01 mm
- A large, right-sized, easy-to-read LCD digital readout, surrounded by a rotating black bezel
- Starrett-designed electronics microprocessor
- Output to Starrett SPC Plus system components on most models
- Utilizes standard indicator accessories and holding devices
- Battery powered and portable
- Battery furnished (over 1 year life)
- Factory floor friendly

ELECTRONIC FEATURES – BASIC MODELS

- Instant inch/mm conversion
- Zero the tool at any position
- Plus/Minus control to indicate direction
- On/Off control with automatic off after one hour of nonuse. (Zero references will not be lost from memory)

ELECTRONIC FEATURES – FULL FUNCTION MODELS

All the features and functions of the BASIC MODELS, plus the following additions:

- Bezel rotates the reading for convenient positioning
- Easiest keyboard control with the new shift button
- Ability to retain and return reading to the original zero reference (ABS)
- Min/Max/TIR mode to retain the lowest and highest readings in a group, and TIR gives the difference between them
- Limits mode to enter low and high limits for tolerance control. This is easily done by the new shift control to enter the proper function.
- Preset is used to install any reading at any point in the display and is also done with the new shift control
- Output jack allows data transmission to the following peripherals for SPC analysis, data collection and hard copy documentation:
 - Starrett No. 772 Series Advanced Data Collection Systems
 - Starrett No. 761 Series Data Multiplexers
 - Other devices that support RS232-C

Resolution Inch/mm	Range Inch/mm	Description	Catalog No.	EDP No.	Price
BASIC MODELS					
.001"/0.01mm	1.0"/25 mm	without output	2600-7	66041	
.0005"/0.01mm	1.0"/25 mm	without output	2600-0	65593	
.0005"/0.01mm	1.0"/25 mm	with output	2600-1	64886	
FULL FUNCTION MODELS					
.001"/0.01mm	1.0"/25 mm	with output	2600-8	66042	
.0005"/0.01mm	1.0"/25 mm	with output	2600-4	64889	
ACCESSORIES AND CABLES					
Adapter from No. PT22938 Cable to IBM-PC (RS232C)			PT61768	66454	
Shielded Cable to Starrett No. 761 Data Multiplexer and No. 772 Series Data Collector Modules, No 768 Remote Display and PT61768 Adapter z			PT22938	64059	
Spindle Lifting Cable			PT26263	66043	
One 3-Volt Battery No. CR2450			PT61120	65446	

PRECISION TOOLS

IDS DIGIMATIC INDICATORS WITH ABSOLUTE ENCODER

MIT SERIES 543:

Simple and Economical Design with Absolute Encoder

These IDS Type Digimatic Indicators incorporate Mitutoyo's Absolute Encoder Technology so all settings are maintained for the life of the battery. The IDS provides clear digital readings in a convenient and compact package which conforms generally to Series 2 dial indicator dimensions.



Measuring Range: 0-.5"/0-12.7mm

LCD Resolution: .0005"/ 0.01mm

Accuracy: (20°C) .0008"/0.02mm

Measuring Force: 1.4N(140gf) or less

Battery: Silver oxide cell SR-44 (1pc) **No. 541980**

Battery Life: Approx 20,000 hours

Protection Level: Conforming to IP-42

Functions: ORIGIN, ON/OFF, in/mm, +/-

Data Output*: SPC Digimatic output

Stem Diameter: .375"

Contact Point: .16" (DIA.) Steel ball (4-48UNF) **(No. 900032)**

Weight: 0.27 lbs

INCH/METRIC

Catalog No.	Description	Order No.	Price
543-683	Lug-Back	543683	
9543-683B	Flat Back	9543683	
OPTIONAL ACCESSORIES			
903425	Spindle Lifting Lever (ANSI/AGD Type)	903425	
540774	Spindle Lifting Cable	540774	
O2ACB420	Lug-on-Center Back (ANSI/AGD Type)	5702430	
O2ACB440	Flat Back	5702440	
O2ACB610	Back with Post	5702610	
O2ACB620	Adjustable Back (ANSI/AGD Type)	5702620	
O2ACB640	Back with Offset Lug	5702640	
O2ACB650	Magnetic Back	5702650	
O2ACB660	Back with Screw Mount (ANSI/AGD Type)	5702660	
O2ACB680	Back with Adjustable Bracket	5702680	

* For SPC output order Connecting Cable **905338** (1m) or **905409** (2m)

WISDOM™ ELECTRONIC DIGITAL INDICATORS - AGD GROUPS 2, 3, AND RECTANGULAR OVERSIZED

STARRETT SERIES 2700:

This is our most versatile line of electronic indicators, available in three styles, in addition to a remote display and accompanying probe series. All indicators feature a glass scale design with an unsurpassed accuracy of ± one resolution when measuring from a known standard. All have rugged, sealed enclosures as well.

WISDOM™ BASIC SERIES

- User Selectable Resolutions: All available resolutions can be utilized in the same indicator, provided they are coarser than the resolution of the purchased model.
- Instant inch/mm conversion
Plus or minus travel direction
Maximum reading hold
ZERO the tool at any position of the spindle
Rotating bezel
Auto Off: After 10 minutes of nonuse.
Serial Number: Indicators are furnished with individual serial number labels, coded with data for traceability
Three Power Sources: Operate by battery, A/C adapter, or through data port
Multiple Data Output/Input Choices: Output jack allows data transmission to the following peripherals for analysis, data collection, and hard copy:
Starrett No. 772 Series Advanced Data Collection Systems
Starrett No. 761 Series Data Multiplexers
Direct to RS232 - serial - BCD parallel and M.T.I.

WISDOM™ PLUS SERIES

- These models are more advanced than any other indicator in the world and have all the features and functions of the Basic Series, plus the following additions:
- Preset Mode to install any reading at any point in the display. Reading is retained even if the indicator is turned off
 - T.I.R.: Displays the difference between the highest and lowest values reached
 - Floating Reference: Allows you to set the absolute/preset number at any spindle position
 - Tolerancing: Permits the entering of high and low tolerances. When the tolerances are exceeded, the display will flash. Numbers are retained even if the indicator is turned off
 - Minimum reading hold
 - Hold Button to Freeze Display: Displays and holds the reading after the measurement has been taken
 - Feature Lock: Unique feature locks user selections so that a wrong button push will not change your settings

WISDOM™ SERIES REMOTE DISPLAYS AND PROBES

- These displays with probes will make absolute, incremental, and/or comparative measurements and implement all the features of WISDOM Plus indicators. System is ideal where viewing and operation ease are required. It is also suitable for any stand-alone gaging application.
- Remote display is a rugged enclosure with a 5/8" (16mm) high, easy-to-view LCD readout
 - Power sources include 110V 50/60hz, or battery operated (without backlight)
 - Probe and display can be separated by a distance of up to 6' (1.8 meters)



- Cable is hard wired to the probe and has a jack for convenient connection to the remote display box
- Readout box can be elevated for desired viewing

Please inquire for more information.



WISDOM™ BASIC SERIES

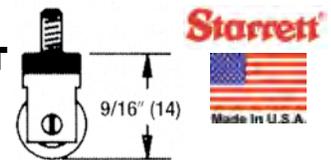
Catalog No.	EDP No.	Range Inch/mm	Resolution Inch/mm	No. of Res. Avail.	AGD Case	Price
2720-0	65815	.600"/15mm	.00005"/0.001mm	10	AGD-2	
2720-1	65816	.600"/15mm	.0001"/0.002mm	8	AGD-2	
2720-3	65817	.600"/15mm	.0005"/0.01mm	4	AGD-2	
2720-4	65818	.600"/15mm	.001"/0.02mm	2	AGD-2	

WISDOM™ PLUS SERIES

F2720-0	65835	.600"/15mm	.00005"/0.001mm	10	AGD-2	
F2720-1	65836	.600"/15mm	.0001"/0.002mm	8	AGD-2	
F2720-3	65837	.600"/15mm	.0005"/0.01mm	4	AGD-2	
F2720-4	65838	.600"/15mm	.001"/0.02mm	2	AGD-2	

Complete range of accessories, power source, and cables available; please inquire.

DIAL INDICATOR CONTACT POINT /SET STARRETT SERIES 25:



Roller Contact Point

No. 25W/ EDP No. 53916

- This contact has a small, hardened roller, 3/8 (9.5mm) in diameter for continuous gaging of moving material where the material movement is at a slow speed. Contact has #4-48 screw thread and substitutes for the regular contact point provided on Starrett and other AGD indicators.
- Furnished with a knurled check nut for positioning the contact on the indicator spindle.

Catalog No.	EDP No.	Price
25W	53916	

- 14 points with #4-48 screw thread to fit AGD dial indicators: a regular 1/4" (6.3mm) long point; 9 special form points; a No. 28 shock absorbing anvil; and 3 extra long points 1/2", 3/4" and 1" (13, 19, 25mm) long. High grade steel, hardened and ground. All are mounted on a convenient aluminum ring for safe keeping and ready selection.



Catalog No.	EDP No.	Price
25R	50153	

22 PIECE INDICATOR POINT KIT SERIES 219:



- All points have standard 4-48 threads.
- For use with Series 1-2-3-4 Dial Indicators.
- Carefully knurled stem for ease of operation.
- Plastic case.



Order No. 219022	
Price	

PRECISION TOOLS

TEST INDICATORS

SERIES 219:

- Automatic Reversing
- Satin Chrome Finish
- Adjustable Bezel
- Three-way Dovetail mounting
- Carbide point
- 5/32" and 3/8" mounting stems
- Fitted case



MEGA
Superior Import

LAST WORD® DIAL

TEST INDICATORS

STARRETT SERIES 711, 711M:

Starrett



Indicators are used for precise measurements in machining, layout, checking and inspection work.

The indicator attachment on the end of the body adapts the indicator to jib borers, milling or boring machines.

By means of the ball swivel joint, the indicator adjusts to sweep any hole or surface within its range.

The universal shank attaches to the end of the indicator attachment adapting the indicator to vernier height gages, as well as to lathe tool posts and milling machine arbors. Features include: a jeweled lever for extra smooth indicator action; a switch lever on the body to reverse the action; a hard chrome plated .120"(3mm) diameter ball contact point with ratchet joint for instant movement to any position; an adjustable 15/16" diameter dial; and a removable inspection hole cover screw for minor adjustments. Each indicator is furnished with three steel contact points, complete in protective case.



Range	Grad.	Dial Reading	Type	Order No.	Price
.030"	.0005"	0-15-0	Horizontal	2198000	
.030"	.0005"	0-15-0		2198005*	
.008"	.0001"	0-4-0		2198010	
0.8mm	0.01mm	0-40-0		2198030	
.030"	.0005"	0-15-0	Vertical	2198020	
0.8mm	.01mm	0-40-0		2198040	

* Black Dial Face

DIGITAL TEST INDICATOR

SERIES 219:

- Power on / off key, Zero setting key, Inch / Metric key, Tolerance key.
- Contact Point Diameter: 1/8" / 2.5mm
- Accuracy: +/- 0.001" / 0.02mm
- Range: +/- 0.02" / 0.5mm
- Grad.: 0.0005" / 0.01mm



MEGA
Superior Import

Order No.
2190010
Price

SWIVEL HEAD DIAL INDICATORS

STARRETT SERIES 811, 811M:



Starrett



Indicator with unique swivel head positions at any angle between 0° and 90°. Horizontal, vertical and 45° dial indicator – all in one. Simplifies gage inventory, saves money. Contact lever is automatically reversible, a practical, time-saving feature. Compatible with most dovetail attachments, meets international ISO specs and is available in .001" and .0005" graduations or 0.01mm, all with jewel bearings. Contact is frictionally adjustable, reversing, and offers ranges of ±.030" in .001" models, ±.015" in .0005" models, and ±.4mm in metric models. Dial Diameter 1-3/8" (35mm). Fitted case.

Range	Dial Grad	Dial Reading	Color	Description	Cat. No.	EDP No.	Price
.030"	.0005"	0-15-0	White	With attachments	811-5CZ	57079	
.030"	.0005"	0-15-0	White	Without attachments	811-5PZ	57080	
.060"	.001"	0-30-0	White	With attachments	811-1CZ	57081	
.060"	.001"	0-30-0	White	Without attachments	811-1PZ	57082	
.030"	.0005"	0-15-0	Black	With attachments	B811-5CZ	63261	
.030"	.0005"	0-15-0	Black	Without attachments	B811-5PZ	63262	
.060"	.001"	0-30-0	Black	With attachments	B811-1CZ	63263	
.060"	.001"	0-30-0	Black	Without attachments	B811-1PZ	63264	
.030"	.0005"	0-15-0	Red	With attachments	R811-5CZ	63265	
.030"	.0005"	0-15-0	Red	Without attachments	R811-5PZ	63266	
.060"	.001"	0-30-0	Red	With attachments	R811-1CZ	63267	
.060"	.001"	0-30-0	Red	Without attachments	R811-1PZ	63268	
.8mm	0.01mm	0-40-0	Yellow	With attachments	811-MCZ	57083	
.8mm	0.01mm	0-40-0	Yellow	Without attachments	811-MPZ	57084	

Accessory attachments include: dovetail body clamp, tool post holder, swivel post snug with dovetail indicator clamp, and snug and rod unit.

Grad.	Dial Reading	Range	Description	Catalog No.	EDP No.	Price
Inch Reading						
.001"	0-15-0	.030"	Indicator with Universal Shank Complete, Body Clamp	711FSAZ	52925	
.001"	0-15-0	.030"	Indicator with Gooseneck Shank	711FSBZ	52927	
.001"	0-15-0	.030"	Indicator with Body Clamp only	711FSZ	52929	
.0005"	0-15-0	.030"	Indicator with Universal Shank Complete, Body Clamp	711HSAZ	52951	
.0005"	0-15-0	.030"	Indicator with Body Clamp only	711HSZ	52953	
.001"	0-15-0	.030"	Indicator with all Attachments*	711GCSZ	52943	
.001"	0-15-0	.030"	Indicator with Universal Friction Holder with Shank	711GPSZ	52944	
.0005"	0-15-0	.030"		711LPSZ	52958	
.0005"	0-15-0	.030"	Indicator with all Attachments*	711LCSZ	52957	
Millimeter Reading						
0.01mm	0-35-0	0.7mm	Indicator with Universal Shank	711MFAZ	52926	
0.01mm	0-35-0	0.7mm	Indicator with Body Clamp only	711MFSZ	52930	
0.01mm	0-35-0	0.7mm	Indicator with Universal Shank Friction Holder	711MGPSZ	52946	
0.01mm	0-35-0	0.7mm	Indicator complete with all Attachments*	711MGCSZ	52945	

*Attachments include: 3 contact points (.35", .062", .120" or .9, 1.6, 3mm), body clamp, universal friction holder with shank, universal shank complete with long and short arm, double-jointed attachment, height gage attachment, surface gage attachment, coupling with 3/16" (4.8mm) hole.

INDIVIDUAL CONTACT POINTS (fits all No. 711 series)

Length	Ball Dia.	Material	Part No.	EDP No.	Price
5/32 (4mm)	.35"/0.9mm	Steel	PT07137	70945	
	.120"/3mm	Steel	PT07087	70912	
	.035"/0.9mm	Carbide	PT07137X	52964	
	.062"/1.6mm	Carbide	PT07136X	52965	
	.120"/3mm	Carbide	PT07087X	52966	

DIAL TEST INDICATORS WITH DOVETAIL MOUNTS

STARRETT SERIES 708, 709:



- Easy-to-read angled head.
- 3 dovetail positioning mounts.
- Meet or exceed ISO accuracy specifications.
- Precision gear driven design with accurate, smooth jeweled movement.
- Replaceable contacts are frictionally adjustable.
- Furnished in case.

Dial test indicators have large dial faces, 1-3/8" (35mm) diameter which provide ease of reading. The long contact and narrow body provide inreach versatility. Standardized dovetails work with dial test indicator accessories.

C = COMPLETE WITH ATTACHMENTS:

Dovetail body clamp, tool post holder, swivel post snug with dovetail indicator clamp, snug and rod unit.

Carbide contact point included.

INCH

Grad.	Range	Dial Read	Dial Color	Cat. No.	EDP No.	Price			
.0001"	.010"	0-5-0	White	708AZ	64212				
			Red	R708AZ	64603				
			Black	B708AZ	64607				
			White	708ACZ	64217				
			Red	R708ACZ	64604				
			Black	B708ACZ	64608				
.0005"	.030"	0-15-0	White	708BZ	64213				
				708BCZ	64218				
			White	709AZ	64214				
			Red	R709AZ	64605				
			Black	B709AZ	64609				
			White	709ACZ	64219				
.0005"	.060"	0-15-0	Red	R709ACZ	64606				
			Black	B709ACZ	64610				
			White	709BZ	64215				
				709BCZ	64220				
			Millimeter Reading						
			0.002mm	0.2mm	0-100-0	Yellow	708MAZ	65864	
				708MACZ	65865				
0.01mm	0.8mm	0-40-0	Yellow	709MAZ	64216				
				709MACZ	64221				

TRUETEST TEST INDICATORS

SERIES 513:



513-443
White Face



513-443-06
Black Face

Graduation	Range Per Rev	Range	Dial Reading	Catalog No.		Accuracy	Dim. L*	Dial Face	Order No.		Price	
				Basic	Complete				Basic	Complete	Basic	Complete
.0005"	.03"	.06"	0-15-0	513-442	513-442T	±.0005"	.78"	White	513442	9513442		
				513-442-01	513-442T-01			Blue	5134421	9134421		
				513-442-06	513-442T-06			Black	5134426	9134426		
.0005"	.03"	.06"	0-15-0	513-446	513-446T	±.0005"	1.33"	White	513446	913446		
				513-446-06	513-446T-06			Black	5134466	9134466		
.001"	.008"	.016"	0-4-0	513-443	513-443T	±.0002"	.59"	White	513443	913443		
				513-443-06	513-443T-06			Black	5134436	9134436		

TEST INDICATOR AXIAL SUPPORT

STARRETT SERIES 708:



- Triple-hinged holder is designed to mount dovetail indicators, including Starrett Nos. 708, 709, and 811 Series
- Will also accommodate test indicators including No. 711 Series.

Overall Length: Approx. 5-1/4" (133mm)
Shank Size: 3/8" (9.5mm)



Catalog No.	EDP No.	Price
PT26007	65101	

UNIVERSAL DIAL INDICATOR HOLDER

SERIES 219:



Fits all dial indicators. Clamps all standard dovetails. Swivels in all directions. Shank Size: 1/4" Dia. x 3" Overall Length

Order No.	2199000	Price	

Quality Indicators

The Choice Is Yours!!!

Complete		Basic	
	Indicator with a ø.078" carbide contact point		ø.039" contact point
	ø.038" stem 190321		ø.118" contact point
	Nut 190322		ø.5/32" stem 190318
	Square arm 900306		For ø.5/32" and ø.3/8" stems Swivel Clamp 900322

*L = Point Length



PRECISION TOOLS

BACK - PLUNGER DIAL TEST INDICATORS

STARRETT SERIES 650, 651:



Back plunger indicators include a 3" (75mm) detachable deep hole attachment interconnecting directly with the main spindle for positive action. The attachment is for checking internal dimensions of a workpiece while in fixtures or machines and can be easily removed.

The Starrett Model No. 651 series are identical to the No. 650 series except they cannot accept the deep hole attachment. Both models have 1-11/16" (43mm) diameter bezels and are available with either 0-50-0 balanced dial or 0-100 continuous reading dial. Each has adjustable dials to set zero at any point opposite the hand. The indicator mounting rod measures 1/4" diameter x 3-3/16" (6.3mm x 80mm) long. The back plunger stem is AGD 3/8" (9.5mm) diameter. Indicators are furnished with three different AGD contact points for use in most applications.

Both the Starrett Model No. 650A and No. 651A sets include accessory attachments: clamp, tool post holder and snug, complete in case.

Graduation: .001" or 0.01mm
Range: .200" or 5mm



Shown with detachable deep hole attachment held in tool post holder with upright spindle and snug, complete.

Dial Reading	Description	Catalog No.	EDP No.	Price
0-100	Indicator with 3 contact points, detachable deep hole attachment, 3 accessory attachments*, in case	650A1Z	64475	
0-50-0	Indicator with 3 contact points, detachable deep hole attachment, 3 accessory attachments*, in case	650A5Z	64474	
0-100	Indicator with 3 contact points, detachable deep hole attachment ONLY	650B1	64477	
0-50-0	Indicator with 3 contact points, detachable deep hole attachment ONLY	650B5	64476	
0-100	Indicator with 3 contact points, 3 accessory attachments*, in case	651A1Z	64483	
0-50-0	Indicator with 3 contact points, 3 accessory attachments*, in case	651A5Z	64484	
0-100	Indicator with 3 contact points ONLY	651B1	64485	
0-50-0	Indicator with 3 contact points ONLY	651B5	64486	
0-100 Yellow Dial Face	Indicator with 3 Contacts Points, detachable deep hole attachment 3 Attachments*, in Case	650MA1Z	65261	
0-100 Yellow Dial Face	Indicator with 3 Contact Points, detachable deep hole attachment	650MB1	65262	
0-100 Yellow Dial Face	Indicator with 3 contact points 3 attachment* in case	651MA1Z	65263	
0-100 Yellow Dial Face	Indicator with 3 contact points ONLY	651MB1	65264	

*Accessory attachments include: clamp, tool post holder and snug.



UNIVERSAL BACK-PLUNGER DIAL TEST INDICATORS

STARRETT SERIES 196:



Universal dial test indicator adjusts to any angle. The slightest pressure on the contact point produces a movement of the hand on the dial. Indicator comes with three hardened contact points which allow any outside surface to be checked including cutters, gears and racks. Metric indicators have a Yellow dial face.

Graduation .001" / 0.02mm

Range .200" / 5mm (in 2-1/2 revolutions of the hand)

Attachments:

- Tool post holder with sleeve is used in lathe work.
- Snug complete has 5/16" dia (8mm) and 3/32-1/4" (2.4 -6.3mm) holding capacity.
- Clamp attaches the indicator to lathe and planer tools and milling arbors.
- Hole attachment lets the indicator be used over obstructions and inside holes to a depth of 1-5/8" (40mm).

Dial Reading	Description	Catalog No.	EDP No.	Price
0-100	Indicator complete with attachments in case	196A1Z	50697	
	Indicator ONLY	196B1	50699	
0-50-0	Indicator complete with attachments, in case	196A5Z	50714	
	Indicator ONLY	196B5	50717	
0-2	Indicator complete with attachments in case	196MA1Z	65251	
	Indicator ONLY	196MB1	65252	
0-1-0	Indicator complete with attachments in case	196MA5Z	65253	
	Indicator ONLY	196MB5	65254	

BACK PLUNGER WITH PERPENDICULAR MOUNTING STEM

GROUP 1

MIT SERIES 1:



Mitutoyo

INCH - ANSI Standard (Stem Diameter 3/8")

Grad.	Total Range	Catalog No.	Range Per Rev.	Dial Reading	Order No.	Price
.001"	.1"	1156	.1"	0-100	1156	
.001"	.1"	1157	.1"	0-50-0	1157	

**METRIC - ANSI Standard (Stem Diameter 8mm)
With Yellow Dial Face**

Grad.	Total Range	Cat. No.	Range Per Rev.	Dial Reading	Order No.	Price
0.01mm	5mm	1160	1mm	0-100	9991160	



While we show the most popular Mitutoyo items, we can supply their entire range of products; please inquire.

MAGNETIC BASE INDICATOR HOLDERS

SERIES 221:

On/off switch controls strong permanent magnet. Complete with "V" area for clamping to round surfaces, 3 diameter dial holding rod with swivel adapter for lug back indicator to accept all AGD dial indicators, upright, swivel clamp, universal swivel attachment, and scriber.



Standard



Fine Adjustment

Order No.	Description	Price
1540000	Standard	
1540005	With Fine Adjustment	

MAGNETIC BASE HOLDER

SERIES 221:

- Rugged **heavy duty** magnetic base.
- Grips flat or curved metal surfaces.
- Magnet molded in plastic base.
- 4" x 5/16" (100mm x 8 mm) steel center post.
- Base for many applications.

Order No.	Description	Size of Base	Price
1540025	Magnetic Base complete with assembly	2x1-1/2x1-1/4" 50x38x32mm	



FLEXIBLE ARM MAGNETIC BASE

SERIES 221:

- Articulated arm style alnico magnetic base, positions and locks easily.
- Includes ON/OFF switch and central locking knob to tighten both arms.
- Includes two balls joints and one central cylindrical joint.
- Dial gage holder includes fine adjustment and full 360° swivel.
- Hydraulic clamping system suitable for dial gauges with stem of 1/4" (6.35 mm), 5/16 (8mm) and 3/8" (9.5mm) and dovetail indicators.
- Magnetic pull approx. 130 lbs. (60 Kgs.)

Order No.	Max Height	Base Dimension	Price
1540012	14"/ 355mm	2-1/2 x1-7/8x2-1/8" 63 x 48 x 55mm	



MAGNETIC BASE INDICATOR HOLDERS

PUSH BUTTON TYPE

SERIES 221:

On/off button releases magnet. Supplied with universal clamp to accept all AGD indicators and long extended arm.

Base size : 1-3/4" Wide
x 2" Height
x 1-7/8" Depth



Standard

Fine Adjustment

Standard Type:	Order No. 1540050	Price
Fine Adjustment:	Order No. 1540075	Price

HEAVY DUTY DIAL GAGE HOLDER

SERIES 79:

Rigid, steel arm, nickel plated.

- Has fine adjustment.
- NOGA central locking mechanism with spring loaded bearing.
- Powerful magnetic base 176LBF.

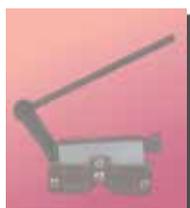
Model No.	Order No.	Price
MG61033	7910339	



MAGNETIC BASE INDICATOR HOLDER

SERIES 221:

Accommodates almost all test and dial indicators. Precision adjustment controlled by thumb screw.



MAGNETIC BASE

SERIES 221:

- A universal magnetic base that will save time and improve accuracy
- Strong magnet with 45 lbs. of holding power
- Zinc die cast housing
- Size 4-1/2" x 1" x 1-1/4"
- 5 different locations for mounting accessories

Order No. 2220000
Price



HEAVY DUTY MAGNETIC BASE INDICATOR HOLDER WITH ROTARY ON-OFF SWITCH - WITH OR WITHOUT



STARRETT AGD DIAL INDICATORS

STARRETT SERIES 659:

Holder has a powerful permanent magnet base that attaches to flat or round surfaces. A swivel post snug positions the dial indicator at any height and at any vertical or horizontal angle – and provides for axial travel and rotation of the gage rod. A stem clamp with 3/8" (9.5mm) hole holds the indicator, allowing it to be faced in any direction. A knurled thumb screw locks each gage adjustment, with the final indicator setting accomplished by a fine adjustment at the opposite end of the gage rod.



A second tapped hole in one side of the base is for mounting the upright post horizontally or adding another post for multiple inspection work. Both the swivel post snug and base have precision ground base contact surfaces. Furnished with or without AGD indicator (.0005" graduation, 0-25-0 dial reading, .125" range or 0.01mm Grad., 0-50-0 Dial Reading, 2.5mm Range.) with jewel bearings. Has a rotary on-off switch and a form ground involute vee for accurate seating on round work up to 5" (125mm) diameter.

Dimensions: Base 2-3/8" x 2-3/8" x 3"; upright post and gage rod are 9-3/8" x 3/4" (238 x 19mm) diameter.

Description	Catalog No.	EDP No.	Price
Base with upright post, swivel snug gage rod, indicator clamp, fine Adjustment, threaded adapter, without indicator, without case	659A	56687	
Magnetic base with upright post, swivel snug, gage rod, indicator clamp, fine adjustment, threaded adapter, without indicator, in case	659AZ	55947	
Magnetic base with Upright Post Assembly, with inch reading indicator No. 25-131J in case	659BZ	55948	
Base and Upright Post Assembly with millimeter reading indicator No. 25-181J in case	659MBZ	64892	

MAGNETIC BASE INDICATOR HOLDER WITH ATTACHMENTS



STARRETT SERIES 657:

Magnetic Base with attachments: Upright Base Post, Snug, Rod, Indicator Attachment, and Snug complete (1/4" and 3/8" holes)

- Base has three precision ground magnetic contact surfaces.
- Grips horizontally, vertically or upside down.
- V-step holds base to arbors, shafts, chucks.
- Push button on-off switch for one hand operation.
- Threaded end fits lug backs of all AGD indicators and miniature indicators.

Magnetic Base: 1-15/16"x1-5/8"x1-7/8" (50x40x48mm) deep

Catalog No.	EDP No.	Price
657AA	52743	



MAGNETIC BASE INDICATOR HOLDER WITH ATTACHMENTS



STARRETT SERIES 657:

Base has three precision ground magnetic contact surfaces. Grips horizontally, vertically or upside down. V-step holds base to arbors, shafts, chucks, and other round surfaces. Extra 1/4-20NC tapped hole in one side of base (not shown) for mounting post.

Upright Base Post: 3/8"(9.5mm) diameter x 7-7/16"(190mm) length overall.

Swivel Post Snug: Allows universal indicator adjustment-up and down, to any vertical angle, in a complete circle, and any distance from the base along the gage holding rod.

Snug has two 3/8"(9.5mm) diameter holes.

Gage Holding Rod: 3/8"(9.5mm) diameter x 9-1/2" (240mm) long. Clamping mechanism for gripping lug back of AGD dial indicators and miniature dial indicators.

Indicator may be set at any angle by loosening binding screw.

Magnetic Base: 1-15/16" x 1-5/8" x 1-7/8" (50x40x48mm). Push button on-off switch.



Description	Catalog No.	EDP No.	Price
Magnetic base with post, snug and rod	657D	52749	
Magnetic base ONLY, without post or attachments	657P	52757	

UNIVERSAL INDICATOR HOLDER WITH TRIPLE - JOINTED ARM AND FINE ADJUSTMENT



STARRETT SERIES 657:

Universal Indicator Holder with Fine-Adjustment, Magnetic Base, Indicator Holding Rod, and Snug

- Versatile holder has three pivots for positioning the indicator.
- Working area is within a hemisphere having a radius of approximately 12"(300mm).
- Will hold indicators with 3/8"(9.5mm) stem, 1/4" (6.3mm) or 3/16"(4.7mm) shank, standard dovetail mount or body clamp.

Catalog No.	EDP No.	Price
657 - 1	64436	



The very sensitive fine-adjustment is located on the magnetic base to eliminate indicator deflection when it is being adjusted.

MAGNETIC STANDS



MIT SERIES 7:

MITUTOYO Magnetic Stands, accept all AGD-type Dial Indicators.

Test Indicators and Probes having 3/8" diameter shank and/or Lug Back with 1/4" diameter mounting hole.

The ON-Off Switch offers instant mounting and dismounting without any adverse effect to the indicators or work surface.

Indicator not included.



Catalog No.	Description	Order No.	Price
7010S	With 6" rod and universal clamp	7010	
7011BN	With 6" adjustable rod and universal clamp	7011	

UNIVERSAL MAGNETIC INDICATOR HOLDERS

SERIES 221:

- Two universal ball sockets permits adjustment to any angle or position.
- Dovetail clamp for test indicators.
- 1/4" (6.35mm) hole for 1/4" (6.35mm) stem indicators.
- Provided with extension rod 1/4" x 3-1/2" (6.35 x 90mm)
- Powerful magnetic force.



MINI MAGNETIC BASE INDICATOR HOLDERS

SERIES 221:

Small size and strong magnetic holding power for mounting indicators in not easily accessible locations.

- Height of base: 1"
- Diameter of base: 1"
- Height of rod: 3-1/2"
- Diameter of rod: 1/4"

Includes universal holder and disc on bottom for neutralizing magnet when not in use.



Standard Fine Adjustment



Order No.	Description	Base Dia.	Base Height	Body Height	Price
1540002	Without Fine Adjustment	1-3/16"/30mm	1"/25mm	5"/125mm	
1540003	With fine Adjustment	1-3/16"/30mm	1"/25mm	4-3/4"/120mm	

Order No.	Description	Price
1540015	Standard	
1540020	With Fine Adjustment	

MAGNETIC BASE INDICATOR HOLDER - FLEXIBLE TYPE

SERIES 221:



Strong magnetic holding power includes "V" area for clamping to round surfaces. On/off switch, made of hardened and ground components, flexes almost 360°, and is rigidly locked into position with a lever. Includes 5" rod having 3 different diameters and a swivel adapter for lug back indicators to accept all AGD dial indicators.

Order No. 1540011	Price

NOGAFLEX POPEYE MAGNETIC BASE

SERIES 79:

- Unique, 5 axis, 3 dimensional holder.
- Has a unique patented 360° fine adjustment at the base.
- Central locking mechanism with NOGA designed spring loaded bearing.
- On/off magnetic base 70LBF.
- Holds test and dial indicator on 3/8" adapter to 6mm and dovetail. (Also inch sizes).



Model No.	Order No.	Price
NF1024	791024	

MAGNETIC BASES

SERIES 986:
(The Original)

Instant Positioning--Instant Locking
Universal Holders/Positioners For AGD Indicators and Electronic Sensors (Lug Backs Too)

The heavy duty FLEXBAR is completely flexible: lets you reach over, under, around, instantly and surely. Elimination of the large assortment of rods, swivels, clamps and other hardware necessary to reach and measure in obstructed areas. Cuts set-up time as much as 75% to 90%. FLEXBAR sets and locks with a simple twist of the lever.

- Top Mounting Clamp ("B"): (Telescoping Action) Grips objects from .125" up to .510" diameter.
- Cable and swaged fittings are stainless aircraft & Mil Spec Grade.
- Locked by Tensioning of Cable, incredible rigidity is achieved by this design. (No Movement once locked)
- Cam Action Locking.



Model No. 18028



Model No. 18058

Model No. 18028	Flexbar on Push-Button Mag. Base with Micro-Screw Fine Adjustor	Order No. 8618028	Price	
Model No. 18058	Flexbar on V-Button Mag. Base with In Line Fine Adjustor	Order No. 8618058	Price	
Model No. 18038	Flexbar on V-Button Mag. Base with Fine Adjustor Rod	Order No. 8618038	Price	

FLEX-O-POST INDICATOR HOLDER WITH MAGNETIC BASE

STARRETT SERIES 657:



The Flex-O-Post is an assembly of short tubular steel sections and precision ball joints linked by an internal steel cable. It can be adjusted to any position and locked by turning a lever near the magnetic base. When locked, the post becomes rigid, holding its position until the locking lever is released. This makes it possible to use an AGD dial indicator or a dial test indicator in awkward places hard to reach with conventional holding devices. Base has three precision ground magnetic contact surfaces. Grips horizontally, vertically or upside down. V-step holds base to arbors, shafts, chucks.

Assembled to the magnetic base, the Flex-O-Post has a vertical reach of 14-15/16" (380mm) and a horizontal reach of 9-3/4" (250mm). The indicator snug can be rotated through 360° and locked in any position by a knurled thumb screw.



Description	Catalog No.	EDP No.	Price
Magnetic base with Flex-O-Post, without fine adjustment attachment	657T	52760	
Magnetic base with Flex-O-Post, with fine adjustment attachment	657TW	52761	

UNIVERSAL MAGNETIC STAND

MIT SERIES 7:

(Stand only)

- Accepts all AGD .375" and 8mm stems.
- Accepts Dial and Test Indicators.
- Overall Length: Approx. 15".
- Permanent magnet with on-off switch.
- Collar included for 8mm stem indicators.
- Magnetic Pull - 132 lbs.



Mitutoyo

Order No. 7019	Price	
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FLEXI-STAND

MIT SERIES 7:

(Stand only)

- Accepts all AGD .375" and 8mm stems. Must order Collar **206983** for 8mm stem.
- Accepts Dial and Test Indicators.
- 360 pivot, Multi-jointed arms.
- One clamping knob locks all flexible joints.
- On-Off Switch for instant mounting and dismounting.
- Magnetic Pull - 132 lbs.
- Overall Length: Approx. 15".



Mitutoyo

Order No. 7012	Price	
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MAGNETIC BASE INDICATOR HOLDER WITH SWIVEL POST ASSEMBLY

STARRETT SERIES 657:



Power magnet base holds firmly to steel or iron surfaces – horizontally, vertically, upside-down. Push-button turns magnetic force on or off for quick, one-hand set-up and take-down. V-step adapts base to horizontal or vertical arbors and chucks. Extra 1/4-20 tapped hole in side of base for indicator post. Three precision ground magnetic contact surfaces (plus V-step). Black wrinkle finish on non-working surfaces. For use with Starrett Model 711 Series Last Word Dial Test Indicators, Starrett Model 196 Series Universal Dial Test Indicators and similar indicators of other manufacture.



Magnetic Base: 1-15/16" x 1-5/8" x 1-7/8 (50x40x48mm) deep

Description	Catalog No.	EDP No.	Price
Magnetic base with indicator swivel post assembly and adapter bushing, complete	657A	52744	
Magnetic base only	657P	52757	

MINI MAGNETIC STANDS

SERIES 221:

- Compact and small universal permanent magnetic stand.
- High magnetic power affords maximum rigidity.
- Includes disc on bottom for neutralizing magnet when not in use.



MEGA Superior Import

Order No.	Description	Base Dia.	Total Height	Price
1540016	Without Fine Adjustment	1-1/8"/28mm	5"/125mm	
1540021	With Fine Adjustment	1-1/8"/28mm	5-3/8"/135mm	

UNIVERSAL INDICATOR HOLDER

SERIES 219:

- Ideal for Bridgeport®-type machines.
- A quicker way of indicating.
- Suitable for all popular indicators with 5/32" shank or dovetail.
- Mounts with a single screw directly on machine quill, bypassing the working tool.
- Adapts immediately for fast and positive indicating.



MEGA Superior Import

Order No. 2199500	Price	
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TEST INDICATOR HOLDER

SERIES 79:

- Test indicator holder arm with 3/8" diameter, 40mm long stem.
- Most useful for centering holes on milling machines.

Model No.	Order No.	Price
NF1018	791018	



NOGA

PRECISION TOOLS

GRANITE DIAL GAGE STAND SERIES 223:

Black granite base can be used as a small tool-maker's and inspector's granite surface plate. Fine adjustment knob. For use with any indicator.

SPECIFICATIONS

.00005" Flatness
Base: 6" x 6" x 2" Thick
Column Height: 10"

Order No. 1545000

Price



Indicator not Included



DIAL COMPARATOR STAND WITH FINE ADJUSTMENT SERIES 223:

Anvil Size: 2-3/8" (60mm)
Throat Depth: 3" (75mm)
Measuring Range: 5" (125mm)

- Compact and versatile
- Rugged enamelled cast iron base
- Rustproof chrome plated column at right angle to base
- Hardened and precision ground round serrated anvil
- Provided with fine adjustment knob for zero setting
- Suitable for all dial gages including 3/8" and 5/16" dia. stem
- Base dimension: 6" x 4" (150 x 100mm)
- Column diameter: 1" (25.4mm)

Order No. 2230000

Price



Indicator not Included

DIAL GAGE STAND SERIES 223:

Precision Ground Base.
Fine adjustment knob.
For use with any indicator.

SPECIFICATIONS:

Base: 5-1/2" x 4-1/4"
Column Diameter: 1"
Working Capacity: 8-1/2"

Order No. 1545005

Price



Indicator not Included



DIAL COMPARATORS STARRETT SERIES 653, 653G:



Bench type comparator gages are ruggedly built for in-process and final inspection work. The Starrett jewel-bearing dial indicator is mounted on a beam that can be adjusted vertically on an upright post. A knurled thumb screw locks the beam in any position, and a sliding ring with locking screw (below the beam) permits swinging the indicator to either side. The ring also acts as a safety device, preventing accidental dropping of the beam. Fine adjusting knob is located on the beam. Lever on dial indicator can be positioned for left or right hand operation. A ribbed, precision ground, cast iron base measures approximately 8" x 9" (200x225mm). A Grade A crystal pink granite base, 8" x 12" x 2" (200x300x50mm), finished to an overall tolerance of .0001" (0.0025mm). Specifications common to both gages are: 9-1/4" (235mm) maximum vertical capacity; 5" (125mm) maximum throat depth; 1/2" (12.7mm) vertical adjustment of indicator. Any AGD dial indicator or AGD electronic digital indicator can be interchanged with indicators listed.



MACHINIST KITS SERIES 640:

With the high quality tools contained in these kits, O.D.'s, I.D.'s, Depths, and Lengths can be accurately and reliably measured. Fitted plastic case.



0-1" Micrometer	6" Dial Caliper	6" Rule
<ul style="list-style-type: none"> • .0001" grad. • Carbide tipped faces • Friction thimble • Satin chrome sleeve • Locknut 	<ul style="list-style-type: none"> • Reading .001" • Fully hardened stainless steel • Outside, inside and depth measurement • Satin chrome finish 	<ul style="list-style-type: none"> • 1/8, 1/16, 1/32, 1/64 graduations • Satin chrome finish • Stainless steel • Fully flexible
Order No. 6400001		Price <input type="text"/>

TOOL KITS SERIES 640:



Order No.	Description	Price
3 Piece Set 6400003	0-6" White face Dial Caliper .03x.0005" White face Test Indicator 0-1x.0001" Outside Micrometer	<input type="text"/>
6 Piece Set 6400006	0-6" White face Dial Caliper 0-1" White face Dial Indicator .03x.0005" White face Test Indicator 0-1x.0001" Outside Micrometer Magnetic Base W/fine adj. 22-pc Indicator Point Set	<input type="text"/>

Complete Stands Including Indicator

Dial Indicator Specifications				With Cast Iron Base		
Grad.	Dial Reading	Range	Indicator No.	Catalog No.	EDP No.	Price
.001"	0-50-0	.250"	655-141J	653J	52737	<input type="text"/>
0.01mm		2.5mm	655-181J	653MJ	56146	<input type="text"/>

Complete Stands Including Indicator

Dial Indicator Specifications				With Granite Base		
Grad.	Dial Reading	Range	Indicator No.	Catalog No.	EDP No.	Price
.001"	0-50-0	.250"	655-141J	653GJ	55966	<input type="text"/>
0.01mm		2.5mm	655-181J	653GMJ	56127	<input type="text"/>

Stands Only

Description	Catalog No.	EDP No.	Price
Comparator with cast iron base, without indicator	653	55917	<input type="text"/>
Comparator with granite base, without indicator	653G	56646	<input type="text"/>

SELECT PRECISION MEASURING TOOL SETS



STARRETT SERIES 905:

- Set includes basic tools and test indicator for a wide variety of precision measuring.
- Furnished in attractive, protective case.

Set Inch (Metric) includes Starrett:

- No. T231XRL (V231MXRL)
1" (25mm) Micrometer with carbide faces and thermal insulators on frame.
- No. 120A-6 (120M-150)
6" (150mm) Dial Caliper.
- No. C604RE-6 (C635E-150)
6" (150mm) Spring Tempered Precision Rule.
- No. 711FSA (711MFSA)
LASTWORD® Dial Test Indicator with Universal Shank .001" / 0.01mm Graduation.



Description	Catalog No.	EDP No.	Price
Inch Set	S905AZ	65805	
Metric Set	S905MAZ	65806	

BASIC PRECISION MEASURING TOOL SETS



STARRETT SERIES 909:

- Sets include three of the most commonly used tools for a wide variety of precision measuring.
- Furnished in attractive, protective case.

Basic Inch (Metric) Set includes Starrett:

- No. 436XRL-1 (436MXRL-25)
1" (25mm) Outside Micrometer
- No. 120A-6 (120M-150)
6" (150mm) Dial caliper
- No. C604R-6 (C635E-150)
6" (150mm) Spring Tempered Precision Rule



Description	Catalog No.	EDP No.	Price
Inch Set	S909Z	65122	
Metric Set	S909MZ	65668	

DIGIMATIC TOOL KITS

MIT SERIES 950:

The Digimatic Tool Kits include Mitutoyo's highly popular 0-1"/0-25mm Digimatic Micrometer and 0-6"/0-150mm Digimatic Caliper. The case is made of handsome mahogany and has spaces for gage batteries. The micrometer spanner is a supplied accessory.



INCH/METRIC

New Technology Tool Kit - includes:	
Item No.	Description
182-112	6" Black Steel Rule
293-677	0-1.2"/0-30mm IP-54 rated Quickmike
500-464	0-6"/0 150mm Solar Caliper
64PPP931	Mahogany Case



950-921

Catalog No. 950-923
Order No. 950923
Price

INCH/METRIC

Digimatic Tool Kit Lite - includes:	
Item No.	Description
182-112	6" Black Steel Rule
700-113	0-6"/0-150mm My Cal Lite
293-811	0-1"/0-25.4mm MDC Lite (Ratchet Thimble)
64PPP932	Mahogany Case

Catalog No. 950-921
Order No. 950921
Price:

ELECTRONIC TOOL KIT SERIES 725:



- RANGE: 0-1"/0-25mm**
MICROMETER FEATURES:
- 5 keys Positive-designed electronic micrometer
 - Large and clear LCD.
 - Absolute and incremental conversion.
 - Friction thimble.
 - Data hold and tolerance set.
 - SPC output
 - .00005"/.001mm

- RANGE: 0-6"/0-150mm**
CALIPER FEATURES:
- Rugged construction of stainless steel with no rack, no pinion, and no glass scale.
 - 5 Digit high contrast display
 - Inch / Metric switch
 - Floating "Zero" reference point
 - Resolution ± .0005" / 0.01mm
 - Accuracy .001"
 - SPC Output
 - Four way measurement
 - Includes: fitted case / battery

Order No. 6000057
Price

BASIC ELECTRONIC TOOL SETS (WITH OR WITHOUT OUTPUT)



STARRETT SERIES 759:

- Set No. S766BZ (with Output) includes:**
- 797B-6/150 – 0-6" / 0-150mm Electronic Digital Slide Caliper
 - 795XFL-1 – 0-1" / 0-25mm Electronic Digital Outside Micrometer
- Set No. S776AZ (without Output) includes:**
- 799A-6/150 – 0-6" / 0-150mm Electronic Digital Slide Caliper
 - 3734XFL-1 – 0-1" / 0-25mm Electronic Digital Outside Micrometer



- Sets include same tools with or without output.
- Basic starter set for electronic measuring.
- Furnished in attractive, protective case.

Description	Catalog No.	EDP No.	Price
With Output	S766BZ	9911606	
Without Output	S766AZ	12206	

PRECISION TOOLS

CO-AX INDICATOR

SERIES 219:

The **Blake CO-AX Indicator** provides a simplified method for centering a workpiece or fixture on Horizontal or Vertical machines. Face of the indicator remains stationary in any desired position while the machine spindle rotates, thus leaving the operator with both hands free to accurately position the machine table by coordinated movement of the table.



Supplied Complete with indicator, internal feeler, external feeler, restraining arm and fitted box.

SPECIFICATIONS:

- **Length:** 6-7/8"
- **Shank:** 3/8" Diameter x 7/8" long
- **Weight:** 9-1/2 oz.
- **Feeler Ball:** 1/8" Diameter
- **Measuring Range:** .250" Axis Offset.
- ***Capacity:** Internal, 5/32" to 4-1/4" Dia.
External, 0 to 4-1/4" Dia.
- **Speed:** not recommended to exceed 800RPM approx.
- **Locating Accuracy:** to within .0002" of true center.
- **Initial Positioning:** within 7/16" dia. circle of true location.

* Capacity can be increased to 12" dia. by use of accessory feelers.

Order No.	Price
2190000	

Model No.	Description	Order No.	Price
851-C2	Feeler, inside dia., Carbide, Range: 4.250"	2198512	
852-C2	Feeler, outside dia., Carbide, Range: 4.250"	2198522	
851-4	Feeler, inside dia., Range: 8.000"	2198514	
851-6	Feeler, inside dia., Range: 12.000"	2198516	
852-6	Feeler, outside max. dia. 12.000"	2198526	
853	Assembly, center point feeler	2198530	

CENTERING INDICATOR

SERIES 219:



- Designed for quick and accurate centering of a work piece or fixture.
- Operates at any angle.
- Use on vertical and horizontal machines
- Use for internal and external diameters.
- While spindle rotates, the centering indicator remains stationary and always faces the operator



Supplied complete with:
restraining rod, center point feeler, 4" straight feeler, 8" straight feeler, 12" straight feeler, 4" curved feeler, 8" curved feeler, 12" curved feeler, fitted case

INCH

Specifications	
Length:	6-7/8"
Shank:	3/8" dia. x 7/8" long
Probe ball:	1/8" diameter
Measuring range:	.250 axis offset
Capacity:	Internal: 5/32" to 4-1/4" dia. External: 0 - 4-1/4" dia.
Speed:	Not exceed 800RPM Approx.
Locating accuracy	To within 0.00025" of true center
Graduation:	0.0005"

Order No.	Price
2190005	

INDICATOR GROOVE GAGES

STARRETT SERIES 1175:



This lightweight, hand-operated gage is for in-process or bench inspection of oil grooves, snap ring retainer grooves, "O" ring seat retainer grooves and similar internal recesses. It is also useful for checking bore dimensions and revealing the presence of taper, bell-mouth and out-of-roundness. The gage consists of a pistol grip frame with gaging contacts mounted on a reference jaw and a sensitive jaw. The sensitive gaging contact, which has a 1/2" (12.7mm) retractable range, transfers the work dimension through a linear friction-free transfer mechanism to the dial indicator. Since the lower reference jaw is fixed, it supports the entire weight of the gage and the operator's hand, thus preventing incorrect gaging pressure and false readings. Furnished with jewel bearings, in case.

Range	Grad.	Dial		Catalog No.	EDP No.	Price
		Reading	Range			
.375-6"	.0005"	±30	.060"	1175Z	53173	
9.5-150mm	0.01mm	±100	2.5mm	1175MZ	65032	

DIAL THICKNESS GAGES
SERIES 633:



POCKET THICKNESS GAGES
MIT SERIES 007:



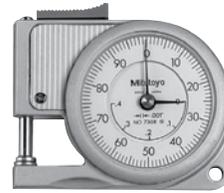
Standard



Pocket

Designed to measure outer thickness. Ideally suited for quick inspection of paper, leather, wire, plastic, sheet metal etc. Measuring faces are finely ground for precise measurement to .001" or .02mm. Dial Reading 0 - 100.

Type	Range	Throat Depth	Grad.	Order No.	Price
Standard	.4" 10mm	1.125"	.001" .01mm	6330112	
				6330010	
Pocket	.5" 10mm	.5"	.001" .01mm	6330510	
				6330520	



The smallest thickness gage, made for carrying convenience, makes precise measurement to .001". Designed to quickly gage the thickness of paper, leather, wire, plastic sheet, sheet metal and the like.

The spindle is lifted atop the gage. It is pre-loaded so that a variety of materials can be measured with a consistent spindle pressure. Diameter of the spindle and anvil faces is .236". The pocket thickness gage weighs only 3 oz.. Spindle is chrome plated.

- Inch Thickness Gage, No. 7308, has a Fraction - to - Decimal - Equivalent Table on rear panel.
- Measuring faces are hardened, ground and lapped for accuracy.
- Easy adjustment for zero point— loosen tiny clamp screw on back of bottom frame, then adjust by turning the screw at bottom of anvil.

Dimensions : 2-3/8" x 1-3/4" x 1/2" thick.

Range	Grad.	Order No.	Price
.4" 10mm	.001" 0.01mm	7308	
		7309	

POCKET DIAL THICKNESS GAGE
STARRETT SERIES 1010:



Checks thickness of materials up to 3/8". Throat depth ranges from 1/2" down to 5/16"; diameter of the flat contacts is 1/4". The gage has a small count hand for recording each revolution of the large hand. The case is a die casting, chrome plated, with an unbreakable crystal. Furnished in case.



Range	Grad.	Dial Reading	Catalog No.	EDP No.	Price
3/8	.001	0-100	1010Z	53114	
9mm	0.01mm	0-100	1010MZ	53116	

Quality Precision Tools



The Choice Is Yours!!!

DIAL THICKNESS GAGES Mitutoyo
MIT SERIES 7:

Thickness Gages consist of a Series 2 dial indicator with revolution counter and a rigid frame with handle.

The Dial Thickness Gages offer a quick and efficient means of inspection with their convenient grip handle, thumb trigger and spring-loaded spindle. The various models cover a wide range of applications.



7300

7304

7316

7326

Catalog No.	Range	Resolution	Throat Depth	Remarks	Order No.	Price
INCH						
7326	0-.05"	.0001"	1.18"	High Accuracy	7326	
7300	0-.4"	.001"	1.18"		7300	
7312	0-.4"	.001"	1.18"	Adjustable Anvil	7312	
7316	0-.4"	.001"	1.18"	Blade Type	7316	
7361	0-.4"	.001"	1.18"	Pipe Gage	7361	
7304	0-1.0"	.001"	1.18"		7304	
7322	0-1.0"	.001"	4.72"	Deep Throat	7322	
METRIC						
7301	0-10mm	0.01mm	30mm		7301	
7315	0-10mm	0.01mm	30mm	Blade Type	9997315	
7321	0-10mm	0.01mm	120mm	Deep Throat	9997321	
7360	0-10mm	0.01mm	30mm	Pipe Gage	997360	
7305	0-20mm	0.01mm	30mm		7305	
7323	0-20mm	0.01mm	120mm	Deep Throat	9997323	

ELECTRONIC DIGITAL THICKNESS GAGES

SERIES 725:

- Graduation .01mm/.0005"
- Throat Depth .5"
- Zero Set
- Inch/mm conversion.

Range	Order No.	Price
0-.6"/0-15mm	7250000	
0-1"/0-25mm	7250010	



Mitutoyo

POCKET THICKNESS GAGES - QUICK MINI

MIT SERIES 007:



It's the size of a business card, but with the power and precision of Mitutoyo inside.

Quick Mini is a convenient snap-action pocket thickness gage offering LCD digital readout. Quick Mini is ideal for rapid checking of a wide variety of materials including metal, paper, plastics and wood.

Inch /Metric

Catalog No.	700-118	700-122
Order No.	700118	700122
Price		
Measuring Range	.5"/12mm	1"/25mm
Resolution	.0005"/0.01mm	
Instrumental Error	±.001"/±0.02mm	
Repeatability	.0005"/0.01mm	
Battery	SR44 #541980	
	Battery life: 2 years under normal use	
Max. Response Speed	1,600 mm/s	
Alarm	Battery Voltage low, overspeed	

Note: SPC output is not provided on Quick Mini

SURFACE GAGES

SERIES 238:

Hardened Base. "V" Groove in bottom of base for cylindrical work. Spindle can be set below base level. Tension screw permits fine adjustment.



Base Size (Length x Width x Height)	Spindle Length	Order No.	Price
2-3/16 x 1-5/8 x 3/4	4 and 7	1630398	
3-1/4 x 2-1/2 x 1	9 and 12	1630399	
4 x 3-1/2 x 1-1/8	12 and 18	1630400	

MEDA Superior Import

INSIDE & OUTSIDE DIAL CALIPER GAGES

SERIES 461:

MEDA Superior Import



- Tips thickness = 0.12"
- Carbide measuring points.
- Arms automatically open and close at the touch of a button.
- Can be set with a micrometer or ring gage.
- Dial face dia. 2". Bezel rotates for zero setting.
- Supplied in a fitted case.

A = Height of contacts
B = Width of contacts
L = Length of arms

INSIDE

Range	Grad.	A	B	L	Order No.	Price
0.6-1.4"	.001"	0.118"	0.118"	1.9	4610614	
1.4-2.2"	.001"	0.236"	0.118"	3.1	4611422	
2.2-3.0"	.001"	0.315"	0.118"	3.1	4612230	
3.0-3.8"	.001"	0.315"	0.118"	3.9	4613038	

OUTSIDE

Range	Grad.	A	B	L	Order No.	Price
0-0.8"	.001"	0.236	0.118	2.3	4610008	
0.8-1.6"	.001"	0.236	0.118	2.3	4610816	
1.6-2.4"	.001"	0.236	0.118	2.1	4611624	
2.4-3.2"	.001"	0.236	0.118	2.1	4612432	
3.2-4.0"	.001"	0.236	0.118	2.1	9613240	



While we show only the most popular Mitutoyo items we can supply their entire range of products. Please inquire for a complete Mitutoyo catalog.

SURFACE GAGE - ROUND BASE

SERIES 238:

- Sturdy construction surface gage.
- Consists of adjusting knob and hardened scribe.
- Round base made of close grain cast iron
- Very useful for every workshop



MEDA Superior Import

Order No.	Height	Base Diameter	Price
1630012	12"(300mm)	3-1/8" (80mm)	
1630020	20"(500mm)	3-1/8" (80mm)	
1630040	40"(1000mm)	6-150"(150mm)	

UNIVERSAL SURFACE GAGES

STARRETT SERIES 57:



Standard size for all-around work. Cast base with black wrinkled finish. Ground bottom surface, polished sides, two gage pins for linear work, and V-groove for cylindrical work. Spindle adjustable to any angle above or below work. Scriber may be used in small hole in place of lower sleeve in place of spindle. Fine adjusting screw in base rocker.

Spindle	Base	Catalog No.	EDP No.	Price
9" & 12" 225 & 300mm	3 x 2-9/16" 75 x 65mm	57B	50293	
12 & 18" 300 & 450mm	3-3/4 x 3-3/8" 95 x 85mm	57D	50295	

SURFACE GAGE

MIT SERIES 156:

MITUTOYO Surface Gage 156502 has a 5/32" DIA. 7" scriber, .39" DIA. upright post which is 10" tall. It has a coarse-adjusting clamp for upright post, fine-adjusting knob and baked-enamel-finished, hardened-steel base. The two gage pins provided are held tightly against the base.

The rocker runs the entire length of the base and pivots against a heavy spring, allowing a wide range of fine adjustment, yet holding the tip of the scriber firmly.

Use of test indicator along with this Surface Gage is recommended.

- Bottom surface, Vee and parallel side edges are ground.
- A pair of gage pins for linear work.
- 7" Scriber
- Fine adjusting knob
- Suitable as a small transfer stand with MITUTOYO test indicator.



Order No.	Scriber	Base	Price
156502	7	3-3/8 x 2-3/8	

NOTE: 156502 supersedes 7030.

UNIVERSAL SURFACE GAGES WITH HARDENED STEEL BASE

STARRETT SERIES 257:



Hardened steel base with ground and polished contact faces, four gage pins for linear work, and V-groove for cylindrical work. Spindle adjusts to any angle above or below base. Knurled thumb screw on base rocker for extra fine adjustment.

Spindle	Base	Catalog No.	EDP No.	Price
9" & 12" 225 & 300mm	2-7/8 x 2-3/8" 70 x 60mm	257B	51241	
12" & 18" 300 & 450mm	3-1/2 x 3-3/16" 90 x 80mm	257D	51243	

TOOLMAKERS' SURFACE GAGES

STARRETT SERIES 56:



Smaller size ideal for lighter work. Hardened steel base, ground and polished, with two gage pins for linear work plus V-groove for cylindrical work. Spindle adjusts to any angle above or below base. Scriber and spindle holes are in permanent alignment, and scriber may be used in small hole of lower sleeve in place of spindle. Knurled thumb screw in base rocker provides fine adjustment.

Spindle	Base	Catalog No.	EDP No.	Price
4 & 7" 100 & 175mm	2 x 1-1/2" 50 x 38mm	56B	50290	

UNIVERSAL SLEEVES

STARRETT SERIES 57, 58:



Adapts indicators or scribers to surface gages and other tools. Sleeves provide a convenient means of attaching scribers and indicator shanks to surface gages, magnetic bases, indicator tool post holders and gage rods. The large diameter knurled clamping nut provides a firm grip on rods, posts and scribers.

Spindle Hole Diameters	Gripping hole Diameters	Catalog No.	EDP No.	Price
5/16", 3/8" 8, 9.5mm	1/4", 3/16", 5/32", 9/64" 3.5, 4, 4.8, 6.35mm	57S	50296	
1/4", 5/16", 3/8" 6.35, 8, 9.5mm	3/32" - 1/4" 2.4 - 6.35mm	58S	56613	



Manufactured by some of the world's leading gage block manufacturers and used in many of the world's leading factories and laboratories. Manufactured to highest precision standards, meeting or exceeding Federal specifications. All sets have individual serial numbers and are supplied with individual inspection certificates, showing the exact measurement of each block. Indexed wooden case furnished with each set.

GRADES AND TOLERANCES (Length)
Maximum permissible errors.
Units = 1 millionth of an inch

Size of Gauge Up to and including	1(AA)	Grade 2(A+)	3(A+B)	B
1"	+2 -2	+4 -2	+8 -4	+10 -6
2"	+4 -4	+8 -4	+16 -8	+20 -12
3"	+5 -5	+10 -5	+20 -10	+30 -18
4"	+6 -6	+12 -6	+24 -12	+40 -24

81 pc. sets consist of the following blocks:	36 pc. sets consist of the following blocks:
9 blocks from .1001" to 1.009" 49 blocks from .101" to .149" 19 blocks from .050" to .950" 4 blocks from 1.000" to 4.000"	1 block .050" 10 blocks from .1000" to .1009" 9 blocks from .101" to .109" 9 blocks from .110" to .190" 4 blocks from .200" to .500" 3 blocks 1.000" - 2.000" - 4.000"

PRECISION TOOLS

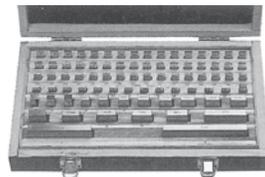
GAGE BLOCK SETS SERIES 224:



METRIC GAGE BLOCK SET SERIES 224:



Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.



Consists of the following blocks:
9 blocks 1.001 - 1.009 in 0.001mm steps
49 blocks 1.01 - 1.49 in 0.01mm steps
19 blocks 0.5 - 9.5 in 0.5mm steps
10 blocks 10 - 100 in 10mm steps

Pieces	Grade	Order No.	Price
87	2	2240873	

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

Starrett Webber	
81 pc. Grade B Rectangular Set.	Includes: Certificate of Calibration traceable to NIST.
Order No.	99923
Price	

Pieces	Grade	Order No.	Price
RECTANGULAR			
81	2	1575281	
81	3	1575381	
81	B	1550810	
36	2	1575236	
36	3	1575336	
36	B	1550336	
SQUARE			
81	2	1560281	
81	3	1560381	
81	B	1560481	

CARBIDE GAGE BLOCK SET SERIES 224:



STEEL GAGE BLOCK SETS- LONG SIZES SERIES 224:



Used when continuous handling would wear out standard steel blocks.

- Rectangular
- All blocks are carbide.
- Superior coefficient ratio.
- Extremely high corrosion resistance.



8 Piece Set Includes 5", 6", 7", 8", 10", 12", 16", 20"

Pieces	Grade	Order No.	Price
81	2	2240000	

Grade 2		Grade 3		Grade B	
Order No.	Price	Order No.	Price	Order No.	Price
2420082		2420083		2420084	

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

RECTANGULAR STEEL GAGE BLOCK SETS IN CASE

SERIES 793:

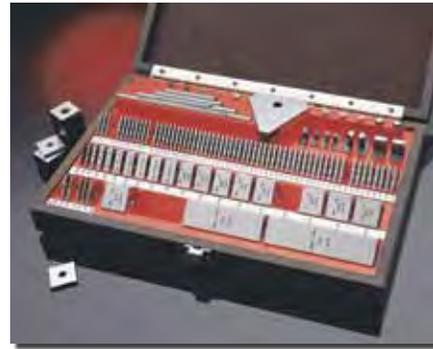
METRIC sets available, please inquire.



The quality of Starrett-Webber is your assurance of accuracy year after year. Steel blocks have a Rockwell hardness of 65 ± 1/2 "C" scale, and feature unusually fine hard grain structure which gives them a lifetime of wear and abrasion. Starrett-Webber standards of surface finish are actually higher than government requirements.

STEEL GAGE BLOCKS

Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*
RS81.A1	92913	Webber Grade, A1 / B89.1.9 Grade 0	81	.100-12.000" in steps of .001"/.200-12.000" in steps of .0001"	
RS88.A1	92802		88	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/16 - 12.000" in steps of 1/64"	
RS92.A1	92804		92	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/64 - 12.000" in steps of 1/64"	
RS38.A1	92807		38	.100-4.000" in steps of .001"/.150-4.000" in steps of .0001"/.200 -.4000" in steps of .00005"	
RS36.A1	99023		34	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"	
RS28.A1	93058		28	.020 -.240" in steps of .001"/.040 -.240" in steps of .0001"/.060 -.240" in steps of .00005"	
RS9.A1	92939	9	.0625-4.000" in steps of .0625"/.100-4.000" in steps of .100"		



SQUARE STEEL GAGE BLOCK SETS IN CASE



STEEL GAGE BLOCKS

Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*
SS81.A1	92844	Webber Grade, A1 / B89.1.9 Grade 0	81	.100-12.000" in steps of .001"/.200-12.00 in steps of .0001"	
SS88.A1	92850		88	.100-12.000" in steps of .001"/200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/ 1/16-12.000" in steps of 1/64"	
SS36.A1	92852		36	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"	
SS28.A1	92856		28	0.20-.240" in steps of .001"/.040-.240" in steps of .0001"/.060-.240" in steps of .00005"	
SS8.A1X	92994		8	5.000-84" in steps of 1.000"	
SS8.AAX	93675		8	5.000-84" in steps of 1.000"	

***CROBLOX® GAGE BLOCKS**

Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*
RC81.A1	92885	Webber Grade, A1 / B89.1.9 Grade 0	81	.100-12.000" in steps of .001"/.200-12.000" in steps of .0001"	
RC88.A1	92898		88	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/16 - 12.000" in steps of 1/64"	
RC34.A1	92390		34	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"	
RC28.A1	92908		28	.020 -.240" in steps of .001"/.040 -.240" in steps of .0001"/.060 -.240" in steps of .00005"	

***CROBLOX® GAGE BLOCKS**

Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*
SC81.A1	92818	Webber Grade, A1 / B89.1.9 Grade 0	81	.100-12.000" in steps of .001"/.200-12.00 in steps of .0001"	
SC88.A1	92830		88	.100-12.000" in steps of .001"/200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/ 1/16-12.000" in steps of 1/64"	
SC36.A1	92840		88	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"	

*NOTE: Sets include etched serial numbers and NVLAP Accredited Commercial Grade Calibration.



Individual blocks available.

Complete accessory kits and individual accessories available; please inquire.

All sets also available in Webber Grade AA / B89.1 Grade 00; please inquire.

*Croblox® Chromium Carbide gage blocks are considered the top of the line - the finest available. They outwear regular steel and ceramic. In addition, they will not corrode and are very **stable and accurate**, and have exceptional "wringing" qualities

PRECISION TOOLS



Ceramic Gage Blocks available; please inquire.

Mitutoyo

GAGE BLOCK SETS SERIES 516:

Metric Gage Blocks available; please inquire.



MITUTOYO Gage Blocks are now available either in rectangular or square, Inch or Metric, individually or in sets. All gage blocks are made of a special steel alloy which possesses excellent stability and thermal expansion coefficient for most measuring applications. Each block is manufactured and calibrated to MITUTOYO Specifications which meet or exceed Federal Specifications GGG-G-15C. Each block is serialized regardless of the grade so that it can be easily identified when the block is re-calibrated at a later date. The quality of the surface finish on MITUTOYO Blocks has been tested and compared by our users. The result indicates that MITUTOYO Gage Blocks have a superior surface finish.

- All MITUTOYO Gage Blocks meet or exceed Federal Specifications GGG-G-15C. (except B-Grade.)
- All MITUTOYO Gage Block Sets (except B-Grade) are furnished with a

Certificate of Calibration without extra charge, and are traceable to the National Bureau of Standards.

- The rugged wooden box has index numbers and is specially treated to keep moisture away from the blocks. The underside of the case has four soft pads to prevent slippage.
- All gage block edges have blended radius, and are burr-proofed. Wringing or stacking the block does not cause damage to the measuring surfaces.

A Certificate of Accuracy, traceable to the National Bureau of Standards, is furnished with each MITUTOYO gage block set and individual block. It indicates the actual size of each block to the closest millionth of an inch. This Certificate, a highly important part of gage block use, is automatically provided with sets or individual blocks at no additional cost.

RECTANGULAR GAGE BLOCK SETS

SERIES 516:



Mitutoyo

LONG GAGE BLOCK SETS

SERIES 516:

Mitutoyo



Note: Mitutoyo adds a - 26 - to our Order Numbers.

Number of Blocks / Grade	Block Combination in Set	Order No.	Price
81 / 1 (AA)	9 Blks .1001 - .1009 in .0001" steps	516901	
81 / 2 (A+)	49 Blks .101 - .149 in .001" steps	516902	
81 / 3 (A&B)	19 Blks .050 - .950 in .050" steps	516903	
81 / B*	4 Blks 1.000 - 4.000 in 1.000" steps	516904	
35 / 2 (A+)	1 Blk .10005" 9 Blks .1001 - .1009 in .0001" steps	516914	
35 / 3 (A&B)	9 Blks .101 - .109 in .001" steps 10 Blks .10 - .190 in .01" steps 3 Blks .200, .300 and .500" 3 Blks 1.000, 2.000 and 4.000"	516915	
9 / 2 (A+)**	2 Blocks .0625 and .1000"	516930	
9 / 3 (A&B)**	1 Block .125" 3 Blocks .200, .250 and .300"	516931	
9 / 3 (A&B)	3 Blocks .500, 1.000 and 2.000"	516935	

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
8 / 2 (A+)	1", 2", 3", 4", 5", 6", 7", 8"	516126	
8 / 2 (A+)	5", 6", 7", 8", 10", 12", 16", 20"	516712	
8 / 3 (A+B)	5", 6", 7", 8", 10", 12", 16", 20"	516713	

* The B grade 516904 is furnished with a certificate of accuracy stating +.000010" and -.000006" for all blocks one inch and under and +.000010" and -.000006" for each additional inch.

** Includes optical flat.

SQUARE GAGE BLOCK SETS

SERIES 516:

Mitutoyo



THIN GAGE BLOCK SETS

SERIES 516:

(RECTANGULAR)



Mitutoyo

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
10 / 2 (A+)	.005", .010", .015", .020", .025", .030", .035", .040", .045", .050"	516926	
10 / 3 (A+B)	.005", .010", .015", .020", .025", .030", .035", .040", .045", .050"	516927	

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
81 / 1 (AA)	1 Blk .050"	516401	
81 / 2 (A+)	10 Blks .100" - .1009" in .0001" steps	516402	
81 / 3 (A+B)	49 Blks .101" - .149" in .001" steps	516403	
81 / B	17 Blks .150" - .950" in .05" steps 4 Blks 1.000" - 4.000" in 1.000" steps	516404	
36 / 2 (A+)	1 Blk .050" 10 Blks .1000" - .1009" in .0001" steps 9 Blks .101" - .109" in .001" steps	516422	
36 / 3 (A+B)	9 Blks .11" - .19" in .01" steps 4 Blks .2" - .5" in .1" steps 3 Blks 1", 2", 4"	516423	

GAGE BLOCK ACCESSORIES

FOR RECTANGULAR BLOCKS
SERIES 226:



LIMITED QUANTITY

	Description / Use	Quantity	Order No.	Price
	Base Block - Gage Block mounting surface lapped flat and parallel with base. Size of base : 4" x 2-3/4" x 1.7"	1	1565101	
	Scriber Point - Used for scribing lines	1	1565102	
	Center Point - Used for locating centers	1	1565103	
	Points - Used for checking graduations	Pair	1565204	
	Cylindrical Jaws - Used for inside and outside measurements and setting of instruments accuracy .100" Radius Size .200" Radius Size .250" Radius Size .500" Radius Size .750" Radius Size	Pair	1565205	
		Pair	1565206	
		Pair	1565207	
		Pair	1565208	
		Pair	1565209	
	Flat Jaws - Two sides lapped and accurately flat, parallel and to size. .750" Height, 6" long	Pair	1565210	
	Jaws with Reference Lines - used for spacing blocks within limits .0625"	Pair	1565211	
	Jaws with Beveled Ends - .750" Height, 4" Long .750" Height, 6" Long	Pair	1565212	
		Pair	1565213	
	Holders - 2.250" Capacity 4.000" Capacity 6.000" Capacity 10.000" Capacity 16.000" Capacity	1	1565114	
		1	1565115	
		1	1565116	
		1	1565117	
		1	1565118	

PRECISION TOOLS

COMPLETE ACCESSORY SETS FOR RECTANGULAR GAGE BLOCKS

SERIES 226:



LIMITED QUANTITY

Order No. 1565140 Price <input type="text"/> 14 pc. Accessory Set Consists of	Description	Order No. 1565270 Price <input type="text"/> 27 pc. Accessory Set Consists of
1 Pair	.100" Radius Cylindrical Jaws	1 Pair
1 Pair	.200" Radius Cylindrical Jaws	1 Pair
1 Pair	.250" Radius Cylindrical Jaws	1 Pair
1 Pair	.500" Radius Cylindrical Jaws	1 Pair
	.750" Radius Cylindrical Jaws	1 Pair
1 Pair	Jaws-Beveled Ends .750" x 4" L	1 Pair
1 Pair	Jaws-Beveled Ends .750" x 6" L	1 Pair
1 each	Holder 2.250" Capacity	1 each
	Holder 4.000" Capacity	1 each
	Holder 6.000" Capacity	1 each
1 each	Holder 10.000" Capacity	1 each
	Base Block	1 each
	Scriber Point	1 each
	Center Point	1 each
	Points	1 Pair

SPACE BLOCKS

SERIES 227:

Set consists of the following 36 blocks :

- 9 pcs. .101" - .109" by .001"
- 15 pcs. .050" - .190" by .010"
- 9 pcs. .200" - 1.000" by .100"
- 1 pc. .0625"
- 1 pc. .125"
- 1 extra block 1.000"



Can often take the place of gage blocks. Outside diameter is .750"; inside diameter has 1/4" - 28 thread for accurately connecting the individual blocks. 4 threaded connecting studs included. Hardened, ground, and lapped to ±.0001". Supplied in fitted wooden case.

Order No. 1570036

Price



PLUG GAGE HANDLE

SERIES 463:



Handles all Plug Gage sizes from 1/32" thru 1/2", 0.79 to 12.7mm diameter. GO and NO-GO clearly marked.

STAR USA - Order No. 4630000

Price

MEDA - Order No. 4630567

Price



PLUG GAGE SETS

SERIES 463:

Each gage is :

- Centerless lapped to a 10 micro finish or better
- 2" Long
- Hardened to 60 - 62 RC.
- Electro etched with size (over .060")

Useful for checking locations, measuring hole sizes and depths, GO and NO-GO gaging, setting micrometers, checking distances between holes etc.



Larger sets available. See our website or inquire

PLUS TOLERANCE SETS + .0002" - .0000"

MINUS TOLERANCE SETS - .0002" + .0000"

Range	No. of Mem	Order No.	Price	Range	No. of Mem	Order No.	Price
.011" - .060"	50	4630001		.011" - .060"	50	4630100	
.061 - .250	190	4630010		.061 - .250	190	4630110	
.251 - .500	250	4630020		.251 - .500	250	4630120	
.501 - .625	125	4630030		.501 - .625	125	4630130	
.626 - .750	125	4630040		.626 - .750	125	4630140	

CLASS ZZ REPLACEMENT PINS

SERIES 987:

Keep old sets in compliance!

Replace missing, damaged, or worn-out Class ZZ gages from your existing sets & libraries. These replacement pins are perfect in updating your old sets, and bringing them back into compliance. Each pin is individually marked with size and direction of tolerance. Packaged with a rust preventative, these pins maintain an indefinite shelf life; so keep several of your most used sizes on hand! Each pin is NIST traceable and includes a Certificate of Accuracy printed on back of package.



- Class ZZ (.0002" or .005mm tolerance)
- Go (Plus) or NoGo (Minus)
- NIST traceable
- .0005", or .01mm sizes
- .001" or .02mm set increments
- 52100 tool steel; 60/62 Rc
- 2" long
- 10 microinch finish or better
- within .0001" round
- marked with size & direction of tolerance on gages over .060"
- Certificate of Accuracy included

For CLASS X Replacement Pins, see page 428.

Range	Partial Order No.*		Price
	Plus	Minus	
INCH			
.0040" to .0105"	9870001	9870101	
.0110" to .0605"	9870002	9870102	
.0610" to .5005"	9870003	9870103	
.5010" to .6255"	9870004	9870104	
.6260" to .7505"	9870005	9870105	
.7510" to .8325"	9870006	9870106	
.8330" to .9165"	9870007	9870107	
.9170" to 1.0005"	9870008	9870108	
METRIC			
0.20mm to 1.29mm	9870009	9870109	
1.30mm to 4.99mm	9870010	9870110	
5.00mm to 9.99mm	9870011	9870111	
10.00mm to 13.99mm	9870012	9870112	
14.00mm to 16.49mm	9870013	9870113	
16.50mm to 18.99mm	9870014	9870114	
19.00mm to 20.99mm	9870015	9870115	
21.00mm to 22.49mm	9870016	9870116	
22.50mm to 23.99mm	9870017	9870117	
24.00mm to 25.49mm	9870018	9870118	

*Specific size must be added to these partial Order Numbers

PLAIN PLUGS

SERIES 987:

Economical General Purpose Pin Gages

Make quick and accurate measurements with Vermont Gage pin gages. Measure hole sizes. Calculate distances between holes. Gage slot widths. Check locations. Use for Go/No-Go gaging. Size in micrometers and snap gages. These economical gages are a must for anyone making frequent and varied measurements.

- Class ZZ (.0002" or .005mm tolerance)
- Go (Plus) or NoGo (Minus)
- NIST traceable
- .0005", or .02mm sizes
- .001" or .02mm set increments
- 52100 tool steel; 60/62 Rc
- 2" long
- 10 microinch finish or better
- Within .0001" round
- Marked with size & direction of tolerance on gages over .060"
- Certificate of Accuracy included



Inch Libraries (.001" increments)

(Continued)

Range	No. of Gages	Wt. lbs.	Order No. (Plus)	Order No. (Minus)	Price
.0610" to .9160"	856	138	0110165	0120165	PRICE ON APPLICATION
.0615" to .9165"	856	138	0130165	9940165	
.0610" to 1.000"	940	176	0110170	9120170	
.0615" to 1.0005"	940	176	0130170	9140170	
.2510" to .8320"	582	99	0110180	0120180	
.2515" to .8325"	582	99	9130180	9940180	
.2510" to 1.0000"	750	170	0110185	0120185	
.2515" to 1.0005"	750	170	0130185	9140185	
.5010" to .9160"	416	112	0110190	9120190	
.5015" to .9165"	416	112	0130190	9140190	
.5010" to 1.0000"	500	150	0110195	0120195	
.5015" to 1.0005"	500	150	0130195	9140195	
.6260" to 1.0000"	375	129	0110200	0120200	
.6265" to 1.0005"	375	129	9130200	9940200	
.7510" to 1.0000"	250	98	0110205	0120205	
.7515" to 1.0005"	250	98	0130205	9140205	

Metric sets (.02mm increments)

Range	No. of Gages	Wt. lbs.	Order No. (Plus)	Order No. (Minus)	Price
0.20mm to 1.28mm	55	2	0210010	0220010	PRICE ON APPLICATION
0.21mm to 1.29mm	55	2	0230010	9240010	
1.30mm to 4.98mm	185	6	0210020	0220020	
1.31mm to 4.99mm	185	6	0230020	0240020	
5.00mm to 9.98mm	250	14	0210030	0220030	
5.01mm to 9.99mm	250	14	0230030	0240030	
10.00mm to 13.98mm	200	24	0210040	0220040	
10.01mm to 13.99mm	200	24	0230040	9240040	
14.00mm to 16.48mm	125	24	0210050	0220050	
14.01mm to 16.49mm	125	24	0230050	9240050	
16.50mm to 18.98mm	125	30	0210060	0220060	
16.51mm to 18.99mm	125	30	0230060	9240060	
19.00mm to 20.98mm	100	32	0210070	0220070	
19.01mm to 20.99mm	100	32	0230070	9240070	
21.00mm to 22.48mm	75	29	0210080	0220080	
21.01mm to 22.49mm	75	29	0230080	9240080	
22.50mm to 23.98mm	75	33	0210090	0220090	
22.51mm to 23.99mm	75	33	0230090	9240090	
24.00mm to 25.48mm	75	36	0210100	0220100	
24.01mm to 25.49mm	75	36	0230100	9240100	

Metric Libraries (.02mm increments)

0.20mm to 13.98mm	690	46	0210110	0220110	PRICE ON APPLICATION
0.21mm to 13.99mm	690	46	0230110	9999990	
0.20mm to 18.98mm	940	100	0210115	0220115	
0.21mm to 18.99mm	940	100	0230115	0240115	
0.20mm to 22.48mm	1115	161	0210120	0220120	
0.21mm to 22.49mm	1115	161	0230120	9240120	
0.20mm to 25.48mm	1265	230	0210125	0220125	
0.21mm to 25.49mm	1265	230	0230125	0240125	
1.30mm to 16.48mm	760	68	0210130	0220130	
1.31mm to 16.49mm	760	68	0230130	9240130	
1.30mm to 20.98mm	985	130	0210135	0220135	
1.31mm to 20.99mm	985	130	9230135	0240135	
1.30mm to 23.98mm	1135	192	0210140	0220140	
1.31mm to 23.99mm	1135	192	0230140	9240140	
1.30mm to 25.48mm	1210	228	0210145	0220145	
1.31mm to 25.49mm	1210	228	9230145	0240145	

Inch Sets (.001 increments)

Range	No. of Gages	Wt. lbs.	Order No. (Plus)	Order No. (Minus)	Price
.0060" to .0600"	55	2	0110010	9920010	PRICE ON APPLICATION
.0065" to .0605"	55	2	0130010	9999010	
.0110" to .0600"	50	2	0110020	9920020	
.0115" to .0605"	50	2	9930020	0140020	
.0110" to .2500"	240	6	0110030	9999930	
.0115" to .2505"	240	6	0130030	0140030	
.0610" to .2500"	190	6	0110040	9999040	
.0615" to .2505"	190	6	0130040	0140040	
.2510" to .5000"	250	20	9110050	9999050	
.2515" to .5005"	250	20	0130050	0140050	
.5010" to .6250"	125	21	0110060	9120060	
.5015" to .6255"	125	21	0130060	0140060	
.6260" to .7500"	125	31	0110070	9920070	
.6265" to .7505"	125	31	0130070	0140070	
.7510" to .8320"	82	27	0110080	9999080	
.7515" to .8325"	82	27	0130080	0140080	
.8330" to .9160"	84	33	0110090	9920090	
.8335" to .9165"	84	33	0130090	0140090	
.9170" to 1.0000"	84	38	0110100	9999100	
.9175" to 1.0005"	84	38	9130100	9999900	

Inch Libraries (.001 increments)

.0060" to .6250"	620	49	0110110	9920110	PRICE ON APPLICATION
.0065" to .6255"	620	49	9130110	9940110	
.0060" to .8320"	827	107	0110115	0120115	
.0065" to .8325"	827	107	9130115	9940115	
.0110" to .7500"	740	78	0110140	0120140	
.0115" to .7505"	740	78	0130140	9140140	
.0110" to .9160"	906	138	0110145	0120145	
.0115" to .9165"	906	138	9130145	9140145	
.0110" to 1.000"	990	176	0110150	9920150	
.0115" to 1.0005"	990	176	0130150	9940150	
.0610" to .7500"	690	78	0110160	0120160	
.0615" to .7505"	690	78	9130160	9140160	

(Continued)

STANDARD CLASS X PLUG GAGES

SERIES 987:

Sizes up to 1"

Use as masters to calibrate measuring equipment or to gage parts directly. Either way, these Class X (+.00004", -.0000") plug gages are accurate, cost effective measurement standards perfect for both the shop floor and Metrology laboratory. Available with Certificate of Calibration traceable to NIST.

- Single (GO) tolerance (+.00004, -.00000)
- NIST traceable
- Sizes available every .0001" up to 1.0000"
- Tool Steel; 60/62 Rc (Cold Stabilized)
- 2" long
- 2 microinch finish or better
- Within .00002" round
- Certificate of Accuracy included

INCH

Range	Partial Order No.*	Price
.0040" to .0150"	9870019	
.0151" to .0300"	9870020	
.0301" to .0750"	9870021	
.0751" to .1800"	9870022	
.1801" to .2810"	9840023	
.2811" to .4060"	9870024	
.4061" to .5100"	9870025	
.5101" to .6350"	9870026	
.6351" to .7600"	9870027	
.7601" to 1.000"	9870028	

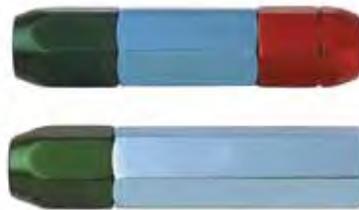


*Specific size must be added to these partial order numbers.



REVERSIBLE GAGE HANDLES

SERIES 636:



Range	Single-End Handle			Double-End Handle		
	Handle No.	Order No.	Price	Handle No.	Order No.	Price
Inch						
.0040"-.0750"	1WSE	9101010		1WDE	9102010	
.0751"-.1800"	2WSE	5101020		2WDE	5102020	
.1801"-.2810"	3WSE	9999030		3WDE	5102030	
.2811"-.4060"	4WSE	9101040		4WDE	5102040	
.4061"-.5100"	5WSE	9101050		5WDE	5102050	
.5101"-.6350"	6WSE	5101060		6WDE	5102060	
.6351"-.7600"	7WSE	5101070		7WDE	5102070	
.7601"-1.0100"	8WSE	5101080		8WDE	5102080	
Metric						
.10 to 1.90mm	1WSE	5103010		1WDE	9104010	
1.91 to 4.56mm	2WSE	5103020		2WDE	9104020	
4.57 to 7.14mm	3WSE	5103030		3WDE	5104030	
7.15 to 10.30mm	4WSE	5103040		4WDE	5104040	
10.31 to 12.94mm	5WSE	5103050		5WDE	5104050	
12.95 to 16.12mm	6WSE	5103060		6WDE	5104060	
16.13 to 19.30mm	7WSE	5103070		7WDE	5104070	
19.31 to 25.64mm	8WSE	5103080		8WDE	5104080	

BUSHINGS FOR REVERSIBLE HANDLES

SERIES 636:



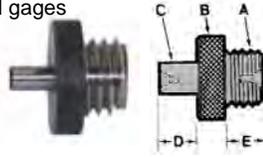
Range	Order No.	Price	Range	Order No.	Price	Range	Order No.	Price
.0040"-.0060"	5120010		.1661"-.1730"	5120300		.4501"-.4650"	5120590	
.0061"-.0100"	5120020		.1731"-.1800"	5120310		.4651"-.4800"	5120600	
.0101"-.0130"	9920030		.1801"-.1880"	5120320		.4801"-.4950"	5120610	
.0131"-.0150"	5120040		.1881"-.1960"	5120330		.4951"-.5100"	5120620	
.0151"-.0200"	9920050		.1961"-.2040"	5120340		.5101"-.5320"	5120630	
.0201"-.0250"	9920060		.2041"-.2120"	5120350		.5321"-.5470"	5120640	
.0251"-.0300"	9120070		.2121"-.2200"	5120360		.5471"-.5630"	5120650	
.0301"-.0350"	9120080		.2201"-.2280"	5120370		.5631"-.5790"	5120660	
.0351"-.0400"	9120090		.2281"-.2360"	5120380		.5791"-.5940"	5120670	
.0401"-.0450"	9120100		.2361"-.2440"	5120390		.5941"-.6100"	5120680	
.0451"-.0500"	5120110		.2441"-.2520"	5120400		.6101"-.6250"	5120690	
.0501"-.0550"	5120120		.2521"-.2610"	5120410		.6251"-.6350"	5120700	
.0551"-.0600"	5120130		.2611"-.2710"	5120420		.6351"-.6560"	5120710	
.0601"-.0650"	5120140		.2711"-.2810"	5120430		.6561"-.6720"	5120720	
.0651"-.0700"	5120150		.2811"-.2910"	5120440		.6721"-.6880"	5120730	
.0701"-.0750"	5120160		.2911"-.3010"	5120450		.6881"-.7040"	5120740	
.0751"-.0820"	5120170		.3011"-.3110"	5120460		.7041"-.7190"	5120750	
.0821"-.0890"	5120180		.3111"-.3210"	5120470		.7191"-.7350"	5120760	
.0891"-.0960"	5120190		.3211"-.3310"	5120480		.7351"-.7500"	5120770	
.0961"-.1030"	5120200		.3311"-.3410"	5120490		.7501"-.7600"	5120780	
.1031"-.1100"	5120210		.3411"-.3510"	5120500		.7601"-.7810"	5120790	
.1101"-.1170"	5120220		.3511"-.3610"	5120510		.7811"-.8120"	5120800	
.1171"-.1240"	5120230		.3611"-.3710"	5120520		.8121"-.8430"	5120810	
.1241"-.1310"	5120240		.3711"-.3820"	5120530		.8431"-.8750"	5120820	
.1311"-.1380"	5120250		.3821"-.3940"	5120540		.8751"-.9060"	5120830	
.1381"-.1450"	5120260		.3941"-.4060"	5120550		.9061"-.9370"	5120840	
.1451"-.1520"	5120270		.4061"-.4200"	5120560		.9371"-.9680"	5120850	
.1521"-.1590"	5120280		.4201"-.4350"	5120570		.9681"-.1.0000"	5120860	
.1591"-.1660"	5120290		.4351"-.4500"	5120580				



HOLE LOCATION PLUG GAGES
SERIES 200:



- All diameters concentric within .0001 T.I.R.
- Shaft dia. (C) .2500 + .0002, -.0000 on all gages to simplify calculation of hole spread.
- Shaft length (D) is 3/8" on all gages.



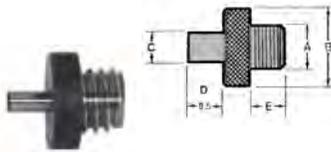
U.N.C. SIZES

Thread Dia.			Order No.	Price
A	B	E		
2-56	5/16	1/4	2000256	
4-40	5/16	1/4	2000440	
5-40	5/16	1/4	2000540	
6-32	5/16	1/4	2000632	
8-32	5/16	1/4	2000832	
10-24	5/16	1/4	2001024	
1/4-20	3/8	3/8	2001620	
5/16-18	1/2	3/8	2002018	
3/8-16	1/2	3/8	2002416	
7/16-14	3/4	3/8	2002814	
1/2-13	3/4	3/8	2003213	
5/8-11	3/4	3/8	2004011	
3/4-10	1	1/2	2004810	
7/8-9	1-1/8	1/2	2005609	
1-8	1-1/4	1/2	2006408	

U.N.F. SIZES

Thread Dia.			Order No.	Price
A	B	E		
6-40	5/16	1/4	2000640	
10-32	5/16	1/4	2001032	
1/4-28	3/8	3/8	2001628	
5/16-24	1/2	3/8	2002024	
3/8-24	1/2	3/8	2002424	
7/16-20	3/4	3/8	2002820	
1/2-20	3/4	3/8	2003220	
5/8-18	3/4	3/8	2004018	
3/4-16	1	1/2	2004816	
7/8-14	1-1/8	1/2	2005614	
1-14	1-1/4	1/2	2006414	

- All diameters concentric within .0001 T.I.R.
- Shaft dia. (C) 6.35mm + .005mm, -.000mm.
- Shaft length (D) is 9.5mm on all gages.



METRIC SIZES

Thread Dia.			Order No.	Price
A	B	E		
2.0 x .40	7.9	6.35	2002040	
2.5 x .45	7.9	6.35	2002545	
3.0 x .50	7.9	6.35	2003050	
4.0 x .70	7.9	6.35	2004070	
5.0 x .80	9.5	6.35	2005080	
6.0 x 1.00	9.5	6.35	2006010	
8.0 x 1.25	12.7	12.70	2008012	
10.0 x 1.50	12.7	12.70	2001015	
12.0 x 1.75	19.1	12.70	2001217	
16.0 x 2.00	19.1	12.70	9001620	
20.0 x 2.50	23.8	12.70	2002025	
24.0 x 3.00	28.6	12.70	2002430	

THREAD PLUG GAGES
SERIES 635:



Double End GO-NOGO With Handle
Class 2B / Class 6H

Each gage includes pitch diameter certification traceable to the U.S. Bureau of Standards.

Size	Pitch	Order No.	Price
6	32	6350632	
8	32	6350832	
10	24	6351024	
10	32	6351032	
1/4	20"	6351620	
5/16	18	6352018	
3/8	16	6352416	
1/2	13	6353213	
5/8	11	6354011	
3/4	10	6354810	
7/8	9	6355609	
1	8	6356406	
3	.5mm	9950350	
4	.7	6350470	
5	.8	6350580	
6	1.0	9350610	
8	1.25	9350812	
10	1.5	9351015	
12	1.75	6351217	
14	1.5	6351415	
16	1.5	6351615	
18	1.5	6351815	
20	1.5	6352015	

THREAD PLUG GAGE HANDLES
SERIES 636:



Range		Model No.	Order No.	Price
Inch	Metric			
.0590 - .1050"	1.50 - 2.67mm	000	6365000	
.1051 - .1500"	2.68 - 3.81mm	00	6365500	
.1501 - .2300"	3.82 - 5.84mm	0	6365550	
.2301 - .3650"	5.85 - 9.27mm	1	6365551	
.3651 - .5100"	9.28 - 12.95mm	2	6365552	
.5101 - .8250"	12.96 - 20.95mm	3	6365553	
.8251 - 1.1350"	20.96 - 28.83mm	4	6365554	
1.1351 - 1.5100"	28.84 - 38.35mm	5	6365555	

THREAD RING GAGE HOLDERS
SERIES 636:



Range		Model No.	Order No.	Price
Inch	Metric			
.0590 - .2300"	1.50 - 5.84mm	1-T	6360012	
.2301 - .3650"	5.85 - 9.27mm	2-T	6361620	
.3651 - .5100"	9.28 - 12.95mm	3-T	6362432	
.5101 - .8250"	12.96 - 20.95mm	4-T	6363648	
.8251 - 1.1350"	20.96 - 28.83mm	5-T	6365672	
1.1351 - 1.5100"	28.84 - 38.35mm	6-T	6368096	

STANDARD THREAD GAGES

SERIES 987:

Work Plugs, Rings

Inspect internal and external threads with Vermont Gage thread gages. Vermont Gage thread gages are made to precise class X tolerances and come standard with a Certificate of Accuracy. Standard thread plugs include pitch diameters for 2B, 3B, (inch) and 6H (Metric) class of fit. Standard thread rings include pitch diameters for 2A, 3A (inch) and 6g (metric) class of fit. Go/ NoGo plug double - end assemblies get 1 line (up to 15 characters) of custom marking. Thread members are made of steel (chrome plated gages for added wear resistance are available; please inquire).



PRECISION TOOLS

Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
0-80 UNF					
Taperlock Plug 2B	9110101	0110102		0110104	
Taperlock Plug 3B	9110101	0110103		0110105	
Ring 2A	6110101	6110103		6110105	
Ring 3A	6110102	6110104		6110106	
1-64 UNC					
Taperlock Plug 2B	0110251	0110252		0110254	
Taperlock Plug 3B	0110251	0110253		0110255	
Ring 2A	6110251	6110253		6110255	
Ring 3A	6110252	6110254		6110256	
1-72 UNF					
Taperlock Plug 2B	0110351	0110352		0110354	
Taperlock Plug 3B	0110351	0110353		0110355	
Ring 2A	6110351	6110353		6110355	
Ring 3A	6110352	6110354		6110356	
2-56 UNC					
Taperlock Plug 2B	0110501	0110502		0110504	
Taperlock Plug 3B	0110501	0110503		0110505	
Ring 2A	6110501	6110503		6110505	
Ring 3A	6110502	6110504		6110506	
2-64 UNF					
Taperlock Plug 2B	0110601	0110602		1106040	
Taperlock Plug 3B	0110601	0110603		1106050	
Ring 2A	6110601	6110603		6110605	
Ring 3A	6110602	6110604		6110606	
3-48 UNC					
Taperlock Plug 2B	0110751	0110752		0110754	
Taperlock Plug 3B	0110751	0110753		0110755	
Ring 2A	6110751	6110753		6110755	
Ring 3A	6110752	6110754		6110756	
3-56 UNF					
Taperlock Plug 2B	0110851	0110852		0110854	
Taperlock Plug 3B	0110851	0110853		0110855	
Ring 2A	6110851	6110853		6110855	
Ring 3A	6110852	6110854		6110856	
4-40 UNC					
Taperlock Plug 2B	0111001	0111002		0111004	
Taperlock Plug 3B	0111001	0111003		0111005	
Ring 2A	6111001	6111003		6111005	
Ring 3A	6111002	6111004		6111006	
4-48 UNF					
Taperlock Plug 2B	0111101	0111102		0111104	
Taperlock Plug 3B	0111101	9111103		0111105	
Ring 2A	6111101	6111103		6111105	
Ring 3A	6111102	6111104		6111106	
5-40 UNC					
Taperlock Plug 2B	9111251	0111252		0111254	
Taperlock Plug 3B	9111251	0111253		9111255	
Ring 2A	6111251	9111253		6111255	
Ring 3A	9111252	9111254		6111256	
5-44 UNF					
Taperlock Plug 2B	0111351	0111352		9111354	
Taperlock Plug 3B	0111351	0111353		0111355	
Ring 2A	6111351	9111353		6111355	
Ring 3A	6111352	6111354		6111356	
6-32 UNC					
Taperlock Plug 2B	0111501	0111502		0111504	
Taperlock Plug 3B	0111501	0111503		0111505	
Ring 2A	6111501	6111503		6111505	
Ring 3A	6111502	6111504		6111506	

Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
6-40 UNF					
Taperlock Plug 2B	9111601	0111602		0111604	
Taperlock Plug 3B	9111601	0111603		0111605	
Ring 2A	9911601	6111603		9111605	
Ring 3A	9911602	6111604		6111606	
8-32 UNC					
Taperlock Plug 2B	0111751	0111752		0111754	
Taperlock Plug 3B	0111751	0111753		0111755	
Ring 2A	6111751	6111753		6111755	
Ring 3A	6111752	6111754		6111756	
8-36 UNF					
Taperlock Plug 2B	0111851	0111852		0111854	
Taperlock Plug 3B	0111851	0111853		0111855	
Ring 2A	6111851	6111853		6111855	
Ring 3A	9111852	6111854		6111856	
10-24 UNC					
Taperlock Plug 2B	0112001	0112002		0112004	
Taperlock Plug 3B	0112001	0112003		0112005	
Ring 2A	6112001	6112003		6112005	
Ring 3A	6112002	6112004		9112006	
10-32 UNF					
Taperlock Plug 2B	0112101	0112102		0112104	
Taperlock Plug 3B	0112101	0112103		0112105	
Ring 2A	6112101	6112103		6112105	
Ring 3A	6112102	6112104		6112106	
12-24 UNC					
Taperlock Plug 2B	0112210	0112252		0112254	
Taperlock Plug 3B	0112210	0112253		0112255	
Ring 2A	6112251	6112253		9112255	
Ring 3A	6112252	6112254		6112256	
12-28 UNF					
Taperlock Plug 2B	0112351	0112352		0112354	
Taperlock Plug 3B	0112351	0112353		0112355	
Ring 2A	6112351	6112353		6112255	
Ring 3A	6112352	6112354		6112356	
12-32 UNEF					
Taperlock Plug 2B	0112451	0112452		0112454	
Taperlock Plug 3B	0112451	0112453		0112455	
Ring 2A	6112451	6112453		6112455	
Ring 3A	6112452	6112454		6112456	
1/4-20 UNC					
Taperlock Plug 2B	0112601	0112602		0112604	
Taperlock Plug 3B	0112601	0112603		0112605	
Ring 2A	6112601	6112603		6112605	
Ring 3A	6112602	6112604		6112606	
1/4-28 UNF					
Taperlock Plug 2B	0112701	0112702		0112704	
Taperlock Plug 3B	0112701	0112703		0112705	
Ring 2A	6112701	6112703		6112705	
Ring 3A	6112702	6112704		6112706	
1/4-32 UNEF					
Taperlock Plug 2B	0112801	0112802		0112804	
Taperlock Plug 3B	0112801	0112803		0112805	
Ring 2A	6112801	6112803		6112805	
Ring 3A	6112802	6112804		6112806	
5/16-18 UNC					
Taperlock Plug 2B	0112951	0112952		0112954	
Taperlock Plug 3B	0112951	0112953		0112955	
Ring 2A	6112951	6112953		6112955	
Ring 3A	6112952	6112954		6112956	

STANDARD THREAD GAGES (Continued)
 SERIES 987:



Size / Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
5/16-24 UNF					
Taperlock Plug 2B	0113051	0113052		9113054	
Taperlock Plug 3B	0113051	0113053		0113055	
Ring 2A	6113051	6113053		6113055	
Ring 3A	6113052	6113054		6113056	
5/16-32 UNEF					
Taperlock Plug 2B	0113151	0113152		0113154	
Taperlock Plug 3B	0113151	9113153		0113155	
Ring 2A	6113151	9913153		6113155	
Ring 3A	6113152	6113154		6113156	
3/8-16 UNC					
Taperlock Plug 2B	0113301	0113302		0113304	
Taperlock Plug 3B	0113301	0113303		0113305	
Ring 2A	6113301	6113303		6113305	
Ring 3A	6113302	6113304		6113306	
3/8-24 UNF					
Taperlock Plug 2B	9113401	0113402		0113404	
Taperlock Plug 3B	9113401	0113403		0113405	
Ring 2A	6113401	6113403		6113405	
Ring 3A	6113402	6113404		6113406	
3/8-32 UNEF					
Taperlock Plug 2B	0113501	0113502		0113504	
Taperlock Plug 3B	0113501	0113503		0113505	
Ring 2A	6113501	6113503		6113505	
Ring 3A	6113502	6113504		6113506	
7/16-14 UNC					
Taperlock Plug 2B	0113651	0113652		0113654	
Taperlock Plug 3B	0113651	0113653		0113655	
Ring 2A	6113651	6113653		6113655	
Ring 3A	6113652	6113654		6113656	
7/16-20 UNF					
Taperlock Plug 2B	0113751	0113752		0113754	
Taperlock Plug 3B	0113751	0113753		0113755	
Ring 2A	6113751	6113753		6113755	
Ring 3A	6113752	6113754		6113756	
7/16-28 UNEF					
Taperlock Plug 2B	0113851	0113852		0113854	
Taperlock Plug 3B	0113851	0113853		0113855	
Ring 2A	6113851	6113853		6113855	
Ring 3A	6113852	6113854		6113856	
1/2-13 UNC					
Taperlock Plug 2B	0114001	0114002		0114004	
Taperlock Plug 3B	0114001	0114003		0114005	
Ring 2A	6114001	6114003		6114005	
Ring 3A	6114002	6114004		6114006	
1/2-20 UNF					
Taperlock Plug 2B	0114101	9114102		0114104	
Taperlock Plug 3B	0114101	0114103		0114105	
Ring 2A	6114101	6114103		6114105	
Ring 3A	6114102	6114104		6114106	
1/2-28 UNEF					
Taperlock Plug 2B	0114201	9114202		9114204	
Taperlock Plug 3B	0114201	0114203		0114205	
Ring 2A	6114201	6114203		6114205	
Ring 3A	6114202	6114204		6114206	

Size/ Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
9/16-12 UNC					
Taperlock Plug 2B	0114351	0114352		9114354	
Taperlock Plug 3B	0114351	0114353		0114355	
Ring 2A	6114351	6114353		6114355	
Ring 3A	6114352	6114354		6114356	
9/16-18 UNF					
Taperlock Plug 2B	0114451	0114452		1144540	
Taperlock Plug 3B	0114451	9114453		0114455	
Ring 2A	6114451	6114453		6114455	
Ring 3A	6114452	6114454		6114456	
9/16-24 UNEF					
Taperlock Plug 2B	0114551	9114552		0114554	
Taperlock Plug 3B	0114551	0114553		0114555	
Ring 2A	6114551	6114553		6114555	
Ring 3A	6114552	6114554		6114556	
5/8-11 UNC					
Taperlock Plug 2B	9114701	0114702		0114704	
Taperlock Plug 3B	9114701	0114703		9114705	
Ring 2A	6114701	6114703		6114705	
Ring 3A	6114702	6114704		6114706	
5/8-18 UNF					
Taperlock Plug 2B	0114801	0114802		0114804	
Taperlock Plug 3B	0114801	0114803		0114805	
Ring 2A	6114801	6114803		6114805	
Ring 3A	6114802	6114804		6114806	
5/8-24 UNEF					
Taperlock Plug 2B	0114901	0114902		0114904	
Taperlock Plug 3B	0114901	0114903		0114905	
Ring 2A	6114901	6114903		6114905	
Ring 3A	6114902	6114904		6114906	
11/16-24 UNEF					
Taperlock Plug 2B	9115051	0115052		0115054	
Taperlock Plug 3B	9115051	0115053		0115055	
Ring 2A	6115051	6115053		6115055	
Ring 3A	6115052	6115054		6115056	
3/4-10 UNC					
Taperlock Plug 2B	0115201	0115202		0115204	
Taperlock Plug 3B	0115201	0115203		0115205	
Ring 2A	6115201	6115203		6115205	
Ring 3A	6115202	6115204		6115206	
3/4-16 UNF					
Taperlock Plug 2B	0115301	0115302		0115304	
Taperlock Plug 3B	0115301	0115303		0115305	
Ring 2A	6115301	6115303		6115305	
Ring 3A	6115302	6115304		6115306	
3/4-20 UNEF					
Taperlock Plug 2B	0115401	0115402		0115404	
Taperlock Plug 3B	0115401	0115403		0115405	
Ring 2A	6115401	6115403		6115405	
Ring 3A	6115402	6115404		6115406	
13/16-20 UNEF					
Taperlock Plug 2B	0115551	0115552		0115554	
Taperlock Plug 3B	0115551	0115553		0115555	
Ring 2A	6115551	6115553		6115555	
Ring 3A	6115552	6115554		6115556	

PRECISION TOOLS

Set Plug Gages also available; please inquire.



STANDARD THREAD GAGES (Continued) SERIES 987:

PRECISION TOOLS

Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
7/8-9 UNC					
Taperlock Plug 2B	0115701	0115702		0115704	
Taperlock Plug 3B	0115701	0115703		0115705	
Ring 2A	6115701	6115703		6115705	
Ring 3A	6115702	6115704		6115706	
7/8-14 UNF					
Taperlock Plug 2B	0115801	0115802		0115804	
Taperlock Plug 3B	0115801	0115803		0115805	
Ring 2A	6115801	6115803		6115805	
Ring 3A	6115802	6115804		6115806	
7/8-20 UNEF					
Taperlock Plug 2B	0115901	0115902		0115904	
Taperlock Plug 3B	0115901	0115903		0115905	
Ring 2A	6115901	6115903		6115905	
Ring 3A	6115902	6115904		6115906	
15/16-20 UNEF					
Taperlock Plug 2B	0116051	0116052		0116054	
Taperlock Plug 3B	0116051	0116053		0116055	
Ring 2A	6116051	6116053		6116055	
Ring 3A	6116052	6116054		6116056	
1-8 UNC					
Taperlock Plug 2B	0116201	0116202		0116204	
Taperlock Plug 3B	0116201	0116203		0116205	
Ring 2A	6116201	6116203		6116205	
Ring 3A	6116202	6116204		6116206	
1-12 UNF					
Taperlock Plug 2B	0116301	0116302		0116304	
Taperlock Plug 3B	0116301	0116303		0116305	
Ring 2A	6116301	6116303		6116305	
Ring 3A	6116302	6116304		6116306	
1-14 UNS					
Taperlock Plug 2B	0116401	0116402		0116404	
Taperlock Plug 3B	0116401	9116403		0116405	
Ring 2A	6116401	6116403		6116405	
Ring 3A	6116402	6116404		6116406	
1-20 UNEF					
Taperlock Plug 2B	0116501	9116502		0116504	
Taperlock Plug 3B	0116501	0116503		0116505	
Ring 2A	6116501	6116503		6116505	
Ring 3A	6116502	6116504		6116506	
1 1/16-12 UN					
Taperlock Plug 2B	0116651	0116652		0116654	
Taperlock Plug 3B	0116651	0116653		0116655	
Ring 2A	6116651	6116653		6116655	
Ring 3A	6116652	6116654		6116656	
1 1/16 18 UNEF					
Taperlock Plug 2B	0116751	0116752		0116754	
Taperlock Plug 3B	0116751	0116753		0116755	
Ring 2A	6116751	6116753		6116755	
Ring 3A	6116752	6116754		6116756	
1 1/8-7 UNC					
Taperlock Plug 2B	0116901	0116902		0116904	
Taperlock Plug 3B	0116901	0116903		0116905	
Ring 2A	6116901	6116903		6116905	
Ring 3A	6116902	6116904		6116906	
1 1/8-12 UNF					
Taperlock Plug 2B	0117001	0117002		0117004	
Taperlock Plug 3B	0117001	0117003		0117005	
Ring 2A	6117001	6117003		6117005	
Ring 3A	6117002	6117004		6117006	
1 1/8-18 UNEF					
Taperlock Plug 2B	9117101	9117102		0117104	
Taperlock Plug 3B	9117101	0117103		0117105	
Ring 2A	6117101	6117103		6117105	
Ring 3A	6117102	6117104		6117106	
1 3/16-12 UN					
Taperlock Plug 2B	0117251	0117252		0117254	
Taperlock Plug 3B	0117251	9117253		0117255	
Ring 2A	6117251	6117253		6117255	
Ring 3A	6117252	6117254		6117256	

Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
1 3/16-18 UNEF					
Taperlock Plug 2B	0117351	0117352		0117354	
Taperlock Plug 3B	0117351	0117353		0117355	
Ring 2A	6117351	6117353		6117355	
Ring 3A	6117352	6117354		6117356	
1 1/4-7 UNC					
Taperlock Plug 2B	9117501	0117502		0117504	
Taperlock Plug 3B	9117501	0117503		0117505	
Ring 2A	6117501	6117503		6117505	
Ring 3A	6117502	6117504		6117506	
1 1/4-12 UNF					
Taperlock Plug 2B	0117601	0117602		0117604	
Taperlock Plug 3B	0117601	0117603		0117605	
Ring 2A	6117601	6117603		6117605	
Ring 3A	6117602	6117604		6117606	
1 1/4-18 UNEF					
Taperlock Plug 2B	0117701	0117702		0117704	
Taperlock Plug 3B	0117701	0117703		0117705	
Ring 2A	6117701	6117703		6117705	
Ring 3A	6117702	6117704		6117706	
1 5/16-12 UN					
Taperlock Plug 2B	0117851	0117852		0117854	
Taperlock Plug 3B	0117851	0117853		0117855	
Ring 2A	6117851	6117853		6117855	
Ring 3A	6117852	6117854		6117856	
1 5/16-18 UNEF					
Taperlock Plug 2B	0117951	0117952		0117954	
Taperlock Plug 3B	0117951	0117953		0117955	
Ring 2A	6117951	6117953		6117955	
Ring 3A	6117952	6117954		6117956	
1 3/8-6 UNC					
Taperlock Plug 2B	0118101	0118102		0118104	
Taperlock Plug 3B	0118101	9118103		0118105	
Ring 2A	6118101	6118103		6118105	
Ring 3A	6118102	6118104		6118106	
1 3/8-12 UNF					
Taperlock Plug 2B	0118201	9118202		0118204	
Taperlock Plug 3B	0118201	0118203		0118205	
Ring 2A	6118201	6118203		6118205	
Ring 3A	6118202	6118204		6118206	
1 3/8-18 UNEF					
Taperlock Plug 2B	9118301	0118302		0118304	
Taperlock Plug 3B	9118301	0118303		0118305	
Ring 2A	6118301	6118303		6118305	
Ring 3A	6118302	6118304		6118306	
1 7/16-12 UN					
Taperlock Plug 2B	0118451	0118452		0118454	
Taperlock Plug 3B	0118451	0118453		0118455	
Ring 2A	6118451	6118453		6118455	
Ring 3A	6118452	6118454		6118456	
1 7/16-18 UNEF					
Taperlock Plug 2B	0118551	0118552		0118554	
Taperlock Plug 3B	0118551	0118553		0118555	
Ring 2A	6118551	6118553		6118555	
Ring 3A	6118552	6118554		6118556	
1 1/2-6 UNC					
Taperlock Plug 2B	0118701	9118702		9118704	
Taperlock Plug 3B	0118701	0118703		0118705	
Ring 2A	6118701	6118703		6118705	
Ring 3A	6118702	6118704		6118706	
1 1/2-12 UNF					
Taperlock Plug 2B	0118801	0118802		0118804	
Taperlock Plug 3B	0118801	0118803		0118805	
Ring 2A	6118801	6118803		6118805	
Ring 3A	6118802	6118804		6118806	
1 1/2-18 UNEF					
Taperlock Plug 2B	0118901	0118902		0118904	
Taperlock Plug 3B	0118901	0118903		0118905	
Ring 2A	6118901	6118903		6118905	
Ring 3A	6118902	6118904		6118906	

STANDARD THREAD GAGES (Continued)

SERIES 987:



Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
M1.6 X .35 Taperlock Plug 6H Ring 6g	0210101 6210101	0210102 6210102		0210103 6210103	
M1.8 X .35 Taperlock Plug 6H Ring 6g	0210251 6210251	0210252 6210252		0210253 6210253	
M2.0 X .40 Taperlock Plug 6H Ring 6g	0210401 6210401	0210402 6210402		0210403 6210403	
M2.2 X .45 Taperlock Plug 6H Ring 6g	0210551 6210551	0210552 6210552		0210553 6210553	
M2.5 X .45 Taperlock Plug 6H Ring 6g	0210701 6210701	0210702 6210702		0210703 6210703	
M3.0 X .50 Taperlock Plug 6H Ring 6g	0210851 6210851	0210852 6210852		0210853 6210853	
M3.5 X .60 Taperlock Plug 6H Ring 6g	0211001 6211001	0211002 6211002		0211003 6211003	
M4.0 X .70 Taperlock Plug 6H Ring 6g	0211151 6211151	0211152 6211152		0211153 6211153	
M4.5 X .75 Taperlock Plug 6H Ring 6g	0211301 6211301	0211302 6211302		0211303 6211303	
M5.0 X .80 Taperlock Plug 6H Ring 6g	0211451 6211451	0211452 6211452		0211453 6211453	
M5.5 X .75 Taperlock Plug 6H Ring 6g	0211601 6211601	0211602 6211602		0211603 6211603	
M6.0 X 1.00 Taperlock Plug 6H Ring 6g	0211751 6211751	0211752 6211752		0211753 6211753	
M7.0 X 1.00 Taperlock Plug 6H Ring 6g	0211901 6211901	0211902 6211902		0211903 6211903	
M8.0 X 1.25 Taperlock Plug 6H Ring 6g	0212051 6212051	0212052 6212052		0212053 6212053	
M9.0 X 1.25 Taperlock Plug 6H Ring 6g	0212201 6212201	0212202 6212202		0212203 6212203	
M10.0 X 1.50 Taperlock Plug 6H Ring 6g	0212551 6212551	0212552 6212552		0212553 6212553	
M10.0 X 1.25 Taperlock Plug 6H Ring 6g	0212451 6212451	0212452 6212452		0212453 6212453	
M10.0 X .75 Taperlock Plug 6H Ring 6g	0212351 6212351	0212352 6212352		0212353 6212353	
M11.0 X 1.50 Taperlock Plug 6H Ring 6g	0212701 6212701	0212702 6212702		0212703 6212703	
M12.0 X 1.75 Taperlock Plug 6H Ring 6g	0213051 6213051	0213052 6213052		0213053 6213053	

Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
M12.0 X 1.50 Taperlock Plug 6H Ring 6g	0212951 6212951	0212952 6212952		0212953 6212953	
M12.0 X 1.25 Taperlock Plug 6H Ring 6g	0212851 6212851	0212852 6212852		0212853 6212853	
M14.0 X 2.00 Taperlock Plug 6H Ring 6g	0213301 6213301	0213302 6213302		0213303 6213303	
M14.0 X 1.50 Taperlock Plug 6H Ring 6g	0213201 6213201	0213202 6213202		0213203 6213203	
M15.0 X 1.50 Taperlock Plug 6H Ring 6g	0213551 6213551	0213552 6213552		0213553 6213553	
M15.0 X 1.00 Taperlock Plug 6H Ring 6g	0213451 6213451	0213452 6213452		0213453 6213453	
M16.0 X 2.00 Taperlock Plug 6H Ring 6g	0213801 6213801	0213802 6213802		0213803 6213803	
M16.0 X 1.50 Taperlock Plug 6H Ring 6g	0213701 6213701	0213702 6213702		0213703 6213703	
M17.0 X 1.50 Taperlock Plug 6H Ring 6g	0214051 6214051	0214052 6214052		0214053 6214053	
M17.0 X 1.00 Taperlock Plug 6H Ring 6g	0213951 6213951	0213952 6213952		0213953 6213953	
M18.0 X 2.50 Taperlock Plug 6H Ring 6g	0214301 6214301	0214302 6214302		0214303 6214303	
M18.0 X 1.50 Taperlock Plug 6H Ring 6g	0214201 6214201	0214202 6214202		0214203 6214203	
M20.0 X 2.50 Taperlock Plug 6H Ring 6g	0214651 6214651	0214652 6214652		0214653 6214653	
M20.0 X 1.50 Taperlock Plug 6H Ring 6g	0214551 6214551	0214552 6214552		0214553 6214553	
M20.0 X 1.00 Taperlock Plug 6H Ring 6g	0214451 6214451	0214452 6214452		0214453 6214453	
M22.0 X 2.50 Taperlock Plug 6H Ring 6g	0214901 6214901	0214902 6214902		0214903 6214903	
M22.0 X 1.50 Taperlock Plug 6H Ring 6g	0214801 6214801	0214802 6214802		0214803 6214803	
M24.0 X 3.00 Taperlock Plug 6H Ring 6g	0215151 6215151	0215152 6215152		0215153 6215153	
M24.0 X 2.00 Taperlock Plug 6H Ring 6g	0215051 9215051	0215052 9215052		0215053 9215053	
M25.0 X 2.00 Taperlock Plug 6H Ring 6g	0215401 6215401	0215402 6215402		0215403 6215403	
M25.0 X 1.50 Taperlock Plug 6H Ring 6g	0215301 6215301	0215302 6215302		0215303 6215303	
M26.0 X 1.50 Taperlock Plug 6H Ring 6g	0215651 6215651	0215652 6215652		0215653 6215653	

PRECISION TOOLS



**We can supply "special" gages.
Let us quote your requirements.**

STANDARD THREAD GAGES (Continued)

SERIES 987:



Size/Type	Order No. Go Member	Order No. NoGo Member	Price	Order No. Go/NoGo Set	Price
M26.0 X 1.00 Taperlock Plug 6H Ring 6g	0215551 6215551	0215552 6215552		0215553 6215553	
M27.0 X 3.00 Taperlock Plug 6H Ring 6g	0215901 6215901	0215902 6215902		0215903 6215903	
M27.0 X 2.00 Taperlock Plug 6H Ring 6g	0215801 6215801	0215802 6215802		0215803 6215803	
M28.0 X 2.00 Taperlock Plug 6H Ring 6g	0216251 6216251	0216252 6216252		0216253 6216253	
M28.0 X 1.50 Taperlock Plug 6H Ring 6g	0216151 6216151	0216152 6216152		0216153 6216153	
M28.0 X 1.00 Taperlock Plug 6H Ring 6g	0216051 6216051	0216052 6216052		0216053 6216053	
M30.0 X 3.50 Taperlock Plug 6H Ring 6g	0216601 6216601	0216602 6216602		0216603 6216603	
M30.0 X 2.00 Taperlock Plug 6H Ring 6g	0216501 6216501	0216502 6216502		0216503 6216503	
M30.0 X 1.50 Taperlock Plug 6H Ring 6g	0216401 6216401	0216402 6216402		0216403 6216403	
M32.0 X 2.00 Taperlock Plug 6H Ring 6g	0216851 6216851	0216852 6216852		0216853 6216853	
M32.0 X 1.50 Taperlock Plug 6H Ring 6g	0216751 6216751	0216752 6216752		0216753 6216753	
M33.0 X 3.50 Taperlock Plug 6H Ring 6g	0217101 6217101	0217102 6217102		0217103 6217103	
M33.0 X 2.00 Taperlock Plug 6H Ring 6g	0217001 6217001	0217002 6217002		0217003 6217003	
M35.0 X 1.50 Taperlock Plug 6H Ring 6g	0217251 6217251	0217252 6217252		0217253 6217253	
M36.0 X 4.00 Taperlock Plug 6H Ring 6g	0217601 6217601	0217602 6217602		0217603 6217603	
M36.0 X 3.00 Taperlock Plug 6H Ring 6g	0217501 6217501	0217502 6217502		0217503 6217503	
M36.0 X 2.00 Taperlock Plug 6H Ring 6g	0217401 6217401	0217402 6217402		0217403 6217403	
M38.0 X 1.50 Taperlock Plug 6H Ring 6g	0217751 6217751	0217752 6217752		0217753 6217753	
M39.0 X 4.00 Taperlock Plug 6H Ring 6g	0218101 6218101	0218102 6218102		0218103 6218103	
M39.0 X 3.00 Taperlock Plug 6H Ring 6g	0218001 6218001	0218002 6218002		0218003 6218003	
M39.0 X 2.00 Taperlock Plug 6H Ring 6g	0217901 6217901	0217902 6217902		0217903 6217903	

PIPE THREAD PLUGS

SERIES 987:



For gaging standard pipe and pipe fittings!

Use Vermont Gage pipe thread plugs to check tapered and straight external pipe threads. Perfect for inspecting standard pipe and pipe fittings. Vermont Gage pipe threads are made to precise class X tolerances and come with Certificate of Accuracy.

The NPT and NPTF (Dryseal) series includes standard tapered pitch diameters. The NPSM and NPSF series includes standard straight pitch diameters. Add a taperlock handle to create a complete pipe gage assembly.

- Class X
- NIST traceable
- Tool steel; 60/62 Rc (Cold Stabilized)
- Handles custom marked 1 line (up to 15 Characters) included add 15 cents for each additional character
- Inch Handles - Light Blue Metric Handles -Yellow
- Certificate of accuracy included

NPT Tapered Pipe Plugs

Range	Order Plug Gage Member	Price
1/16 - 27	9999101	
1/8 - 27	9910251	
1/4 - 18	0110401	
3/8 - 18	0110551	
1/2 - 14	0110701	
3/4 - 14	9910851	
1 - 11-1/2	9111001	
1-1/4 - 11-1/2	0111151	
1-1/2 - 11-1/2	0111301	
2 - 11-1/2	0111451	
2-1/2 - 8	0111601	
3 - 8	9111751	

PIPE PLUG HANDLES

SERIES 636:



Range	Handle No.	Order No.	Price
1/16 - 27	1	5141040	
1/8 - 27	2	5141050	
1/4 - 18	3	5141060	
3/8 - 18	3	5141060	
1/2 - 14	4	5141070	
3/4 - 14	4	5141070	
1 - 11-1/2	5	5141080	
1-1/4 - 11-1/2	5	5141080	
1-1/2 - 11-1/2	5	5141080	
2 - 11-1/2	5	5141080	
2-1/2 - 8	6	5162050	
3 - 8	6	5162050	

(Continued)

PIPE THREAD PLUGS (Continued)
SERIES 987:



PIPE THREAD RINGS
SERIES 987:



For gaging standard pipe and pipe fitting!

Use Vermont Gage pipe threads to check tapered and straight internal pipe threads. Perfect for inspecting standard pipe and pipe fittings. Vermont Gage pipe threads are made to precise class X tolerance and come with Certificate of Accuracy. The NPT and NPTF (Dryseal) series includes standard tapered pitch diameters. The NPSM series includes standard straight pitch diameters.

- Class X
- NIST Traceable
- Tool Steel; 60/62 Rc/ (Cold Stabilized)
- Certificate of accuracy included

NPT Tapered Pipe Rings

Size	Order No. Ring Gage Members	Price
1/16 - 27	4110101	
1/8 - 27	4110251	
1/4 - 18	4110401	
3/8 - 18	4110551	
1/2 - 14	4110701	
3/4 - 14	4110851	
1 - 11-1/2	4111001	
1-1/4 - 11-1/2	4111151	
1-1/2 - 11-1/2	4111301	
2 - 11-1/2	4111451	
2-1/2 - 8	4111601	
3 - 8	4111751	



NPTF Tapered Pipe Rings

Size	Basic		Plain 6-Step			
	Order No. L- 1	Price	Order No. L- 2	Price		
1/16 - 27	9990101		5110102		5110107	
1/8 - 27	5110251		5110252		5110257	
1/4 - 18	5110401		5110402		5110407	
3/8 - 18	5110551		5110552		5110557	
1/2 - 14	5110701		5110702		5110707	
3/4 - 14	5110851		5110852		5110857	
1 - 11-1/2	9091001		5111002		5111007	
1-1/4 - 11-1/2	5111151		5111152		5111157	
1-1/2 - 11-1/2	5111301		5111302		5111307	
2 - 11-1/2	5111451		5111452		5111457	
2-1/2 - 8	5111601		5111602		5111607	
3 - 8	5111751		5111752		5111757	

NPSM Straight Pipe Rings

Size	Pitch Dia. Go 2A	Pitch Dia. NoGo 2A	Order No.		Price
			Go Ring 2A	NoGo Ring 2A	
1/8 - 27	.3725	.3689	9990251	9910252	
1/4 - 18	.4903	.4859	6110401	6110402	
3/8 - 18	.6256	.6211	6110551	6110552	
1/2 - 14	.7769	.7718	6110701	6110702	
3/4 - 14	.9873	.9820	9990851	9110852	
1 - 11-1/2	1.2369	1.2311	9011001	9111002	
1-1/4 - 11-1/2	1.5816	1.5756	6111151	6111152	
1-1/2 - 11-1/2	1.8205	1.8144	6111301	6111302	
2 - 11-1/2	2.2944	2.2882	6111451	6111452	
2-1/2 - 8	2.7600	2.7526	6111601	9111602	
3 - 8	3.3862	3.3786	9991751	9111752	

NPTF Tapered Pipe Plugs

Size	Basic		Plain 6-Step	
	Order No. L-1	Order No. L-3	Order No.	Price
1/16 - 27	1110101	1110102	1110107	
1/8 - 27	1110251	1110252	1110257	
1/4 - 18	1110401	1110402	1110407	
3/8 - 18	1110551	1110552	1110557	
1/2 - 14	1110701	1110702	1110707	
3/4 - 14	1110851	1110852	1110857	
1 - 11-1/2	1111001	1111002	1111007	
1-1/4 - 11-1/2	1111151	1111152	1111157	
1-1/2 - 11-1/2	1111301	1111302	1111307	
2 - 11-1/2	1111451	1111452	1111457	
2-1/2 - 8	1111601	1111602	1111607	
3 - 8	1111751	1111752	1111757	

NPSM Straight Pipe Plugs

Size	Pitch Dia. Go Member 2B	Pitch Dia. NoGo Member 2B	Order No. Go Member 2B	Order No. NoGo Member 2B	Price
1/8 - 27	.3736	.3783	2110251	2110252	
1/4 - 18	.4916	.4974	2110401	2110402	
3/8 - 18	.6270	.6329	2110551	2110552	
1/2 - 14	.7784	.7851	2110701	2110702	
3/4 - 14	.9889	.9958	2110851	2110852	
1 - 11-1/2	1.2386	1.2462	2111001	2111002	
1-1/4 - 11-1/2	1.5834	1.5912	2111151	2111152	
1-1/2 - 11-1/2	1.8223	1.8302	2111301	2111302	
2 - 11-1/2	2.2963	2.3044	2111451	2111452	
2-1/2 - 8	2.7622	2.7720	2111601	2111602	
3 - 8	3.3885	3.3984	2111751	2111752	

NPSF Straight Pipe Plugs

Size	Order No. Go Member	Order No. NoGo Member	Price
1/8 - 27	9110251	9110252	
1/4 - 18	3110401	3110402	
3/8 - 18	3110551	3110552	
1/2 - 14	3110701	3110702	
3/4 - 14	3110851	3110852	
1 - 11-1/2	9911001	9911002	

INSPECTION GAGE BALLS

SERIES 247:

26 pairs of precision balls ranging from 1/8" to 1" diameter.

- Chrome steel hardened to 63RC
- Ground and Lapped
- Grade 25 Accuracy - AFBMA
- Made in the U.S.A.

Sizes included: 1/8 - 3/4 x 32nds & 9/64, 13/16 - 1" x 16ths



Order No. 2470500
Price

PRECISION TOOLS

CLIP RULES

SERIES 218:



"EASY-LOOK" PRECISION RULES

Series 218:

Highly accurate, made of the finest quality steel, hardened and tempered, with white colored graduations.

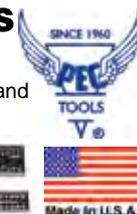
Graduations:

4R - 8ths, 16ths, 32nds, 64ths

5R - 32nds, 64ths, 10ths, 100ths

E/M - 32nds, 64ths, mm, 0.5m

M - mm, 0.5mm, mm, 0.5mm



FLEXIBLE

RIGID

Round end rules with depth gage pocket clip.

Description	Order No.		Price
	PEC USA	MEDA	
FRONT- 32nd, 64ths BACK- Decimal Equiv. Chart	2180000	-	
FRONT- mm, 64ths BACK- Metric Equiv. Chart	2180005	-	
FRONT - mm, 32nds, BACK - Conversion Table	-	2180500	

Lgth	Grad.	Order No.	Price	Lgth	Grad.	Order No.	Price
6	4R	2180006		6	4R	2185006	
6	5R	2180106		6	5R	2185106	
6	E/M	2180206		6	E/M	2185206	
12	4R	2180012		12	4R	2185012	
12	5R	2180112		12	5R	2185112	
12	E/M	2180212		12	E/M	2185212	
18	4R	2180018		18	4R	2185018	
18	5R	2180118		18	5R	2185118	
24	4R	2180024		24	4R	2185024	
24	5R	2180124		24	5R	2185124	
150mm	M	2180506		150mm	M	2185506	
300mm	M	2180512		300mm	M	2185512	

PRECISION RULES

SERIES 218:

Highly accurate, made of the finest quality steel, hardened and tempered, with satin-chrome finish.

Graduations:

3R - 32nds, 64ths, 10ths, 50ths

4R - 8ths, 16ths, 32nds, 64ths

5R - 32nds, 64ths, 10ths, 100ths

16R - 32nds, 64ths, 50ths, 100ths

E/M - 32nds, 64ths, mm, 0.05mm

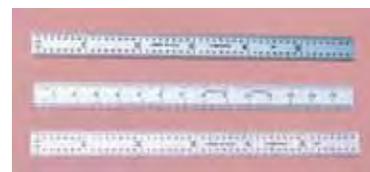
M - mm, 0.5mm, mm, 0.5mm

FLEXIBLE RULES

Length	Width	Thick-ness	Grad.	MEDA		PEC - USA	
				Order No.	Price	Order No.	Price
6	1/2	.015	3R			1510406	
6	1/2	.015	4R	2510006		1510006	
6	1/2	.015	5R	2510106		1510106	
6	1/2	.015	16R			1510306	
6	1/2	.015	E/M			1510206	
12	1/2	.015	3R			1510412	
12	1/2	.015	4R	2510012		1510012	
12	1/2	.015	5R	2510112		1510112	
12	1/2	.015	16R			1510312	
12	1/2	.015	E/M			1510212	
18	3/4	.020	3R			1510418	
18	3/4	.020	4R	2510018		1510018	
18	3/4	.020	5R	2510118		1510118	
18	3/4	.020	16R			1510318	
18	3/4	.020	E/M			1510218	
24	3/4	.020	3R			1510424	
24	3/4	.020	4R	2510024		1510024	
24	3/4	.020	5R	2510124		1510124	
24	3/4	.020	16R			1510324	
24	3/4	.020	E/M			1510224	
36	3/4	.020	4R			1510036	
36	3/4	.020	5R			1510136	
36	3/4	.020	16R			1510336	
36	3/4	.020	E/M			1510236	
48	3/4	.020	4R			1510048	
48	3/4	.020	5R			1510148	
48	3/4	.020	16R			1510348	
48	3/4	.020	E/M			1510248	
150mm	1/2	.015	M			1510506	
300mm	1/2	.015	M			1510512	
450mm	3/4	.020	M			1510518	
600mm	3/4	.020	M			1510524	
900mm	3/4	.020	M			1510536	
1000mm	3/4	.020	M			1510540	

RIGID RULES

Length	Width	Thick-ness	Grad.	MEDA		PEC - USA	
				Order No.	Price	Order No.	Price
6	3/4	.040	3R			1515406	
6	3/4	.040	4R	2515006		1515006	
6	3/4	.040	5R	2515106		1515106	
6	3/4	.040	16R			1515306	
6	3/4	.040	E/M			1515206	
12	1	.040	3R			1515412	
12	1	.040	4R	2515012		1515012	
12	1	.040	5R	2515112		1515112	
12	1	.040	16R			1515312	
12	1	.040	E/M			1515212	
18	1-1/8	.040	3R			1515418	
18	1-1/8	.040	4R	2515018		1515018	
18	1-1/8	.040	5R	2515118		1515118	
18	1-1/8	.040	16R			1515318	
18	1-1/8	.040	E/M			1515218	
24	1-1/8	.040	3R			1515424	
24	1-1/8	.040	4R	2515024		1515024	
24	1-1/8	.040	5R	2515124		1515124	
24	1-1/8	.040	16R			1515324	
24	1-1/8	.040	E/M			1515224	
36	1-1/4	.040	4R			1515036	
36	1-1/4	.040	5R			1515136	
36	1-1/4	.040	16R			1515336	
36	1-1/4	.040	E/M			1515236	
48	1-1/4	.040	4R			1515048	
48	1-1/4	.040	5R			1515148	
48	1-1/4	.040	16R			1515348	
48	1-1/4	.040	E/M			1515248	
150mm	3/4	.040	M			1515506	
300mm	1	.040	M			1515512	
450mm	1-1/8	.040	M			1515518	
600mm	1-1/8	.040	M			1515524	
1000mm	1-1/4	.040	M			1515540	



PRECISION TOOLS

STEEL RULES - ENGLISH GRADUATION

SERIES 789:

- All types - spring tempered, heavy spring tempered, semi-flexible and full flexible.
- Graduations for every purpose - English, metric and shrink - machine divided with distinctive graduations.
- Quick Reading rules furnished with new easier reading, staggered graduations.
- All No. C404R and C416R rules furnished with hole in end for hanging.

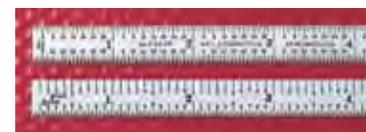
In Order No.

Prefix C - Satin Chrome Finish
 Suffix R - Quick Reading Grads.
 Suffix S - Semi-Flexible
 Suffix E - End Graduations
 Suffix N - Narrow Type

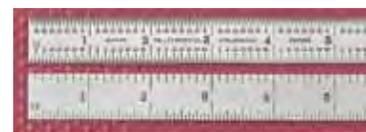
Starrett



Catalog No.	EDP No.	Grad.	Width (Approx.)	Thickness (Approx.)	Type	Price
6" Lengths						
*C303R-6	51334	3R	1/2"	1/64"	Full Flexible	
*C303SR-6	51335	3R	3/4"	1/50"	Semi-Flexible	
*C304SRE-6	51343	4R	3/4"	1/50"	Semi-Flexible	
*C604R-6	52678	4R	3/4"	3/64"	Spring Tempered	
*C604RE-6	52660	4R	3/4"	3/64"	Spring Tempered	
*C305R-6	51347	5R	1/2"	1/64"	Full Flexible	
*C610N-6	52696	10	3/16"	3/64"	Spring Tempered	
*C316R-6	51374	16R	1/2"	1/64"	Full Flexible	
*C616R-6	52701	16R	3/4"	3/64"	Spring Tempered	
12" Lengths						
C303SR-12	51336	3R	1"	1/40"	Semi-Flexible	
C304SRE-12	51344	4R	1"	1/40"	Semi-Flexible	
C604R-12	52679	4R	1"	3/64"	Spring Tempered	
C604RE-12	52661	4R	1"	3/64"	Spring Tempered	
*C305R-12	51348	5R	15/32"	1/64"	Full Flexible	
*C316R-12	51375	16R	15/32"	1/64"	Full Flexible	
C616R-12	52702	16R	1"	3/64"	Spring Tempered	
18" Lengths						
C604R-18	52680	4R	1-1/8"	3/64"	Spring Tempered	
*C305R-18	51349	5R	3/4"	1/50"	Full Flexible	
*C316R-18	51376	16R	3/4"	1/50"	Full Flexible	
24" Lengths						
C303SR-24	51338	3R	1"	1/40"	Semi-Flexible	
C304R-24	56645	4R	3/4"	1/50"	Full Flexible	
C404R-24	51484	4R	1-1/4"	1/10"	Heavy Spring Tempered	
C604R-24	52681	4R	1-1/4"	3/64"	Spring Tempered	
*C305R-24	51350	5R	3/4"	1/50"	Full Flexible	
*C316R-24	51377	16R	3/4"	1/50"	Full Flexible	
C416R-24	51509	16R	1-1/4"	1/10"	Heavy Spring Tempered	
36" Lengths						
C404R-36	51485	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C604R-36	52682	4R	1-1/4"	3/64"	Spring Tempered	
*C305R-36	51351	5R	3/4"	1/50"	Full Flexible	
*C316R-36	51378	16R	3/4"	1/50"	Full Flexible	
C416R-36	51510	16R	1-1/2"	1/10"	Heavy Spring Tempered	
48" Lengths						
C404R-48	51486	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C604R-48	52683	4R	1-1/4"	3/64"	Spring Tempered	
C416R-48	51511	16R	1-1/2"	1/10"	Heavy Spring Tempered	
72" Lengths						
C404R-72	51488	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C416R-72	51513	16R	1-1/2"	1/10"	Heavy Spring Tempered	
96" Lengths						
C404R-96	56191	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C416R-96	56197	16R	1-1/2"	1/10"	Heavy Spring Tempered	
120" Lengths						
C404R-120	56192	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C416R-120	56198	16R	1-1/2"	1/10"	Heavy Spring Tempered	
144" Lengths						
C404R-144	56193	4R	1-1/2"	1/10"	Heavy Spring Tempered	
C416R-144	56199	16R	1-1/2"	1/10"	Heavy Spring Tempered	



3R GRADUATION	
First Edge: 32nds	Front Side
Second Edge: 64ths	Reverse Side
Fourth Edge: 10ths	
Third Edge: 50ths	



4R GRADUATION	
First Edge: 64ths	Front Side
Second Edge: 32nds	Reverse Side
Fourth Edge: 8ths	
Third Edge: 16ths	



5R GRADUATION	
First Edge: 10ths	Front Side
Second Edge: 100ths	Reverse Side
Fourth Edge: 32nds	
Third Edge: 64ths	



10R GRADUATION	
First Edge: 64ths	Front Side
Second Edge: 32nds	Reverse Side
Third Edge: 16ths	



16R GRADUATION	
First Edge: 50ths	Front Side
Second Edge: 100ths	Reverse Side
Fourth Edge: 32nds	
Third Edge: 64ths	

END GRADUATION



* Indicates rules with single row of inch figures (all rules under 1" width).
 Rules without * have double row of inch figures.

(Continued)

PRECISION TOOLS

STEEL RULES - METRIC GRADUATION (Continued)

SERIES 789:



Catalog No.	EDP No.	Grad.	Width (Approx.)	Thickness (Approx.)	Type	Price
150mm Lengths						
C330-150	51329	30	12.7mm	0.4mm	Full Flexible	
C331-150*	51331	31	12.7mm	0.4mm	Full Flexible	
C334-150*	56262	34	12.7mm	0.4mm	Full Flexible	
635N-150	70164	35	4.8mm	1.2mm	Spring Tempered	
C635-150	52630	35	19.1mm	1.2mm	Spring Tempered	
C635E-150	55968	35E**	19.1mm	1.2mm	Spring Tempered	
C636ME-150*	52634	36	19.1mm	1.2mm	Spring Tempered	
300mm Lengths						
C331-300*	51332	31	12.7mm	0.4mm	Full Flexible	
C334-300*	56696	34	12.7mm	0.4mm	Full Flexible	
C335S-300	56048	35	25.4mm	0.5mm	Semi-Flexible	
C635-300	52631	35	25.4mm	1.2mm	Spring Tempered	
500mm Lengths						
C334-500*	56697	34	19.1mm	0.5mm	Full Flexible	
C635-500	52632	35	28.6mm	1.2mm	Spring Tempered	
1000mm (1 meter) Lengths						
C334-1000*	56698	34	19.1mm	0.5mm	Full Flexible	
C635-1000	52633	35	31.8mm	1.2mm	Spring Tempered	



No. 36 GRADUATION	
First Edge: 32nds	Front Side
Second Edge: 1/2mm	
Fourth Edge: mm	Reverse Side
Third Edge: 64ths	



No. 35 GRADUATION	
First Edge: mm	Front Side
Second Edge: 1/2mm	
Fourth Edge: mm	Reverse Side
Third Edge: 1/2mm	

Reads both left-to-right and right-to-left – an exclusive Starrett feature!

*English graduated edges are 5-3/4" long on 150mm rules; 11-3/4" long on 300mm rules; 19-1/2" long on 500mm rules; and 39-1/4" long on 1000mm rules.

** mm Ends Graduations on Front Side



No. 30 GRADUATION	
Second Edge: 1/2mm	Front Side
Fourth Edge: 1/2mm	Reverse Side
Third Edge: mm	



No. 31 GRADUATION	
First Edge: 32nds	Front Side
Second Edge: 64ths	
Fourth Edge: 1/2mm	Reverse Side
Third Edge: mm	



No. 34 GRADUATION	
First Edge: 10ths	Front Side
Second Edge: 50ths	
Fourth Edge: mm	Reverse Side
Third Edge: 1/2mm	

STEEL HOOK RULE WITH REVERSIBLE HOOK

STARRETT SERIES 604:



ADJUSTABLE STEEL HOOK RULES

STARRETT SERIES 604:



Convenient hook rule permits accurate measurements even when the user cannot see if the rule is even with the measuring edge. Especially useful for measuring from round corners, through hubs, for setting inside calipers, etc. The single hook is hardened and may be reversed or removed entirely. Rule made of high quality steel, satin chrome finish, machine-divided graduations.

This improved Hook Rule features an adjustable double hook that can be shortened or extended on either side in relation to any one of four graduation on the rule. Makes possible accurate measurements from shallow or deep shoulders and also permits setting calipers to any of the graduations. Hooks are hardened and may be adjusted or removed entirely by a slight turn of the eccentric stud. Satin Chrome finish, 4R Graduation.

SPECIFICATIONS

Width Length	Thickness (Approx.)	(Approx.)	Catalog No.	EDP No.	Price
6"	3/4"	3/64"	CH604R-6	52673	
12"	1"	3/64"	CH604R-12	52674	
18"	1-1/8"	3/64"	CH604R-18	52675	
24"	1-1/4"	3/64"	CH604R-24	52676	

Catalog No.	EDP No.	Length	Width (Approx.)	Thickness (Approx.)	Price
CD604R-6	52665	6"	3/4"	3/64"	
CD604R-12	52666	12"	1"	3/64"	

SELECTION GUIDE

STEEL RULES

MIT SERIES 182:



WIDE RIGID RULES (Thickness : 3/64")

Type	Order No.	Price	Size	Graduations				Width
INCH	182101		6 (4R)	1/8	1/16	1/32	1/64th	3/4
	182102		6 (16R)	1/32	1/64	1/50	1/100th	3/4
	182103		6 (5R)	1/32	1/64	1/10	1/100th	3/4
	182104		6 (3R)	1/32	1/64	1/10	1/50th	3/4
INCH / METRIC	182105		6 x 150mm	1/32	1/64	1mm	1/2mm	3/4
	182106		6 x 150mm	1/50	1/100	1mm	1/2mm	3/4
	182107		6 x 150mm	1/10	1/100	1mm	1/2mm	3/4
	182108		6 x 150mm	1/10	1/50	1mm	1/2mm	3/4
METRIC only	182111		150mm	1mm	1/2mm	1mm	1/2mm	19mm
INCH	182121		12 (4R)	1/8	1/16	1/32	1/64th	1
	182122		12 (16R)	1/32	1/64	1/50	1/100th	1
	182123		12 (5R)	1/32	1/64	1/10	1/100th	1
	182124		12 (3R)	1/32	1/64	1/10	1/50th	1
INCH / METRIC	182125		12 x 300mm	1/32	1/64	1mm	1/2mm	1
	182126		12 x 300mm	1/50	1/100	1mm	1/2mm	1
METRIC only	182131		300mm	1mm	1/2mm	1mm	1/2mm	25mm
INCH	182241		18 (4R)	1/8	1/16	1/32	1/64th	1-3/16
	182142		18 (16R)	1/32	1/64	1/50	1/100th	1-3/16
	182143		18 (5R)	1/32	1/64	1/10	1/100th	1-3/16
	182144		18 (3R)	1/32	1/64	1/10	1/50th	1-3/16
INCH / METRIC	182145		18 x 450mm	1/32	1/64	1mm	1/2mm	1-3/16
METRIC only	182151		450mm	1mm	1/2mm	1mm	1/2mm	30mm
INCH	182161		24 (4R)	1/8	1/16	1/32	1/64	1-3/16
	182162		24 (16R)	1/32	1/64	1/50	1/100th	1-3/16
	182163		24 (5R)	1/32	1/64	1/10	1/100th	1-3/16
INCH / METRIC	182165		24 x 600mm	1/32	1/64	1mm	1/2mm	1-3/16
METRIC only	182171		600mm	1mm	1/2mm	1mm	1/2mm	30mm

FULL - FLEXIBLE RULES (Thickness : 1/64")

INCH	182201		6 (4R)	1/8	1/16	1/32	1/64th	1/2
	182202		6 (16R)	1/32	1/64	1/50	1/100th	1/2
	182203		6 (5R)	1/32	1/64	1/10	1/100th	1/2
	182204		6 (3R)	1/32	1/64	1/10	1/50th	1/2
INCH / METRIC	182205		6 x 150mm	1/32	1/64	1mm	1/2mm	1/2
	182206		6 x 150mm	1/50	1/100	1mm	1/2mm	1/2
	182207		6 x 150mm	1/10	1/100	1mm	1/2mm	1/2
	182208		6 x 150mm	1/10	1/50	1mm	1/2mm	1/2
METRIC only	182211		150mm	1mm	1/2mm	1mm	1/2mm	12mm
INCH	182221		12 (4R)	1/8	1/16	1/32	1/64th	1/2
	182222		12 (16R)	1/32	1/64	1/50	1/100th	1/2
	182223		12 (5R)	1/32	1/64	1/10	1/100th	1/2
	182224		12 (3R)	1/32	1/64	1/10	1/50th	1/2
INCH / METRIC	182225		12 x 300mm	1/32	1/64	1mm	1/2mm	1/2
	182226		12 x 300mm	1/50	1/100	1mm	1/2mm	1/2
METRIC only	182231		300mm	1mm	1/2mm	1mm	1/2mm	12mm
INCH	182141		18 (4R)	1/8	1/16	1/32	1/64th	1/2
	182242		18 (16R)	1/32	1/64	1/50	1/100th	3/4
	182243		18 (5R)	1/32	1/64	1/10	1/100th	3/4
	182244		18 (3R)	1/32	1/64	1/10	1/50th	3/4
INCH / METRIC	182245		18 x 450mm	1/32	1/64	1mm	1/2mm	3/4
METRIC only	182251		450mm	1mm	1/2mm	1mm	1/2mm	18mm
INCH	182261		24 (4R)	1/8	1/16	1/32	1/64th	3/4
	182262		24 (16R)	1/32	1/64	1/50	1/100th	3/4
	182263		24 (5R)	1/32	1/64	1/10	1/100th	3/4
	182264		24 (3R)	1/32	1/64	1/10	1/50th	3/4
INCH / METRIC	182265		24 x 600mm	1/32	1/64	1mm	1/2mm	3/4
METRIC only	182271		600mm	1mm	1/2mm	1mm	1/2mm	18mm

(Continued)

SELECTION GUIDE

STEEL RULES (Continued)

MIT SERIES 182:



SEMI - FLEXIBLE RULES Satin chrome finish and engraved on front side only

Thickness: 1/64"

Size	Order No.	Price	Graduations					Width
4 x 100mm	182301		1/2mm	1mm	32nds	64ths	16ths	5/8"
6 x 150mm	182302		1/2mm	1mm	32nds	64ths	16ths	5/8"
12 x 300mm	182305		1/2mm	1mm	32nds	64ths	16ths	5/8"
20 x 500mm	182307		1/2mm	1mm	32nds	64ths	16ths	5/8"
40 x 1000mm	182309		1/2mm	1mm	32nds	64ths	16ths	5/8"

POCKET STEEL RULE - With Pocket Clip (Inch / Metric equivalents on back side).

Size	Order No.	Price	Graduations		Width
6 x 150mm	950300		1mm	64ths	1/2"



PRECISION TOOLS

1/4, 3/8, 1/2, 3/4, 1" TEMPERED STEEL RULES WITH HOLDER

STARRETT SERIES 423:



The set of five small rules together with a new improved holder is extremely useful for measurements in confined or hard-to-reach locations. They are especially suitable for measuring grooves, short shoulders, recesses, keyways, etc.

The rules are easily inserted in the slotted end of the holder and are rigidly clamped in place by a slight turn of the knurled nut at the end of the handle. Two slots are provided permitting the rules to be held in the holder at 30 or 45 degrees, either square in a slot or tipped to one side. No. 10 Graduation. Furnished in attractive protective case.

Catalog No.	EDP No.	Description	Price
S423Z	51524	Set of 5 rules with holder	

6" FULL FLEXIBLE STEEL RULE WITH POCKET CLIP

STARRETT SERIES 310:



Rule is made of tempered full flexible steel and has accurate machine-divided graduations in 32nds on one edge and 64ths on the opposite edge.

Catalog No.	EDP No.	Grad.	Approx. Width	Approx. Thickness	Price
C310K-6	56701	No. 10	1/2"	1/64"	



6" RULE CASE WITH CLIP

STARRETT SERIES 1612, 1634:



A leather-like case with pocket clip for 6 inch rules. Rounded metal-bound edges prevent pocket from becoming worn and torn by rule corners.

Catalog No.	EDP No.	Description	Price
1612	55433	Case with Clip, for 1/2" wide 6" Rules	
1634	55434	Case with Clip, for 3/4" wide 6" Rules	



STEEL RULE HOLDER

STARRETT SERIES 789:

Designed for pattern makers, toolmakers, and machinists for holding rule upright on surface plate in transferring measurements with surface gages. Also useful as depth gage. Knurled clamp nut locks rule on holder. Base 3-1/8" long by 2-1/2" wide.



Catalog No.	EDP No.	Description	Price
62	50304	Holds Steel Rules 3/4" to 1-9/16" wide	

PRECISION SQUARES
SERIES 229:



Accurately made of fine grade tool steel. Ground and polished blade and beam. Hardened and tempered blade. Suitable for precise layout and measuring. Length of blade is measured from inner edge of beam to end of blade.



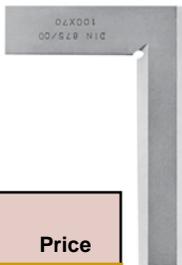
In/mm Size & Lgth. of Blade	In/mm Lgth. of Beam	Squareness of Blade	Order No.	Price
2"/50mm	2/50	.001"/25 microns	1580002	
3"/75mm	2-1/2/63	.001"/25 microns	1580003	
4"/100mm	3/75	.001"/25 microns	1580004	
6"/150mm	4/100	.001"/25 microns	1580006	
9"/225mm	6/150	.001"/25 microns	1580009	
12"/300mm	8/200	.002"/50 microns	1580012	
18"/450mm	10/250	.0038"/90 microns	1580018	
24"/600mm	13/33	.0038"/90 microns	1580024	

Set includes:
2", 3", 4" & 6"
in a wooden case.

Order No. 2290000	Price	
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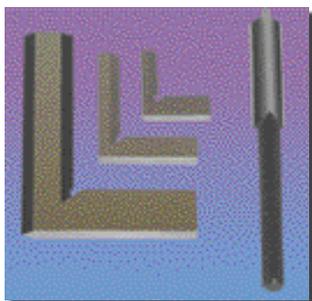
BEVEL EDGE SQUARES
SERIES 230:

Made from a single piece of high grade tool steel. Entire square is hardened, accurately ground, and lapped for straightness and parallelism. Blades are beveled on both edges of each side.



Size & Lgth. of Blade	Lgth. of Beam	Order No.	Price
1-3/8	1	1585001	
2-3/8	1-3/8	1585002	
3-1/8	2	1585003	
4	2-1/2	1585004	
5	3	1585005	
6-3/4	4	1585006	
8-1/2	5-1/8	1585008	
10-1/2	6-3/8	1585010	

DIE MAKERS' SQUARE SET
SERIES 231:



Especially made for precise miniature layout. Set consists of three hardened bevel edged squares 3/4", 1-1/4", and 2-3/8" long, plus a 1-1/2" triangular straight edge with a removable handle. Includes fitted case.

Order No. 1590000	Price	
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STEEL SQUARES
MIT SERIES 916:



All edges are hardened and precision ground.

Beveled Edge Squares

Size	Order No.	Outside Dimensions	Square- ness	Price
2	916100	2 x 1.6	.00010	
3	916101	3 x 2	.00011	
4	916102	4 x 2-3/4	.00012	
6	916103	6 x 4	.00014	
8	916104	8 x 5	.00018	

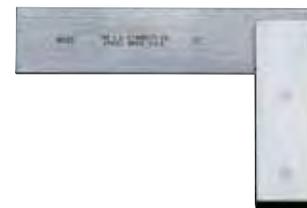
Regular Squares

Size	Order No.	Outside Dimensions	Square- ness	Price
3	916401	3 x 2	.00026	
4	916402	4 x 2-2/3	.00028	
6	916403	6 x 4	.00032	
8	916404	8 x 5	.00036	
10	916405	10 x 6-1/2	.00040	
12	916406	12 x 8	.00044	
16	916407	16 x 10	.00052	
20	916408	20 x 12	.00059	
30	916409	30 x 16	.00080	
40	916410	40 x 20	.00116	

**MASTER
PRECISION SQUARES**
STARRETT SERIES 20:



Recommended for use where extreme accuracy is required. Beams and blades are of high quality tool steel hardened, ground and lapped to insure parallelism and straightness. Beam is grooved at inner corner for clearance of burr or dirt. Squareness accuracy to .0001"/0.0025mm every 6" (150mm).



Length of Blade*	Length of Beam	Catalog No.	EDP No.	Price
1-1/2" / 40mm	1-1/2" / 40mm	20-1-1/2	50128	
3" / 75mm	2-3/8" / 60mm	20-3	50130	
4-1/2" / 115mm	3-1/2" / 90mm	20-4-1/2	50132	
6" / 150mm	4-5/16" / 110mm	20-6	50134	
12" / 300mm	7" / 180mm	20-12	50136	
24" / 600mm	12-5/16" / 310mm	20-24	50140	
36" / 910mm	20" / 500mm	20-36	50142	

*Measured from the inner edge of the beam to the end of the blade. Sent without case unless otherwise ordered. Cases available for squares through 12" (300mm) by ordering No. 20ZZ and size.

PRECISION TOOLS

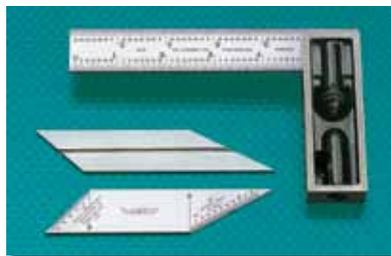
CYLINDER SQUARES SERIES 236:



DOUBLE SQUARES STARRETT SERIES 13:



These squares are hardened, and the ends are lapped to 90° angular accuracy with the cylinders as follows: 6" square to ± .00010", 12" square to ± .00015". Includes fitted case.



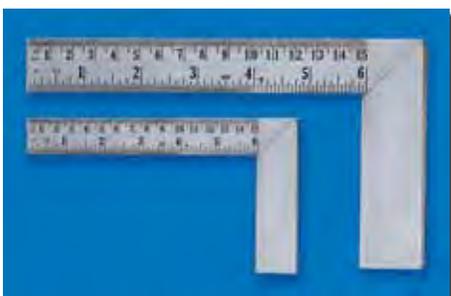
Height	Diameter	Order No.	Price
6	3	1620003	
12	4	1620004	

Double squares are popular with machinists, tool and pattern makers. Hardened, sliding blades are adjustable for a wide variety of uses. Faces of head are ground square. 6"/150mm size is equipped with a level, head is approximately 3-1/2" (90mm) long, and the faces approximately 9/16" (14mm) wide.

GRADUATED STEEL SQUARES SERIES 229:



- Made of tool steel.
- Square accurate both inside and outside
- Etched fine graduations in inches and millimeters



Blades are graduated in 8ths, 16ths, 32nds, 64ths (1mm both Edges one Side; and 1mm and 1/2mm Reverse Side). Bevel blade has octagon angle at one end and hexagon angle at other end clearly marked. Drill grinding blade is beveled to 59° and 41° and both ends have quick reading machine-divided graduations in 64ths, and graduation is located to measure perpendicularly to axis of the drill. By reading graduations, center point can be easily and accurately located.

Order No.	Length of blade		Price
	Inch	mm	
2294100	4	100	
2296150	6	150	
2296200	8	200	
2299225	9	225	
2291230	12	300	

Size	Description	Catalog No.	EDP No.	Price
4"	With graduated blade only	13A	50109	
4	With graduated and bevel blades	13B	50110	
6	With graduated blade only	13C	50111	
6	With graduated and bevel blades	13E	50112	
6	Complete with graduated, bevel, and drill grinding blades	13F	50113	
100mm	With Graduated Blade only	13MA	56278	
100mm	With Graduated and Bevel Blades	13MB	56279	
150mm	With Graduated blade only	13MC	56280	
150mm	With Graduated and Bevel Blades	13ME	56263	

MASTER PRECISION SQUARES WITH BEVELED EDGES STARRETT SERIES 55:



CENTER SQUARE SERIES 229:



- Made from ground tool steel.
- Hardened and tempered blade.
- Useful square for rapid location of round bar or disc center.
- To execute, place the round bar between the centre square. Scribe different lines on the work piece each time changing its position. Center of the scribed lines will give the accurate center of the work piece.



Similar to Starrett hardened squares except that blades are beveled on both edges of each side, providing practically a line contact with work. Beam and blade are hardened, ground and lapped to insure parallelism and straightness. The beam is grooved at inner corner for clearance of burr and dirt.



Max. Work Diameter		Order No.	Price
Inch	mm		
1-1/2	38	2290112	
3	75	2290375	

Length of Blade*	Length of Beam	Catalog No.	EDP No.	Price
1-1/2" / 40mm	1-1/2" / 40mm	55-1-1/2	50277	
3" / 75mm	2-3/8" / 60mm	55-3	50279	
4-1/2" / 115mm	3-1/2" / 90mm	55-4-1/2	50281	
6" / 150mm	4-5/16" / 110mm	55-6	50283	

*Measured from the inner edge of the beam to the end of the blade. Sent without case unless otherwise ordered. Cases available for squares through 12" (300mm) by ordering No. 55ZZ and size.

DIE MAKERS' SQUARES

STARRETT SERIES 453:



Starrett



Larger knurled thumb screw locks sliding blades at any position, and smaller one tilts blades at an angle. To set blades, release blade clamp screw, and tilt blade to desired angle by turning small knurled screw. Blade held in position by tightening clamping screw. Head and blades hardened and ground. Offset blade, used where it would be impossible to sight straight blade, protrudes from square about 1-1/2" (38mm) and is 1/8" (3mm) wide. Both sides of each edge are beveled to give line contact.

The inch reading blade is graduated on one side, upper edge in 32nds, lower edge in 64ths and the millimeter reading blade is graduated in millimeter and 1/2 millimeter. The bevel blade is approx. 2-1/2" (63mm) long x 1/2" (12.5mm) wide and is beveled to 30° on one end and 45° on the other.

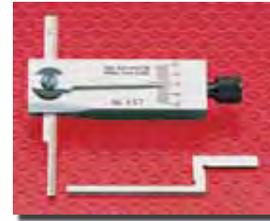
The narrow graduated blade has 32nds graduation on one side, and 64ths on the other. It is 5/32" (4mm) wide over a length of approx. 1-5/8" (41mm) and cut away at one end to a width of 3/32" (2.4mm).

Description	Catalog No.	EDP No.	Price
Inch Reading - Graduation 32nds, 64ths			
With standard graduated blade	453A	52345	
Complete with standard, bevel narrow, and offset blades in case	453EZ	52351	
Millimeter Reading - Graduation mm and 1/2 mm			
With standard graduated blade	453MA	52346	

DIE MAKERS' SQUARES

WITH ANGULAR ADJUSTMENT

STARRETT SERIES 457:



Starrett



This is a highly useful tool for tool and diemakers, especially for measuring die clearances. It is also very handy for pattern makers to check angles and drafts on patterns.

The beam of this square is graduated to show the setting in degrees of the blades. Blades can be set for any angle up to 10°, either side of 0° and the angle is indicated by the line on the pointer.

The graduated blade has 32nds of an inch on one side, and 64ths on the other. It is 5/32" (4mm) wide over a length of approximately 1-5/8" (41mm) and cut away at one end to a width of 3/32" (2.4mm).

The offset blade, which is used where it would be impossible to insert the straight blade, protrudes from the square about 1-1/2" (38mm). It is 1/8" (3mm) wide and both sides of each edge are beveled to give visual line contact.

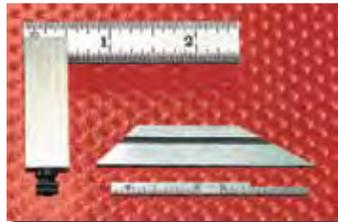
The beam is beveled adjacent to the blade so that the blade is readily visible when checking in holes, slots, etc. Blades and beams are hardened and ground.

Angular Range 10°-0°-10°

Description	Catalog No.	EDP No.	Price
With Straight Blade Only	457A	52428	
Complete, With Straight and Offset Blades	457C	52429	

DOUBLE STEEL SQUARES WITH HARDENED AND GROUND HEAD AND BLADES

STARRETT SERIES 14:



Starrett



These fine precision double steel squares are designed for tool and diemakers. Blades are adjustable for use in places not possible with stationary blade squares. A knurled clamping nut accurately locks the blades in any position.

The inch reading blade is graduated on one side, upper edge in 32nds and lower edge in 64ths and the millimeter reading blade is graduated in mm and 1/2 mm.

The bevel blade for checking angles is beveled 45° on one end and 30° on the other end.

The narrow graduated blade is 2-1/4" (58mm) long with 32nds graduation on one side, and 64ths on the other. It is 5/32" (4mm) wide over a length of approximately 1-5/8" (41mm) and cut away at one end to a width of 3/32" (2.4mm). Millimeter blades are mm on one side and 1/2 mm on the other.

Size	Grad.	Description	Catalog No.	EDP No.	Price
Inch Reading - 32nds, 64ths					
2-1/2"	32nds, 64ths	With graduated blade only	14A	50117	
		Complete with graduated narrow, and bevel blades	14D	50118	
Millimeter Reading - mm both edges One Side; 1/2 mm Reverse Side					
50mm	mm, 1/2mm	With graduated blade only	14MA	56260	
		Complete with graduated narrow, and bevel blades	14MD	9956261	

DOUBLE SQUARE SERIES 234:

Ideal for precision layout work. Blades are hardened and tempered with a satin-chrome finish.



Size of Blade	Grad.	Order No.	Price
4	4R	1610004	
4	16R	1610014	
4	E/M	1610024	
6	4R	1610006	
6	16R	1610016	
6	E/M	1610026	

COMBINATION SQUARE SET - 4 PIECE SERIES 233:



Hardened and Ground. Set includes 12" stainless steel chrome plated blade with 4R inch (8ths, 16ths, 32nds, 64ths) graduations, double indexed and reversible Protractor Head with full 180° graduation and spirit level, Square Head with level and scribe, and Center Head.

Order No.	Price
1600112	

PRECISION TOOLS



COMBINATION SQUARES

SERIES 233:



- Blades are fully hardened and tempered.
- Reversible protractor heads for hardened squares.
- Double-indexed protractor is graduated 180° in both directions.
- Finished in baked enamel.
- Square Head has level and scribe point.
- Micro-fine blade graduation.
- Easy to read satin chrome finished blades.
- Sets with cast heads or with hardened heads.

Blade Graduations:

- 4R** - 8ths, 16ths, 32nds, 64ths,
- 16R** - 32nds, 64ths, 50ths, 100ths
- E/M** - 32nds, 0.5mm, 64ths, mm
- M** - mm, 0.5mm, mm, 0.5mm

4 PIECE COMBINATION SQUARE SETS



STANDARD SETS include cast Square Head, cast Center Head, non-reversible Protractor Head, and hardened chrome plated Blade.

HARDENED SETS include hardened Square Head, hardened Center Head, reversible Protractor Head and hardened chrome plated Blade.

STANDARD SETS

HARDENED SETS

Size of Blade	Grad.	Order No.	Price	Size of Blade	Grad.	Order No.	Price
12"	4R	2331200		12"	4R	2331250	
12	16R	2331201		12	16R	2331251	
12	E/M	2331202		12	E/M	2331252	
18	4R	2331800		18	4R	2331850	
18	16R	2331801		18	16R	2331851	
18	E/M	2331802		18	E/M	2331852	
24	4R	2332400		24	4R	2332450	
24	16R	2332401		24	16R	2332451	
24	E/M	2332402		24	E/M	2332452	
300mm	M	2331203		300mm	M	2331253	
450mm	M	2331803		450mm	M	2331853	
600mm	M	2331603		600mm	M	2331653	

3 PIECE COMBINATION SQUARE SETS

Similar to 4 piece COMBINATION SQUARE SETS but without Protractor Head. Sets consist of Square Head, Center Head, and Hardened Chrome Plated Blade.



STANDARD SETS

HARDENED SETS

Size of Blade	Grad.	Order No.	Price	Size of Blade	Grad.	Order No.	Price
6"	4R	2330600		6"	4R	2330650	
6	16R	2330601		6	16R	2330651	
6	E/M	2330602		6	E/M	2330652	
12	4R	331200		12	4R	9331250	
12	16R	331201		12	16R	331251	
12	E/M	331203		12	E/M	331253	
18	4R	331800		18	4R	331850	
18	16R	331801		18	16R	331851	
18	E/M	331803		18	E/M	331853	
24	4R	332400		24	4R	332450	
24	16R	332401		24	16R	332451	
24	E/M	332403		24	E/M	332453	
150mm	M	2330603		150mm	M	2330653	
300mm	M	331204		300mm	M	331254	
450mm	M	331804		450mm	M	331854	
600mm	M	332404		600mm	M	332454	

For 2 piece sets consisting of blade and square head see next page and order each piece separately.

COMBINATION SQUARE COMPONENTS
SERIES 233:



Individual components for assembling 2 piece, 3 piece, and 4 piece SQUARE SETS.



SQUARE BLADES

Size	Grad.	Order No.	Price	Size	Grad.	Order No.	Price
4	4R	1605004		18	4R	1605018	
4	16R	1605904		18	5R	1605518	
4	E/M	1606004		18	16R	1605918	
6	4R	1605006		18	E/M	1606018	
6	16R	1605906		24	4R	1605024	
6	E/M	1606006		24	16R	1605924	
12	4R	1605012		24	E/M	1606024	
12	5R	1605512		100mm	M	9605100	
12	16R	1605912		150mm	M	1605150	
12	E/M	1606012		300mm	M	9605300	
				450mm	M	1605450	
				600mm	M	9605600	

PROTRACTOR HEADS

Fits Blade Sizes: 12", 18", 24" / 300mm, 450mm, 600mm

Description	Order No.	Price
Non-Reversing	1605000	
Reversing	1605050	



SQUARE HEADS

Desc.	Fits Blade Sizes	Order No.	Price
Cast Iron	4 & 6", 150mm	1605100	
Cast Iron	12, 18, 24", 300, 450, 600mm	1605200	
Hardened	4 & 6", 150mm	1605500	
Hardened	12, 18, 24", 300, 450, 600mm	1605600	



CENTER HEADS

Desc.	Fits Blade Sizes	Order No.	Price
Cast Iron	4 & 6", 150mm	1605300	
Cast Iron	12, 18, 24", 300, 450, 600mm	1605400	
Hardened	4 & 6", 150mm	1605700	
Hardened	12, 18, 24", 300, 450, 600mm	1605800	



COMBINATION SQUARE WITH SQUARE HEAD

STARRETT SERIES 11H: Cast Iron with Black Wrinkle Finish
STARRETT SERIES 33H: Hardened Steel Head with Smooth, Black Enamel Finish



"C" prefix in Catalog No. indicates Satin Chrome finish

Size	Graduation	SERIES 11H: Cast Iron Heads with Black Wrinkle Finish			SERIES 33H: Forged and Hardened Steel Heads with Smooth Black Enamel Finish		
		Catalog No.	EDP No.	Price	Catalog No.	EDP No.	Price
4"	8ths, 16ths, 32nds, 64ths	11H-4-4R	50049		33H-4-4R	50203	
4"	8ths, 16ths, 32nds, 64ths	C11H-4-4R	56360		C33H-4-4R	56390	
6"	8ths, 16ths, 32nds, 64ths	11H-6-4R	50051		33H-6-4R	50205	
6"	8ths, 16ths, 32nds, 64ths	C11H-6-4R	56362		C33H-6-4R	56392	
6"	32nds, 64ths, 50ths, 100ths	11H-6-16R	50053		33H-6-16R	50207	
6"	32nds, 64ths, 50ths, 100ths	C11H-6-16R	56364		C33H-6-16R	56394	
12"	8ths, 16ths, 32nds, 64ths	11H-12-4R	50055		33H-12-4R	50209	
12"	8ths, 16ths, 32nds, 64ths	C11H-12-4R	56366		C33H-12-4R	56396	
12"	32nds, 64ths, 50ths, 100ths	11H-12-16R	50057		33H-12-16R	50211	
12"	32nds, 64ths, 50ths, 100ths	C11H-12-16R	56368		C33H-12-16R	56398	
18"	8ths, 16ths, 32nds, 64ths	11H-18-4R	50059		33H-18-4R	50213	
18"	8ths, 16ths, 32nds, 64ths	C11H-18-4R	56370		C33H-18-4R	56400	
18"	32nds, 64ths, 50ths, 100ths	11H-18-16R	50061		33H-18-16R	50215	
18"	32nds, 64ths, 50ths, 100ths	C11H-18-16R	56372		C33H-18-16R	56402	
24"	8ths, 16ths, 32nds, 64ths	11H-24-4R	50063		33H-24-4R	50217	
24"	8ths, 16ths, 32nds, 64ths	C11H-24-4R	56374		C33H-24-4R	56404	
24"	32nds, 64ths, 50ths, 100ths	11H-24-16R	50065		33H-24-16R	50219	
24"	32nds, 64ths, 50ths, 100ths	C11H-24-16R	56376		C33H-24-16R	56406	
Metric Only		11MH Series			33MH Series		
150mm	mm and 1/2mm Both Sides	11MH-150	56241		33MH-150	56247	
150mm	mm and 1/2mm Both Sides	C11MH-150	56380		C33MH-150	56410	
300mm	mm and 1/2mm Both Sides	11MH-300	56243		33MH-300	56249	
300mm	mm and 1/2mm Both Sides	C11MH-300	56382		C33MH-300	56412	
600mm	mm and 1/2mm Both Sides	11MH-600	56245		33MH-600	9956251	
600mm	mm and 1/2mm Both Sides	C11MH-600	56384		C33MEH-600	56414	
Inch / Metric		11MEH Series			33MEH Series		
300mm	1/2mm, 32nds One Side;	11MEH-300	50067		33MEH-300	50221	
11-3/4"	mm & 64ths Reversed	C11MEH-300	56386		C33MEH-300	56416	
600mm	1/2mm, 32nds One Side;	11MEH-600	56121		33MEH-600	50237	
23-1/2"	mm & 64ths Reversed	C11MEH-600	56388		C33MEH-600	56418	

- With reversible lock bolt, scriber, spirit level (except 4").
- Machine-divided blade has very sharp, accurate graduations and is easy to read.
- Square head slides smoothly and may be removed to level work.
- Bearing surfaces are accurately ground.

PRECISION TOOLS



COMBINATION SQUARE WITH SQUARE HEAD AND CENTER HEAD

STARRETT SERIES 11HC: Cast Iron with Black Wrinkle Finish
 STARRETT SERIES 33HC: Hardened Steel Head with Smooth, Black Enamel Finish



- With reversible lock bolt, scribe, spirit level and hardened, tempered steel blades.
- Machine-divided blade has very sharp, accurate graduations and is easy to read.
- Square head slides smoothly and may be removed to level work.
- Bearing surfaces are accurately ground.

INCH

"C" prefix in Catalog No. indicates Satin Chrome Finish

Size	Graduation	SERIES 11HC: Cast Iron Heads with Black Wrinkle Finish			SERIES 33HC: Forged and Hardened Steel Heads with Smooth Black Enamel Finish		
		Catalog No.	EDP No.	Price	Catalog No.	EDP No.	Price
4"	8ths, 16ths, 32nds, 64ths	11HC-4-4R	9950050		33HC-4-4R	50204	
4"	8ths, 16ths, 32nds, 64ths	C11HC-4-4R	56361		C33HC-4-4R	56391	
6"	8ths, 16ths, 32nds, 64ths	11HC-6-4R	50052		33HC-6-4R	50206	
6"	8ths, 16ths, 32nds, 64ths	C11HC-6-4R	56363		C33HC-6-4R	56393	
6"	32nds, 64ths, 50ths, 100ths	11HC-6-16R	50054		33HC-6-16R	50208	
6"	32nds, 64ths, 50ths, 100ths	C11HC-6-16R	56365		C33HC-6-16R	56395	
12"	8ths, 16ths, 32nds, 64ths	11HC-12-4R	50056		33HC-12-4R	50210	
12"	8ths, 16ths, 32nds, 64ths	C11HC-12-4R	56367		C33HC-12-4R	56397	
12"	32nds, 64ths, 50ths, 100ths	11HC-12-16R	50058		33HC-12-16R	50212	
12"	32nds, 64ths, 50ths, 100ths	C11HC-12-16R	56369		C33HC-12-16R	56399	
18"	8ths, 16ths, 32nds, 64ths	11HC-18-4R	50060		33HC-18-4R	50214	
18"	8ths, 16ths, 32nds, 64ths	C11HC-18-4R	56371		C33HC-18-4R	56401	
18"	32nds, 64ths, 50ths, 100ths	11HC-18-16R	50062		33HC-18-16R	50216	
18"	32nds, 64ths, 50ths, 100ths	C11HC-18-16R	56373		C33HC-18-16R	56403	
24"	8ths, 16ths, 32nds, 64ths	11HC-24-4R	50064		33HC-24-4R	50218	
24"	8ths, 16ths, 32nds, 64ths	C11HC-24-4R	56375		C33HC-24-4R	56405	
24"	32nds, 64ths, 50ths, 100ths	11HC-24-16R	50066		33HC-24-16R	50220	
24"	32nds, 64ths, 50ths, 100ths	C11HC-24-16R	56377		C33HC-24-16R	56407	
Metric		11MHC Series			33MHC Series		
150mm	mm and 1/2mm Both Sides	11MHC-150	56242		33MHC-150	56248	
150mm	mm and 1/2mm Both Sides	C11MHC-150	56381		C33MHC-150	56411	
300mm	mm and 1/2mm Both Sides	11MHC-300	56244		33MHC-300	9956250	
300mm	mm and 1/2mm Both Sides	C11MHC-300	56383		C33MHC-300	56413	
600mm	mm and 1/2mm Both Sides	11MHC-600	56246		33MHC-600	9956252	
600mm	mm and 1/2mm Both Sides	C11MHC-600	56385		C33MHC-600	56415	
Inch / Metric		11MEHC Series			33MEHC Series		
300mm	1/2mm, 32nds One Side;	11MEHC-300	50068		33MEHC-300	50222	
11 3/4"	mm & 64ths Reverse Side	C11MEHC-300	56387		C33MEHC-300	56417	
600mm	1/2mm, 32nds One Side;	11MEHC-600	50075		33MEHC-600	50238	
23 1/2"	mm & 64ths Reverse Side	C11MEHC-600	56389		C33MEHC-600	56419	

COMBINATION SQUARE SETS - 4pc WITH SQUARE HEAD, CENTER HEAD AND NON - REVERSIBLE PROTRACTOR HEAD

STARRETT SERIES 9:



With reversible lock bolts, scribe, spirit level in both square head and protractor head. Direct reading double 180° protractor scale, and hardened steel machine-divided blade. Cast Iron Heads with black wrinkle finish.



"C" prefix in Catalog No. indicates Satin Chrome Finish

Size	Blade	Graduation	Catalog No .	EDP No.	Price
12"	Regular	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	9-12-4R	50042	
	Satin Chrome		C9-12-4R	50046	
	Regular	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	9-12-16R	50043	
18"	Regular	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	9-18-4R	50044	
24"	Regular	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	9-24-4R	50045	
300mm	Regular	mm and 1/2 mm both sides	9M-300	56253	
600mm	Regular	mm and 1/2 mm both sides	9M-600	56254	
300mm	Regular	1/2 mm and 32nds one side;	9ME-300	50047	
11-3/4"		mm and 64ths reverse side			
600mm	Regular	1/2 mm and 32nds one side;	9ME-600	50048	
23-1/2"		mm and 64ths reverse side			

COMBINATION SQUARE SETS - 4PC WITH SQUARE HEAD, CENTER HEAD, AND REVERSIBLE PROTRACTOR HEAD



STARRETT SERIES 434, 435:

- With reversible lock bolt, scribe, spirit level and hardened, tempered steel blade.
- Direct reading double 180° protractor scale.
- Machine-divided blade has very sharp, accurate graduations and is easy to read.
- Stable heads.
- Bearing surfaces accurately ground.



INCH

“C” prefix in Catalog No. indicates Satin Chrome Finish

Size	Graduation	Blade	SERIES 435: Cast Iron Heads with Black Wrinkle Finish			SERIES 434: Forged & Hardened Square & Center Heads, Cast Iron Protractor Head with Smooth Black Finish		
			Catalog No.	EDP No.	Price	Catalog No.	EDP No.	Price
12"	4R - 8ths, 16ths, Quick Read 32nds, 64ths	Regular Satin Finish	435-12-4R	51556		434-12-4R	51542	
	16R - Quick Read 32nds, 64ths	Regular Satin Finish	C435-12-4R	66682		C434-12-4R	51548	
	Aircraft Quick Read 50ths, 100ths	Regular Satin Finish	435-12-16R	51557		434-12-16R	51543	
18"	4R - 8ths, 16ths, Quick Read 32nds, 64ths	Regular Satin Finish	435-18-4R	51558		434-18-4R	51544	
	16R - Quick Read 32nds, 64ths	Regular Satin Finish				C434-18-4R	51550	
	Aircraft Quick Read 50ths, 100ths	Regular Satin Finish				434-18-16R	51545	
24"	4R - 8ths, 16ths, Quick Read 32nds, 64ths	Regular Satin Finish	435-24-4R	51559		434-24-4R	51546	
	16R - Quick Read 32nds, 64ths	Regular Satin Finish				C434-24-4R	51552	
	Aircraft Quick Read 50ths, 100ths	Regular Satin Finish				434-24-16R	51547	
Metric Only			434M Series			434M Series		
300mm	mm and 1/2mm Both Sides	Regular Satin Finish	435M-300	66177		434M-300	996255	
600mm	mm and 1/2mm Both Sides	Regular Satin Finish	C435M-300	61918		C434M-300	56420	
			435M-600	66681		434M-600	9956256	
						C434M-600	56421	
Inch / Metric			435ME Series			434ME Series		
300mm	1/2mm, 32nds One Side; mm & 64ths Reverse Side	Regular Satin Finish	435ME-300	51560		434ME-300	51554	
11 3/4"						C434ME-300	9956422	
600mm	1/2mm, 32nds One Side; mm & 64ths Reverse Side	Regular Satin Finish	435ME-600	51561		434ME-600	51555	
23 1/2"						C434ME-600	56423	

SQUARE HEADS, CENTER HEADS, AND PROTRACTOR HEADS ONLY FOR COMBINATION SQUARES, COMBINATION SETS AND BEVEL PROTRACTORS

STARRETT SERIES 11, 1224:

The heads listed below fit any blade having the corresponding size on all Combination Squares, Combination Sets and Bevel Protractors except No. 33J and No. 8 Combination Squares. 12, 18, and 24 inch sizes are interchangeable. In ordering, specify complete catalog number and length of blade.



“C” prefix in Catalog No. indicates Satin Chrome Finish

Catalog No.	EDP No.	Fits Blade Size	Price
SQUARE HEADS - Cast - Black Wrinkle Finish			
H11-4	50069	4"	
H11-6	50070	6"	
H11-1224	50071	12 - 24", 300mm, 600mm	
CENTER HEADS - Cast - Black Wrinkle Finish			
C11-4	50072	4"	
C11-6	50073	6"	
C11-1224	50074	12 - 24", 300mm, 600mm	
PROTRACTOR HEADS - Black Wrinkle Finish - Reversible			
PR1224W	52525	12 - 24", 300mm, 600mm	
CPR1224W	64601	12 - 24", 300mm, 600mm	
PROTRACTOR HEADS - Black Wrinkle Finish - Non-Reversible			
PNR1224W	50107	12 - 24", 300mm, 600mm	
*CPNR1224W	50108	12 - 24", 300mm, 600mm	

STARRETT SERIES 33, 1224:

Catalog No.	EDP No.	Fits Blade Size	Price
SQUARE HEADS - Forged & Hardened - Black Enamel Finish			
H33-4	50223	4"	
H33-6	50224	6"	
H33-1224	50225	12 - 24", 300mm, 600mm	
CENTER HEADS - Forged & Hardened - Black Enamel Finish			
C33-4	50226	4"	
C33-6	50227	6"	
C33-1224	50228	12 - 24", 300mm, 600mm	
PROTRACTOR HEADS - Black Enamel Finish - Reversible			
PR1224S	52515	12 - 24", 300mm, 600mm	
*CPR1224HS	52516	12 - 24", 300mm, 600mm	

*Satin Chrome Finish on Turret

BLADES ONLY FOR COMBINATION SQUARES AND SETS

SERIES 789:



Starrett



Blades fit any head having the corresponding size on all Starrett combination squares, combination sets and bevel protractors.

Blade sizes 12, 18, 24 and 36", 300mm and 600mm are interchangeable.

Length	Approx. Width x Thickness	Finish	Graduations	Catalog No.	EDP No.	Price
4"	5/8 x 1/16"	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB4-4R	50077	
	5/8 x 1/16	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB4-16R	50078	
6"	3/4 x 5/64	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB6-4R	50080	
	3/4 x 5/64	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB6-16R	50082	
12"	1 x 3/32	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB12-4R	50084	
	1 x 3/32	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB12-16R	50087	
18"	1 x 3/32	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB18-4R	50089	
	1 x 3/32	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB18-16R	50091	
24"	1 x 3/32	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB24-4R	50093	
	1 x 3/32	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB24-16R	50096	
36"	1 x 3/32	Satin Chrome	4R - 8ths, 16ths, Quick Reading 32nds, 64ths	CB36-4R	50097	
	1 x 3/32	Satin Chrome	16R - Quick Reading 32nds, 64ths, Aircraft Quick Reading 50ths, 100ths	CB36-16R	50098	
150mm	19 x 2mm	Satin Chrome	mm and 1/2mm both sides	CB150-35	55988	
300mm	25 x 2.4	Satin Chrome	mm and 1/2mm both sides	CB300-35	55989	
600mm	25 x 2.4	Satin Chrome	mm and 1/2mm both sides	CB600-35	55990	
150mm & 5-3/4"	19 x 2	Satin Chrome	1/2 mm and 32nds one side; mm and 64ths reverse side	CB150-36	55992	
300mm & 11-3/4"	25 x 2.4	Satin Chrome	1/2 mm and 32nds one side; mm and 64ths reverse side	CB300-36	55993	
600mm & 23-1/2"	25 x 2.4	Satin Chrome	1/2 mm and 32nds one side; mm and 64ths	CB600-36	55994	

Quality Precision Tools

MEGA
Superior Import

Mitutoyo

Starrett

The Choice Is Yours!!!

COMBINATION SQUARE SETS

(3 & 4 Pc.)

MIT SERIES 180:



SQUARE HEAD

CENTER HEAD

PROTRACTOR HEAD

COMPONENTS

Order No.	Price	Length	Graduations
BLADES ONLY			
180401		6	8, 16, 32, 64ths (4R)
180402		6	32, 64, 50, 100ths (16R)
180403		6" x 150mm	32, 64ths, 1, 1/2mm
180405		150mm	1, 1/2, 1, 1/2mm
180501		12	8, 16, 32, 64ths (4R)
180502		12	32, 64, 50, 100ths (16R)
180503		12" x 300mm	32, 64ths, 1, 1/2mm
180505		300mm	1, 1/2, 1, 1/2mm
180701		18	8, 16, 32, 64ths (4R)
180702		18	32, 64, 50, 100ths (16R)
180703		18" x 450mm	32, 64th, 1, 1/2mm
180705		450mm	1, 1/2, 1, 1/2mm
180601		24	8, 16, 32, 64ths (4R)
180602		24	32, 64, 50, 100ths (16R)
180603		24" x 600mm	32, 64, 1, 1/2mm
HEADS ONLY			
180101		Hardened Cast Iron	
180102		Square Head for 6" models	
180201		Square Head for 12-24" & 300-450mm models	
180202		Center Head for 6" models	
180111		Cast Iron - Not Hardened	
180112		Square Head for 6" models	
180112		Square Head for 12-24" & 300-450mm models	
180211		Center Head for 6" models	
180212		Center Head for 12-24" & 300-450mm models	
180301		Protractor Head for 12-24" & 300-450mm models	
ACCESSORIES			
990003		Clamp for 12-24" & 300-450mm models	
990009		Clamp for 6" Square & Center Heads	
990010		Clamp for 6" Center Head	
990011		Clamp for Protractor Head	
990006		Scriber for Square Head	

Set No.	Price	Blade		Square Head	Center Head	Protractor Head
		Desc.	No.			
INCH						
180801		6" 4R	180401	180111**	180211**	
180802		6" 16R	180402	180111**	180211**	
180803		12" 4R	180501	180112**	180212**	
180804		12" 16R	180502	180112**	180212**	
180805		12" 4R	180501	180112**	180212**	180301**
180806		12" 16R	180502	180112**	180212**	180301**
180901		6" 4R	180401	180101*	180201*	
180902		6" 16R	180402	180101*	180201*	
180903		12" 4R	180501	180102*	180202*	
180904		12" 16R	180502	180102*	180202*	
180905		12" 4R	180501	180102*	180202*	180301**
180906		12" 16R	180502	180102*	180202*	180301**
INCH / METRIC						
180807		12"/300mm	180503	180112**	180212**	180301**
180907		12"/300mm	180503	180102*	180202*	180301**
METRIC						
180810		300mm	180505	180112**	180212**	180301**
180910		300mm	180505	180102*	180202*	180301**

* Hardened Cast Iron Heads

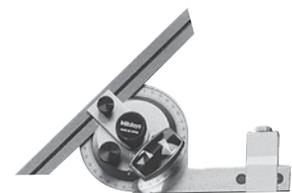
** Non-Hardened Heads

UNIVERSAL BEVEL PROTRACTOR

SERIES 187:

FEATURES

- Hardened stainless steel, rust and wear resistant for long life.
- Flush-reading, no parallax error, gives a high degree of accurate measurements.
- With Magnifier glass for easier and faster reading.

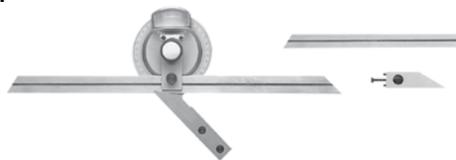


Order No.	Price	Graduation		Includes
		Dial	Vernier	
187904		1°	5 min	6" blade (187104) & Clamp box for Inch Height Gage (950749)
187906		1°	5 min	12" blade (187103) & Clamp box for Inch Height Gages (950749)
ACCESSORIES				
187-103				12" blade
187-104				6" blade
187-105				Acute angle attachment
950749				Clamp box for Inch Height Gages
950750				Clamp box for Metric Height Gages

UNIVERSAL BEVEL PROTRACTORS WITH VERNIER, ULTRA-FINE ADJUSTMENT AND ACUTE ANGLE ATTACHMENT STARRETT SERIES C359:



UNIVERSAL BEVEL PROTRACTOR SERIES 228:



This precision instrument with magnifying lens has the features of an optical protractor. The rotating disc is graduated in 4 x 90°. Made of stainless steel with satin-chrome finish for easy reading. Permits setting and reading to 5 minutes or 1/12°. Included are 6" and 12" hardened blades and an acute angle attachment. Supplied in fitted case.

Ordering No. 1575000	Price	
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Any angle up to 360° can be laid out, or measured to 5 minutes or 1/12 degree with this tool. Acute angle attachment for measuring or laying out small angles furnished with tool. One side of tool flat which permits laying flat on work or paper. Satin Chrome finish. Fitted case.

- Blades can be rotated to the desired angle and adjusted to the desired length.
- Both the dial and the blade can be locked independently.
- Flush surfaces on the base permits use on vernier height gages.

Bevel Protractor including 7 & 12" blades

Catalog No.	EDP No.	Price
C359FZ	51398	

Acute Angle Attachment

Catalog No.	EDP No.	Price
PT99329	51392	

PROTRACTORS SERIES 228:



Used to set bevels, transfer angles etc.. Stainless steel with permanently etched graduations from 0-180° in opposite directions. Protractor arm of 6". Head size: 3-1/2 x 2".

Description	Order No.	Price
Round Head	2280005	
Rectangular Head	2280010	

UNIVERSAL BEVEL PROTRACTOR - WITH DIAL READING SERIES 228:



- Direct reading to 5 minutes from 1-3/8" diameter dial.
- Two-color rotating disc shows 10° graduations and direction of indication in window.
- Two-color fixed dial clearly indicates the measured values in far spread degree and 5 minute increments.
- Indicating range 4 x 90°.
- Stainless steel head and blades, hardened and ground.
- Head satin chromed. Positive locks.
- High accuracy and extreme versatility.
- Includes: Bevel Protractor, 12" blade, acute angle attachment, case.



Order No. 2280000	Price	
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STEEL PROTRACTORS STARRETT SERIES C19, C183:



C19



C183

Useful for setting bevels, transferring angles and as small T-square. Graduated 0 to 180 degrees both directions. Six inch blade may be locked in position by tightening knurled nut. Flat back allows use for drafting. Satin Chrome finish.

Catalog No.	EDP No.	Blade Length	Range	Price
C19	50127	6"	0 to 180°	
C183	50672	6"	0 to 180°	



While we show the most popular **Starrett** items, we can supply their entire range of products; please inquire.

DEPTH AND ANGLE GAGES

SERIES 243:



- Hardened and ground steel body.
- Spring tension knurled nut for easy depth measurement and locking.
- Fitted with stainless steel rule graduated 64th one side and 0.5 mm on reverse.
- Rule measures 7/32" (5.5mm) wide and .041"(1.05mm) thick.
- Angular depth gage has an added feature permitting its use as a protractor for measuring angles.

Order No.	Description	Length	Body Dimension	Price
1655001	Plain Depth Gage	6"(150mm)	1-1/2 x 2-1/4 x 1/8" 40 x 58 x 3.2mm	
1655000	Angular Depth Gage	6"(150mm)	1-1/2 x 2-1/4 x 1/8" 40 x 58 x 3.2mm	

COMBINATION DEPTH AND ANGLE GAGE

SERIES 243:



Head is made of hardened steel with protractor graduations in 30°, 45°, and 60° angles. The base surface measures 2-1/2" x 1/8" thick. The 6" rule has 32nds or mm graduations on one side and 64ths or 1/2mm on the other side. A 6" rod is included for measuring depths in narrow places.

Description	Order No.	Price
Inch	1655002	
Metric	1655003	

PROTRACTOR / DEPTH GAGE

SERIES 243:



- Graduated from 0-180°
- Spring tension nut to secure rule to desired depth and angle.
- Narrow 6" (150mm) rule graduated 64th on one side and 0.5mm at reverse.



Order No.	Description	Price
2431015	Round	
2431020	Rectangular	

RULE DEPTH GAGE

STARRETT SERIES 237:



Consists of case hardened steel head, 2-5/8" long by 1/8" thick / 66 x 3mm, and 6"/150mm tempered steel rule fitted to slot in head. Rule locked in position by knurled nut and friction spring.

Length	Graduated	Catalog No.	EDP No.	Price
6"	32nds, 64ths	237	51080	
150	mm, 1/2 mm	237M	51081	

COMBINATION DEPTH AND ANGLE GAGE

STARRETT SERIES 236:

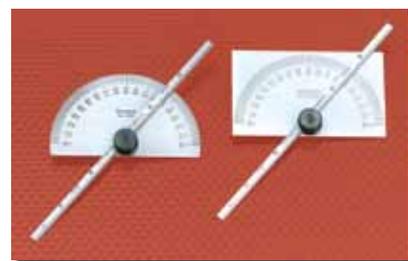


Can be used as depth gage by simply reversing the rule, as protractor for measuring 30, 45 and 60 degree angles and, if rule is removed, it can be used separately. Hardened, polished steel head measures 2-5/8" (66mm) long x 1/8" (3mm) thick. Steel rule can be locked in any position.

Length	Rules Graduations	Degrees	Catalog No.	EDP No.	Price
6"	32nds, 64ths	30°, 45°, 60°	236	51074	

PROTRACTOR AND DEPTH GAGE

STARRETT SERIES 493, C493B:



Combining protractor head graduated from 0 to 180 degrees in opposite directions with 6 inch blade graduated one side in 32nds and on reverse side in 64ths. Blade adjusts to any angle and may be clamped anywhere along its length by knurled thumb nut. Flat surface on back of the head permits laying tool flat on paper or work.

Catalog No.	EDP No.	Description	Price
493	52532	Semi-Circular Head	
C493B	52534	Rectangular-Head	

SINE BARS AND SINE PLATE

SERIES 253:



- Body and rolls made of hardened and precise ground tool steel.
- Perfect tool for angular inspection and measurement.
- Top parallel to bottom of rolls $\pm .0004$ "
- Distance between center of rolls $\pm .0004$ "

Order No.	Width	Distance Between Rollers	Price
1715005	15/16"	5"	
1715010	1"	10"	
1715050	2"	5"	
1715022	30mm	100mm	
1715222	30mm	200mm	

3" THIN SINE BAR

SERIES 253:



Precision ground and hardened. Two 1/4" holes are provided for mounting. 7/32" wide. Fits in bottom of vise to accurately set work piece to desired angle. Can be used for accurately setting swivel vise or angle vise, to set work piece at an angle to T-Slots of milling table, back rail of magnetic chuck, setting milling machine head etc.

Order No.	Price
2530000	

ECONOMY SINE BARS

SERIES 253:



Hardened and precision ground.

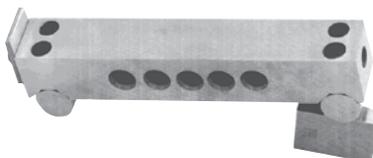
Distance Between Rollers	Width	Order No.	Price
2-1/2"	1"	1715625	
5"	1"	1715605	

SINE BAR

SERIES 641:



Suburban's exacting Sine Bars are perfect for angular inspection and measurement. Our Sine Bars effectively 'cancel' the angle being measured to check its accuracy. Made of hardened steel. They are ground square and parallel within .0002". The end rail, included with each of Suburban's Sine Bars, can be mounted at either end.



Model No.	Dimensions	Center Dis. of rolls	Lbs. Wt.	Order No.	Price
SB-111	6 x 1 x 1-11/16"	5.000	2	6410044	
SB-1110	11 x 1-1/8 x 2-1/16"	10.000	5	6410045	

SINE BAR & RISER SET

SERIES 247:



- Quickly measure the desired angle in a machine setup.
- Eliminate constant tables to calculate angles, and gage blocks to set angles. Simply choose the angle setting blocks required for the desired angle. Quick and simple set-up for use in grinding, milling, drilling and inspection applications.

Includes:

- One 5" Sine Bar, 1" square, hardened and precision ground.
- 18 Risers with a range of 1/2 - 15 degrees resulting angle, including 2 risers providing "taper per foot" of 1/4 and 1/2 degree.
- Fitted molded case.



Order No.	Price
2530100	

PLANER AND SHAPER GAGE

SERIES 247:



Max Range 1/4 - 9-1/4" with extension rod. Makes setting of planer and shaper tools easy. Set gage with micrometer, surface gage or caliper and bring cutting tool in contact with it. Gives the operator a reliable starting point, thus eliminating trial cuts. Also use in conjunction with Dial Indicator to level large plates for planing, etc.



Order No.	Price
2470100	

PLANER & SHAPER GAGE

SERIES 641:



- 7/16" to 10" Range
- Extra tapped holes on sliding member for mounting indicator post or other accessories.
- 1-1/8 Wide body
- Beveled Ways eliminate side play.
- All surfaces square and parallel for use in any plane.
- .0002" Accuracy
- Weight: 4 lbs.
- Fitted wooden case and 3" extension included.

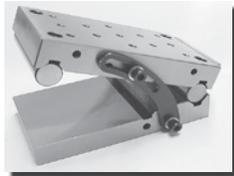


Model No.	Order No.	Price
PG-613	6410048	

PRECISION TOOLS



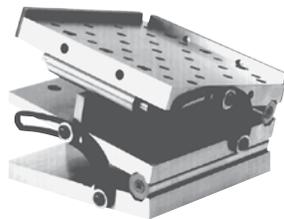
5" SIMPLE SINE PLATES
SERIES 253:



All parts made of hardened tool steel and ground to highest accuracy. Squareness and parallelism are within .0002" per 5". Many 1/4"-20 holes to facilitate clamping. Two end rails included on **1715205**, one end rail on **1715105**. .200" step built into gage block roll so that gage blocks over .200" can be used to set very small angles. 5" distance between center rolls is accurate within .0002". All models have an offset hinge for added stability. **1715205** has 2 T-Slots in top plate for 1/4" T-bolts.

Dimensions	Order No.	Price
3-1/4 x 6 x 1-7/8	1715105	
5 x 6 x 2-7/16	1715205	

5" COMPOUND SINE PLATE
SERIES 253:



Similar to simple sine plates above but with two offset hinges for added stability.

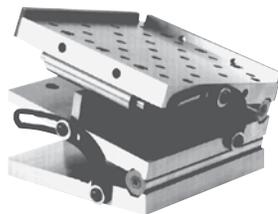
6 x 12 plate, **1715555** has 3/8"-16 tapped holes, 5" and 10" distance between center rolls accurate within .0002", and weighs 75 lbs.

Dimensions	Order No.	Price
6 x 6 x 3	1715505	
6 x 12 x 4-3/16	1715555	

COMPOUND SINE PLATES
SERIES 641:

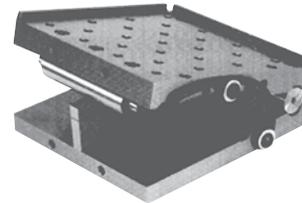
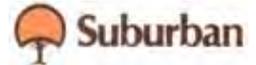


- 0-60° capacity.
- Minute angle step .200" built into the front gage block roll - eliminates steps in base plate.
- Two hardened and ground side rails and two locking straps included.
- Locking strap always remains below the top surface!
- Large hinge pins for extra strength.
- Tapped holes in top plate 6 x 6" or smaller 1/4-20, larger models have 3/8-16 tapped holes.



Model No.	Dimensions	Cen. Dis of Rolls	Lbs.	Order No.	Price
SPC-66-S1	6 x 6 x 3-1/8	5.000	27 lbs.	6410009	
SPC-612-S2	6 x 12 x 4-3/16	5.000&10.000	71 lbs.	6410010	
SPC-1212-S2	12 x 12 x 4-3/16	10.000	137 lbs.	6410011	

SINE PLATES
SERIES 641:



- Minute angle step .200" built into the gage block roll eliminates step in base plate.
- Two hardened and ground side rails and one locking strap included.
- Locking strap always remains below the top surface!
- Large hinge pins for extra strength.
- Tapped holes in top plate 6 x 6" or smaller 1/4-20, larger models have 3/8-16 tapped holes.

Model No.	Dimensions	Cen. Dis of Rolls	Lbs	Order No.	Price
SP-136	6 x 3 x 2	5.000	9 lbs.	6410001	
SP-44-S0	4 x 4 x 2	3.000	9 lbs.	6410002	
SP-555	6 x 5 x 2-1/4	5.000	17 lbs.	6410003	
SP-66-S1	6 x 6 x 2	5.000	18 lbs.	6410004	
SP-612-S2	6 x 12 x 2-5/8	5.000	47 lbs.	6410005	
SP-812-S2	8 x 12 x 2-5/8	5.000	62 lbs.	6410006	
SP-1212-S2	12 x 12 x 2-5/8	10.000	90 lbs.	6410007	
SP-126-S2	12 x 6 x 2-5/8	10.000	45 lbs.	6410008	

MAGNETIC SINE PLATES
SERIES 641:

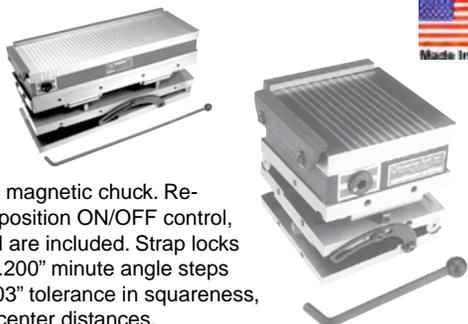


Ceramic permanent magnetic chucks can't lose their magnetism. Removable handle for ON/OFF operation, end rail and side rail all included. Sine plate angles lock rigidly with locking strap. Squareness, parallelism and roll center distances within .0002" and .0003". Unit features .200" minute angle steps.

STANDARD POLE					
Model No.	Dimensions	Cen. Dis of Rolls	Lbs.	Order No.	Price
MSP-66-S1	6 x 6 x 4-5/8	5.000	39 lbs.	6410018	
MSP-126-S2	12 x 6 x 5-1/4	10.000	87 lbs.	6410019	
MSP-612-S2	6 x 12 x 5-1/4	5.000	89 lbs.	6410020	
MSP-1212-S2	12 x 8 x 5-1/4	10.000	190 lbs.	6410021	
FINE POLE					
Model No.	Dimensions	Cen. Dis of Rolls	Lbs.	Order No.	Price
MSP-363-FP	6 x 3 x 4-1/4	5.000	22 lbs.	6410025	
MSP-66-FP-S1	6 x 6 x 4-5/8	5.000	43 lbs.	6410026	
MSP-126-FP-S2	12 x 6 x 5-1/4	10.000	92 lbs.	6410027	
MSP-612-FP-S2	6 x 12 x 5-1/4	5.000	94 lbs.	6410028	
MSP-1212-FP-S2	12 x 12 x 5-1/4	10.000	196 lbs.	6410029	

MAGNETIC COMPOUND SINE PLATES

SERIES 641:



Ceramic permanent magnetic chuck. Removable handle for position ON/OFF control, side rail and end rail are included. Strap locks sine plate securely. .200" minute angle steps with .0002" and .0003" tolerance in squareness, parallelism and roll center distances.

STANDARD POLE

Model No.	Dimensions	Gen. Dis of Rolls	Lbs.	Order No.	Price
MSPC-66-S1	6 x 6 x 5-3/4	5.000	48 lbs.	6410022	
MSPC-612-S2	6 x 12 x 6-13/16	10.000 & 5.000	113 lbs.	6410023	
MSPC-1212-S2	12 x 12 x 6-13/16	10.000	237 lbs.	6410024	

FINE POLE

Model No.	Dimensions	Gen. Dis of Rolls	Lbs.	Order No.	Price
MSPC-66-FP-S1	6 x 6 x 5-3/4	5.000	52 lbs.	6410030	
MSPC-612-FP-S2	6 x 12 x 6-13/16	10.000 & 5.000	118 lbs.	6410031	
MSPC-1212-FP-S2	12 x 12 x 6-13/16	10.000	243 lbs.	6410032	

PRECISION ANGLE BLOCK SET - MEIDA Superior Import

1/4 - 45°

SERIES 227:

- Made from hardened steel.
- Use for grinding and milling machine operations.
- Complete in fitted case.
- 17pc. set includes the following angles: 1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°, 35°, 40°, and 45° plus 2 riser blocks.



Order No. 1570150

Price

UNIVERSAL ANGLE BLOCK SET

SERIES 227:

An accurate and direct method for angle set-ups in production and inspection.

Set includes:

- 3 "V" Blocks - 10°, 15°, 30°
 - 5 Angle Blocks - 1°, 2°, 3°, 4°, 5°
- Dimensions (l x w x h):
 "V" Blocks - 3 x 1-3/16 x 1-3/16
 Angle Blocks - 2-3/4 x 1-3/16



All blocks are made of hardened steel and precision ground to ±10 second accuracy. Includes fitted case.

Order No. 1570100

Price

454

PRECISION ANGLE BLOCK SET - MEIDA Superior Import

1° - 30°

SERIES 227:



An accurate and direct method for angle set-ups in production and inspection.

Set Includes: 10 Blocks; 1° increments up to 5° and 5° increments up to 30°

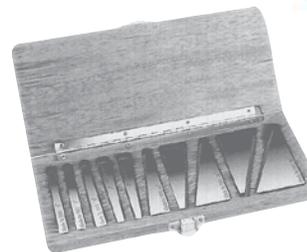
Dimensions: 3" Long x 1/4" Thick
 Made of hardened steel and precision ground to ±.0001" accuracy.
 Includes fitted case.

Order No. 1570010

Price

ANGLE BLOCKS

SERIES 641:



- Set complete in fitted case. Size 3" Long x 1/4" thick.
- Furnished in 1° increments to 5 degrees and in 5° increments to 30 degrees.
- Hardened steel, precision ground.
- Accuracy ±.0001" per inch.
- With the addition of the optional 1/4° and 1/2° blocks virtually any conceivable angle to these increments can be established.

Model	Description	Lbs.	Order No.	Price
AB-10-ST	Set of 10 Angle Blocks	3 lbs.	6410069	
AB-QTR	Optional 1/4 degree block	1 lb.	6410070	
AB-HLF	Optional 1/2 degree block	1 lb.	6410071	

THIN ANGLE BLOCK SETS

SERIES 227:



- Hardened and precision ground on working surfaces.
- Two 1/4" holes for mounting. 3-1/2" Long x 5/32" Thick.
- Fitted case.



Consists of	Order No.	Price
1/2° & 1°-5° x 1°	1570006	
6° - 10° x 1°	1570005	
All Above Blocks	1570011	

*Using two blocks a range of 1/2° - 10-1/2° x 1/2° can be covered.

0°- 60° PRECISION ANGLE BLOCKS



SERIES 227:

Fast, simple, easy to use for drilling, milling and set-up applications.

FEATURES:

- 0°- 60° Adjustable angle by locking the hex screw on the bottom.
- 90° "V"
- Squareness .0002"
- Angle accuracy ± 10 seconds.
- Hardened to HRC 50-55°



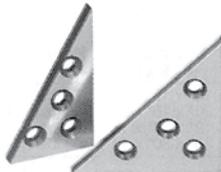
Length x Height x Width	Width of "V"	Order No.	Price
4 x 1-7/8 x 1-7/8	1-7/8	2270001	
4 x 1-7/8 x 1-3/16	1-7/8	2270002	
3 x 1-1/4 x 1	1	2270003	

SOLID ANGLE PLATES

SERIES 227:



Made of hardened steel, precision ground angles for convenient set-ups in tooling production and inspection. Four holes for easy mounting.
1/4" Thick.



Dimensions	Angles	Order No.	Price
3 x 3"	45°, 45°, 90°	1570201	
2 x 3-3/8"	30°, 60°, 90°	1570202	
Above two in a plastic case.		1570200	

STEEL PARALLELS

SERIES 241:



Made of quality steel, hardened and precision ground to very close tolerances on all four sides. Parallels are finished, packed and sold in pairs.

Dim.	Order No.	Price	Dim.	Order No.	Price
1/4 x 1/2 x 6	2411632		3/4 x 1 x 9	2414864	
1/4 x 5/8 x 6	2411640		3/4 x 1 x 12	2414865	
1/4 x 3/4 x 6	2411648		3/4 x 1-1/4 x 12	2414872	
3/8 x 1/2 x 6	2412432		1 x 2 x 12	2416499	
3/8 x 3/4 x 6	2412448		1-1/4 x 1-1/2 x 12	2418096	
1/2 x 3/4 x 6	2413248		1-1/4 x 2 x 12	2418099	
1/2 x 1 x 6	2413264		1-1/2 x 2 x 12	2419620	
1/2 x 3/4 x 9	2413249		1-1/2 x 3 x 12	2419630	
1/2 x 1 x 9	2413265				

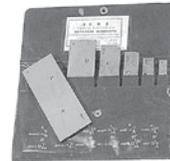
ADJUSTABLE PARALLEL SETS



SERIES 242:

Useful for layout, inspecting and gaging work. Highly accurate dovetail construction. The 2 halves slide smoothly and are quickly locked into position. The 6 piece set is supplied in an attractive plastic wallet and has the following range:

3/8"	to	1/2"
1/2"	to	11/16"
11/16"	to	15/16"
15/16"	to	1-5/16"
1-5/16"	to	1-3/4"
1-3/4"	to	2-1/4"



MEDA - SUPERIOR IMPORT

6 Piece (3/8 - 2-1/4)	Order No. 1650016	Price	
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PEC TOOLS - USA

6 Piece (3/8 - 2-1/4)	Order No. 1650006	Price	
4 Piece (3/8 - 1-5/16)	Order No. 1650004	Price	

ADJUSTABLE PARALLELS

STARRETT SERIES 154:



Starrett adjustable parallels provide a wide range of use in layout, gaging, inspection work and for setups on various machine tools. Their adjustable feature makes it possible to adjust them to exact size by micrometer measurement and also permits use in place of several solid-type parallels.

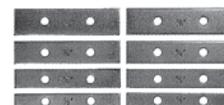
Can be inserted in openings and expanded to size. Size of opening can then be determined by measuring parallels with micrometer. Parallels consists of two dovetailed pieces that slide smoothly and can be easily adjusted. All parallels are 9/32" (7mm) thick.



Catalog No.	EDP No.	Range		Price
154A	50578	3/8 - 1/2"	9.5 - 12.7mm	
154B	50579	1/2 - 11/16"	12.7 - 17.5mm	
154C	50580	11/16 - 15/16"	17.5 - 23.8mm	
154D	50581	15/16 - 1-5/16"	23.8 - 33.3mm	
154E	50582	1-5/16 - 1-3/4"	33.3 - 44.4mm	
154F	50583	1-3/4 - 2-1/4"	44.4 - 57.1mm	
S154SZ	50584	Set of 4 parallel-sizes A,B,C,D - in case		
S154LZ	50586	Set of 6 parallel-sizes A,B,C,D,E,F, - in case		

THIN PARALLEL SET

SERIES 241:



Set consists of 4 matched pairs of hardened and precision ground parallels 5/32" thick, 3" long in 1/2, 5/8, 3/4, and 7/8 heights. Two 1/4" holes in each parallel. Useful for fast setting of work pieces to needed height in vise jaws

Order No. 2410500	Price	
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Quality Precision Tools



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PRECISION PARALLEL SETS

SERIES 241:



Tolerance: Parallel 0.0003" on 2 sides, top and bottom.

Dimensions: within 0.001" allowance.

Hardness: Case hardened to RC 55 to 62 on 2 sides top and bottom only.

The holes are designed for easier handling and set-ups. Made from fine quality tool steel, stress relieved against distortion, precision ground, and hardened. These precision parallels are recommended for layout work, standards and set-ups.

1/4" STEEL PARALLEL SET

SERIES 241:



Parallels in matched pairs made of special steel hardened and precision ground. 2 holes in each parallel. 9 pair in fitted case.

Each parallel is 1/4" wide and 6" long. Height : 1 pair each 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4". Includes fitted case.



Order No. 2410009

Price

1/32" ULTRA-THIN STEEL PARALLEL SET

SERIES 241:



All are 6" long and only 1/32" thick
Set includes: 20 pairs: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16".

• Includes fitted case.



Order No. 2410020

Price

STEEL PARALLEL SETS -

3/16" and 1/2"

SERIES 241:



Each set consists of 4 pairs of hardened and ground parallels. All parallels are 6" long. Includes fitted case.



Height	Thickness	Hole Dia.	Order No.	Price
1	3/16	5/16	1645001	
1-1/4	3/16	3/8		
1-1/2	3/16	7/16		
1-3/4	3/16	1/2		
1	1/2	5/16	1645002	
1-1/4	1/2	3/8		
1-1/2	1/2	7/16		
1-3/4	1/2	1/2		
1	3/16	5/16	1645003	
1-1/4	3/16	5/16		
1-1/2	1/2	1/2		
1-3/4	1/2	1/2		

1/8" THIN STYLE STEEL PARALLEL SET

SERIES 241:



Parallels in matched pairs made of special steel, hardened and precision ground. 2 holes in each parallel. 10 pair in fitted case.

Each parallel is 1/8" wide and 6" long. Height: 1 pair each 1/2 - 1-5/8 x 8ths. Includes fitted case.



Order No. 1645004

Price

STEEL PARALLELS

STARRETT SERIES 384:



- Hardened and ground to close limits.
- Indispensable for inspection and layout work or various set-ups on machines.
- Furnished in pairs, 6" (150mm) in length.
- Made from special grade of tool steel, hardened and ground.



Description	Catalog No.	EDP No.	Price
Sets of 4 Pairs - Sizes A,C,E,G-In Case	S384JZ	51453	
Sets of 4 Pairs - Sizes N,M,P,F,-In Case	S384-1Z	63676	
Sets of 4 Pairs - Sizes G,H,R,M,-In Case	S384-2Z	63677	
Sets of 5 Pairs - Sizes S,T,W,X,Y, In Case	S384-3Z	63678	

Thickness		Width		Catalog No.	EDP No.	Price
Inch	mm	Inch	mm			
1/8"	3mm	1"	25mm	384A	51445	
3/16"	5mm	7/8"	22mm	384C	51447	
1/4"	6mm	3/4"	19mm	384E	51449	
		1"	25mm	384F	51450	
3/8"	10mm	1/2"	13mm	384G	51451	
		3/4"	19mm	384H	51452	
1/4"	6mm	3/8"	10mm	384M	63645	
		1/2"	13mm	384N	63646	
		5/8"	16mm	384P	63647	
3/8"	10mm	1"	25mm	384R	63648	
		5/8"	16mm	384S	63649	
1/2"	13mm	3/4"	19mm	384T	63650	
		1"	25mm	384W	63651	
		1-1/8"	28mm	384X	63652	
		1-1/4"	31mm	384Y	63653	

PRECISION WAVY PARALLELS
SERIES 241:



- Unique innovation in the field of clamping-aid techniques.
- Engineered to exceed the practical application possibilities of conventional precision parallels.
- New concept, practical and reliable for the precision vertical positioning of workpiece.
- Economical, simple and easy to use in precision clamping of parts in drilling, boring, milling, grinding, assembly work, etc.
- Ideal for clamping a group of flat workpieces.
- Can readily be used as classic shims.
- Thin and fragile workpieces can be secured without damage by utilizing the spring pressure of these parallels, for example in assembly applications, etc.
- Range of 9 pair set 1/2" to 1-1/2" in 1/8" height increments.
- Each parallel is .012" Thick x 4-5/16" Long
- Made of high quality spring steel, hardened, stress relieved & precision ground.
- Guaranteed to size in height & parallelism ±.0002".
- Set of 9 pairs furnished in attractive fitted case.



Order No. 2410000	Price
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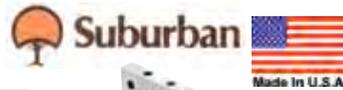
1-2-3 AND 2-4-6 BLOCK SETS
SERIES 254: MEDA - SUPERIOR IMPORT
SERIES 641: SUBURBAN



Used in layout and setup work. Each set consists of 2 matched, hardened and precision-ground blocks. The squareness on all sides is within .0001" per inch. The blocks are supplied with a plus allowance of .0001" to .0003" to allow nominal lapping. Five 3/8"-16 tapped holes are provided for clamping. SUBURBAN sets include wooden case.

Size	MEDA		SUBURBAN		
	Order No.	Price	Catalog No.	Order No.	Price
1x2x3	1720123		B123H23M	6410145	
2x4x6	1720246		-	-	

ANGLE PLATES
SERIES 641:



Solid, one piece angle plates are made of hardened steel, square and parallel to within .0002" for reliable positioning. All holes are tapped.



Model No.	Dimensions	Weight	Order No.	Price
AP-333	3 x 3 x 3 x 1 x 1-1/2	5 lbs.	6410061	
AP-334-S0	4 x 3 x 3 x 1	6 lbs.	6410062	
AP-444-S1	4 x 4 x 4 x 1-1/4	10 lbs.	6410063	
AP-446-S2	6 x 4 x 4 x 1-1/4	13 lbs.	6410064	
AP-664-S1	6 x 6 x 4 x 1-1/4	20 lbs.	6410065	

1-2-3 DELUXE BLOCK SET
SERIES 254:



Used in layout and setup work. Each set consists of 2 matched, hardened and precision-ground blocks. The squareness on all sides is within .0001" per inch. The blocks are supplied with a plus allowance of .0001" to .0003" to allow nominal lapping. Five 3/8"-16 tapped holes are provided for clamping. 5 stainless steel socket head 3/8" - 16 cap screws, one hex key in a plastic fitted case.



Order No. 1725123	Price
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STEPPED ANGLE PLATES
SERIES 227:



Product Description

- Solid one piece construction for longer life
- Hardened to 55 to 62 HRC
- Ground flat, square and parallel within .0002"/.005mm
- Made from alloy steel



Size	Thread Size	Order No.	Price
3" x 3" x 3"	1/4" - 20 UNC	2276456	

PRECISION ANGLE PLATE
STARRETT SERIES 580:



Precision ground angle plate is made from hardened steel. Grinding step of 1/4" wide x 3/4" (6.35 x 19mm) down from the top surface that allows for the grinding, machining or inspection of small items. Ten 1/4"-20 tapped holes, six on the face and two on each end, provide for the clamping of work to the angle plate and/or clamping the angle block to a sine fixture or machine.



Description	Catalog No.	EDP No.	Price
3" x 3" x 3" 75mm x 75mm x 75mm	580	64961	

STEEL STRAIGHT EDGES
STARRETT SERIES 380, 385, 387:



Straight edges are precision made of fine tool steel to rigid standards. Ground all over and finely finished. For drawing or scribing straight lines and checking surfaces for straightness. Straight edges in sizes 36"(900mm) and longer are marked with arrows and should be suspended at these two points to minimize deflection caused by their length and weight.



Length		Width x Thick		No. 380 Series Square Edge		
Inch	mm	Inch	mm	No.	Catalog EDP No.	Price
12"	300mm	1-13/32"x11/64"	36x4.4mm	380-12	51438	
18"	450mm			380-18	51439	
24"	600mm			380-24	51440	
36"	900mm	2-13/32"x7/32"	60x5.5mm	380-36	51441	
48"	1200mm			380-48	51442	
72"	1800mm	3-5/32"x9/32"	80x7mm	380-72	51444	

No. 385 Series with Bevel		
Catalog No.	EDP No.	Price
385-12	51455	
385-18	51456	
385-24	51457	
385-36	51458	
385-48	51459	
385-72	51461	

No. 387 Series with Bevel Edge and Graduation		
Catalog No.	EDP No.	Price
387-12	51468	
387-18	51469	
387-24	51470	
387-36	51471	
387-48	51472	

KNIFE-EDGE STRAIGHT EDGES

SERIES 232:



For detection of minor surface variations or machining irregularities on flat surfaces. Made of alloy tool steel and provided with insulated grips.

Length	Order No.	Price
4"/100mm	1595004	
6"/150mm	1595006	
10"/250mm	1595010	

Quality Precision Tools



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SPRING CALIPERS, DIVIDERS AND SETS

SERIES 252:



Legs machined to rigid length and balance. Hardened and tempered spring. Polished finish. Flat leg pattern.

Outside Spring Calipers			Inside Spring Calipers			Spring Dividers			Hermaphrodite Caliper		
Size	Order No.	Price	Size	Order No.	Price	Size	Order No.	Price	Size	Order No.	Price
3	1710103		3	1710303		3	1710603		6	1710706	
4	1710104		4	1710304		4	1710604		-	-	
6	1710106		6	1710306		6	1710606		-	-	
8	1710108		8	1710308		8	1710608		-	-	
10	1710110		10	1710310		10	1710610		-	-	
12	1710112		12	1710312		12	1710612		-	-	
18	1710118		18	1710318		18	1710618		-	-	
24	1710124		24	1710324		24	1710624		-	-	
36	1710136		36	1710336		36	1710636		-	-	

SETS

- Three piece set consists of one each of Divider, Inside Caliper, and Outside Caliper.
- Set packed in a box.

Divider and Caliper Sets

Catalog No.	Size		Price
	Inch	mm	
1710704	4	100	
9710706	6	150	
1710708	8	200	
1710710	10	250	
1710712	12	300	

SQUARE LEG SPRING DIVIDERS AND CALIPERS - PRECISION

SERIES 252:

- Professional grade dividers and calipers with rugged construction.
- Legs made from heavy square stock machined to smooth taper.
- Hardened and ground measuring points.
- Hardened and tempered spring.
- Quick spring nut for making quick positive adjustments.



TECHNICAL MEASURING SETS

SERIES 640:



Dividers		Inside		Outside		Nominal Size
Order No.	Price	Order No.	Price	Order No.	Price	
1710513		1710403		1710203		3"(75mm)
1710504		1710404		1710204		4"(100mm)
1710505		1710405		1710205		5"(125mm)
1710506		1710406		1710206		6"(150mm)
1710507		1710407		1710207		7"(175mm)
1710508		1710408		1710208		8"(200mm)
1710509		1710409		1710209		9"(225mm)
1710510		1710410		1710210		10"(250mm)
1710512		1710412		1710212		12"(300mm)
1710516		1710416		1710216		16"(400mm)
1710520		1710420		1710220		20"(500mm)

Order No.	No. of pcs.	Description	Price
6400004	4	6" (150mm) divider, inside Caliper, outside caliper and pocket rule.	
6400005	5	6" (150mm) divider, inside caliper, outside caliper pocket rule and 5" (125mm) vernier caliper.	
6400007	6	6" (150mm) divider, inside caliper, outside caliper, pocket rule, 5" (125mm) vernier caliper and 6" (150mm) angular depth gage	

"YANKEE" SPRING-TYPE CALIPERS AND DIVIDERS

STARRETT
SERIES: 73, 79, 83:



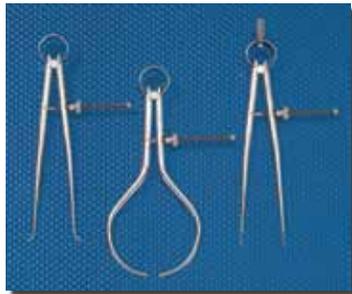
- Dividers are made from high grade steel and are well finished.
- Very durable legs are made of flat stock.
- Fulcrum stud is hardened, with smooth bearing surface.
- The flexible bow spring is extra strong to assure reliability.
- Available with solid nut or quick adjusting spring nut for fast, positive adjustments.

SOLID NUT **QUICK SPRING NUT**

Size	Catalog No.	EDP No.	Price	Catalog No.	EDP No.	Price
Inside Calipers						
4"-(100mm)	73A-4	50334		73B-4	50335	
6 - (150mm)	73A-6	50336		73B-6	50337	
8 - (200mm)	73A-8	50338		73B-8	50339	
12 - (300mm)	73A-12	50342		73B-12	50343	
Outside Calipers						
4"-(100mm)	79A-4	50364		79B-4	50365	
6-150mm)	79A-6	50366		79B-6	50367	
8 - (200mm)	79A-8	50368		79B-8	50369	
12 - (300mm)	79A-12	50372		79B-12	50373	
Dividers						
4"-(100mm)	83A-4	50376		83B-4	50377	
6 -(150mm)	83A-6	50378		83B-6	50379	
8 - (200mm)	83A-8	50380		83B-8	50381	
12 -(300mm)	83A-12	50384		83B-12	50385	

TOOLMAKER'S SPRING-TYPE CALIPERS AND DIVIDERS WITH ROUND LEGS AND SOLID NUT

STARRETT SERIES: 274, 275, 277:



Designed for toolmakers and all good mechanics who require finer adjustment and better balance so a more sensitive feel can be obtained. The fulcrum stud is hardened and the bearing surfaces of the legs are large enough to prevent any side deflection. The bow spring is strong and flexible, and the adjustment is centrally located in the legs to assure smooth action.

Size		Inside Calipers			Outside Calipers			Dividers		
Inch	mm	Cat. No.	EDP No.	Price	Cat. No.	EDP No.	Price	Cat. No.	EDP No.	Price
3"	75mm	274-3	51301		275-3	51305		277-3	51309	
6"	150mm	274-6	51303		275-6	51307		277-6	51311	

TELESCOPING GAGES MEDA SERIES 237:



Double action, self centering, for measuring inside diameters, widths of slots, etc. Contact points are hardened and precision-ground to a radius. Set of 6, in a plastic wallet with the following range:

5/16	to	1/2"
1/2	to	3/4"
3/4	to	1-1/4"
1-1/4	to	2-1/8"
2-1/8	to	3-1/2"
3-1/2	to	6"



MEDA - SUPERIOR IMPORT

Order No. 1625000 Price

PEC - USA

Order No. 1625001 Price

TELESCOPING GAGE SETS

STARRETT SERIES 579:



- Gages have two telescoping arms.
- Handles are rigidly attached to contact plungers and are automatically self-adjusting.
- Constant spring tension gives uniform contact pressure and both plungers are easily locked at any desired setting by a slight turn of the knurled screw in the end of the handle.
- Ends of contacts hardened and ground to a radius to give proper clearance for the smallest hole they will enter.

Range		Handle Length		Catalog No.	EDP No.	Price
5/16-1/2"	8-13mm	2-3/8"	60mm	579A	52610	
		8"	200mm	579A-8	63192	
		12"	300mm	579A-12	63195	
1/2-3/4"	13-19mm	2-3/8"	60mm	579B	52611	
		8"	200mm	579B-8	63193	
		12"	300mm	579B-12	63196	
3/4- 1-1/4"	19-32mm	2-3/8"	60mm	579C	52612	
		8"	200mm	579C-8	63194	
		12"	300mm	579C-12	63197	
1-1/4 - 2-1/8"	32-54mm	2-3/8"	60mm	579D	52613	
		12"	300mm	579D-12	63198	
2-1/8 - 3-1/2"	54-89mm	2-3/8"	60mm	579E	52614	
		12"	300mm	579E-12	63199	
3-1/2 - 6"	89-150mm	3-1/4"	82mm	579F	52615	
		12"	300mm	579F-12	63200	

Sets

Description	Cat. No.	EDP	Price
Set of 4, No. 579A, B, C, D in Case	S579GZ	52616	
Set of 6, No. 579A, B, C, D, E, F in Case	S579HZ	52617	

TELESCOPING GAGES

MIT SERIES 155:
(5/16" TO 6") DOUBLE ACTION -
SELF CENTERING FOR QUICK CHECKING OF
INSIDE MEASUREMENTS.



- Uniform contact pressure.
- Plunger or gage expands in hole to be measured, is locked in place and gage is removed from the hole. Final hole size is obtained by measuring over contacts with a micrometer.
- Constant spring tension for uniform feel.
- Rigid handle with self centering feature.
- Satin chrome finished.
- Contact Points are of hardened tool steel and precision ground on the end measuring radius.
- Telescoping Gage Sets are supplied in a plastic wallet.
- Available individually or as a set.

Range		Order No.	OAL.	Price
5/16 - 1/2	(8 - 12.7mm)	155121	4.33	
1/2 - 3/4	(12.7mm - 19mm)	155122	4.33	
3/4 - 1-1/4	(19 - 32mm)	155123	4.33	
1-1/4 - 2-1/8	(32 - 54mm)	155124	5.90	
2-1/8 - 3-1/2	(54 - 90mm)	155125	5.90	
3-1/2 - 6	(90 - 150mm)	155126	5.90	
5/16 - 6	(8 - 150mm)	155903	6 pc. Set	
1/2 - 6	(12.7 - 150mm)	155904	5 pc. Set	
5/16 - 2-1/8	(8 - 54mm)	155907	4 pc. Set	

PRECISION TOOLS

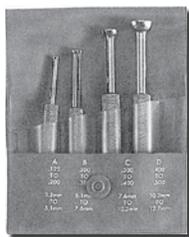
SMALL HOLE GAGE SETS

SERIES 240:



Supplied in two different styles :

1. full ball construction
2. half ball - flat bottom construction; for measuring inside diameters or widths of small shallow holes or slots where regular gages are not accessible. Each set consists of the following 4 gages in a plastic wallet.



Measuring Range	
.125 - .200"	3.2 - 5.1mm
.200 - .300"	5.1 - 7.6mm
.300 - .400"	7.6 - 10.2mm
.400 - .500"	10.2 - 12.7mm

Description	Order No.	Price
Half ball construction	1640096	
Full ball construction	1640097	

SMALL HOLE GAGES -

SHORT SERIES

STARRETT SERIES 830:



Similar to No. 829 Series but with flat bottom contacts for checking size of shallow holes, slots, etc. Short type 2" (50mm) for measuring in close quarters.

Catalog No.	EDP No.	Range - Inch	Range - mm	Price
830A	53076	.125 to .150"	3.2 to 3.8mm	
830B	53077	.150 to .200"	3.8 to 5.1mm	
830C	53078	.200 to .300"	5.1 to 7.6mm	
830D	53079	.300 to .400"	7.6 to 10.2mm	
830E	53080	.400 to .500"	10.2 to 12.7mm	
S830FZ	53081	Set of five (5) in case		

SMALL HOLE GAGES -

FULL BALL

STARRETT SERIES 829:



No. 829 small hole gages accurately measure holes, slots grooves and recesses. Split ball contact regulated by turning knob at end of handle. Measurements obtained by measuring over ball contact with micrometer. Contacts hardened for long life.



Catalog No.	EDP No.	Range - Inch	Range - Metric	Price
829A	53070	.125 to .200"	3.2 to 5.1mm	
829B	53071	.200 to .300"	5.1 to 7.6mm	
829C	53072	.300 to .400"	7.6 to 10.2mm	
829D	53073	.400 to .500"	10.2 to 12.7mm	
S829EZ	53074	Set of four (4) in case		

SMALL HOLE GAGES -

HALF BALL

STARRETT SERIES 831:



Similar to No. 829 Series. Flat bottom contacts for checking size of shallow holes, slots, etc. Contacts hardened.



Catalog No.	EDP No.	Range-English	Range - Metric	Length Approx	Price
831A	53083	.125 to .200"	3.2 to 5.1mm	2-13/16"	
831B	53084	.200 to .300"	5.1 to 7.6mm	3-1/8"	
831C	53085	.300 to .400"	7.6 to 10.2mm	3-3/8"	
831D	53086	.400 to .500"	10.2 to 12.7mm	3-1/2"	
S831EZ	53087	Set of four (4) in case			

RADIUS GAGE SETS
SERIES 246:



For inspection and layout work. Each gage is marked with its radius size and has five measuring surfaces for concave and convex radii. Satin chrome finish. Each set comes in fitted wallet.



No. of Leaves	Range	Order No.	Price
25	1/64-17/64 x 64ths 9/32 - 1/2 x 32nds	1680025	
8 8	9/16 - 1 x 16ths 1-1/16 - 1-1/2 x 16ths	1685300 1686300	
25	.010 - .030 x .005 .040 - .100 x .010 .120 - .220 x .020 .240 - .320 x .040 .350 - .500 x .050	1683300	

RADIUS GAGE SETS
STARRETT SERIES 167:

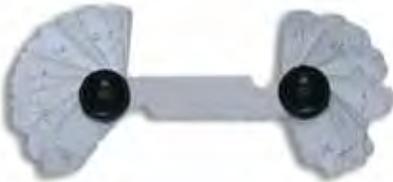


Radii or fillets can be checked or laid out easier, faster and more accurately with Starrett No.167 Radius Gages. They are available individually and in sets, in fractional sizes 1/64-1/2" and decimal sizes .010-.500" and in millimeters from 0.5-15mm. For maximum convenience, these fine gages are offered in many different sets. Each set is furnished in an attractive case which provide complete protection and easy, instant selection of the right gage size for the job.



- Made of stainless steel with satin finish.
- Individual gages allow each gage to be used separately for greatest accuracy and convenience.
- Each gage is marked with its radius and has five different gaging surfaces for both convex and concave radii.
- Precision finished radii with extra smooth, accurate edges.

RADIUS GAGES
SERIES 246:



- Handy device for checking radii of tools and dies easier and faster.
- Gage features leaves for measuring both concave and convex radii.
- Each leaf is clearly stamped with the radius size.

LOCKING TYPE

Order No.	Range	No. of Leaves	Price
1680030	1/32" to 1/4" by 1/64"	30	
1680032	17/64" to 1/2" by 1/64"	32	
1680034	1 to 7 mm	34	
1680232	7.5 to 15mm	32	
1680230	15.5 to 25mm	30	
1680018	0.75 to 5 by 0.25mm	18	
1680016	5.5 to 13 by 0.5mm	16	

No. S167 Radius Gage Sets - Inch

Gages per Set	Radii Range	Description	Catalog No.	EDP No.	Price
16	1/32-17/64" by 64ths	Without Holder	S167AZ	50615	
17	1/64-17/64" by 64ths	With Holder	S167AHZ	50616	
24	1/32-17/64" by 64ths 9/32-1/2" by 32nds	Without Holder 167A, S167B Combined	S167CZ	50618	
8	9/32-1/2" by 32nds	Without Holder	S167BZ	50617	
25	1/64-17/64" by 64ths 9/32-1/2" by 32nds	167AH, S167B Combined With Holder	S167CHZ	50619	
16	1/32-1/2" by 32nds	Without Holder	S167DZ	50620	

No. S167M Radius Gage Sets - Millimeter

Gages per Set	Radii Range	Description	Catalog No.	EDP No.	Price
13	1-7mm x 0.5mm	Without Holder	S167MAZ	55817	
14	0.5-7mm x 0.5mm	With Holder	S167MAHZ	55818	
8	8-15mm x 1mm	Without Holder	S167MBZ	55819	
21	1-7mm x 0.5mm 8-15mm x 1mm	S167MA, S167MB Without Holder	S167MCZ	55820	
22	0.5-7mm x 0.5mm 8-15mm x 1mm	167MB & S167MAH With Holder	S167MCHZ	55821	
15	1-15mm x 1mm	Without Holder	S167MDZ	55822	

No. SD167 Radius Gage Sets - Decimal-Inch

Gages per Set	Radii Range	Description	Catalog No.	EDP No.	Price
19	.020-.300" x .020" .350-.500 x .050"	Without Holder With Holder	SD167FZ SD167FHZ	63464 63460	
26	.010-.025 x .005" .030-.100 x .010" .120-.300 x .020" .350-.500 x .050"	Without Holder With Holder	SD167GZ SD167GHZ	63433 63463	

PRECISION TOOLS

Quality Precision Tools



The Choice Is Yours!!!

FILLET OR RADIUS GAGES

STARRETT SERIES 178:



Starrett®

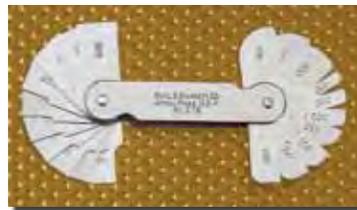


For tool and die makers and other mechanics to lay out and check radii. Each leaf, stamped with radius size, measures both concave and convex radii. Locking device holds any leaf securely in position. Made of finely finished, high quality steel.

No. of Leaves	Range (Concave and Convex)	Catalog No.	EDP No.	Price
30	1/32 – 1/4" by 64ths	178A	50664	
32	17/64 – 1/2" by 64ths	178B	50666	
34	1 – 3mm by 0.25mm 3 – 7mm by 0.5mm	178MA	50665	

FILLET OR RADIUS GAGE

STARRETT SERIES 279:



Starrett®



Has 20 leaves – nine with concave and convex radii from .020" to .100" by .010", four with concave and convex radii from .125" to .200" by .025", one with concave and convex radii of .250", three with concave radii only from .300" to .400" by .050", and three leaves with convex radii only from .300" to .400" by .050".

No. of Leaves	Range	Catalog No.	EDP No.	Price
20	.020 – .400"	279	51314	

ANGLE GAGE

STARRETT SERIES 466:



Starrett®



Toolmakers, inspectors, diesinkers save time in checking angles. Gage has 18 leaves each with a different angle. Approximately 9/32" thick by 1-1/16" wide by 4-3/16" long with following leaves – by degrees, 1°, 2°, 3°, 4°, 5°, 7°, 8°, 9°, 10°, 12°, 14°, 14°-1/2°, 15°, 20°, 25°, 30°, 35°, 45°. Each leaf ground on edges as well as both sides. Made of finely finished, spring tempered steel.

No. of Leaves	Catalog No.	EDP No.	Price
18	466	52463	

18 PIECE ANGLE GAGE SET

SERIES 247:

MEJA
Superior Import



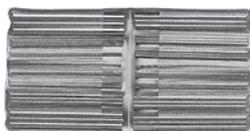
- Eight gaging surfaces per gage,
- Each gage checks primary, 1/2 primary and complimentary angles.
- Quick and accurate inspection of angles and I.D. or O.D. Chamfers in or out of the machine.
- Indispensable for every inspector, tool-maker, machinist, layout and draftsman.
- Complete with fitted case.

Order No.	Price
2470018	

THREAD MEASURING

WIRE SET

SERIES 245:



MEJA
Superior Import

48 Wires - 16 different sizes - to measure external threads by the 3 wire method. Measures all threads from 3-48 TPI and metric threads from .5mm to 6mm pitch. Wires are fitted in a plastic pouch marked with sizes. Includes a laminated chart compiled from the U.S. Standard Handbook.

Order No.	Price
2450000	

MACHINIST GAGE SETS

SERIES 247:



4 PIECES

4 to 84 Screw Pitch Gage,
1/32" to 1/4" Radius Gage,
60° Center Gage &
.0015 to .25" Feeler Gage

4 PIECES

0.4 to 6 Screw Pitch Gage,
1-7mm Radius Gage,
55° Center Gage &
.05 to 1.0mm Feeler Gage

Order No. 2472203

Price

Order No. 2472298

Price

SCREW CUTTING GAGE

SERIES 235:

MEJA
Superior Import



- Made from ground stainless steel
- Clearly etched Graduation.
- Used for gaging thread profiles
47-1/2° British Association, 14-1/2° Acme, 60° American and metric, 55° Whitworth and BSF.

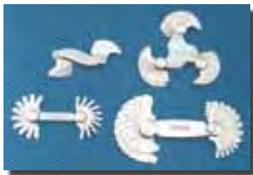
Order No.	Overall length	Price
2355000	2"/50mm	



While we show only the most popular **Starrett** items we can supply their entire range of products. Please inquire for a complete **Starrett** catalog.

SCREW PITCH GAGES

SERIES 789:



Starrett



SCREW PITCH (THREAD) GAGES

SERIES 245:

MEDA
Superior Import



- Useful for determining the pitch of various threads.
- Consists of a substantial steel case with folding leaves. Each leaf has teeth corresponding to a definite pitch marked on the leaf.
- Features a locking device so leaves can be securely locked in position.

V, Unified, American National 60° Threads

Cat. No.	EDP No.	No. of Leaves	TPI Range	Threads per Inch	Price
155**	50588	27	2-1/4 - 28	2-1/4, 2-3/8, 2-1/2, 2-5/8, 2-3/4, 2-7/8, 3, 3-1/4, 3-1/2, 4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 24, 28	
6 ²	50035	30	4 - 42	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42	
474 ²	52486	28	4 - 80	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40, 44, 48, 56, 64, 72, 80	
472 ²	52484	51	4 - 84	First Corner 17 Leaves: 4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18 Second Corner 17 Leaves: 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 Third Corner 17 Leaves: 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84	
473 ¹	52485	30	6 - 60	6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42, 48, 50, 56, 60	

International Metric Standard 60° Threads

Cat. No.	EDP No.	No. of Leaves	TPI Range	Pitches in mm	Price
156M*	50589	28	.25 - 2.5mm	.25, .30, .35, .40, .45, .50, .55, .60, .65, .70, .75, .80, .85, .90, 1, 1.1, 1.2, 1.25, 1.3, 1.4, 1.5, 1.6, 1.7, 1.75, 1.8, 1.9, 2, 2.5	
159M**	50591	28	1 - 11.5mm	0.5, .75, 1, 1.1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5	

* With locking device ** With locking device and 60° center gage.
¹ With positive stop and 11-1/2 and 27 pipe thread pitches
² With locking device and 11-1/2 and 27 pipe thread pitches

Product Description

- Very handy gage to quickly determine the pitch of various threads
- Made of high quality polished tool steel
- Features a locking device at both ends to securely lock the leaves
- All leaves clearly marked with size
- Comes in a plastic pouch

For gaging of 60° "V" thread (except where noted). Each leaf swings out and can be locked into position. Each gage is marked with its size.

TPI Range/ No. of Leaves	Range of Pitches	Order No.	Price
4-42 (30)	4,4-1/2,5,5-1/2,6,7,8,9,10,11,11-1/2,12,13,14,15,16,18,20,22,24,26,27,28,30,32,34,36,38,40,42	1665442	
4-84 (51)	All of above plus : 44,46,48,50,52,54,56,58,60,62,64,66,68,70,72,74,76,78,80,82,84	1670484	
0.25-2.5mm (28)	.25,.30,.35,.40,.45,.50,.55,.60,.65,.70,.75,.80,.85,.90,1.00,1.10,1.20,1.25,1.30,1.40,1.50,1.60,1.70,1.75,1.80,1.90,2.00,2.50	1675001	
0.40-6.0mm (20)	.40,.45,.50,.60,.70,.75,.80,1.00,1.25,1.50,1.75,2.00,2.50,3.00,3.50,4.00,4.50,5.00,5.50,6.00	1675002	
4-42 & 0.25 to 6.0mm (31+24=55)	Combination-American Nat'l 60° and Metric 60° Threads	2451116	
4-62 & 0.25 to 6.0mm (28+24=52)	Combination-Whitworth Standard 55° and Metric Standard 60°	2451118	
4-62G (28)	Whitworth Standard 55°	2451120	

29° ACME SCREW THREAD GAGE

STARRETT SERIES 284: SERIES 245:

MEDA
Superior Import



Used in grinding and setting tools when cutting Acme threads. Range: 1-10 threads per inch.

PRECISION TOOLS

Quality Precision Tools

The Choice Is Yours!!!

MEDA SUPERIOR IMPORT	
Order No. 2450029	Price <input style="width: 50px;" type="text"/>
PEC TOOLS - USA	
Order No. 1695029	Price <input style="width: 50px;" type="text"/>
STARRETT - USA — Catalog No. 284	
Order No. 51319	Price <input style="width: 50px;" type="text"/>

FEELER OR THICKNESS GAGES

SERIES 247:



- Each gage set comprised of thin polished steel blades within a steel case.
- Appropriate thickness clearly marked on each blade (inch and millimeter).
- Approximate length 3-1/2" (90mm)
- Used to check bearing clearance in auto industry, flatness of jigs and fixtures, adjusting spark plugs, etc.

No. of Leaves	Leaf Thickness Range	Straight Blade		Tapered Blade	
		Order No.	Price	Order No.	Price
9	.0015"-.015"	1680009		1682009	
26	.0015"-.025"	1680026		1682026	
20	.05-1.00mm	1685120		1685020	

See our **STOCK MATERIALS** section for Thickness (Feeler) Gage material in:
 1/2" x 12" strips,
 1/2" x 25 foot coils,
 and assortments.



NO. 270 TAPER GAGE

STARRETT SERIES 270:



- The Starrett No. 270 Taper Gage is a very useful tool, especially for bearing work and for gaging slots.
- The gage is made of quality tool steel 7/16" (11 mm) wide by 6-1/4" (160mm) long and is accurately tapered throughout its entire length for quick and convenient measuring of slot widths, etc.
- One side is graduated from .010" to .150 in thousandths of an inch and the reverse side from 0.3 mm to 4 mm in one-twentieth of a mm (0.05 mm).

Catalog No.	EDP No.	Price
270	51292	

THICKNESS GAGES

English and Metric
 SERIES 789:



Leaves made of tempered steel, carefully finished to correct thickness, individually tested and marked. A locking device is furnished. Leaves may be easily removed or replaced.

Catalog No.	EDP No.	Size Leaves	Range	Price
Inch Reading Thickness Gages with Straight Leaves				
66 (26 leaves)	50314	1/2 x 3-1/32"	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025"	
66B (31 leaves)	57097	1/2 x 3-1/32"	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025, .026, .028, .030, .032, .035"	
467 (13 leaves)	52464	1/2 x 4-1/2"	.0015, .002, .003, .004, .006, .008, .010, .020, .030, .040, .075, .100, .200"	
172E (8 leaves)	50654	1/2 x 12"	.002, .003, .004, .005, .006, .008, .010, .015"	
Inch Reading Thickness Gages with Tapered Leaves				
66T (26 leaves)	50315	1/2-1/4 x 3-1/32"	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025"	
172CT (8 leaves)	50652	1/2-1/4 x 6	.002, .003, .004, .006, .008, .010, .012, .015	
Millimeter Reading Thickness Gages with Straight Leaves				
66MA (20 leaves)	55974	12.7 x 77mm	0.05, 0.10, 0.15, 0.20, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.0	
173MA (13 leaves)	57086	12.7 x 77mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50	
467M (13 leaves)	52465	12.7 x 114mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.10, 0.15, 0.20, 0.30, 1.0, 2.0, 3.0, 5.0	
Millimeter Reading Thickness Gages with Tapered Leaves				
172MBT (9 leaves)	50656	12.7-7 x 114mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.10, 0.15, 0.20, 0.30	
173MAT (13 leaves)	57087	12.7-7 x 77mm	.03, .04, .05, .06, .07, .08, .09, .10, .15, .20, .30, .40, .50	
173MCT (13 leaves)	57088	12.7-7 x 152mm		

TAPER (BORE) GAGE

SERIES 247:



- Handy gage for measuring cylindrical bores, bearing work and for gaging slots.
- Made from matte finished stainless steel
- Clearly etched graduations for precise measurement.

Order No.	Range	Price
2470115	1/32-5/8" 1 to 15mm	

TAPER GAGES
SERIES 269:



For determining hole size in dies and all kinds of other work. Reads in thousandths of an inch or 0.02mm. All sizes are made from spring tempered steel approximately .012" thick and have a locking device which makes it possible to lock any leaf in position for use. Furnished in a protective case.

Leaves	Catalog Range	Length	No.	EDP No.	Price
8	1/10 - 1/2"	2-1/2"	269A	51290	
10	1/2 - 1"	2-3/4"	269B	51291	
10	2 - 12mm	64mm	269MA	56031	
13	12-25mm	70mm	269MB	56032	

DRILL GAGES
SERIES 244:

- Made of heavy gage carbon steel.
- Hole sizes and decimal equivalents permanently etched.



Order No.	For Drill sizes	Price
1660214	A - Z	
1660211	1 - 60	
1660213	1/16 - 1/2 by 64ths	
1660215	Set of above 3	
1660212	1 mm - 13mm	

DRILL AND WIRE GAGES
SERIES 244:



WIRE GAGE



STANDARD - Satin Chrome Finish, Hardened.

Description	Range	Order No.	Price
Drill Gage	#1 - #60 - 60 Holes	1660001	
Drill Gage	#61 - #80 - 20 Holes	1660002	
Drill Gage	1/16 - 1/2 x 1/64 - 29 Holes	1660003	
Drill Gage	A - Z - 26 Holes	1660004	
Drill Gage	1mm - 5.9mm - 57 Holes	1660011	
Drill Gage	1.5mm - 12.5mm - 30 Holes	1660012	
Wire Gage	0-36 American Standard	1660100	
Wire Gage	0-36 U.S. Standard	1660200	

DRILL AND STEEL WIRE GAGE - HARDENED

SERIES 186, 187, 198, 286:



- Used to quickly and conveniently identify drill bit sizes.
- Made of heavy gage steel, machined and ground to close tolerances.
- Hole sizes and decimal equivalents are permanently etched on the face.
- Attractive satin finish.
- Gage is thoroughly tested for accuracy after hardening.

Range Drill Sizes	Catalog No.	EDP No.	Price
No. 1 - 60	186	50676	
No. 61 - 80	286	51320	
1/16 - 1/2"	187	50677	
A-Z	198	50718	

WIRE GAGES- RECTANGLE AND ROUND
SERIES 244:

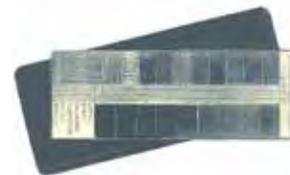


- Popular gage for iron wire, hot and cold rolled sheet steel.
- Made from bright finished and polished hardened stainless steel.
- Gages have a convenient decimal equivalent of each number.
- Clear permanently etched graduations in USA Standard.



Order No.	Description	Price
1660400	Rectangular	
1660300	Round	

SURFACE ROUGHNESS GAGE (MICRO FINISH COMPARATOR)
SERIES 247:



Contains 22 specimens of differently machined surfaces (Lapped, Ground, Blanchard, Turned, Milled and Profiled) from 2 to 500 micro inches.

Order No. 1685022	Price	
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Quality Precision Tools

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MICROFINISH SURFACE COMPARATORS

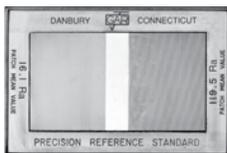


SERIES 713:

ALL COMPARATORS ARE MADE OF ELECTROFORMED NICKEL

Individually serialized, calibrated and certified reference standards are available at an additional charge.

PRECISION REFERENCE STANDARD: an economical calibration standard for surface analyzing equipment. Ra values 119.5 and 16.1; includes certification traceable to N.I.S.T. Individually serialized, calibrated and certified. Reference Standards are also available.



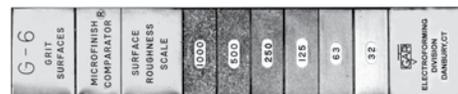
Model No.	Order No.	Price
PRS-603	2470001	

CYLINDRICAL GROUND MICROFINISH COMPARATOR: 10 replicated ground surface finish specimens: 5 shown as inside diameter (I.D.) and 5 shown as outside diameter (O.D.) - both with a range of 4 to 63 microinches.



Model No.	Order No.	Price
G-62	2470062	

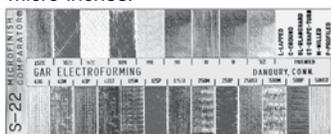
GRIT-BLAST MICROFINISH COMPARATOR: 6 replicated grit-blasted surface finish specimens ranging from 32 to 1000 microinches.



Model No.	Order No.	Price
G-6	2470006	

CONVENTIONAL MACHINING MICROFINISH COMPARATOR:

22 replicated machined surface finish specimens with examples of six different machining processes: lapped, ground, blanchard ground, shape-turned, milled and profiled - ranging from 2 to 500 micro-inches.



Model No.	Order No.	Price
S-22	2470022	

CYLINDRICAL TURNED MICROFINISH COMPARATOR: 10 replicated turned surface finish specimens: 5 shown as inside diameter (I.D.) and 5 shown as outside diameter (O.D.) - both with a range of 16 to 250 microinches.



Model No.	Order No.	Price
G-63	2470063	

SHOT-BLAST MICROFINISH COMPARATOR: 6 replicated shot-blasted surface finish specimens ranging from 32 to 1000 microinches.



Model No.	Order No.	Price
SH-6	2470106	

CONVENTIONAL MACHINING MICROFINISH COMPARATOR:

12 replicated machined surface finish specimens with examples of five different machining processes: lapped, ground, profiled, shape-turned and milled - ranging from 4 to 125 microinches.



Model No.	Order No.	Price
G-60	2470060	

For MEDA - Superior Import see previous page.

CAST MICROFINISH COMPARATOR: 9 replicated cast surface finish specimens ranging from 20 to 900 microinches.



Model No.	Order No.	Price
C-9	2470009	

CONVENTIONAL MACHINING MICROFINISH COMPARATOR: 12 replicated machined surface finish specimens with examples of four different machining processes: shape-turned, ground, profiled and milled-ranging from 250 to 2000 microinches.



Model No.	Order No.	Price
G-61	2470061	

ELECTRICAL DISCHARGE MACHINED MICROFINISH COMPARATOR (EDM): 9 replicated EDM surface finish specimens ranging from 16 to 250 microinches.



Model No.	Order No.	Price
E-9	2470109	

MASTER VISUAL-TACTUAL SET: 8 individual blocks with fifteen replicated machined surface finish specimens ranging from 2 to 125 microinches.



Model No.	Order No.	Price
M-15 Set	2470015	

GAR PAK KIT: Contains 4 individual roughness scales that include replicated surface finish specimens of machined (S-22), grit-blasted (G-6), shot-blasted (SH-6) and electrical discharge machined (EDM) (E-9) surfaces.



Model No.	Order No.	Price
G-4 Kit	2470004	

CENTER GAGES
SERIES 248:



- Very handy gage used in grinding and setting screw cutting tools.
- Made of tempered stainless steel.
- Clearly etched scale for finding number of threads per inch.
- Inch gage is graduated in 14ths, 20ths, 24ths, 32nds and features a table of double depth of thread for determining size of tap drills.
- Metric Gage graduated in mm and 1/2mm.
- Supplied in a plastic pouch.



Order No.	Description	Price
1690060	American Unified National Standard 60°	
1690560	Metric 60°	

TWIST DRILL GRINDING GAGE
SERIES 235:



- For twist drills with acute angle of 118° up to 2" (50mm) diameter.
- Made from Stainless Steel.

Order No.	Overall length	Price
1615002	4-1/2"/114mm	



UNIVERSAL GRINDING GAGE
SERIES 235:



- Made of Polished Stainless Steel.
- Clearly etched graduations.
- Combines twist drill grinding gages, thread gage.
- Measures square and hexagonal angles of 120°, 118°, 90°, 60°, 55°

Order No.	Overall length	Price
1615003	3-3/4"/95mm	



ROUND BAR CENTER FINDER
SERIES 250:



- Accurately and quickly locates center on round workpiece.
- For execution place the tool in drill chuck or collet and line up pointer with line scribed on shaft.
- Supplied with instructions



Order No.	Shank Dia.	Overall Length	Price
1700025	3/8"/9.5mm	4-1/8"/105mm	

60° CENTER GAGES
SERIES 248:



Used in grinding and setting screw cutting tools. Graduated in 14ths and 20ths on one side and 32nds and 32nds on the other side for determining threads per inch. Features table of double depths of threads for determining size of tap drills. The metric model is graduated in millimeters on one side.

Inch	Order No. 1690061	Price
Metric	Order No. 1690561	Price

CENTER GAGES
STARRETT SERIES C391, C396, C398M:



C391 and C396 are graduated in 14ths, 20ths, 24ths, and 32nds for finding number of threads per inch. No. C391 has table of double depths of threads for determining size of tap drills. Graduations on No. 398M are in mm and 1/2mm. All gaging surfaces ground. Satin Chrome finish.



Catalog No.	EDP No.	Description	Price
C391	51475	American National or U.S. Standard, 60°	
C396	51477	Whitworth or English Standard 55°	
C398M	51478	Metric Standard, 60°	

DRILL POINT GAGE
SERIES 235:



- For properly grinding 59° drill points for measuring drill tips.
- Rule and slide are made of steel with non-glare hard chrome finish.
- 6" rigid rule is calibrated in 8ths, 64ths, 32nds, and 64ths.
- Slide is calibrated in 32nds and 64ths.
- End clip is adjustable and removable.
- Versatile - can be used as rule, hook rule, try square, depth gage or caliper and for layouts.

Order No. 1615000	Price

DRILL POINT GAGE
STARRETT SERIES 22:



Provides a quick accurate way for determining the correct drill point angle of 59° and the correct length of drill lips.

- Length 6"
- Head is beveled to 59°, graduated in 32nds
- Blade graduations - 8ths, 16ths, Quick Reading 32nds, 64ths
- Sliding head can be adjusted and locked by a thumb nut.
- Hook can be adjusted or extended on either side of rule or removed.
- Can also be used as plain rule, hook rule, depth gage, and slide caliper.

Catalog No.	EDP No.	Price
22C	50150	

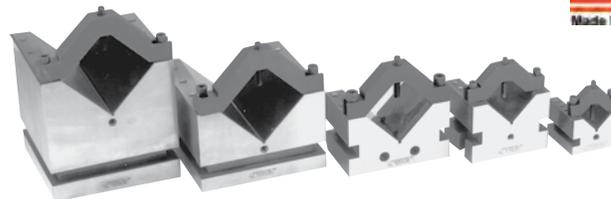
V-BLOCKS AND CLAMPS

SERIES 255:



V-BLOCKS

SERIES 641: SUBURBAN - USA
SERIES 794: MEDA - SUPERIOR IMPORT



Made of hardened steel and precision ground. Matched and numbered in pairs. Blocks can be used on sides since clamps do not protrude.

All vee blocks are parallel, square and central within .0002". Each block comes with one clamp and blocks are available in matched pairs. All models are made of hardened steel. Sizes other than those listed are available by special order.

Capacity	Size (L x W x H)	Order No.	Price
2 dia.	2-3/8 x 2-3/4 x 2	1725005	

V-BLOCK AND CLAMPS

SERIES 255:



Made of tool steel, hardened and precision ground. Matched and numbered in pairs to an accuracy of .0002". Models 003 and 004 can be used on their sides since clamps do not protrude.

Capacity	L x W x H Size	Order No.	Price
1 dia.	1-5/8 x 1-1/4 x 1-1/4	1725000	
1 dia.	1-3/8 x 1-5/8 x 1-3/4	1725001	
1-1/2 dia.*	2 x 1-1/2 x 1-1/2	1725007	
1-1/2 dia.	1-5/8 x 1-3/4 x 2-3/4	1725002	
1-1/2 dia.	1-3/4 x 2-1/2 x 2-3/4	1725003	
2-1/8 dia.	2-3/4 x 3-1/2 x 4-7/8	1725004	

*One clamp per set.

V-BLOCK AND CLAMP

SERIES 255:



Made of hardened steel and precision ground. Block can be used on its base, end, or sides. Block has 4 tapped clamping holes with 3/8"-16 thread. Clamp has adjustable side screw for support.



90° SUPER DUTY V-BLOCK SETS

SERIES 255:



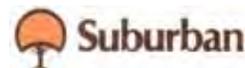
All V-blocks are parallel, square and centered within 0.0002". Completely hardened and ground tool steel, fitted case. One reversible swing away clamp supplied with each block.



INDIVIDUAL BLOCKS							
Model No.	Dim.	"V" Cap	Lbs.	Suburban		MEDA	
				Order No.	Price	Order No.	Price
90° V Blocks							
VB-222-S0	2-1/2 x 2-1/2 x 2	1-5/8	3 lbs.	6410049		7940015	
VB-334-S1	3 x 4 x 3	2-7/8	9 lbs.	6410050		7940016	
VB-466-S2	6 x 6 x 4	4-3/8	33 lbs.	6410051			
VB-666	6 x 6 x 6	4-3/8	50 lbs.	6410052			

MATCHED PAIRS 90° V Blocks				
Model No.	Suburban		MEDA	
	Order No.	Price	Order No.	Price
VB-222-M-S0	6410053		7940017	
VB-334-M-S1	6410054		7940018	
VB-466-M-S2	6410055			
VB-666-M	6410056			

Quality Precision Tools



The Choice Is Yours!!!

Capacity	Size	Order No.	Price
1-5/16 dia.	1-7/8 square x 3-5/8 long	1725006	

Dimensions	Vee Capacity	Order No.	Price
2-3/8x2-3/8x2"	1-3/16"	2550000	
4-1/8x4-1/8x3-1/16"	2-9/16"	2550001	

PRECISION V-BLOCK AND CLAMP - FOR LARGER CAPACITY WORK
STARRETT SERIES 578:



V-block will handle round work up to a diameter of 4" (100mm). The block can be used on its side or on its end for machining or inspection, with no interference from the clamp. A reversible swing-away style clamp is furnished with the unit. The three tapped hole positions in the V-block for the clamp allow the clamp to be positioned at either end or at the center. Two tapped holes in one end of the V-block provide for mounting it perpendicular to a face plate. Clearance holes in the bottom provide for mounting the V-block to angle plates or other fixtures. The block is 5-1/4" wide, 3" high and 3-3/8" long (133 x 75 x 86mm) and made of hardened steel, precision ground.



Description	Capacity Diameter	Catalog No.	EDP No.	Price
V-block and clamp	Max 4" (100mm) Min. 9/16" (14mm)	578	64960	

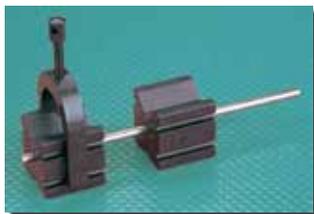
V-BLOCK AND CLAMP
STARRETT SERIES 567:



Can be used on base, end, and flat on either side as clamp is within outside width of block. Clamp is provided with an adjustable side screw with caps to support block and prevent tilting. Groove at stepped end at right angle to base and is handy for holding shouldered studs, round pins, etc. Hole clearance for drilling and removing dowel pins is provided. Block has four 3/8" -16 tapped holes, two in base and one on each side to attach angle iron. Angle iron holding block can then be attached to lathe faceplate or held by magnetic chuck. Block made of hardened steel. Sides are ground parallel and the groove central and parallel to sides and base. Size 1-7/8" (48mm) square, base length about 3-1/2" (89mm).

Description	Capacity	Catalog No.	EDP No.	Price
Set complete: One V-block and one clamp	1-5/16" (33mm)	567	52588	

V-BLOCKS AND CLAMP
STARRETT SERIES 271:



- Complete set with 2 V-blocks and 1 clamp.
- Case hardened steel.
- Used singly or in pairs.
- Includes steel rod which keeps blocks in alignment.
- Hold work up to 1-1/4" (32 mm) diameter.

Catalog No.	EDP No.	Price
271C	51295	

V-BLOCKS AND CLAMPS FOR ROUND OR SQUARE WORK
STARRETT SERIES 568:



- Clamps have screw holes at 45° and 90° for holding either round or square work.
- Clamp can be mounted on V-block in low or high position for small or large work.
- 3/8"-16 Tapped holes for mounting the V-block on face plates or angle irons.
- V-blocks are hardened steel precision ground, parallel, and square on all sides.
- V-groove is ground central and parallel to sides and base for perfect alignment in matched pairs.
- Each block is 2-1/2" long x 3" wide x 2" high (63 x 75 x 50 mm).

V-BLOCKS AND CLAMPS SET
STARRETT SERIES 278:



V's are ground central, parallel and square with ends and sides. Made of tool steel and hardened. Manufactured and numbered in pairs, so that V's in each block are always in alignment. Tapped hole 1/4"-20 through sides. Angle iron and blocks can then be attached to lathe faceplate or held by magnetic chuck. Each block 1-1/4" (32mm) square and 1-5/8"(40mm) long.



Description	Capacity	Catalog No.	EDP No.	Price
Set complete: Two V-blocks (one pair) and two clamps	1"/25mm	278	51312	

Description	Catalog No.	EDP No.	Price
Two V-blocks (matched pair) and two clamps 2" (50mm) round - 1-7/16" (36mm) square capacity	568C	52592	

PRECISION TOOLS

SUPER WEE BLOCKS

SERIES 986:



(Smallest Vee Blocks in the World)

Ideal for: holding and indexing pins and punches while grinding-drilling-milling-EDM work (electrodes, etc.). Inspecting parts on optical comparators. Used in conjunction with large V-Blocks or Magnetic V-Blocks. Provides maximum bearing surface. It's a complete holding fixture system with bridges to straddle longer parts and yet the top hold-down screw of grinding fixture is utilized efficiently. Work area is clearly visible. Grind or machine miniature or intricate parts.

- Precision hardened and ground, Wee Blocks are within .0002" in both squareness and parallelism.
- Clamps are reversible.
- Blocks and clamping bars are hardened



Complete in Fitted Case, set includes:

- 1- Super Wee Block "A" capacity .030"-5/32"
- 1- Bridge A (for above)
- 1-Super Wee Block "B" capacity .050"-9/32"
- 1-Bridge B (for above)
- 1-Ring Clamp with thumb screw for Block "A"
- 1-Ring Clamp with thumb screw for Block "B"
- 2-Top Clamping Bar - 1/8"
- 2-Top Clamping Bar -5/32"
- 1-Top Clamping Bar -3/16"



Model No. 16096	
Order No. 8616096	Price



While we show only the most popular **FLEXBAR** items we can supply their entire range of products. Please inquire for a complete **FLEXBAR** catalog.

MICRO-RISE HIGH PRECISION ADJUSTABLE "V" BLOCKS

SERIES 986:



High Precision Adjustable V-Blocks Use for inspection, production milling, work staging, spin grinding, or any operation requiring precision adjustable support.

FEATURES:

- Hardened and ground anvils support up to 1,000 lbs.
- Wide angle "V" accepts 3/16" to 5" diameters.
- Top flats ground parallel to base. Can hold wide, flat parts. Narrow flats may be held on a parallel across top.
- Vibration lock, (position lock), prevents creeping.
- Insures solid support without deflection
- 1/2" total rise of "V", .050" per revolution.
- Dial graduated in increments of .001".
- Available in metric screw and dial.

Dimensions	
• Base.....	1-3/4 x 4"
• "V" Section.....	13/16" Wide
• Height Closed	3"
• Height Open	3-1/2"
• Standard "V" Angle.....	120°
• Special "V" Angle.....	90° on request

Model No.	Description	Order No.	Price
16505	Std. 2 pc. set	8616505	
16507	Std. 2 pc. set w/clamps	8616507	

BALL BEARING "V" BLOCK

Enables you to inspect and detect out-of-round conditions and lobes with no damage to parts and no damage to blocks.

SERIES 986:

Sold in Matching Pairs:
±5 Microns
with Clamps & Test Ball



Model No.	Size	Inspection Capacity	Dia. of Balls	Wt. Capacity of Pair	Work Capacity w/ Clamps	Order No.	Price Per Pair
16093	Small (2"x2"x1")	3/64" to 2-1/2"	1/2"	220 lbs.	1-1/4"	8616093	
16094	Medium (3-3/8"x3-3/8"x1-3/8")	3/32" to 5"	15/16"	1,100 lbs.	2-1/2"	8616094	
16095	Large (4-3/4x4-3/8"x2-3/8")	3/16" to 15"	1-1/2"	2,000 lbs.	3"	8616095	

MAGNETIC V BLOCK-DUAL VEE  **SUPERIOR IMPORT**
 SERIES 509:

- All working surfaces are precision ground.
- Ideal for holding, inspection and light machining.
- Accuracy of Vee is within 0.0003" (0.007mm).
- Powerful, permanent magnet is controlled by rotary ON/OFF switch.
- Supplied in fine finished wooden box.
- 6" long V-block is 50% longer and 100% stronger than 4" V-blocks.

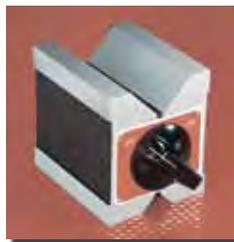


Order No.	Length	Width	Height
1726012	2-3/4"(70mm)	2-1/8"(54mm)	2-7/8"(73mm)
1726006	4"(100mm)	2-3/4"(70mm)	3-3/4"(95mm)
1726212	4"(100mm)	2-3/4"(70mm)	3-3/4"(95mm)
1726220	6"(150mm)	3"(75mm)	3-3/4"(95mm)

Order No.	V-Width		Price
	Big V	Small V	
1726012 (Single)	1-1/2"(38mm)	3/4" (19mm)	
1726006 (Single)	2"(50mm)	3/4" (19mm)	
1726212 (Pair)	2"(50mm)	3/4" (19mm)	
1726220 (Single)	2-1/4"(55mm)	1" (25mm)	

DUAL - VEE MAGNETIC V-BLOCK

STARRETT SERIES 271:



Magnetic V-blocks are designed for versatility and accuracy. All working surfaces are precision ground to provide convenient set-ups for inspection and light machining. Two precision vees will hold round stock sizes from 1/4" to 1-3/4" diameters. A powerful permanent magnet is controlled by a rotary switch. All working surfaces are heat treated for long wear and stability. Each block is 2-1/2" wide x 3" high x 3" (63 x 75 x 75mm) long. The top vee is 1-1/2" (38mm) wide at top, and 3/4" (19mm) wide at bottom with 90° included angles.

Capacity	Catalog No.	EDP No.	Price
1-3/4" (44mm)	566	63323	

HIGH PRECISION TOOLMAKERS VISES  **SUPERIOR IMPORT**
 SERIES 256:



Made of hardened steel. All surfaces including jaws are precision ground with .0004" accuracy for flatness, parallelism and squareness. Can be used in any position. Models 1730001 and 1730002 have "V" grooved jaws for holding round work.

Width	Height	Depth of Jaw	Jaw Opening	Order No.	Price
2-3/8"	1-3/4"	15/16"	2-3/16"	1730001	
2-7/16"	2-7/16"	1-1/8"	3"	1730002	
3"	2-1/4"	1-1/4"	2-3/8"	1730003	

QUICK ACTING PRECISION VISES  **SUPERIOR IMPORT**



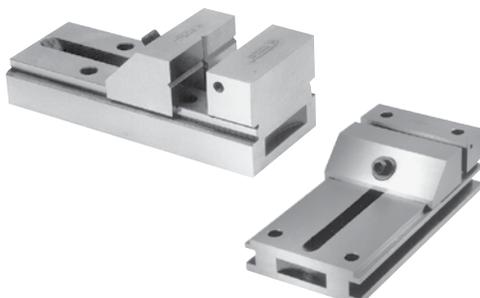
All surfaces hardened and precision ground to ± .0002". Base and stationary jaw are one solid piece. Horizontal and Vertical "V" on moveable jaw for holding round work. Up to 400 lbs. pressure at 45° downward angle keeps work rigid. Quick adjustment is made by pulling pin and pushing sliding jaw forward -then tightening with an Allen wrench.

Overall Length	Width	Height	Depth of Jaw	Jaw Opening	Order No.	Price
6"	2"	2"	1-3/16"	3"	1730206	
7"	3"	3"	1-1/2"	3-3/8"	1730307	

PRECISION VISES

SERIES 641: SUBURBAN - USA

SERIES 794: MEDA - SUPERIOR IMPORT



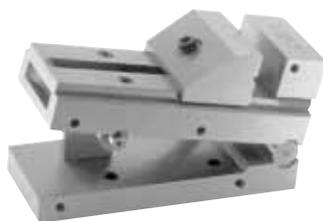
Angled channel provides extra jaw capacity. Jaw can be opened or closed without unbolting from work surface. Squareness and parallelism within .0002". V-237-S1 has recessed pockets at both ends for clamping. Vees machined in face of moveable jaw and 12 stepped channel which eliminates side holes are available on some models.

Model	Dimensions	Jaw Cap	Lbs.	Suburban		MEDA	
				Order No.	Price	Order No.	Price
V-225-S0	5-7/8 x 2 x 2	3-1/4	6 lbs.	6410036		7940006	
V-237-S1	7-1/2 x 3 x 2-5/8	4-3/4	11 lbs.	6410037		7940007	
V-411-S2	11 x 4 x 3	7	20 lbs.	6410038		7940008	
V-612-S2	12 x 6 x 3-7/16	8	40 lbs.	6410039		7940009	

PRECISION TOOLS

SINE VISES

SERIES 641: SUBURBAN - USA
 SERIES 794: MEDA SUPERIOR IMPORT



Made of hardened steel, Suburban's vises are square and parallel to within +.0003", including vees in sliding jaw. One locking strap included with each vise.

Model	Dimensions	Jaw Capacity	Weight	Center Distance of Rolls	SUBURBAN		MEDA	
					Order No.	Price	Order No.	Price
SV-337-S1	7-1/2 x 3 x 3-5/8	4-3/4	17 lbs.	5.000 within .0002	6410033		7940010	
SV-411-S2	11 x 4 x 4-5/8	7	39 lbs.	10.000 within .0002	6410034		7940011	
SV-612-S2	12 x 6 x 5-1/8	8	60 lbs.	10.000 within .0002	6410035		7940012	

MINI SWIVEL PRECISION VISE

SERIES 256:



This extremely versatile vise is made to highest accuracy standards and is supplied with removable jig plates.

SPECIFICATIONS:

Jaw Width	2-3/4"
Jaw Depth (including jig plates)	1-1/8"
Jaw Opening	25/32"
Overall Height	2-5/8"
Hardness	Rc 58-62°
Tolerance	± .0004" Square and Parallel
Base plate has 4 clamping slots	
Swivels	180°

Order No. 1730004	Price	
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MAGNETIC EDGE FINDERS

SERIES 250:



- Conveniently attaches itself to workpiece with built-in permanent magnet.
- Precision ground, allows workpieces to be indicated within accuracy of ± .0001"
- If hole or slot is indicated to centerline of spindle the edge of workpiece will automatically be on center line.
- Avoids calculation errors by eliminating additions or subtractions.
- Two models to choose from — Slotted model to pick up single edges and Double Edge model with centering hole to pick up tangent of 2 edges.

Model SEF Single Edge Finder	
Order No. 649910	Price
Model DEF Double Edge Finder	
Order No. 649920	Price



MINI PRECISION TOOLMAKERS

INSERT VISE

SERIES 256:



- Also used in large vises.

APPROXIMATE DIMENSIONS:

- Jaw width - 15/16"
- Jaw Opening - 1/2"
- Weight - 11oz.
- Jaw Depth - 4/10"
- Length - 2-1/2"



Order No. 1730006	
Price	

FINDERS (EDGE AND CENTER)

SERIES 250:



To locate work edges shoulders, grooves, center points, and scribed lines for accurate machining such as jig boring, etc. All parts hardened and ground.



Style / Type	Shank Dia.	Contact Dia.	Order No.	Price
Single End / Edge	3/8"	.200"	1700001	
Single End / Edge	1/2	.500	1700002	
Double End / Edge	1/2	.200 and .500	1700003	
Double End / Edge & Center	1/2	.200 and Ptd. contact	1700004	
Double End / Edge & Center	3/8	.200 and Ptd. Contact	1700005	
Single End / Edge	1/2	.200	1700006	
Single End / Center	3/8	Pointed Contact	1700007	
Single End / Center	1/2	Pointed Contact	1700008	
Single End / Edge	10mm	10mm	1700026	
Single End / Edge	12mm	5mm	1700077	

Sets	Order No.	Price
4pc Set of #s 1700001 - 1700004	1700021	
4pc Set of #s 1700005 - 1700008	1700022	
6pc Set of #s 1700001 - 1700006	1700023	
8pc Set of #s 1700001 - 1700008	1700024	

PRECISION TOOLS

Quality Precision Tools

The Choice Is Yours!!!

EDGE FINDERS
STARRETT SERIES 827:



Work with flat, straight edges, shoulders, grooves, round work, studs, dowels, or center points and scribed lines can be accurately located with this handy tool. Double end model has a pointed contact at opposite end for locating center points and scribed lines. Body and contacts made of tool steel, hardened, ground and lapped to close tolerances for diameter and concentricity. Furnished in protective case.

Body Diameter	Contact Diameter	Description	Catalog No.	EDP No.	Price
.375"	.200"	Single End	827A	53062	
.500	.200 and pointed contact	Double End	827B	53063	
10mm	6mm	Single End	827MA	56041	

ROUND BAR CENTER FINDER
SERIES 250:



- € Accurately and quickly locates center on round workpiece.
- € For execution place the tool in drill chuck or collet and line up pointer with line scribed on shaft.
- € Supplied with instructions



Order No.	Shank Dia.	Overall Length	Price
1700025	3/8"/9.5mm	4-1/8"/105mm	

STEREO MICROSCOPES
SERIES 510:



DELUXE FEATURES:

- Fully coated, excellent optics give an upright image over a wide field of view, sharp and clear
- Provides the original true color of the viewed object
- Accurate alignment ensures the observer fatigue-free viewing
- 45° inclined binocular head, with locked-in eyepieces.
- Left ocular-tube with diopter adjustment range of ±5mm
- Interpupillary distance adjustable between 2.16 - 2.95"
- Working distance 2.09"
- Includes paired eyecaps, a dust cover, paired clips
- Well-painted metal base
- Precise and smooth rack & pinion focus system
- Equipped with an arm stand.



Order No.	Price
5100600	

Eyepiece **WF10X**
Objective **2X / 4X**
Object Plate **White / black, glass, Ø3.74"**
Light Source **Top & bottom incandescent light**

Description	Order No.	Price
Accessories 15X Eyepiece pair	5100515	
20X Eyepiece pair	5100520	

WIGGLER OR CENTER FINDER
SERIES 250:



The attachments permit this tool to be used for many different applications such as: checking concentricity, establishing center distances, positioning tool spindle in relation to work surfaces, etc. Set includes body and the following interchangeable attachments:

- Ball contact (.250" dia.)
- Disc contact (.100" Dia.)
- Needle point
- Offset indicator holder

Order No.	Price
1700500	

WIGGLER OR CENTER FINDER WITH ATTACHMENTS
STARRETT SERIES 828:



Wiggler/Center Finder, complete with Pointed Shank, Ball Contact, Disc Contact, Offset Indicator Holder, and Case.

- Furnished with offset indicator holder and chuck designed to hold all attachments.
- Four attachments adapt the tool to countless applications.
- Check run-out or concentricity; establish center distances, check straightness or alignment of flat surfaces.
- With Pointed Shank, working centers can be accurately located.

Catalog No.	EDP No.	Description	Price
S828HZ	53064	Wiggler/Center Finder, complete with case and 4 attachments	

See Our Entire Selection of:

MICROMETERS..... See index



HEIGHT GAGES See index





POCKET MICROSCOPE SERIES 510:



50 POWER
(Microscope has inverted image)

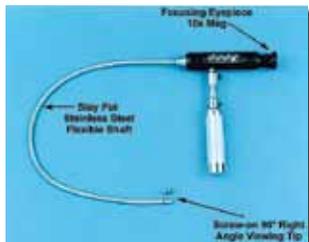
Model Number 2013	
Order No. 5105010	Price <input type="text"/>

FIBEROPTIC FLEXIBLE BORESCOPE

SERIES 986:

**GENERAL PURPOSE INDUSTRIAL SCOPE
HANDLING MULTIPLE INSPECTION TASKS**

General Purpose Model: Direct & Right Angle Viewing
This general purpose fiberscope is designed to be a valuable inspection device which is capable of reducing or eliminating costly machine & equipment teardown for inspection purposes. With the portable battery handle light source, the GP model becomes a self-contained, versatile inspection device to detect worn, damaged, or otherwise inadequate conditions in hidden or normally inaccessible areas.



Specifications:

- Shaft Dia. .312" (7.9mm).
- Shaft Length: 24".
- Min Band Radius: 1.5".
- Field of View: 60 Degrees.
- Depth of Field: 2"-3.0".

Features:

- B-Style, Diopter Adjustable Eyepiece.
- ACMI Light Guide Connector.

Complete with light handle, right angle attachment, and heavy-duty carrying case.

Model No. 16128
Order No. 8616128
Price <input type="text"/>



COMPARATORS AND MAGNIFIERS SERIES 510:



POCKET COMPARATOR

Has a precision ground achromatic lens (3 element, 2 groups), photo etched scale, with 7x magnification.

Order No. 1001975	Price <input type="text"/>
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ELECTRONIC GAGES SERIES 544:



Highly sensitive gages for fast and accurate positioning. Each gage features three LED indicators which provide 360° visibility. Gages are made of hardened and ground chrome steel and include two batteries.

EDGE FINDER

Highly sensitive for fast and accurate positioning. Lights up on contact. T.I.R. within .0002". 3/4" Shank Diameter. .400 Probe Diameter.

Order No. 5440000	Price <input type="text"/>
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MEDA - SUPERIOR IMPORT	
Order No. 5440500	Price <input type="text"/>



POCKET COMPARATOR SET

Includes the Model 1975 comparator with the 5 most popular reticles, namely #1,#5,#7,#8, and #12 in fitted case.

Order No. 1001976	Price <input type="text"/>
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POCKET COMPARATOR



Has a precisely ground achromatic lens (coated 4 elements, 2 groups), photo etched scale with a 10x magnification.

Order No.: 1001983	Price: <input type="text"/>
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POCKET COMPARATOR SET

Includes the Model 1983 comparator with the 5 most popular reticles, namely, #1,#5,#7,#8 and #12 in fitted case.

Order No.: 1002004	Price: <input type="text"/>
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HEIGHT OFFSET GAGE



For fast and accurate setting and measurement of vertical tool height. Lights up on contact.

Order No. 5440010	Price <input type="text"/>
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3 DIMENSIONAL ELECTRONIC SENSOR (x, y, z)

- A new concept for fast and accurate "zero" finding, and starting point for all three axes (x,y,z).
- Made of high quality steel hardened to RC60, precision ground on all surfaces.
- Operates in vertical and horizontal position.
- Over travel safety zone in all three axes: x,y - .100", z - .200".
- Shank Diameter .750" +.0000/-.0002".
- Probe diameter .2000", ±.0002".
- "Z" axis to reference surface 2.000" ±.0002
- Repeatability ±.0005".

Order No. 5440020	Price <input type="text"/>
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FLASHLIGHT MAGNIFIER



With 10x magnification is an excellent instrument. It features a built-in lighting device that works on two 1.5 Volt batteries.

Order No. 1001966	Price <input type="text"/>
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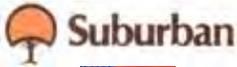
FLASHLIGHT MAGNIFIER AND COMPARATOR

Combination with 7x magnification consists of a magnifying unit and a section to insert batteries.

Order No. 1001998	Price <input type="text"/>
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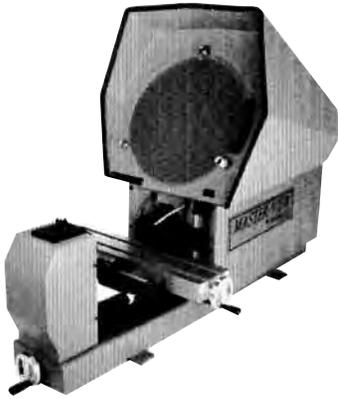
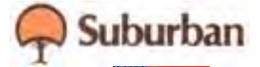


PRECISION TOOLS



14" OPTICAL COMPARATORS

SERIES 641:



MASTER - VIEW™

INCLUDES:

- Surface illumination through duplex fiber optics.
- Digital LCD scales on X and Z axis provide readings to .0005".
- SPC Output from scales that are compatible with most SPC Systems.
- High capacity 4" x 8" travel stage with 4.5" x 19" work surface.
- Ball way construction handles loads to 100 lbs
- 3-Position rotary switch selects profile, surface, or combination surface and profile illumination modes.
- Single long life tungsten-halogen light source.
- 10X lens system.
- Rotary frosted glass screen with 90° crosslines and 360° protractor rim.
- Vernier readings to 5 min. of arc
- Overlay chart clips.
- Heavy duty monorail type, welded steel frame.
- Weighs 245 lbs.
- Comparator measures 48-1/2" long x 22-1/4" wide x 34" high

Model No. MV-14

Order No. 6411000	Price	
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MASTER - VIEW II™

INCLUDES:

All of the MASTER VIEW™ features plus:

- QUADRA-CHEK® R2000 Series
- ACU-RITE® Glass scales with 0.0001" Reading Accuracy on the X AND Y Axis

Model No. MV-14Q

Order No. 6411003	Price	
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OPTIONAL ACCESSORIES FOR MASTER - VIEW II ONLY

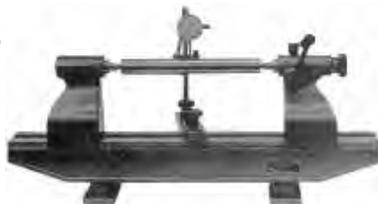
Part No.	Description	Order No.	Price
MV-14QMP	Serial Printer	6413114	
MV-14QRKP	Remote Keypad	6414114	
MV-14QFS	Footswitch	6415115	

OPTIONAL ACCESSORIES FOR BOTH MODELS

Part No.	Description	Order No.	Price	Part No.	Description	Order No.	Price
MV14-20X	20X Lens	6411020		OVERLAY CHARTS			
MV14-50X	50X Lens	6411050		OC-1*	Comb. grid/radius	6411001	
MV14-BASE	Cabinet base (225 lbs.)	6411141		OC-6	Radius	6411006	
MV14-CTR	Stage centers	6411142		OC-2*	Grid	6411002	
MV14-HOOD	Hood	6411145		OC-29*	Screw thread	6411029	
RRV-473	Rotary base vise	6411473		OC-10*	Radius / angle	6411010	
MV14-VB	V-block	6411143		*Specify 10X, 20X, or 50X when ordering.			
MV14-RD2	X & Z AXIS REMOTE LED DISPLAY (INCLUDES CABLES & MOUNTING BRACKET)	6411144		Special charts available, prices on request.			

BENCH CENTERS

SERIES 650:



FEATURES:

- Quick release centers.
- M.T.2 Centers are hardened and ground.
- Indicator Holder included.
- Hand Scraped ways, adjustable gibs.
- Head Stock can be adjusted lengthwise and locked securely in any position by special lever type handle.



For accurate concentricity inspection.

Distance Between Center	Swing	Overall Length	Weight	Order No.	Price
16"	12"	30"	125 lbs.	6500100	
32"	19"	48"	395 lbs.	6500200	

LAPPING / BENCH PLATE

SERIES 462:

10" x 14" x 2-3/4" Height
Precision ground on one side,
grooved on the other side.

Order No.	2565000
Price	



PORTABLE HARDNESS TESTERS

SERIES 251:

This low cost auxiliary hardness tester covers the entire range of heat treated steel from 20 to 65 RC hardness on the Rockwell C Scale. Can be used on any flat piece with a thickness of several inches down to 1/4". Will not mar the surface of parts. 11" high x 2-1/4" dia. base.



Order No. 1705600

Price

HARDNESS TESTERS - ROCKWELL SYSTEM

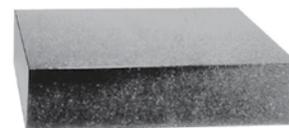
SERIES 251:

Hardness Testers are designed and manufactured for measuring hardness of metals and alloys of all kinds, hard or soft whether flat, round or irregular in shape. These testers are simple in design and easy to operate, yet sensitive and accurate testing results can be obtained. They are ideally suitable for laboratories, tool rooms, inspection and heat treatment departments, factories, schools, etc. These testers conform to IS:3804-1966 and BS:891-962 part I and part II for Rockwell testing.



SURFACE PLATES - BLACK GRANITE

SERIES 649:



STANDARD ACCESSORIES

- 5-3/4" Testing Table • 2-3/16" Testing Table
- 2-3/16" Testing Table with "V" groove • 120° Diamond Penetrator
- 1/16" Steel Ball Penetrator • Rockwell A Test Block
- Rockwell B Test Block • Rockwell C Test Blocks (3pcs.)
- Screwdrivers (2pc.) • Instruction Manual • Dustproof Cover

FEATURES

- Automatic weight selection

SPECIFICATIONS

Maximum Load (kgf.): 150
Load Range (kgf.): 60, 100, 150
Initial Range Load (kgf.): 10
Maximum Test Height: 4-1/4"
Depth of Throat: 5-1/4"
Size of Base: 7x18"
Machine Height: 24-1/2"
Approx. Net Weight: 150 lbs.

Mitutoyo & Starrett Hardness Testers available. See our website or inquire.



Order No. 1705500

Price

- Lowest temperature coefficient, least responsive to temperature changes.
- Moisture and corrosion free, no rusting, no oiling, will not stain or discolor.
- Practically maintenance free, fast easy to clean.
- Smooth "Ball Bearing" surface.
- Resists dust and abrasives, non-magnetic.

TOOL ROOM ("B") GRADE - 0 LEDGE

Size	T	± A	Lbs.	Order No.	Price
9 x 12"	2"	.0001"	30	6491011	
12 x 18	3	.0001	75	6491115	
18 x 24	3	.00015	140	6491152	
24 x 36	4	.0002	430	6491203	
36 x 48	4	.0004	800	6491304	

INSPECTION ("A") GRADE - 2 LEDGE

12 x 18"	3	.00005"	70	6493115	
18 x 24	3	.000075	135	6493152	
24 x 36	4	.0001	365	6493203	
36 x 48	6	.0002	1140	6493304	

T - Thickness ±A - Overall Lateral Accuracy

DIAMOND PENETRATOR - ROCKWELL SYSTEM

SERIES 251:

Fits all models.

Order No. 1705100

Price



HARDNESS TESTER FILES

SERIES 251:

SET INCLUDES:



Color	Nominal	Actual Hardness
Red	RC40	RC40-42
Yellow	RC45	RC45-47
Light Green	RC50	RC50-52
Green	RC55	RC55-57
Blue	RC60	RC60-62
Black	RC65	RC64-66

Order No. 637750

Price

The Hardness Tester Tat Fits in Your Pocket

Set of 6 pieces to check the hardness of metals in range of RC40 to RC65. Compact and easy to check the hardness of steel materials which can not be measured by testing machines. Convenient to check the hardness of material before cutting (Milling, Turning, Drilling, etc.) jobs. Convenient to check the hardness during/after heat treatment process. Each of 6 pieces is fitted with distinctive color coded and non-slip grip.

GRANITE SURFACE PLATE STANDS

SERIES 649:

- Overall working height 36"
- With 4 leveling screws
- Support all grade surface plates



Size	Weight	0-ledge	2-ledge	Price
18x24"	100 lbs.	6499000	6499100	
24x36"	110 lbs.	6499001	6499101	
36x48"	210 lbs.	6499002	6499102	



BLACK GRANITE SURFACE PLATES

SERIES 140:



Traceable to N.I.S.T.
Fed. Spec. GGG-P-463c



Special Sizes
quotes on request.

2 - LEGE

All prices are FOB California.

OVERALL FLATNESS

The overall flatness specifications of STAR USA Granite products meet and surpass the requirement set forth by Federal Specification GGG-P-463c. This publication defines the three standard grades of tolerance for surface plates as follows:

- AA - Laboratory Grade:** For high precision operations in consistent temperature gauging rooms and metrology departments.
- A - Inspection Grade:** For general use in quality control areas.
- B - Toolroom Grade:** For shop work and production checking.

SURFACE PLATES AA LABORATORY GRADE							
Size W x L x T	O - LEDEGE		2 - LEDEGE		Overall Accuracy	Repeat Reading	Shipping Weight lb
	Order No.	Price	Order No.	Price			
8x12x2	1405001		-		+/- .000025	+/- .000017.5	28
9x12x3	1405002		-		+/- .000025	+/- .000017.5	40
12x12x3	1405003		-		+/- .000025	+/- .000017.5	54
12x18x3	1405004		1405019		+/- .000025	+/- .000017.5	81
18x18x4	1405005		1405020		+/- .000025	+/- .000017.5	156
18x24x4	1405006		1405021		+/- .000037	+/- .000017.5	208
24x24x4	1405007		1405022		+/- .000037	+/- .000022.5	278
24x36x6	1405008		1405023		+/- .000050	+/- .000022.5	601
24x48x6	1405009		1405024		+/- .000075	+/- .000022.5	802
30x48x6	1405010		1405025		+/- .000087	+/- .000022.5	1,002
36x36x6	1405011		1405026		+/- .000075	+/- .000022.5	902
36x48x6	1405012		1405027		+/- .0001	+/- .000022.5	1,203
36x60x8	1405013		1405028		+/- .000125	+/- .000030	1,966
36x72x10	1405014		1405029		+/- .00015	+/- .000030	2,914
48x48x8	1405015		1405030		+/- .0001	+/- .000030	2,097
48x60x8	1405016		1405031		+/- .00015	+/- .000030	2,621
48x72x10	1405017		1405032		+/- .000175	+/- .000030	3,885
48x96x12	1405018		1405033		+/- .00025	+/- .000037.5	5,920

SURFACE PLATES A INSPECTION GRADE							
Size W x L x T	O - LEDEGE		2 - LEDEGE		Overall Accuracy	Repeat Reading	Shipping Weight lb
	Order No.	Price	Order No.	Price			
8x12x2	1405034		-		+/- .000050	+/- .000030	28
9x12x3	1405035		-		+/- .000050	+/- .000030	40
12x12x3	1405036		-		+/- .000050	+/- .000030	54
12x18x3	1405037		1405052		+/- .000050	+/- .000030	81
18x18x3	1405038		1405053		+/- .000050	+/- .000030	121
18x24x3	1405039		1405054		+/- .000075	+/- .000030	162
24x24x3	1405040		1405055		+/- .000075	+/- .000035	216
24x36x4	1405041		1405056		+/- .0001	+/- .000035	416
24x48x6	1405042		1405057		+/- .00015	+/- .000035	802
30x48x6	1405043		1405058		+/- .000175	+/- .000035	1,002
36x36x6	1405044		1405059		+/- .00015	+/- .000035	902
36x48x6	1405045		1405060		+/- .0002	+/- .000035	1,203
36x60x6	1405046		1405061		+/- .00025	+/- .000040	1,503
36x72x8	1405047		1405062		+/- .0003	+/- .000040	2,359
48x48x6	1405048		1405063		+/- .0002	+/- .000040	1,603
48x60x6	1405049		1405064		+/- .0003	+/- .000040	2,004
48x72x8	1405050		1405065		+/- .00035	+/- .000040	3,145
48x96x10	1405051		1405066		+/- .0005	+/- .000050	4,933

(Continued)

PRECISION TOOLS



BLACK GRANITE SURFACE PLATES / STANDS / COVERS

SERIES 140:
(Continued)



All prices are FOB California.

SURFACE PLATES B TOOLROOM GRADE							
Size W x L x T	O - LEDGE		2 - LEDGE		Overall Accuracy	Repeat Reading	Shipping Weight lb
	Order No.	Price	Order No.	Price			
8x12x2	1405067		-		+/- .0001	+/- .000055	28
9x12x3	1405068		-		+/- .0001	+/- .000055	40
12x12x3	1405069		-		+/- .0001	+/- .000055	54
12x18x3	1405070		1405085		+/- .0001	+/- .000055	81
18x18x3	1405071		1405086		+/- .0001	+/- .000055	121
18x24x3	1405072		1405087		+/- .00015	+/- .000055	162
24x24x3	1405073		1405088		+/- .00015	+/- .000060	216
24x36x4	1405074		1405089		+/- .0002	+/- .000060	416
24x48x6	1405075		1405090		+/- .0003	+/- .000060	802
30x48x6	1405076		1405091		+/- .00035	+/- .000060	1,002
36x36x6	1405077		1405092		+/- .0003	+/- .000060	902
36x48x6	1405078		1405093		+/- .0004	+/- .000060	1,203
36x60x6	1405079		1405094		+/- .0005	+/- .000080	1,503
36x72x6	1405080		1405095		+/- .0006	+/- .000080	1,804
48x48x6	1405081		1405096		+/- .0004	+/- .000080	1,603
48x60x6	1405082		1405097		+/- .0006	+/- .000080	2,004
48x72x6	1405083		1405098		+/- .0007	+/- .000080	2,405
48x96x8	1405084		1405099		+/- .001	+/- .0001	3,947

O-Ledge Plate with Stationary Stand



Plate Cover



State thickness of plate when ordering covers.

Standard working height of stand with plate is 36" measured from the top of the plate to the floor.

STEEL SUPPORT STANDS AND COVERS								
Size W x L	Plate Thickness	Stationary Stand		Castered Stand with Locks		Shipping Weight lb	Vinyl Surface Plate Cover	
		Order No.	Price	Order No.	Price		Order No.	Price
12x12	-	-		-		-	1405133	
12x18	up to 4"	1405101		1405117		95	1405134	
18x18	up to 4"	1405102		1405118		95	1405135	
18x24	up to 4"	1405103		1405119		95	1405136	
24x24	up to 4"	1405104		1405120		100	1405137	
24x36	up to 4"	1405105		1405121		120	1405138	
24x36	5" to 6"	1405106		1405122		170	1405139	
24x48	up to 6"	1405107		1405123		200	1405140	
30x48	up to 6"	1405108		1405124		220	1405141	
36x36	up to 6"	1405109		1405125		210	1405142	
36x48	up to 8"	1405110		1405126		225	1405143	
36x60	up to 8"	1405111		1405127		245	1405144	
36x72	up to 10"	1405112		1405128		260	1405145	
48x48	up to 8"	1405113		1405129		250	1405146	
48x60	up to 8"	1405114		1405130		275	1405147	
48x72	up to 10"	1405115		1405131		380	1405148	
48x96	up to 12"	1405116		1405132		530	1405149	

PREMIUM GRANITE CLEANER

Size	Order No.	Price
1 Pint	1405150	
1 Case of 12 Pints	1405151	



Penetrates the granite surface to loosen dirt, grime, and residue. It leaves the surface clean, which cuts down wear on precision surfaces.

Sold in pint size squeeze bottles.