

# IRWIN®

Industrial Tools

## Full Line Catalog



IRWIN® Industrial Tools Full Line Catalog

IRWIN®  
Industrial Tools



**WISE-GRIP®**

**MARATHON**

**QUICK-GRIP**

**SPEEDBOR.**

**STRAIT-LINE.**

**Unibit.**

**HANSON.**

## The History Behind IRWIN® Industrial Tools

IRWIN Industrial Tools has a long and storied history stretching for more than a century and set against the backdrop of a young, ambitious nation. In 1885, Charles Irwin patented the Auger bit and, along with four business partners, formed the IRWIN Auger Bit Company. In 1924, William Petersen, a Danish immigrant, invented and patented the first locking pliers, VISE-GRIP. Through innovation and acquisitions, these two companies have now become IRWIN Industrial Tools.

IRWIN Industrial Tools manufacture and distributes professional grade hand tools and power tool accessories worldwide for trade professionals who demand superior performance and durability on the job. IRWIN Industrial Tools' brand portfolio features user-preferred category leaders such as VISE-GRIP® locking tools, MARATHON® circular saw blades, QUICK-GRIP® clamping tools, SPEEDBOR® wood boring drill bits, STRAIT-LINE® marking tools, UNIBIT® step drill bits and HANSON® taps and dies.



For more information about IRWIN Industrial Tools' full line of hand tools and power tool accessories, call 1-800-866-5740 or visit [www.irwin.com](http://www.irwin.com).

**NEW** IRWIN® Innovation

IRWIN Industrial Tools' end user obsession, combined with world-class product development, enables us to produce professional-grade hand tools and power tool accessories that provide superior performance and durability on the job.

By incorporating end user feedback with advanced engineering, we are able to deliver innovative products that continue to surpass industry standards.



**IRWIN.**  
**STRAIT-LINE.**  
Chalk Reel



**IRWIN.**  
**STRAIT-LINE.**  
Dust Off Chalk



**IRWIN.**  
**MARATHON.**  
with WeldTec. Framing Blade



**IRWIN.**  
**SPEEDBOR.**  
MAX Bits



**IRWIN.**  
**VISE-GRIP.**  
Fast Release. Locking Pliers



**IRWIN.**  
**VISE-GRIP.**  
Quick Adjusting Wrench



**IRWIN.**  
**VISE-GRIP.**  
Pliers



**IRWIN.**  
**SPEEDBOR.**  
Blue-Groove Bits



**IRWIN.**  
Torsion Screwdriving Bits



**IRWIN.**  
Bi-Metal Snap Blades



**IRWIN.**  
**BOLT-GRIP.** Deep Well  
Bolt Extractors



**IRWIN.**  
**QUICK-GRIP.**  
Parallel Bar Clamp



**IRWIN.**  
**QUICK-GRIP XHP.**  
One-Handed Bar Clamp



**IRWIN.**  
**MARATHON.**  
Soft-Sided Hole Saw Kits



**IRWIN.**  
Folding Utility Knife



**IRWIN.**  
Rigs/ Belts



**IRWIN.**  
**TURBOMAX.** Titanium Drill Bits



**IRWIN.**  
**MARATHON.**  
Vinyl Siding Blade



**IRWIN.**  
Fiber Cement Blade

## ULTIMATE TRADESMAN CHALLENGE

IRWIN Industrial Tools, a Newell-Rubbermaid® company, has been searching for The Ultimate Tradesmen since April 2007 via the Ultimate Tradesman Challenge. Several thousand tradesmen have already competed in local events in over 40 states to secure the honor. Bruce Quigley of Clarkston, Michigan, was named The Ultimate Tradesman by winning the 2007 IRWIN Ultimate Tradesman Challenge at the National Championship event in Phoenix on Nov. 11, 2007 with a total time of 20.40 seconds. Quigley won a new 2007 Ford F-150 pick-up truck customized by Roush Performance, \$30,000 dollars as well as a dream barbecue with Jamie McMurray and the #26 IRWIN race team at his home. Future contestants in 2008 - 2009 will similarly have to measure, mark and drill a piece of lumber quickly and accurately, using IRWIN tools. The fastest time will win the coveted title of Ultimate Tradesman, and the chance to win \$1.26 million dollars and other great prizes.

IRWIN Industrial Tools developed the Ultimate Tradesmen Promotion because it is a chance to share its passion for tools and accessories with professional tradesmen and DIYers. It's a chance to reach out to end-users where they work, play, buy and learn.

"IRWIN tools and accessories are being used on job sites every day by tradesmen all over the country, so we figured, 'Why not create a fun, but competitive contest where people can show off their skills?'" said McMurray. "Speed and precision are essential for success on the race track, and contestants in this promotion will need both of these attributes to be successful in the IRWIN Ultimate Tradesman Challenge."

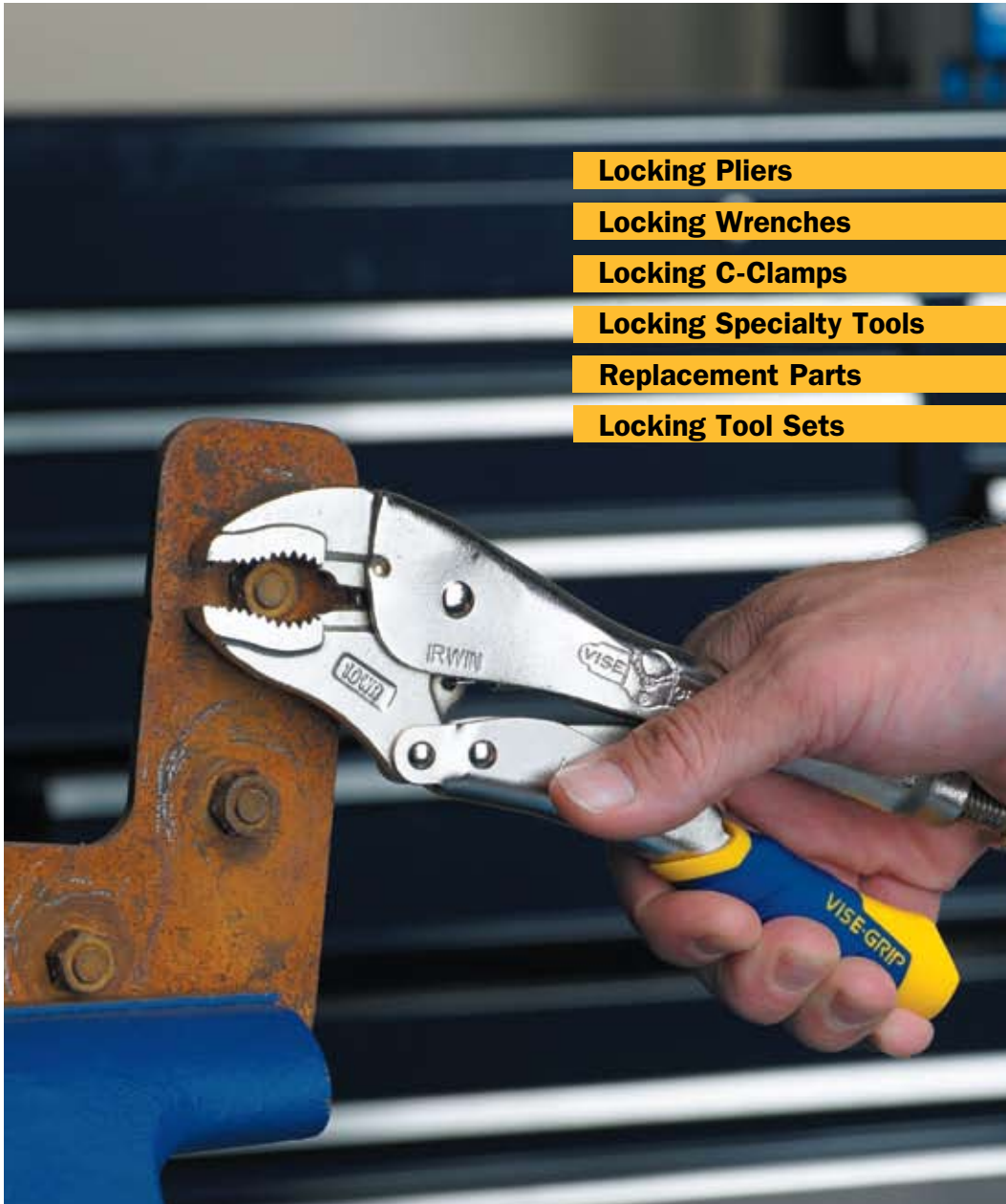
The IRWIN Ultimate Tradesman Challenge is another example of the company's commitment to its distributor partners and end-users. IRWIN is constantly striving to make the end-user experience more productive and efficient through the development of hand tools and power tool accessories with meaningful innovation and performance.

For more details on the IRWIN Industrial Tools' Ultimate Tradesman Challenge, visit [www.irwinchallenge.com](http://www.irwinchallenge.com).



■ LOCKING TOOLS	5
■ PLIERS, WRENCHES & SCREWDRIVERS	13
■ CLAMPING TOOLS	23
■ CHISELS	29
■ SNIPS	31
■ MARKING & LAYOUT TOOLS	33
■ HANDSAWS	41
■ UTILITY KNIVES	45
■ CIRCULAR SAW BLADES	49
■ LINEAR EDGE	55
■ FASTENER DRIVE	61
■ MASONRY DRILLING	85
■ METAL DRILLING	97
■ WOOD DRILLING	117
■ TAPS & DIES	131
■ EXTRACTORS	165
■ WORKSITE PRODUCTS	173





<b>Locking Pliers</b>	<b>8</b>
<b>Locking Wrenches</b>	<b>10</b>
<b>Locking C-Clamps</b>	<b>10</b>
<b>Locking Specialty Tools</b>	<b>11</b>
<b>Replacement Parts</b>	<b>11</b>
<b>Locking Tool Sets</b>	<b>12</b>

## The Professional's Choice Since 1924

The VISE-GRIP® Locking Tool was invented in 1924 by a blacksmith in the small town of DeWitt, Nebraska. Eight decades and half of a billion tools later, IRWIN® VISE-GRIP Locking Tools continue to be handcrafted with the same quality and dependability that trade professionals have trusted and preferred since the beginning.

Our expertise in design and manufacturing produces locking tools with more than twice the life and significantly more strength than other tools on the market. And to further meet the needs of professional tool users, IRWIN VISE-GRIP is now available in two handle configurations: The Original™ and Fast Release™.



## The Original IRWIN VISE-GRIP Locking Tool

The Original IRWIN VISE-GRIP Locking Tools provide powerful locking force using the classic triggered design.



*The Original*  
SINCE 1924™

## IRWIN VISE-GRIP Fast Release Locking Tool

The IRWIN VISE-GRIP Fast Release Locking Tool offers the strength and durability of The Original with the performance advantage of a release that is 2x easier to open. It unlocks from any angle without needing to press a trigger, making it ideal for professionals who work in tight spaces. The Fast Release Locking Tool also offers more finger room to accommodate large hands and professionals who wear gloves.



*One-Hand*  
**Fast Release**™

LOCKING TOOLS



05T

**2X**  
EASIER TO OPEN



Hex Key Control

### Adjusting Screw

- Provides exacting pressure with Micro Adjust Screw
- Maintains pressure for repetitive use

### Hardened Teeth

- Designed to grip from any angle
- Broached for maximum durability

### High Grade Alloy Steel

- Heat treated for maximum strength & life
- Cycle-tested durability.



**The World's Most Versatile Hand Tools™**

IRWIN applies VISE-GRIP® engineering to many tool configurations, giving you powerful locking force in a wide variety of applications in almost every profession. The table below lists just a few of the hundreds of uses in several trades. All VISE-GRIP tools are built to last a lifetime. Replacement parts are available to keep your tools working like new for years to come.

Application	Locking Pliers	Large Capacity Locking Pliers	Long Nose Locking Pliers	Locking C-Clamp	Locking Wrench
<b>HVAC</b>	Clamping, crimping, wire cutting	Non-slip pipe wrench	Clamping, crimping, wire cutting	Clamping for HVAC structural welding supports and piping racks	Removing/attaching nuts and bolts
<b>Welding Fabricating</b>	Holding and clamping, wire cutting	Holding and clamping	Small piece clamping	Clamping for structural welding	Removing/attaching nuts and bolts
<b>Plumbing</b>	Non-slip pipe wrench	Non-slip pipe wrench	Faucet and appliance repair	Temporary pipe hanger	Removing/attaching nuts and bolts
<b>Auto Mechanics</b>	Removing bolts, holding and clamping	Leveraging screwdrivers, alignment tool, exhaust repair	Removing brake springs and clips, hose crimp/clamp	Auto body repair	Removing/attaching nuts and bolts
<b>MRO</b>	Machine repair, removing bolts, holding, clamping, wire cutting, pulling nails and staples, vehicle repair, portable vise, maintenance and demolition	Machine repair, removing bolts, holding, clamping, vehicle repair, portable vise, maintenance and demolition	Machine maintenance, demolition, faucet and appliance repair	Temporary hangers	Removing bolts, maintenance and demolition
<b>Electricians</b>	Portable vise, wire cutter	Portable vise	Wire bending	Temporary workbox holder	Removing/attaching nuts and bolts
<b>Carpentry Woodworking Construction</b>	Pulling nails and staples, maintenance and demolition, wire cutting, lag screws, carriage bolt nuts		Pulling staples, maintenance, wire cutting, lag screws, carriage bolt nuts	Clamping wood joints, pocket joinery, glue-up and holding clamps and metal stud fabrication	
<b>Office and Home</b>	Home maintenance, vehicle maintenance, portable vise	Appliance repair, emergency handle, portable vise	Precision work, hobbies	Hobbies, wood-working	Removing/attaching nuts and bolts

LOCKING TOOLS



# LOCKING TOOLS

## LOCKING PLIERS

### WISE-GRIP® Locking Pliers

#### High-Grade Alloy Steel

- Heat treated for maximum durability

#### Wire Cutter (some models)

#### Micro Adjusting Screw For Exacting Pressure

- Turn screw to adjust pressure and fit
- Stays adjusted for repetitive use

#### Hardened Teeth

- Designed to grip any angle
- Broached for maximum durability



0502L3

#### Guarded Release Trigger (some models)

- Protects from accidental release
- Releases quickly

### WISE-GRIP Straight Jaw Locking Pliers



0102L3

- Straight jaw provides maximum contact on flat, square or hex work

#### Original™ Handle

Description	Size	Jaw Adjustment	Carded Stock #
10R®	10" (250 mm)	0" - 1-3/4" (0 mm - 44 mm)	0102L3
7R®	7" (175 mm)	0" - 1-1/2" (0 mm - 38 mm)	0302L3

#### Original Handle

Description	Size	Jaw Adjustment	Carded Stock #
10WR®	10" (250 mm)	0" - 1-7/8" (0 mm - 48 mm)	0502L3
7WR®	7" (175 mm)	0" - 1-1/2" (0 mm - 38 mm)	0702L3
5WR®	5" (125 mm)	0" - 1-1/8" (0 mm - 29 mm)	0902L3
4WR®	4" (100 mm)	0" - 1" (0 mm - 25 mm)	1002L3

### WISE-GRIP Curved Jaw Locking Pliers with Wire Cutter



0502L3

#### Fast Release™ Handle

Description	Size	Jaw Adjustment	Carded Stock #
10WR®	10" (250 mm)	0" - 1-7/8" (0 mm - 48 mm)	05T
7WR®	7" (175 mm)	0" - 1-1/2" (0 mm - 38 mm)	07T
5WR®	5" (125 mm)	0" - 1-1/8" (0 mm - 29 mm)	09T



05T

- Curved jaw puts tremendous pressure on four points of any style nut or bolt head

**WISE-GRIP® Curved Jaw Locking Pliers**



1102L3

**Original™ Handle**

Description	Size	Jaw Adjustment	Carded Stock #
10CR®	10" (250 mm)	0" - 1-7/8" (0 mm - 48 mm)	1102L3
7CR®	7" (175 mm)	0" - 1-1/2" (0 mm - 38 mm)	1302L3

**WISE-GRIP Large Jaw Locking Pliers**



12L3

- Heavy-duty jaw grips work of all shapes; ideal for plumbers, mechanics, welders, and large jobs

**Original Handle**

Description	Size	Jaw Adjustment	Carded Stock #
12LC®	12" (300 mm)	0" - 3-1/8" (0 mm - 79 mm)	12L3

**WISE-GRIP Long Nose Locking Pliers**



1402L3

**Original Handle**

Description	Size	Jaw Adjustment	Carded Stock #
9LN®	9" (225 mm)	0" - 2-3/4" (0 mm - 70 mm)	1502L3
6LN®	6" (50 mm)	0" - 2" (0 mm - 51 mm)	1402L3
4LN®	4" (100 mm)	0" - 1-5/8" (0 mm - 41 mm)	1602L3



14T

- Long, straight nose provides easy access in narrow, hard-to-reach places

**Fast Release™ Handle**

Description	Size	Jaw Adjustment	Carded Stock #
6LN®	6" (150 mm)	0" - 2" (0 mm - 5 mm)	14T

# LOCKING TOOLS

## LOCKING WRENCHES/C-CLAMPS

### WISE-GRIP® Locking Wrenches with Wire Cutter



04

- Jaw locks onto three sides of a hex fastener and won't slip or mar

### WISE-GRIP Locking C-Clamps with Regular Tips



19



19T

- Wide-opening jaw provides greater versatility in clamping a variety of shapes

### WISE-GRIP Locking C-Clamps with Swivel Pads



20

- Swivel pads hold tapered work, awkward fabricating jobs and delicate projects without damaging the work surface

#### Original Handle

Description	Size	Jaw Adjustment	Carded Stock #
10LW®	10" (250 mm)	5/8" - 1-1/8" (16 mm - 28 mm)	02
7LW®	7" (175 mm)	7/16" - 3/4" (11 mm - 19 mm)	04
4LW®	4" (100 mm)	1/4" - 9/16" (7 mm - 14 mm)	08

#### Original Handle

Description	Size	Jaw Adjustment	Throat Depth	Stock #
24R™	24" (605 mm)	0" - 10" (0 mm - 254 mm)	15 - 1/2" (394 mm)	275
18DR™	18" (455 mm)	0" - 7-1/2" (0 mm - 190 mm)	9 - 1/2" (241 mm)	211
18R®	18" (455 mm)	0" - 8" (0 mm - 200 mm)	9 - 1/2" (241 mm)	21
11R®	11" (275 mm)	0" - 3-3/8" (0 mm - 85 mm)	2 - 5/8" (67 mm)	19
9DR™	9" (225 mm)	0" - 4-1/2" (0 mm - 112 mm)	4 - 3/4" (121 mm)	30
6R®	6" (150 mm)	0" - 2" (0 mm - 50 mm)	1 - 1/2" (38 mm)	17

#### Fast Release™ Handle

Description	Size	Jaw Adjustment	Carded Stock #
11R®	11" (275 mm)	0" - 3-3/8" (0 mm - 85 mm)	19T
6R®	6" (150 mm)	0" - 2" (0 mm - 50 mm)	17T

#### Original Handle

Description	Size	Jaw Adjustment	Throat Depth	Stock #
24SP™	24" (605 mm)	0" - 10" (0 mm - 254 mm)	15 - 1/2" (394 mm)	28
18SP™	18" (455 mm)	0" - 8" (0 mm - 200 mm)	9 - 1/2" (241 mm)	22
11SP®	11" (275 mm)	0" - 3-3/8" (0 mm - 85 mm)	2 - 5/8" (67 mm)	20
9SP™	9" (225 mm)	0" - 4-1/2" (0 mm - 112 mm)	4 - 3/4" (121 mm)	31
6SP™	6" (150 mm)	0" - 2" (0 mm - 50 mm)	1 - 1/2" (38 mm)	18
4SP™	4" (100 mm)	0" - 1-5/8" (0 mm - 41 mm)	1 - 1/4" (32 mm)	165

**WISE-GRIP® Locking Sheet Metal Tool**



23

- Makes bending, forming and crimping sheet metal jobs easier

**WISE-GRIP Locking Welding Clamp**



25

- U-shaped jaw provides enhanced visibility and more working space

**WISE-GRIP Locking Panel Clamp**



251

- Provides quick clamping and alignment of auto body panels

**WISE-GRIP Locking Chain Clamp**



27

- Chain holds and locks around any shape or size

**WISE-GRIP Locking Pinch Off Tool**



29

- Pinches off and locks onto tubing, leaving both hands free to do other work

**Original Handle**

Description	Size	Jaw Adjustment	Jaw Depth	Jaw Width	Stock #
8R®	8" (200 mm)	0-1/2" (13mm)	1-3/4" (44 mm)	3-1/8" (78 mm)	23
9R®	9" (225 mm)	2-3/4" (70 mm)	2-1/2" (64 mm)	2-3/4" (70 mm)	25
9AC	9" (225 mm)	3/8" (10 mm)	1/2" (12 mm)	2-3/4" (70 mm)	251
20R®	9" (225 mm)	18" (455 mm) chain	—	—	27
RR™	7" (175 mm)	1-1/4" (32 mm)	1" (25 mm)	—	29

**Replacement Parts**



40-07



40-08



40153

- Genuine WISE-GRIP replacement parts include springs, adjusting screws, chains and pads

Description	Stock #
Adjusting screw for 10R®, 10WR®, 10CR®, 20R®, 12LC®, 11R®, 11SP®, 18R®, 18SP™, 24R™, 24SP™ and 10LW®	40-07
Replacement spring for 10R®, 10WR®, 10CR®, 11R®, 11SP®, 20R®, 12LC® and 10LW®	40-08
Two pair medium, blue soft pads, fit swivel pads on 6SP®	40152
Two pair large, blue soft pads, fit swivel pads on 11SP®, 18SP™, 24SP® and 318S®	40153
Adjusting screw for 7R®, 7WR®, 7CR®, 9LN®, 8R®, 9R®, RR™ and 7LW®	40-21
Replacement spring for 7R®, 7WR®, 7CR®, 9LN®, 8R®, 9R®, RR™ and 7LW®	40-22
Replacement spring for 18R®, 18DR™, 18SP™, 24R™ and 24SP™	40-34
Replacement spring for 9DR™ and 9SP™	40-50
Adjusting screw for 5WR®, 6LN®, 6BN®, 6R® and 6SP™	40-51
Replacement spring for 5WR®, 6LN®, 6BN®, 6R® and 6SP™	40-52
Replacement spring for 4WR®, 4LN®, 4SP™ and 4LW®	40-92
18" / 455 mm extension chain for 20R®	40EXT
18" / 455 mm replacement chain for 20R®	40REP

# LOCKING TOOLS SETS

## WISE-GRIP® Original™ Sets

The IRWIN Roll up Kit Bags are made of durable polyester with a skid resistant PVC sponge backing. The tools fit securely in polyester mesh organizer pockets and, when rolled up, are held in place by two elastic 3/4" wide bands. Steel reinforced grommets allow the opened kit bag to be displayed on peg wall hooks.



73



757KB

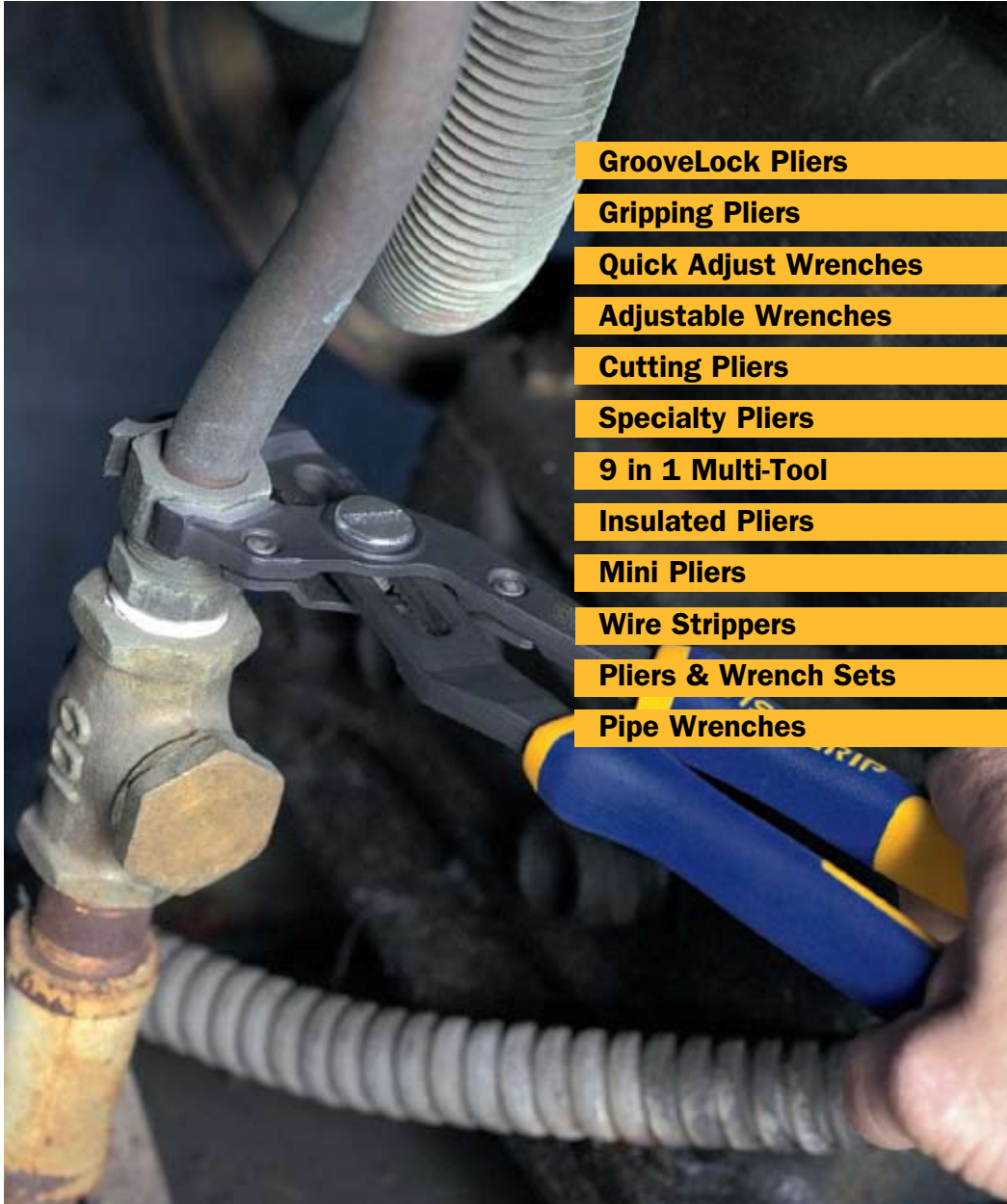


1078KB

Description	Contents	Stock #
213H	Home and Hobby Tool Set Contains: 7WR® and 6LN® Locking Pliers	36
215G	Gift Set Contains: 10WR® and 5WR® Locking Pliers	37
641KB	6-pc Tool Set in Kit Bag with 6 Koozie Cups Contains: 10WR®, 9LN®, 7WR®, 6LN®, 5WR® and 4LN® Locking Tools	641
538KB	5-pc Tool Set Contains: 10R®, 10CR®, 7WR®, 6LN®, 5WR® Locking Pliers	68
428GS	4-pc Tool Set in Kit Bag Contains: 10CR®, 7R®, 6LN®, 5WR® Locking Pliers	71
321GS	3-pc Tool Set in Kit Bag Contains: 10WR®, 6LN®, 5WR® Locking Pliers	73
544T	5-pc Clamping Set Contains: 10R®, (2) 11R®, (2) 6R® Locking Pliers and T-shirt	74
7-pc	Tool Set in Kit Bag Contains: 10WR®, 6LN®, 7WR®, 10LW®, 7LW®, 5WR® and 12LC® Locking Pliers	757KB
10-pc	Tool Set in Tray Contains: 10R®, 10WR®, 7R®, 7WR®, 7LW®, 5WR®, 6LN®, 9LN®, 6R® and 11R® Locking Tools	1078TRAY
10-pc	Tool Set in Kit Bag: 10R®, 10WR®, 7R®, 7WR®, 7LW®, 5WR®, 6LN®, 9LN®, 6R® and 11R® Locking Tools	1078KB
3-pc	Locking Pliers Set with Pocket Knife: 10R®, 7CR® and 5WR®	2077703

LOCKING TOOLS





<b>GrooveLock Pliers</b>	<b>14</b>
<b>Gripping Pliers</b>	<b>15</b>
<b>Quick Adjust Wrenches</b>	<b>16</b>
<b>Adjustable Wrenches</b>	<b>17</b>
<b>Cutting Pliers</b>	<b>17</b>
<b>Specialty Pliers</b>	<b>18</b>
<b>9 in 1 Multi-Tool</b>	<b>18</b>
<b>Insulated Pliers</b>	<b>19</b>
<b>Mini Pliers</b>	<b>19</b>
<b>Wire Strippers</b>	<b>19</b>
<b>Pliers &amp; Wrench Sets</b>	<b>20</b>
<b>Pipe Wrenches</b>	<b>21</b>

# PLIERS, WRENCHES & SCREWDRIVERS

## GROOVELOCK PLIERS

### IRWIN® VISE-GRIP® GrooveLock Pliers

The IRWIN VISE-GRIP GrooveLock pliers are revolutionizing the world of groove joint pliers. They are the fastest, most versatile groove joint pliers available due to their patented Press-n-Slide button, double the available groove positions compared to other groove joint pliers and 2X faster adjusting than traditional groove joint pliers.

#### Metal Injection Molding (MIM)

- Precision parts deliver strength & exceptional performance



#### Press-N-Slide Button

- Quickly adjusts lower jaw



- Molded handles for comfort
- Less hand fatigue

#### All Purpose Jaw

- Grips flat, round, hex & square work pieces

#### Multi-Groove Ratcheting System

- Allows for precise positioning
- Twice the groove positions of traditional groove joint pliers

#### Anti-Pinch Design



*\*than traditional groove joint pliers*

PLIERS, WRENCHES & SCREWDRIVERS

Description	Size	Jaw Capacity	Jaw Positions	Pipe Size	Nut Size (Across Flats)	Stock #
GV8 GrooveLock Pliers	8"/200 mm	1-3/4"	13	1"	30 mm (1.18")	2078108
GV10 GrooveLock Pliers	10"/250 mm	2-1/4"	16	1-1/2"	40 mm (1.57")	2078110
GV12 GrooveLock Pliers	12"/300 mm	2-3/4"	19	2"	50 mm (1.96")	2078112
GV16 GrooveLock Pliers	16"/400 mm	4-1/2"	21	3-3/4"	105 mm (4.25")	2078116
GV20 Groove Lock Pliers	20"/500 mm	6"	25	4-1/2"	135 mm (5.25")	2078120



**WISE-GRIP® Groove Joint Pliers**



2078508

- Right angle teeth grip in all directions for maximum bite

Size	Jaw Capacity	Jaw Thickness	Jaw Positions	American Std. Pipe Size	Stock #
6"/150 mm	1"	3/8"	4	1"	2078506
8"/200 mm	1-1/4"	13/32"	5	1"	2078508
10"/250 mm	2"	13/32"	7	2"	2078510
10"/250 mm	1-7/8"	13/32"	7	Smooth Jaw	2078500
12"/300 mm	2-1/4"	1/2"	7	2"	2078512
16"/400 mm	4-1/2"	17/32"	9	4"	2078516

**WISE-GRIP Slip Joint Pliers**



2078406

- Machined jaws for maximum gripping strength

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
6"/150 mm	1-1/8"	1-5/32"	7/16"	Yes	2078406
8"/200 mm	1-5/16"	1-11/32"	7/16"	Yes	2078408

**WISE-GRIP Forged Crimper**



2078310

- Designed for crimping insulated & non-insulated connections & terminals on 10-22 AWG wire

Size	Jaw Length	Jaw Width	Point Thickness	Wire Cutter	Stock #
10"/250 mm	1-3/16"	1-9/32"	3/16"	Yes	2078310

**WISE-GRIP Fencing Pliers**



2078901

- The only tool needed to work on metal and wood posts
- Nickel chromium steel construction for overall strength & durability

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
10-1/4"/260 mm	13/16"	3-3/16"	19/32"	Yes	2078901

**WISE-GRIP Convertible Snap Ring**



2078900

- One pair replaces two for internal or external use
- Includes four interchangeable tips for ease in moving from one project to the next

Size	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Wire Cutter	Stock #
6"/150 mm	1-11/32"	1"	N/A	5/32"	No	2078900

# PLIERS, WRENCHES & SCREWDRIVERS

## QUICK ADJUST WRENCHES

### IRWIN® VISE-GRIP® Quick Adjusting Wrench

The VISE-GRIP® Quick Adjusting Wrench is the fastest, most versatile wrench available because it features a sliding lever for quick adjustments. The Quick Adjusting Wrench combines the versatility of adjustable wrenches with the precision and consistency of open-end wrenches.

#### Parallel Jaws with Smooth Surfaces

- Grip securely and help prevent scratches



#### Sliding Lever

- Releases jaw for sizing

#### Precise Scale Markings

- Adjust to nut and bolt sizes easily
- Available in SAE or metric

#### Grooved Internal Jaw

- Manually slides forward for quick, one-hand sizing
- Keeps jaw locked in place for leverage and repeated use



- Molded handles for comfort
- Less hand fatigue

#### Hang Hole

- For easy storage



\*vs. traditional adjustable wrenches

Description	Size	Jaw Thickness	Jaw Capacity	Stock #
6" Quick Adjusting Wrench - SAE	6"/150 mm - SAE	1/4"	7/8"	2078603
6" Quick Adjusting Wrench - Metric	6"/150 mm - Metric	1/4"	22 mm	2078604
8" Quick Adjusting Wrench - SAE	8"/200 mm - SAE	5/16"	1"	2078601
8" Quick Adjusting Wrench - Metric	8"/200 mm - Metric	5/16"	25 mm	2078602
10" Quick Adjusting Wrench - SAE	10"/250 mm - SAE	3/8"	1-1/4"	2078605
10" Quick Adjusting Wrench - Metric	10"/250 mm - Metric	3/8"	31 mm	2078607
12" Quick Adjusting Wrench - SAE	12"/300 mm - SAE	7/16"	1-1/2"	2078609
12" Quick Adjusting Wrench - Metric	12"/300 mm - Metric	7/16"	38 mm	2078611

PLIERS, WRENCHES & SCREWDRIVERS

**WISE-GRIP® Adjustable Wrenches**



2078608

- Inch and metric scales
- Extra wide jaw capacity

Size	Jaw Capacity	Jaw Length	Jaw Thickness	Stock #
6"/150 mm	15/16"	27/32"	1/4"	2078606
8"/200 mm	1-1/8"	1"	5/16"	2078608
10"/250 mm	1-1/4"	1-1/4"	3/8"	2078610
12"/300 mm	1-1/2"	1-13/32"	7/16"	2078612
15"/380 mm	1-13/16"	1-27/32"	17/32"	2078613*
18"/455 mm	2-1/4"	2-3/32"	19/32"	2078618*
24"/610 mm	2-5/8"	2-5/32"	3/4"	2078624*

\* Solid Metal Handle - No Pro-Touch Grips

**WISE-GRIP Long Nose Pliers**



2078216

- Induction hardened cutting edge stays sharp longer
- Machined jaws for maximum gripping strength

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
6"/150 mm	1-7/8"	3/4"	7/16"	Yes	2078216
8"/200 mm	2-7/16"	15/16"	15/32"	Yes	2078218

**WISE-GRIP Bent Nose Pliers**



2078226

- Thin nose gets into tight spaces, easy to reach around obstructions
- Induction hardened cutting edge stays sharp longer

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
6"/150 mm	1-9/16"	3/4"	7/16"	Yes	2078226
8"/200 mm	2"	15/16"	15/32"	Yes	2078228

**WISE-GRIP Diagonal Cutting Pliers**



2078306

- Induction hardened cutting edge stays sharp longer

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
6"/150 mm	13/16"	13/16"	13/32"	Yes	2078306
7"/175 mm	13/16"	1-5/32"	1/2"	Yes	2078307
8"/200 mm	7/8"	1-1/8"	7/16"	Yes	2078308

**WISE-GRIP Lineman's Pliers**



2078209

- Induction hardened cutting edge stays sharp longer
- Machined jaws for maximum gripping strength

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
8"/200 mm	1-15/32"	1-3/16"	9/16"	Yes	2078208
9.5"/240 mm	1-9/16"	1-1/4"	5/8"	Yes	2078209

# PLIERS, WRENCHES & SCREWDRIVERS

## SPECIALTY PLIERS/ 9 IN 1 MULTI-TOOL

### WISE-GRIP® Iron Workers Pliers



2078909

- Induction hardened cutting edge stays sharp longer
- Cross hatched teeth designed to provide an aggressive grip

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
9" (225 mm)	1-1/2"	1-1/4"	19/32"	Yes	2078909

### WISE-GRIP Cable Cutting Pliers



2078328

- Cuts up to 3/0 fine stranded copper battery cable

Size	Jaw Length	Jaw Width	Jaw Thickness	Type of Wire	Stock #
8" (200 mm)	13/16"	1-1/4"	19/32"	Copper & Aluminum	2078328

### WISE-GRIP End Cutting Pliers



2078318

- Wide throat clearance allows semi flush cutting of nails & rivets
- Induction hardened cutting edge stays sharp longer

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
8" (200 mm)	1/2"	1-21/32"	1-1/8"	Yes	2078318

### WISE-GRIP Concrete Nippers



2078910

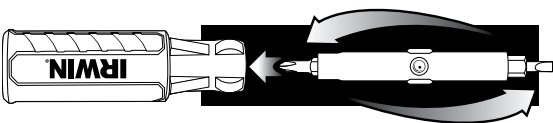
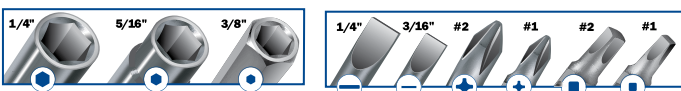
- Induction hardened cutting edge stays sharp longer
- Precision matched jaws provide a clean cut

Size	Jaw Length	Jaw Width	Jaw Thickness	Wire Cutter	Stock #
10" (250 mm)	3/4"	1-3/8"	15/16"	Yes	2078910

### IRWIN® 9 in 1 Multi-Tool

IRWIN's 9 in 1 Multi-Tool is designed to provide end users with a high quality, convenient tool that is versatile enough for all their fastening needs. It comes with 6 bits and 3 nut drivers that can be used on numerous fasteners and nuts. The Multi-Tool provides internal storage to keep the bits and nut drivers close at hand at all times. Our ergonomic ProTouch™ Grip offers comfort and slip resistance to achieve maximum torque while working.

Description	Stock#
9 in 1 Multi-Tool	2051100



2051100

PLIERS, WRENCHES & SCREWDRIVERS

**WISE-GRIP® Insulated Pliers**



10505872



10505868



10505865



10505870



10505871

Description	Size	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Wire Cutter	Stock #
Combination	6"/150 mm	1-3/8"	1"	3/8"	-	Yes	10505872
Combination	7"/170 mm	1-1/2"	1-1/8"	7/16"	-	Yes	10505873
Combination	8"/200 mm	1-3/4"	1-1/8"	7/16"	-	Yes	10505874
Long Nose	6"/150 mm	2-1/8"	11/16"	11/32"	1/16"	Yes	10505868
Long Nose	8"/200 mm	3"	13/16"	3/8"	3/32"	Yes	10505869
Bent Nose	8"/200 mm	2-3/4"	13/16"	3/8"	3/32"	Yes	10505870
Diagonal Cutting	6"/150 mm	7/8"	7/8"	7/16"	-	Yes	10505865
Diagonal Cutting	7"/170 mm	13/16"	1-1/8"	1/2"	-	Yes	10505866
Diagonal Cutting	8"/200 mm	7/8"	1-1/8"	3/8"	-	Yes	10505867
Wire Stripper	6"/150 mm	3/8"	7/8"	3/8"	-	No	10505871

**WISE-GRIP Mini Pliers**



Description	Size	Jaw Length	Jaw Width	Jaw Thickness	Point Thickness	Spring Loaded	Wire Cutter	Stock #
Bent Nose	5"/125 mm	1-1/8"	9/16"	11/32"	3/32"	Yes	No	2078965
Flat Nose	5-1/4"/135 mm	1-1/4"	9/16"	11/32"	7/32"	Yes	No	2078945
Lineman's	4-3/4"/120 mm	5/8"	9/16"	11/32"	5/16"	Yes	Yes	2078915
End Cutting	4-1/4"/110 mm	5/16"	9/16"	11/32"	1/2"	Yes	Yes	2078904
Diagonal Cutting	4-1/2"/115 mm	17/32"	9/16"	11/32"	NA	Yes	Yes	2078935
Long Nose	5-1/4"/135 mm	1-1/4"	9/16"	11/32"	3/32"	Yes	Yes	2078905
Needle Nose	5-3/4"/145 mm	1-11/16"	9/16"	11/32"	3/32"	Yes	No	2078955
Flush Cut Diagonal	4-1/2"/115 mm	17/32"	9/16"	11/32"	NA	Yes	Yes	2078925

**WISE-GRIP Wire Strippers**



2078300



2078309



2078317



2078316



2078305

Size	Jaw Length	Jaw Width	Point Thickness	Wire Gauge	Wire Cutter	Stock #
8"/200 mm	N/A	2"	29/32"	10-24 AWG	Yes	2078300
8"/200 mm	1-3/16"	1-1/4"	1/8"	10-22 AWG	Yes	2078309
7"/170 mm	1-11/16"	1-1/4"	1/8"	10-20 AWG	Yes	2078317
6"/150 mm	1-19/32"	1-1/4"	1/8"	10-20 AWG	Yes	2078316
5"/125 mm	5/8"	3/4"	5/32"	10-24 AWG	Yes	2078305

• Available in ProTouch™ (6", 7", 8", 8-1/2") or dipped (5") grips for comfort

# PLIERS, WRENCHES & SCREWDRIVERS

## PLIERS & WRENCH SETS

### WISE-GRIP® Kitbag Sets



3pc. GrooveLock Pliers Set #2078711



5pc. Pliers & Wrench Set #2078708



8pc. Mini Pliers Set #2078714



8pc. Master Set #2078712

### WISE-GRIP Tray Sets



3pc. GrooveLock Pliers Set #2078710



4pc. Quick Adjusting Wrench Set—Metric #2078720



4pc. Quick Adjusting Wrench Set—SAE #2078719



4pc. Adjustable Wrench Set #2078706



4pc. Pliers Set #2078707

### WISE-GRIP Packaged Sets



2pc. SAE Quick Adjusting Wrench Set #2078718



2pc. GrooveLock Pliers Set #2078709



2pc. Pliers Set #2078702



2pc. Adjustable Wrench Set #2078700



3pc. Pliers Set #2078704



4pc. Pliers and Adjustable Wrench Set #2078705



2pc. 6" SAE & Metric Quick Adjusting Wrench #2078717



2pc. 8" SAE & Metric Quick Adjusting Wrench #2078713



2pc. Pliers Set #2078701



2pc. Pliers Set #2078703



3pc. Insulated Pliers Set #10505519



4pc. Pliers, Wrench & Knife Set #2101106HDDS

**IRWIN VISE-GRIP® Quick Adjusting Pipe Wrench**

The Irwin Vise-Grip Quick Adjusting Pipe Wrench is built with convenience and durability in mind. The quick adjusting jaw allows for one-handed operation and enhances user speed and convenience. Accessibility to confined work spaces is made possible by the sleek jaw profile and reduced tool length. The cast aluminum construction is 40% lighter than a traditional 14" cast iron wrench and thus reduces user fatigue.



**Forged Hook Jaw**

- 2-1/4" jaw capacity equivalent to standard 14" pipe wrench
- Ideal for pipe diameters up to 1-1/2"
- Ideal for most surfaces including black, galvanized, PVC and copper pipe, as well as nuts, bolts and couplings
- Broached Teeth



**Quick Adjusting Jaw**

- One-handed operation ratchets quickly to work surface



**Cast Aluminum Construction**

- 40% less weight than standard 14" cast iron pipe wrench
- Ergonomic handle ideal for heavy torque & maximum comfort

*\*than traditional pipe wrenches*

Length	Pipe Capacity	Stock #
11"	1-1/2"	274001SM

**VISE-GRIP Cast Iron Pipe Wrenches**



274102

- Heavy duty cast iron housing
- Drop forged jaw is heat treated to resist distortion or breakage
- Hardened teeth provide tremendous bite
- Easy spin adjusting nut is heat treated for durability

Length	Pipe Capacity	Stock #
8"	1"	274105
10"	1-1/2"	274101
12"	2"	274106
14"	2"	274102
18"	2-1/2"	274103
24"	3"	274104
36"	5"	274107
48"	6"	274108

**VISE-GRIP Cast Aluminum Pipe Wrenches**



2074110

- 40% lighter than our cast iron pipe wrenches
- Drop forged jaw is heat treated to resist distortion or breakage
- Hardened teeth provide tremendous bite
- Easy spin adjusting nut is heat treated for durability

Length	Pipe Capacity	Stock #
10"	1-1/2"	2074110
12"	2"	2074112
14"	2"	2074114
18"	2-1/2"	2074118
24"	3"	2074124
36"	5"	2074136
48"	6"	2074148

# CLAMPING TOOLS







<b>XP™ One-Handed Bar Clamps</b>	<b>25</b>
<b>One-Handed Bar Clamps</b>	<b>26</b>
<b>Hand Clamps</b>	<b>26</b>
<b>Traditional Clamps</b>	<b>27</b>
<b>Parallel Jaw Clamps</b>	<b>27</b>
<b>Specialty Clamps</b>	<b>28</b>
<b>Vises</b>	<b>28</b>

# CLAMPING TOOLS

## Get A Better Hold On Your Project

Over a decade ago, we introduced the convenient QUICK-GRIP® One-Handed Bar Clamp to the world and reinvented the process of clamping. Today, this innovation is still a top choice for a wide range of uses. Whatever the dimensions of your project or the materials used, IRWIN® Industrial Tools has the clamping tools to help you achieve professional results faster and easier. The following table provides a quick guide for determining the types of clamps to use on common projects, plus the holding force\* each one provides. As an innovator in the clamping category, IRWIN is proud to offer a complete line of clamping tools to meet every need.

### Clamping Tools Quick Reference

Clamps & Specs												
Holding Force:	20 - 65 lbs	30 - 60 lbs	400 - 1600 lbs	1000 - 1200 lbs	1000 lbs	1150 lbs	40 lbs	140 lbs	150 lbs	550 lbs	1150 lbs	N/A
Clamp Capacity:	1" - 3"	1 1/2" - 4"	1" - 8"	Based on pipe length	6" - 36"	12" - 30"	4"	6" - 12"	6" - 50"	6" - 50"	26" - 50" w/ stop off	N/A
Throat Depth:	1" - 3"	1 1/2" - 4"	1 3/8" - 4 1/2"	1 1/2" - 1 7/8"	3 1/2"	4 1/2"	1 3/16"	2 7/16"	3 3/4"	3 3/4"	3 3/4"	N/A
Light Clamping, Crafts	GOOD	BETTER	GOOD				BEST	BEST	BEST			
Flat panel & solid wood edge glue up				BEST	BETTER	BETTER				GOOD	BEST	
Deep reach clamps, Furniture wood gluing						BEST					GOOD	BETTER
Heavy Duty Holding			BETTER		BETTER	BETTER		GOOD	GOOD	BEST		
Metal working, High localized pressure			BEST	GOOD	BETTER	BETTER						
Corner joining, Multiple surface clamping												BEST
Irregular clamping surfaces												BEST

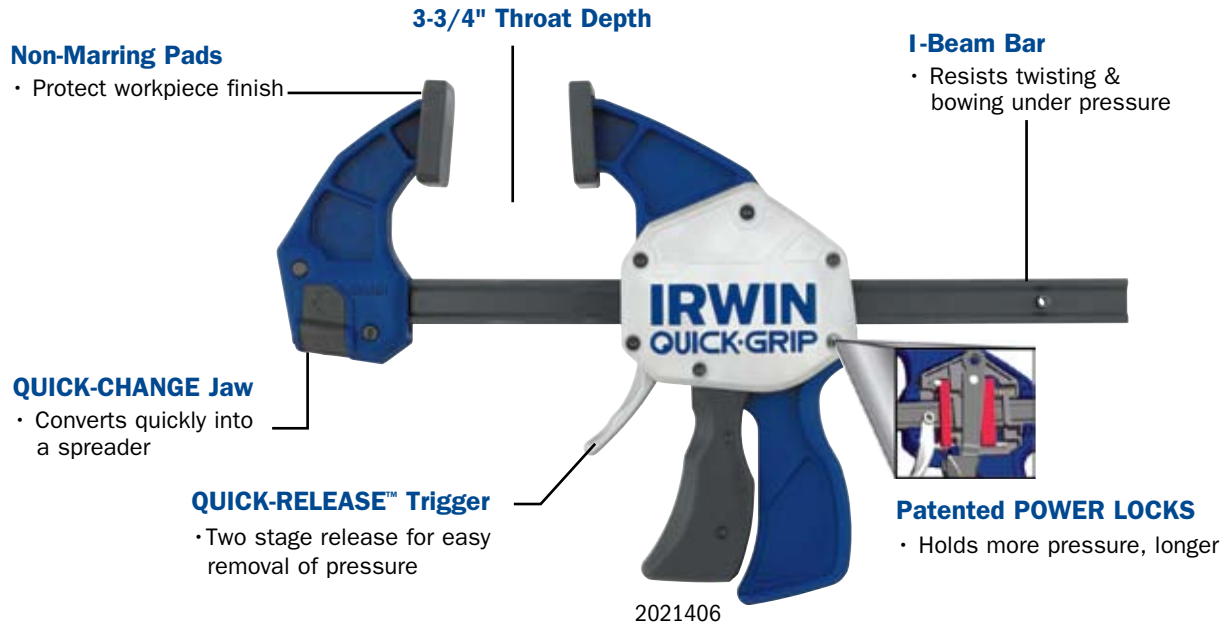
\*refers to sustained holding force

CLAMPING TOOLS



**QUICK-GRIP® XP™** The most powerful one-handed bar clamp on the market.

IRWIN revolutionized clamping with the introduction of the QUICK-GRIP XP One-Handed Bar Clamp and Spreader. The XP combines the ease of one-handed clamping with the power of 550 lbs of pressure, making holding and heavy-duty jobs faster than with traditional clamping tools. With the reinforced I-beam bar and internal POWER LOCKS™ delivering 550 lbs of pressure, the XP is ideal for commercial applications. The unique QUICK-CHANGE™ design also allows it to be quickly transformed into a spreader.



Description	Clamping Capacity	Spreading Capacity	Throat Depth	Stock #
QUICK-GRIP XP One-Handed Bar Clamp / Spreader	6" (15 cm)	8-1/2" - 16-1/2" (21 cm - 42 cm)	3-3/4" (95 mm)	2021406
	12" (30 cm)	8-1/2" - 22-1/2" (21 cm - 57 cm)	3-3/4" (95 mm)	2021412
	18" (45 cm)	8-1/2" - 28-1/2" (21 cm - 72 cm)	3-3/4" (95 mm)	2021418
	24" (60 cm)	8-1/2" - 34-1/2" (21 cm - 87 cm)	3-3/4" (95 mm)	2021424
	36" (91 cm)	8-1/2" - 46" (21 cm - 117 cm)	3-3/4" (95 mm)	2021436
	50" (127 cm)	8-1/2" - 60" (21 cm - 152 cm)	3-3/4" (95 mm)	2021450

CLAMPING TOOLS



# CLAMPING TOOLS

## ONE-HANDED BAR CLAMPS/HAND CLAMPS

### QUICK-GRIP® One-Handed Bar Clamp/Spreader



512QC

- Patented pistol grip design enhances comfort and ease of use
- Converts to a spreader with the QUICK-CHANGE® feature

### QUICK-GRIP Mini One-Handed Bar Clamp



5412

- Patented pistol grip design enhances comfort and ease of use
- QUICK-RELEASE™ trigger for fast and easy positioning

### QUICK-GRIP Micro One-Handed Bar Clamp/Spreader



53006

- Perfect size for hobby and craft applications
- Converts to a spreader

Description	Clamping Capacity	Spreading Capacity	Throat Depth	Stock #	Stock # (2-pack)
One-Handed Bar Clamp/Spreader	6" (15 cm)	7-1/2" - 14-5/8" (195 mm - 360 mm)	3-1/4" (80 mm)	506QC	–
	12" (30 cm)	7-1/2" - 20-5/8" (195 mm - 515 mm)	3-1/4" (80 mm)	512QC	–
	18" (45 cm)	7-1/2" - 26-5/8" (195 mm - 665 mm)	3-1/4" (80 mm)	518QC	–
	24" (60 cm)	7-1/2" - 32-5/8" (195 mm - 820 mm)	3-1/4" (80 mm)	524QC	–
	36" (91 cm)	7-1/2" - 44-5/8" (195 mm - 1120 mm)	3-1/4" (80 mm)	536QC	–
	50" (126 cm)	7-1/2" - 58-5/8" (195 mm - 1475 mm)	3-1/4" (80 mm)	550QC	–
One-Handed Mini Bar Clamp	6" (15 cm)	–	2-7/16" (62 mm)	546	5462
	12" (30 cm)	–	2-7/16" (62 mm)	5412	54122
One-Handed Micro Bar Clamp/Spreader	4-1/4" (10 cm)	8" (20 cm)	1-3/16" (30 mm)	53006	530062

CLAMPING TOOLS

### QUICK-GRIP HANDI-CLAMP®



59200

- QUICK-RELEASE trigger allows fast and easy positioning and release
- High-tech resin construction provides strength and durability
- Non-marring swivel pads protect workpiece

### QUICK-GRIP Spring Clamps



58200

- High-tech resin construction provides strength and durability
- Non-marring swivel pads protect workpiece

### QUICK-GRIP Metal Clamps



222601

- Simple and convenient for light clamping crafts
- Non marring pads protect the workpiece

Description	Clamping Capacity	Throat Depth	Stock #
HANDI-CLAMP	1-1/2" (37 mm)	1-1/2" (37 mm)	59100
	2" (50 mm)	2" (50 mm)	59200
	4" (10 cm)	3" (75 mm)	59400
Spring Clamps	1" (25 mm)	1" (25 mm)	58100
	2" (50 mm)	2" (50 mm)	58200
	2" (50 mm)	3" (75 mm)	58300
Metal Spring Clamps	1"(25 mm)	1" (25 mm)	222601
	2"(50 mm)	2" (50 mm)	222702
	3"(75 mm)	3" (75 mm)	222803

**QUICK-GRIP® Bar Clamps, Heavy Duty**



223212

- Ergonomic ProTouch™ handle allows higher clamping pressure
- I-beam bar reduces flexing and bowing
- Non marring pads protect the workpiece

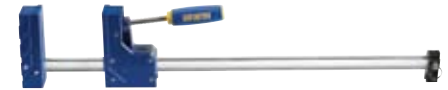
**QUICK-GRIP Bar Clamps, Medium Duty**



223112

- ProTouch handle for an ergonomic grip
- I-beam bar reduces flexing and bowing
- Clutch lock for easy movement along bar
- Non marring pads protect the workpiece

**NEW QUICK-GRIP Parallel Jaw Clamps**



2024100

- Deep 3-3/4 inch jaw depth for optimized pressure distribution
- Secure locking system prevents jaws from slipping
- ProTouch handle for an ergonomic grip
- Body and jaws made of quality resin to prevent marring and glue adhesion
- Up to 1150 lbs of pressure
- Removal of end foot allows for quick conversion to a spreader

**QUICK-GRIP C-Clamps**



225104

- Double-rolled thread provides greater clamping speed
- Large swivel pad reduces marring on work surface and increases stability
- Large handle for greater clamping pressure with less effort

**QUICK-GRIP Pipe Clamps**



224134

- Innovative clutch system eliminates the need for threaded pipe
- Large feet offer more stability
- Greater clearance between handle and worktop
- Large clutch plates allow for easier release

Description	Clamping Capacity	Spreading Capacity	Throat Depth	Pipe Size	Stock #
Bar Clamps, Heavy Duty	12" (30 cm)	–	4-7/8" (12 cm)	–	223212
	18" (45 cm)	–	4-7/8" (12 cm)	–	223218
	24" (60 cm)	–	4-7/8" (12 cm)	–	223224
	32" (75 cm)	–	4-7/8" (12 cm)	–	223230
Bar Clamps, Medium Duty	6" (15 cm)	–	3-1/8" (76 mm)	–	223106
	12" (30 cm)	–	3-1/8" (76 mm)	–	223112
	18" (45 cm)	–	3-1/8" (76 mm)	–	223118
	24" (60 cm)	–	3-1/8" (76 mm)	–	223124
	30" (65 cm)	–	3-1/8" (76 mm)	–	223130
	36" (91 cm)	–	3-1/8" (76 mm)	–	223136
	C-Clamps	1" (25 mm)	–	1-3/16" (30 mm)	–
2" (50 mm)		–	1-5/16" (33 mm)	–	225102
3" (75 mm)		–	2-1/4" (51 mm)	–	225103
4" (10 cm)		–	3" (75 mm)	–	225104
5" (12-1/2 cm)		–	3-1/4" (81 mm)	–	225105
6" (15 cm)		–	3-1/2" (87 mm)	–	225106
8" (20 cm)		–	4" (10 cm)	–	225108
2" (50 mm) Deep		–	3-1/2" (87 mm)	–	225123
3" (75 mm) Deep		–	4-1/2" (12 cm)	–	225134
1-1/2" (37 mm)		–	1-1/2" (37 mm)	–	2025101
2-1/2" (95 mm)		–	1-3/8" (33 mm)	–	2025102
2-1/2" (95 mm)		–	2-1/2" (95 mm)	–	2025103
Pipe Clamps		–	Based on pipe length	1-1/2" (37 mm)	3/4" (19 mm)
	1-1/2" (37 mm)	Based on pipe length	1-7/8" (47 mm)	1/2" (12 mm)	224212
	–	N/A	2-1/2" (95 mm)	3/4" (19 mm)	2024100
Parallel Jaw Clamps	24" (60 cm)/ 26" w/o stop	10-1/2" - 31" (26 cm-78 cm)	3-3/4" (95 mm)	–	2026500
	48" (121 cm)/ 50" w/o stop	11-1/2" - 55" (26 cm-140 cm)	3-3/4" (95 mm)	–	2026501



# CLAMPING TOOLS

## SPECIALTY CLAMPS/VISES

### QUICK-GRIP® Band Clamp



226100

- 1" x 15' for large and irregular shaped projects

### QUICK-GRIP Corner Clamp



226200

- Light-duty 3" corner clamp is perfect for picture frames and smaller projects

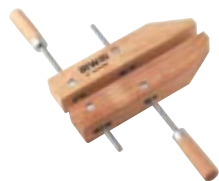
### QUICK-GRIP 90° Angle Clamp



226410

- Designed to hold material up to 3" thick at a 90° angle

### QUICK-GRIP Wooden Handscrew Clamp



226800

- Crafted from quality boxwood
- 4-1/2" jaws adjust to any angle for clamping non-parallel surfaces and odd shapes

### QUICK-GRIP Heavy Duty Workshop Vises



226305

- Swivel base for easy positioning
- Anvil for forming and shaping
- Integral pipe jaws

### QUICK-GRIP Clamp-On Vise



226303

- Performance of traditional vise with added portability
- Integral 3" pipe jaws

### QUICK-GRIP Woodworkers Vise



226361

### QUICK-GRIP Drill Press Vise



226340

Description	Throat Depth	Jaw Width	Jaw Capacity	Stock #
1" x 15' Band Clamp	—	—	—	226100
3" Corner Clamp	—	—	—	226200
90° Angle Clamp	—	—	—	226410
Wooden Handscrew Clamp	—	—	—	226800
4" Heavy Duty Workshop Vise	2-1/2" (63 mm)	4" (10 cm)	4-1/4" (11 cm)	226304
5" Heavy Duty Workshop Vise	3-3/8" (84 mm)	5" (12 cm)	6-1/2" (16 cm)	226305
6" Heavy Duty Workshop Vise	3-3/8" (84 mm)	6" (15 cm)	8-3/4" (84 mm)	226306
3" Clamp-On Vise	3" (75 mm)	3" (75 mm)	2" (50 mm)	226303
6-1/2" Woodworkers Vise	3" (75 mm)	6-1/2" (16 cm)	4-1/2" (11 cm)	226361
4" Drill Press Vise	1/2" (12 mm)	4" (10 cm)	4-1/2" (11 cm)	226340



**Woodworking Chisels**

# CHISELS

## WOODWORKING CHISELS

Professionals who use chisels everyday know that edge retention is key to chisel performance. That is why IRWIN® Industrial Tools manufactures its chisels from solid-forged, high-carbon steel. For fine woodworkers, IRWIN Marples® chisels remain the world standard, incorporating the advantages that have made them an industry-leading brand for close to 200 years.

### IRWIN Marples BLUE CHIP® Woodworking Chisels



M444/S4

- Long blade and polypropylene handle for increased leverage
- Best suited for hand or mallet work
- High-carbon solid-forged steel blade for maximum edge retention

Description	Blade Width	Carded Stock #
BLUE CHIP Bevel Edge Chisel		
	1/8"	M444/-1/8N
	1/4"	M444/-1/4N
	3/8"	M444/-3/8N
	1/2"	M444/-1/2N
	5/8"	M444/-5/8N
	3/4"	M444/-3/4N
	1"	M444/1N
	1-1/4"	M444/1-1/4N
	1-1/2"	M444/1-1/2N
	2"	M444/2N
4-pc Set (Carded)	1/4", 1/2", 3/4", 1"	M444/S4N
6-pc Set (Boxed)	1/4", 3/8", 1/2", 5/8", 3/4", 1"	M444/SB6N

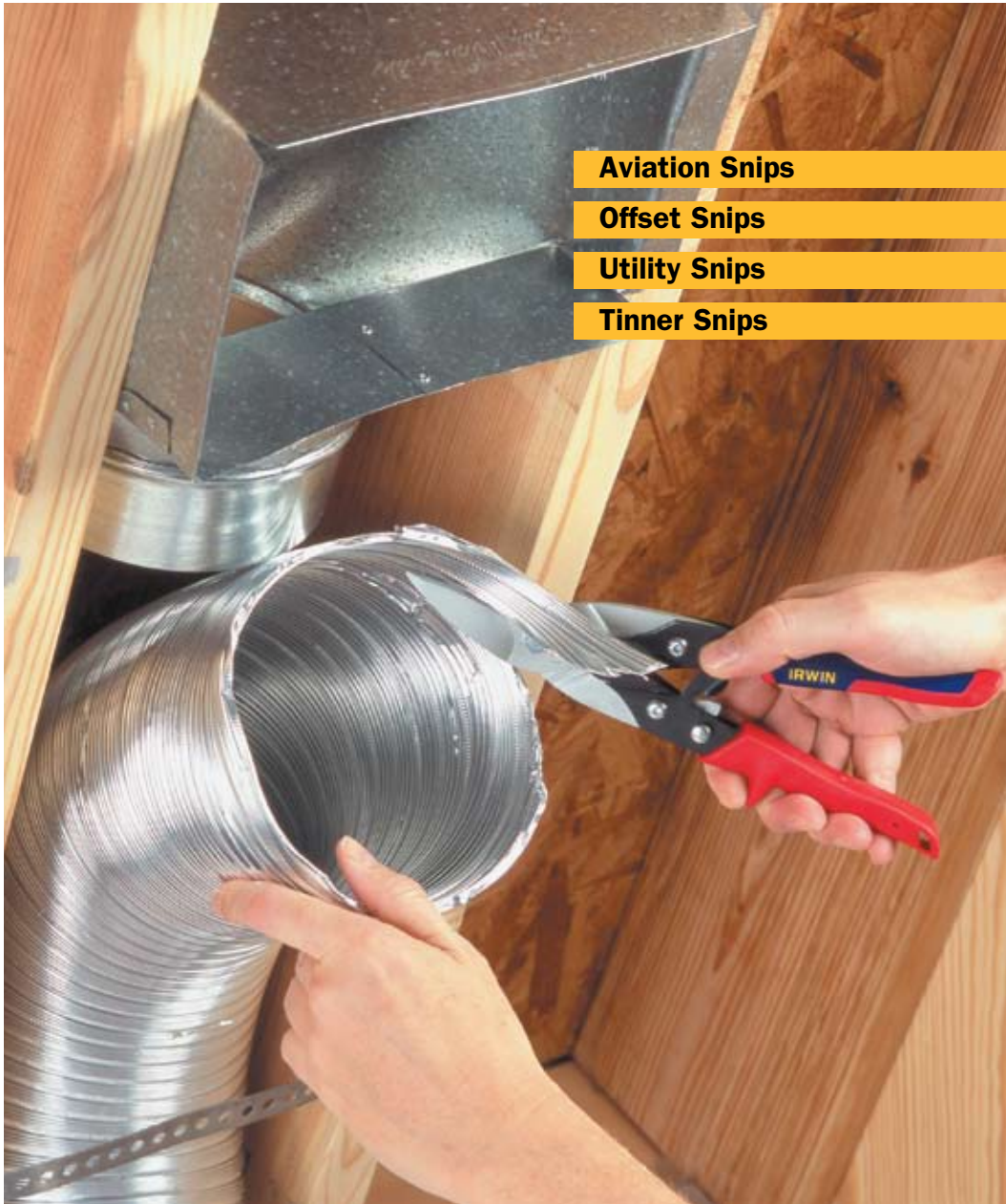
CHISELS

### Bevel Up Versus Bevel Down

The position of your chisel's bevel makes a big difference in the results you will achieve. When you use a chisel with the bevel up, the result is removal of larger chips. With the bevel down, a chisel offers you more control. The blade tends to work itself out of the wood grain, removing small shavings instead of large chips.







<b>Aviation Snips</b>	<b>32</b>
<b>Offset Snips</b>	<b>32</b>
<b>Utility Snips</b>	<b>32</b>
<b>Tinner Snips</b>	<b>32</b>

### Trust Built On Performance

IRWIN® Aviation & Offset Snips feature Hot Drop forged steel blades for a sharper cutting edge and greater strength. The ergonomically designed ProTouch™ grips and long-life spring increase the leverage and optimize each cut.

#### Aviation Snips



2073112



2073113



2073115

Model	Description	Size	Length of Cut	Cutting Capacity		Carded Stock #
-------	-------------	------	---------------	------------------	--	----------------

*Aviation snips are equipped with multiple pivot pins that provide compound cutting action.*

111	Cuts Left and Straight	10" (254 mm)	1-5/16" (33 mm)	Cold-Roll Steel 18 ga	Stainless Steel 23 ga	2073111
112	Cuts Right and Straight	10" (254 mm)	1-5/16" (33 mm)	Cold-Roll Steel 18 ga	Stainless Steel 23 ga	2073112
113	Cuts Straight and Wide Curves	10" (254 mm)	1-5/16" (33 mm)	Cold-Roll Steel 18 ga	Stainless Steel 23 ga	2073113

115	Bulldog Snips Notch and Trim	9" (228 mm)	3/4" (19 mm)	Cold-Roll Steel 16 ga	Stainless Steel 18 ga	2073115
-----	------------------------------	-------------	--------------	-----------------------	-----------------------	---------

#### Offset Snips



2073212



2073211

Model	Description	Size	Length of Cut	Cutting Capacity		Carded Stock #
-------	-------------	------	---------------	------------------	--	----------------

*Offset snips are equipped with multiple pivot pins that provide compound cutting action. They also cut at a sharper angle, distancing your hands from sharp, jagged work surfaces.*

SR	Cuts Straight and Angles or Curves Right	9-1/2" (241 mm)	1-5/16" (33 mm)	Cold-Roll Steel 18 ga	Stainless Steel 23 ga	2073212
SL	Cuts Straight and Angles or Curves Left	9-1/2" (241 mm)	1-5/16" (33 mm)	Cold-Roll Steel 18 ga	Stainless Steel 23 ga	2073211

#### Multi-Purpose Snips



21304

- Compound leverage design provides cuts up to 3-1/8"

Model	Description	Size	Length of Cut	Cutting Capacity		Carded Stock #
-------	-------------	------	---------------	------------------	--	----------------

304	ExtraCut Snips, cuts straight and curves	11-3/4" (298 mm)	3-1/8" (80 mm)	Cold-Roll Steel 24 ga	Stainless Steel 26 ga	21304
-----	--	------------------	----------------	-----------------------	-----------------------	-------

#### Tinner Snips



22007



23007

- Precision-ground blade edges ensure quality cuts
- Hot drop, forged steel blades provide maximum strength
- Double-dipped vinyl handles ensure comfort

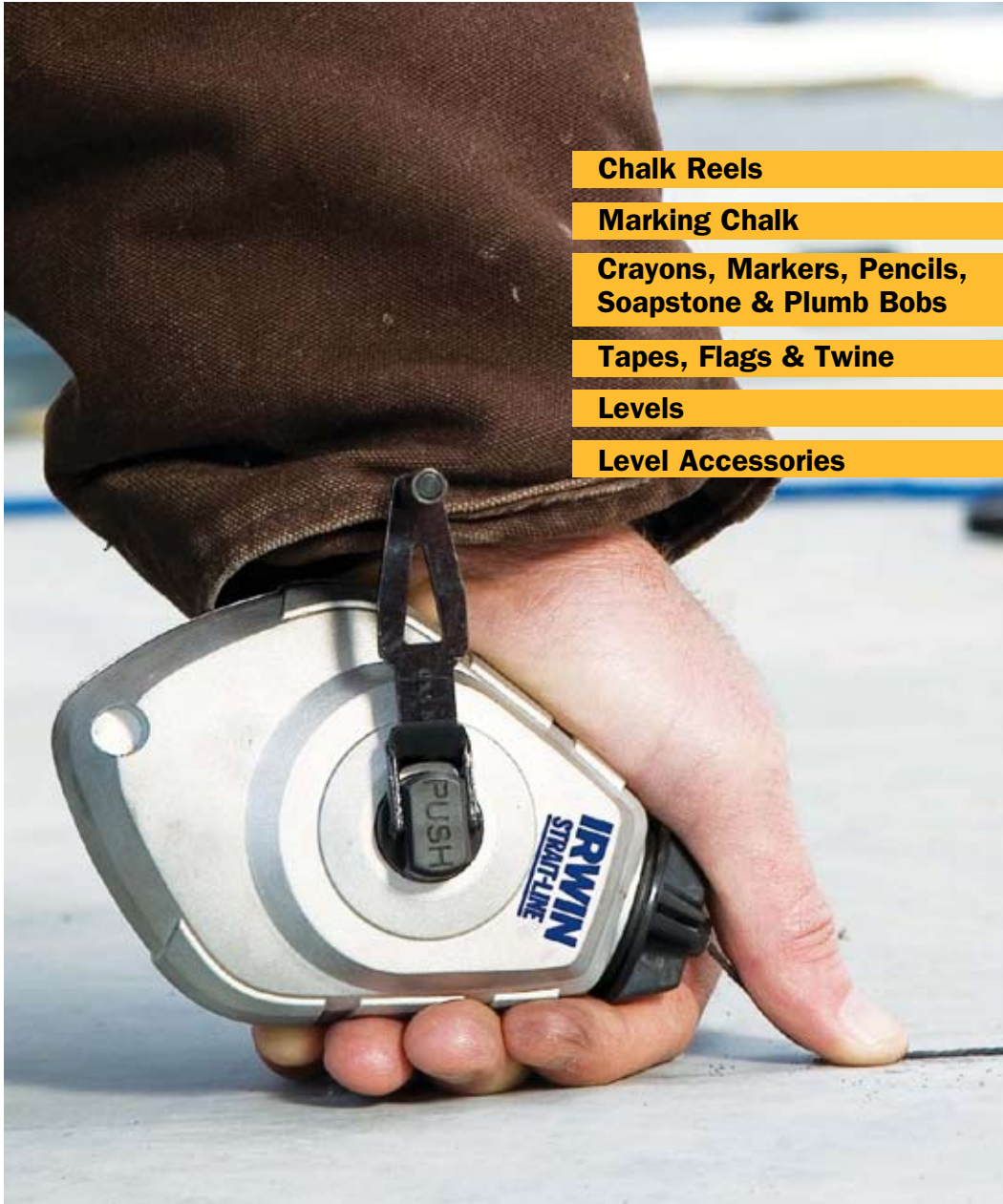
Model	Description	Size	Length of Cut	Cutting Capacity		Carded Stock #
-------	-------------	------	---------------	------------------	--	----------------

##### Flat Blades

007	Cuts straight and wide curves	7" (175 mm)	1-1/2" (38 mm)	Cold-Roll Steel 24 ga	Stainless Steel 28 ga	22007
010		10" (250 mm)	2" (51 mm)	Cold-Roll Steel 22 ga	Stainless Steel 26 ga	22010
012		12-3/4" (320 mm)	2-3/4" (70 mm)	Cold-Roll Steel 20 ga	Stainless Steel 22 ga	22012

##### Duckbill Blades

207	Cuts straight and tight curves	7" (175 mm)	1-1/2" (38 mm)	Cold-Roll Steel 26 ga	Stainless Steel 28 ga	23007
210		10" (250 mm)	2" (51 mm)	Cold-Roll Steel 24 ga	Stainless Steel 26 ga	23010
212		12-3/4" (320 mm)	2-3/4" (70 mm)	Cold-Roll Steel 22 ga	Stainless Steel 24 ga	23012



<b>Chalk Reels</b>	<b>34</b>
<b>Marking Chalk</b>	<b>35</b>
<b>Crayons, Markers, Pencils, Soapstone &amp; Plumb Bobs</b>	<b>36</b>
<b>Tapes, Flags &amp; Twine</b>	<b>37</b>
<b>Levels</b>	<b>38</b>
<b>Level Accessories</b>	<b>39</b>

# MARKING & LAYOUT TOOLS

## CHALK REELS

### **NEW** IRWIN® STRAIT-LINE® *MACH6* Chalk Reel

From the company that invented the chalk reel in 1960, we bring you the fastest, toughest, most innovative reel in the industry – the IRWIN STRAIT-LINE Mach6. Designed with a powerful 6:1 gear system, this advanced chalk reel retrieves line up to 6X faster than traditional models. Its metal housing and handle, plus high performance line, provide extra strength for unrivaled durability. When speed, performance and reliability are crucial, depend on the Mach6 Chalk Reel. Only from IRWIN STRAIT-LINE.

#### Wide-Pronged Hook

- For stable anchoring and ability to snap lines at various angles



- Twisted polyester & nylon line resists fraying and breaking
- Absorbs chalk quickly for darker, sharper lines



#### 6:1 Gear System

- 6:1 gear ratio saves time and money

#### Chalk Fill Cap

- Provides a large opening for filling reel

#### Larger Crank Handle Clutch

- Releases line without spinning

#### Diecast Metal Housing

- Provides greater impact resistance

#### EZ Access Door

- Allows for entry into the chalk reel - just remove 1 screw to change out the line

#### Longer Metal Handle

- For faster rewind and greater torque



### Chalk Reels



64110



64310



2031318DS



2031314DS



2031311

Length	Description	Carded Stock #	Bulk Stock #
<b>Reels</b>			
50'	Aluminum Chalk Reel (1:1)	63950	–
100'	Aluminum Chalk Reel (1:1)	64110	64111
100'	Speed-Line Chalk Reel (3.5:1)	64310	64311
<b>NEW</b> 100'	Speed-Line Pro Chalk Reel (3.5:1)	2031318DS	2031321B
<b>NEW</b> 100'	Mach6 Chalk Reel (6:1)	2031314DS	2031317B
150'	Large Capacity Chalk Reel (2:1)	2031311	–
<b>Combos</b>			
100'	Aluminum Chalk Reel with 4 oz. Orange Chalk (1:1)	64497	–
100'	Aluminum Chalk Reel with 4 oz. Red Chalk (1:1)	64498	–
100'	Aluminum Chalk Reel with 4 oz. Blue Chalk (1:1)	64499	–
100'	Speed-Line Chalk Reel with 4 oz. Blue Chalk (3.5:1)	64494	–
100'	Speed-Line Chalk Reel with 4 oz. Red Chalk (3.5:1)	64495	–
<b>NEW</b> 100'	Speed-Line Pro Chalk Reel with 4 oz. Blue Chalk (3.5:1)	2031319DS	–
<b>NEW</b> 100'	Speed-Line Pro Chalk Reel with 4 oz. Red Chalk (3.5:1)	2031320DS	–
<b>NEW</b> 100'	Mach6 Chalk Reel with 4 oz. Blue Chalk (6:1)	2031315DS	–
<b>NEW</b> 100'	Mach6 Chalk Reel with 4 oz. Red Chalk (6:1)	2031316DS	–
<b>Replacement Lines</b>			
50'	Twisted Polyester Replacement Line	64550	–
100'	Twisted Polyester Replacement Line	64610	–
<b>NEW</b> 100'	Mach6 & Speed-Line Pro High Performance Replacement Line - Nylon/Polyester	2031333	–
<b>NEW</b> 150'	Large Capacity Chalk Reel Replacement Line	2031313	–

**STRAIT-LINE® Marking Chalk**



65202 64801 64908 65101

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

**NEW**

Description	Color	Stock #
4 oz. Standard	Blue	64801
4 oz. Permanent	Red	64802
8 oz. Dust-Off	Light Violet	2032170
8 oz. Standard	White	64904
8 oz. Standard	Blue	64901
8 oz. Hi-Vis	Orange	64905
8 oz. Hi-Vis	Yellow	64903
8 oz. Hi-Vis	Green	64907
8 oz. Permanent	Red	64902
8 oz. Permanent	Black	64908
8 oz. Permanent Staining	Indigo Blue	2032171
8 oz. Permanent Staining	Crimson Red	2032172
8 oz. Permanent Staining	Midnight Black	2032173
2.5 lb. Standard	Blue	65201
2.5 lb. Hi-Vis	Orange	65205
2.5 lb. Permanent	Red	65202
2.5 lb. Permanent	Black	65207
2.5 lb. Permanent Staining	Indigo Blue	2032174
2.5 lb. Permanent Staining	Crimson Red	2032175
2.5 lb. Permanent Staining	Midnight Black	2032176
5 lb. Dust-Off	Light Violet	2032177
5 lb. Standard	White	65104
5 lb. Standard	Blue	65101
5 lb. Hi-Vis	Orange	65105
5 lb. Hi-Vis	Yellow	65103
5 lb. Hi-Vis	Green	65106
5 lb. Permanent	Red	65102
5 lb. Permanent	Black	2032160
5 lb. Permanent Staining	Indigo Blue	2032178
5 lb. Permanent Staining	Crimson Red	2032179
5 lb. Permanent Staining	Midnight Black	2032180

**Marking Chalk Color Permanence & Application Guide**

IRWIN STRAIT-LINE®	DUST-OFF	STANDARD	HI-VISIBILITY	PERMANENT	PERMANENT STAINING
<b>Available Colors</b>	Light Violet	Blue White	Orange Green Yellow	Black Red	Crimson Red Indigo Blue Midnight Black
<b>Applications</b>	<b>INDOOR</b> Remodeling Interior Trim Interior Decorating Cabinet Installation	<b>INDOOR/OUTDOOR</b> Roofing Siding Paneling Interior Layout	<b>OUTDOOR</b> Corrections Plumbing/Electrical Roofing Masonry	<b>OUTDOOR</b> Exterior Layout Concrete Layout Roofing Steel & Metal Fabrication	<b>OUTDOOR</b> Exterior Layout Concrete Layout Extreme Conditions Long Term Applications
<b>Weatherability*</b>	Less than 1 day	1 Week	2-3 Weeks	2 Months	4+ Months
<b>Permanence</b>	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
<b>Benefits</b>	Eliminates need for priming before painting Wipes off smooth surfaces with cloth, including drywall Cleanly wipes off rough surfaces with wet cloth Vacuums up easily Leaves no stain on Trex® or other composite wood	Temporary marking chalk Provides great visibility	Ideal for low light conditions and use on dark surfaces Use to show layout changes and corrections	Weather resistant lines remain visible after weeks of weather, sun and jobsite wear and tear	Weatherproof lines withstand months of weather, sun and jobsite wear and tear* Reduces the need for spraying a sealant on snapped lines

ML07\_0206

Trex is a registered™ of the Trex Company, Inc.

\*Based on average rainfall of 4"/month (Atlanta, Chicago, Dallas)

# MARKING & LAYOUT TOOLS

## CRAYONS/MARKERS/PENCILS/SOAPSTONE/PLUMB BOBS

### STRAIT-LINE® Lumber Crayons



66404

- For use on oily, slick, wet, cold or dry surfaces
- Ideal for lumber, concrete, ceramics, rubber, metal, paper & cardboard
- Non-toxic, waterproof

### STRAIT-LINE China Markers



02089-SH

- Ideal for writing on china, glass, metal or plastic
- Marks on porous and non-porous surfaces
- Fade and moisture resistant
- Write length of 2500 ft.

### STRAIT-LINE Carpenter Pencils & Sharpener



66300

- 7" overall length pencil



233250

### STRAIT-LINE Chalk Markers & Soapstone



2033500

- For temporary marking on metal surfaces
- Made of natural soapstone for superior marking

### Hexagon Plumb Bobs



13085

- Accurately machined steel, corrosion resistant nickel plating

Description	Color	Qty.	Carded Stock #	Bulk Stock #
4-1/2" Wax Based Lumber Crayon	Red	12-pc	—	66401
	Blue	12-pc	—	66402
	Green	12-pc	—	66403
	Black	12-pc	—	66404
	White	12-pc	—	66405
4-1/2" Wax Based Lumber Crayon	Yellow	12-pc	—	66406
	Red	2-pc	666012	—
	Black	2-pc	666042	—
4-1/2" Wax Based Lumber Crayon	Yellow	2-pc	666062	—
	Red	6-pc	66501	—
4-1/2" Wax Based Lumber Crayon	Yellow	6-pc	66506	—
	—	—	66510	—
Lumber Crayon Holder	—	—	66510	—

Description	Color	Qty.	Bulk Stock #
China Marker	Red	12-pc	02059-SH
	Black	12-pc	02089-SH
	White	12-pc	02060-SH

Description	Qty.	Carded Stock #	Bulk Stock #
Soft Lead Carpenter Pencil	12-pc	—	66301
Medium Lead Carpenter Pencil	Box of 72	—	66305SL
Medium Lead Carpenter Pencil	12-pc	—	66300
Medium Lead Carpenter Pencil	6-pc	66400	—
Hard Lead Carpenter Pencil	12-pc	—	66302
Carpenter Pencil Sharpener	25-pc	—	233250

Description	Color	Qty.	Bulk Stock #
Soapstone 5" x 1/2" x 3/16"	White	144	2033500
Railroad Chalk	White	144	2032150
Half Moon Carpenter Chalk	Blue	Box of 72	2032101

Description	Weight	Carded Stock #
Hex Plumb Bob	5 oz.	13055
Hex Plumb Bob	8 oz.	13085
Plumb Bob	12 oz.	13125

**STRAIT-LINE® Flagging Tapes**



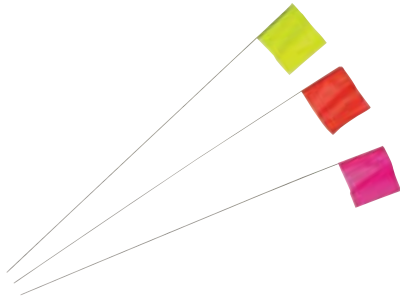
66200



65901

- Weatherproof poly vinyl chloride for harsh outdoor conditions
- Ideal for construction, landscaping, excavating, identification of trees or hazards and locating underground cables or pipe

**STRAIT-LINE Stake Flags**



- Bright, fade resistant color for maximum visibility
- Ideal for above ground marking, even at -40°

**STRAIT-LINE #18 Braided Twine**



Length	Description	Qty.	Bulk Stock #
<b>Flagging Tape</b>			
150'	Glo Red	24	65601
	Glo Orange	24	65602
	Glo Pink	24	65603
	Glo Lime	24	65604
	Glo Yellow	24	65605
300'	Red	24	65901
	Orange	24	65902
	Blue	24	65903
	White	24	65904
	Yellow	24	65905

<b>Barrier Tape</b>			
300' x 3"	CAUTION	8	66200
	DANGER - DO NOT ENTER	8	66202
1000' x 3"	CAUTION - CONSTRUCTION AREA	2	66211
300' x 3"	WET PAINT	8	66222
1000' x 3"	CAUTION	2	66231

<b>Danger Flags Roll</b>			
12" x 12"	Red Danger Flags	1	2034208
<b>Floor Tape</b>			
2" x 54'	Yellow/Black Floor Tape	12	2034300

Length	Color	Qty.	Bulk Stock #
2.5" X 3.5" X 21"	Glo Orange	100	64100
	Glo Pink	100	64101
	Glo Lime	100	64102
	White	100	2034204
	Yellow	100	2034205
	Blue	100	2034206
	Glo Red	100	2034207

Length	Description	Qty.	Bulk Stock #
100'	Orange # 18 Braided Twine	12	2034410
	Fluorescent Green # 18 Braided Twine	12	2034411
270'	Orange # 18 Braided Twine	12	2034403
	Fluorescent Green # 18 Braided Twine	12	2034408
500'	Orange # 18 Braided Twine	12	2034404
	Fluorescent Green # 18 Braided Twine	12	2034409

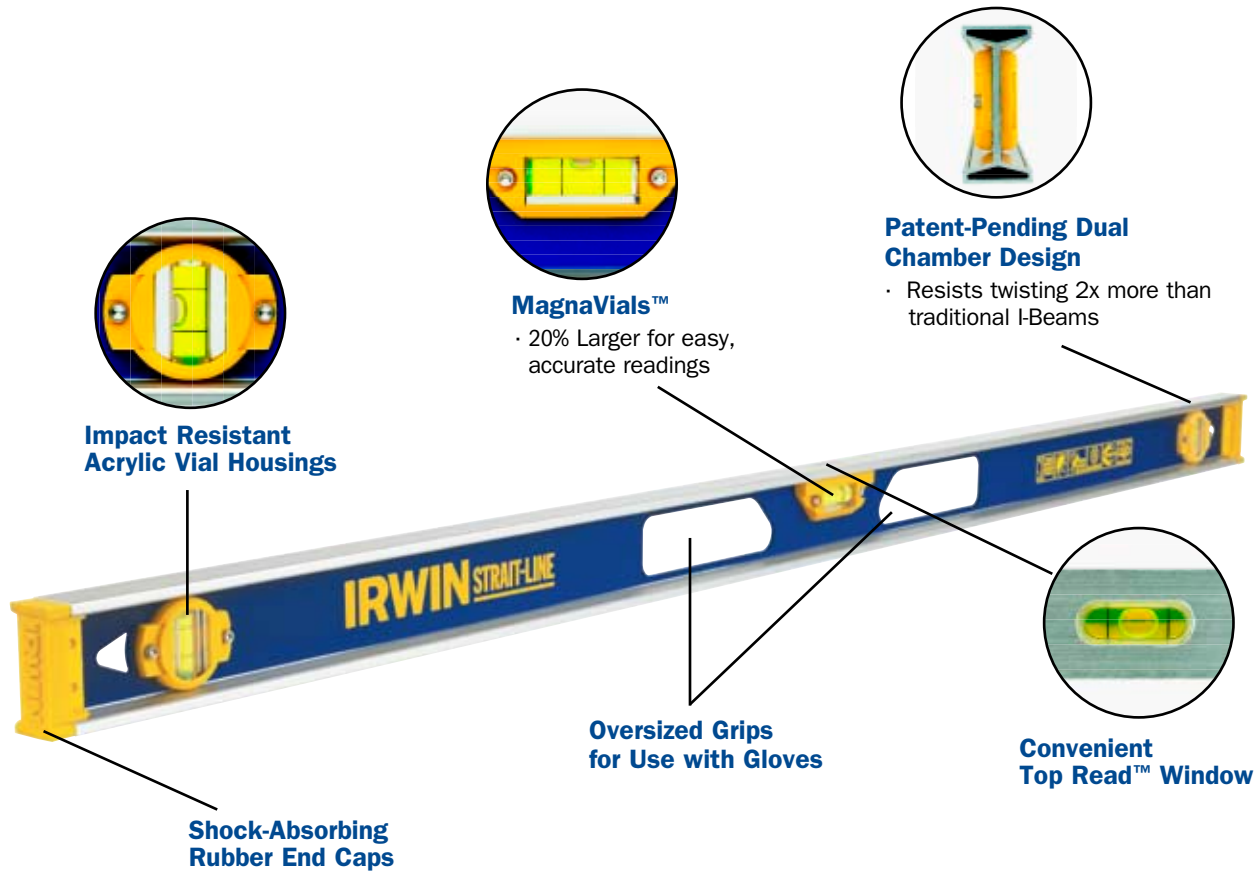
# MARKING & LAYOUT TOOLS

## I-BEAM LEVELS

### IRWIN® STRAIT-LINE® I-Beam Levels

IRWIN has expanded our offering of professional levels with the STRAIT-LINE I-Beam Level. Constructed of durable aluminum and featuring our patent-pending dual chamber design, IRWIN STRAIT-LINE I-Beam Levels provide industry-leading strength and durability. The easy-to-read MagnaVials™ are 20% larger than standard vials, providing accurate, consistent readings. For quality, accuracy & durability you can always count on your STRAIT-LINE I-Beam level to get the job done right.

MARKING & LAYOUT TOOLS



	Length	Description	Stock #
	24"	I-Beam Level	2035200
Ⓜ	24"	Magnetic I-Beam Level	2035201
	48"	I-Beam Level	2035202
Ⓜ	48"	Magnetic I-Beam Level	2035203
	72"	I-Beam Level	2035204
Ⓜ	78"	Magnetic I-Beam Level	2035207



**STRAIT-LINE® Box Beam Levels**



2035101

- Durable box beam construction
- PlumbSite® front vial viewer
- Continuous edge center vial
- Patented hex key vial calibration for guaranteed accuracy

**LIFETIME GUARANTEE**

Vials are guaranteed not to fade, fog, leak, develop a static charge or become inaccurate under normal usage.

Length	Description	Stock #
24"	Box Beam Level	2035101
24"	Magnetic Box Beam Level	2035102
48"	Box Beam Level	2035103
48"	Magnetic Box Beam Level	2035104
72"	Box Beam Level	2035105
72"	Magnetic Box Beam Level	2035106
96"	Box Beam Level	2035107
96"	Magnetic Box Beam Level	2035108
78" & 32"	Door Jamb Level Kit	2035400
78" & 32"	Magnetic Door Jamb Level Kit	2035401

**Cast Aluminum Torpedo Level**



2035100

- Cast aluminum body for unrivaled strength and durability
- PlumbSite® front vial viewer
- V-Groove for small pipes
- Concave sides for use on pipes
- B tank valve key
- Inch and metric scales

Length	Description	Stock #
9"	Torpedo Level	2035100



**Level Accessories**

- RAFTERHOOK™ safely hangs the box beam level
- WOODTACS™ attach the box beam level to door jambs or timber frame wall
- Storage bag holds up to two 4 ft. levels

Description	Stock #
Level RAFTERHOOK	2035600
Level WOODTACS	2035601
Level Storage Bag	2035602



2035600

**RAFTERHOOK**



2035601

**WOODTACS**



2035602

**Level Storage Bag**

— magnetic

MARKING & LAYOUT TOOLS





**Carpenter Saws 42**

**Specialty Saws 43**

**Pull Saws 44**

# HANDSAWS

## CARPENTER SAWS

### IRWIN® MARATHON® Carpenter Saws

Driven by input from trade professionals and supported by the world-class linear edge engineering behind the MARATHON brand, IRWIN has developed one of the most advanced lines of carpenter saws available. From the innovative M2™ Tooth Technology and Easy-Start™ Teeth to the ergonomic ProTouch™ handle – professional users will experience a new level of cutting performance.

**Tapered-Pitch™ Nose**

- Improves clearance & stability

**Thick-Body™ Blade**

- Delivers rigidity & control

**ProTouch Handle**

- Ergonomic design provides durability & comfort

**Easy-Start Teeth**

- 12 pt. extra-fine front teeth provide a rapid, smooth start



**M2 Tooth Technology**

- Patent-pending advanced tooth geometry & Tri-Ground™ teeth provide a fast, efficient cut

**Deep Gullets™**

- Provide rapid removal of chips

2011201

Short Carpenter Saw	Typical User	Common Applications
	<ul style="list-style-type: none"> <li>Exterior Trim Carpenter</li> <li>General Carpenter</li> <li>Remodeler</li> </ul>	<ul style="list-style-type: none"> <li>Overhead fascia and gable work</li> <li>Removing door plates</li> <li>Drywall rough-in</li> <li>Demolition when power tools may damage surrounding materials</li> <li>Making hand cuts in custom installations when the miter angle is greater than 55°</li> <li>General utility cuts</li> </ul>
Long Carpenter Saw	Typical User	Common Applications
	<ul style="list-style-type: none"> <li>Concrete Forming Contractor</li> <li>Brick/Masonry Contractor</li> <li>Remodeler</li> </ul>	<ul style="list-style-type: none"> <li>Cutting wood forms and scaffolding support when electricity is not available</li> <li>Cleaning out 90° angle on stair stringer or bird's mouth rafter cut</li> </ul>

#### 15" ProTouch Coarse Cut



2011201

#### 15" ProTouch Fine Cut



2011200

#### 15" Standard Coarse Cut



2011102

Description	Blade Length	Blade Thickness	Tooth Count	Stock #
ProTouch Coarse Cut Saw	15" (381 mm)	1 mm	9 pt.	2011201
	20" (508 mm)	1 mm	9 pt.	2011204
	24" (609 mm)	1 mm	9 pt.	2011203
ProTouch Fine Cut Saw	15" (381 mm)	1 mm	12 pt.	2011200
	24" (609 mm)	1 mm	12 pt.	2011202
Standard Coarse Cut Saw	15" (381 mm)	1 mm	9 pt.	2011102
	20" (508 mm)	1 mm	9 pt.	2011104

**ProTouch™ Drywall/Jab Saw**



2014100

**Typical User:**

Drywall Contractor, Electrician, Plumber, HVAC

**Common Applications:**

Roughing in drywall, Cutting out HVAC and electrical openings, Cutting ceiling tile openings for light installation

- Thick-Body™ Blade
- Aggressive Tri-Ground™ Teeth
- Ergonomic ProTouch Handle

**Standard Drywall/Jab Saw**



2014102

**Typical User:**

Drywall Contractor, Electrician, Plumber, HVAC

**Common Applications:**

Roughing in drywall, Cutting out HVAC and electrical openings, Cutting ceiling tile openings for light installation

- Rigid Blade
- Bi-Ground Teeth
- Hardwood Handle

**ProTouch Coping Saw**



2014400

**Typical User:**

Interior Trim Contractor, Woodworker

**Common Applications:**

Supplement to power tools, Cutting the curved profile on crown, base or chair rail moulding

- Flat-Bar™ Frame with 5-1/2" (140 mm) frame depth
- High Speed Steel Blade
- DuraSteel™ Pins
- Ergonomic Triangular ProTouch Handle

**ProTouch Dovetail/Jamb Saw**



2014450

**Typical User:**

Tile Contractors, Remodelers

**Common Applications:**

Flush cutting door jambs and millwork for tile installation/prep

- Wide-Body™ Reversible Flush-Cut™ Blade
- Spring-Loaded Pin enables blade to reverse for left or right cutting
- Ergonomic ProTouch Handle

**ProTouch Multi-Saw**



2015100

- Includes both Metal & Wood blades
- Ergonomic ProTouch Handle

**Standard Utility Saw**





2014200

- Thick-Body Blade (1 mm)
- Aggressive Tri-Ground Teeth
- Hardwood Handle

Description	Blade Length	Blade Thickness	Tooth Count	Stock #
ProTouch Drywall/Jab Saw	6-1/2" (165 mm)	1.5 mm	9 pt.	2014100
Standard Drywall/Jab Saw	6-1/2" (165 mm)	1.2 mm	7 pt.	2014102
ProTouch Coping Saw	6-1/2" (165 mm)	—	17 pt.	2014400
Coping Saw Replacement Blades - Coarse 3pk	6-1/2" (165 mm)	—	17 pt.	2014500
Coping Saw Replacement Blades - Fine 3pk	6-1/2" (165 mm)	—	21 pt.	2014501
ProTouch Dovetail/Jamb Saw	10" (254 mm)	2" (50 mm)	14 pt.	2014450
ProTouch Multi-Saw Metal Blade	10" (254 mm)	—	24 pt.	2015100
Wood Blade	5-1/4" (133 mm)	—	10 pt.	—
Standard Utility Saw (Wood/Drywall)	11-1/2" (292 mm)	—	10 pt.	2014200

### Pull Saw Advantages

Pull Saws do not have to withstand a pushing force, so a micro-thin blade can be used. The thin blade and precision ground teeth provide clean cuts. The pulling motion prevents binding and provides better control. Less weight, coupled with the natural pulling motion, results in less user fatigue.

Type of Saw	Typical User	Common Application
General Carpentry  Double Edge 	<ul style="list-style-type: none"> <li>Interior Trim Contractors</li> <li>Exterior trim contractors</li> <li>Hardwood flooring contractors</li> <li>Traditional woodworkers</li> <li>Cabinetmakers</li> </ul>	<b>Woodworking</b> <ul style="list-style-type: none"> <li>Cutting hand dovetails</li> <li>Creating miters on small millwork, such as shoe and quarter round moulding</li> <li>Flush cutting dowels</li> </ul> <b>Construction</b> <ul style="list-style-type: none"> <li>Flush cutting shims and door casings</li> <li>Overhead fascia and gable work</li> <li>Making utility trim cuts on millwork and hardwood flooring</li> </ul>

#### 15" General Carpentry Saw



213100

- Primary use - Aggressive cross cutting
- Flexible blade for flush cuts
- User example: General Carpenter – cleaning out the 90° circular saw cut on a stair stringer and bird's mouth rafter cut

#### 12" General Carpentry Saw



213101

- Primary uses - Cross cutting and ripping
- Flexible blade for flush cut
- User example: Exterior Trim Carpenter – cutting the overhang of gable soffit

#### Extra Fine Cut Saw



213102

- Primary uses - Fine miter or hand dovetail cuts
- Spine provides support for more control
- User example: Woodworker – cutting hand dovetails for furniture assembly

#### Double Edge Saw



213103

- Primary uses - Utility ripping and cross cutting
- User example: General Carpenter – flush cutting door shims and remodeling – cleanout of door casing prior to laying new floor tile

#### Dovetail/Detail Saw



213104

- Primary uses - Flush cutting dowels and fine detail cut
- User example: Interior Trim Contractor – detail work around windows and door frames

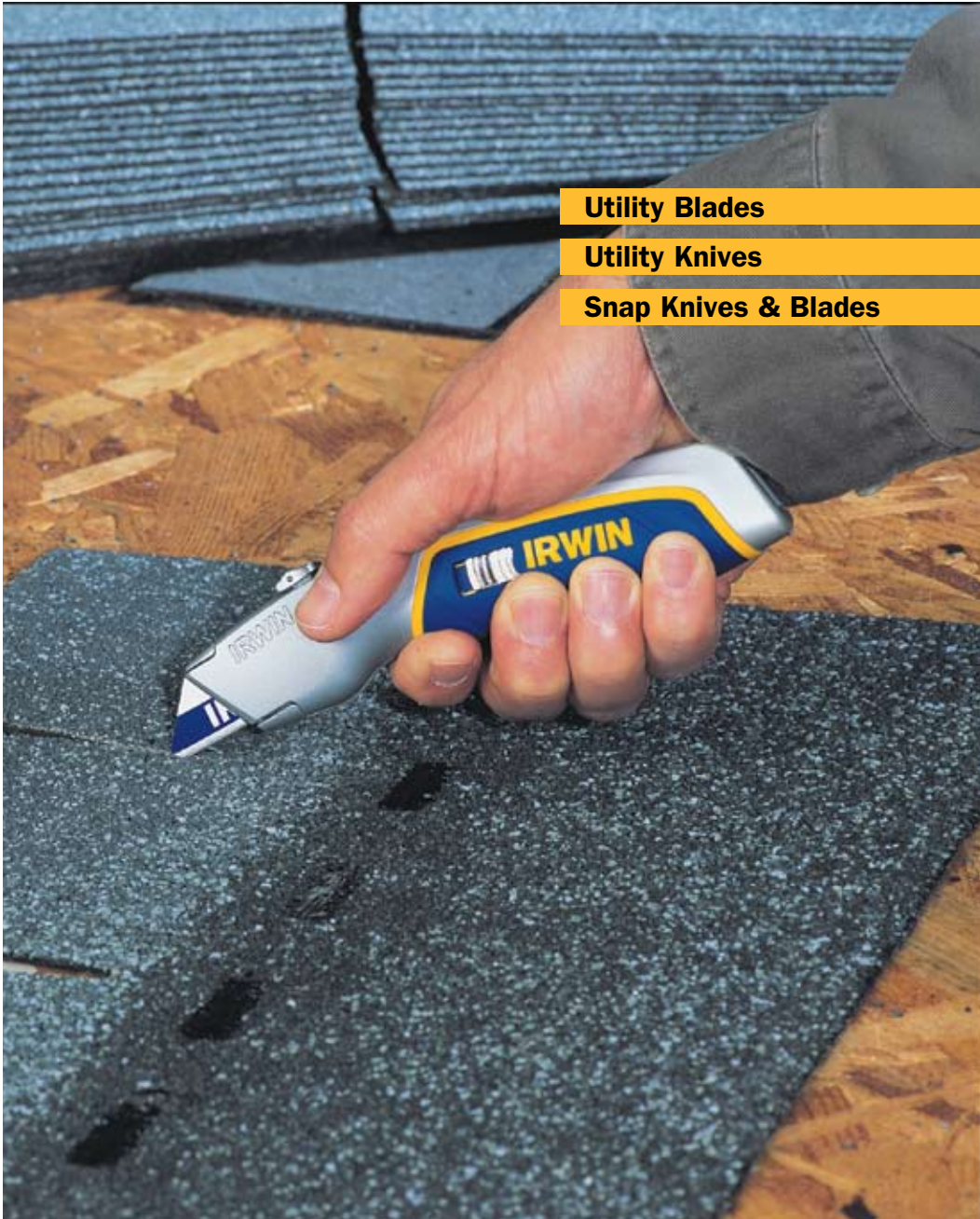
#### Combi-Saw



218HP-300

- Primary uses - Gardening/pruning and metal cutting
- Contains both wood cutting and hacksaw blades
- ProTouch™ Grip

Description	Tooth Count	Blade Length	Handle Material	Stock #
Pull Saw - Carpenter	10 pt.	15" (380 mm)	2-Polymer	213100
	14 pt.	12" (305 mm)	2-Polymer	213101
Pull Saw - Extra Fine (with spine)	19 pt.	10-5/8" (270 mm)	2-Polymer	213102
Pull Saw - Double Edge (rip/cross cut)	7 pt./17 pt.	9-1/2" (240 mm)	Polymer	213103
Pull Saw - Mini Dovetail/Detail	22 pt.	7-1/4" (185 mm)	Polymer	213104
Utility Saw - Combi-Saw	4 pt. Bow Saw Blade 24 pt. Hack Saw Blade	12" (317 mm)	ProTouch Handle	218HP-300



<b>Utility Blades</b>	<b>46</b>
<b>Utility Knives</b>	<b>47</b>
<b>Snap Knives &amp; Blades</b>	<b>48</b>

# UTILITY KNIVES & BLADES

## UTILITY BLADES

### IRWIN® BLUE BLADE™ Bi-Metal Utility Blades

The IRWIN BLUE BLADE bi-metal utility blades stay sharper 3X longer\* than traditional IRWIN carbon blades (item #2083100). As the name implies, bi-metal blades are produced through a patented process of combining spring steel and high speed steel, each with its own attributes and benefits, making them virtually shatterproof.\*\*



#### Blade Dispenser



2084400

- Easily dispenses single or multiple blades
- Stores 50, 70 or 100 blades

Description	Quantity	Stock #
BLUE BLADE Bi-Metal Utility Blades	5 Pack	2084100
	20 Pack w/Dispenser	2084200
	50 Pack w/Dispenser	2084300
	70 Pack w/Dispenser	2084350
	100 Pack w/Dispenser	2084400

\* Tested on 20 lb. recycled paper

\*\* Under normal working conditions

#### Bi-Metal Safety Blades



2088100

- Blunted ends inhibit puncture wounds
- Speed tip penetrates surfaces easily

Description	Quantity	Stock #
Bi-Metal Safety Blades	5 Pack	2088100
	50 Pack	2088300

#### Traditional Carbon Blades



2083100

Description	Quantity	Stock #
Traditional Carbon Blades	5 Pack	2083100
	100 Pack	2083200

#### Large Carbon Hook Blades



2087100

- Hooked point protects surface underneath

Description	Quantity	Stock #
Carbon Hook Blades	5 Pack	2087100
	100 Pack	2087102



**ProTouch™ Retractable Utility Knife**



2082200

- QUICK-CHANGE® mechanism allows for easy blade removal & reversal without opening
- Optimized cutting angle for reduced fatigue
- ProTouch ergonomic grip
- Inside storage for 5 blades
- Includes 3 IRWIN BLUE BLADE Bi-Metal utility blades

**ProTouch Fixed Utility Knife**



2081200

- Optimized cutting angle for reduced fatigue
- Easy tool-free entry
- ProTouch ergonomic grip
- Inside storage for 5 blades
- Includes 3 IRWIN BLUE BLADE Bi-Metal utility blades

**Standard Retractable Utility Knife**



2082101

- Optimized cutting angle for reduced fatigue
- Smooth, three-position slide exposes variable blade lengths
- Screw permanently captured in casing to prevent loss
- Inside storage for 5 blades
- Includes 1 IRWIN BLUE BLADE Bi-Metal utility blades

**Standard Fixed Utility Knife**



2081101

- Optimized cutting angle for reduced fatigue
- Screw permanently captured in casing to prevent loss
- Inside storage for 5 blades
- Includes 1 IRWIN BLUE BLADE Bi-Metal utility blades

**NEW Folding Utility Knife**



2089100

- Compact, rugged design
- Quick-Change Button™ for easy blade change
- Wire stripper notch for built in convenience
- Extended thumb ledge provides support and leverage while cutting
- Anchored belt clip for convenient access

**Self-Retracting Safety Knife**



2088600

- Two blade positions: 2 mm extension for box cutting & full extension for general use
- Self-retracting for safer use
- Interlocking nose
- Tool-free entry
- Ergonomic Grip
- Includes 1 IRWIN Bi-Metal safety blade

**Hi-Vis Retractable Utility Knife**



2082300

- Optimized cutting angle for reduced fatigue
- Smooth, three-position slide exposes variable blade lengths
- Screw permanently captured in casing to prevent loss
- Inside storage for 5 blades
- Includes 3 IRWIN BLUE BLADE Bi-Metal utility blades

Description	Case Qty.	Stock #
ProTouch Retractable Utility Knife	5	2082200
ProTouch Fixed Utility Knife	5	2081200
Standard Retractable Knife	5	2082101
Standard Fixed Utility Knife	5	2081101
Hi-Vis Retractable Utility Knife	5	2082300
Self-Retracting Safety Knife	5	2088600
Folding Utility Knife	10	2089100



# UTILITY KNIVES & BLADES

## SNAP KNIVES & BLADES

**NEW** 18 mm ProTouch™ Snap Knife



2086203

- ProTouch™ Handle provides secure grip and comfort
- Patented auto blade lock and auto blade load
- Internal blade storage
- Stainless steel blade guide
- Rubberized hinged end cap with snap closure
- Includes 1 Bi-Metal snap blade

9 mm ProTouch Snap Knife



2086200

- ProTouch Handle provides secure grip and comfort
- Patented auto blade lock and auto blade load
- Internal blade storage
- Stainless steel blade guide
- Rubberized hinged end cap with snap closure
- Includes 3 snap blades

**NEW** Snap Blade Refill Packs



2086404

- Easy one-touch dispensing
- Convenient, durable carrying case
- Available in 3, 10, & 50 packs

**NEW** 18 mm Standard Snap Knife



2086102

- Patented auto blade lock
- Hinged end cap with snap closure
- Internal blade storage
- Stainless steel blade guide
- Includes 1 Bi-Metal snap blade

9 mm Standard Snap Knife



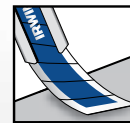
2086100

- Handle provides secure grip and comfort
- Patented auto blade lock and auto blade load
- Internal blade storage
- Stainless steel blade guide
- Rubberized hinged end cap with snap closure
- Includes 3 snap blades

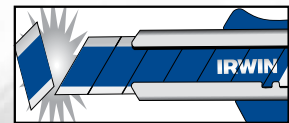


### BLUE BLADE™ Bi-Metal Snap Blades

The IRWIN® Blue Blade™ has revolutionized traditional snap blades with the introduction of Bi-Metal technology. Bi-Metal snap blades are produced through a patented process of combining two types of metal, spring steel and high speed steel, allowing the blade to bend without accidentally breaking. It also ensures that the blade snaps cleanly on the score every time.



Hi Flex Blade



Snaps Cleanly Every Time

### Knives & Blades

Description	Case Qty	Stock #
Pro Touch Snap Knife - 9 mm Carbon Blade	5	2086200
Pro Touch Snap Knife - 18 mm Carbon Blade	5	2086201
<b>NEW</b> Pro Touch Snap Knife - 18 mm Bi-Metal Blade	5	2086203
Standard Snap Knife - 9 mm Carbon Blade	5	2086100
Standard Snap Knife - 18 mm Carbon Blade	5	2086101
<b>NEW</b> Standard Snap Knife - 18 mm Bi-Metal Blade	5	2086102
3 Pack - 9 mm Carbon Blades	5	2086300
10 Pack - 9 mm Carbon Blades	5	2086301

### Bi-Metal Snap Blades

Description	Case Qty	Stock #
<b>NEW</b> 3-Pack Bi-Metal Snap Blades - 18 mm	25	2086403
<b>NEW</b> 10-Pack Bi-Metal Snap Blades - 18 mm	5	2086404
<b>NEW</b> 50-Pack Bi-Metal Snap Blades - 18 mm	5	2086405

UTILITY KNIVES & BLADES








<b>WeldTec™ Saw Blades</b>	<b>51</b>
<b>Portable Corded Saw Blades</b>	<b>52</b>
<b>Miter/Table Saw Blades</b>	<b>53</b>
<b>Cordless Saw Blades</b>	<b>54</b>

# CIRCULAR SAW BLADES

## The Standard For Jobsite Productivity

IRWIN® Industrial Tools makes MARATHON® circular saw blades for a full range of saws and applications. Use the table below to match blades for your equipment with your project plans. Locate the saw type and blade diameter in the left column. The columns to the right list the recommended MARATHON blade sizes and the available number of teeth per blade.

Type of Saw	Blade Diameter	Arbor	Application	Teeth
Cordless Circular Saws 	5-3/8"	10 mm	Framing/Ripping	18, 24
	5-1/2"	10 mm	Framing/Ripping	18, 24
	6-1/2"	5/8"	Framing/Ripping	18, 24
			Trim/Finish	40
Corded Circular Saws 	6-1/2"	5/8" Diamond	Framing/Ripping	20
	7-1/4"	5/8" and Diamond Knockout	Framing/Ripping	16, 18, 24
			Decks	24
			Trim/Finish	40, 60
Worm Drive Circular Saws 	7-1/4"	5/8" and Diamond Knockout	Framing/Ripping	18, 24
			Decks	24
			Trim/Finish	40
Table & Miter Saws 	8 - 8-1/4"	5/8" and Diamond Knockout	General Purpose	24
			Trim/Finish	40
	10"	5/8"	General Purpose	24
			Decks	40
			Trim/Finish	60
			Trim/Finish	80
Compound Miter & Sliding Compound Miter Saws 	10"	5/8"	Framing/Ripping	24
			Decks	40
			Trim/Finish	60
			Trim/Finish	80
	12"	1"	General Purpose	40
			Trim/Finish	72
		Trim/Finish	80	
		Trim/Finish	100	

## The Professional Tradesman's Choice For Construction

When you're building, there's no room for error. Your tools must be of the highest quality, with precision and performance you can always depend on. That's why professional tradesmen choose the MARATHON family of circular saw blades from IRWIN Industrial Tools. Offering a wide variety of blades for every construction application, IRWIN is the brand of blades you can always depend on. MARATHON. A time-tested brand. A family of superior saw blades. Professional results.

**Made Stronger. Lasts Longer.**

IRWIN has redefined excellence in the world of saw blades with the introduction of MARATHON® with WeldTec. This revolutionary new saw blade has WELDED carbide teeth for a 30% stronger tooth bond that gives you longer life. UC2™ (sub-micro grain) carbide teeth are 70% more compact than standard carbide teeth and are sharpened to finer, more durable cutting edges that stay sharper longer. The E.O.T.™ grind technology, where every other tooth is ground thinner, makes this the FASTEST FRAMING BLADE EVER™.

**E.O.T. Grind Technology**

- Patented tooth design
- Every other tooth is ground thinner
- FASTEST FRAMING BLADE EVER



**WeldTec Technology**

- Carbide teeth are welded not brazed
- 30% stronger tooth bond
- Longest life & durability

**Also Features...**

- Innovative heat vents & expansion slots for straighter cuts
- Reinforced shoulder for durability



**UC2 Carbide**

- Sub-micro grain
- 70% tougher than standard carbide
- Stays sharper, longer
- Best in class cut quality

CIRCULAR SAW BLADES

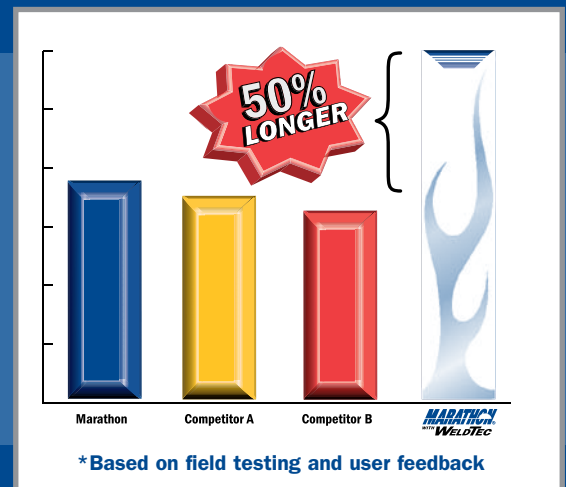
**Braze vs. Weld**



Standard brazed blades use a brazing material, which acts like a glue, to join the carbide tooth to the steel plate. This bond is only as strong as the brazing material, which softens as heat builds up during a cut and can cause tooth loss upon impact.

Marathon with WeldTec has welded carbide teeth. Welding fuses the carbide teeth to the steel plate, which makes the bond as strong as the base material. This bond is unaffected by heat build up and results in superior tooth retention.

**How many weeks did this blade last?\***



# CIRCULAR SAW BLADES

## PORTABLE CORDED SAW BLADES



24035

### MARATHON® with WeldTec Saw Blades

- Carbide teeth are welded not brazed
- 30% stronger tooth bond
- Longest life & durability
- Patent pending tooth design
- Every other tooth is ground thinner for fast cuts
- Fastest Framing Blade Ever™



24030

### MARATHON Saw Blades

- Every other tooth is thinner for faster cuts
- Construction grade carbide teeth for long life
- Reinforced shoulder for added durability
- Heat vent & expansion slot design reduces vibration for longer life and straighter cuts



25130

### IRWIN® Classic Series Saw Blades

- Precision ground teeth for smooth, accurate cuts
- Corrosion resistant coating helps prevent rusting
- Professional performance for an economic price



11830

### NEW MARATHON Vinyl Cutting Saw Blades

- Optimized, symmetric 60° tooth design eliminates chipping & cracking for a fast, smooth finish when pushing or pulling through the cut
- Innovative heat vent & expansion slot designs
- Efficient chip ejection prevents binding & blade warping

CIRCULAR SAW BLADES

Diameter	Tooth Count	Arbor	Kerf	Hook Angle	Grind	Stock #	Bulk Stock #	Applications
<b>MARATHON Portable Coded Carbide Saw Blades</b>								
6-1/2"	20	5/8" Diamond	.071"	20°	ATB	—	24021	Framing/Ripping
7-1/4"	18	5/8" Diamond	.071"	20°	ATB	14028	24028	Framing/Ripping
MARATHON w/ WeldTec 7-1/4"	24	5/8" Diamond	.071"	20°	ATB	—	24035	Framing/Ripping
7-1/4"	24	5/8" Diamond	.071"	20°	ATB	14030	24030	Framing/Ripping
7-1/4"	40	5/8" Diamond	.071"	20°	ATB	14031	24031	Trim/Finish
<b>IRWIN Classic Series Portable Coded Carbide Saw Blades</b>								
7-1/4"	16	5/8" Diamond	.087"	22°	ATB	15030	25030	General Purpose
7-1/4"	24	5/8" Diamond	.087"	19°	ATB	15130	25130	Framing/Ripping/Decks
7-1/4"	40	5/8" Diamond	.087"	20°	ATB	15230	25230	Trim/Finish
7-1/4"	60	5/8" Diamond	.087"	18°	ATB	15530	25530	Trim/Finish
<b>IRWIN Portable Coded Steel Saw Blades</b>								
7-1/4"	26	5/8" Diamond	.087"	28°	Top/Face	11040	—	Framing/Ripping
7-1/4"	32	5/8" Diamond	.087"	25°	Top/Face	10040	20040	Framing/Ripping
7-1/4"	40	5/8" Diamond	.087"	18°	Top/Face	11140	—	Trim/Finish
7-1/4"	60	5/8" Diamond	.087"	5°	Top/Face	11240	—	Trim/Finish
7-1/4"	140	5/8" Diamond	.078"	5°	Top/Face	11840	21840	Trim/Finish
7-1/4"	150	5/8" Diamond	.067"	5°	Top/Face Hollow Ground	11440	—	Trim/Finish
<b>MARATHON Portable Coded Vinyl Saw Blade</b>								
7-1/4"	120	5/8" Diamond	.055"	Negative	Top/Face	11830	21830	Vinyl/PVC
<b>MARATHON Portable Coded Deck Saw Blade (Pressure Treated Wood)</b>								
7-1/4"	24	5/8" Diamond	.071"	20°	ATB	14130	24130	Deck Blade
<b>IRWIN Portable Coded Fiber Cement Saw Blades</b>								
7-1/4"	6	5/8" Diamond	.079"	15°	ATB	15702	—	Fiber Cement



14076

**MARATHON® Miter/ Table Saw Blades**

- #400 grit diamond ground teeth for a smooth finish
- Construction grade carbide teeth for longer life
- Precision balanced for accurate smooth cuts
- Thin kerf for fast cuts and longer motor life



15370

**IRWIN Classic Series Miter/Table Saw Blades**

- Precision ground teeth for smooth, accurate cuts
- Corrosion resistant coating helps prevent rusting
- Professional performance for an economic price



11270

**IRWIN Steel Miter/ Table Saw Blades**

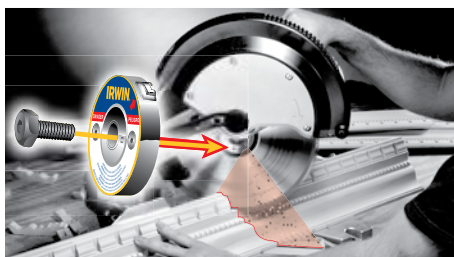
- Precision ground teeth for smooth, accurate cuts
- Fully hardened plate runs truer longer
- Heavy gauge, high carbon steel for extended life

Diameter	Tooth Count	Arbor	Kerf	Hook Angle	Grind	Stock #	Bulk Stock #	Applications
<b>MARATHON Miter/Table Carbide Saw Blades</b>								
8-1/4"	24	5/8" Diamond	.083"	20°	ATB	14050	—	General Purpose
8-1/4"	40	5/8" Diamond	.083"	15°	ATB	14053	—	Trim/Finish
10"	24	5/8"	.095"	20°	ATB	14233	24233	Framing/Ripping
10"	40	5/8"	.095"	20°	ATB	14070	24070	Decks
10"	60	5/8"	.095"	15°	ATB	14074	—	Trim/Finish
10"	80	5/8"	.095"	10°	ATB	14076	—	Trim/Finish
12"	40	1"	.095"	20°	ATB	14080	—	General Purpose
12"	72	1"	.095"	15°	ATB	14082	—	Trim/Finish
12"	80	1"	.095"	5°	ATB	14083	—	Trim/Finish
12"	100	1"	.095"	10°	ATB	14084	—	Trim/Finish
<b>IRWIN Classic Series Miter/Table Carbide Saw Blades</b>								
8- 8-1/4"	24	5/8" Diamond	.087"	16°	ATB	15150	—	General Purpose
8- 8-1/4"	40	5/8" Diamond	.087"	17°	ATB	15250	—	Trim/Finish
10"	24	5/8" Diamond	.102"	22°	ATB	15070	—	Framing/Ripping
10"	40	5/8" Diamond	.102"	16°	ATB	15270	—	Decks
10"	60	5/8" Diamond	.102"	12°	ATB	15370	—	Trim/Finish
<b>IRWIN Miter/Table Saw Steel Blades</b>								
8 - 8-1/4"	180	5/8" Diamond	.071"	2°	Top/Face	11850	—	Trim/Finish
10"	40	5/8"	.110"	18°	Top/Face	11170	—	Decks
10"	80	5/8"	.079"	6°	Top/Face	11670	—	Trim/Finish
10"	80	5/8"	.110"	6°	Top/Face	11270	—	Trim/Finish
10"	180	5/8"	.094"	2°	Hollow Ground Top/Face	11870	—	Trim/Finish
<b>IRWIN Miter Saw Laser Guides</b>								
						3061001	—	Miter/Table Saw
						3061002	—	Abrasive Chop Saw

CIRCULAR SAW BLADES



**Turn Your Miter Saw into a Laser Guided Power Tool!**



- Projects a clear laser line on the work for more accurate cuts.
- Self Calibrating - sits flush against the blade for an accurate line, every time!
- Save time and money. No need to remeasure. No miscuts to scrap.
- Self activating! Rotation of the blade powers the laser.

# CIRCULAR SAW BLADES

## CORDLESS SAW BLADES



24029C

### MARATHON Cordless Carbide Saw Blades

- Ultra thin kerf for more cuts per charge
- Face ground carbide teeth for fast, clean cuts
- Aggressive hook angle for fast cuts
- Construction grade carbide teeth for longer life



15120

### IRWIN® Classic Series Cordless Carbide Saw Blades

- Corrosion resistant coating helps prevent rusting
- Precision ground teeth for smooth, accurate cuts
- Professional performance for an economic price



11220

### IRWIN® Classic Series Cordless Steel Saw Blades

- Precision ground teeth for smooth, accurate cuts
- Fully hardened plate runs truer longer
- Heavy gauge, high carbon steel for extended life

CIRCULAR SAW BLADES

Diameter	Tooth Count	Arbor	Kerf	Hook Angle	Grind	Stock #	Bulk Stock #	Applications
<b>MARATHON Cordless Carbide Saw Blades</b>								
5-3/8"	18	10 mm	.063"	20°	ATB	14015	—	Framing/Ripping
5-3/8"	24	10 mm	.063"	20°	ATB	14017	—	Framing/Ripping
5-1/2"	18	10 mm	.063"	25°	ATB	14027	—	Framing/Ripping
5-1/2"	24	10 mm	.063"	23°	ATB	14011	—	Framing/Ripping
6-1/2"	18	5/8"	.063"	23°	ATB	14020	24020	Framing/Ripping
6-1/2"	24	5/8"	.063"	23°	ATB	14029	24029C	Framing/Ripping
6-1/2"	40	5/8"	.063"	23°	ATB	14023	—	Trim/Finish
7-1/4"	24	5/8"	.063"	23°	ATB	14025	—	Framing/Ripping/Decks
<b>IRWIN Classic Series Cordless Carbide Saw Blades</b>								
6-1/2"	24	5/8" Diamond	.087"	22°	ATB	15120	—	Framing/Ripping
6-1/2"	40	5/8" Diamond	.087"	19°	ATB	15220	—	Trim/Finish
<b>IRWIN Cordless Steel Saw Blades</b>								
6-1/2"	60	5/8" Diamond	.087"	5°	Top/Face	11220	—	Trim/Finish
6-1/2"	140	5/8" Diamond	.078"	4°	Top/Face	11820	—	Trim/Finish





<b>Reciprocating Saw Blades</b>	<b>56</b>
<b>Bi-Metal Hole Saws/Arbors</b>	<b>58</b>
<b>Hole Saw Kits</b>	<b>59</b>
<b>Jig Saws</b>	<b>60</b>
<b>Portable Band Saw Blades</b>	<b>60</b>
<b>Door Lock Installation Kits</b>	<b>60</b>

# LINEAR EDGE RECIPROCATING SAW BLADES

## Electron Beam Weld

- For stronger, longer lasting teeth

## 8% Cobalt

- Keeps teeth sharp, longer



## Bi-Metal Construction

- For faster cutting and added durability

## Precision Set Teeth

- For faster, smoother cuts

## Reciprocating Saw Blade Cross Reference Guide

Application	IRWIN® #	Length	TPI	LENOX	Bosch	Dewalt	Milwaukee	Morse
Metal Cutting	372414P2 372414P5	4"	14	20550-414R 20488-B414R 20551-S414R	S518B S522AF S522BF	DW4807 DW4807B	48-01-5181, 48-00-5181 48-01-6181, 48-00-1172 48-01-1181, 48-00-1181 48-02-1181	RB41014P, RB41014B RB414B, RB414P, RB414C RH414B, RH414P
	372418P2 372418P2	4"	18	20552-418R 20489-B418R	S518E S522EF	DW4810	48-01-5183, 48-00-5183 48-01-6183, 48-01-1183 48-02-1183, 48-00-1183 48-00-1174	RB418P, RB418B, RB418C RH418B, RH418P
	372424P2 372424P5	4"	24	2055-424R 20490-B424R 20555-S424R	S518EF S518G	DW4812	48-10-5185, 48-00-5185 48-01-6185, 48-01-1185 48-00-1185, 48-00-1176 48-00-1185	RB424B, RB424HP, RB424C RH424B, RH424P
	372614 372614P2 372614P5 372614B	6"	14	20564-614R 20494-B614R 20565-S614R	S918BF S918B S922BF	DW4808 DW4808B	48-01-5182, 48-02-5182 48-00-5182, 48-01-6182 48-01-5282, 48-00-5282 48-01-6282, 48-01-1182 48-02-1182, 48-00-1182 48-00-1179	RB614B, RB614P, RB614C RH614B, RH614P
	372618 372618P2 372618P5 372618B	6"	18	20566-618R 20529-B618R 20567-S618R	S918EF S918E S922EF	DW4811 DW4811B DW4878	48-01-5184, 48-02-5184 48-00-5184, 48-01-6184 48-01-6184, 48-01-5284 48-00-5284, 48-01-6284 48-01-1184, 48-02-1184 48-00-1184, 48-00-2170	RB618B, RB618C, RB618P RH618B, RH618P
Wood Cutting	372624 372624P 372624P5 372624B	6"	24	20568-624R 20496-B624R 20569-S624R	S918A S922AF	DW4813	48-01-5186, 48-02-5186 48-00-5186, 48-01-6186 48-01-5286, 48-00-5286 48-01-1186, 48-02-1186 48-00-2171	RB624B, RB624P, RB624C RH624B, RH624P
	372810 372810P2 372810P5 372810B	8"	10	20580-810R 20590-B810R 20581-S810R	S1018H S1122HF	DW4865 DW4865B	48-01-5093, 48-02-5093 48-00-5093, 48-01-6093 48-01-5193, 48-00-5193 48-01-6193, 48-01-3093 48-02-3093, 48-00-2175 48-00-5713, 48-00-8713	RB8501014B, RB8501014P RB8501014C, RB810B RB810P, RB81014B RB81014P, RB81014C
	372818 372818P2 372818P5 372818B	8"	18	20578-818R 20487-B818R 20563-S618R	S1122EF	DW4921	48-01-5188, 48-02-5188 48-00-5188, 48-01-6188 48-00-5788, 48-00-8788	RB818B, RB818P, RB814B RB814P, RB814C
	372606 372606P2 372606P5 372606B	6"	6	2056-606R 20492-B606R 20559-S606R	S811DF S811D S828D	DW4850	48-00-5012, 48-01-5012 48-01-6012	RB606STP, RB606STC RB606STB, RC606STP RC606STB
	Metal & Wood Cutting	372610 372610P2 372610P5 372610B	6"	10	20562-610R 20493-B610R 20561-S61	S811HF S811H S922VF	DW4845 DW4806 DW4806B DW4877	48-01-5092, 48-02-5092 48-00-5092, 48-01-6092 48-01-3092, 48-02-3092 48-00-1064
372110 372110P2 372110P5 372110B		12"	10	20583-110R 20491-B110R 20584-S110R	S1211H S1222VF	DW4838	48-01-5094, 48-02-5094 48-00-5094, 48-01-6094 48-01-5194, 48-00-5194 48-01-6194, 48-01-3094 48-02-3094	RB12501014B RB12501014P RB12501014C RB121014P RB121014B, RB1214P
372656 372656P2 372656P5 372656B		6"	6	20572-656R 20530-B656R 20573-S656R	S611DF S644D S611VF S644DF	DW4847 DW4848B DW4802 DW4802B DW4876	48-01-5031, 48-02-5031 48-00-5031, 48-01-6031 48-01-5035, 48-02-5035 48-00-5035, 48-01-6035 48-00-5015, 48-01-3031 48-02-3031, 48-00-3031 48-01-3035, 48-02-3035 48-00-3035, 48-01-1012 48-02-1012, 48-00-1031	RB63506B, RB53606P RC606STB, RC606B RB65006B, RB65006P RB65006C, RC606STP
372956 372956P2 372956P5 372956B		9"	6	20582-956R 20558-B956R 20587-S956R	S1544DF S1511DF	DW4848 DW4803 DW4803B	48-01-5036, 48-02-5036 48-00-5036, 48-01-6036 48-00-5016, 48-00-3036 48-01-3036, 48-00-1033 48-02-3036	RB95006B, RB93500B, RC905B, RB95006P RB035006P, RC905P, RB95006C, RB906B, RC900P
Demolition		372156 372156P2 372156P5 372156B	12"	6	20585-156R 205495-B156R 20586-S156R	S1344D S1411DF S1344DF	DW4849 DW4804 DW4804B	48-01-5037, 48-02-5037 48-00-5037, 48-01-6037 48-00-5017, 48-01-3037 48-02-3037, 48-00-3037 48-00-1032, 48-00-1302
	372666 372666P5	6"	6	20512-6066R 20614-B6066R	—	DW4862	48-00-5021, 48-00-8021	RB66206T20, RB66206T3
	372960 372960P5	9"	10	20597-960R 20524-B960R	—	DW4865 DW4865B	—	RB96210T20, RB96210T3

LINEAR EDGE

**Wood Cutting**



372606

- Fast cutting for wood, composition materials and plastic
- Use with materials 3/16"(5 mm) and thicker

**Nail Embedded Wood Cutting**



372656

- Roughing-in work and nail embedded wood
- Use with materials 3/16" (5 mm) and thicker

**Metal & Wood Cutting**



372610

- Cuts nail embedded wood, composition materials, plastic, pipe, carbon steel and stainless steel
- Use with materials 1/8" (3 mm) and thicker

**Metal Cutting**



372614

- Cuts all metals including nonferrous pipe conduit, stainless and sheet metals
- Use with materials 1/8"-1/2" (3-13 mm) thick

**Demolition**



372966

- For heavy duty and demolition applications in wood and metal
- Use with materials 3/16" (5 mm) and thicker

**Specialty**



372945F

- Designed for specialty applications

Length	TPI	Blade Thickness	Stock #	Stock # (2-pk)	Stock # (5-pk)	Stock # (25-pk)	Bulk # (50-pk)
6"	6	.035"	372606	372606P2	372606P5	372606B	—

Length	TPI	Blade Thickness	Stock #	Stock # (2-pk)	Stock # (5-pk)	Stock # (25-pk)	Bulk # (50-pk)
6"	6	.050"	372656	372656P2	372656P5	372656B	372656BB
9"	6	.050"	372956	372956P2	372956P5	372956B	372956BB
12"	6	.050"	372156	372156P2	372156P5	372156B	372156BB

Length	TPI	Blade Thickness	Stock #	Stock # (2-pk)	Stock # (5-pk)	Stock # (25-pk)	Bulk # (50-pk)
6"	10	.035"	372610	372610P2	372610P5	372610B	372610BB
8"	10	.050"	372810	372810P2	372810P5	372810B	372810BB
12"	10/14	.050"	372110	372110P2	372110P5	372110B	372110BB

Length	TPI	Blade Thickness	Stock #	Stock # (2-pk)	Stock # (5-pk)	Stock # (25-pk)	Bulk # (50-pk)
4"	14	.035"	—	372414P2	372414P5	—	—
4"	18	.035"	—	372418P2	372418P5	—	—
4"	24	.035"	—	372424P2	372424P5	—	—
6"	14	.035"	372614	372614P2	372614P5	372614B	372614BB
6"	18	.035"	372618	372618P2	372618P5	372618B	372618BB
6"	24	.035"	372624	372624P2	372624P5	372624B	372624BB
8"	18	.035"	372818	372818P2	372818P5	372818B	372818BB
12"	18	.035"	—	—	372118P5	—	—

Length	TPI	Blade Thickness	Stock #	Stock # (2-pk)	Stock # (5-pk)	Stock # (25-pk)	Bulk # (50-pk)
6"	6	.062"	372666	—	372666P5	—	372666BB
9"	6	.062"	372966	—	372966P5	—	372966BB
9"	10	.062"	372960	—	372960P5	—	372960BB

Application	Length	TPI	Blade Thickness	Stock #
Hardiplank, Fiberglass & Cement Board	6"	6 Carbide	.050"	372606C
General Purpose, Wood & Metal Cutting	6"	6 Fleam Ground	.050"	372645F
Hardiplank, Fiberglass & Cement Board	8"	3 Carbide	.050"	372803C
Pruning, Fast Wood Cutting	9"	4/5 Fleam Ground	.050"	372945F

# LINEAR EDGE

## BI-METAL HOLE SAWS/HOLE SAW ARBORS

### High Quality Construction For Fast Clean Cuts

Each IRWIN MARATHON® Hole Saw is crafted from the highest quality bi-metal. The teeth are attached to a carbon steel body by a process called electron beam welding. The result is a tool composed of two types of metal welded edge-to-edge – also known as bi-metal construction.

Because IRWIN MARATHON Hole Saws are engineered and manufactured for exceptional sharpness and durability, they will cut much more than wood. These saws will also cut holes in aluminum, copper, iron, stainless steel and zinc.

**Variable Depth Gullets**

- Provide more efficient chip clearance

**4/6 Variable Pitch Teeth**

- For reduced noise and improved performance

**Electron Beam Weld**

- For stronger, longer lasting teeth

**Bi-Metal Construction**

- For toughness and long life

### Hole Saw RPM Reference Guide

Diameter	Mild Steel	Tool & Stainless	Cast Iron	Brass	Alum.
9/16" (14mm)	580	300	400	790	900
5/8" (16mm)	550	275	365	730	825
11/16" (17mm)	500	250	330	665	750
3/4" (19mm)	460	230	300	600	690
25/32" (20mm)	425	210	280	560	630
13/16" (21mm)	425	210	280	560	630
7/8" (22mm)	390	195	260	520	585
15/16" (24mm)	370	185	245	495	555
1" (25mm)	350	175	235	470	525
1-1/16" (27mm)	325	160	215	435	480
1-1/8" (29mm)	300	150	200	400	450
1-3/16" (30mm)	285	145	190	380	425
1-1/4" (32mm)	275	140	180	360	410
1-5/16" (33mm)	260	135	175	345	390
1-3/8" (35mm)	285	145	190	380	425
1-7/16" (37mm)	240	120	160	315	360
1-1/2" (38mm)	230	115	150	300	345
1-9/16" (40mm)	220	110	145	290	330
1-5/8" (41mm)	210	105	140	280	315
1-11/16" (43mm)	205	100	135	270	305
1-3/4" (44mm)	195	95	130	250	295
1-13/16" (46mm)	190	95	125	250	285
1-7/8" (48mm)	180	90	120	240	270
2" (51mm)	170	85	115	230	255

Diameter	Mild Steel	Tool & Stainless	Cast Iron	Brass	Alum.
2-1/16" (52mm)	165	80	110	220	245
2-1/8" (54mm)	160	80	105	210	240
2-1/4" (57mm)	150	75	100	200	225
2-5/16" (59mm)	140	70	95	190	220
2-3/8" (60mm)	140	70	95	190	220
2-1/2" (64mm)	135	65	90	180	205
2-9/16" (65mm)	130	65	85	175	200
2-5/8" (67mm)	130	65	85	170	195
2-3/4" (70mm)	125	60	80	160	185
2-7/8" (73mm)	120	60	80	160	180
3" (76mm)	115	55	75	150	170
3-1/8" (79mm)	110	55	70	140	165
3-1/4" (83mm)	105	50	70	140	155
3-3/8" (86mm)	100	50	65	130	150
3-1/2" (89mm)	95	45	65	130	145
3-5/8" (92mm)	95	45	60	120	140
3-3/4" (95mm)	90	45	60	120	135
3-7/8" (98mm)	85	40	55	110	130
4" (102mm)	85	40	55	110	130
4-1/8" (105mm)	80	40	55	110	120
4-1/4" (108mm)	80	40	55	110	120
4-3/8" (111mm)	75	35	50	100	105
4-1/2" (114mm)	75	35	50	100	105
4-3/4" (121mm)	70	35	45	90	95

### Hole Saw Arbors



373002

- Tough, durable construction
- For 3/8" & 1/2" drill chucks
- Removable pilot drill for easy replacement

Shank Size	Shank Type	Fits Hole Saw Sizes	Pin Driven	Stock #
3/8"	Standard Hex	9/16" - 1-3/16"	No	373001
1/2"	Standard Hex	9/16" - 1-3/16"	No	373002
3/8"	Standard Hex	1-1/4" - 6"	Yes	373003
1/2"	Standard Hex	1-1/4" - 6"	Yes	373004
1/4"	Quick Change Hex	9/16" - 1-3/16"	No	373005
N/A	–	1/4" Replacement Pilot Drill	–	373000

Diameter	Pipe Entrance	Pipe Tap	Recommended RPM (In Steel)	Arbored Stock #	Boxed Stock #
9/16"	—	—	580	373090A	373090BX
5/8"	—	—	550	373058A	373058BX
11/16"	—	—	500	373011A	373011BX
3/4"	3/8"	1/2"	460	373034A	373034BX
13/16"	—	—	425	373013A	373013BX
7/8"	1/2"	3/4"	390	373078A	373078BX
15/16"	—	—	370	373015A	373015BX
1"	—	—	350	373100A	373100BX
1-1/16"	—	—	325	373110A	373110BX
1-1/8"	3/4"	1"	300	373118A	373118BX
1-3/16"	—	—	285	373130A	373130BX
1-1/4"	—	—	275	373114A	373114BX
1-5/16"	—	—	260	373150A	373150BX
1-3/8"	1"	—	285	373138A	373138BX
1-7/16"	—	—	240	373170A	373170BX
1-1/2"	—	1-1/4"	230	373112A	373112BX
1-9/16"	—	—	220	373190A	373190BX
1-5/8"	—	—	210	373158A	373158BX
1-11/16"	—	—	205	373111A	373111BX
1-3/4"	1-1/4"	1-1/2"	195	373134A	373134BX
1-13/16"	—	—	190	373113A	373113BX
1-7/8"	—	—	180	373178A	373178BX
2"	1-1/2"	—	170	373200A	373200BX
2-1/16"	—	—	165	373210A	373210BX
2-1/8"	—	—	160	373218A	373218BX
2-1/4"	—	2"	150	373214A	373214BX
2-5/16"	—	—	140	373250A	373250BX
2-3/8"	—	—	140	373238A	373238BX
2-1/2"	2"	—	135	373212A	373212BX
2-9/16"	—	—	130	373290A	373290BX
2-5/8"	—	2-1/2"	130	373258A	373258BX
2-3/4"	—	—	125	373234A	373234BX
2-7/8"	—	—	120	373278A	373278BX
3"	2-1/2"	—	115	373300A	373300BX
3-1/8"	—	—	110	373318A	373318BX
3-1/4"	—	3"	105	373314A	373314BX
3-3/8"	—	—	100	373338A	373338BX
3-1/2"	—	—	95	373312A	373312BX
3-5/8"	3"	—	95	373358A	373358BX
3-3/4"	—	3-1/2"	90	373334A	373334BX
3-7/8"	—	—	85	373378A	373378BX
4"	—	—	85	373400A	373400BX
4-1/8"	3-1/2"	—	80	373418A	373418BX
4-1/4"	—	3-1/2"	80	373414A	373414BX
4-3/8"	—	—	75	373438A	373438BX
4-1/2"	—	4-1/2"	75	373412A	373412BX
4-3/4"	—	—	70	373434A	373434BX
5"	—	—	65	—	373500BX
5-1/2"	—	—	60	—	373512BX
6"	—	—	55	—	373600BX

LINEAR EDGE

**NEW** Bi-Metal Hole Saw Kits



3073004

- Super hard steel RC 65-66 for increased life
- 4/6 TPI reduces vibration
- Variable gullet depths provide more efficient chip removal

Description	Contents	Stock #
9pc Electrician's Kit	3/4", 7/8", 1-1/8", 1-1/2", 1-3/4", 2-1/4, 1/2" Hex, 3/8" Hex, Pilot Drill	3073002
9pc Plumber's Kit	7/8", 1-1/8", 1-3/8", 1-3/4", 2", 2-1/2", 1/2" Hex, 3/8" Hex, Pilot Drill	3073003
17pc General Purpose Kit	5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2", 1-3/4", 2", 2-1/2", 3", 1/2" Hex, 1/2" Hex, Pilot Drill (3)	3073004

# LINEAR EDGE

## JIGSAW BLADES/PORTABLE BAND SAW BLADES/DOOR LOCK KITS

### Jig Saw Blades



3072410D



3071412

- Wood cutting: Precision ground teeth for fast smooth cutting in hard & soft wood, plastics, laminate particle board and plywood
- Metal cutting: Fully hardened teeth for cutting ferrous and non-ferrous metals, aluminum and sheet steel

Blade Length	TPI	Blade Material	Tooth Design	Carded Stock # (2-pk)
<b>U-Shank</b>				
3"	—	5/32 Carbide Grit	—	3071300
3-1/4"	10	Bi-Metal	Milled	3071314
3-1/4"	20	Bi-Metal	Milled	3071320
3-1/4"	36	Bi-Metal	Milled	3071336
4"	6	Carbon	Fleam Ground	3071406
4"	10	Carbon	Milled	3071410
4"	10	Carbon	Fleam Ground	3071412
4"	10	Carbon	Fleam Ground	3071410D
6-pc Assorted	—	—	—	3071001
<b>T-Shank</b>				
3"	—	5/32 Carbide Grit	—	3072300
3"	10	Bi-Metal	Milled	3072314
3"	20	Bi-Metal	Milled	3072320
3"	36	Bi-Metal	Milled	3072336
4"	6	Carbon	Fleam Ground	3072406
4"	10	Carbon	Milled	3072410
4"	10	Carbon	Fleam Ground	3072412
4"	10	Carbon	Fleam Ground	3072410D
6-pc Assortment	—	—	—	3072001

### Portable Band Saw Blades



3074000

- Shatter resistant, bi-metal construction for extended life
- 8% Cobalt content for added durability
- Electron beam weld construction provides flexibility

Blade Length	TPI	Height	Blade Thickness	Stock # (3-pk)	Bulk # (25-pk)
44-7/8"	10/14	1/2"	.020"	3074000P3	3074000P25
44-7/8"	14	1/2"	.020"	3074001P3	3074001P25
44-7/8"	18	1/2"	.020"	3074002P3	3074002P25
44-7/8"	24	1/2"	.020"	3074003P3	3074003P25
44-7/8"	14/18	1/2"	.020"	3074004P3	3074004P25

### Portable Band Saw Material Matrix

Blade Length	TPI	Recommended Thickness
44-7/8"	14	1/4" to 1/2"
44-7/8"	18	1/8" to 1/4"
44-7/8"	24	3/32" to 1/8"
44-7/8"	14/18	1/8" to 1/2"

### Door Lock Installation Kits



3111005

- Self centering jig fits all common door widths
- Adjustable for both 2-3/8" and 2-3/4" backsets
- Complete installation in 3 easy steps

Door Width	Backset	Door Type	Hole Saw Type	Stock #
1-1/4" or 1-3/4"	2-3/8" or 2-3/4"	Wood	Carbon Steel	3111001
1-1/4" or 1-3/4"	2-3/8" or 2-3/4"	Wood or Metal	Bi-Metal	3111002





**Screwdriving Bits 63**

**Screw Guides/Insert Bit Holders 74**

**Nutsetters 76**

**Socket Adapters 77**

**Sets 78**

## Tools Manufactured For Strength and Value

### Industry-Specific Screwdriver Bits

Fastener heads are often designed for the particular needs of specific applications and industries. The table below identifies the most common fastener styles used in each industry listed. Manufactured to meet ANSI standards.

#### Features

- Made of high-grade S2 tool steel
- Wide variety of point sizes to fit many different applications
- IRWIN bits are milled for a precise fit
- On the Rockwell hardness scale, IRWIN bits are between 58-62

Industry	Profile	Phillips®	Slotted	Square Recess	TORX®	Tamper Resistant TORX®	Hex	POZIDRIV®	TORQ-SET®	TRI-WING®	Spanner	Frearson	Clutch G	Clutch A
Appliance		•	•	•	•			•						
Automotive		•	•		•		•	•						
Aviation		•	•						•	•		•		
Cabinetry				•								•		
Construction		•	•					•						
Control Panels							•				•			
Decking		•	•	•				•						
Drywall		•		•										
Electronics		•	•		•	•	•		•	•				
Furniture		•	•	•			•							
Hobby		•	•				•					•	•	•
HVACR		•	•	•										
Machine Tools/Metal							•							
Manufactured Housing													•	•
Marine		•	•									•		
Recreation		•	•				•					•	•	•
Security				•		•	•		•	•	•			
Subfloor		•		•										

® TRI-WING, POZIDRIV, TORQ-SET, and Phillips are registered trademarks of the Phillips Screw Company.  
 ® TORX is a registered trademark of Acument Intellectual Properties, LLC.

## Phillips Bit Selection

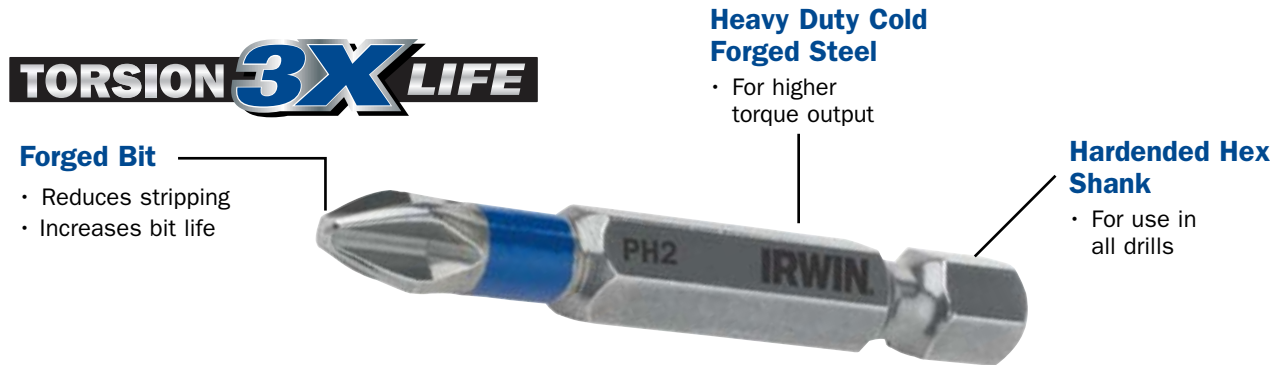
The chart below shows the proper Phillips bit to use for driving each type of fastener. Find the screw type and size you are driving. The column at the far left lists the proper point size to use.

Phillips Bit Point Size	Screw Type					
	Wood		Sheet Metal		Machine	
	Flat, Oval	Round	Flat, Oval, Binding	Flat, Oval, Round, Stove, Binding	Round Fillister	Truss Brazier Button
	SIZE		SIZE		SIZE	
0	0, 1	0, 1	0, 1	0, 1	0, 1	0, 1
1	2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4	2, 3, 4, 5
2	5, 6, 7, 8, 9	5, 6, 7, 8, 9, 10	5, 6, 7, 8, 10	5, 6, 7, 8, 10	5, 6, 7, 8, 10	6, 8, 10
3	10, 12, 14, 16	12, 14, 16	12, 14	12, 14	12, 1/4, 5/16	12, 1/4,
4	18, 20, 24	18, 20, 24	5/16, 3/8 7/16, 1/2	—	3/8, 7/16, 1/2	5/16, 3/8, 7/16, 1/2



**NEW** Torsion Screwdriving Bit Lasts 3X Longer than Other Bits

Superior fit, increased durability and the ability to withstand high torque applications account for the IRWIN torsion difference. A unique four hit, cold forged manufacturing process enables better fitment into screws with less cam out and is compatible with all drills and bit holders. The innovative heat-treating process provides greater durability for bit users. The IRWIN Torsion bit lasts longer and delivers professional performance that stands up to rigorous use. The Torsion's extreme torque output is derived from a precise cylindrical body geometry designed by IRWIN engineers to ensure the highest torque load in IRWIN history.



**NEW** Phillips® Insert Bit



3053002

- Forged steel for higher torque output

Point Size	Shank Diameter	Overall Length	Carded Stock #	Bulk Stock #
<b>Torsion Phillips Insert Bits</b>				
#1	1/4"	1"	3053001	3053001B
#2	1/4"	1"	3053002	3053002B
#3	1/4"	1"	3053004	3053004B

**NEW** Phillips Power Bit



3052002

<b>Torsion Phillips Power Bits</b>				
#1	1/4"	1-15/16"	3052001	3052001B
#2	1/4"	1-15/16"	3052002	3052002B
#3	1/4"	1-15/16"	3052003	3052003B

**NEW** Square Recess Insert Bits



3053007

<b>Torsion Square Recess Insert Bits</b>				
#1	1/4"	1"	3053005	3053005B
#2	1/4"	1"	3053006	3053006B
#3	1/4"	1"	3053007	3053007B

**NEW** Square Recess Power Bits



3052005

<b>Torsion Square Recess Power Bits</b>				
#1	1/4"	1-15/16"	3052004	3052004B
#2	1/4"	1-15/16"	3052005	3052005B
#3	1/4"	1-15/16"	3052006	3052006B

# FASTENER DRIVE SCREWDRIVING BITS



## Phillips® Bits

### Phillips Insert Bits



92011

- Forged steel for higher torque output

Point Size	Shank Diameter	Overall Length	Carded Stock #	Bagged Stock #	Bulk Stock #
#0	1/4"	1"	3053008 (2-pc)	—	92001
#1	1/4"	1"	3510052C (2-pc)	—	92005
#2	1/4"	1"	3510112C (2-pc)	3510115B (5-pc)	92011
#2	1/4"	1"	3510115C (5-pc)	351011XB (10-pc)	—
#2	1/4"	1"	351011XC (10-pc)	35101125 (25-pc)	—
#3	1/4"	1"	3510192C (2-pc)	—	92019
#1	1/4"	1-1/2"	—	—	92025
#2	1/4"	1-1/2"	—	—	92027
#3	1/4"	1-1/2"	—	—	92035
#2	1/4"	2"	—	—	92039
#2	1/4"	2-1/2"	—	—	92045
#1	5/16"	1-1/4"	—	—	92073
#2	5/16"	1-1/4"	—	—	92075
#3	5/16"	1-1/4"	—	—	92077
#4	5/16"	1-1/4"	—	—	92079

### Phillips Drywall Insert Bits



92047

Point Size	Shank Diameter	Overall Length	Carded Stock #	Bagged Stock #	Bulk Stock #
#1	1/4"	1"	—	—	92007
#2	1/4"	1"	3510472C (2-pc)	351047XB (10-pc)	92047
#2	1/4"	1"	3510475C (5-pc)	35104725 (25-pc)	—
#2	1/4"	1"	351047XC (10-pc)	—	—
#2	1/4"	2"	—	—	92053

### Phillips Drywall Screwsetter



351064

Point Size	Shank Diameter	Overall Length	Carded Stock #	Bagged Stock #	Bulk Stock #
#2	1/4"	1"	3510641C (1-pc)	3510643B (3-pc)	351064

### Phillips Power Bits



93007

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Carded Stock # (2-pc)	Carded Stock # (5-pc)	Bagged Stock # (5-pc)	Bulk Stock #
#1	1/4"	2"	3520031C	3042007	—	—	93003
#2	1/4"	2"	3520071C	—	3520075C	3520075B	93007
#3	1/4"	1-15/16"	3520111C	—	—	—	93011
#1	1/4"	2-3/4"	—	—	—	—	93017
#2	1/4"	2-3/4"	—	3052009	—	—	93019
#3	1/4"	2-3/4"	—	—	—	—	93021
#1	1/4"	3"	—	—	—	—	93043
#2	1/4"	3"	—	—	—	—	93047
#3	1/4"	3"	—	—	—	—	93049
#1	1/4"	3-1/2"	3520231C	—	—	—	93023
#2	1/4"	3-1/2"	3520251C	—	—	—	93025
#3	1/4"	3-1/2"	3520291C	—	—	—	93029
#1	1/4"	4"	—	—	—	—	93053
#2	1/4"	4"	—	—	—	—	93057
#3	1/4"	4"	—	—	—	—	93059
#1	1/4"	6"	—	—	—	—	93063
#2	1/4"	6"	3520671C	—	—	—	93067
#3	1/4"	6"	3520691C	—	—	—	93069

#### Power Bit Sets

#1, #2, & #3	1/4"	2"	#1, #2, & #3	1/4"	2"	3521993C
--------------	------	----	--------------	------	----	----------

FASTENER DRIVE

**□ Square Recess Bits**

**Square Recess Insert Bits**



92205

Point Size	Shank Diameter	Overall Length	Carded Stock #	Bagged Stock #	Bulk Stock #
#0	1/4"	1"	—	—	92201
#1	1/4"	1"	3512032C (2-pc)	—	92203
#2	1/4"	1"	3512052C (2-pc)	3512055B (5-pc)	92205
#2	1/4"	1"	—	351205XB (10-pc)	—
#2	1/4"	1"	—	35120525 (25-pc)	—
#3	1/4"	1"	3512072C (2-pc)	—	92207

**Square Recess 2 Piece Design Insert Bits**



92225

Point Size	Shank Diameter	Overall Length	Carded Stock # (2-pc)	Bulk Stock #
#0	1/4"	1"	—	92221
#1	1/4"	1"	3512232C	92223
#2	1/4"	1"	3512252C	92225
#3	1/4"	1"	3512272C	92227

**Square Recess Power Bits**



93205

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Carded Stock # (5-pc)	Bulk Stock #
#1	1/4"	2"	3522031C	—	93203
#2	1/4"	2"	3522051C	3522055C	93205
#3	1/4"	2"	3522071C	—	93207
#1	1/4"	2-3/4"	—	—	93211
#2	1/4"	2-3/4"	—	—	93213
#3	1/4"	2-3/4"	—	—	93215
#1	1/4"	3"	93219C	—	93219
#2	1/4"	3"	93221C	—	93221
#3	1/4"	3"	—	—	93223
#1	1/4"	4"	—	—	93225
#2	1/4"	4"	—	—	93226
#3	1/4"	4"	—	—	93227
#1	1/4"	6"	—	—	93230
#2	1/4"	6"	3522311C	—	93231
#3	1/4"	6"	—	—	93232

FASTENER DRIVE

# FASTENER DRIVE

## SCREWDRIVING BITS

### Square Recess 2 Piece Design Power Bits



93239

- Forged S2 Steel Tip

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Carded Stock # (5-pc)	Bulk Stock #
#0	1/4"	1-15/16"	—	—	93235
#1	1/4"	1-15/16"	—	—	93237
#2	1/4"	1-15/16"	3522391C	3522395C	93239
#3	1/4"	1-15/16"	—	—	93241
#1	1/4"	2-3/4"	—	—	93245
#2	1/4"	2-3/4"	—	—	93247
#3	1/4"	2-3/4"	—	—	93249
#1	1/4"	3"	—	—	93253
#2	1/4"	3"	—	—	93255
#3	1/4"	3"	—	—	93257
#1	1/4"	6"	—	—	93263
#2	1/4"	6"	—	—	93265
#3	1/4"	6"	—	—	93267
<b>Power Bit Set</b>					
#1, #2 & #3	1/4"	1-15/16"	3522993C	—	—

### Slotted Bits

#### Slotted Insert Bits



92047

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Carded Stock # (2-pc)	Bulk Stock #
3-4	1/4"	1"	3511051C	—	92105
4-5	1/4"	1"	3511071C	—	92107
6-8	1/4"	1"	3511111C	3511112C	92111
8-10	1/4"	1"	3511131C	3511132C	92113
10-12	1/4"	1"	3511151C	3511152C	92115
12-14	1/4"	1"	—	—	92117
14-16	1/4"	1"	—	—	92119
4-5	1/4"	1-1/2"	—	—	92135
6-8	1/4"	1-1/2"	—	—	92139
8-10	1/4"	1-1/2"	—	—	92141
10-12	1/4"	1-1/2"	—	—	92143
12-14	1/4"	1-1/2"	—	—	92145
14-16	1/4"	1-1/2"	—	—	92147
3-4	5/16"	1-1/2"	—	—	92163
4-5	5/16"	1-1/2"	—	—	92165
6-8	5/16"	1-1/2"	—	—	92169
8-10	5/16"	1-1/2"	—	—	92171
10-12	5/16"	1-1/2"	—	—	92173
12-14	5/16"	1-1/2"	—	—	92175
14-16	5/16"	1-1/2"	—	—	92177

#### Slotted Power Bits with Finder



93193

- Assists in keeping power bit engaged with fastener

Point Size	Shank Diameter	Overall Length	Bulk Stock #
5-6	1/4"	2-5/32"	93191
6-8	1/4"	2-5/32"	93193
10-12	1/4"	2-5/32"	93195
4-5	1/4"	3-3/4"	93186
5-6	1/4"	3-3/4"	93187
6-8	1/4"	3-3/4"	93188
8-10	1/4"	3-3/4"	93189

FASTENER DRIVE

**Slotted Power Bits**



93111

- Used for common round-head, oval-head and flat-head fasteners

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
3-4	1/4"	2"	—	93103
4-5	1/4"	2"	—	93105
5-6	1/4"	2"	3052010	93107
6-8	1/4"	2"	3521091C	93109
8-10	1/4"	2"	3521111C	93111
10-12	1/4"	2"	3521131C	93113
12-14	1/4"	2"	—	93115
3-4	1/4"	2-3/4"	—	93123
4-5	1/4"	2-3/4"	—	93125
5-6	1/4"	2-3/4"	—	93127
6-8	1/4"	2-3/4"	—	93129
8-10	1/4"	2-3/4"	—	93131
10-12	1/4"	2-3/4"	—	93133
12-14	1/4"	2-3/4"	—	93135
3-4	1/4"	3"	—	93139
4-5	1/4"	3"	—	93141
5-6	1/4"	3"	—	93143
6-8	1/4"	3"	—	93145
8-10	1/4"	3"	—	93147
10-12	1/4"	3"	—	93149
12-14	1/4"	3"	—	93151
3-4	1/4"	3-1/2"	—	93155
4-5	1/4"	3-1/2"	—	93157
5-6	1/4"	3-1/2"	—	93159
6-8	1/4"	3-1/2"	—	93161
8-10	1/4"	3-1/2"	—	93163
10-12	1/4"	3-1/2"	—	93165
12-14	1/4"	3-1/2"	—	93167
3-4	1/4"	6"	—	93173
4-5	1/4"	6"	—	93175
5-6	1/4"	6"	—	93177
6-8	1/4"	6"	—	93179
8-10	1/4"	6"	—	93181
10-12	1/4"	6"	—	93183
12-14	1/4"	6"	—	93185

**Power Bit Set**

4-5, 6-8 & 8-10	1/4"	2"		3523993C
-----------------	------	----	--	----------

FASTENER DRIVE

# FASTENER DRIVE SCREWDRIVING BITS



## TORX Insert Bits



3522993C

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Carded Stock # (10-pc)	Bulk Stock #
T6	1/4"	1"	—	—	92306
T7	1/4"	1"	3513091C	—	92309
T8	1/4"	1"	3513121C	—	92312
T9	1/4"	1"	3513151C	—	92315
T10	1/4"	1"	3513181C	—	92318
T15	1/4"	1"	3513211C	—	92321
T20	1/4"	1"	3513241C	—	92324
T25	1/4"	1"	3513271C	351327XC	92327
T27	1/4"	1"	3513301C	—	92330
T30	1/4"	1"	3513331C	—	92333
T40	1/4"	1"	3513361C	—	92336
T30	5/16"	1-1/4"	—	—	92361
T40	5/16"	1-1/4"	—	—	92365
T45	5/16"	1-1/4"	—	—	92369
T50	5/16"	1-1/4"	—	—	92377
T55	5/16"	1-1/4"	—	—	92381
<b>Insert Bit Sets</b>					
T10 & T15	1/4"	1"	3514962C (2-pc)		
T20 & T25	1/4"	1"	3514972C (2-pc)		

FASTENER DRIVE



## TORX Tamper Resistant Insert Bits



92335

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
T7	1/4"	1"	3053019C	
T8	1/4"	1"	3053021C	
T9	1/4"	1"	3053022C	92317
T10	1/4"	1"	3053023C	92320
T15	1/4"	1"	3053024C	92323
T20	1/4"	1"	3053025C	92326
T25	1/4"	1"	3053026C	92329
T27	1/4"	1"	3053027C	92332
T30	1/4"	1"	3053028C	92335
T40	1/4"	1"	3053029C	92338
T45	5/16"	1-1/4"	3053058C	92371
T50	5/16"	1-1/4"	3053059C	92379
T55	5/16"	1-1/4"	3043060C	92383
<b>Insert Bit Sets</b>				
T10, T15, T20, T25, T27 & T30	1/4"	1"	3514996C (6-pc)*	

\*Tamper resistant



**TORX® Bits**

**TORX® Power Bits**



93336

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
T6	1/4"	2"	353009	93306
T7	1/4"	2"	—	93309
T8	1/4"	2"	—	93312
T9	1/4"	2"	—	93315
T10	1/4"	2"	3523181C	93318
T15	1/4"	2"	3523211C	93321
T20	1/4"	2"	3523241C	93324
T25	1/4"	2"	3523271C	93327
T27	1/4"	2"	3523301C	93330
T30	1/4"	2"	3523331C	93333
T40	1/4"	2"	3052011	93336
T7	1/4"	2-3/4"	—	93337
T8	1/4"	2-3/4"	—	93339
T9	1/4"	2-3/4"	—	93340
T10	1/4"	2-3/4"	—	93341
T15	1/4"	2-3/4"	3052012	93342
T20	1/4"	2-3/4"	3052013	93343
T25	1/4"	2-3/4"	3052014	93344
T27	1/4"	2-3/4"	—	93345
T30	1/4"	2-3/4"	—	93346
T40	1/4"	2-3/4"	—	93347
T7	1/4"	3-1/2"	—	93356
T8	1/4"	3-1/2"	—	93357
T9	1/4"	3-1/2"	—	93358
T10	1/4"	3-1/2"	—	93359
T15	1/4"	3-1/2"	3052015	93360
T20	1/4"	3-1/2"	3052016	93361
T25	1/4"	3-1/2"	3052017	93362
T27	1/4"	3-1/2"	—	93363
T30	1/4"	3-1/2"	—	93364
T40	1/4"	3-1/2"	—	93365
T8	1/4"	6"	—	93366
T10	1/4"	6"	3052018	93367
T15	1/4"	6"	3052019	93368
T20	1/4"	6"	3052020	93369
T25	1/4"	6"	3523701C	93370
T27	1/4"	6"	—	93371
T30	1/4"	6"	—	93372
T40	1/4"	6"	—	93373

**Power Bit Set**

T15, T20 & T25	1/4"	1-15/16"	3524993C
----------------	------	----------	----------

© TORX is a registered trademark of Acument Intellectual Properties, LLC.

FASTENER DRI

# FASTENER DRIVE SCREWDRIVING BITS



## POZIDRIV® Bits

### POZIDRIV Insert Bits



92085

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
#1	1/4"	1"	3510831C	92083
#2	1/4"	1"	3510851C	92085
#3	1/4"	1"	3510871C	92087

### POZIDRIV Power Bits



93079

- Reduces cam-out

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
#1	1/4"	2"		93073
#2	1/4"	2"		93077
#3	1/4"	2"		93079
#1	1/4"	3-1/2"	3052022	93036
#2	1/4"	3-1/2"	3052023	93037
#3	1/4"	3-1/2"	3052024	93038
#1	1/4"	6"		93039
#2	1/4"	6"		93040
#3	1/4"	6"		93041

POZIDRIV and Phillips are registered trademarks of Phillips Screw Company.



## TORQ-SET® Bits

### TORQ-SET Insert Bits



92238

Point Size	Shank Diameter	Overall Length	Carded Stock # (2-pc)	Bulk Stock #
#0	1/4"	1"	3053037	92230
#1	1/4"	1"	3053038	92231
#2	1/4"	1"	3053039	92232
#3	1/4"	1"	3053040	92233
#4	1/4"	1"	3053041	92234
#5	1/4"	1"	3053042	92235
#6	1/4"	1"	3053043	92236
#8	1/4"	1"	3053044	92238
#10	1/4"	1"	3053045	92240

### TORQ-SET Power Bits



93438

Point Size	Shank Diameter	Overall Length	Carded Stock # (2-pc)	Bulk Stock #
#0	1/4"	1-1/4"	3052025	93430
#1	1/4"	1-1/4"	3052026	93431
#2	1/4"	1-1/4"	3052027	93432
#3	1/4"	1-1/4"	3052028	93433
#4	1/4"	1-1/4"	3052029	93434
#5	1/4"	1-1/4"	3052030	93435
#6	1/4"	1-1/4"	3052031	93436
#8	1/4"	1-1/4"	3052032	93438
#10	1/4"	1-1/4"	3052033	93439

® TRI-WING and TORQ-SET are registered trademarks of Phillips Screw Company.





**Hex Head Bits**

**Hex Head Metric  
Insert Bits**



92531

Point Size	Shank Diameter	Overall Length	Bulk Stock #
2 mm	1/4"	1-1/4"	92507
3 mm	1/4"	1-1/4"	92509
4 mm	1/4"	1-1/4"	92511
5 mm	1/4"	1-1/4"	92513
6 mm	1/4"	1-1/4"	92515
8 mm	1/4"	1-1/4"	92517
3 mm	5/16"	1-1/4"	92525
4 mm	5/16"	1-1/4"	92527
5 mm	5/16"	1-1/4"	92529
6 mm	5/16"	1-1/4"	92531
8 mm	5/16"	1-1/4"	92533

**Hex Head Fractional  
Insert Bits**



92495

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
.050"	1/4"	1-1/4"	—	92407
1/16"	1/4"	1-1/4"	—	92403
5/64"	1/4"	1-1/4"	3053010	92411
3/32"	1/4"	1-1/4"	3053011	92415
7/64"	1/4"	1-1/4"	3053012	92419
1/8"	1/4"	1-1/4"	3053013	92423
9/64"	1/4"	1-1/4"	3053014	92427
5/32"	1/4"	1-1/4"	3053015	92431
3/16"	1/4"	1-1/4"	3053016	92437
7/32"	1/4"	1-1/4"	3053017	92443
1/4"	1/4"	1-1/4"	3053018	92451
5/16"	1/4"	1-1/4"	—	92467
3/8"	1/4"	1-1/4"	—	92483
5/32"	5/16"	1-1/4"	—	92489
3/16"	5/16"	1-1/4"	—	92491
7/32"	5/16"	1-1/4"	—	92493
1/4"	5/16"	1-1/4"	—	92495
5/16"	5/16"	1-1/4"	—	92497
3/8"	5/16"	1-1/4"	—	92499

**Insert Bit Set**

3/32", 7/64", 1/8", 9/64", 5/32", 3/16" & 7/32"	1/4"	1-1/4"	3515997C (7-pc)
---	------	--------	-----------------

**Hex Head Power Bits**



93411

Point Size	Shank Diameter	Overall Length	Bulk Stock #
1/16"	1/4"	1-15/16"	93403
5/64"	1/4"	1-15/16"	93405
3/32"	1/4"	1-15/16"	93407
7/64"	1/4"	1-15/16"	93409
1/8"	1/4"	1-15/16"	93411
9/64"	1/4"	1-15/16"	93413
5/32"	1/4"	1-15/16"	93415
3/16"	1/4"	1-15/16"	93419
7/32"	1/4"	1-15/16"	93423
1/4"	1/4"	1-15/16"	93427

# FASTENER DRIVE

## SCREWDRIVING BITS



### Frearson Bits

#### Frearson Insert Bits



92595

Shank Diameter	Overall Length	Bagged Stock #	Bulk Stock #
1/4"	1"	—	92595

#### Frearson Power Bits



93481

Shank Diameter	Overall Length	Bulk Stock #
1/4"	2"	93481



### Type A Clutch Insert Bits



92545

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
5/32"	1/4"	1"	3053047	92545
3/16"	1/4"	1"	3053048	92549



### Type G Clutch Bits

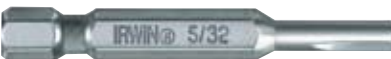
#### Type G Clutch Insert Bits



92543

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
1/8"	1/4"	1"	3053049	92543
5/32"	1/4"	1"	3053050	92547
3/16"	1/4"	1"	3053051	92551

#### Type G Clutch Power Bits



93467

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
1/8"	1/4"	1-15/16"	3052034	93463
5/32"	1/4"	1-15/16"	3052035	93467
3/16"	1/4"	1-15/16"	3052036	93471
5/32"	1/4"	2-3/4"	3052037	93475



### TRI-WING® Insert Bits

#### Insert Bits



92536

Point Size	Shank Diameter	Overall Length	Carded Stock # (2-pc)	Bulk Stock #
#1	1/4"	1"	305030*	92535
#2	1/4"	1"	305031*	92536
#3	1/4"	1"	305032*	92537
#4	1/4"	1"	305033*	92538
#5	1/4"	1"	305034*	92539
#6	1/4"	1-1/4"	305035*	92540
#7	1/4"	1-1/4"	305036*	92599

\* Note: 2 Bits per card

© TRI-WING and TORQ-SET are registered trademarks of Phillips Screw Company.

FASTENER DRIVE



## Spanner Insert Bits



92567

Point Size	Shank Diameter	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
#4	1/4"	1"	3053052	92563
#6	1/4"	1"	3053053	92565
#8	1/4"	1"	3053054	92567
#10	1/4"	1"	3053055	92569
#12	1/4"	1"	3053056	92571
#14	1/4"	1"	3053057	92573

## Double End Bits\*

IRWIN Double-End Bits deliver both speed and convenience by combining screwdriver bits in a durable one-piece design. These industrial quality bits are manufactured to withstand the same high-torque use as IRWIN power bits.



93525

Point Size	Shank Diameter	Overall Length	Carded Stock # (2-pc)	Bagged Stock # (5-pc)	Bagged Stock # (3-pc)	Bulk Stock #
#1 Phillips®/6-8 Slotted	1/4"	1-1/2"	3054001C	—	—	93503
#2 Phillips/8-10 Slotted	1/4"	1-1/2"	3535092C	3535095B	—	93509
#3 Phillips/10-12 Slotted	1/4"	1-1/2"	3054002C	—	—	93515
#1 Phillips/6-8 Slotted	1/4"	2-3/8"	—	—	—	93521
#2 Phillips/8-10 Slotted	1/4"	2-3/8"	3535252C	3535255B	—	93525
#2 Phillips/#2 Phillips	1/4"	2-3/8"	3532022C	3532025B	—	353202
#2 Sq Recess/#2 Sq Recess	1/4"	2-3/8"	—	3532035B	—	353203
#2 Phillips/8-10 Slotted	1/4"	3-1/2"	3533012C	—	—	—
<b>Double End Bit Set</b>						
#1 Phillips/6-8 Slotted, #2 Phillips/8-10 Slotted & #3 Phillips/10-12 Slotted	1/4"	2-3/8"	—	—	3532993C	—

FASTENER DRIVE

\* DO NOT place double-end bits in bit holding screwdrivers, power bit holders, or quick-change chuck adapters. The retaining ring in the bit holder is designed for insert bits only.

## Ceiling Tile Hanger Bits

Ceiling Tile Hanger Bits are specially designed for suspended ceiling installers. Their unique shape allows for faster driving of the eye hooks from which ceiling grids are hung. Designed to maintain fastener alignment during rotation.



93543

Description	Overall Length	Bulk Stock #
1/4" Ceiling Tile Hanger Bit	3"	93543
5/16" Ceiling Tile Hanger Bit	3"	93545

# FASTENER DRIVE

## SCREW GUIDES/INSERT BIT HOLDERS

### Screw Guides – Retracting Sleeves

Engineered to hold long fasteners in place, the screw guide sleeve retracts as the fastener is driven into the workpiece. It is especially useful in hard-to-reach applications.



#### Features

- Ideal for extra long fasteners
- Magnetic for secure retention of fastener
- Reduces fastener slipping and wobble
- Designed for use with insert bits only

#### Screw Guides – Retracting Sleeves



93551

	Hex Drive	Shank Diameter	Retracted Length	Extended Length	Carded Stock # (1-pc)	Bulk Stock #
	Compact	1/4"	3-1/16"	4-11/16"	3555511C	93551
	Standard	1/4"	4-11/16"	7-3/8"	3555531C	93553

### Insert Bit Holders

#### Features











- Can be used with socket wrench or socket adapter
- Available with or without magnet
- Available with or without C-ring
- Designed for insert bits only

#### 1/4" Hex Shank Bit Holders



93718


- C-ring design contains an internal clip that fits into the retaining ring notch of the insert bit to hold the bit securely in place
- Bit holders without the internal C-ring (no C-ring) hold the insert bit in place by magnet only
- Knurled design contains an external screw cap combined with an internal O-ring to hold the insert bit securely in place


	Point Size	Overall Length	Carded Stock # (1-pc)	Bagged Stock # (3-pc)	Bulk Stock #
	Standard with C-Ring	2-1/4"	–	–	93711
	Standard with C-Ring	2-1/4"	3557121C	3557123B	93712
	No C-Ring	2-1/4"	–	–	93714
	Knurled	3"	3056002	–	93715
	Standard with C-Ring	3"	–	–	93717
	Standard with C-Ring	3"	3557181C	3557183B	93718
	Turned	3"	–	–	93720
	Turned	3"	–	–	93721
	No C-Ring	3"	–	–	93722
	Standard with C-Ring	4"	–	–	93728
	Standard with C-Ring	6"	–	–	93730
	Standard with C-Ring	8"	–	–	93732
	Standard with C-Ring	10"	–	–	93734
	Standard with C-Ring	12"	–	–	93736

#### 1/4" Hex Shank Bit Holders For 5/16" Hex Insert Bits



93724

	Hex Drive	Overall Length	Bulk Stock #
	Turned	3"	93723
	Turned	3"	93724

 — magnetic

**7/16" Hex Shank Bit Holders**



93741

Hex Drive	Overall Length	Bulk Stock #
For 1/4" Insert Bits	2-3/4"	93741

**Square Drive Bit Holders**

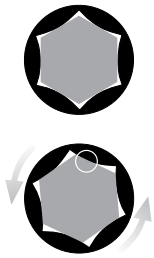


93813

Square Drive	Bit Size	Overall Length	Carded Stock # (1-pc)	Bagged Stock # (3-pc)	Bulk Stock #
1/4"	1/4"	1"	3056003C	—	93811
3/8"	1/4"	1-1/4"	3558131C	3558133B	93813
3/8"	5/16"	1-1/4"	—	—	93815
1/2"	5/16"	1-1/2"	3056005	—	93817

**Nutsetters**

IRWIN Nutsetters stand apart from the competition by combining unsurpassed magnetic power and high performance materials to give you total control of the fastener.



**Lobular Design**

- Drives the fastener on the side instead of forcing the corners to turn
- Maintains the true shape of the fastener, dramatically reducing breakage and stripping damage
- Provides more clearance on the corners of the fastener where paint build-up can occur

**Features**

- Magnetic nutsetters use magnets that are 4x more powerful than common magnets
- Positive retention of the screw improves installation rate
- Universal 1/4" hex shank fits most power tools and quick-change chuck adapters

**Fractional Nutsetter 1-7/8" Length-Lobular**



94712

Hex Drive	Shank Diameter	Socket Body Dia.	Carded Stock #	Bagged Stock # (3-pc)	Bulk Stock #
1/4"	1/4"	7/16"	3547121C	3547123B	94712
5/16"	1/4"	1/2"	3547321C	3547323B	94732
3/8"	1/4"	9/16"	3547521C	3547523B	94752
7/16"	1/4"	5/8"	3547721C	3547723B	94772

**Fractional Nutsetter 2-9/16" Length-Lobular**



94872

Hex Drive	Shank Diameter	Socket Body Dia.	Carded Stock # (1-pc)	Bagged Stock # (2-pc)	Bagged Stock # (3-pc)	Bulk Stock #
1/4"	1/4"	7/16"	3548121C	3548122B	3548123B	94812
5/16"	1/4"	1/2"	3548321C	3548322B	3548323B	94832
3/8"	1/4"	9/16"	3548521C	—	3548523B	94852
7/16"	1/4"	5/8"	3548721C	—	3548723B	94872

**Nutsetter Sets-Lobular**

Hex Drive	Shank Diameter	Overall Length	Carded Stock #
1/4", 5/16", 3/8"	1/4"	1-7/8"	3545973C (3-pc)
1/4", 5/16", 3/8", 7/16"	1/4"	1-7/8"	3545984C (4-pc)
1/4", 5/16", 3/8"	1/4"	2-9/16"	3545993C (3-pc)

— magnetic

# FASTENER DRIVE

## NUTSETTERS

### Metric Nutsetters



94204

	Hex Drive	Shank Diameter	Socket Body Dia.	Overall Length	Bagged Stock # (3-pc)	Bulk Stock #
Ⓜ	6 mm	1/4"	11.1 mm	47.6 mm	3051019	94202
	8 mm	1/4"	12.7 mm	47.6 mm		94203
Ⓜ	8 mm	1/4"	12.7 mm	47.6 mm	3051020	94204
Ⓜ	10 mm	1/4"	14.3 mm	47.6 mm	3051021	94206

### Magnetic Insert Nutsetters



94132

	Hex Drive	Shank Diameter	Socket Body Dia.	Overall Length	Bulk Stock #
Ⓜ	1/4"	1/4"	7/16"	1-1/2"	94112
Ⓜ	5/16"	1/4"	1/2"	1-1/2"	94132
Ⓜ	3/8"	1/4"	9/16"	1-5/8"	94152
Ⓜ	7/16"	1/4"	5/8"	1-5/8"	94172

- Can be used in bit holding screwdrivers or in any non-magnetic bit holders

### Fractional Nutsetters



94212

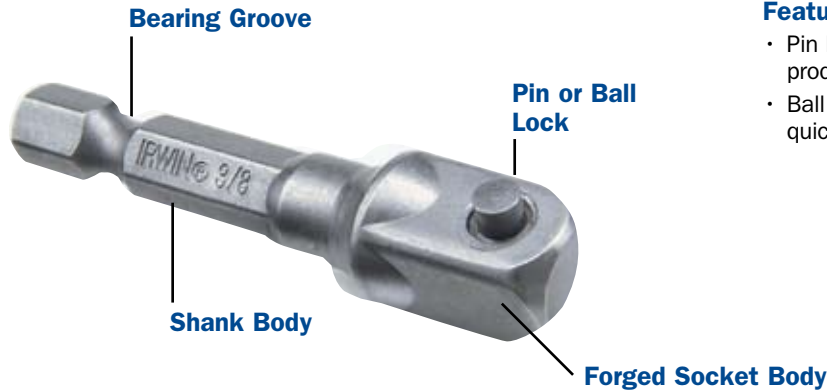
- For use with sheet metal screws and other hexagonal head fasteners

	Hex Drive	Shank Body	Shank Diameter	Socket Body Dia.	Overall Length	Carded Stock # (1-pc)	Bagged Stock # (3-pc)	Bulk Stock #
	3/16"	—	1/4"	7/16"	1-7/8"		3051010	94209
	1/4"	—	1/4"	7/16"	1-7/8"			94211
Ⓜ	1/4"	—	1/4"	7/16"	1-7/8"		3051011	94212
Ⓜ	1/4"	—	1/4"	1/2"	1-7/8"			94215
Ⓜ	1/4"	—	1/4"	1/2"	1-7/8"			94216
Ⓜ	5/16"	—	1/4"	1/2"	1-7/8"			94231
Ⓜ	5/16"	—	1/4"	1/2"	1-7/8"		3051013	94232
Ⓜ	3/8"	—	1/4"	9/16"	1-7/8"			94251
Ⓜ	3/8"	—	1/4"	9/16"	1-7/8"		3051015	94252
Ⓜ	7/16"	—	1/4"	5/8"	1-7/8"			94271
	7/16"	—	1/4"	5/8"	1-7/8"			94272
	1/2"	—	1/4"	3/4"	1-7/8"			94291
	1/2"	—	1/4"	3/4"	2-9/16"		3051018	
	1/4"	—	1/4"	7/16"	2-9/16"			94311
Ⓜ	1/4"	—	1/4"	7/16"	2-9/16"		3051012	94312
Ⓜ	1/4"	3/8"	1/4"	7/16"	2-9/16"			94316
	5/16"	5/16"	1/4"	1/2"	2-9/16"			94331
Ⓜ	5/16"	5/16"	1/4"	1/2"	2-9/16"		3051014	94332
	5/16"	3/8"	1/4"	1/2"	2-9/16"			94335
Ⓜ	5/16"	3/8"	1/4"	1/2"	2-9/16"			94336
	3/8"	5/16"	1/4"	9/16"	2-9/16"			94351
Ⓜ	3/8"	5/16"	1/4"	9/16"	2-9/16"		3051016	94352
Ⓜ	3/8"	3/8"	1/4"	9/16"	2-9/16"			94356
	7/16"	3/8"	1/4"	5/8"	2-9/16"			94371
Ⓜ	7/16"	3/8"	1/4"	5/8"	2-9/16"	3051017		94372
Ⓜ	1/4"	—	1/4"	7/16"	4"	3051001		94414
Ⓜ	1/4"	—	1/4"	7/16"	6"	3051004		94416
Ⓜ	1/4"	—	1/4"	7/16"	12"	3051007		
Ⓜ	5/16"	—	1/4"	1/2"	4"	3051002		94434
Ⓜ	5/16"	—	1/4"	1/2"	6"	3051005		94436
Ⓜ	5/16"	—	1/4"	1/2"	12"	3051008		
Ⓜ	3/8"	—	1/4"	9/16"	4"	3051003		
Ⓜ	3/8"	—	1/4"	9/16"	6"	3051006		
Ⓜ	3/8"	—	1/4"	9/16"	12"	3051009		

FASTENER DRIVE

Ⓜ — magnetic ▼ — tapered

**Socket Adapters**



**Features**

- Pin lock design for production applications
- Ball retention design for quick-change application

**7/16" Hex Shank Square Drive Socket Adapter**



93749

Square Drive	Lock Type	Overall Length	Bulk Stock #
3/8"	Pin	5"	93748
1/2"	Pin	3"	93749

**1/4" Square Drive Socket Adapter**



93758

Square Drive	Lock Type	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
1/4"	Pin	1-3/8"	3056004C	93755
1/4"	Ball	1-3/8"	—	93756
1/4"	Pin	2"	—	93758
1/4"	Ball	2"	3567611C	93761
1/4"	Pin	3"	—	93763
1/4"	Ball	3"	—	93765
1/4"	Pin	4"	—	93771
1/4"	Pin	6"	—	93776
1/4"	Ball	6"	—	93777

**3/8" Square Drive Socket Adapter**



93783

Square Drive	Lock Type	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
3/8"	Pin	1-5/8"	—	93781
3/8"	Ball	1-5/8"	—	93782
3/8"	Pin	2"	—	93783
3/8"	Ball	2"	3567841C	93784
3/8"	Pin	3"	—	93786
3/8"	Ball	3"	—	93787
3/8"	Pin	4"	—	93789
3/8"	Pin	6"	—	93792
3/8"	Ball	6"	—	93793

**1/2" Square Drive Socket Adapter**



93795

Square Drive	Lock Type	Overall Length	Carded Stock # (1-pc)	Bulk Stock #
1/2"	Ball	2"	3567951C	93795
1/2"	Ball	3"	—	93797

# FASTENER DRIVE SETS

## IRWIN® PRO-PAK™



357320

Description	Bulk Stock # (20-pc)
#2 Phillips® Insert Bit	357320
#2 Phillips Reduced Diameter Insert Bit	357120
#2 Square Recess Insert Bit	357220
#2 Square 2-pc Design Insert Bit	357220C
#2 Torsion Phillips Insert Bit	3053003

## **NEW** Torsion 6-pc Quick Change Magnetic Drive Guide Set



3057023

Contents	Quantity	Stock # 3057023
#1 Phillips Power Bit	1	3052001
#2 Phillips Power Bit	2	3052002
#1 Square Recess Power Bit	1	3052004
#2 Square Recess Power Bit	1	3052005
2-1/2" Quick Change Chuck	1	90102

## **NEW** Torsion 14-pc Quick Change Magnetic Drive Guide Set



3057024

Contents	Quantity	Stock # 3057024
#1 Phillips Insert Bit	2	3053001
#2 Phillips Insert Bit	4	3053002
#1 Square Recess Insert Bit	2	3053005
#2 Square Recess Insert Bit	4	3053006
Magnetic bit Holder 2-1/4"	1	93714
Compact Magnetic Drive Guide	1	93551

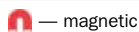
## 7-pc Magnetic Drive Guide Set



3057011DS

Contents	Quantity	Stock # 3057011DS
#2 Phillips Insert Bit 1"	2	92011
#2 Square Recess Insert Bit 1"	2	92205
8-10 Slotted Insert Bits 1"	2	92113
Compact Magnetic Drive Guide	1	93551

® Phillips is a registered trademark of Phillips Screw Company.



— magnetic



**13-pc Magnetic Drive Guide Set**



3057013DS

Contents	Quantity	Stock #	3057013DS
#1 Phillips® Insert Bit 1"	1	92005	
#2 Phillips Insert Bit 1"	4	92011	
#3 Phillips Insert Bit 1"	1	92019	
#1 Square Recess Insert Bit 1"	1	92203	
#2 Square Recess Insert Bit 1"	3	92205	
8-10 Slotted Insert Bit 1"	2	92113	
4-11/16" Magnetic Drive Guide	1	93553	

**21-pc Magnetic Drive Guide Set**



3057002DS

Contents	Quantity	Stock #	3057002DS
#2 Phillips Insert Bits 1"	10	92011	
#2 Square Insert Bits 1"	5	92205	
8-10 Slotted Insert Bits 1"	5	92113	
4-11/16" Magnetic Drive Guide	1	93553	

**7-pc Quick Change Bit Set**



3057003DS

Contents	Quantity	Stock #	3057003DS
#1 Phillips Power Bit 2"	1	93003	
#2 Phillips Power Bit 2"	2	93007	
#2 Square Recess Power Bit 2"	2	93205	
8-10 Slotted Power Bit 2"	1	93111	
2-1/2" Quick Change Chuck	1	90102	

**NEW 31-pc Fastener Drive Tool Soft Case Set**



3057026

- Soft case with snap lock closure and durable hinge for rigorous jobsite conditions
- Bit storage case included

Contents	Quantity	Stock #	3057026
Magnetic Bit Holer 2-1/4"	1	93714	
#1 Phillips Insert Bit 1"	2	92005	
#2 Phillips Insert Bit 1"	5	92011	
#3 Phillips Insert Bit 1"	3	92019	
#1 Square Recess Insert Bit 1"	2	92203	
#2 Square Recess Insert Bit 1"	5	92205	
#3 Square Recess Insert Bit 1"	1	92207	
4-5 Slotted Insert Bit 1"	1	92107	
6-8 Slotted Insert Bit 1"	3	92111	
8-10 Slotted Insert Bit 1"	2	92113	
10-12 Slotted Insert Bit 1"	1	92115	
T15 Torx Insert Bit 1"	1	92321	
T20 Torx Insert Bit 1"	1	92324	
T25 Torx Insert Bit 1"	1	92327	
T27 Torx Insert Bit 1"	1	92330	
T30 Torx Insert Bit 1"	1	92333	

— magnetic

® Phillips is a registered trademark of Phillips Screw Company.

# FASTENER DRIVE SETS

## **NEW** 31-pc Fastener Drive Tool and SPEEDBOR® Soft Case Set



3057031

- Featuring SPEEDBOR spade bits with patented Blue-Groove™ point and cutting edge for faster chip removal.
- Soft case with snap lock closure and durable hinge for rigorous jobsite conditions

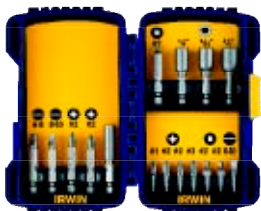
## **NEW** 41-pc Fastener Drive Tool Soft Case Set



3057041

- Soft case with snap lock closure and durable hinge for rigorous jobsite conditions
- Includes most popular insert bits, power bits and nutsetters

## 16-pc Screwdriver Bit Set



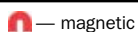
3057014

- Includes most popular insert bits, power bits and nutsetters

Contents	Quantity	Stock # 3057031
2-1/2" Quick Change Chuck	1	90102
Magnetic bit Holder 2-1/4"	1	93714
Compact Magnetic Screw guide 3-1/16"	1	93551
#1 PH Power Bit 2"	2	93003
#2 PH Power Bit 2"	4	93007
#3 PH Power Bit 2"	1	93003
8-10 Slotted Power Bit 2"	1	93111
10-12 Slotted Power Bit 2"	1	93113
#1 Square Recess Power Bit 2"	2	93203
#2 Square Recess Power Bit 2"	3	93205
#3 Square Recess Power Bit 2"	1	93207
#2 Square Recess Power Bit 1"	3	92205
#2 Phillips Insert Bit 1"	4	92011
3/8"-6" BULK SPEEDBOR DRILL BIT	1	99906
1/2"-6" BULK SPEEDBOR DRILL BIT	1	99908
5/8"-6" BULK SPEEDBOR DRILL BIT	1	99910
3/4"-6" BULK SPEEDBOR DRILL BIT	1	99912
7/8"-6" BULK SPEEDBOR DRILL BIT	1	99914
1"-6" BULK SPEEDBOR DRILL BIT	1	99916

Contents	Quantity	Stock # 3057041
Compact Magnetic Screw Guide 3-1/16"	1	93551
Magnetic bit Holder 2-1/4"	1	93714
#1 Phillips Insert Bit 1"	2	92005
#2 Phillips Insert Bit 1"	6	92011
#3 Phillips Insert Bit 1"	2	92019
#1 Square Recess Insert Bit 1"	2	92203
#2 Square Recess Insert Bit 1"	4	92205
#3 Square Recess Insert Bit 1"	1	92207
6-8 Slotted Insert Bit 1"	1	92111
8-10 Slotted Insert Bit 1"	2	92113
10-12 Slotted Insert Bit 1"	1	92115
#1 PH Power Bit 2"	1	93003
#2 PH Power Bit 2"	4	93007
#3 PH Power Bit 2"	2	93003
8-10 Slotted Power Bit 2"	1	93111
10-12 Slotted Power Bit 2"	1	93113
#1 Square Recess Power Bit 2"	1	93203
#2 Square Recess Power Bit 2"	3	93205
#3 Square Recess Power Bit 2"	1	93207
#2 PH Power Bit 4"	1	93059
#2 Square Recess Power Bit 4"	1	93226
1/4" - 1-7/8" Nutsetter	1	94712
5/16" - 1-7/8" Nutsetter	1	94732

Contents	Quantity	Stock # 3057014
Magnetic Bit Holder 2-1/4"	1	97314
#1 Phillips® Insert Bit 1"	1	92005
#2 Phillips Insert Bit 1"	2	92011
#3 Phillips Insert Bit 1"	1	92019
#2 Square Recess Insert Bit 1"	2	92205
8-10 Slotted Insert Bit 1"	1	92113
1/4" x 1-7/8" Nutsetter	1	94712
5/16" x 1-1/8" Nutsetter	1	94732
3/8" x 1-7/8" Nutsetter	1	94752
#2 Phillips Power Bit 2"	2	93007
#2 Square Recess Insert Bit 2"	1	93205
8-10 Slotted Power Bit 2"	1	93111
6-8 Slotted Power Bit 2"	1	93109



© Phillips is a registered trademark of Phillips Screw Company.

**24-pc Screwdriver Bit Set**



3057015

- Magnetic drive guide included  
4" power bits for increased accessibility

Contents	Quantity	Stock # 3057015
#1 Phillips Insert Bit 1"	1	92005
#2 Phillips Insert Bit 1"	5	92011
#3 Phillips Insert Bit 1"	1	92019
#1 Square Recess Insert Bit 1"	1	92203
#2 Square Recess Insert Bit 1"	3	92205
#3 Square Recess Insert Bit 1"	2	92207
8-10 Slotted Insert Bit 1"	1	92113
Compact Magnetic Screw Guide 3-1/16"	1	93551
1/4" x 1-7/8" Nutsetter	1	94712
5/16" x 1-7/8" Nutsetter	1	94732
3/8" x 1-7/8" Nutsetter	1	94752
#2 Phillips Power Bit 4"	1	93057
#2 Square Recess Insert Bit 4"	1	93226
#2 Phillips Power Bit 2"	2	93007
#2 Square Recess Insert Bit 2"	1	93205
8-10 Slotted Power Bit 2"	1	93111

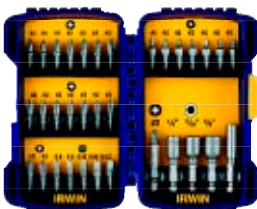
**20-pc Drill Drive Set**



357020

Contents	Quantity	Stock # 357020
Compact Magnetic Drive Guide	1	93551
1/4" x 2-9/16" Nutsetter	1	94812
3/8" x 2-9/16" Nutsetter	1	94852
5/16" x 2-9/16" Nutsetter	1	94832
#2/#2 Phillips Double End Bit	1	353202
#1 Phillips Insert Bit	1	92005
#2 Phillips Insert Bit	2	92011
#3 Phillips Insert Bit	1	92019
#2 Square Recess Insert Bit	2	92205
8-10 Slotted Insert Bit	1	92113
1/4" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63516
3/16" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63512
5/32" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63510
1/8" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63508
3/32" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63506
1/16" 135° Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bit	1	63504

**33-pc Screwdriver Bit Set**

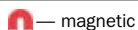


3057017

- Includes most popular insert bits, power bits and nutsetters

Contents	Quantity	Stock # 3057017
Magnetic Bit Holder 2-1/4"	1	93714
#1 Phillips Insert Bit 1"	2	92005
#2 Phillips Insert Bit 1"	12	92011
#3 Phillips Insert Bit 1"	2	92019
#1 Square Recess Insert Bit 1"	1	92203
#2 Square Recess Insert Bit 1"	5	92205
#3 Square Recess Insert Bit 1"	1	92207
1/4" x 1-7/8" Nutsetter	1	94712
5/16" x 1-7/8" Nutsetter	1	94732
3/8" x 1-7/8" Nutsetter	1	94752
#2 Phillips Power Bit 2"	1	93007
6-8 Slotted Insert Bit 1"	2	92111
8-10 Slotted Insert Bit 1"	2	92113
10-12 Slotted Insert Bit 1"	1	92115

FASTENER DRIVE



® Phillips is a registered trademark of Phillips Screw Company.

# FASTENER DRIVE SETS

## 40-pc Screwdriver Bit Set



3057018

- Includes torx and hex head insert bits

Contents	Quantity	Stock # 3057018
Magnetic Bit Holder 2-1/4"	1	93714
#1 Phillips® Insert Bit 1"	2	92005
#2 Phillips Insert Bit 1"	7	92011
#3 Phillips Insert Bit 1"	2	92019
#1 Square Recess Insert Bit 1"	1	92203
#2 Square Recess Insert Bit 1"	5	92205
#3 Square Recess Insert Bit 1"	1	92207
6-8 Slotted Insert Bit 1"	1	92111
8-10 Slotted Insert Bit 1"	1	92113
10-12 Slotted Insert Bit 1"	1	92115
TORX® Insert Bits 1": T10, T15, T20, T25, T27, T30, T40	7	92318, 92321, 92324, 92327, 92330, 92333, 92336
Hex Head Insert Bits: 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32"	7	92415, 92419, 92423, 92427, 92431, 92437, 92493
#2 Square Recess Power Bit 2"	1	93205
#3 Square Recess Power Bit 2"	1	93207
#2 Phillips Power Bit 2"	1	93007
#3 Phillips Power Bit 2"	1	93003

FASTENER DRIVE

## 30-pc Fastener Drive Set



357030

Contents	Quantity	Stock # 357030
#1 Phillips Insert Bit	2	92005
#2 Phillips Insert Bit	7	92011
#3 Phillips Insert Bit	2	92019
#1 Sq Recess Insert Bit	1	92203
#2 Sq Recess Insert Bit	5	92205
#3 Sq Recess Insert Bit	1	92207
6-8 Slotted Insert Bit	1	92111
8-10 Slotted Insert Bit	1	92113
10-12 Slotted Insert Bit	1	92115
2-1/4" Magnetic Bit Holder	1	93712
#2/#2 Phillips Double End Bit	2	353202
#2 Sq Recess Double End	1	353203
8-10 Slotted Double End Bit	1	93525
1/4" Magnetic Nutsetters - 2-9/16"	1	94812
5/16" Magnetic Nutsetters - 2-9/16"	1	94832
3/8" Magnetic Nutsetters - 2-9/16"	1	94852
7/16" Magnetic Nutsetters - 2-9/16"	1	94872

® TORX is a registered trademark of Acument Intellectual Properties, LLC.

® Phillips is a registered trademark of Phillips Screw Company.

**16-pc Fastener Drive Set**



3057016

All IRWIN Fastener Drive Bits are manufactured from industrial grade tool steel and tested to meet the highest standards for hardness and torque.

Contents	Quantity	Stock # 3057016
#2 Phillips® Power Bit x 3-1/2"	1	93025
#3 Phillips Power Bit x 3-1/2"	1	93029
#2 POZIDRIV® Power Bit x 3-1/2"	1	93037
#1 Phillips Power Bit x 6"	1	93063
#2 Phillips Power Bit x 6"	1	93067
T15 TORX® #2 Power Bit x 3-1/2"	1	93360
T20 TORX #2 Power Bit x 3-1/2"	1	93361
T20 TORX #2 Power Bit x 6"	1	93369
T25 TORX #2 Power Bit x 6"	1	93370
T27 TORX #2 Power Bit x 6"	1	93371
T30 TORX #2 Power Bit x 6"	1	93372
1/4" Socket Adapter x 2"	1	93761
3/8" Socket Adapter x 2"	1	93784
5/16" Magnetic Nutsetter x 1-7/8"	1	94732
2-1/2" Quick Change Chuck	1	90102
6" Quick Change Extension	1	90106

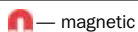
**34-pc Fastener Drive Set**



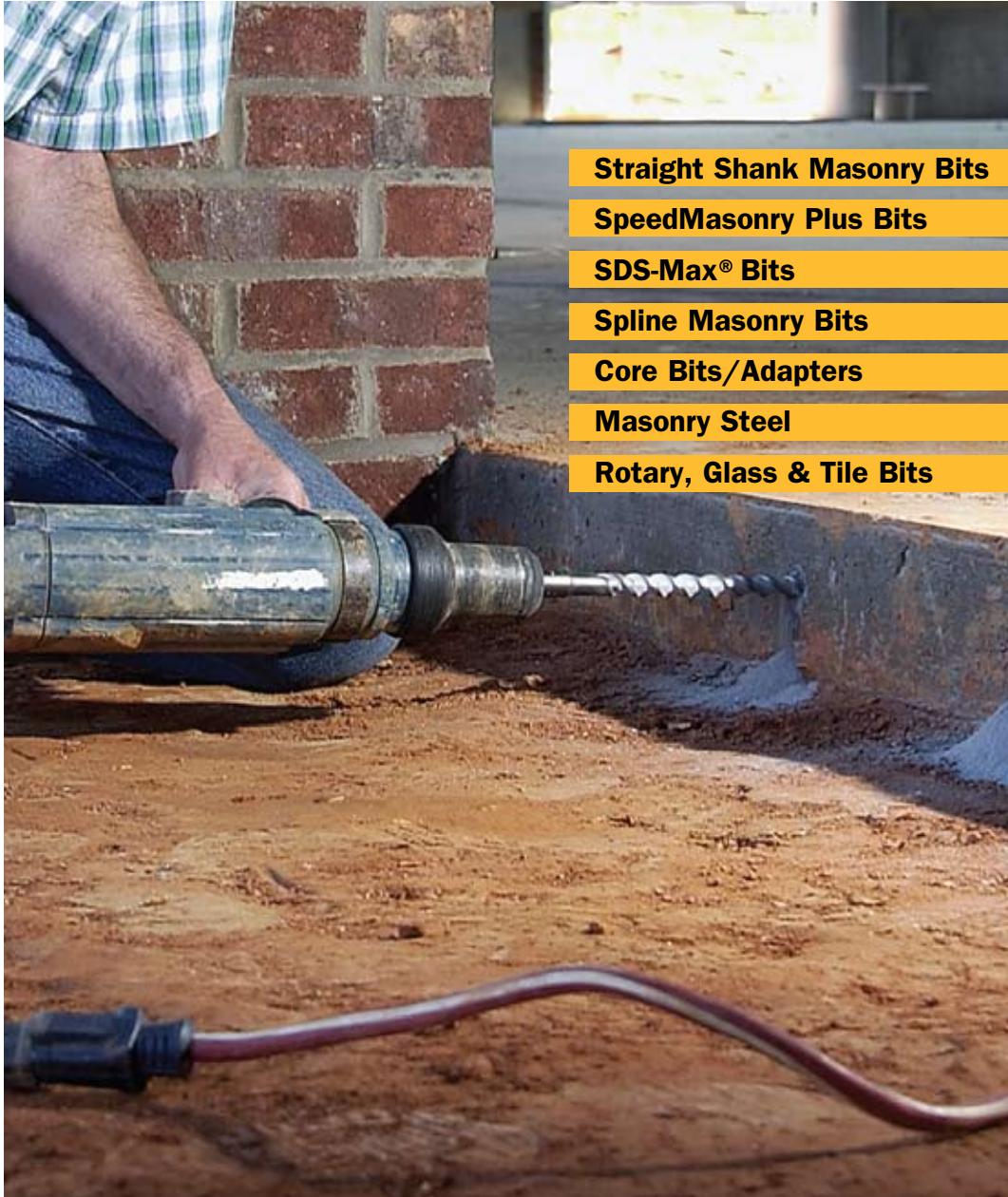
3057034

All IRWIN Fastener Drive Bits are manufactured from industrial grade tool steel and tested to meet the highest standards for hardness and torque.

Contents	Quantity	Stock # 3057034
#1 Phillips Power Bit x 2"	1	93003
#2 Phillips Power Bit x 2"	1	93007
#3 Phillips Power Bit x 2"	1	93011
#1 POZIDRIV Power Bit x 2"	1	93073
#2 POZIDRIV Power Bit x 2"	1	93077
#3 POZIDRIV Power Bit x 2"	1	93079
T8 TORX Power Bit x 2"	1	93312
T9 TORX Power Bit x 2"	1	93315
T10 TORX Power Bit x 2"	1	93318
#1 Phillips Power Bit x 3-1/2"	1	93023
#2 Phillips Power Bit x 3-1/2"	1	93025
#3 Phillips Power Bit x 3-1/2"	1	93029
#2 POZIDRIV Power Bit x 3-1/2"	1	93037
T15 TORX Power Bit x 3-1/2"	1	93360
T20 TORX Power Bit x 3-1/2"	1	93361
T25 TORX Power Bit x 3-1/2"	1	93362
T30 TORX Power Bit x 3-1/2"	1	93364
#1 Phillips Power Bit x 6"	1	93063
#2 Phillips Power Bit x 6"	1	93067
#3 Phillips Power Bit x 6"	1	93069
#2 POZIDRIV Power Bit x 6"	1	93040
T15 TORX Power Bit x 6"	1	93368
T20 TORX Power Bit x 6"	1	93369
T25 TORX Power Bit x 6"	1	93370
T27 TORX Power Bit x 6"	1	93371
T30 TORX Power Bit x 6"	1	93372
1/4" Socket Adapter x 2"	1	93761
3/8" Socket Adapter x 2"	1	93784
1/2" Socket Adapter x 2"	1	93795
1/2" Magnetic Nutsetter x 1-7/8"	1	94712
5/16" Magnetic Nutsetter x 1-7/8"	1	94732
3/8" Magnetic Nutsetter x 1-7/8"	1	94752
2-1/2" Quick Change Adapter	1	90102
6" Quick Change Adapter	1	90106







**Straight Shank Masonry Bits 88**

**SpeedMasonry Plus Bits 89**

**SDS-Max® Bits 91**

**Spline Masonry Bits 92**

**Core Bits/Adapters 93**

**Masonry Steel 94**

**Rotary, Glass & Tile Bits 96**

## Patented Designs Increase Productivity

Patented flute designs and tip geometries from IRWIN® increase masonry drilling speeds to achieve more work in less time. Bits with 4-cutter tips mean less vibration, faster drilling and rounder holes for better anchoring. Manufactured to ANSI standards.



Old  
SpeedMasonry Plus

New  
SpeedMasonry Plus

### New Flute

All IRWIN Masonry Drill Bits feature our new patented flute design. This ensures efficient and speedy removal of dust for faster drilling and longer life.

### New Extra-Short Head

Our innovative IRWIN SpeedMasonry Plus drill head is designed to force drilling dust directly into the flute where it is rapidly removed. This reduces the risk of clogging and increases penetration speed.

### New Carbide Tip

The new patented carbide tip on IRWIN SpeedMasonry Plus Masonry Drill Bits is self-centering for more control as drilling begins. It also offers more aggressive cutting angles for faster drilling. A larger tungsten carbide tip improves strength and durability.



Profile View

### 140° Cutting Tip

- Provides more cutting surface than competitor's tip
- Reduces breakout in through-hole applications
- Centering point prevents walking



Top View

### Machined Dust Channels

- Allows quicker removal of dust while drilling

## Tips for Drilling in Concrete

- The proper pressure on the tool is the amount it takes to remove dust most quickly.
- Locate holes to avoid hitting rebar with carbide tips.
- Do not use water in the hole when drilling. Water can destroy the carbide tip and interfere with dust removal.
- If necessary to help remove dust, plunge the bit in and out of the hole while drilling.
- Do not drill beyond the flute length of the bit. The bit could break or bind and become stuck in the hole.
- Lubricate the shank of the bit to reduce wear on the drive end of the bit.
- Check the shanks of your bits for wear marks caused by the tool holder on the drill. A worn tool holder decreases the performance and life of the bit.



**Power Tool Cross-Reference - Masonry Drill Bits**

	SpeedMasonry Plus		Spline		SDS-max®		7/16" Hex	9/16" Hex	A Taper	B Taper	Straight Shank	TE F/G
<b>DeWalt®</b>	DW653K DW566K DW557K DW523K	DW567K DW514 DW563K	DW530K DW532K	DW531K DW533K	DW541K DW540K	DW545K						
<b>Black &amp; Decker®</b>	5013 5016 5053K 5054K	5009 5014 5056 5057	5041 5044 5093 5098 5059 5042 5045	5095 50593 50598 5043 5049 5096								
<b>Bosch®</b>	11207 11210 11211 11212 11213 11225 11239	11215 11221 11222 11224 11228 11234 11236	11203 11205 11219 11233 11203 11233	11209 11220 11204 11214 11232 11244	12141 11227 11231 11235	11216 11230 11233 11245						
<b>Metabo®</b>	6010 6018 6020 6026 6028	6011 6015 6021 6024	RH66 RH99 6030 6046 BHE6046S	1129 1130 6040 BHE6040S	6045				Used with A Taper Adapters	Used with B Taper Adapters		
<b>Makita®</b>	HR160 HR1821 HR2511 HR2410 HR2511	HR2010 HR2000 HR2400 HR2420	HR3851 HR4040C	HR5000 HM0810B	HM1100C HR4000C HR5001C	HM1202C HR4500C					Used in Rotary Percussion Masonry Drills with a Three Jaw	
<b>Ramset®</b>	425		442 445	475								
<b>RedHead®</b>	555	715	747-2									
<b>Ryobi®</b>	ED160	ED211	PK382 ED382	ER382								
<b>Kango®</b>	200 327 426	285 422 430	637S 430S 840SV K900BV	950S 501S 850SV 950SV	840 MV K 1400	850 MV						
<b>Milwaukee®</b>	5362 5368 5366 5367 5303 5317 5324	5311 5316 5322 5302 5312 5320 5369	5343 5309 5316 5344 5352 5321	5347 5311 5341 5348 5317 5342	5313 5315	5300 5310	5305 5314	5235 5236	5351 5357			
<b>Hitachi®</b>	DH20DV DH22VD DH24PC VR16 DH15VB	DH22UB DH24PB DH24PE VRT22A	DH38YE DH38VA DH38YEG DH40FB DS50SB	DH50SB DH384E DH40FA DH50SBK	DH40MA DH45MA DH60MB	DH40MB DH50MB						
<b>Hilti®</b>	TE 1 TE 2 TE 2-S TE 2M TE 5 TE 5A TE 6A TE 10 TE 10A TE 12	TE 14 TE 15 TE 15C TE 17 TE 18ME GP/TE 22 TE 24 TE 25 TE 12S			TE 52 TE 60 TE 72 TE 74 TE 92 TE 95	TE 54 TE 55 TE 94 TE 75 TE 76						TE 52 TE 55 TE 60 TE 72
<b>Porter Cable®</b>	639							HS6254				
<b>Skil®</b>	6372	642					726	628 731	728 732			

MASONRY DRILLING

SDS-max® is a registered trademark of Robert Bosch GmbH. DEWALT is a registered trademark of DEWALT Industrial Tool Company. Black & Decker is a registered trademark of The Black & Decker Corporation. Bosch and Skil are registered trademarks of Robert Bosch Tool Corporation. Metabo is a registered trademark of Metabowerke GmbH. Makita is a registered trademark of Makita U.S.A. Ramset and RedHead are registered trademarks of Ramset Fasteners Pty Limited. Ryobi is a registered trademark of Ryobi Limited. Kango is a registered trademark of Atlas Copco AB. Milwaukee is a registered trademark of Milwaukee Electric Tool Corporation. Hitachi is a registered trademark of Hitachi America, Ltd. Hilti is a registered trademark of Hilti Corp. Porter-Cable is a registered trademark of Porter-Cable Corporation.

# MASONRY & SPECIALTY DRILLING

## STRAIGHT SHANK



326015

### Straight Shank Drill Bits



Straight Shank



2-cutter Head

Diameter	Usable Length	Overall Length	Stock # (1-pc)	Stock # (25-pc)
1/8"	1-1/2"	3"	326000	326000B25
5/32"	4"	6"	326001	—
3/16"	2"	3-1/2"	326002	326002B25
3/16"	4-1/2"	6"	326003	326003B25
1/4"	2"	4"	326005	326005B25
1/4"	4"	6"	326006	326006B25
1/4"	8"	12"	326007	—
5/16"	2-1/2"	4-3/4"	326008	326008B25
5/16"	4"	6"	326009	326009B25
5/16"	8"	12"	326010	—
3/8"	4"	6"	326011	326011B25
3/8"	8"	12"	326012	—
3/8"	16"	20"	326013	—
7/16"	4"	6"	326014	—
1/2"	4"	6"	326015	326015B25
1/2"	8"	12"	326016	—
1/2"	20"	24"	326017	—
5/8"	3"	6" (1/2" Shank)	326019	—
5/8"	8"	12" (1/2" Shank)	326020	—
5/8"	20"	24" (1/2" Shank)	326021	—
3/4"	3"	6" (1/2" Shank)	326022	—
3/4"	8"	12" (1/2" Shank)	326023	—
7/8"	3"	6" (1/2" Shank)	326024	—
7/8"	8"	12" (1/2" Shank)	326025	—
1"	3"	6" (1/2" Shank)	326026	—
1"	8"	12" (1/2" Shank)	326027	—

MASONRY DRILLING

### Multi-Material Bit 5-pc Set



3025001SMHD

- Designed to drill in multiple materials

Description	Contents	Stock #
Multi Material Bit 5-pc Set	1/8", 5/32", 3/16", 1/4", 1/16"	3025001SMHD



### Designed To Drill:



Brick | Block | Tile | Metal | Wood | Plastic | Marble



322002

**SpeedHammer Plus  
Drill Bits**



SpeedHammer Plus  
Shank



2-cutter  
Head

Diameter	Usable Length	Overall Length	Stock #	Stock# (25-pc)
5/32"	2"	4"	322001	-
5/32"	4"	6"	322002	322002B25
3/16"	2"	4"	322003	322003B25
3/16"	4"	6"	322004	322004B25
3/16"	6"	8"	322005	322005B25
3/16"	8"	10"	322006	322006B25
3/16"	10"	12"	322007	322007B25
7/32"	4"	6"	322013	322013B25
7/32"	10"	12"	322015	322015B25
1/4"	2"	4"	322016	322016B25
1/4"	4"	6"	322017	322017B25
1/4"	6"	8"	322018	322018B25
1/4"	8"	10"	322019	-
1/4"	10"	12"	322020	-
1/4"	12"	14"	322021	-
5/16"	4"	6"	322022	322022B25
5/16"	10"	12"	322023	-
3/8"	4"	6"	322024	322024B25
3/8"	8"	10"	322025	-
3/8"	10"	12"	322026	322026B25
3/8"	16"	18"	322027	-
3/8"	22"	24"	322028	-
7/16"	4"	6"	322029	-
7/16"	10"	12"	322030	-
1/2"	4"	6"	322031	322031B25
1/2"	8"	10"	322032	-
1/2"	10"	12"	322033	322033B25
1/2"	16"	18"	322034	-
1/2"	22"	24"	322035	-
9/16"	4"	6"	322036	-
9/16"	10"	12"	322037	-
9/16"	16"	18"	322038	-
5/8"	4"	6"	322041	-
5/8"	6"	8"	322042	322042B25
5/8"	10"	12"	322043	-
5/8"	16"	18"	322044	-
5/8"	22"	24"	322045	-
11/16"	6"	8"	322046	-
3/4"	6"	8"	322047	-
3/4"	10"	12"	322048	-
3/4"	16"	18"	322049	-
3/4"	22"	24"	322050	-
7/8"	6"	8"	322051	-
7/8"	10"	12"	322052	-
7/8"	16"	18"	322053	-
1"	8"	10"	322054	-
1"	16"	18"	322055	-

MASONRY DRILLING

# MASONRY & SPECIALTY DRILLING

## SPEEDHAMMER PLUS

### 7-pc SpeedHammer Plus Drill Bit Set



322000

Diameter	Usable Length	Overall Length	Quantity	Stock #
<b>7-pc Set</b>				
<b>SpeedMasonry Plus Set</b>				
3/16"	2	4	1	322003
1/4"	2	4	1	322016
1/4"	4	6	2	322017
5/16"	4	6	1	322022
3/8"	4	6	1	322024
1/2"	4	6	1	322031

MASONRY DRILLING

### SpeedHammer Plus Drill Bits 4-cutter



4-cutter Head

Diameter	Usable Length	Overall Length	Standard Pack	Stock #
3/4"	16"	18"	1	322082
7/8"	16"	18"	1	322085
1"	16"	18"	1	322087
1-1/8"	16"	18"	1	322089

### SpeedHammer Plus Hex Drive Drill Bit



322056

- Hex Drive on shank for easy attachment of fastener drive tool

Diameter	Usable Length	Overall Length	Stock # (1-pc)	Stock # (25-pc)
3/16"	2"	5"	322056	—
3/16"	3"	6"	322057	—
3/16"	4"	7"	322058	322058B25
5/32"	2"	5"	322059	—
5/32"	4"	7"	322061	—



323000

**SDS-Max Drill Bits**



SDS-max  
Shank



2-cutter  
Head



4-cutter  
Head

Diameter	Usable Length	Overall Length	Standard Pack	2-cutter Stock #	4-cutter Stock #
3/8"	7-1/2"	13"	1	323000	-
1/2"	7-1/2"	13"	1	323001	-
1/2"	15-1/2"	21"	1	323002	-
9/16"	7-1/2"	13"	1	323003	-
9/16"	15-1/2"	21"	1	323004	-
5/8"	7-1/2"	13"	1	-	323005
5/8"	15-1/2"	21"	1	-	323006
5/8"	30-1/2"	36"	1	-	323007
11/16"	15-1/2"	21"	1	-	323008
3/4"	8"	13"	1	-	323009
3/4"	17"	21"	1	-	323010
3/4"	31"	36"	1	-	323011
13/16"	17"	21"	1	-	323012
7/8"	8"	13"	1	-	323014
7/8"	17"	21"	1	-	323015
1"	8"	13"	1	-	323016
1"	17"	21"	1	-	323017
1"	31"	36"	1	-	323018
1-1/8"	12"	17"	1	-	323020
1-1/8"	17"	21"	1	-	323022
1-1/4"	10"	15"	1	-	323023
1-1/4"	18"	23"	1	-	323024
1-1/4"	31"	36"	1	-	323025
1-3/8"	18"	23"	1	-	323028
1-1/2"	18"	23"	1	-	323031
1-3/4"	17"	23"	1	-	323033
2"	17"	23"	1	-	323034

© SDS-max is a registered trademark of Robert Bosch GmbH.



MASONRY DRILLING

# MASONRY & SPECIALTY DRILLING

## SPLINE



324011

### Spline Drill Bits



2-cutter  
Head



4-cutter  
Head

Diameter	Usable Length	Overall Length	Standard Pack	2-cutter Stock #	4-cutter Stock #
3/8"	5"	10"	1	324000	—
3/8"	8"	13"	1	324001	—
3/8"	11"	16"	1	324002	—
1/2"	5"	10"	1	324003	—
1/2"	8"	13"	1	324004	—
1/2"	11"	16"	1	324005	—
1/2"	17"	22"	1	324006	—
1/2"	24"	29"	1	324007	—
1/2"	31"	36"	1	324008	—
9/16"	8"	13"	1	324009	—
9/16"	17"	23"	1	324010	—
5/8"	5"	10"	1	324011	324050
5/8"	11"	16"	1	324012	324051
5/8"	17"	22"	1	324013	324052
5/8"	24"	29"	1	—	324053
5/8"	31"	36"	1	324015	324054
11/16"	11"	16"	1	—	324055
3/4"	5"	10"	1	324017	—
3/4"	5"	10"	1	324018	324057
3/4"	17"	22"	1	—	324058
3/4"	11"	16"	1	324019	324056
3/4"	17"	22"	1	324020	—
3/4"	24"	29"	1	324021	324059
3/4"	31"	36"	1	324022	324060
7/8"	11"	16"	1	324025	324063
7/8"	17"	22"	1	324026	324064
7/8"	31"	36"	1	324027	—
1"	8"	13"	1	324028	—
1"	11"	16"	1	324029	324065
1"	17"	22"	1	324030	324066
1"	24"	29"	1	—	324068
1"	31"	36"	1	324031	324067
1-1/8"	11"	16"	1	324033	324070
1-1/8"	17"	22"	1	324034	324071
1-1/4"	11"	16"	1	324035	324072
1-1/4"	17"	22"	1	324036	324073
1-1/4"	31"	36"	1	324037	324074
1-3/8"	11"	16"	1	324038	—
1-3/8"	17"	22"	1	324039	324076
1-1/2"	11"	16"	1	324040	—
1-1/2"	17"	22"	1	324041	324078
1-3/4"	17"	22"	1	324043	324080
2"	17"	22"	1	324044	324081



325000

**One-Piece Masonry Core Spline**



Diameter	Overall Length	Standard Pack	Standard Tip Stock #
1-1/2"	12"	1	325000
1-1/2"	22"	1	325001
2"	12"	1	325002
2"	22"	1	325003
2-1/2"	12"	1	325004
2-1/2"	22"	1	325005
3" or 3-1/8"	12"	1	325006
3" or 3-1/8"	22"	1	325007
3-1/2"	12"	1	325008
3-1/2"	22"	1	325009
4"	12"	1	325010
4"	22"	1	325011
5"	12"	1	325012
5"	22"	1	325013
Ejector Key	—	1	325030
Center Bit	—	1	325031

**One-Piece Masonry Core SDS-max®**



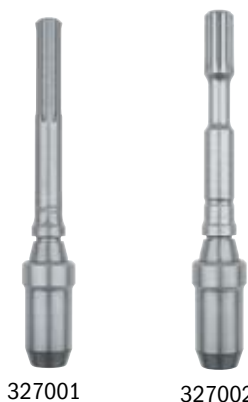
325014

325030

325031

Diameter	Overall Length	Standard Pack	Standard Tip Stock #
1-1/2"	12"	1	325014
1-1/2"	22"	1	325015
2"	12"	1	325016
2"	22"	1	325017
2-1/2"	12"	1	325018
2-1/2"	22"	1	325019
3" or 3-1/8"	12"	1	325020
3" or 3-1/8"	22"	1	325021
3-1/2"	12"	1	325022
3-1/2"	22"	1	325023
4"	12"	1	325024
4"	22"	1	325025
5"	22"	1	325026
6"	22"	1	325027
Ejector Key	—	1	325030
Center Bit	—	1	325031

**Adapters**



327001

327002

Description	Stock #
Adapter, SDS-max to SpeedMasonry Plus	327001
Adapter, Spline to SpeedMasonry Plus	327002

SDS-max® is a registered trademark of Robert Bosch

MASONRY DRILLING

# MASONRY & SPECIALTY DRILLING

## MASONRY STEEL

### Moil Point



334020

- For general chiseing and breaking work in brickwork, concrete and loose stone (ex: when laying cables)

### Scraping Chisel (Angled)



332011

- For easy removal of tiles (with ergonomically angled working end)

### Flat Chisel



332003

- For general chiseing and breaking work in brickwork, concrete and loose stone (ex: when laying cables)

### Mortar/Seam Tool



332012

- For the removal and cleaning of pointing in brickwork and mortar

### Scaling Chisel



332008

- For removing large quantities of material

### Slotting Chisel



332013

- For brickwork repair (ex: removing pointing)

### Wide Scaling Chisel



332010

- For removing large areas of floor covering and reward sheeting

### Bush Tool - One Piece



332017

- For roughing up concrete and asphalt prior to a surface treatment

MASONRY DRILLING

Point Type	Dimensions	SpeedMasonry Plus Stock #	Spline Stock #	SDS-max® Stock #	3/4" Hex Stock #	1-1/8" Hex Stock #
Moil Point	10"	331000	—	—	—	—
	12"	—	333000	332000	334000	—
	18"	—	333001	332001	334001	—
	20"	—	—	—	—	334020
Flat Chisel	3/4" x 10"	331001	—	—	—	—
	1" x 12"	—	333003	332003	334003	—
	1" x 18"	—	333004	332004	334004	—
	1-3/8" x 20"	—	—	—	—	334021
Scaling Chisel	1-5/8" x 10"	331002	—	—	—	—
	1-1/2" x 12"	—	333006	332006	—	—
	2" x 12"	—	333008	332008	334005	—
	3" x 12"	—	333010	332010	334006	—
	3" x 20"	—	—	—	—	334022
Scraping Chisel, Angled	2" x 12"	—	—	332011	—	—
Mortar/Seam Tool	1-1/8" x 12"	—	—	332012	—	—
Slotting Chisel	1-3/8" x 12"	—	333012	332013	—	—
Bush Tool - 1-pc	1-3/4" x 9-1/4"	—	333017	332017	334011	—



**Ground Rod Driver**



332019

- For driving in ground rods (ex: telecommunications)

**Gouge**



332016

- For cutting narrow channels into concrete

**Clay Spade**



332014

- For general garden and landscaping, not for use in concrete

**Tamping Plate**



332020

- For compacting soil and gravel  
(Select the proper adapter from the table on previous page)

**Pointed Spade**



333014

- For digging in soil, not for use in concrete

**Asphalt Cutter**



332015

- For road building when repairing road surfaces or other road maintenance, not for use in concrete

Point Type	Dimensions	SpeedMasonry Plus Stock #	Spline Stock #	SDS-max® Stock #	3/4" Hex Stock #	1-1/8" Hex Stock #
Clay Spade	4" x 17"	–	–	332014	–	–
	5-3/8" x 21"	–	–	–	–	334023
Pointed Spade	5-3/8" x 16"	–	333014	–	334009	–
Asphalt Cutter	4-3/8" x 16"	–	–	332015	–	–
	4-3/8" x 17"	–	333015	–	334010	–
	5" x 19"	–	–	–	–	334025
Gouge	1" x 12"	–	333016	332016	–	–
Ground Rod Driver	5/8"-3/4" x 10"	–	333019	332019	334012	–
Tamping Plate	5" x 5"	–	333020	332020	–	–
Tamping Plate Shank	12"	–	333021	332021	334014	–

SDS-max® is a registered trademark of Robert Bosch

# MASONRY DRILLING

## GLASS & TILE/CARBIDE TIPPED



50520

### Glass and Tile Carbide Tipped Masonry Drill Bits

- For drilling glass, tile and ceramic

Diameter	Stock #
1/8"	50508
3/16"	50512
1/4"	50516
5/16"	50520
3/8"	50524
1/2"	50532



61120

### Economy Rotary Masonry Drill Bits

- For all-purpose jobs

Diameter	Overall Length	Shank	Stock #
1/8"	3"	1/8"	61108
3/16"	4"	3/16"	61112
1/4"	4"	1/4"	61116
5/16"	4"	1/4"	61120
3/8"	4"	1/4"	61124
7/16"	4"	1/4"	61128
1/2"	4"	1/4"	61132
5/8"	6"	3/8"	61140
3/4"	6"	3/8"	61148
<b>Economy Rotary Masonry Drill Bit Set</b>			
5-pc Set			
3/16", 1/4", 5/16", 3/8", 1/2"			61170



5026012

### Rotary Drill Bits

- Slow spiral for quick easy debris removal

Diameter	Overall Length	Std. Pack	Stock #
1/8"	3"	5	5026000
5/32"	3"	5	5026001
13/16"	4"	5	5026002
1/4"	4"	3	5026003
1/4"	13"	5	5026005
5/16"	4"	5	5026006
5/16"	13"	3	5026008
3/8"	4"	5	5026009
3/8"	13"	3	5026011
7/16"	6"	5	5026012
7/16"	13"	3	5026013
1/2"	6"	5	5026015
1/2"	13"	3	5026016
5/8"	6"	5	5026019
5/8"	13"	3	5026020
3/4"	6"	5	5026021
3/4"	13"	3	5026022
1"	6"	5	5026023
<b>Rotary Masonry Drill Bit Set</b>			
5-pc Set			
3/16", 1/4", 5/16", 3/8", 1/2"			5026024



**Jobber Length Drill Bits 99**

**Mechanics Length Drill Bits 107**

**Screw Machine Length Drill Bits 107**

**Silver & Deming Drill Bits 109**

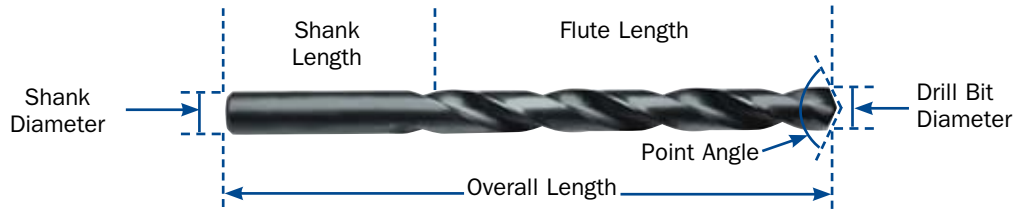
**Extra Length Drill Bits 110**

**Step Drill Bits 111**

**Specialty Purpose  
Drilling Tools 113**

**Drill Bit Sets 114**

## Engineered For Controlled Precision And Speed



**Overall Length:** The length from the point to the end of the drill

**Point Angle:** The angle of the cutting edges

**Drill Diameter:** The cutting diameter of the drill

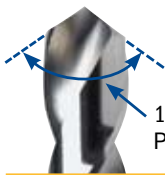
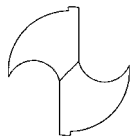
**Shank Length:** The end of the drill bit that is secured by the drill

**Flute Length:** The length from the point to the end of the flutes

### Tip Geometry

#### 118° Conventional Point

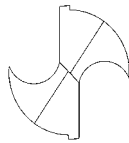
- General Use
- Not self-centering
- For Stationary Drills
- Performs better in softer materials than hard metal



118°  
Point Angle

#### 135° Split Point

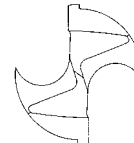
- Self-centering (won't "walk")
- For Portable Drills
- Requires less force than 118°



135°  
Point Angle

#### TURBOMAX® Tip

- Self-centering (won't "walk")
- Precision ground to stay sharp longer and drill faster
- For Portable Drills
- Requires less force than 118°



METAL DRILLING

### Drill Bit Section

Material	Point Angle	Black & Gold TURBOMAX®		Heavy-Duty	Titanium Nitride (TiN) Coated	Cobalt	General Purpose
		(135°)	(TURBOMAX®)	(135°)	(135°)	(135°)	(118°)
Wood/Drywall		●	●	●	●	●	●
Sheet Metal		●	●	●	●	●	●
Mild Steel		●	●	●	●	●	●
High Alloy Steels		●	●	●	●	●	●
Stainless Steels		●	●	●	●	●	●
Cast Iron		●	●	●	●	●	●
Aluminum, Brass & Copper		●	●	●	●	●	●
Plastic		●	●	●	●	●	●

Key: ● Recommended ● Acceptable ● Not Recommended

**Cutting Speeds - by Working Material**

**Speeds for High Speed Steel Drills**

	<b>SFM*</b>
Aluminum and its Alloys	200 - 300
Brass and Bronze (Ordinary)	150 - 300
Bronze ( High Tensile)	70 - 150
Die Castings (Zinc Base)	300 - 400
Iron-Cast (Soft)	100 - 150
Cast (Medium hard)	70 - 100
Hard Chilled	30 - 40
Malleable	80 - 90
Magnesium and its Alloys	250 - 400
Monel Metal or High-Nickel Steel	30 - 50
Plastics or Similar Materials (Bakelite)	100 - 300
Steel - Mild (.2 carbon to .3 carbon)	80 - 110
Steel (.4 carbon to .5 carbon)	70 - 80
Tool (1.2 carbon)	50 - 60
Forgings	40 - 50
Alloy - 300 to 400 Brinell	20 - 30
High Tensile (Heat Treated)	
35 to 40 Rockwell C	30 - 40
40 to 45 Rockwell C	25 - 35
45 to 50 Rockwell C	15 - 25
50 to 55 Rockwell C	7 - 15
Stainless Steel	
Free Machining Grades	30 - 80
Work Hardening Grades	15 - 50
Wood	300 - 400

\*Surface Feet per Minute (SFM)

$$RPM = \frac{SFM \times 3.82}{Drill Diameter}$$

**Speeds and Feeds for Deep Hole Drilling**

Holes that qualify as "deep-hole drilling" are three or more drill bit diameters deep. When drilling this deep, the speed and feed rate must be adjusted to reduce friction. Friction creates heat, and heat build-up in the drill bit can cause failure and breakage. Lubricants help dissipate heat from the tip of the drill bit, prolonging drill life, and should always be used when deep-hole drilling.

Another technique that should be used when deep-hole drilling is called "pecking". Pecking is the process whereby the user drills a short distance then backs the drill out of the hole before progressing. Pecking lessens the possibility of chips getting lodged in the flute and allows for the reintroduction of lubricant into the hole.

**Speed and Feed Reduction (Based upon the hole depth)**

Hole Depth to Dia. (times drill dia.)	Speed Reduction	Feed Reduction
3	10%	10%
4	20%	10%
5	30%	20%
6	35 - 40%	20%

**Feed Per Drill Revolution**

Drill Dia. Range	Light	Medium	Heavy
1/16" to 1/8"	.0005 - .0010	.0010 - .0020	.0020 - .0040
1/8" to 1/4"	.0010 - .0030	.0030 - .0050	.0040 - .0050
1/4" to 3/8"	.0030 - .0050	.0050 - .0070	.0060 - .0100
3/8" to 1/2"	.0040 - .0060	.0050 - .0080	.0080 - .0120
1/2" to 3/4"	.0050 - .0070	.0070 - .0100	.0090 - .0140
3/4" to 1"	.0070 - .0100	.0090 - .0140	.0140 - .0200

See pages 127-128 for Tap & Drill Selection Chart

**Titanium Nitride (TiN) Coated HSS Fractional Straight Shank Jobber Length Drill Bits 135° Split Point (Series 639/637)**



63724

- Titanium Nitride coated bits last up to six times longer than standard high speed steel drill bits
- Cutting edge stays sharper longer
- Titanium Nitride coating reduces friction
- Repetitive metal drilling with Portable Drills, Stationary Drill Press

**Sets:**

**Metal Index:** 63737, 3018003

\*Note: 2 bits per Card

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	1-7/8"	63904*	63704
5/64"	.0781	1"	2"	63905*	63705
3/32"	.0938	1-1/8"	2-1/4"	63906*	63706
7/64"	.1094	1-1/2"	2-5/8"	63907*	63707
1/8"	.1250	1-5/8"	2-3/4"	63908*	63708
9/64"	.1406	1-3/4"	2-7/8"	63909	63709
5/32"	.1563	2"	3-1/8"	63910	63710
11/64"	.1719	2-1/8"	3-1/4"	63911	63711
3/16"	.1875	2-5/16"	3-1/2"	63912	63712
13/64"	.1563	2-7/16"	3-5/8"	63913	63713
7/32"	.2188	2-1/2"	3-3/4"	63914	63714
15/64"	.2344	2-5/8"	3-7/8"	63915	63715
1/4"	.2500	2-3/4"	4"	63916	63716
17/64"	.2656	2-7/8"	4-1/8"	—	63717
9/32"	.2812	2-15/16"	4-1/4"	63918	63718
19/64"	.2969	3-1/16"	4-3/8"	—	63719
5/16"	.3125	3-3/16"	4-1/2"	63920	63720
21/64"	.3281	3-5/16"	4-5/8"	—	63721
11/32"	.3438	3-7/16"	4-3/4"	63922	63722
23/64"	.3594	3-1/2"	4-7/8"	—	63723
3/8"	.3750	3-5/8"	5"	63924	63724
25/64"	.3906	3-3/4"	5-1/8"	—	63725
13/32"	.4063	3-7/8"	5-1/4"	63926	63726
27/64"	.4219	3-15/16"	5-3/8"	—	63727
7/16"	.4375	4-1/16"	5-1/2"	63928	63728
29/64"	.4531	4-3/16"	5-5/8"	—	63729
15/32"	.4689	4-5/16"	5-3/4"	63930	63730
31/64"	.4844	4-3/8"	5-7/8"	—	63731
1/2"	.5000	4-1/2"	6"	63932	63732

# METAL DRILLING

## JOBBER LENGTH DRILL BITS

### Black & Gold HSS Fractional Straight Shank Jobber Length Drill Bits 135° Split Point (Series 30190)



3019016B

- High Speed Steel features a black shank and gold flute
- Heavy-duty web construction for strength and durability
- 135° split point begins drilling immediately, minimizing bit "walk"
- 3-flatted shank on 3/16" and above for better chuck grip

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
3/64"	.0469	3/4"	1-3/4"	—	3019003B
1/16"	.0625	7/8"	1-7/8"	—	3019004B
5/64"	.0781	1"	2"	—	3019005B
3/32"	.0938	1-1/8"	2-1/4"	—	3019006B
7/64"	.1094	1-1/2"	2-5/8"	—	3019007B
1/8"	.1250	1-5/8"	2-3/4"	—	3019008B
9/64"	.1406	1-3/4"	2-7/8"	—	3019009B
5/32"	.1563	2"	3-1/8"	—	3019010B
11/64"	.1719	2-1/8"	3-1/4"	—	3019011B
3/16"	.1875	2-5/16"	3-1/2"	—	3019012B
13/64"	.2031	2-7/16"	3-5/8"	—	3019013B
7/32"	.2188	2-1/2"	3-3/4"	—	3019014B
15/64"	.2344	2-5/8"	3-7/8"	—	3019015B
1/4"	.2500	2-3/4"	4"	—	3019016B
17/64"	.2656	2-7/8"	4-1/8"	—	3019017B
9/32"	.2813	2-15/16"	4-1/4"	—	3019018B
19/64"	.2969	3-1/16"	4-3/8"	—	3019019B
5/16"	.3125	3-3/16"	4-1/2"	—	3019020B
21/64"	.3281	3-5/16"	4-5/8"	—	3019021B
11/32"	.3438	3-7/16"	4-3/4"	—	3019022B
23/64"	.3594	3-1/2"	4-7/8"	—	3019023B
3/8"	.3750	3-5/8"	5"	—	3019024B
25/64"	.3906	3-3/4"	5-1/8"	—	3019025B
13/32"	.4063	3-7/8"	5-1/4"	—	3019026B
27/64"	.4219	3-15/16"	5-3/8"	—	3019027B
7/16"	.4375	4-1/16"	5-1/2"	—	3019028B
29/64"	.4531	4-3/16"	5-5/8"	—	3019029B
15/32"	.4688	4-5/16"	5-3/4"	—	3019030B
31/64"	.4844	4-3/8"	5-7/8"	—	3019031B
1/2"	.5000	4-1/2"	6"	—	3019032B

### Black & Gold HSS Fractional 3/8" Reduced Shank Jobber Length Drill Bits 135° Split Point (Series 30191)



3019128B

- Standard Black & Gold bit with 3/8" reduced shanks

**Set:**

Metal Index: 3018005

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
25/64"	.3906	3-3/4"	5-1/8"	—	3019125B
13/32"	.4063	3-7/8"	5-1/4"	—	3019126B
27/64"	.4219	3-15/16"	5-3/8"	—	3019127B
7/16"	.4375	4-1/16"	5-1/2"	—	3019128B
29/64"	.4531	4-3/16"	5-5/8"	—	3019129B
15/32"	.4688	4-5/16"	5-3/4"	—	3019130B
31/64"	.4844	4-3/8"	5-7/8"	—	3019131B
1/2"	.5000	4-1/2"	6"	—	3019132B

**TURBOMAX® Titanium HSS Fractional  
Jobber Length Drill Bits  
(Series 3015)**



3015012

- Titanium nitride coating for 6X longer life
- Turbomax tip for burr free holes. Exact centering /no walking on straight and curved surfaces
- Reinforced web for added strength and durability
- 3-Flatted shank on 3/16" and above for better chuck grip

**Sets:**

**Pro Set Cases:** 3018008, 3018009, 3018010, 3018011

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	1-7/8"	3015004*	—
5/64"	.0781	1"	2"	3015005*	—
3/32"	.0938	1-1/8"	2-1/4"	3015006*	—
7/64"	.1094	1-1/2"	2-5/8"	3015007*	—
1/8"	.1250	1-5/8"	2-3/4"	3015008	—
9/64"	.1406	1-3/4"	2-7/8"	3015009	—
5/32"	.1563	2"	3-1/8"	3015010	—
11/64"	.1719	2-1/8"	3-1/4"	3015011	—
3/16"	.1875	2-5/16"	3-1/2"	3015012	—
13/64"	.2031	2-7/16"	3-5/8"	3015013	—
7/32"	.2188	2-1/2"	3-3/4"	3015014	—
15/64"	.2344	2-5/8"	3-7/8"	3015015	—
1/4"	.2500	2-3/4"	4"	3015016	—
17/64"	.2656	2-7/8"	4-1/8"	3015017	—
9/32"	.2813	2-15/16"	4-1/4"	3015018	—
19/64"	.2969	3-1/16"	4-3/8"	3015019	—
5/16"	.3125	3-3/16"	4-1/2"	3015020	—
21/64"	.3281	3-5/16"	4-5/8"	3015021	—
11/32"	.3438	3-7/16"	4-3/4"	3015022	—
23/64"	.3594	3-1/2"	4-7/8"	3015023	—
3/8"	.3750	3-5/8"	5"	3015024	—
25/64"***	.3906	3-3/4"	5-1/8"	3015025	—
13/32"***	.4063	3-7/8"	5-1/4"	3015026	—
27/64"***	.4219	3-15/16"	5-3/8"	3015027	—
7/16"***	.4375	4-1/16"	5-1/2"	3015028	—
29/64"***	.4531	4-3/16"	5-5/8"	3015029	—
15/32"***	.4688	4-5/16"	5-3/4"	3015030	—
31/64"***	.4844	4-3/8"	5-7/8"	3015031	—
1/2"***	.5000	4-1/2"	6"	3015032	—

\*\*Note: 3/8" reduced shank

\*Note: 2 bits per Card

**TURBOMAX HSS Fractional  
Straight Shank Jobber Length Drill Bits  
(Series 733/731)**



73124

- High speed steel features a black body and gold flute
- Turbomax tip for burr free holes. Exact centering /no walking on straight and curved surfaces
- 3-flatted shank on 3/16" and above for better chuck grip

**Sets:**

**Metal Index:** 73136, 73137, 73138, 73149  
**Pro Set Cases:** 318015, 318018

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	1-7/8"	73304*	73104
5/64"	.0781	1"	2"	73305*	73105
3/32"	.0938	1-1/8"	2-1/4"	73306*	73106
7/64"	.1094	1-1/2"	2-5/8"	73307*	73107
1/8"	.1250	1-5/8"	2-3/4"	73308*	73108
9/64"	.1406	1-3/4"	2-7/8"	73309	73109
5/32"	.1563	2"	3-1/8"	73310	73110
11/64"	.1719	2-1/8"	3-1/4"	73311	73111
3/16"	.1875	2-5/16"	3-1/2"	73312	73112
13/64"	.2031	2-7/16"	3-5/8"	73313	73113
7/32"	.2188	2-1/2"	3-3/4"	73314	73114
15/64"	.2344	2-5/8"	3-7/8"	73315	73115
1/4"	.2500	2-3/4"	4"	73316	73116
17/64"	.2656	2-7/8"	4-1/8"	73317	73117
9/32"	.2813	2-15/16"	4-1/4"	73318	73118
19/64"	.2969	3-1/16"	4-3/8"	73319	73119
5/16"	.3125	3-3/16"	4-1/2"	73320	73120
21/64"	.3281	3-5/16"	4-5/8"	73321	73121
11/32"	.3438	3-7/16"	4-3/4"	73322	73122
23/64"	.3594	3-1/2"	4-7/8"	73323	73123
3/8"	.3750	3-5/8"	5"	73324	73124
25/64"	.3906	3-3/4"	5-1/8"	73325	73125
13/32"	.4063	3-7/8"	5-1/4"	73326	73126
27/64"	.4219	3-15/16"	5-3/8"	73327	73127
7/16"	.4375	4-1/16"	5-1/2"	73328	73128
29/64"	.4531	4-3/16"	5-5/8"	73329	73129
15/32"	.4688	4-5/16"	5-3/4"	73330	73130
31/64"	.4844	4-3/8"	5-7/8"	73331	73131
1/2"	.5000	4-1/2"	6"	73332	73132

\*Note: 2 bits per Card

# METAL DRILLING

## JOBBER LENGTH DRILL BITS

### TURBOMAX® HSS 3/8" Reduced Shank Jobber Length Drill Bits (Series 736/734)



73432

- Standard TURBOMAX bit with 3/8" reduced shanks

**Set:**

Metal Index: 3018006B

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
25/64"	.3906	3-3/4"	5-1/8"	73625	73425
13/32"	.4063	3-7/8"	5-1/4"	73626	73426
27/64"	.4219	3-15/16"	5-3/8"	73627	73427
7/16"	.4375	4-1/16"	5-1/2"	73628	73428
29/64"	.4531	4-3/16"	5-5/8"	73629	73429
15/32"	.4688	4-5/16"	5-3/4"	73630	73430
31/64"	.4844	4-3/8"	5-7/8"	73631	73431
1/2"	.5000	4-1/2"	6"	73632	73432

### Black Oxide HSS Fractional Straight Shank Jobber Length Drill Bits 135° Split Point (Series 675/635)



63524

- Black Oxide finish for corrosion resistance
- Heavy-duty web construction for strength and durability
- 135° split point begins drilling immediately, minimizing bit "walk"

**Sets:**

Pro Set Cases: 314015

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
3/64"	.0469	3/4"	1-3/4"	—	63503
1/16"	.0625	7/8"	1-7/8"	67504*	63504
5/64"	.0781	1"	2"	67505*	63505
3/32"	.0938	1-1/8"	2-1/4"	67506*	63506
7/64"	.1094	1-1/2"	2-5/8"	67507*	63507
1/8"	.1250	1-5/8"	2-3/4"	67508*	63508
9/64"	.1406	1-3/4"	2-7/8"	67509	63509
5/32"	.1563	2"	3-1/8"	67510	63510
11/64"	.1719	2-1/8"	3-1/4"	67511	63511
3/16"	.1875	2-5/16"	3-1/2"	67512	63512
13/64"	.2031	2-7/16"	3-5/8"	67513	63513
7/32"	.2188	2-1/2"	3-3/4"	67514	63514
15/64"	.2344	2-5/8"	3-7/8"	67515	63515
1/4"	.2500	2-3/4"	4"	67516	63516
17/64"	.2656	2-7/8"	4-1/8"	67517	63517
9/32"	.2813	2-15/16"	4-1/4"	67518	63518
19/64"	.2969	3-1/16"	4-3/8"	67519	63519
5/16"	.3125	3-3/16"	4-1/2"	67520	63520
21/64"	.3281	3-5/16"	4-5/8"	67521	63521
11/32"	.3438	3-7/16"	4-3/4"	67522	63522
23/64"	.3594	3-1/2"	4-7/8"	67523	63523
3/8"	.3750	3-5/8"	5"	67524	63524
25/64"	.3906	3-3/4"	5-1/8"	67525	63525
13/32"	.4063	3-7/8"	5-1/4"	67526	63526
27/64"	.4219	3-15/16"	5-3/8"	67527	63527
7/16"	.4375	4-1/16"	5-1/2"	67528	63528
29/64"	.4531	4-3/16"	5-5/8"	67529	63529
15/32"	.4688	4-5/16"	5-3/4"	67530	63530
31/64"	.4844	4-3/8"	5-7/8"	67531	63531
1/2"	.5000	4-1/2"	6"	67532	63532

### Black Oxide HSS Fractional 3/8" Reduced Shank Jobber Length Drill Bits 135° Split Point (Series 678/634)



63432

- Standard Black Oxide bit with 3/8" reduced shanks

**Set:**

Pro Set Case: 314018

Metal Index: 3018004

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
25/64"	.3906	3-3/4"	5-1/8"	67825	63425
13/32"	.4063	3-7/8"	5-1/4"	67826	63426
27/64"	.4219	3-15/16"	5-3/8"	67827	63427
7/16"	.4375	4-1/16"	5-1/2"	67828	63428
29/64"	.4531	4-3/16"	5-5/8"	67829	63429
15/32"	.4688	4-5/16"	5-3/4"	67830	63430
31/64"	.4844	4-3/8"	5-7/8"	67831	63431
1/2"	.5000	4-1/2"	6"	67832	63432

\*Note: 2 bits per Card

METAL DRILLING



**Cobalt HSS Fractional  
Straight Shank Jobber Length Drill Bits  
135° Point (Series 3016/631)**



63124

- 5% Cobalt for higher heat and abrasion resistance
- Heavy-duty web construction for strength and durability
- 135° split point begins drilling immediately, minimizing bit "walk"

**Applications:**

Tough metal drilling, including heavy-duty abrasive alloy metal drilling on hardened steel (heat-treated)

**Sets:**

**Pro Set Case:** 316015

**Metal Index:** 63137, 63221, 3018002b (M42 grade)

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	1-7/8"	3016004	63104
5/64"	.0781	1"	2"	3016005	63105
3/32"	.0938	1-1/8"	2-1/4"	3016006	63106
7/64"	.1094	1-1/2"	2-5/8"	3016007	63107
1/8"	.1250	1-5/8"	2-3/4"	3016008	63108
9/64"	.1406	1-3/4"	2-7/8"	3016009	63109
5/32"	.1563	2"	3-1/8"	3016010	63110
11/64"	.1719	2-1/8"	3-1/4"	3016011	63111
3/16"	.1875	2-5/16"	3-1/2"	3016012	63112
13/64"	.2031	2-7/16"	3-5/8"	3016013	63113
7/32"	.2188	2-1/2"	3-3/4"	3016014	63114
15/64"	.2344	2-5/8"	3-7/8"	3016015	63115
1/4"	.2500	2-3/4"	4"	3016016	63116
17/64"	.2656	2-7/8"	4-1/8"	3016017	63117
9/32"	.2813	2-15/16"	4-1/4"	3016018	63118
19/64"	.2969	3-1/16"	4-3/8"	3016019	63119
5/16"	.3125	3-3/16"	4-1/2"	3016020	63120
21/64"	.3281	3-5/16"	4-5/8"	3016021	63121
11/32"	.3438	3-7/16"	4-3/4"	3016022	63122
23/64"	.3594	3-1/2"	4-7/8"	3016023	63123
3/8"	.3750	3-5/8"	5"	3016024	63124
25/64"	.3906	3-3/4"	5-1/8"	3016125	63125
13/32"	.4063	3-7/8"	5-1/4"	3016126	63126
27/64"	.4219	3-15/16"	5-3/8"	3016127	63127
7/16"	.4375	4-1/16"	5-1/2"	3016128	63128
29/64"	.4531	4-3/16"	5-5/8"	3016129	63129
15/32"	.4689	4-5/16"	5-3/4"	3016130	63130
31/64"	.4844	4-3/8"	5-7/8"	3016131	63131
1/2"	.5000	4-1/2"	6"	3016132	63132

**Cobalt HSS Fractional 3/8" Reduced  
Shank Jobber Length Drill Bits  
135° Point (Series 30160)**



3016228

- Standard Cobalt bit with 3/8" reduced shanks

**Applications:**

Tough metal drilling, including heavy-duty abrasive alloy metal drilling on hardened steel (heat treated)

**Sets:**

**Pro Set Case:** 316015

**Metal Index:** 3018002 (M35 grade)

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
25/64"	.3906	7/8"	1-7/8"	3016025	3016225
13/32"	.4063	1"	2"	3016026	3016226
27/64"	.4219	1-1/8"	2-1/4"	3016027	3016227
7/16"	.4375	1-1/2"	2-5/8"	3016028	3016228
29/64"	.4531	1-5/8"	2-3/4"	3016029	3016229
15/32"	.4689	1-3/4"	2-7/8"	3016030	3016230
31/64"	.4844	2"	3-1/8"	3016031	3016231
1/2"	.5000	2-1/8"	3-1/4"	3016032	3016232

# METAL DRILLING

## JOBBER LENGTH DRILL BITS

### General Purpose HSS Fractional Straight Shank Jobber Length Drill Bits 118° Point (Series 605/601)



60124

- Recommended for use in metal, wood & plastic
- 118° conventional point, bright finish

**Applications:**

Automotive, MRO, Stationary Drill Press

**Sets:**

Metal Index: 60136, 60137, 60138, 60221

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/64"	.0156	3/16"	3/4"	—	60101
1/32"	.0313	1/2"	1-3/8"	—	60102
3/64"	.0469	3/4"	1-3/4"	—	60103
1/16"	.0625	7/8"	1-7/8"	60504*	60104
5/64"	.0781	1"	2"	60505*	60105
3/32"	.0938	1-1/8"	2-1/4"	60506*	60106
7/64"	.1094	1-1/2"	2-5/8"	60507*	60107
1/8"	.1250	1-5/8"	2-3/4"	60508*	60108
9/64"	.1406	1-3/4"	2-7/8"	60509	60109
5/32"	.1563	2"	3-1/8"	60510	60110
11/64"	.1719	2-1/8"	3-1/4"	60511	60111
3/16"	.1875	2-5/16"	3-1/2"	60512	60112
13/64"	.2031	2-7/16"	3-5/8"	60513	60113
7/32"	.2188	2-1/2"	3-3/4"	60514	60114
15/64"	.2344	2-5/8"	3-7/8"	60515	60115
1/4"	.2500	2-3/4"	4"	60516	60116
17/64"	.2656	2-7/8"	4-1/8"	60517	60117
9/32"	.2813	2-15/16"	4-1/4"	60518	60118
19/64"	.2969	3-1/16"	4-3/8"	60519	60119
5/16"	.3125	3-3/16"	4-1/2"	60520	60120
21/64"	.3281	3-5/16"	4-5/8"	60521	60121
11/32"	.3438	3-7/16"	4-3/4"	60522	60122
23/64"	.3594	3-1/2"	4-7/8"	60523	60123
3/8"	.3750	3-5/8"	5"	60524	60124
25/64"	.3906	3-3/4"	5-1/8"	60525	60125
13/32"	.4063	3-7/8"	5-1/4"	60526	60126
27/64"	.4219	3-15/16"	5-3/8"	60527	60127
7/16"	.4375	4-1/16"	5-1/2"	60528	60128
29/64"	.4531	4-3/16"	5-5/8"	60529	60129
15/32"	.4688	4-5/16"	5-3/4"	60530	60130
31/64"	.4844	4-3/8"	5-7/8"	60531	60131
1/2"	.5000	4-1/2"	6"	60532	60132

\*Note: 2 bits per Card

### General Purpose HSS Fractional 3/8" Reduced Shank Jobber Length Drill Bits 118° Point (Series 738/718)



71832

- Standard general purpose bit with 3/8" reduced shanks

**Applications:**

Automotive, MRO, Stationary Drill Press

**Sets:**

Metal Index: 60147, 60148

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
25/64"	.3906	3-3/4"	5-1/8"	73825	71825
13/32"	.4063	3-7/8"	5-1/4"	73826	71826
27/64"	.4219	3-15/16"	5-3/8"	73827	71827
7/16"	.4375	4-1/16"	5-1/2"	73828	71828
29/64"	.4531	4-3/16"	5-5/8"	73829	71829
15/32"	.4688	4-5/16"	5-3/4"	73830	71830
31/64"	.4844	4-3/8"	5-7/8"	73831	71831
1/2"	.5000	4-1/2"	6"	73832	71832

**General Purpose HSS Wire Gauge  
Straight Shank Jobber Length  
Drill Bits (Series 811)**



80128

- Numbered from 1 to 60 (large to small)
- Drills exact size hole for tapping
- Use where non fractional sized holes are required

**Applications:**

Automotive, MRO, Portable Drills,  
Stationary Drill Press

**Sets:**

Metal Index: 80181, 80183

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #	Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
No. 1	.2280	2-5/8"	3-7/8"	81101	80101	No. 41	.0960	1-3/8"	2-3/8"	81141	80141
No. 2	.2210	2-5/8"	3-7/8"	81102	80102	No. 42	.0935	1-1/8"	2-1/4"	81142	80142
No. 3	.2130	2-1/2"	3-3/4"	81103	80103	No. 43	.0890	1-1/8"	2-1/4"	81143	80143
No. 4	.2090	2-1/2"	3-3/4"	81104	80104	No. 44	.0860	1-1/8"	2-1/8"	81144	80144
No. 5	.2055	2-1/2"	3-3/4"	81105	80105	No. 45	.0820	1-1/8"	2-1/8"	81145	80145
No. 6	.2040	2-1/2"	3-3/4"	81106	80106	No. 46	.0810	1-1/8"	2-1/8"	81146	80146
No. 7	.2010	2-7/16"	3-5/8"	81107	80107	No. 47	.0785	1"	2"	81147	80147
No. 8	.1990	2-7/16"	3-5/8"	81108	80108	No. 48	.0760	1"	2"	81148	80148
No. 9	.1960	2-7/16"	3-5/8"	81109	80109	No. 49	.0730	1"	2"	81149	80149
No. 10	.1935	2-7/16"	3-5/8"	81110	80110	No. 50	.0700	1"	2"	81150	80150
No. 11	.1910	2-5/16"	3-1/2"	81111	80111	No. 51	.0670	1"	2"	81151	80151
No. 12	.1890	2-5/16"	3-1/2"	81112	80112	No. 52	.0635	7/8"	1-7/8"	81152	80152
No. 13	.1850	2-5/16"	3-1/2"	81113	80113	No. 53	.0595	7/8"	1-7/8"	81153	80153
No. 14	.1820	2-3/16"	3-3/8"	81114	80114	No. 54	.0550	7/8"	1-7/8"	81154	80154
No. 15	.1800	2-3/16"	3-3/8"	81115	80115	No. 55	.0520	7/8"	1-7/8"	81155	80155
No. 16	.1770	2-3/16"	3-3/8"	81116	80116	No. 56	.0465	3/4"	1-3/4"	81156	80156
No. 17	.1730	2-3/16"	3-3/8"	81117	80117	No. 57	.0430	3/4"	1-3/4"	81157	80157
No. 18	.1695	2-1/8"	3-1/4"	81118	80118	No. 58	.0420	11/16"	1-5/8"	81158	80158
No. 19	.1660	2-1/8"	3-1/4"	81119	80119	No. 59	.0410	11/16"	1-5/8"	81159	80159
No. 20	.1610	2-1/8"	3-1/4"	81120	80120	No. 60	.0400	11/16"	1-5/8"	81160	80160
No. 21	.1590	2-1/8"	3-1/4"	81121	80121	No. 61	.0390	11/16"	1-5/8"	-	80161
No. 22	.1570	2"	3-1/8"	81122	80122	No. 62	.0380	5/8"	1-1/2"	-	80162
No. 23	.1540	2"	3-1/8"	81123	80123	No. 63	.0370	5/8"	1-1/2"	-	80163
No. 24	.1520	2"	3-1/8"	81124	80124	No. 64	.0360	5/8"	1-1/2"	-	80164
No. 25	.1495	1-7/8"	3"	81125	80125	No. 65	.0350	5/8"	1-1/2"	-	80165
No. 26	.1470	1-7/8"	3"	81126	80126	No. 66	.0330	1/2"	1-3/8"	-	80166
No. 27	.1440	1-7/8"	3"	81127	80127	No. 67	.0320	1/2"	1-3/8"	-	80167
No. 28	.1405	1-3/4"	2-7/8"	81128	80128	No. 68	.0310	1/2"	1-3/8"	-	80168
No. 29	.1260	1-3/4"	2-7/8"	81129	80129	No. 69	.0292	1/2"	1-3/8"	-	80169
No. 30	.1285	1-5/8"	2-3/4"	81130	80130	No. 70	.0280	3/8"	1-1/4"	-	80170
No. 31	.1200	1-5/8"	2-3/4"	81131	80131	No. 71	.0260	3/8"	1-1/4"	-	80171
No. 32	.1160	1-5/8"	2-3/4"	81132	80132	No. 72	.0250	5/16"	1-1/8"	-	80172
No. 33	.1130	1-1/2"	2-5/8"	81133	80133	No. 73	.0240	5/16"	1-1/8"	-	80173
No. 34	.1110	1-1/2"	2-5/8"	81134	80134	No. 74	.0225	1/4"	1"	-	80174
No. 35	.1100	1-1/2"	2-5/8"	81135	80135	No. 75	.0210	1/4"	1"	-	80175
No. 36	.1065	1-7/16"	2-1/2"	81136	80136	No. 76	.0200	3/16"	7/8"	-	80176
No. 37	.1040	1-7/16"	2-1/2"	81137	80137	No. 77	.0180	3/16"	7/8"	-	80177
No. 38	.1015	1-7/16"	2-1/2"	81138	80138	No. 78	.0160	3/16"	7/8"	-	80178
No. 39	.0995	1-3/8"	2-3/8"	81139	80139	No. 79	.0145	1/8"	3/4"	-	80179
No. 40	.0980	1-3/8"	2-3/8"	81140	80140	No. 80	.0135	1/8"	3/4"	-	80180

# METAL DRILLING

## JOBBER LENGTH DRILL BITS

### Left-Hand Heavy-Duty HSS Fractional Straight Shank Jobber Length Drill Bits (Series 623)



62324

- Black Oxide finish for corrosion resistance
- Heavy-duty web construction for strength and durability
- 135° split point begins drilling immediately, minimizing bit "walk"

#### Applications:

General metal drilling, creates pilot holes for screw extractors.

Size	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	7/8"	1-7/8"	–	62304
5/64"	1"	2"	–	62305
3/32"	1-1/8"	2-1/4"	–	62306
7/64"	1-1/2"	2-5/8"	–	62307
1/8"	1-5/8"	2-3/4"	–	62308
9/64"	1-3/4"	2-7/8"	–	62309
5/32"	2"	3-1/8"	–	62310
11/64"	2-1/8"	3-1/4"	–	62311
3/16"	2-5/16"	3-1/2"	–	62312
13/64"	2-7/16"	3-5/8"	–	62313
7/32"	2-1/2"	3-3/4"	–	62314
15/64"	2-5/8"	3-7/8"	–	62315
1/4"	2-3/4"	4"	–	62316
17/64"	2-7/8"	4-1/8"	–	62317
9/32"	2-15/16"	4-1/4"	–	62318
19/64"	3-1/16"	4-3/8"	–	62319
5/16"	3-3/16"	4-1/2"	–	62320
21/64"	3-5/16"	4-5/8"	–	62321
11/32"	3-7/16"	4-3/4"	–	62322
23/64"	3-1/2"	4-7/8"	–	62323
3/8"	3-5/8"	5"	–	62324
25/64"	3-3/4"	5-1/8"	–	62325
13/32"	3-7/8"	5-1/4"	–	62326
27/64"	3-15/16"	5-3/8"	–	62327
7/16"	4-1/16"	5-1/2"	–	62328
29/64"	4-3/16"	5-5/8"	–	62329
15/32"	4-5/16"	5-3/4"	–	62330
31/64"	4-3/8"	5-7/8"	–	62331
1/2"	4-1/2"	6"	–	62332

**Left-Hand Cobalt HSS Fractional Mechanics Length Drill Bits 135° Split Point (Series 305)**



30524

- 8% Cobalt alloyed for higher heat and abrasion resistance
- Shorter drill for additional strength
- Heavy-duty web construction for strength and durability

**Sets:**

5 Piece Set: 30520

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
5/64"	.0781	1"	2"	—	30505
7/64"	.1094	1"	2-3/16"	—	30507
1/8"	.1250	1-1/16"	2-1/4"	—	30508
5/32"	.1563	1-1/4"	2-9/16"	—	30510
3/16"	.1875	1-1/2"	2-7/8"	—	30512
7/32"	.2188	1-5/8"	3-1/8"	—	30514
1/4"	.2500	1-3/4"	3-5/16"	—	30516
9/32"	.2812	2"	3-9/16"	—	30518
19/64"	.2969	2-1/16"	3-5/8"	—	30519
5/16"	.3125	2-1/8"	3-3/4"	—	31520
11/32"	.3438	2-1/4"	3-15/16"	—	30522
3/8"	.3750	2-3/8"	4-1/8"	—	30524
13/32"	.4062	2-1/2"	4-3/8"	—	30526
7/16"	.4375	2-5/8"	4-9/16"	—	30528
15/32"	.4688	2-3/4"	4-3/4"	—	30530
1/2"	.5000	2-7/8"	5"	—	30532

**HSS Fractional Screw Machine Length Drill Bits (Series 301)**



30132

- Black Oxide finish for corrosion resistance
- Shorter length for increased strength and rigidity
- Also known as "stubbies"

**Applications:**

Industrial applications, MRO, automotive, machine shop

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	5/8"	1-5/8"	—	30104
5/64"	.0781	11/16"	1-11/16"	—	30105
3/32"	.0938	3/4"	1-3/4"	—	30106
7/64"	.1094	13/16"	1-13/16"	—	30107
1/8"	.1250	7/8"	1-7/8"	—	30108
9/64"	.1406	15/16"	1-15/16"	—	30109
5/32"	.1562	1"	2-1/16"	—	30110
11/64"	.1719	1-1/16"	2-1/8"	—	30111
3/16"	.1875	1-1/8"	2-3/16"	—	30112
13/64"	.2031	1-3/16"	2-1/4"	—	30113
7/32"	.2188	1-1/4"	2-3/8"	—	30114
16/64"	.2500	1-5/16"	2-7/16"	—	30115
1/4"	.2500	1-3/8"	2-1/2"	—	30116
17/64"	.2656	1-7/16"	2-5/8"	—	30117
9/32"	.2813	1-1/2"	2-11/16"	—	30118
19/64"	.2969	1-9/16"	2-3/4"	—	30119
5/16"	.3125	1-5/8"	2-13/16"	—	30120
21/64"	.3281	1-11/16"	2-15/16"	—	30121
11/32"	.3438	1-11/16"	3"	—	30122
23/64"	.3594	1-3/4"	3-1/16"	—	30123
3/8"	.3750	1-13/16"	3-1/8"	—	30124
25/64"	.3906	1-7/8"	3-1/4"	—	30125
13/32"	.4063	1-15/16"	3-5/16"	—	30126
27/64"	.4219	2"	3-3/8"	—	30127
7/16"	.4375	2-1/16"	3-7/16"	—	30128
29/64"	.4531	2-1/8"	3-9/16"	—	30129
15/32"	.4689	2-1/8"	3-5/8"	—	30130
31/64"	.4844	2-3/16"	3-11/16"	—	30131
1/2"	.5000	2-1/4"	3-3/4"	—	30132

# METAL DRILLING

## SCREW MACHINE LENGTH DRILL BITS

### HSS Wire Gauge Screw Machine Length Drill Bits (Series 201)



20120

- Black Oxide finish for corrosion resistance
- Numbered from 1 to 55 (large to small)
- Drills exact size hole for tapping (used where more precisely sized holes are required)
- Shorter length for increased strength and rigidity

#### Applications:

Industrial applications, MRO, automotive, machine shop

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
No. 1	.2280	1-5/16"	2-7/16"	—	20101
No. 2	.2210	1-5/16"	2-7/16"	—	20102
No. 3	.2130	1-1/4"	2-3/8"	—	20103
No. 4	.2090	1-1/4"	2-3/8"	—	20104
No. 5	.2055	1-1/4"	2-3/8"	—	20105
No. 6	.2040	1-1/4"	2-3/8"	—	20106
No. 7	.2010	1-3/16"	2-1/4"	—	20107
No. 8	.1190	1-3/16"	2-1/4"	—	20108
No. 9	.1960	1-3/16"	2-1/4"	—	20109
No. 10	.1935	1-3/16"	2-1/4"	—	20110
No. 11	.1910	1-3/16"	2-1/4"	—	20111
No. 12	.1890	1-3/16"	2-1/4"	—	20112
No. 13	.1850	1-1/8"	2-3/16"	—	20113
No. 14	.1820	1-1/8"	2-3/16"	—	20114
No. 15	.1800	1-1/8"	2-3/16"	—	20115
No. 16	.1770	1-1/8"	2-3/16"	—	20116
No. 17	.1730	1-1/8"	2-3/16"	—	20117
No. 18	.1695	1-1/16"	2-1/8"	—	20118
No. 19	.1660	1-1/16"	2-1/8"	—	20119
No. 20	.1610	1-1/16"	2-1/8"	—	20120
No. 21	.1590	1-1/16"	2-1/8"	—	20121
No. 22	.1570	1-1/16"	2-1/8"	—	20122
No. 23	.1540	1"	2-1/16"	—	20123
No. 24	.1520	1"	2-1/16"	—	20124
No. 25	.1495	1"	2-1/16"	—	20125
No. 26	.1470	1"	2-1/16"	—	20126
No. 27	.1440	1"	2-1/16"	—	20127
No. 28	.1405	15/16"	1-15/16"	—	20128
No. 29	.1360	15/16"	1-15/16"	—	20129
No. 30	.1285	15/16"	1-15/16"	—	20130
No. 31	.1200	7/8"	1-7/8"	—	20131
No. 32	.1160	7/8"	1-7/8"	—	20132
No. 33	.1130	7/8"	1-7/8"	—	20133
No. 34	.1110	7/8"	1-7/8"	—	20134
No. 35	.1100	7/8"	1-7/8"	—	20135
No. 36	.1065	13/16"	1-13/16"	—	20136
No. 37	.1040	13/16"	1-13/16"	—	20137
No. 38	.1015	13/16"	1-13/16"	—	20138
No. 39	.0995	13/16"	1-13/16"	—	20139
No. 40	.0980	13/16"	1-13/16"	—	20140
No. 41	.0960	13/16"	1-13/16"	—	20141
No. 42	.0935	3/4"	1-3/4"	—	20142
No. 43	.0890	3/4"	1-3/4"	—	20143
No. 44	.0860	3/4"	1-3/4"	—	20144
No. 45	.0820	3/4"	1-3/4"	—	20145
No. 46	.0810	3/4"	1-3/4"	—	20146
No. 47	.0785	11/16"	1-11/16"	—	20147
No. 48	.0760	11/16"	1-11/16"	—	20148
No. 49	.0730	11/16"	1-11/16"	—	20149
No. 50	.0700	11/16"	1-11/16"	—	20150
No. 51	.0670	11/16"	1-11/16"	—	20151
No. 52	.0635	11/16"	1-11/16"	—	20152
No. 53	.0595	5/8"	1-5/8"	—	20153
No. 54	.0550	5/8"	1-5/8"	—	20154
No. 55	.0520	5/8"	1-5/8"	—	20155

**Silver and Deming (S&D) HSS Fractional  
1/2" Reduced Shank Drill Bits  
118° Point (Series 911/901)**



91148

- 6" overall length
- For use in 1/2" drill chucks
- 3-flatted shank for secure grip

**Applications:**

Heavy-duty metal drilling,  
automotive, body shop, metal  
fabrication

**Sets:**

8 Piece Set: 90108



91164

Size	Decimal Equiv.	Flute Length	Overall Length	Tubed Stock #
33/64"	.5156	3"	6"	91133
17/32"	.5313	3"	6"	91134
35/64"	.5469	3"	6"	91135
9/16"	.5625	3"	6"	91136
37/64"	.5781	3"	6"	91137
19/32"	.5938	3"	6"	91138
39/64"	.6094	3"	6"	91139
5/8"	.6250	3"	6"	91140
41/64"	.6406	3"	6"	91141
21/32"	.6563	3"	6"	91142
43/64"	.6719	3"	6"	91143
11/16"	.6875	3"	6"	91144
45/64"	.7031	3"	6"	91145
23/32"	.7188	3"	6"	91146
47/64"	.7344	3"	6"	91147
3/4"	.7500	3"	6"	91148
49/64"	.7656	3"	6"	91149
25/32"	.7812	3"	6"	91150
51/64"	.7969	3"	6"	91151
13/16"	.8125	3"	6"	91152
53/64"	.8281	3"	6"	91153
27/32"	.8438	3"	6"	91154
55/64"	.8594	3"	6"	91155
7/8"	.8750	3"	6"	91156
57/64"	.8906	3"	6"	91157
29/32"	.9062	3"	6"	91158
59/64"	.9219	3"	6"	91159
15/16"	.9375	3"	6"	91160
61/64"	.9531	3"	6"	91161
31/32"	.9688	3"	6"	91162
63/64"	.9844	3"	6"	91163
1"	1.000	3"	6"	91164
1-1/64"	1.0156	3"	6"	90165
1-1/32"	1.0313	3"	6"	90166
1-1/16"	1.0625	3"	6"	90168
1-3/32"	1.0938	3"	6"	90170
1-1/8"	1.1250	3"	6"	90172
1-5/32"	1.1563	3"	6"	90174
1-3/16"	1.1875	3"	6"	90176
1-1/4"	1.2500	3"	6"	90180
1-5/16"	1.3125	3"	6"	90184
1-3/8"	1.3750	3"	6"	90188
1-7/16"	1.4375	3"	6"	90192
1-1/2"	1.5000	3"	6"	90196

# METAL DRILLING

## EXTRA LENGTH DRILL BITS

### 12" Longboy HSS Fractional 1/2" Reduced Shank Drill Bits (Series 604)



60448

- For use in 1/2" drill chucks
- 3-flatted shank for secure grip

#### Applications:

Deep drilling into wood and metal beams

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/2"	.5000	9"	12"	—	60432
9/16"	.5625	9"	12"	—	60436
5/8"	.6250	9"	12"	—	60440
11/16"	.6875	9"	12"	—	60444
3/4"	.7500	9"	12"	—	60448
13/16"	.8125	9"	12"	—	60452
7/8"	.8750	9"	12"	—	60456
15/16"	.9375	9"	12"	—	60460
1"	1.000	9"	12"	—	60464
1-1/16"	1.0625	9"	12"	—	60468
1-1/8"	1.1250	9"	12"	—	60472
1-1/4"	1.2500	9"	12"	—	60480

### 12" Aircraft Extension HSS Fractional Straight Shank Drill Bits 135° Split Point (Series 621/612)



61224

- Black Oxide finish for corrosion resistance
- Heavy-duty web construction for strength and durability

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	12"	62104	61204
3/32"	.0938	1-1/4"	12"	—	61206
1/8"	.1250	1-5/8"	12"	62108	61208
5/32"	.1563	2"	12"	—	61210
3/16"	.1875	2-5/16"	12"	62112	61212
7/32"	.2188	2-1/2"	12"	—	61214
1/4"	.2500	2-3/4"	12"	62116	61216
9/32"	.2813	2-15/16"	12"	—	61218
5/16"	.3125	3-3/16"	12"	62120	61220
11/32"	.3438	3-7/16"	12"	—	61222
3/8"	.3750	3-5/8"	12"	62124	61224
13/32"	.4063	3-7/8"	12"	—	61226
7/16"	.4375	4-1/16"	12"	62128	61228
15/32"	.4688	4-5/16"	12"	—	61230
1/2"	.5000	4-1/2"	12"	62132	61232

### 6" Aircraft Extension HSS Fractional Straight Shank Drill Bits 135° Split Point (Series 667/666)



66624

- Black Oxide finish for corrosion resistance
- Heavy-duty web construction for strength and durability

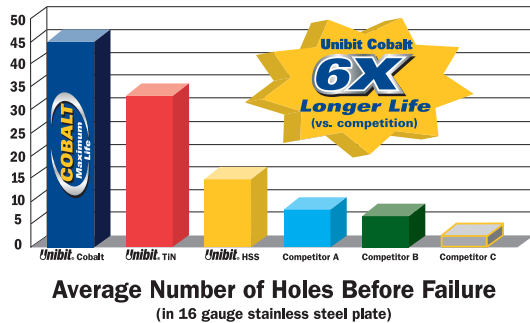
Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/16"	.0625	7/8"	6"	66704	66604
5/64"	.0781	1"	6"	—	66605
3/32"	.0938	1-1/4"	6"	—	66606
7/64"	.1094	1-1/2"	6"	—	66607
1/8"	.1250	1-5/8"	6"	66708	66608
9/64"	.1406	1-3/4"	6"	—	66609
5/32"	.1563	2"	6"	—	66610
11/64"	.1719	2-1/8"	6"	—	66611
3/16"	.1875	2-5/16"	6"	66712	66612
13/64"	.2031	2-7/16"	6"	—	66613
7/32"	.2188	2-1/2"	6"	—	66614
15/64"	.2344	2-5/8"	6"	—	66615
1/4"	.2500	2-3/4"	6"	66716	66616
17/64"	.2656	2-7/8"	6"	—	66617
9/32"	.2813	2-15/16"	6"	—	66618
19/64"	.2969	3-1/16"	6"	—	66619
5/16"	.3125	3-3/16"	6"	66720	66620
21/64"	.3281	3-5/16"	6"	—	66621
11/32"	.3438	3-7/16"	6"	—	66622
23/64"	.3594	3-1/2"	6"	—	66623
3/8"	.3750	3-5/8"	6"	66724	66624
25/64"	.3906	3-3/4"	6"	—	66625
13/32"	.4063	3-7/8"	6"	—	66626
27/64"	.4219	3-15/16"	6"	—	66627
7/16"	.4375	4-1/16"	6"	66728	66628
15/32"	.4688	4-5/16"	6"	—	66630
1/2"	.5000	4-1/2"	6"	66732	66632



**UNIBIT® Step Drill Bits - Maximum Life in Tough Steel**

UNIBIT is the most recognized brand for professionals in electrical, automotive and plumbing. UNIBIT fulfills the IRWIN tradition of providing reliable, high-quality professional tools. IRWIN UNIBIT has been the most innovative and trusted name in step drill bits since its invention in 1972. The new IRWIN UNIBIT Cobalt is the latest addition to the step drill bit category. Made of cobalt high speed steel, this step drill bit will last longer in the toughest of materials. From stainless steel to aluminum or PVC pipe, the UNIBIT Cobalt is the most versatile and longest lasting step drill bit in the market.

**Comparative Life Test in Stainless Steel**



**M35 Grade Cobalt HSS**

- High heat & abrasion resistance
- Longest cutting edge life

**Radial Concave Flute**

- True round holes
- Greatest control
- Minimizes vibration

**3-Flatted Shank**

- Won't slip in chuck

**Speedpoint® Tip**

- Fast starting
- 6X faster than original Unibit

**Laser Marked Sizes**

- Permanent: won't wear off with use



METAL DRILLING

**UNIBIT Cobalt HSS**



10231

- M35 grade Cobalt HSS
- Longest cutting edge life
- 6X longer life\*

\*versus competition

	Description	# of Hole Sizes	Shank Size	Carded Stock #
	#1 1/8"-1/2" (1/32" steps)	13	1/4"	10231CB
▲	#2 3/16"-1/2" (1/16" steps)	6	1/4"	10232CB
▲	#3 1/4"-3/4" (1/16" steps)	9	3/8"	10233CB
▲	#4 3/16"-7/8" (1/16" steps)	12	3/8"	10234CB
▲	#9 7/8" and 1-1/8" for (1/2" and 3/4") KO	2	1/2"	10239CB
	#20 9/16"-1" (1/16") Inc - Hole Enlarging	8	1/2"	10220CB
▲	#1M 4 mm-12 mm (1 mm steps)	9	1/4"	11101CB
▲	#2M 4 mm - 12 mm (2 mm steps)	5	1/4"	11102CB
▲	#3M 6 mm - 18 mm (2 mm steps)	7	3/8"	11103CB
▲	#4M 4 mm - 22 mm (2 mm steps)	10	3/8"	11104CB

▲ SpeedPoint™ Tip

# METAL DRILLING

## STEP DRILL BITS

### UNIBIT® HSS Fractional Titanium Nitride (TiN) Coated



15101

- Titanium Nitride coating extends cutting edge life up to 6x
- Single-fluted cutting edge for greater control & rounder holes

**Set:** 15502

	Description	# of Hole Sizes	Shank Size	Carded Stock #
▲	#1T 1/8" - 1/2" (1/32" steps)	13	1/4"	15101
▲	#2T 3/16" - 1/2" (1/16" steps)	6	1/4"	15102
▲	#3T 1/4" - 3/4" (1/16" steps)	9	3/8"	15103
▲	#4T 3/16" - 7/8" (1/16" steps)	12	3/8"	15104
▲	#13T 1-1/8" (single hole)	10	1/2"	15313
	#21T 13/16" - 1-3/8" (hole enlarging)	1	1/2"	15221

### UNIBIT HSS Metric Titanium Nitride (TiN) Coated



16103

- Titanium Nitride coating extends cutting edge life up to 6x
- Single-fluted cutting edge for greater control & rounder holes

	Description	# of Hole Sizes	Shank Size	Carded Stock #
▲	#1MT 4 mm - 12 mm (1 mm steps)	9	1/4"	16101
▲	#2MT 4 mm - 12 mm (2 mm steps)	5	1/4"	16102
▲	#3MT 6 mm - 18 mm (2 mm steps)	7	3/8"	16103
▲	#4MT 4 mm - 22 mm (2 mm steps)	10	3/8"	16104
▲	#5MT 5 mm - 35 mm (2 - 3 mm steps)	13	1/2"	16105

### UNIBIT HSS Fractional



10234

- Single-fluted cutting edge for greater control & rounder holes
- Ideal for drilling holes in thin materials such as mild steel, copper, brass, aluminum, plexiglass, wood and laminates

**Sets:** 10225, 10228, 10502

	Description	# of Hole Sizes	Shank Size	Carded Stock #
	#1 1/8" - 1/2" (1/32" steps)	13	1/4"	10231
▲	#2 3/16" - 1/2" (1/16" steps)	6	1/4"	10232
▲	#3 1/4" - 3/4" (1/16" steps)	9	3/8"	10233
▲	#4 3/16" - 7/8" (1/16" steps)	12	3/8"	10234
▲	#5 1/4" - 1-3/8" (1/8" steps)	10	1/2"	10235
▲	#9 7/8" and 1-1/8" (1/2" and 3/4" Knock-Out)	2	1/2"	10239
	#10 1/2" (single hole)	1	1/4"	10310
	#11 7/8" (single hole)	1	3/8"	10311
	#12 3/8" (single hole)	1	1/4"	10312
▲	#13 1-1/8" (single hole)	1	1/2"	10313
▲	#14 1-7/32" (single hole)	1	1/2"	10314
	#20 9/16" - 1" (hole enlarging)	8	1/2"	10220
	#21 13/16" - 1-3/8" (hole enlarging)	10	1/2"	10221

### UNIBIT HSS Metric



11101

- Single-fluted cutting edge for greater control & rounder holes
- Ideal for drilling holes in thin materials such as mild steel, copper, brass, aluminum, plexiglass, wood and laminates

	Description	# of Hole Sizes	Shank Size	Carded Stock #
▲	#1M 4 mm - 12 mm (1 mm steps)	9	1/4"	11101
▲	#2M 4 mm - 12 mm (2 mm steps)	5	1/4"	11102
▲	#3M 6 mm - 18 mm (2 mm steps)	7	3/8"	11103
▲	#4M 4 mm - 22 mm (2 mm steps)	10	3/8"	11104
▲	#5M 5 mm - 35 mm (2-3 mm steps)	13	1/2"	11105
	#20M 14 mm - 24 mm (hole enlarging)	6	1/2"	11580
	#21M 20 mm - 34 mm (hole enlarging)	8	1/2"	11581
	PG29M 5 mm - 28.3 mm	10	1/2"	11194
	29 mm 5 mm - 29 mm	10	1/2"	11195

▲ — SpeedPoint™ Tip

**UNIBIT® Sets**



10228

Description	Type	Contents	Stock #
4-pc Set	High Speed Steel Set	#1, 2, 4 & 21	10225
4-pc Set	High Speed Steel Set w/#1 TiN	#1, 2 & 3 plus #1T	10228
3-pc Set	High Speed Steel Set	#1, 2 & 3	10502
3-pc Set	Titanium Nitride Coated Set	#1T, 2T & 3T	15502
3-pc Set	Cobalt Set	#1C, 2C & 3C	10502CB
9-pc Set	Unibit/ TiN Turbomax Set	#1, #4 & 7-pc TiN (1/16", 3/32", 1/8", 3/16", 7/32", 1/4", 3/8")	3018008

**Double End HSS Drill Bits  
(Series 606/ 616)**



10228

- Black Oxide finish for corrosion resistance
- Drills twice as many holes as a single end drill bit
- Heavy-duty web for strength and durability

**Applications:**

General metal drilling in tight spaces, drilling sheet metal for rivets and fasteners

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
7/64"		5/8"	1*7/8"	—	60607
1/8"		5/8"	2"	—	60608
9/64"		5/8"	2"	—	60609
5/32"		5/8"	2-1/16"	—	60610
3/16"		5/8"	2-3/16"	—	60612
7/32"		11/16"	2-3/8"	—	60614
1/4"		7/8"	2-1/2"	—	60616
#11		11/16"	2-1/4"	—	61611
#20		5/8"	2-1/8"	—	61620
#30		5/8"	2"	—	61630

**High Speed Steel  
Countersinks**

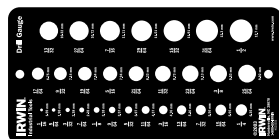


12413

- 1/4" round shank
- Milled and precision ground to 82° for countersinking into most machinable materials
- 5 Flutes

Size	Decimal Equiv.	Flute Length	Overall Length	Carded Stock #	Bulk Stock #
1/2"	.5000	3/8"	1-5/8"	12411	—
5/8"	.6250	7/16"	1-3/4"	12412	—
3/4"	.7500	1/2"	1-13/16"	12413	—

**Drill Bit Gauge & Stand**



12092

Description	Carded Stock #	Bulk Stock #
Fractional Drill Gauge	12092	—
Drill Stand 1/16" - 1/2"	60172	—

# METAL DRILLING

## JOBBER LENGTH DRILL BIT SETS

### 29-pc Metal Index Drill Bit Sets

#### Removable Cartridges

- Allows for easy transport to worksite

#### Automatic Indexing

- For easy bit access and identification

#### 3 Easy Steps to Open Case & Remove a Cartridge



Slide Latch



Open Case



Remove Cartridge

#### Rubber Over Molded Case

- Protects case if dropped

3018003

\*Note: 3/8" Reduced Shank

Description	Type	Contents	Point	Finish	Stock #
29-pc Set	Cobalt M42 HSS Fractional	1/16" - 1/2" by 64ths	135°	Cobalt	3018002B
*29-pc Set	Cobalt M35 HSS Fractional	1/16" - 1/2" by 64ths	135°	Cobalt	3018002
*29-pc Set	TiN HSS Fractional	1/16" - 1/2" by 64ths	135°	TiN Coated	3018003
*29-pc Set	Heavy-Duty HSS Fractional	1/16" - 1/2" by 64ths	135°	Black Oxide	3018004
*29-pc Set	Black & Gold HSS Fractional	1/16" - 1/2" by 64ths	135°	Black & Gold Oxide	3018005
*29-pc Set	TURBOMAX® HSS Fractional	1/16" - 1/2" by 64ths	TURBOMAX	Gold Oxide	3018006B
*29-pc Set	TURBOMAX® Titanium Fractional	1/16" - 1/2" by 64ths	TURBOMAX	TiN Coated	3018011

METAL DRILLING

### 29-pc Metal Index Drill Bit Set



73138

### 21-pc Metal Index Drill Bit Set



73149

### 13-pc Metal Index Drill Bit Set



73136

Description	Type	Contents	Point	Finish	Stock #
<b>Straight Shank Sets</b>					
13-pc Set	Gen. Purp. HSS Fractional	1/16" - 1/4" by 64ths	118°	Bright	60136
15-pc Set		1/16" - 1/2" by 32nds	118°	Bright	60137
21-pc Set		1/16" - 3/8" by 64ths	118°	Bright	60221
60-pc Set	Gen. Purp. HSS Wire Gauge	#1 - #60	118°	Bright	80181
20-pc Set		#61 - #80	118°	Bright	80183
15-pc Set	Cobalt HSS Fractional	1/16" - 1/2" by 32nds	135°	Cobalt	63137
21-pc Set		1/16" - 3/8" by 64ths	135°	Cobalt	63221
15-pc Set	TiN HSS Fractional	1/16" - 1/2" by 32nds	135°	TiN Coated	63737
13-pc Set	TURBOMAX® HSS Fractional	1/16" - 1/4" by 64ths	TURBOMAX®	Gold Oxide	73136
15-pc Set		1/16" - 1/2" by 32nds	TURBOMAX	Gold Oxide	73137
29-pc Set		1/16" - 1/2" by 64ths	TURBOMAX	Gold Oxide	73138
21-pc Set		1/16" - 3/8" by 64ths	TURBOMAX	Gold Oxide	73149
<b>Reduced Shank Sets</b>					
15-pc Set	Gen. Purp. HSS Fractional 3/8"	1/16" - 1/2" by 32nds	118°	Bright	60147
29-pc Set		1/16" - 1/2" by 64ths	118°	Bright	60148
8-pc Set	Silver & Deming (S&D) HSS Fractional 1/2"	9/16" - 1" by 32nds	118°	Black Oxide & Bright	90108



314018



318015



316015

**Pro Set Cases**

Description	Type	Contents	Point	Finish	Stock #
15-pc Set	Black Oxide HSS Fractional Straight Shank Jobber Length	1/16" - 3/8"	135°	Black Oxide	314015
18-pc Set	Black Oxide HSS Fractional Jobber Length	1/16" - 1/2" with 3/8" Reduced Shank	135°	Black Oxide	314018
15-pc Set	Cobalt HSS Fractional Straight Shank Jobber Length	1/16" - 3/8"	135°	Cobalt	316015
15-pc Set	TURBOMAX® HSS Fractional Straight Shank Jobber	Length 1/16"-3/8"	TURBOMAX®	Gold Oxide	318015
18-pc Set	TURBOMAX HSS Fractional Jobber	Length 1/16"-1/2" with 3/8" Reduced Shank	TURBOMAX	Gold Oxide	3018024SM
15-pc Set	Titanium Turbomax	1/16" - 3/8"	TURBOMAX	TiN	3018009
18-pc Set	Titanium Turbomax	1/16" - 1/2"	TURBOMAX	TiN	3018010
9-pc Set	Titanium Turbomax & Unibit	1/16" - 3/8" Unibit #1 & #4	TURBOMAX	TiN	3018008



3018009



3018010

METAL DRILLING













<b>SPEEDBOR® Max</b>	<b>119</b>
<b>Flat Bits</b>	<b>120</b>
<b>Quick Change Extensions</b>	<b>121</b>
<b>Hollow Center Auger Bits</b>	<b>122</b>
<b>Solid Center Auger Bits</b>	<b>126</b>
<b>Installer Bits</b>	<b>127</b>
<b>Adjustable Wood Bits</b>	<b>128</b>
<b>Brad Point Bits</b>	<b>128</b>
<b>Self-Feed Bits</b>	<b>128</b>
<b>Forstner Bits</b>	<b>129</b>
<b>Plug Cutters</b>	<b>129</b>

## A Century of Quality & Innovation

In 1885 the IRWIN Auger Bit Company was formed. Over 120 years later, IRWIN® is still the leading manufacturer of wood drilling bits & accessories.

IRWIN is now proud to introduce the new SPEEDBOR MAX, the fastest SPEEDBOR ever. Three cutting edges and 3 spurs extend the life of the bit and provide a fast, smooth, clean hole. Whether roughing-in electrical or cutting clean holes for carpentry work, professionals can improve their productivity with the new innovative SPEEDBOR MAX.

No matter what wood drilling project you face, IRWIN Industrial Tools makes a drill bit to do the job better. Our mark of quality is stamped on the shank of our full range of bits for every application and every need. Whether it requires quick, clean holes or precise finish work, there's an IRWIN bit for every job. Use the chart below to determine exactly what you need.

Bit Style	Size Range	Typical Trades	Application Benefits
<b>SPEEDBOR® MAX</b> 	1/2" to 1-1/4" diameter	Carpentry Electrical Plumbing	Fast, clean holes with reduced "break out" when through-hole drilling. Full Screw-Tip requires less effort.
<b>SPEEDBOR® Flat Bits</b> 	1/4" to 1-1/2" diameter 4-3/4" to 16" lengths	Carpentry Electrical Plumbing	Fast, clean holes with reduced "break out" when through-hole drilling
<b>I-100 Solid Center Auger Bit</b> 	1/4" to 1-1/2" diameter 7-1/2" length	Carpentry Electrical Plumbing	Self-feeding tip pulls bit into the work for repetitive cutting of fast clean holes with a clean exit hole. Single spur cutting edge scribes the circumference of the hole for a smoother finish
<b>Ship Auger Bit</b> 	3/8" to 2" diameter 7-1/2" to 29" lengths	Public Utilities Electrical Plumbing Carpentry Log Homes	Hollow center provides better chip removal for deeper holes in utility poles and logs
<b>Installer Bit</b> 	1/4" to 3/4" diameter 12" to 30" lengths	Telecommunications Cable / Internet Security Systems	Wire hole near the end of the bit enables user to pull wire back through after drilling the hole
<b>Self-Feed Bit</b> 	1" to 4-5/8" diameter	Plumbing Electrical General Contracting	Replaceable self-feeding tip pulls bit into the wood; for cutting larger holes with clean edges
<b>Forstner Bit</b> 	1/4" to 2-1/8" diameter	Fine Woodworking Cabinetmaking	Precise cutting of smooth, flat-bottomed (blind) holes with clean, sharp edges
<b>Brad Point Bit</b> 	1/8" to 1/2" diameter	Woodworking Cabinetmaking	Precise cutting of smooth through-holes with clean, sharp edges and reduced "break out"



**SPEEDBOR MAX**

**MAX LIFE**

**Cutting Spurs**

- 3 cutting edges for added durability

**MAX EASE**

**Full Screw Tip**

- Allows bit to self feed

**MAX SPEED**

**Tri-Flute Design**

- For faster chip ejection

**Grooved Hex Shank**

- Prevents slipping in drill chuck or bit extension
- Fits all standard 1/4" quick change chucks



WOOD DRILLING

Diameter	Description	Stock #	Bulk Stock #
1/2"	1/2" x 6" SPEEDBOR MAX Drill Bit	3041001	3041001B
9/16"	9/16" x 6" SPEEDBOR MAX Drill Bit - Bulk		3041014B
5/8"	5/8" x 6" SPEEDBOR MAX Drill Bit	3041002	3041002B
3/4"	3/4" x 6" SPEEDBOR MAX Drill Bit	3041004	3041004B
7/8"	7/8" x 6" SPEEDBOR MAX Drill Bit	3041005	3041005B
1"	1" x 6" SPEEDBOR MAX Drill Bit	3041007	3041007B
1-1/4"	1-1/4" x 6" SPEEDBOR MAX Drill Bit	3041009	3041009B



3041003

Description	Stock #
3-pc. Set SPEEDBOR MAX (5/8", 3/4", 1")	3041003
6-pc. Set SPEEDBOR MAX (1/2", 5/8", 3/4", 7/8", 1", 1-1/4")	3041006
16-pc. Set SPEEDBOR MAX Merchandiser	3041010M

# WOOD DRILLING

## FLAT BITS

### SPEEDBOR® Flat Bits

#### Grooved Hex Shank

- Prevents slipping in drill chuck or bit extension
- Fits all standard Quick Change chucks



#### Cutting Spurs

- Double spurs scribe the outside of the hole which reduces "break out"

#### Patented Blue-Groove Point & Cutting Edge

- Optimal scoop geometry to eject wood chips
- Prevents scraping wood

#### 10% Larger Shank

- For added durability



87916

#### 4-3/4" SPEEDBOR Short Length Flat Bits

- Shorter bit length gets into confined spaces (between studs) where standard lengths will not fit

Diameter	Length	Shank Size	Stock #
1/2"	4-3/4"	1/4" hex	87908
5/8"	4-3/4"	1/4" hex	87910
3/4"	4-3/4"	1/4" hex	87912
7/8"	4-3/4"	1/4" hex	87914
1"	4-3/4"	1/4" hex	87916
1-1/4"	4-3/4"	1/4" hex	87920
1-1/2"	4-3/4"	1/4" hex	87924



88816

#### 6" SPEEDBOR Standard Length Flat Bits

Diameter	Length	Shank Size	Stock #	Bulk Stock #
1/4"	6"	1/4" hex	88804	99904
5/16"	6"	1/4" hex	88805	99905
3/8"	6"	1/4" hex	88806	99906
7/16"	6"	1/4" hex	88807	99907
1/2"	6"	1/4" hex	88808	99908
9/16"	6"	1/4" hex	88809	99909
5/8"	6"	1/4" hex	88810	99910
11/16"	6"	1/4" hex	88811	99911
3/4"	6"	1/4" hex	88812	99912
13/16"	6"	1/4" hex	88813	99913
7/8"	6"	1/4" hex	88814	99914
15/16"	6"	1/4" hex	88815	99915
1"	6"	1/4" hex	88816	99916
1-1/8"	6"	1/4" hex	88818	99918
1-1/4"	6"	1/4" hex	88820	99920
1-3/8"	6"	1/4" hex	88822	99922
1-1/2"	6"	1/4" hex	88824	99924



88716

#### 16" SPEEDBOR Extra-Long Flat Bits

- Not for use with bit extensions or drill presses

Diameter	Length	Shank Size	Stock #	Bulk Stock #
3/8"	16"	1/4"	88706	99706
1/2"	16"	1/4"	88708	99708
5/8"	16"	1/4"	88710	—
3/4"	16"	1/4"	88712	99712
7/8"	16"	1/4"	88714	99714
1"	16"	1/4"	88716	99716



88898

**SPEEDBOR® Flat Bit Sets**



341008

**SPEEDBOR Pro Set**

- Sliding latch design provides added security



90106

**Quick Change Bit Extensions**

- Tapered head design guides the extension through the hole
- Recessed black sleeve prevents accidental release
- Slim diameter chuck and extension will pass through 11/16" and larger holes

Description	Diameter	Stock #
3-pc set	1/2", 3/4", 1"	87950
3-pc set w/clip strip (12 unit)	1/2", 3/4", 1"	87950CS
4-pc pouched	1/2", 3/4", & 1" & 6" EXT	88874
6-pc clam	3/8", 1/2", 5/8", 3/4", 7/8", & 1"	88886
13-pc set in workshop rack	1/4" through 1" in 1/16" increments	88887
6-pc set in workshop rack	3/8", 1/2", 5/8", 3/4", 7/8", & 1"	88888
3-pc pouched	1/2", 3/4", & 1"	88889
6-pc set in SLIMCASE™	3/8", 1/2", 5/8", 3/4", 7/8", & 1"	88890
13-pc pouched	1/4" through 1" in 1/16" increments	88894
6-pc pouched	3/8", 1/2", 5/8", 3/4", & 1" & 6" quick change	88898

Description	Length	Bit Sizes	Stock #
8-pc Pro Set Case	6"	3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", & 1-1/2"	341008

Extension	Stock #
2"	90102
6"	90106
12"	90112

# WOOD DRILLING

## HOLLOW CENTER AUGER BITS

### Ship Auger Bits

#### Heavy-Duty Cutting Edge

- For increased durability and long life even when nails are encountered

#### Hollow Center

- Cleans chips out quickly for fast drilling without clogging hole



#### Full-Length Heat Treatment

- Hardened from tip to shank for extra durability and long life in heavy-duty applications



47416

### Power Drill Long Ship Auger Bits 520H Series

- Cuts through nails without damaging the bit
- Wide lands help keep bit straight as it bores
- Now with impact hex shank
- Medium-fast screw point ideal for general wood drilling applications. Bit can be resharpened

Diameter	Shank Size	Twist Length	Overall Length	Tubed Stock #	Bulk Stock #
3/8"	5/16" hex	12"	17"	47406	47306
7/16"	5/16" hex	12"	17"	47407	47307
1/2"	5/16" hex	12"	17"	47408	47308
9/16"	7/16" hex	12"	17"	47409	47309
5/8"	7/16" hex	12"	17"	47410	47310
11/16"	7/16" hex	12"	17"	47411	47311
3/4"	7/16" hex	12"	17"	47412	47312
13/16"	7/16" hex	12"	17"	47413	47313
7/8"	7/16" hex	12"	17"	47414	47314
15/16"	7/16" hex	12"	17"	47415	47315
1"	7/16" hex	12"	17"	47416	47316
1-1/16"	7/16" hex	12"	17"	47417	47317
1-1/8"	7/16" hex	12"	17"	47418	47318
1-3/16"	7/16" hex	12"	17"	—	47319
1-1/4"	7/16" hex	12"	17"	47420	47320
1-5/16"	7/16" hex	12"	17"	—	47321
1-3/8"	7/16" hex	12"	17"	47422	47322
1-1/2"	7/16" hex	12"	17"	47424	47324
1-5/8"	7/16" hex	12"	17"	—	47326
1-3/4"	7/16" hex	12"	17"	—	47328
2"	7/16" hex	12"	17"	—	47332



42416

### Power Drill Short Ship Auger Bits

- Cuts through nails without damaging the bit
- Short length allows bit to be used in tight areas
- Wide lands keep the bit straight as it bores through the hole. Medium-fast screw point is ideal for general wood drilling applications

Diameter	Shank Size	Twist Length	Overall Length	Stock #
5/8"	5/16"	5"	7-1/2"	42410
11/16"	5/16"	5"	7-1/2"	42411
3/4"	5/16"	5"	7-1/2"	42412
13/16"	5/16"	5"	7-1/2"	42413
7/8"	5/16"	5"	7-1/2"	42414
1"	5/16"	5"	7-1/2"	42416
1-1/8"	7/16"	5"	7-1/2"	42418
1-1/4"	7/16"	5"	7-1/2"	42420



46616



**Hand Brace Utility Pole Auger Bits**

- Extra-long twist is ideal for drilling large poles, construction timbers, and for multiple timber applications
- Cutting spur scribes the outside of the hole during drilling for a smooth, clean hole
- Remove the taper square shank and use in an electric drill or hand brace
- Bit can be resharpened
- Medium-fast screw point ideal for general wood drilling applications

Diameter	Shank Size	Twist Length	Overall Length	Bulk Stock #
3/8"	Adapter shank	12"	18"	46606
7/16"	Adapter shank	12"	18"	46607
1/2"	Adapter shank	12"	18"	46608
9/16"	Adapter shank	12"	18"	46609
5/8"	Adapter shank	12"	18"	46610
11/16"	5/16" hex	12"	18"	46611
3/4"	5/16" hex	12"	18"	46612
13/16"	5/16" hex	12"	18"	46613
7/8"	5/16" hex	12"	18"	46614
15/16"	5/16" hex	12"	18"	46615
1"	5/16" hex	12"	18"	46616
1-1/16"	5/16" hex	12"	18"	46617
11/16"	5/16" hex	18"	24"	46711
13/16"	5/16" hex	18"	24"	46713
1"	5/16" hex	18"	24"	46716

**Adapter Shank**

Fits both Hand Braces and Power Drills



Taper square shank fits hand braces



Cut off or square and use in both power drills and hand braces



47915



**Impact Wrench Utility Pole Auger Bits - 41H Series**

- Extra-long twist is ideal for drilling large poles, construction timbers, and for multiple timber applications
- Cutting spur scribes the outside of the hole during drilling for a smooth, clean hole
- Hex shank design for use in impact wrench drills
- Bit can be resharpened
- Medium-fast screw point ideal for general wood drilling applications

Diameter	Shank Size	Twist Length	Overall Length	Bulk Stock #
13/16"	5/8"	15"	18"	48113
11/16"	5/8"	15"	18"	48111
9/16"	5/8"	15"	18"	48109
1-1/16"	7/16"	15"	18"	47917
15/16"	7/16"	15"	18"	47915
13/16"	7/16"	15"	18"	47913
11/16"	7/16"	15"	18"	47911
9/16"	7/16"	15"	18"	47909
1-1/16"	5/8"	21"	24"	48317
15/16"	5/8"	21"	24"	48315
13/16"	5/8"	21"	24"	48313
11/16"	5/8"	21"	24"	48311
15/16"	7/16"	21"	24"	48215
13/16"	7/16"	21"	24"	48213
11/16"	7/16"	21"	24"	48211

# WOOD DRILLING

## HOLLOW CENTER AUGER BITS



47016



### Power Drill Power Pole Augers

- Extra-long twist is ideal for drilling large poles, construction timbers, and for multiple timber applications
- All bits feature 7/16" adaptable hex shank; simply remove it to use round shank
- Bit can be resharpened
- Medium-fast screw point ideal for general wood drilling applications
- Cutting spur scribes the outside of the hole during drilling for a smooth, clean hole

Diameter	Twist Length	Overall Length	Bulk Stock #
9/16"	12"	17"	46809
5/8"	12"	17"	46810
11/16"	12"	17"	46811
3/4"	12"	17"	46812
13/16"	12"	17"	46813
9/16"	12"	23"	46909
5/8"	18"	23"	46910
11/16"	18"	23"	46911
3/4"	18"	23"	46912
13/16"	18"	23"	46913
7/8"	18"	23"	46914
15/16"	18"	23"	46915
9/16"	24"	29"	47009
5/8"	24"	29"	47010
11/16"	24"	29"	47011
3/4"	24"	29"	47012
13/16"	24"	29"	47013
7/8"	24"	29"	47014
15/16"	24"	29"	47015
1"	24"	29"	47016
1-1/16"	24"	29"	47017

WOOD DRILLING



48715



### Impact Wrench Long Ship Auger Bits - 51H Series

- Hex shank design for use in impact wrench drills
- Wide lands help keep bit straight as it bores
- Bit can be resharpened
- Medium-fast screw point ideal for general wood drilling applications

Diameter	Shank Size	Twist Length	Overall Length	Bulk Stock #
1/2"	7/16"	9"	12"	48508
9/16"	7/16"	9"	12"	48509
11/16"	7/16"	9"	12"	48511
13/16"	7/16"	9"	12"	48513
9/16"	5/8"	9"	12"	48609
9/16"	7/16"	15"	18"	48709
11/16"	7/16"	15"	18"	48711
13/16"	7/16"	15"	18"	48713
15/16"	7/16"	15"	18"	48715
1-1/16"	7/16"	15"	18"	48717



47811

**1/2" Female Square Socket  
Impact Wrench - 51S18 Series**

- Quick release button on the shank
- Medium-fast screw point ideal for general wood drilling applications



Diameter	Twist Length	Overall Length	Bulk Stock #
13/16"	15"	18"	47811



49916

**I-100 Solid Center Auger**

- Solid center design provides extra rigidity while drilling
- Wide lands keep the bit straight as it bores through the hole. The flutes are ground behind the lands to funnel chips to the inside of the bit and away from the outside diameter, producing a faster, cleaner cut
- Single-spur cutting edge scribes the circumference of the hole for a smoother finish
- Coarse screw point provides fast drilling in hard and soft woods
- Full-length heat treated bit guards against bending in heavy-duty applications and strengthens the twist where the greatest strain occurs

Diameter	Shank Size	Twist Length	Overall Length	Bulk Stock #
1/4"	—	4-1/2"	7-1/2"	49904
5/16"	—	4-1/2"	7-1/2"	49905
3/8"	—	4-1/2"	7-1/2"	49906
7/16"	—	4-1/2"	7-1/2"	49907
1/2"	—	4-1/2"	7-1/2"	49908
9/16"	—	4-1/2"	7-1/2"	49909
5/8"	—	4-1/2"	7-1/2"	49910
11/16"	—	4-1/2"	7-1/2"	49911
3/4"	—	4-1/2"	7-1/2"	49912
13/16"	—	4-1/2"	7-1/2"	49913
7/8"	5/16"	4-1/2"	7-1/2"	49914
15/16"	5/16"	4-1/2"	7-1/2"	49915
1"	5/16"	4-1/2"	7-1/2"	49916
1-1/8"	7/16"	4-1/2"	7-1/2"	49918
1-1/4"	7/16"	4-1/2"	7-1/2"	49920
1-3/8"	7/16"	4-1/2"	7-1/2"	49922
1-1/2"	7/16"	4-1/2"	7-1/2"	49924



49999

**I-100 Solid Center Auger Bit Set**

Description	Bit Sizes	Stock #
6-pc pouched	1/4", 3/8", 1/2", 5/8", 3/4" & 1"	49998
3-pc pouched	1/4", 3/8", & 1/2"	49999

# WOOD DRILLING

## SOLID CENTER AUGER BITS



45516



### Drilling Machine Auger Bits - 62R Series, 1/2" Round Shank

- Round shank is designed for use in power drills, drill presses, and drilling machines with 1/2" or larger chuck
- Heavy stem increases strength and rigidity while reducing vibration. Shank length is 2"
- Medium-fast screw point ideal for general wood drilling applications

Diameter	Twist Length	Overall Length	Bulk Stock #
7/16"	6"	8"	45307
1/2"	6"	8"	45308
9/16"	6"	8"	45309
11/16"	6"	8"	45311
3/4"	6"	8"	45312
13/16"	6"	8"	45313
7/8"	6"	8"	45314
1"	6"	8"	45316
3/8"	8"	10"	45406
7/16"	8"	10"	45407
9/16"	8"	10"	45409
11/16"	8"	10"	45411
3/4"	8"	10"	45412
13/16"	10"	12"	45513
1"	10"	12"	45516
3/8"	12"	14"	45606
1/2"	12"	14"	45608
11/16"	12"	14"	45611
3/4"	12"	14"	45612
13/16"	12"	14"	45613
7/8"	12"	14"	45614
1"	12"	14"	45616

WOOD DRILLING



43616

### Hand Brace Solid Center Auger Bits - 62T Series

- Medium-fast screw point ideal for general wood drilling applications
- Full-length heat treated bit guards against bending in heavy-duty applications and strengthens the twist where the greatest strain occurs
- Double spur, double cutter design leaves an extremely clean hole finish

Diameter	Shank Size	Twist Length	Overall Length	Pouched Stock #	Bulk Stock #
1/4"	Taper square	3-1/2"	7-1/2"	43604	—
5/16"	Taper square	3-5/8"	7-5/8"	43605	—
3/8"	Taper square	3-3/4"	7-3/4"	43606	—
7/16"	Taper square	3-7/8"	7-7/8"	43607	—
1/2"	Taper square	4"	8"	43608	—
9/16"	Taper square	4-1/8"	8-1/8"	43609	—
5/8"	Taper square	4-1/4"	8-1/4"	43610	—
11/16"	Taper square	4-3/8"	8-3/8"	43611	—
3/4"	Taper square	4-1/2"	8-1/2"	43612	—
13/16"	Taper square	4-5/8"	8-5/8"	43613	—
7/8"	Taper square	4-9/16"	8-3/4"	43614	—
15/16"	Taper square	4-11/16"	8-7/8"	43615	—
1"	Taper square	4-13/16"	9"	43616	—
1-1/2"	Taper square	4-7/8"	9-1/2"	—	43624
13 pc Pouch	—	—	—	—	43697





38912

**Installer Bits**

- Constructed of premium alloy steel for drilling into a variety of materials including wood, plaster, and metal lath encountered while installing wire
- Special 82° point for fast drilling
- Hole in flute makes it easy to pull wire through walls, ceilings, and floors
- Ideal for installation of small wire for telephones, cable TV, computers, and security systems

Diameter	Shank Size	Overall Length	Pouched Stock #	Bulk Stock #
1/4"	.230"	12"	–	38904
5/16"	.285"	12"	–	38905
3/8"	.370"	12"	–	38906
1/2"	.370"	12"	–	38908
9/16"	.370"	12"	–	38909
5/8"	.370"	12"	–	38910
3/4"	.370"	12"	–	38912
1/4"	.230"	18"	39104	39004
5/16"	.285"	18"	39105	39005
3/8"	.370"	18"	39106	39006
7/16"	.370"	18"	39107	39007
1/2"	.370"	18"	39108	39008
9/16"	.370"	18"	39109	–
5/8"	.370"	18"	39110	39010
3/4"	.370"	18"	39112	–
1/4"	.230"	24"	–	39404
5/16"	.285"	24"	–	39405
3/8"	.370"	24"	–	39406
1/2"	.370"	24"	–	39408
1/4"	.230"	30"	–	39604
3/8"	.370"	30"	–	39606
1/2"	.370"	30"	–	39608

WOOD DRILLING



40012

**Power Drill Masonry Installer Bits**

- Hole in flute makes it easy to pull wire through walls, ceilings, and floors
- Specially designed flute quickly clears masonry dust
- Heavy duty 118° point enters material quickly
- Carbide tip cutting edge ideal for use where masonry construction is encountered including brick, mortar joints, and cinder blocks

Diameter	Shank Size	Overall Length	Stock #
1/4"	.245"	18"	40004
5/16"	.250"	18"	40005
3/8"	.370"	18"	40006
1/2"	.370"	18"	40008
5/8"	.370"	18"	40010
3/4"	.370"	18"	40012

# WOOD DRILLING

## ADJUSTABLE WOOD/BRAD POINT/SELF-FEED BITS



45002

### Adjustable Wood Bits

- Adjustable cutting blade bores a variety of hole sizes
- Cuts 19 hole sizes in increments of 1/8"
- Lockhead screw securely holds blade at desired drilling diameter

Diameter	Shank Size	Usage	Overall Length	Stock #
5/8"- 1-3/4"	9/32"	Drill Press	5-1/2"	44801
7/8"- 3"	11/32"	Drill Press	6-1/2"	45002
7/8"- 3"	—	Hand Brace	—	44202



49618

### Brad Point Drill Bits & Sets

- Brad point tip provides accurate positioning for starting the hole
- Bit is precision ground for use in furniture making, doweling, cabinetry, and other woodworking applications where an exact hole size is required
- Spur cutting edges reduce splintering and ensure a smooth, clean hole
- Wide flutes provide a fast, continuous flow of chip ejection

Diameter	Shank Size	Twist Length	Overall Length	Stock #
1/8"	1/8"	1-7/16"	2-9/16"	49612
3/16"	3/16"	2-1/16"	3-3/8"	49613
1/4"	1/4"	2-1/2"	3-31/32"	49614
5/16"	5/16"	2-15/16"	4-19/32"	49615
3/8"	3/8"	3-7/16"	5-1/4"	49616
7/16"	3/8"	3-11/16"	5-19/32"	49617
1/2"	3/8"	3-31/32"	5-15/16"	49618

Description	Bit Size	Stock #
5-pc pouched	3/16", 1/4", 5/16", 3/8" & 1/2"	49600



43032

### Self-Feed Wood Bits

- For drilling large diameter holes in wood for pipe, conduit and other applications
- Replaceable coarse screw point drills quickly in dry, wet, and gummy wood
- All bits have a 7/16" hex quick change impact shank that fits 1/2" or larger electric drills or 7/16" hex impact wrench drills
- Precision milled shank eliminates runout and wobble
- Ideal for pipe and conduit systems

Diameter	Stock #
1"	43016
1-1/8"	43018
1-1/4"	43020
1-3/8"	43022
1-1/2"	43024
1-3/4"	43028
2"	43032
2-1/8"	43034
2-1/4"	43036
2-9/16"	43041
3"	43047
3-5/8"	43058
4-5/8"	43074

Extensions	Stock #
5-1/2"	3046001
12"	3046002
18"	3046003

WOOD DRILLING



42916

**Forstner Bits**

- Reduced shank fits 3/8" portable drills and drill presses
- Brad point tip starts the bit cleanly on uneven surfaces



42940

**Forstner Bit Set**



43910

**Plug Cutters**

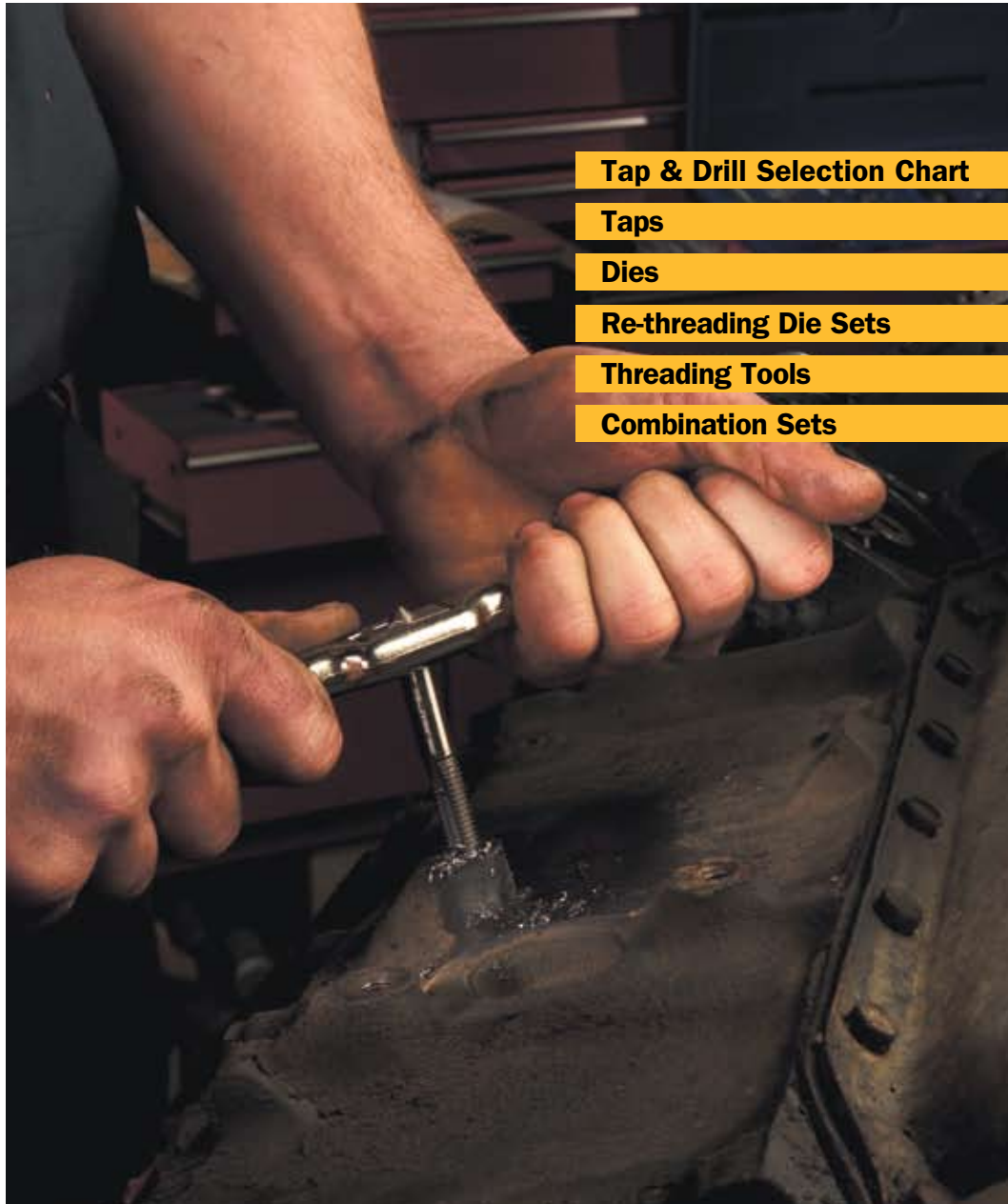
- Recommended for covering fastener holes in furniture, cabinetry, floors, decks, and other woodworking projects
- Constructed of hardened, high-carbon steel for added strength and durability
- Ideal for making dowels

Diameter	Shank Size	Bulk Stock #
1/4"	3/8"	42904
3/8"	3/8"	42906
1/2"	3/8"	42908
5/8"	3/8"	42910
3/4"	3/8"	42912
7/8"	3/8"	42914
1"	3/8"	42916
1-1/8"	3/8"	42918
1-1/4"	3/8"	42920
1-3/8"	3/8"	42922
1-1/2"	3/8"	42924
1-5/8"	3/8"	42926
1-3/4"	3/8"	42928
1-7/8"	3/8"	42930
2"	3/8"	42932
2-1/8"	3/8"	42934
4" Extension	3/8"	42936

Description	Bit Size	Stock #
4-pc Set	5/8", 3/4", 7/8", 1"	42940

Diameter	Shank Size	Stock #
1/4"	1/4"	43904
3/8"	1/4"	43906
1/2"	1/4"	43908
5/8"	1/4"	43910





<b>Tap &amp; Drill Selection Chart</b>	<b>134</b>
<b>Taps</b>	<b>136</b>
<b>Dies</b>	<b>142</b>
<b>Re-threading Die Sets</b>	<b>146</b>
<b>Threading Tools</b>	<b>148</b>
<b>Combination Sets</b>	<b>150</b>

## History of Quality and Dependability

For over 100 years, IRWIN HANSON has been providing the highest quality threading tools in the industry. The IRWIN HANSON name signifies dependability with professionals who use our tools each and every day. By working with various tradesmen, we are able to create solutions for endless fastening challenges. Whether creating new threads or repairing damaged and worn threads, achieving a precise fit is essential. IRWIN HANSON sets the standard for delivering quality every step of the way for your threading applications.

## Tap & Die Overview

Although there are hundreds of different types of fasteners, most of them have the same basic design: a spiral groove inside a hole matches the threads on the outside diameter of a screw or bolt. IRWIN HANSON taps and dies are the tools used by professionals to create threads to solve the most challenging fastener applications.

### Material Types

- **High Carbon Steel (HCS)** for hand tapping applications
- **High Speed Steel (HSS)** for machine tapping where critical dimensions are required

### Point Styles

- Taper, plug, and bottoming styles are available



### Laser Etched

- Tap size and recommended drill bit size are laser etched on each tool for easy identification

### Precision Ground Flutes



## Tap Point Styles

### Taper Taps



8-10 threads

- Easiest to start
- 8 to 10 threads chamfered
- Ideal for tough starting applications
- Preferred use with deep or through hole applications

### Plug Taps



3-5 threads

- 3 to 5 threads chamfered
- Most common chamfer
- Ideal for for all general purpose threading

### Bottom Taps



1-2 threads

- 1 to 2 threads chamfered
- Shortest and least efficient standard chamfer
- Ideal for threading close to the bottom of blind holes

**Die Styles**

**Hexagon Dies**



**5/8", 1", 1-7/16" & 1-13/16" Across Hex Flats**

- Best suited to maintenance and repair work
- Recommended for use with hexagonal die stock handles
- In area with limited space, die can be used with a wrench or socket

**Adjustable Round Dies**



**1", 1-1/2", 2" & 3" Overall Diameter**

- Adjustable dies allow the user to under or over cut their threads
- Ideal for a precision threading with the adjustment of die made by set screw
- Fits into adjustable guide or plain die stock handles
- Meets Federal Specifications GGG-D-296

**Solid Round Dies**



**1" & 1-1/2" Overall Diameter**

- Ideal for general purpose threading
- Fits into adjustable guide or plain die stock handles

**Tap & Die Description Guide**

**10-24 NC**

**Fastener Diameter**

10 - Machine screw size  
5/8" - Fractional  
8 mm - Metric

**Thread Pitch**

Threads per inch (machine & fractional)  
Distance between threads (metric)

**Thread Type**

NC = National Coarse (USS)  
  
NF = National Fine (SAE)  
  
NS = National Special  
  
NEF = National Extra Fine  
NPT = National Pipe Taper  
BSP = British Standard Pipe

**Applications**

General purpose machines and appliances  
  
Automotive parts requiring extreme pressures  
  
Special threads – either diameter or threads per inch  
  
For optical or thin wall parts  
  
For all pipe threads  
  
For all pipe threads

(no thread symbol required for metric fasteners)

**Machine Screw Reference Guide**

Before cutting a thread you must know the rod diameter.

Use the chart to determine the appropriate machine screw size:

Machine Screw	Rod Diameter
#0	.060"
#1	.073"
#2	.086"
#3	.099"
#4	.112"
#5	.125"
#6	.138"

Machine Screw	Rod Diameter
#7	.151"
#8	.164"
#9	.179"
#10	.190"
#12	.216"
#14	.242"

# TAPS & DIES

## TAP & DRILL SELECTION CHART

TAPS & DIES

Diam/Type	Decimal Equiv.	Fractional Tap	Machine Screw Tap	Metric Tap	Screw Ext.
1/64"	.0516				
1/32"	.0312				
1.0 mm	.0394				
60	.0400				
59	.0410				
58	.0420				
57	.0430				
56	.0465				
3/64"	.0469		0 - 80 NF		
55	.0520				
54	.0550				
1.5 mm	.0591				
53	.0595		1 - 64 NC 1 - 72NF		
1/16"	.0625				
52	.0635				
51	.0670				
50	.0700		2 - 56 NC 2 - 64 NF		
49	.0730				
48	.0760				
5/64"	.0781		3 - 48 NC		EX-1
47	.0785				
2.0 mm	.0787				
46	.0810				
45	.0820		3 - 56 NF		
44	.0860		4 - 36 NS		
43	.0890		4 - 40 NC		
42	.0935				
3/32"	.0938		4 - 48 NF		
41	.0960			3 mm - 0.60	
40	.0980				
2.5 mm	.0984			3 mm - 0.50	
39	.0995			3 mm - 0.50	
38	.1015	1/8" - 40 NS	5 - 40 NC		
37	.1040		5 - 44 NF		
36	.1065		6 - 32 NC		
7/64"	.1094				EX-2
35	.1100				
34	.1110		6 - 36 NS		
33	.1130		6 - 40 NF		
32	.1160		6 - 48 NS		
3.0 mm	.1181				
31	.1200				
1/8"	.1250				
30	.1285			4 mm - 0.70 4 mm - 0.75	
29	.1360		8 - 32 NC 8 - 36 NF		
3.5 mm	.1378				
28	.1405				

Diam/Type	Decimal Equiv.	Fractional Tap	Machine Screw Tap	Metric Tap	Screw Ext.
9/64"	.1406	8 - 40 NS			ST-1
27	.1440				
26	.1470	3/16"-24 NS			
25	.1495		10 - 24 NC		
24	.1520				
23	.1540				
5/32"	.1562	3/16"-32 NS			EX-3
22	.1570				
4.0 mm	.1575				
21	.1590		10 - 32 NF		
20	.1600			5 mm - 0.90	
19	.1660			5 mm - 0.80	
18	.1695				
11/64"	.1719				
17	.1730				
16	.1770		12 - 24 NC		
4.5 mm	.1772				
15	.1800				
14	.1820		12 - 28 NEF		
13	.1850				
3/16"	.1875				ST-2
12	.1890				
11	.1910				
10	.1935		14 - 20 NS		
9	.1960				
5.0 mm	.1969			6 mm - 1.00	
8	.1990			6 mm - 1.00	
7	.2010	1/4" - 20 NC			
13/64"	.2031		14 - 24 NS		
6	.2040				
5	.2055				
4	.2090	1/4" - 24 NS			
3	.2130	1/4" - 28 NF			
5.5 mm	.2165				
7/32"	.2188	1/4" - 32 NEF			
2	.2210				
1	.2280	1/4" - 40 NS			
A	.2340				
15/64"	.2344			7 mm - 1.00	ST-3
6.0 mm	.2362			7 mm - 1.00	
B	.2380				
C	.2420				
D	.2460				
E	.2500				
1/4"	.2500				EX-4
6.5 mm	.2559				
F	.2570	5/16" - 18 NC			



Diam/Type	Decimal Equiv.	Fractional Tap	Pipe Tap	Metric Tap	Screw Ext.
G	.2610				
17/64"	.2656			8 mm - 1.25	
H	.2660				
I	.2720	5/16"-24 NF			
7.0 mm	.2756			8 mm - 1.00	
J	.2770			8 mm - 1.00	
K	.2810				
9/32"	.2812	5/16"-32 NEF			
L	.2900				
M	.2950				
7.5 mm	.2953				
19/64"	.2969				EX-5
N	.3020			9 mm - 1.25	
5/16"	.3125	3/8"- 16 NC			ST-4
8.0 mm	.3150			9 mm - 1.00	
O	.3160			9 mm - 1.00	
P	.3230			9 mm - 0.75	
21/64"	.3281		1/8" - 28 BSP		
Q	.3320	3/8"- 24 NF	1/8" - 27 NPT		
8.5 mm	.3346			10 mm - 1.50	
R	.3390			10 mm - 1.50	
11/32"	.3438			10 mm - 1.25	
S	.3480				
9.0 mm	.3543			10 mm - 1.00	
T	.3580			10 mm - 1.00	
23/64"	.3594				
U	.3680	7/16"- 14 NC			
9.5 mm	.3740			11 mm - 1.50	
3/8"	.3750			11 mm - 1.50	ST-5
V	.3770				
W	.3806				
25/64"	.3906	7/16"- 20 NF			
10.0 mm	.3937				
X	.3970				
Y	.4040				
13/32"	.4062			12 mm - 1.75	EX-6
Z	.4130			12 mm - 1.50	
10.5 mm	.4134			12 mm - 1.50	
27/64"	.4219	1/2"- 13 NC		12 mm - 1.25	
11.0 mm	.4331				
7/16"	.4375		1/4" - 18 NPT		
11.5 mm	.4528				
29/64"	.4531	1/2"-20 NF 1/2"-24 NS	1/4" - 19 BSP		
15/32"	.4688			14 mm - 2.00	ST-6
12.0 mm	.4724			14 mm - 2.00	
31/64"	.4844	9/16" - 12 NC			
12.5 mm	.4921			14 mm - 1.50	

Diam/Type	Decimal Equiv.	Fractional Tap	Pipe Tap	Metric Tap	Screw Ext.
1/2"	.5000			14 mm - 1.25 14 mm - 1.50	
13.0 mm	.5118			14 mm - 1.25	
33/64"	.5156	9/16"- 18 NF			
17/32"	.5313	5/8" - 11 NC			EX-7
35/64"	.5469			16 mm - 2.00	
9/16"	.5625		3/8" - 18 NPT		ST-7
37/64"	.5781	5/8" - 18 NF		16 mm - 1.50	
19/32"	.5938	11/16"-11 NS			
39/64"	.6094			18 mm - 2.50	
5/8"	.6250	11/16"-16 NS			
41/64"	.6406				
21/32"	.6562	3/4" - 10 NC		18 mm - 1.50	
43/64"	.6719				
11/16"	.6875	3/4" - 16 NF		20 mm - 2.50	
45/64"	.7031		1/2" - 14 NPT		
23/32"	.7188				
47/64"	.7344				
3/4"	.7500				
49/64"	.7656				
25/32"	.7812	7/8" - 9 NC			
51/64"	.7969				
13/16"	.8125	7/8" - 14 NF		22 mm - 1.50	EX-8
53/64"	.8281			24 mm - 3.00	
27/32"	.8438				
55/64"	.8594				
7/8"	.8750	1" - 8 NC		24 mm - 2.00	
57/64"	.8906				
29/32"	.9062				
59/64"	.9219	1" - 12 NF	3/4" - 14 NPT		
15/16"	.9375	1" - 14 NS			
61/64"	.9531				
31/32"	.9688				
63/64"	.9844	1-1/8" - 7 NC			
1"	1.0000				
1-1/64"	1.0156				
1-1/32"	1.0312				
1-1/16"	1.0625				EX-9
1-3/32"	1.0938				
1-1/8"	1.1250				
1-5/32"	1.1562		1" - 11-1/2" NPT		
1-3/16"	1.1875				
1-1/4"	1.2500				
1-5/16"	1.3125				
1-3/8"	1.3750				
1-7/16"	1.4375				
1-1/2"	1.5000		1-1/4" - 11-1/2" NPT		

NC = National Coarse (USS)  
NS = National Special  
NF = National Fine (SAE)

NEF = National Extra Fine  
NPT = National Pipe Taper  
BSP = British Standard Pipe

# TAPS & DIES

## HIGH CARBON STEEL TAPS

### HANSON® Machine Screw Taps (HCS)



1032



1132



1232

- Ideal for routine maintenance, repair work and for rethreading where high accuracy and tolerance thread is not critical
- Straight flutes are ground to provide rapid chip removal for efficient threading
- Designed for hand threading work in a variety of materials
- Taps produce a class 2B thread

Description	No. of Flutes	Plug Carded Stock #	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
0 - 80 NF	2	—	1102	1002	1202
1 - 64 NC	2	—	1104	1004	1204
1 - 72 NF	2	—	1105	1005	1205
2 - 56 NC	3	—	1106	1006	1206
2 - 64 NF	3	—	1107	1007	1207
3 - 48 NC	3	—	1108	1008	1208
3 - 56 NF	3	—	1109	1009	1209
4 - 36 NS	3	8011	1111	1011	1211
4 - 40 NC	3	8012	1112	1012	1212
4 - 48 NF	3	—	1113	1013	1213
5 - 40 NC	3	—	1116	1016	1216
5 - 44 NF	3	—	1117	1017	1217
6 - 32 NC	3	8018	1118	1018	1218
6 - 36 NS	3	—	1119	1019	1219
6 - 40 NF	3	—	1120	1020	1220
6 - 48 NS	3	—	1121	1021	1221
8 - 32 NC	4	8024	1124	1024	1224
8 - 36 NF	4	—	1125	1025	1225
8 - 40 NS	4	—	1126	1026	1226
10 - 24 NC	4	8028	1128	1028	1228
10 - 32 NF	4	8031	1131	1031	1231
12 - 24 NC	4	8032	1132	1032	1232
12 - 28 NF	4	—	1133	1033	1233
12 - 32 NEF	4	—	1134	1034	1234
14 - 20 NS	4	8035	1135	1035	1235
14 - 24 NS	4	—	1136	1036	1236

### HANSON Fractional Taps (HCS)



1323



1423



1523

- Ideal for routine maintenance, repair work and for rethreading where high accuracy and tolerance thread is not critical
- Straight flutes are ground to provide rapid chip removal for efficient threading
- Designed for hand threading work in a variety of materials
- Taps produce a class 2B thread

Description	No. of Flutes	Plug Carded Stock #	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
1/8" - 40 NS	3	—	—	1306	1506
3/16" - 24 NS	4	—	1412	1312	1512
3/16" - 32 NS	4	—	1413	1313	1513
1/4" - 20 NC	4	8120	1420	1320	1520
1/4" - 24 NS	4	—	1421	1321	1521
1/4" - 28 NF	4	8123	1423	1323	1523
1/4" - 32 NEF	4	—	1424	1324	1524
1/4" - 40 NS	4	—	1425	1325	1525
5/16" - 18 NC	4	8127	1427	1327	1527
5/16" - 24 NF	4	8129	1429	1329	1529
5/16" - 32 NEF	4	—	1431	1331	1531
3/8" - 16 NC	4	8134	1434	1334	1534
3/8" - 24 NF	4	8136	1436	1336	1536
7/16" - 14 NC	4	8139	1439	1339	1539
7/16" - 20 NF	4	8140	1440	1340	1540
1/2" - 13 NC	4	8144	1444	1344	1544
1/2" - 20 NF	4	8145	1445	1345	1545
1/2" - 24 NS	4	—	1446	1346	1546
9/16" - 12 NC	4	8148	1448	1348	1548
9/16" - 18 NF	4	8149	1449	1349	1549
5/8" - 11 NC	4	8152	1452	1352	1552
5/8" - 18 NF	4	8154	1454	1354	1554
11/16" - 11 NS	4	—	1456	1356	1556
11/16" - 16 NS	4	—	1457	1357	1557
3/4" - 10 NC	4	8158	1458	1358	1558
3/4" - 16 NF	4	8160	1460	1360	1560
7/8" - 9 NC	4	—	1461	1361	1561
7/8" - 14 NF	4	—	1463	1363	1563
1" - 8 NC	4	—	1465	1365	1565
1" - 12 NF	4	—	1466	1366	1566
1" - 14 NS	4	—	1467	1367	1567

TAPS & DIES

**HANSON® Metric Taps (HCS)**



1859

- Ideal for auto repair and machinery where metric threads are specified

Description	No. of Flutes	Plug Carded Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
3 mm - 0.50	3	8312	1712	1812
3 mm - 0.60	3	—	1713	—
4 mm - 0.70	4	8317	1717	1817
4 mm - 0.75	4	8318	1718	1818
5 mm - 0.80	4	8322	1722	1822
5 mm - 0.90	4	8323	1723	1823
6 mm - 1.00	4	8327	1727	1827
6.3 mm - 1.00	4	—	1729	1829
7 mm - 1.00	4	8331	1731	1831
8 mm - 1.00	4	8333	1733	1833
8 mm - 1.25	4	8334	1734	1834
9 mm - 0.75	4	8335	—	—
9 mm - 1.00	4	8336	—	—
9 mm - 1.25	4	8337	1737	1837
10 mm - 1.00	4	8338	1738	1838
10 mm - 1.25	4	8339	1739	1839
10 mm - 1.50	4	8340	1740	1840
11 mm - 1.50	4	8341	1741	—
12 mm - 1.25	4	8342	1742	1842
12 mm - 1.50	4	8343	1743	—
12 mm - 1.75	4	8344	1744	1844
14 mm - 1.25	4	—	1749	1849
14 mm - 1.50	4	—	1750	—
14 mm - 2.00	4	—	1752	1852
16 mm - 1.00	4	—	1754	—
16 mm - 1.50	4	—	1755	1855
16 mm - 2.00	4	—	1756	1856
18 mm - 1.50	4	—	1759	1859
18 mm - 2.50	4	—	1761	1861
20 mm - 2.50	4	—	1764	1864
22 mm - 1.50	4	—	1765	1865
24 mm - 2.00	4	—	1768	1868
24 mm - 3.00	4	—	1769	1869

Description	No. of Flutes	Stock #
6 - 32 NC	3	2518
8 - 32 NC	4	2524
10 - 24 NC	4	2528
10 - 32 NF	4	2531
1/8" - 40 NS	3	2606
5/32" - 32 NS	4	2610
5/32" - 36 NS	4	2611
1/4" - 20 NC	4	2620
1/4" - 28 NF	4	2623
5/16" - 18 NC	4	2627
5/16" - 24 NF	4	2629
3/8" - 16 NC	4	2634
3/8" - 24 NF	4	2636
7/16" - 14 NC	4	2639
7/16" - 20 NF	4	2640
1/2" - 13 NC	4	2644
9/16" - 12 NC	4	2648
5/8" - 11 NC	4	2652
5/8" - 18 NF	4	2654
3/4" - 10 NC	4	2658
7/8" - 9 NC	4	2661
1" - 8 NC	4	2665
3 mm - 0.50	3	2712
5 mm - 0.80	4	2722
6 mm - 1.00	4	2727
7 mm - 1.00	4	2731
8 mm - 1.00	4	2733
8 mm - 1.25	4	2734
10 mm - 1.00	4	2738
10 mm - 1.25	4	2739
10 mm - 1.50	4	2740
12 mm - 1.25	4	2742
12 mm - 1.75	4	2744
14 mm - 2.00	4	2752
16 mm - 2.00	4	2756

**HANSON Tap Sets with Taper, Bottoming & Plug Point Styles**



2652

- Set contains all three chamfer styles for various uses

# TAPS & DIES

## HIGH CARBON STEEL TAPS

### HANSON® Pipe Taper Taps (HCS)



1903

- Cuts internal threads in pipes
- Nominal size of the tap is that of the pipe fitting being tapped
- Available in National Pipe Taper (NPT) and British Standard Pipe Taper (BSP)
- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot

Description	No. of Flutes	Plug Carded Stock #	Taper Pouched Stock #	Taper Bulk Stock #
1/8" - 27 NPT	4	8202	—	1902
1/4" - 18 NPT	4	8203	—	1903
3/8" - 18 NPT	4	—	1904P	1904
1/2" - 14 NPT	4	—	1905P	1905
3/4" - 14 NPT	5	—	1906P	1906
1" - 11-1/2 NPT	5	—	—	1907
1-1/4" - 11-1/2 NPT	5	—	—	1908
1-1/2" - 11-1/2 NPT	6	—	—	1909
2" - 11-1/2 NPT	6	—	—	1910
1/8" - 28 BSP	4	—	—	1911
1/4" - 19 BSP	4	—	—	1912

### HANSON 6-pc Pipe Taper Tap Set (HCS)



1921

Contents	Stock # 1921
1/8" - 27 NPT	1902
1/4" - 18 NPT	1903
3/8" - 18 NPT	1904
1/2" - 14 NPT	1905
3/4" - 14 NPT	1906
1" - 11-1/2 NPT	1907

### HANSON Spark Plug Taps (HCS)



2459

- Available in standard and metric threads
- Ideal for threading or re-threading spark plug holes

Description	No. of Flutes	Bulk Stock #
14 mm - 1.25	4	2449
18 mm - 1.50	4	2459

### HANSON Tap (HCS) & Drill Bit (HSS)

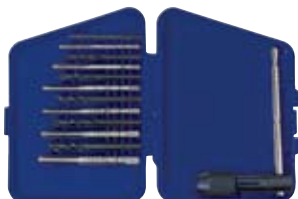


80238

- High speed steel drill bits ensure fast, precise drilling
- High carbon steel plug taps are ideal for general purpose threading

Description	Plug Carded Stock #
4 - 40 NC Tap + No. 43 Drill Bit	80209
6 - 32 NC Tap + 7/64" Drill Bit	80213
8 - 32 NC Tap + No. 29 Drill Bit	80217
10 - 24 NC Tap + No. 25 Drill Bit	80220
10 - 32 NF Tap + No. 21 Drill Bit	80221
12 - 24 NC Tap + No. 16 Drill Bit	80222
1/4" - 20 NC Tap + 13/64" Drill Bit	80230
1/4" - 28 NF Tap + No. 3 Drill Bit	80232
5/16" - 18 NC Tap + Letter G Drill Bit	80235
3/8" - 16 NC Tap + Letter O Drill Bit	80238
1/2" - 13 NC Tap + 27/64" Drill Bit	80242
1/4" - 18 NPT Tap + 7/16" Drill Bit	80260
6 mm - 1.00 Tap + 5mm Drill Bit	80327
8 mm - 1.25 Tap + 17/64" Drill Bit	80334
10 mm - 1.50 Tap + 8.5 Drill Bit	80340

**HANSON® Tap (HCS) & Drill Bit Sets (HSS)**



80185

- These drill and tap combinations produce a thread that is strong and easy to tap
- 135° split point HSS drill bits ensure fast, precise drilling
- High carbon steel plug taps are ideal for general purpose threading

Description	Contents		Stock #
<b>13-pc Set</b>	<b>Lock &amp; Hardware Drill &amp; Tap Set</b>		<b>80185</b>
<b>Thread Size</b>	<b>Plug Tap Stock #</b>	<b>Drill Bit Size</b>	<b>Drill Bit Stock #</b>
6 - 32 NC	1118	7/64"	30107
8 - 32 NC	1124	No. 29	20129
10 - 24 NC	1128	No. 25	20125
10 - 32 NF	1131	No. 21	20121
12 - 24 NC	1132	No. 16	20116
1/4" - 20 NC	1420	13/64"	30113

Threading Tools			Stock #
T-Handle Tap Wrench			12401

Description	Contents		Stock #
<b>13-pc Set</b>	<b>All-Purpose Drill &amp; Tap Set</b>		<b>80187</b>
<b>Thread Size</b>	<b>Plug Tap Stock #</b>	<b>Drill Bit Size</b>	<b>Drill Bit Stock #</b>
4 - 40 NC	1112	No. 43	20143
6 - 32 NC	1118	No. 35	20135
8 - 32 NC	1124	No. 29	20129
10 - 24 NC	1128	No. 25	20125
10 - 32 NF	1131	No. 21	20121
1/4" - 20 NC	1420	No. 7	20107

Threading Tools			Stock #
T-Handle Tap Wrench			12401

**HANSON Cut Thread Machine Screw Taps (HSS)**



400023



403025



406025

- Straight fluted, hand taps
- Taps produce a class 2B thread

Description	No. of Flutes	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
6 - 32 NC	3	403015	400015	406015
6 - 48 NS	3	403017	400017	406017
8 - 32 NC	4	403019	400019	406019
8 - 40 NS	4	403021	400021	406021
10 - 24 NC	4	403022	400022	406022
10 - 32 NF	4	403023	400023	406023
12 - 24 NC	4	403025	400025	-
14 - 20 NS	4	403028	-	-

**HANSON Cut Thread Fractional Taps (HSS)**



410022



413022



416022

- Straight fluted, hand taps
- Taps produce a class 2B thread
- Works in most materials including stainless & alloy steels

Description	No. of Flutes	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
1/4" - 20 NC	4	413010	410010	416010
1/4" - 28 NF	4	413012	-	416012
5/16" - 18 NC	4	413015	410015	416015
5/16" - 24 NF	4	413016	-	416016
3/8" - 16 NC	4	413018	410018	416018
3/8" - 24 NF	4	413019	410019	-
7/16" - 14 NC	4	413020	410020	416020
7/16" - 20 NF	4	413021	410021	-
1/2" - 13 NC	4	413022	410022	416022
1/2" - 20 NF	4	413023	410023	-
9/16" - 12 NC	4	413024	-	-
5/8" - 11 NC	4	413026	410026	-
3/4" - 10 NC	4	-	410028	-

# TAPS & DIES

## HIGH SPEED STEEL TAPS

### HANSON® Cut Thread Pipe Taper Taps (HSS)



459002

- Cuts internal threads in pipes
- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot

Description	No. of Flutes	Taper Stock #
1/8" - 27 NPT	4	459001
1/4" - 18 NPT	4	459002
3/8" - 18 NPT	4	459003
1/2" - 14 NPT	4	459004
3/4" - 14 NPT	5	459005
1" - 11-1/2 NPT	5	459006
1-1/4" - 11-1/2 NPT	5	459007
1-1/2" - 11-1/2 NPT	6	459008

### HANSON 6-pc Cut Thread Pipe Taper Tap Set (HSS)



1924

Contents	Stock # 1924
1/8" - 27 NPT	459001
1/4" - 18 NPT	459002
3/8" - 18 NPT	459003
1/2" - 14 NPT	459004
3/4" - 14 NPT	459005
1" - 11-1/2 NPT	459006

#### Tips

- Always use cutting fluid
- When threading a blind hole, clean the chips from the hole often and do not bottom out the tap - it can cause tap breakage.

### HANSON Ground Thread Fractional Taps (HSS)



310310



313310



316310

- Ground thread taps produce a tighter thread tolerance than cut thread taps
- Designed to .0005" pitch diameter tolerance
- Straight fluted, hand taps

Description	No. of Flutes	Pitch Diameter Limits	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
1/4" - 20 NC	4	H3	313310	310310	316310
1/4" - 28 NF	4	H3	313312	310312	316312
5/16" - 18 NC	4	H3	313315	310315	316315
5/16" - 24 NF	4	H3	313316	310316	316316
3/8" - 16 NC	4	H3	313318	310318	316318
3/8" - 24 NF	4	H3	313319	310319	316319
7/16" - 14 NC	4	H3	313320	310320	316320
1/2" - 13 NC	4	H3	313322	310322	316322
1/2" - 20 NF	4	H3	313325	310323	316323
9/16" - 18 NF	4	H3	313326	—	—
5/8" - 11 NC	4	H3	313327	310327	316327
5/8" - 18 NF	4	H3	313328	310328	316328
3/4" - 10 NC	4	H3	313331	310331	316331
3/4" - 16 NF	4	H3	313332	310332	316332
7/8" - 9 NC	4	H4	313433	310433	316433
7/8" - 14 NF	4	H4	313434	310434	316434
1" - 8 NC	4	H4	313435	310435	316435
1" - 12 NF	4	H4	313436	—	—
1" - 14 NS	4	H4	313437	—	—
1-1/8" - 7 NC	4	H4	313438	310438	316438
1-1/8" - 12 NF	4	H4	313439	310439	316439
1-1/4" - 7 NC	4	H4	313440	310440	316440
1-1/4" - 12 NF	6	H4	313441	310441	316441
1-3/8" - 6 NC	4	H4	—	310442	—
1-3/8" - 12 NF	6	H4	—	310443	—
1-1/2" - 6 NC	4	H4	—	310444	316444
1-1/2" - 12 NF	6	H4	313445	—	—

**HANSON® Ground Thread Machine Screw Taps (HSS)**



300325

- Ideal for maintenance and repair work
- Ground thread taps produce a tighter thread tolerance than cut thread taps
- Designed to .0005" pitch diameter tolerance
- Straight fluted, hand taps

**HANSON Ground Thread Left-hand Fractional Plug Taps (HSS)**



2120

- Left-hand taps cut threads with a left-hand rotation
- Used in applications where left-hand studs or fasteners are required

**HANSON Ground Thread Pipe Taper Taps (HSS)**



359003

- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot

**HANSON Ground Thread Spiral Point\* (Gun Taps) Chip Driver Machine Screw/Fractional Taps (HSS)**



323325

- Engineered specifically for tapping of "through" holes
- Designed to .0005-inches pitch tolerance
- Cuts with a shearing action that shoots the chips ahead of the tap, producing a cleaner thread
- Recommended for production use in machine tools

Description	No. of Flutes	Pitch Diameter Limits	Plug Bulk Stock #	Taper Bulk Stock #	Bottom Bulk Stock #
0 - 80 NF	2	H1	303101	--	--
1 - 64 NC	2	H1	303102	--	--
1 - 72 NC	2	H1	303103	--	--
2 - 56 NC	3	H2	303205	--	306205
6 - 32 NC	3	H3	--	300315	--
8 - 32 NC	4	H3	303319	300319	--
10 - 24 NC	4	H3	303322	300322	--
10 - 32 NF	4	H3	303323	300323	--
12 - 24 NC	4	H3	--	300325	--
12 - 28 NF	4	H3	--	300326	--

Description	No. of Flutes	Pitch Diameter Limits	Bulk Stock #
1/4" - 20 NC	4	H3	2120
1/4" - 28 NF	4	H3	2123
5/16" - 18 NC	4	H3	2127
5/16" - 24 NF	4	H3	2129
3/8" - 16 NC	4	H3	2134
3/8" - 24 NF	4	H3	2136
7/16" - 14 NC	4	H3	2139
7/16" - 20 NF	4	H3	2140
1/2" - 13 NC	4	H3	2144
1/2" - 20 NF	4	H3	2145
9/16" - 12 NC	4	H3	2148
9/16" - 18 NF	4	H3	2149
5/8" - 11 NC	4	H3	2152
5/8" - 18 NF	4	H3	2154
3/4" - 10 NC	4	H3	2158
3/4" - 16 NF	4	H3	2160

Description	No. of Flutes	Bulk Stock #
1/16" - 27 NPT	4	359010
1/8" - 27 NPT	4	359001
1/4" - 18 NPT	4	359002
3/8" - 18 NPT	4	359003
1/2" - 14 NPT	4	359004
3/4" - 14 NPT	5	359005

Description	No. of Flutes	Pitch Diameter Limits	Taper Bulk Stock #
<b>Machine</b>			
6 - 32 NC	2	H3	323315
8 - 32 NC	2	H3	323319
10 - 24 NC	2	H3	323322
10 - 32 NF	2	H3	323323
12 - 24 NC	2	H3	323325
14 - 20 NS	2	H3	323328
<b>Fractional</b>			
1/4 - 20 NC	3	H3	333310
1/4" - 28 NF	2	H3	333312
5/16" - 18 NC	2	H3	333315
3/8" - 16 NC	3	H3	333318
7/16" - 14 NC	3	H3	333320
7/16" - 20 NF	3	H3	333321
1/2" - 13 NC	3	H3	333322
1/2" - 20 NF	3	H3	333323

\*Spiral Point taps should only be used on "through" hole applications

# TAPS & DIES

## HIGH CARBON STEEL DIES

### HANSON® Hexagon Machine Screw Dies (HCS)



6432

### HANSON Hexagon Fractional Dies (HCS)



6544



8461

- Ideal for maintenance and repair work
- Recommended for use with hexagon die stock
- Die can be used with a wrench or socket when space is limited

### HANSON Hexagon Pipe Taper Dies (HCS)



6703



7004

- Ideal for plumbing and air applications

Description	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #	1-13/16" Across Flat Bulk Stock #
<b>Machine</b>				
4 - 36 NS	9311	6411	—	—
4 - 40 NC	9312	6412	—	—
5 - 40 NC	—	6416	—	—
6 - 32 NC	9318	6418	—	—
8 - 32 NC	9324	6424	—	—
10 - 24 NC	9328	6428	—	—
10 - 32 NF	9331	6431	—	—
12 - 24 NC	9332	6432	—	—
14 - 20 NS	9335	6435	—	—

Description	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #	1-13/16" Across Flat Bulk Stock #
<b>Fractional</b>				
3/16" - 24 NS	—	6512	—	—
1/4" - 20 NC	9420	6520	—	—
1/4" - 28 NF	9423	6523	—	—
5/16" - 18 NC	9427	6527	—	—
5/16" - 24 NF	9429	6529	—	—
3/8" - 16 NC	9434	6534	—	—
3/8" - 24 NF	9436	6536	—	—
7/16" - 14 NC	9439	6539	—	—
7/16" - 20 NF	9440	6540	—	—
1/2" - 13 NC	9444	6544	—	—
1/2" - 20 NF	9445	6545	—	—
9/16" - 12 NC	—	—	6848	—
9/16" - 18 NF	—	—	6849	—
5/8" - 11 NC	—	—	6852	—
5/8" - 18 NF	—	—	6854	—
3/4" - 10 NC	—	—	6858	—
3/4" - 16 NF	—	—	6860	—
7/8" - 9 NC	—	—	—	8461
7/8" - 14 NF	—	—	—	8463
1" - 8 NC	—	—	—	8465
1" - 14 NS	—	—	—	8467

Description	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #
1/8" - 27 NPT	9502	6702	—
1/4" - 18 NPT	9503	6703	—
3/8" - 18 NPT	—	—	7004
1/2" - 14 NPT	—	—	7005
1/8" - 28 BSP	—	6711	—
1/4" - 19 BSP	—	6712	—



**HANSON® Hexagon Metric Dies (HCS)**



6638



6949



8569

- Ideal for automotive repair and machinery where metric threads are specified

**HANSON Round Machine Screw Dies (HCS)**



3718



3028

- Solid round dies ideal for general purpose threading
- Adjustable round dies ideal for precision threading

Description	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #	1-13/16" Across Flat Bulk Stock #
3 mm - 0.50	9712	6612	—	—
3 mm - 0.60	—	6613	—	—
4 mm - 0.70	9717	6617	—	—
4 mm - 0.75	9718	6618	—	—
5 mm - 0.80	9722	6622	—	—
5 mm - 0.90	9723	6623	—	—
6 mm - 1.00	9727	6627	—	—
6.3 mm - 1.00	—	6629	—	—
7 mm - 1.00	9731	6631	—	—
8 mm - 1.00	9733	6633	—	—
8 mm - 1.25	9734	6634	—	—
9 mm - 0.75	9735	6635	—	—
9 mm - 1.00	9736	6636	—	—
9 mm - 1.25	9737	6637	—	—
10 mm - 1.00	9738	6638	—	—
10 mm - 1.25	9739	6639	—	—
10 mm - 1.50	9740	6640	—	—
11 mm - 1.50	9741	6641	—	—
12 mm - 1.25	9742	6642	—	—
12 mm - 1.50	9743	6643	—	—
12 mm - 1.75	9744	6644	—	—
14 mm - 1.25	—	—	6949	—
14 mm - 1.50	—	—	6950	—
14 mm - 2.00	—	—	6952	—
16 mm - 1.00	—	—	6954	—
16 mm - 1.50	—	—	6955	—
16 mm - 2.00	—	—	6956	—
18 mm - 1.50	—	—	6959	—
18 mm - 2.50	—	—	6961	—
20 mm - 2.50	—	—	—	8564
22 mm - 1.50	—	—	—	8565
24 mm - 2.00	—	—	—	8568
24 mm - 3.00	—	—	—	8569

TAPS & DIES

Description	1" Overall Diam. Screw Adj. Bulk Stock #	1" Overall Diam. Solid Bulk Stock #
4 - 40 NC	3712	—
4 - 48 NF	3713	—
5 - 40 NC	3716	—
5 - 44 NF	3717	—
6 - 32 NC	3718	—
6 - 36 NS	3719	—
6 - 40 NF	3720	—
6 - 48 NS	3721	—
8 - 32 NC	3724	—
8 - 36 NF	3725	—
8 - 40 NS	3726	—
10 - 24 NC	3728	3028
10 - 32 NF	3731	—
12 - 24 NC	3732	—
12 - 28 NF	3733	—
14 - 20 NS	3735	—

# TAPS & DIES

## HIGH CARBON STEEL DIES

### HANSON® Round Fractional Dies (HCS)



3820



3120

- Solid round dies ideal for general purpose threading
- Adjustable round dies ideal for precision threading

Description	1" Overall Diam. Screw Adj. Bulk Stock #	1" Overall Diam. Solid Bulk Stock #
3/16" - 32 NS	3813	—
1/4" - 20 NC	3820	3120
1/4" - 24 NS	3821	—
1/4" - 28 NF	3823	—
1/4" - 32 NEF	3824	—
1/4" - 40 NS	3825	—
5/16" - 18 NC	3827	3127
5/16" - 24 NF	3829	—
5/16" - 32 NEF	3831	—
3/8" - 16 NC	3834	3134
3/8" - 24 NF	3836	—
7/16" - 14 NC	3839	—
7/16" - 20 NF	3840	—
1/2" - 13 NC	3844	—
1/2" - 20 NF	3845	—
1/2" - 24 NS	3846	—

TAPS & DIES

### HANSON Adjustable Round Fractional Dies Right & Left-Hand (HCS)



4020



7520



7652

- Adjustable round dies ideal for precision threading
- Left-hand dies cut threads with a left-hand rotation

Description	Right-Hand 1-1/2" O.D. Bulk Stock #	Right-Hand 2" O.D. Bulk Stock #	Right-Hand 3" O.D. Bulk Stock #	Left-Hand 1" O.D. Bulk Stock #	Left-Hand 1-1/2" O.D. Bulk Stock #
1/4" - 20 NC	4020	—	—	7520	—
1/4" - 28 NF	4023	—	—	7523	—
5/16" - 18 NC	4027	—	—	7527	—
5/16" - 24 NF	4029	—	—	7529	—
3/8" - 16 NC	4034	—	—	7534	—
3/8" - 24 NF	4036	—	—	7536	—
7/16" - 14 NC	4039	—	—	7539	—
7/16" - 20 NF	4040	—	—	7540	—
1/2" - 13 NC	4044	—	—	7544	—
1/2" - 20 NF	4045	—	—	7545	—
9/16" - 12 NC	4048	—	—	—	7648
9/16" - 18 NF	4049	—	—	—	7649
5/8" - 11 NC	4052	—	—	—	7652
5/8" - 18 NF	4054	—	—	—	7654
11/16" - 11 NS	4056	—	—	—	—
11/16" - 16 NS	4057	—	—	—	—
3/4" - 10 NC	4058	—	—	—	7658
3/4" - 16 NF	4060	—	—	—	7660
7/8" - 9 NC	—	4261	—	—	—
7/8" - 14 NF	—	4263	—	—	—
1" - 8 NC	—	4265	—	—	—
1" - 12 NF	—	4266	—	—	—
1" - 14 NS	—	4267	—	—	—
1-1/8" - 7 NC	—	—	4668	—	—
1-1/8" - 12 NF	—	—	4669	—	—
1-1/4" - 7 NC	—	—	4670	—	—
1-1/4" - 12 NF	—	—	4671	—	—
1-3/8" - 6 NC	—	—	4672	—	—
1-3/8" - 12 NF	—	—	4673	—	—
1-1/2" - 6 NC	—	—	4674	—	—
1-1/2" - 12 NF	—	—	4675	—	—

**HANSON® Round Pipe Taper Dies (HCS)**



4102

Description	1-1/2" O.D. Solid Round Bulk Stock #	1-1/2" O.D. Screw Adj. Bulk Stock #	1" O.D. Screw Adj. Bulk Stock #	2" O.D. Screw Adj. Bulk Stock #
1/8" - 27 NPT	4102	5102	502101	—
1/4" - 18 NPT	4103	5103	—	—
3/8" - 18 NPT	4104	5104	—	—
1/2" - 14 NPT	4105	5105	—	—
1/2" - 14 NPT	—	—	—	4305
3/4" - 14 NPT	—	—	—	4306

\*Note: 502101 is a High Speed Steel Die

**HANSON Re-threading Hexagon Fractional Right & Left-hand Dies (HCS)**



7220



7720

- Designed for repairing damaged bolts and studs

Description	Width Across Hex Flats	Thickness of Hex Die	Right-Hand Bulk Stock #	Left-Hand Bulk Stock #
1/4" - 20 NC	19/32"	1/4"	7220	7720
1/4" - 28 NF	19/32"	1/4"	7223	7723
5/16" - 18 NC	11/16"	5/16"	7227	7727
5/16" - 24 NF	11/16"	5/16"	7229	7729
3/8" - 16 NC	25/32"	3/8"	7234	7734
3/8" - 24 NF	25/32"	3/8"	7236	7736
7/16" - 14 NC	7/8"	7/16"	7239	7739
7/16" - 20 NF	7/8"	7/16"	7240	7740
1/2" - 13 NC	1-1/16"	1/2"	7244	7744
1/2" - 20 NF	1-1/16"	1/2"	7245	7745
9/16" - 12 NC	1-1/16"	1/2"	7248	7748
9/16" - 18 NF	1-1/16"	1/2"	7249	7749
5/8" - 11 NC	1-1/4"	5/8"	7252	7752
5/8" - 18 NF	1-1/4"	5/8"	7254	7754
11/16" - 11 NS	1-7/16"	3/4"	7256	7756
11/16" - 16 NS	1-7/16"	3/4"	7257	7757
3/4" - 10 NC	1-7/16"	3/4"	7258	7758
3/4" - 16 NF	1-7/16"	3/4"	7260	7760
7/8" - 9 NC	1-5/8"	7/8"	7261	7761
7/8" - 14 NF	1-5/8"	7/8"	7263	7763
1" - 8 NC	1-13/16"	1"	7265	7765
1" - 12 NF	1-13/16"	1"	7266	7766
1" - 14 NS	1-13/16"	1"	7267	7767
1-1/8" - 7 NC	2"	1"	7268	—
1-1/8" - 12 NF	2"	1"	7269	—
1-1/4" - 7 NC	2-3/16"	1"	7270	—
1-1/4" - 12 NF	2-3/16"	1"	7271	—
1-3/8" - 6 NC	2-3/8"	1"	7272	—
1-3/8" - 12 NF	2-3/8"	1"	7273	—
1-1/2" - 6 NC	2-9/16"	1"	7274	—
1-1/2" - 12 NF	2-9/16"	1"	7275	—

**HANSON Re-threading Hexagon Metric Right & Left-hand Dies (HCS)**



7349

- Ideal for repairing damaged bolts and studs where metric threads are specified

Description	Width Across Hex Flats	Thickness of Hex Die	Right-Hand Bulk Stock #	Left-Hand Bulk Stock #
14 mm - 1.25	1-1/16"	1/2"	7349	—
14 mm - 1.50	1-1/16"	1/2"	7350	—
14 mm - 2.00	1-1/16"	1/2"	7352	—
16 mm - 1.50	1-1/4"	5/8"	7355	7855
16 mm - 2.00	1-1/4"	5/8"	7356	—
18 mm - 1.00	1-7/16"	3/4"	7358	—
18 mm - 1.50	1-7/16"	3/4"	7359	7859
18 mm - 2.50	1-7/16"	3/4"	7361	—
20 mm - 2.50	1-7/16"	3/4"	7364	—
22 mm - 1.50	1-5/8"	7/8"	7365	7865
24 mm - 1.50	1-13/16"	1"	7367	—
30 mm - 1.50	2"	1"	7373	—

TAPS & DIES

# TAPS & DIES

## HIGH CARBON/HIGH SPEED STEEL DIES

### HANSON® Hexagon Re-threading Pipe Taper Dies (HCS)



7403

- Ideal for repairing damaged threads on plumbing and air pipe applications

Description	Width Across Hex Flats	Thickness of Hex Die	Bulk Stock #
1/8" - 27 NPT	1-1/16"	3/8"	7402
1/4" - 18 NPT	1-1/4"	5/8"	7403
3/8" - 18 NPT	1-7/16"	5/8"	7404
1/2" - 14 NPT	1-5/8"	3/4"	7405
3/4" - 14 NPT	2"	3/16"	7406
1" - 11-1/2 NPT	2-3/8"	1"	7407

### HANSON Adjustable Round Machine Screw & Fractional Dies (HSS)



502024



504053

- HSS ideal for machine cutting where critical dimensions are required
- Adjustable round dies for precision threading

Description	1" Overall Diam. Bulk Stock #	2" Overall Diam. Bulk Stock #
<b>Machine</b>		
4 - 40 NC	502009	—
6 - 32 NC	502014	—
6 - 40 NF	502015	—
8 - 32 NC	502018	—
8 - 36 NF	502019	—
10 - 24 NC	502021	—
10 - 32 NF	502022	—
12 - 24 NC	502024	—
12 - 28 NF	502025	—
<b>Fractional</b>		
1/4" - 20 NC	502038	—
1/4" - 28 NF	502039	—
5/16" - 18 NC	502041	—
5/16" - 24 NF	502042	—
3/8" - 16 NC	502044	—
3/8" - 24 NF	502045	—
7/16" - 14 NC	502046	—
7/16" - 20 NF	502047	—
1/2" - 13 NC	502048	—
1/2" - 20 NF	502049	—
5/8" - 11 NC	—	504053
5/8" - 18 NF	—	504054
3/4" - 10 NC	—	504057
3/4" - 16 NF	—	504058
7/8" - 9 NC	—	504059
7/8" - 14 NF	—	504060
1" - 8 NC	—	504061
1" - 12 NF	—	504062
1" - 14 NS	—	504063

### HANSON 10-pc Hexagon Re-threading Fractional NC Die Set (HCS)



25701

Set Contents	Stock # 25701
<b>Die Size</b>	
1/4" - 20 NC	7220
5/16" - 18 NC	7227
3/8" - 16 NC	7234
7/16" - 14 NC	7239
1/2" - 13 NC	7244
9/16" - 12 NC	7248
5/8" - 11 NC	7252
3/4" - 10 NC	7258
7/8" - 9 NC	7261
1" - 8 NC	7265

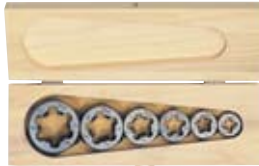
**HANSON® 10-pc Hexagon Re-threading Fractional NF Die Set (HCS)**



24801

Set Contents		Stock # 24801
<b>Die Size</b>		
1/4" - 28 NF		7223
5/16" - 24 NF		7229
3/8" - 24 NF		7236
7/16" - 20 NF		7240
1/2" - 20 NF		7245
9/16" - 18 NF		7249
5/8" - 18 NF		7252
3/4" - 16 NF		7260
7/8" - 14 NF		7263
1" - 12 NF		7266

**HANSON 6-pc Hexagon Re-threading Fractional Pipe Taper Die Set (HCS)**



1922

Set Contents		Stock # 1922
<b>Die Size</b>		
1/8" - 27 NPT		7402
1/4" - 18 NPT		7403
3/8" - 18 NPT		7404
1/2" - 14 NPT		7405
3/4" - 14 NPT		7406
1" - 11-1/2 NPT		7407

**HANSON 16-pc Hexagon Re-threading Fractional Die Set (HCS)**



24839

Set Contents		Stock # 24839
<b>Die Size</b>		
1/4" - 20 NC		7220
1/4" - 28 NF		7223
5/16" - 18 NC		7227
5/16" - 24 NF		7229
3/8" - 16 NC		7234
3/8" - 24 NF		7236
7/16" - 14 NC		7239
7/16" - 20 NF		7240
1/2" - 13 NC		7244
1/2" - 20 NF		7245
9/16" - 12 NC		7248
9/16" - 18 NF		7249
5/8" - 11 NC		7252
5/8" - 18 NF		7254
3/4" - 10 NC		7258
3/4" - 16 NF		7260

**HANSON 12-pc Tap & Re-threading Hexagonal Pipe Die Sets (HCS) & (HSS)**



1920

Set Contents		Stock # 1920
Thread Size Pipe	Tap Stock #	Hex Die Stock #
1/8" - 27 NPT	1902	7402
1/4" - 18 NPT	1903	7403
3/8" - 18 NPT	1904	7404
1/2" - 14 NPT	1905	7405
3/4" - 14 NPT	1906	7406
1" - 11-1/2 NPT	1907	7407
Empty Wooden Case		1920MT

Set Contents		Stock # 1923
Thread Size Pipe	Tap Stock #	Hex Die Stock #
1/8" - 27 NPT	459001	7402
1/4" - 18 NPT	459002	7403
3/8" - 18 NPT	459003	7404
1/2" - 14 NPT	459004	7405
3/4" - 14 NPT	459005	7406
1" - 11-1/2 NPT	459006	7407

# TAPS & DIES

## THREADING TOOLS

### HANSON® Plain Die Stock Handles



12416

- Dies easily lock in position with set screw

### HANSON Adjustable Guide Die Stock Handles



12428

- Maintains alignment for accurate, straight threading

### HANSON Offset Handle Adjustable Tap & Reamer Wrenches



12421

- Straight handle design provides greater leverage, especially when using larger diameter taps

### HANSON Adjustable Tap Handle & Reamer Wrenches



12498

- Straight handle design provides greater leverage, especially when using larger diameter taps
- Designed for use with taps, reamers, screw extractors and other tools with a square shank

### HANSON Reamers



11221

- For deburring and enlarging holes in sheet metal and similar materials
- Not for use in machine tools

Description	Usage	Carded Stock #	Bulk Stock #
<b>HANSON Plain Die Stock Handles</b>			
DS - 57	For 5/8" Hexagon Dies	—	12457
DS - 13	For 13/16" Round Dies	—	12416
DS - 9	For 1" Hexagon or Round Dies	12008	11008
<b>HANSON Adj. Guide Die Stock Handles</b>			
DS - 28	For 1" Adjustable Round Dies	—	12428
DS - 35	For 1-1/2" Adjustable Round Dies	—	12435
DS - 45	For 2" Adjustable Round Dies	—	12445
DS - 26	For 1" Hexagon or Round Dies	12026	11026
DS - 36	For 1-7/16" Hexagon Dies	—	12436
DS - 46	For 1-13/16" Hexagon Dies	—	12446
<b>HANSON Offset Handle Adj. Tap Handle &amp; Reamer Wrenches</b>			
TR - 21	For Taps No. 0 to 1/2" (3 mm to 12 mm)	12021	12421
TR - 121	For Taps No. 1/4" to 1" (6 mm to 24 mm)	—	11212
<b>HANSON Adj. Tap Handle &amp; Reamer Wrenches</b>			
TR - 88	For Taps No. 0 to 1/2" (3 mm to 12 mm)	12088	311088
TR - 98	For Taps 1/4" to 1" (6 mm to 24 mm)	—	12498
<b>HANSON Reamers</b>			
Repair Reamer (1/8" to 1/2")		11214	—
Repair Reamer Pouched (1/2" to 1")		11221	—

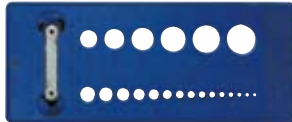
**NEW HANSON® Tap Adaptors**



3095001

- Adaptors feature a 3/8" square drive to accommodate socket wrench or extension
- Designed for use with taps, reamers, screw extractors, and other tools with a square shank
- Not recommended for cutting new threads

**HANSON Metric Measuring Kit with Thread Gauges**



12087

- Shows 21 outside diameters (OD) in millimeters and decimals from 2.3 mm (.0906) to 24 mm (.9449)
- Measures thread pitch in millimeters from 0.35 to 3.00

**HANSON T-Handle Tap Wrenches**



12401

- Designed for use with taps, reamers, screw extractors and other tools with a square shank
- Adjusted and tightened to size by twisting knurled nut
- End of TR-50 & TR-73 wrench has 3/8" square drive to accommodate socket wrench or extension when desired

**HANSON T-Handle Ratcheting Tap Wrench**



21101

21112

- Three position gear box for quick, efficient ratcheting action
- Designed for use with taps, reamers, screw extractors and other tools with a square shank

**HANSON Thread Pitch Gauges**



11016

Description	Usage	Carded Stock #	Bulk Stock #
<b>HANSON Tap Adaptors</b>			
2pc Tap Adaptor Set	2 Sizes for Taps No. 0 to 1/2"	3095001	—
Small Tap Adaptor	For Taps No. 0 to 1/4"	—	3095001A
Large Tap Adaptor	For Taps 1/4" to 1/2"	—	3095001B
<b>HANSON T-Handle Tap Wrench</b>			
TR - 1E	For Taps No. 0 to 1/4" (3 mm to 6 mm)	12001	12401
TR - 1-1/2E	For Taps No. 12 to 5/16"	12115	12415
TR - 2E	For Taps 1/4" to 1/2" (6 mm to 12 mm)	12002	12402
<b>HANSON Tap Wrenches with 3/8" Drive</b>			
TR - 50	For Taps 1/4" to 1/2" (6 mm to 12 mm)	12050	12450
TR - 73*	For Taps No. 0 to 1/4" (3 mm - 6 mm) *	12073	12473
<b>HANSON T-Handle Ratcheting Tap Wrench</b>			
—	For Tap Sizes No. 0 to 1/4" (3 mm to 6 mm)	21201	21101
—	For Tap Sizes 1/4" to 1/2" (6 mm to 12 mm)	21202	21102
—	10" Extended Length for Tap Sizes #0 - 1/4" (3 mm to 6 mm)	21210	21110
—	12" Extended Length for Tap Sizes 1/4" - 1/2" (6 mm to 12 mm)	21212	21112
<b>HANSON Metric Measuring Kit w/Thread Gauges</b>			
Metric Measuring Kit		—	12087
<b>HANSON Thread Pitch Gauges</b>			
16-Leaf Metric Thread Pitch Gauge		12016	11016
16-Leaf Standard and Metric Thread Pitch Gauge		12017	11017
18-Leaf Standard Thread Pitch Gauge		12018	11018

\*Note: TR-73 comes with a hexagon nut

# TAPS & DIES COMBINATION SETS

## HANSON® 117-pc Machine Screw/Fractional/Metric Tap & Hex Die and Drill Bit Deluxe Set



26377

TAPS & DIES

Set Contents			Set Stock # 26377		
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 5/8" Hexagon	Drill Bit Size	Drill Bit Stock #	
4 - 40 NC	1112	6112	No. 3	80103	
6 - 32 NC	1118	6118	No. 7	80107	
8 - 32 NC	1124	6124	No. 9	80109	
10 - 24 NC	1128	6128	No. 16	80116	
10 - 32 NF	1131	6131	No. 19	80119	
12 - 24 NC	1132	6132	No. 20	80120	
<b>Fractional</b>			<b>1" Hexagon</b>	No. 21	80121
1/4" - 20 NC	1420	6520	No. 25	80125	
1/4" - 28 NF	1423	6523	No. 29	80129	
5/16" - 18 NC	1427	6527	No. 30	80130	
5/16" - 24 NF	1429	6529	No. 36	80136	
3/8" - 16 NC	1434	6534	No. 39	80139	
3/8" - 24 NF	1436	6536	No. 43	80143	
7/16" - 14 NC	1439	6539	Letter B	40102	
7/16" - 20 NF	1440	6540	Letter F	40106	
1/2" - 13 NC	1444	6544	Letter H	40108	
1/2" - 20 NF	1445	6545	Letter I	40109	
<b>Metric</b>			<b>5/8" Hexagon</b>	Letter J	40110
3 mm - 0.50	1712	6312	Letter O	40115	
4 mm - 0.70	1717	6317	Letter Q	40117	
4 mm - 0.75	1718	6318	Letter R	40118	
5 mm - 0.80	1722	6322	Letter S	40119	
5 mm - 0.90	1723	6323	Letter U	40121	
6 mm - 1.00	1727	6327	Letter Z	40126	
			<b>1" Hexagon</b>	5/64"	60105
7 mm - 1.00	1731	6631	7/64"	60107	
8 mm - 1.00	1733	6633	5/32"	60110	
8 mm - 1.25	1734	6634	1/4"	60116	
9 mm - 1.00	1736	6636	19/64"	60119	
9 mm - 1.25	1737	6637	5/16"	60120	
10 mm - 1.25	1739	6639	21/64"	60121	
10 mm - 1.50	1740	6640	3/8"	60124	
11 mm - 1.50	1741	6641	25/64"	60125	
12 mm - 1.50	1743	6643	13/32"	60126	
12 mm - 1.75	1744	6644	27/64"	60127	
<b>Pipe</b>			29/64"	60129	
1/8" - 27 NPT	1902	6702			
1/8" - 28 BSP	1911	6711			

Spiral Flute Screw Extractor	Stock #
EX - 1	52401
EX - 2	52402
EX - 3	52403
EX - 4	52404
EX - 5	52405

Threading Tools	Stock #
Adjustable Die Stock - 1" Dies	11026
Plain Die Stock - 5/8" Hexagon Dies	12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"	311088
Two-in-One Tap Wrench - Taps 1/4" to 1/2"	12450
T-Handle Wrench - Taps No. 0 to 1/4"	12473
16 Leaf Metric Thread Pitch Gauge	11016
18 Leaf Standard Thread Pitch Gauge	11018
Empty Plastic Case For 26377	26377MT



**HANSON® 76-pc Machine  
Screw/Fractional/Metric  
Tap & Hex Die Set**



26376

<b>Set Contents</b>		<b>Stock # 26376</b>
<b>Thread Size Machine Screw</b>	<b>Tap Stock # Plug Style</b>	<b>Die Stock # 5/8" Hexagon</b>
4 - 40 NC	1112	6112
6 - 32 NC	1118	6118
8 - 32 NC	1124	6124
10 - 24 NC	1128	6128
10 - 32 NF	1131	6131
12 - 24 NC	1132	6132
<b>Fractional</b>		<b>1" Hexagon</b>
1/4" - 20 NC	1420	6520
1/4" - 28 NF	1423	6523
5/16" - 18 NC	1427	6527
5/16" - 24 NF	1429	6529
3/8" - 16 NC	1434	6534
3/8" - 24 NF	1436	6536
7/16" - 14 NC	1439	6539
7/16" - 20 NF	1440	6540
1/2" - 13 NC	1444	6544
1/2" - 20 NF	1445	6545
<b>Metric</b>		<b>5/8" Hexagon</b>
3 mm - 0.50	1712	6312
4 mm - 0.70	1717	6317
4 mm - 0.75	1718	6318
5 mm - 0.80	1722	6322
5 mm - 0.90	1723	6323
6 mm - 1.00	1727	6327
		<b>1" Hexagon</b>
7 mm - 1.00	1731	6631
8 mm - 1.00	1733	6633
8 mm - 1.25	1734	6634
9 mm - 1.00	1736	6636
9 mm - 1.25	1737	6637
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
11 mm - 1.50	1741	6641
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
<b>Pipe</b>		
1/8" - 27 NPT	1902	6702
1/8" - 28 BSP	1911	6711
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Dies		11026
Plain Die Stock - 5/8" Hexagon Dies		12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
T-Handle Wrench - Taps No. 0 to 1/4"		12473
16 Leaf Metric Thread Pitch Gauge		11016
18 Leaf Standard Thread Pitch Gauge		11018
Empty Plastic Case For 26376		26376MT

TAPS & DIES

# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 66-pc Machine Screw/Fractional Tap & Hex Die Set



97606

TAPS & DIES

Set Contents		Stock # 97606
<b>Thread Size</b>	<b>Tap Stock #</b>	<b>Die Stock #</b>
<b>Machine Screw</b>	<b>Plug Style</b>	<b>5/8" Hexagon</b>
4 - 40 NC	1112	6112
6 - 32 NC	1118	6118
8 - 32 NC	1124	6124
10 - 24 NC	1128	6128
10 - 32 NF	1131	6131
12 - 24 NC	1132	6132
<b>Fractional</b>		<b>1" Hexagon</b>
1/4" - 20 NC	1420	6520
1/4" - 28 NF	1423	6523
5/16" - 18 NC	1427	6527
5/16" - 24 NF	1429	6529
3/8" - 16 NC	1434	6534
3/8" - 24 NF	1436	6536
7/16" - 14 NC	1439	6539
7/16" - 20 NF	1440	6540
1/2" - 13 NC	1444	6544
1/2" - 20 NF	1445	6545
		<b>1-7/16" Hexagon</b>
9/16" - 12 NC	1448	6848
9/16" - 18 NF	1449	6849
5/8" - 11 NC	1452	6852
5/8" - 18 NF	1454	6854
3/4" - 10 NC	1458	6858
3/4" - 16 NF	1460	6860
		<b>1-13/16" Hexagon</b>
7/8" - 9 NC	1461	8461
7/8" - 14 NF	1463	8463
1" - 8 NC	1465	8465
1" - 14 NS	1467	8467
<b>Pipe</b>		<b>1" Hexagon</b>
1/8" - 27 NPT	1902	6702
1/4" - 18 NPT	1903	7003
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Dies		11026
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-13/16" Hexagon Dies		12446
Plain Die Stock - 5/8" Hexagon Dies		12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
T-Handle Wrench - Taps No. 0 to 1/4"		12473
18 Leaf Standard Thread Pitch Gauge		11018

**HANSON® 66-pc Metric Tap & Hex Die Set**



97312

<b>Set Contents</b>		<b>Stock # 97312</b>
<b>Thread Size Metric</b>	<b>Tap Stock # Plug Style</b>	<b>Die Stock # 5/8" Hexagon</b>
3 mm - 0.50	1712	6312
4 mm - 0.70	1717	6317
4 mm - 0.75	1718	6318
5 mm - 0.80	1722	6322
5 mm - 0.90	1723	6323
6 mm - 1.00	1727	6327
<b>1" Hexagon</b>		
7 mm - 1.00	1731	6631
8 mm - 1.00	1733	6633
8 mm - 1.25	1734	6634
9 mm - 1.00	1736	6636
9 mm - 1.25	1737	6637
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
11 mm - 1.50	1741	6641
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
<b>1-7/16" Hexagon</b>		
14 mm - 1.25	2449	6949
14 mm - 1.50	1750	6950
14 mm - 2.00	1752	6952
16 mm - 1.50	1755	6955
16 mm - 2.00	1756	6956
18 mm - 1.50	1759	6959
18 mm - 2.50	1761	6961
<b>1-13/16" Hexagon</b>		
20 mm - 2.50	1764	8564
22 mm - 1.50	1765	8565
24 mm - 2.00	1768	8568
24 mm - 3.00	1769	8569
<b>1" Hexagon</b>		
<b>Pipe</b>		
1/8" - 28 BSP	1911	6711
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Dies		11026
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-3/16" Hexagon Dies		12446
Plain Die Stock - 5/8" Hexagon Dies		12457
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
16 Leaf Metric Thread Pitch Gauge		11016

TAPS & DIES

# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 53-pc Machine Screw/Fractional Tap & Hex Die Set



24640

Set Contents		Stock # 24640
Thread Size	Tap Stock #	Die Stock #
Machine Screw	Plug Style	1" Hexagon
6 - 32 NC	1118	6418
8 - 32 NC	1124	6424
10 - 24 NC	1128	6428
10 - 32 NF	1131	6431
12 - 24 NC	1132	6432
<b>Fractional</b>		
1/4" - 20 NC	1420	6520
1/4" - 28 NF	1423	6523
5/16" - 18 NC	1427	6527
5/16" - 24 NF	1429	6529
3/8" - 16 NC	1434	6534
3/8" - 24 NF	1436	6536
7/16" - 14 NC	1439	6539
7/16" - 20 NF	1440	6540
1/2" - 13 NC	1444	6544
1/2" - 20 NF	1445	6545
<b>1-7/16" Hexagon</b>		
9/16" - 12 NC	1448	6848
9/16" - 18 NF	1449	6849
5/8" - 11 NC	1452	6852
5/8" - 18 NF	1454	6854
3/4" - 10 NC	1458	6858
3/4" - 16 NF	1460	6860
<b>Pipe</b>		
1/8" - 27 NPT Pipe	1902	6072
1/4" - 18 NPT Pipe	1903	6703
<b>Threading Tools</b>		Stock #
Adj. Die Stock - 1" Dies		11026
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
18 Leaf Standard Thread Pitch Gauge		11018

TAPS & DIES

### HANSON 53-pc Metric Tap & Hex Die Set



26394

Set Contents		Stock # 26394
Thread Size	Tap Stock #	Die Stock #
Metric Screw	Plug Style	1" Hexagon
3 mm - 0.50	1712	6612
4 mm - 0.70	1717	6617
4 mm - 0.75	1718	6618
5 mm - 0.80	1722	6622
5 mm - 0.90	1723	6623
6 mm - 1.00	1727	6627
7 mm - 1.00	1731	6631
8 mm - 1.25	1734	6634
9 mm - 1.00	1736	6636
9 mm - 1.25	1737	6637
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
11 mm - 1.50	1741	6641
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
<b>1-7/16" Hexagon</b>		
14 mm - 1.25	1749	6949
14 mm - 2.00	1752	6952
16 mm - 1.50	1755	6955
16 mm - 2.00	1756	6956
18 mm - 1.50	1759	6959
18 mm - 2.50	1761	6961
<b>Pipe</b>		
1/8" - 28 BSP	1911	6711
1/4" - 19 BSP	1912	6712
<b>Threading Tools</b>		Stock #
Adj. Die Stock - 1" Dies		11026
Adj. Die Stock - Hexagon Dies		12436
T-Handle Wrench - Taps No. 0 to 1/4"		12473
T-Handle Wrench - Taps No. 0 to 1/2"		311088
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
16 Leaf Metric Thread Pitch Gauge		11016
Empty Plastic Case		26394MT

**HANSON® 41-pc Machine Screw/Fractional Tap & Hex Die Set**



24606

- Plastic storage case with removable tray keeps all tools organized

Set Contents		Stock # 24606
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 5/8" Hexagon
4 - 40 NC	1112	6112
6 - 32 NC	1118	6118
8 - 32 NC	1124	6124
10 - 24 NC	1128	6128
10 - 32 NF	1131	6131
12 - 24 NC	1132	6132
Fractional		1" Hexagon
1/4" - 20 NC	1420	6520
1/4" - 28 NF	1423	6523
5/16" - 18 NC	1427	6527
5/16" - 24 NF	1429	6529
3/8" - 16 NC	1434	6534
3/8" - 24 NF	1436	6536
7/16" - 14 NC	1439	6539
7/16" - 20 NF	1440	6540
1/2" - 13 NC	1444	6544
1/2" - 20 NF	1445	6545
Pipe		1" Hexagon
1/8" - 27 NPT	1902	6702
Threading Tools		Stock #
Adj. Die Stock - 1" Dies		11026
Plain Die Stock - 5/8" Hexagon Dies		12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
18 Leaf Standard Thread Pitch Gauge		11018
Empty Plastic Case		24606MT

**HANSON 41-pc Metric Tap & Hex Die Set**



26317

Set Contents		Stock # 26317
Thread Size Metric	Tap Stock # Plug Style	5/8" Die Stock #
3 mm - 0.50	1712	6312
4 mm - 0.70	1717	6317
4 mm - 0.75	1718	6318
5 mm - 0.80	1722	6322
5 mm - 0.90	1723	6323
6 mm - 1.00	1727	6327
		1" Die Stock #
7 mm - 1.00	1731	6631
8 mm - 1.00	1733	6633
8 mm - 1.25	1734	6634
9 mm - 1.00	1736	6636
9 mm - 1.25	1737	6637
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
11 mm - 1.50	1741	6641
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
Pipe		Stock #
1/8" - 28 BSP	1911	6711
Threading Tools		Stock #
Adj. Die Stock - 1" Dies		11026
Plain Die Stock - 5/8" Hexagon Dies		12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
16 Leaf Metric Thread Pitch Gauge		11016
Empty Plastic Case		26317MT

# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 25-pc Fractional Tap & Hex Die Set



97094

Set Contents		Stock # 97094
Thread Size Fractional	Tap Stock # Plug Style	Die Stock # 1-7/16" Hexagon
9/16" - 12 NC	1448	6848
9/16" - 18 NF	1449	6849
5/8" - 11 NC	1452	6852
5/8" - 18 NF	1454	6854
3/4" - 10 NC	1458	6858
3/4" - 16 NF	1460	6860
		<b>1-13/16" Hexagon</b>
7/8" - 9 NC	1461	8461
7/8" - 14 NF	1463	8463
1" - 8 NC	1465	8465
1" - 14 NS	1467	8467
<b>Pipe</b>		<b>1-7/16" Hexagon</b>
1/4" - 18 NPT	1903	7003
Threading Tools		Stock #
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-13/16" Hexagon Dies		12446
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Empty Plastic Case		97094MT

TAPS & DIES

### HANSON 25-pc Metric Tap & Hex Die Set



97311

Set Contents		Stock # 97311
Thread Size Metric	Tap Stock # Plug Style	Die Stock # 1-7/16" Hexagon
14 mm - 1.25	2449*	6949
14 mm - 1.50	1750	6950
14 mm - 2.00	1752	6952
16 mm - 1.50	1755	6955
16 mm - 2.00	1756	6956
18 mm - 1.50	1759	6959
18 mm - 2.50	1761	6961
		<b>1-13/16" Hexagon</b>
20 mm - 2.50	1764	8564
22 mm - 1.50	1765	8565
24 mm - 2.00	1768	8568
24 mm - 3.00	1769	8569
Threading Tools		Stock #
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-13/16" Hexagon Dies		12446
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Empty Plastic Case		97311MT

**HANSON® 41-pc Machine Screw/Fractional/Metric Tap & Hex Die Set**



26319

Set Contents		Stock # 26319
Thread Size	Tap Stock #	Die Stock #
<b>Machine Screw</b>		
6 - 32 NC	1118	6118
8 - 32 NC	1124	6124
10 - 24 NC	1128	6128
<b>Fractional</b>		
<b>1" Hexagon</b>		
1/4" - 20 NC	1420	6520
5/16" - 18 NC	1427	6527
3/8" - 16 NC	1434	6534
7/16" - 14 NC	1439	6539
1/2" - 13 NC	1444	6544
1/8" - 27 NPT	1902	6702
<b>Metric</b>		
<b>5/8" Hexagon</b>		
4 mm - 0.75	1718	6318
5 mm - 0.80	1722	6322
6 mm - 1.00	1727	6327
<b>1" Hexagon</b>		
7 mm - 1.00	1731	6631
8 mm - 1.25	1734	6634
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
12 mm - 1.75	1744	6644
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Dies		11026
Plain Die Stock - 5/8" Hexagon Dies		12457
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
Standard and Metric Thread Pitch Gauge		11017

**HANSON 12-pc Machine Screw/Fractional Tap & Hex Die Set**



24605

Set Contents		Stock # 24605
Thread Size	Tap Stock #	Die Stock #
<b>Machine Screw</b>		
6 - 32 NC	1118	6118
8 - 32 NC	1124	6124
10 - 24 NC	1128	6128
10 - 32 NF	1131	6131
<b>Fractional</b>		
1/4" - 20 NC	1420	6220
<b>Threading Tools</b>		<b>Stock #</b>
Plain Die Stock - 5/8" Hexagon Dies		12457
T-Handle Tap Wrench - Taps No. 0 to 1/4"		12401

# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 24-pc Fractional Tap & Hex Die Set



24614

Set Contents		Stock # 24614
Thread Size Fractional	Tap Stock # Plug Style	Die Stock # 1" Hexagon
1/4" - 20 NC	1420	6520
1/4" - 28 NF	1423	6523
5/16" - 18 NC	1427	6527
5/16" - 24 NF	1429	6529
3/8" - 16 NC	1434	6534
3/8" - 24 NF	1436	6536
7/16" - 14 NC	1439	6539
7/16" - 20 NF	1440	6540
1/2" - 13 NC	1444	6544
1/2" - 20 NF	1445	6545
<b>Pipe</b>		
1/8" - 27 NPT	1902	6702
<b>Threading Tools</b>		Stock #
Plain Die Stock - 1" Dies		11008
Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421

### HANSON 24-pc Metric Tap & Hex Die Set



26313

Set Content		Stock # 26313
Thread Size Metric	Tap Stock # Plug Style	Die Stock # 1" Hexagon
3 mm - 0.50	1712	6612
4 mm - 0.70	1717	6617
5 mm - 0.80	1722	6622
6 mm - 1.00	1727	6627
7 mm - 1.00	1731	6631
8 mm - 1.25	1734	6634
9 mm - 1.25	1737	6637
10 mm - 1.50	1740	6640
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
<b>Pipe</b>		
1/8" - 28 BSP	1911	6711
<b>Threading Tools</b>		Stock #
Plain Die Stock - 1" Dies		11008
Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421

### HANSON 12-pc Fractional Tap & Hex Die Set



24612

Set Contents		Stock # 24612
Thread Size Fractional	Tap Stock # Plug Style	Die Stock # 1" Hexagon
1/4" - 20 NC	1420	6520
5/16" - 18 NC	1427	6527
3/8" - 16 NC	1434	6534
7/16" - 14 NC	1439	6539
1/2" - 13 NC	1444	6544
<b>Threading Tools</b>		Stock #
Plain Die Stock - 1" Dies		11008
Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421



**HANSON® 64-pc Machine  
Screw/Fractional Tap & Solid/  
Adjustable Round Die Set**



98614

<b>Set Contents</b>		<b>Stock #</b>	<b>98614</b>
<b>Thread Size</b>	<b>Tap Stock #</b>	<b>Die Stock #</b>	
<b>Machine Screw</b>	<b>Plug Style</b>	<b>1" Solid Round</b>	
4 - 40 NC	1112	3012	
6 - 32 NC	1118	3018	
8 - 32 NC	1124	3024	
10 - 24 NC	1128	3028	
10 - 32 NF	1131	3031	
12 - 24 NC	1132	3032	
<b>Fractional</b>			
1/4" - 20 NC	1420	3120	
1/4" - 28 NF	1423	3123	
5/16" - 18 NC	1427	3127	
5/16" - 24 NF	1429	3129	
3/8" - 16 NC	1434	3134	
3/8" - 24 NF	1436	3136	
7/16" - 14 NC	1439	3139	
7/16" - 20 NF	1440	3140	
1/2" - 13 NC	1444	3144	
1/2" - 20 NF	1445	3145	
		<b>1-1/2" Adj. Round</b>	
9/16" - 12 NC	1448	4048	
9/16" - 18 NF	1449	4049	
5/8" - 11 NC	1452	4052	
5/8" - 18 NF	1454	4054	
3/4" - 10 NC	1458	4058	
3/4" - 16 NF	1460	4060	
		<b>2" Adj. Round</b>	
7/8" - 9 NC	1461	4261	
7/8" - 14 NF	1463	4263	
1" - 8 NC	1465	4265	
1" - 12 NS	1466	4266	
<b>Pipe</b>			
		<b>1" Solid Round</b>	
1/8" - 27 NPT	1902	3202	
		<b>1-1/2" Solid Round</b>	
1/4" - 18 NPT	1903	4103	
<b>Threading Tools</b>		<b>Stock #</b>	
Adj. Die Stock - 1" Dies		11026	
Adj. Die Stock - 1-1/2" Adj. Round Dies		12435	
Adj. Die Stock - 2" Adj. Round Dies		12445	
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	
T-Handle Wrench - Taps No. 0 to 1/4"		12401	
18 Leaf Standard Thread Pitch Gauge		11018	

TAPS & DIES

# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 64-pc Machine Screw/Fractional Tap & Adjustable/Solid Round Die Set



98146

TAPS & DIES

Set Contents		Stock # 98146	
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 1" Adj. Round	
4 - 40 NC	1112	3712	
6 - 32 NC	1118	3718	
8 - 32 NC	1124	3724	
10 - 24 NC	1128	3728	
10 - 32 NF	1131	3731	
12 - 24 NC	1132	3732	
<b>Fractional</b>			
1/4" - 20 NC	1420	3820	
1/4" - 28 NF	1423	3823	
5/16" - 18 NC	1427	3827	
5/16" - 24 NF	1429	3829	
3/8" - 16 NC	1434	3834	
3/8" - 24 NF	1436	3836	
7/16" - 14 NC	1439	3839	
7/16" - 20 NF	1440	3840	
1/2" - 13 NC	1444	3844	
1/2" - 20 NF	1445	3845	
		<b>1-1/2" Adj. Round</b>	
9/16" - 12 NC	1448	4048	
9/16" - 18 NF	1449	4049	
5/8" - 11 NC	1452	4052	
5/8" - 18 NF	1454	4054	
3/4" - 10 NC	1458	4058	
3/4" - 16 NF	1460	4060	
		<b>2" Adj. Round</b>	
7/8" - 9 NC	1461	4261	
7/8" - 14 NF	1463	4263	
1" - 8 NC	1465	4265	
1" - 12 NS	1466	4266	
<b>Pipe</b>		<b>1" Solid Round</b>	
1/8" - 27 NPT	1902	3202	
		<b>1-1/2" Solid Round</b>	
1/4" - 18 NPT	1903	4103	
<b>Threading Tools</b>		<b>Stock #</b>	
Adj. Die Stock - 1" Adj. Round Dies		12428	
Adj. Die Stock - 1-1/2" Adj. Round Dies		12435	
Adj. Die Stock - 2" Adj. Round Dies		12445	
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	
T-Handle Wrench - Taps No. 0 to 1/4"		12401	
18 Leaf Standard Thread Pitch Gauge		11018	

**HANSON® 41-pc Fractional Tap & Adjustable/Solid Round Die Set**



25941

<b>Set Contents</b>		<b>Stock # 25941</b>	
<b>Thread Size Fractional</b>	<b>Tap Stock # Plug Style</b>	<b>Die Stock # 1-1/2" Adj. Round</b>	
1/4" - 20 NC	1420	4020	
1/4" - 28 NF	1423	4023	
5/16" - 18 NC	1427	4027	
5/16" - 24 NF	1429	4029	
3/8" - 16 NC	1434	4034	
3/8" - 24 NF	1436	4036	
7/16" - 14 NC	1439	4039	
7/16" - 20 NF	1440	4040	
1/2" - 13 NC	1444	4044	
1/2" - 20 NF	1445	4045	
9/16" - 12 NC	1448	4048	
9/16" - 18 NF	1449	4049	
5/8" - 11 NC	1452	4052	
5/8" - 18 NF	1454	4054	
3/4" - 10 NC	1458	4058	
3/4" - 16 NF	1460	4060	
<b>Pipe</b>		<b>1-1/2" Solid Round</b>	
1/8" - 27 NPT	1902	4102	
1/4" - 18 NPT	1903	4103	
<b>Threading Tools</b>		<b>Stock #</b>	
Adj. Die Stock - 1-1/2" Dies		12435	
T-Handle Wrench - Taps 1/4" to 1/2"		12402	
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	
18 Leaf Standard Thread Pitch Gauge		11018	
Empty Plastic Case		25941MT	

TAPS & DIES



# TAPS & DIES

## HIGH CARBON STEEL COMBINATION SETS

### HANSON® 39-pc Machine Screw/Fractional Tap & Solid Round Die Set



23614

Set Contents		Stock # 23614
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 1" Solid Round
4 - 40 NC	1112	3012
6 - 32 NC	1118	3018
8 - 32 NC	1124	3024
10 - 24 NC	1128	3028
10 - 32 NF	1131	3031
12 - 24 NC	1132	3032
<b>Fractional</b>		
1/4" - 20 NC	1420	3120
1/4" - 28 NF	1423	3123
5/16" - 18 NC	1427	3127
5/16" - 24 NF	1429	3129
3/8" - 16 NC	1434	3134
3/8" - 24 NF	1436	3136
7/16" - 14 NC	1439	3139
7/16" - 20 NF	1440	3140
1/2" - 13 NC	1444	3144
1/2" - 20 NF	1445	3145
<b>Pipe</b>		
1/8" - 27 NPT	1902	3202
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Dies		11026
T-Handle Wrench - Taps No. 0 to 1/4"		12401
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
18 Leaf Standard Thread Pitch Gauge		11018
Empty Plastic Case		23614MT

TAPS & DIES

### HANSON 39-pc Machine Screw/Fractional Tap & Adjustable Round Die Set



25914

Set Contents		Stock # 25914
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 1-1/2" Adj. Round
4 - 40 NC	1112	3712
6 - 32 NC	1118	3718
8 - 32 NC	1124	3724
10 - 24 NC	1128	3728
10 - 32 NF	1131	3731
12 - 24 NC	1132	3732
<b>Fractional</b>		
1/4" - 20 NC	1420	3820
1/4" - 28 NF	1423	3823
5/16" - 18 NC	1427	3827
5/16" - 24 NF	1429	3829
3/8" - 16 NC	1434	3834
3/8" - 24 NF	1436	3836
7/16" - 14 NC	1439	3839
7/16" - 20 NF	1440	3840
1/2" - 13 NC	1444	3844
1/2" - 20 NF	1445	3845
<b>Pipe</b>		
1/8" - 27 NPT	1902	3202
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1" Adj. Round Dies		12428
T-Handle Wrench - Taps No. 0 to 1/4"		12401
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
18 Leaf Standard Thread Pitch Gauge		11018
Empty Plastic Case		25914MT

**HANSON® 25-pc Fractional Tap & Adjustable/Solid Round Die Set**



98000

<b>Set Contents</b>		<b>Stock # 98000</b>
<b>Thread Size Fractional</b>	<b>Tap Stock # Plug Style</b>	<b>Die Stock # 1-1/2" Adj. Round</b>
9/16" - 12 NC	1448	4048
9/16" - 18 NF	1449	4049
5/8" - 11 NC	1452	4052
5/8" - 18 NF	1454	4054
3/4" - 10 NC	1458	4058
3/4" - 16 NF	1460	4060
		<b>2" Adj. Round</b>
7/8" - 9 NC	1461	4261
7/8" - 14 NF	1463	4263
1" - 8 NC	1465	4265
1" - 14 NS	1467	4267
<b>Pipe</b>		<b>1-1/2" Solid Round</b>
1/4" - 18 NPT	1903	4103
<b>Threading Tools</b>		<b>Stock #</b>
Adj. Die Stock - 1-1/2" Adj. Round Dies		12435
Adj. Die Stock - 2" Adj. Round Dies		12445
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Empty Plastic Case		98000MT

**HANSON 24-pc Fractional Tap & Solid Round Die Set**



23622

<b>Set Contents</b>		<b>Stock # 23622</b>
<b>Thread Size Fractional</b>	<b>Tap Stock # Plug Style</b>	<b>Die Stock # 1" Solid Round</b>
1/4" - 20 NC	1420	3120
1/4" - 28 NF	1423	3123
5/16" - 18 NC	1427	3127
5/16" - 24 NF	1429	3129
3/8" - 16 NC	1434	3134
3/8" - 24 NF	1436	3136
7/16" - 14 NC	1439	3139
7/16" - 20 NF	1440	3140
1/2" - 13 NC	1444	3144
1/2" - 20 NF	1445	3145
<b>Pipe</b>		
1/8" - 27 NPT	1902	3202
<b>Threading Tools</b>		<b>Stock #</b>
Plain Die Stock - 1" Dies		11008
Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421

# TAPS & DIES

## HIGH SPEED STEEL COMBINATION SETS

### HANSON® 41-pc HSS Cut Thread Fractional Tap & Adjustable Die Set



543715

Set Contents		Stock # 543715
Thread Size Fractional	Tap Stock # Plug Style	Die Stock # 1-1/2" Adj. Round
1/4" - 20 NC	413010	503038
1/4" - 28 NF	413012	503039
5/16" - 18 NC	413015	503041
5/16" - 24 NF	413016	503042
3/8" - 16 NC	413018	503044
3/8" - 24 NF	413019	503045
7/16" - NC	413020	503046
7/16" - 20 NF	413021	503047
1/2" - 13 NC	413022	503048
1/2" - 20 NF	413023	503049
9/16" - 12 NC	413024	503051
9/16" - 18 NF	413025	503052
5/8" - 11 NC	413026	503053
5/8" - 18 NF	413027	503054
3/4" - 10 NC	413028	503057
3/4" - 16 NF	413029	503058
1/8" - 27 NPT	459001	503102
1/4" - 18 NPT	459002	503101
Threading Tools		Stock #
Adj. Die Stock - 1-1/2" Round Dies		12435
T-Handle Wrench - Taps No. 1/4" to 1/2"		12402
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
18 Leaf Standard Thread Pitch Gauge		11018

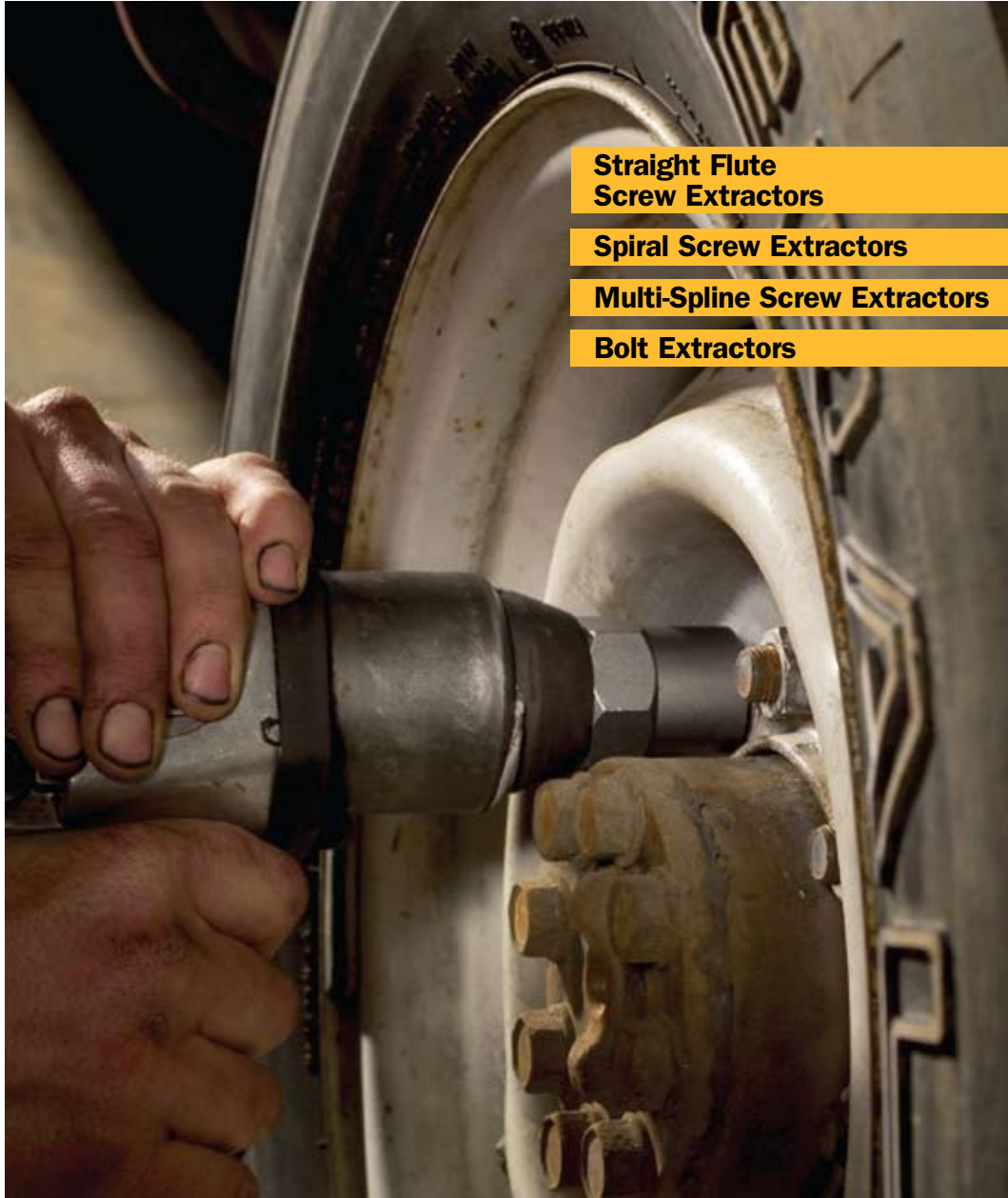
TAPS & DIES

### HANSON 39-pc HSS Cut Thread Machine Screw/ Fractional Tap & Adjustable Round Die Set



541614

Set Contents		Stock # 541614
Thread Size Machine Screw	Tap Stock # Plug Style	Die Stock # 1" Adj. Round
4 - 40 NC	403009	502009
6 - 32 NC	403015	502014
8 - 32 NC	403019	502018
10 - 24 NC	403022	502021
10 - 32 NF	403023	502022
12 - 24 NC	403025	502024
Fractional		
1/4" - 20 NC	413010	502038
1/4" - 28 NF	413012	502039
5/16" - 18 NC	413015	502041
5/16" - 24 NF	413016	502042
3/8" - 16 NC	413018	502044
3/8" - 24 NF	413019	502045
7/16" - 14 NC	413020	502046
7/16" - 20 NF	413021	502047
1/2" - 13 NC	413022	502048
1/2" - 20 NF	413023	502049
Pipe		
1/8" - 27 NPT	459001	502101
Threading Tools		Stock #
Adjustable Die Stock - 1" Adj. Round Dies		12428
T-Handle Wrench - Taps No. 0 to 1/4"		12401
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
18 Leaf Standard Thread Pitch Gauge		11018



<b>Straight Flute Screw Extractors</b>	<b>167</b>
<b>Spiral Screw Extractors</b>	<b>168</b>
<b>Multi-Spline Screw Extractors</b>	<b>170</b>
<b>Bolt Extractors</b>	<b>171</b>

## Serious Solutions for Stuck Fasteners

Professionals all say the same thing. It's tough to get a good grip on a stuck fastener, a rounded or broken head, a snapped stud, or a stripped screw or fitting. IRWIN® Industrial Tools has the solution to deal with any of them. Five different styles of extractors give you extra gripping power to remove problem fasteners without damaging workpieces. For example, our innovative IRWIN BOLT-GRIP™ extractors make quick work of nightmare bolt and nut removal, whatever their condition.






## Remove the Guesswork in Fastener Extraction

Fasteners vary widely in composition and hardness. That's why IRWIN has many different products for removing damaged fasteners and parts. Each extraction tool is specifically designed to take into account the material involved and make removal easier. The guidelines below will help you choose the tool that will deliver the optimal results for your particular situation.

## Guide for Using Screw Extractors

Drill a hole in the threaded part of fastener to be removed. Drill deep enough for the extractor to grip without bottoming out. For best results, use a left-handed drill bit. Insert the extractor and turn with a wrench or drive tool.

EXTRACTORS

Extractor Type	Benefits	Fastener Size Range	Drive Tool
<b>Straight Screw</b> 	<ul style="list-style-type: none"> <li>Extracts without expanding material</li> <li>Ideal for pipes and fittings</li> <li>Works on Left-hand or Right-hand threads</li> </ul>	<b>3/16" - 7/8"</b>	Tap Wrench Wrench Socket Wrench VISE-GRIP® Locking Pliers IRWIN Tap Adaptors
<b>Spiral Screw</b> 	<ul style="list-style-type: none"> <li>Spiral bites into harder materials with increasing torque</li> <li>Flutes embed deeper with each turn</li> </ul>	<b>3/32" - 2-1/2"</b>	Tap Wrench Wrench Socket Wrench VISE-GRIP Locking Pliers IRWIN Tap Adaptors
<b>Multi-Spline Screw</b> 	<ul style="list-style-type: none"> <li>Low profile enables use in confined areas</li> <li>Provides most torque of internal extractors</li> <li>Engages fastener without a deep hole</li> </ul>	<b>1/8" - 7/8"</b>	Flat Wrench Socket Wrench VISE-GRIP Locking Pliers
<b>Bolt Extractor</b> 	<ul style="list-style-type: none"> <li>Engages rusted-over, painted-on, and stripped-out bolts</li> <li>Grips broken, worn, or stubborn fasteners</li> <li>Drive with a variety of tools</li> </ul>	<b>1/4" - 1"</b>	Socket Wrench Wrench VISE-GRIP Locking Pliers
<b>Power-Grip Screw &amp; Bolt Extractors</b> 	<ul style="list-style-type: none"> <li>Grips rusted, painted, stripped, and even round-head fasteners and screws</li> <li>Easily fits into drill or power driver with Quick Change Shank</li> </ul>	<b>3/16" - 1/2"</b>	Power Drill VISE-GRIP Locking Pliers



**HANSON® Straight Flute  
536/526 Series**



52605

Description	Recommended Tap Wrench	Use Drill Size	Removes Bolts & Screws	Carded Stock #	Bulk Stock #
ST-1	TR-88	9/64"	3/16" - 5/16", 5 mm - 8 mm, No. 10	53601	52601
ST-2	TR-88	3/16"	3/8", 10 mm	53602	52602
ST-3	TR-88	15/64"	7/16" and 1/8" NPT, 10 mm, 1/8" BSP	53603	52603
ST-4	TR-98	5/16"	1/2" - 9/16" and 1/4" NPT, 12 mm - 14 mm, 1/4" BSP	53604	52604
ST-5	TR-98	3/8"	5/8" and 3/8" NPT, 16 mm, 3/8" BSP	53605	52605
ST-6	TR-98	15/32"	3/4" and 1/2" NPT, 20 mm, 1/2" BSP	53606	52606
ST-7	TR-98	9/16"	7/8", 22 mm, 5/8" BSP	53607	52607

**HANSON Straight Flute  
Extractor Sets  
536/526 Series**

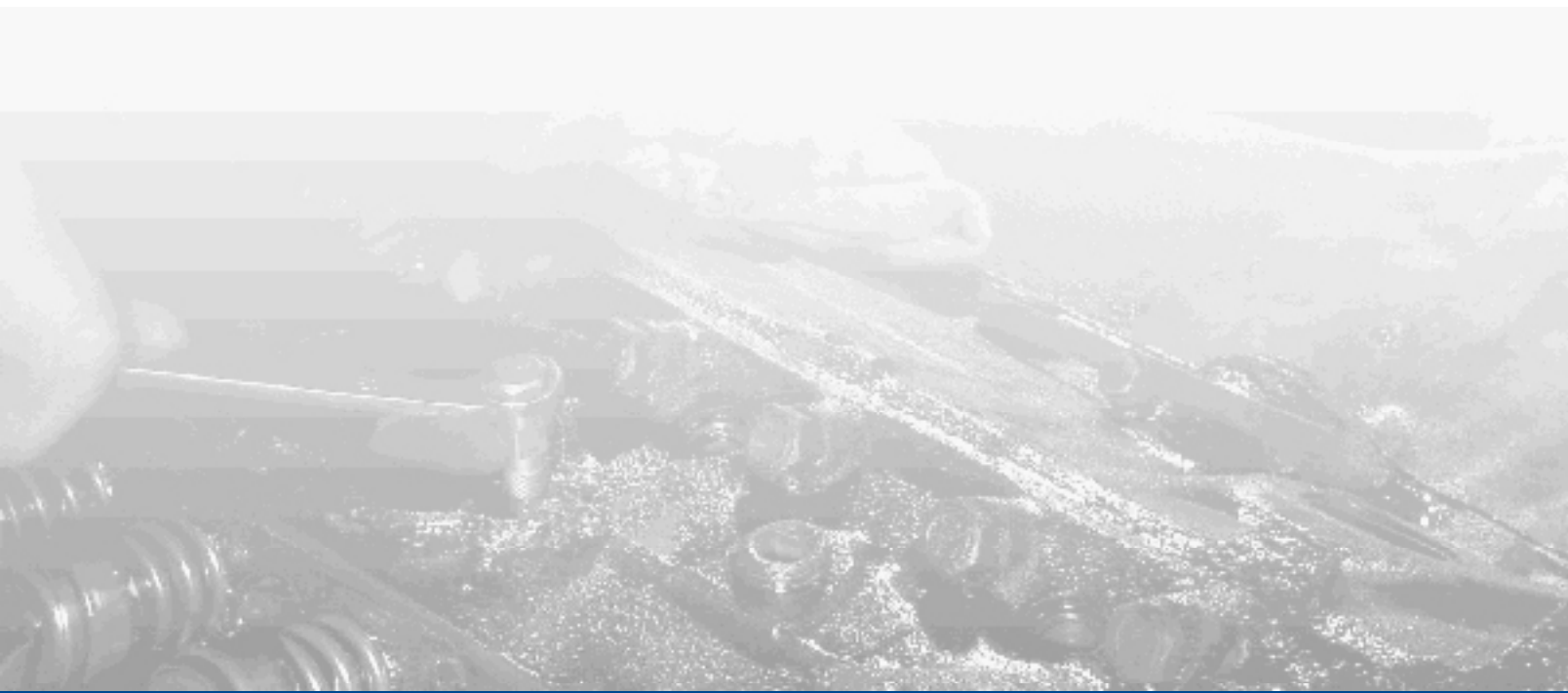


53625

Description	Contents	Carded Stock #	Bulk Stock #
4-pc Set	ST-2 - ST-5	53625	—
5-pc Set	ST-1 - ST-5	53635	52635
6-pc Set	ST-1 - ST-6	53645	52655

Description	Contents	Carded Stock #
<b>10-pc</b>	<b>Extractor &amp; Cobalt Drill Bit Set in Vinyl Pouch</b>	<b>11118</b>
<b>Spiral Flute Extractors</b>		<b>Drill Bits</b>
ST-1	52601	9/64" 63109
ST-2	52602	3/16" 63112
ST-3	52603	15/64" 63115
ST-4	52604	5/16" 63120
ST-5	52605	3/8" 63124

EXTRACTORS



# EXTRACTORS

## SPIRAL FLUTE

### HANSON® Spiral Flute 534/524 Series



52405

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power

Description	Recommended Tap Wrench	Use Drill Size	Removes Bolts & Screws	Carded Stock #	Bulk Stock #
EX-1	TR-88	5/64"	3/32" - 5/32", 2.5 mm - 4 mm, No. 3 - No. 6	53401	52401
EX-2	TR-88	7/64"	5/32" - 7/32", 4 mm - 6 mm, No. 6 - No. 12	53402	52402
EX-3	TR-88	5/32"	7/32" - 9/32", 6 mm - 8 mm, No. 12	53403	52403
EX-4	TR-88	1/4"	9/32" - 3/8", 1/8" NPT, 1/8" BSP, 8 mm - 10 mm	53404	52404
EX-5	TR-98	19/64"	3/8" - 5/8", 1/4" NPT, 1/4" BSP, 10 mm - 16 mm	53405	52405
EX-6	TR-98	13/32"	5/8" - 7/8", 3/8" NPT, 3/8" BSP, 16 mm - 22 mm	53406	52406
EX-7	TR-98	17/32"	7/8" - 1-1/8", 1/2" NPT, 1/2" BSP, 22 mm - 27 mm	53407	52407
EX-8	—	13/16"	1-1/8" - 1-3/8", 3/4" NPT, 3/4" BSP, 27 mm - 36 mm	—	52408
EX-9	—	1-1/16"	1-3/8" - 2", 1" NPT, 1" BSP, 36 mm - 52 mm	—	52409
EX-10	—	1-15/16"	2-1/8" - 2-1/2", 1-1/4" NPT, 1-1/4" BSP, 52 mm - 68 mm	—	52410

Description	Contents	Carded Stock #	Bulk Stock #
4-pc Set	EX-2 - EX-5	—	52425
5-pc Set	EX-1 - EX-5	53535	52435
6-pc Set	EX-1 - EX-6	53545	52445
9-pc Set	EX-1 - EX-9	—	52490

### HANSON Spiral Flute Extractor Sets 535/524 Series



53535

### HANSON Spiral Extractor & Drill Bit Combo Packs 537 Series



53704

- High speed steel drill bit ensures fast, clean drilling

Description	Carded Stock #
EX-1 + 5/64" Drill Bit	53701
EX-2 + 7/64" Drill Bit	53702
EX-3 + 5/32" Drill Bit	53703
EX-4 + 1/4" Drill Bit	53704
EX-5 + 19/64" Drill Bit	53705
EX-6 + 13/32" Drill Bit	53706

Description	Contents	Carded Stock #
<b>6-pc</b>	<b>Extractor &amp; HSS Drill Bit Set in Vinyl Pouch</b>	<b>53700</b>
<b>Spiral Flute Extractors</b>		<b>Drill Bits</b>
EX-1	52401	5/64" 60105
EX-2	52402	7/64" 60107
EX-3	52403	5/32" 60110

**HANSON® 10-pc Spiral Extractor & Drill Bit Set in Metal Index**



11119

**HANSON 35-pc Screw Extractor & Drill Bit Set**



11135

**HANSON 10-pc Spiral Extractor & Drill Bit Combo Packs**



11117

**NEW HANSON 48-pc Master Extender Set**



3101010

- The most complete extractor kit we produce
- For use with fasteners above, below, or flush with the work surface

Description		Contents		Stock # 11119
Spiral Flute Extractors				Drill Bits
EX-1	52401		5/64"	30505
EX-2	52402		7/64"	30507
EX-3	52403		5/32"	30510
EX-4	52404		1/4"	30516
EX-5	52405		19/64"	30519

Description		Contents		Stock # 11135	
Spiral Flute Extractors		Multi Splines Extractors		Left-Hand Cobalt Drill Bits	
EX-1	52401	1/8"	53201	5/64"	30505
EX-2	52402	5/32"	53202	7/64"	30507
EX-3	52403	3/16"	53203	1/8"	30508
EX-4	52404	7/32"	53204	5/32"	30510
EX-5	52405	1/4"	53205	3/16"	30512
EX-6	52406	9/32"	53206	7/32"	30514
		5/16"	53207	1/4"	30516
		11/32"	53208	9/32"	30518
		3/8"	53209	19/64"	30519
		13/32"	53210	5/16"	31520
		7/16"	53211	11/32"	30522
		15/32"	53212	3/8"	30524
		1/2"	53213	13/32"	30526
				7/16"	30528
				15/32"	30530
				1/2"	30532

Description		Contents		Stock # 11117
Spiral Flute Extractors				Drill Bits
EX-1	52401		5/64"	63105
EX-2	52402		7/64"	63107
EX-3	52403		5/32"	63110
EX-4	52404		1/4"	63116
EX-5	52405		19/64"	63119

Description		Contents			Stock # 3101010		
Spiral Flute Extractors		Multi Splines Extractors		Bolt Extractors		Left-Hand Cobalt Drill Bits	
EX-1	52401	1/8"	53201	1/4"	53901	5/64"	30505
EX-2	52402	5/32"	53202	5/16"-8mm	53902	7/64"	30507
EX-3	52403	3/16"	53203	3/8"	53903	1/8"	30508
EX-4	52404	7/32"	53204	10mm	53904	5/32"	30510
EX-5	52405	1/4"	53205	7/16"-11mm	53905	3/16"	30512
EX-6	52406	9/32"	53206	12mm	53906	7/32"	30514
		5/16"	53207	1/2"	53907	1/4"	30516
		11/32"	53208	13mm	53908	9/32"	30518
		3/8"	53209	9/16"-14mm	53909	19/64"	30519
		13/32"	53210	5/8"-16mm	53910	5/16"	31520
		7/16"	53211	17mm	53911	11/32"	30522
		15/32"	53212	11/16"	53912	3/8"	30524
		1/2"	53213	3/4"-19mm	53913	13/32"	30526
						7/16"	30528
						15/32"	30530
						1/2"	30532

EXTRACTORS

# EXTRACTORS

## MULTI-SPLINE SCREW

### HANSON® Hex Head Multi-Spline 522/532 Series



53225

- Designed to remove broken studs, bolts, socket screws and fittings for high torque applications
- Aggressive left-hand spiral design for extra gripping power

Description	Hex Head Size	Bolt Diameter	Recommended Drill Bit Diameter	Carded Stock #	Bulk Stock #
1/8"	1/2"	#12	1/8"	52201	53201
5/32"	1/2"	1/4"	5/32"	52202	53202
3/16"	1/2"	5/16"	3/16"	52203	53203
7/32"	1/2"	3/8"	7/32"	52204	53204
1/4"	1/2"	7/16"	1/4"	52205	53205
9/32"	1/2"	1/2"	9/32"	52206	53206
5/16"	1/2"	9/16"	5/16"	52207	53207
11/32"	1/2"	5/8"	11/32"	52208	53208
3/8"	1/2"	11/16"	3/8"	—	53209
13/32"	1/2"	3/4"	13/32"	—	53210
7/16"	5/8"	13/16"	7/16"	—	53211
15/32"	5/8"	7/8"	15/32"	—	53212
1/2"	5/8"	15/16"	1/2"	—	53213
17/32"	3/4"	1"	17/32"	—	53214
9/16"	3/4"	1-1/16"	9/16"	—	53215
19/32"	3/4"	1-1/8"	19/32"	—	53216
5/8"	3/4"	1-3/16"	5/8"	—	53217
21/32"	7/8"	1-1/4"	21/32"	—	53218
11/16"	7/8"	1-5/16"	11/16"	—	53219
23/32"	7/8"	1-3/8"	23/32"	—	53220
3/4"	7/8"	1-7/16"	3/4"	—	53221
25/32"	1"	1-1/2"	25/32"	—	53222
13/16"	1"	1-9/16"	13/16"	—	53223
27/32"	1"	1-5/8"	27/32"	—	53224
7/8"	1"	1-11/16"	7/8"	—	53225

### HANSON Hex Head Multi-Spline Plastic Case Sets 532 Series



53226

Description	Contents	Stock #
10-pc Set	1/8" through 13/32"	53226
Empty Case for 53226	—	53226MT
15-pc Set	1/8" through 9/16"	53228
Empty Case for 53228	—	53228MT
25-pc Set	1/8" through 7/8"	53227
Empty Case for 53227	—	53227MT

EXTRACTORS



**HANSON® Bolt Extractors**



53910

- Reverse spiral flutes bite into bolt
- For use with 3/8" socket drive, Vise-Grip® Locking Pliers, or wrench.

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock #
1/4"	—	3/8"	53901
5/16"	8 mm	3/8"	53902
3/8"	—	3/8"	53903
—	10 mm	3/8"	53904
7/16"	11 mm	3/8"	53905
—	12 mm	3/8"	53906
1/2"	—	3/8"	53907
—	13 mm	3/8"	53908
9/16"	14 mm	3/8"	53909
5/8"	16 mm	3/8"	53910
—	17 mm	3/8"	53911
11/16"	—	3/8"	53912
3/4"	19 mm	3/8"	53913
3/4"	19 mm	1/2"	53914
13/16"	21 mm	1/2"	53915
7/8"	22 mm	1/2"	53916
15/16"	24 mm	1/2"	53917
1"	—	1/2"	53918

**HANSON 9-pc Fractional Bolt Extractor Set**



54009

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 54009
1/4"	—	3/8"	53901
5/16"	8 mm	3/8"	53902
3/8"	—	3/8"	53903
7/16"	11 mm	3/8"	53905
1/2"	—	3/8"	53907
9/16"	14 mm	3/8"	53909
5/8"	16 mm	3/8"	53910
11/16"	—	3/8"	53912
3/4"	19 mm	3/8"	53913

**HANSON 9-pc Metric Bolt Extractor**



54019

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 54019
5/16"	8 mm	3/8"	53902
—	10 mm	3/8"	53904
7/16"	11 mm	3/8"	53905
—	12 mm	3/8"	53906
—	13 mm	3/8"	53908
9/16"	14 mm	3/8"	53909
5/8"	16 mm	3/8"	53910
—	17 mm	3/8"	53911
3/4"	19 mm	3/8"	53913

**HANSON 13-pc Professional's Industrial Set**



54113

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 54113
1/4"	—	3/8"	53901
5/16"	8 mm	3/8"	53902
3/8"	—	3/8"	53903
—	10 mm	3/8"	53904
7/16"	11 mm	3/8"	53905
—	12 mm	3/8"	53906
1/2"	—	3/8"	53907
—	13 mm	3/8"	53908
9/16"	14 mm	3/8"	53909
5/8"	16 mm	3/8"	53910
—	17 mm	3/8"	53911
11/16"	—	3/8"	53912
3/4"	19 mm	3/8"	53913

EXTRACTORS

# EXTRACTORS

## BOLT EXTRACTORS

### HANSON® 5-pc Lugnut Specialty Set



54125

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 54125
3/4"	19 mm	1/2"	53914
13/16"	21 mm	1/2"	53915
7/8"	22 mm	1/2"	53916
15/16"	24 mm	1/2"	53917
1"	–	1/2"	53918

### 5-pc BOLT-GRIP® Base Set



394001

- Includes most commonly used sizes
- Engineered to grip bolts in almost any condition
- Case accommodates Expansion Set (#394002)

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 394001
3/8"	–	3/8"	53903
7/16"	11 mm	3/8"	53905
1/2"	–	3/8"	53907
9/16"	14 mm	3/8"	53909
5/8"	16 mm	3/8"	53910

### 5-pc BOLT-GRIP Expansion Set



394002

- Provides additional diameters to address a complete range of fastener sizes

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 394002
5/16"	8 mm	3/8"	53902
–	10 mm	3/8"	53904
–	13 mm	3/8"	53908
11/16"	–	3/8"	53912
3/4"	19 mm	3/8"	53913

EXTRACTORS

### **NEW** 5-pc BOLT-GRIP Deep Well Set



3094001

- Longer profile and smaller head to fit in smaller areas
- Reaches recessed fasteners and fits over exposed studs

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 3094001
3/8"	–	3/8"	59903
7/16"	11 mm	3/8"	59905
1/2"	–	3/8"	59907
9/16"	14 mm	3/8"	59909
5/8"	16 mm	3/8"	59910

### 7-pc POWER-GRIP™ Set



394100

- Reverse spiral teeth provide maximum gripping power
- 1/4" hex shank fits most drills and Quick Change Adaptors

Removes Fractional Size Bolts	Removes Metric Size Bolts	Drive Size	Stock # 394100
3/16"	–	1/4"	394100A
1/4"	–	1/4"	394101A
5/16"	8 mm	1/4"	394102A
3/8"	–	1/4"	394103A
–	10 mm	1/4"	394104A
7/16"	11 mm	1/4"	394105A
1/2"	–	1/4"	394107A



<b>Rigs</b>	<b>174</b>
<b>Aprons</b>	<b>174</b>
<b>Support</b>	<b>175</b>
<b>Belts/Pouches</b>	<b>176</b>
<b>Accessories</b>	<b>178</b>
<b>Tool Storage</b>	<b>179</b>
<b>Knee Pads</b>	<b>181</b>
<b>Gloves</b>	<b>182</b>

### Superior Products for the Superior Tradesman.

IRWIN Industrial Tools is focused on developing products that exceed the demanding needs of the tradesman. We work directly with professionals of all trades to help us identify and develop products of superior quality and performance. Our worksite products line is just another way for IRWIN to continue to deliver this promise.

IRWIN Tool Rigs, Aprons & Pouches are constructed of the finest materials to provide maximum convenience and durability. All of our products feature reinforced points of wear that allow our products to hold up to the toughest work environments. Our products also feature large pockets that allow for quick and easy access to tools and fasteners.

IRWIN Tool Bags, Totes & Organizers are made of 1000 Denier Nylon, one of the most rugged fabrics in the world. The IRWIN tool storage program provides lightweight and convenient options for nearly all of your tool storage needs. From our split-sided designs to our rotating handles, IRWIN has the right solution for every trades' needs.

IRWIN Knee Pads provide both protection and comfort. From the highest memory Gel Plus™ foam, 3 Unique Cap Styles, & Comfort-Split™ Strap, there is a kneepad to satisfy any tradesman's needs.

IRWIN Work Gloves are made of a unique blend of synthetic materials and offer styles for a wide range of trade professionals. Reinforced palms and padded knuckles provide added protection and comfort. All IRWIN Work Gloves are machine washable and available in 3 different sizes.

WORKSITE PRODUCTS

#### Oil Tanned Leather 4pc. Contractors Rig



4031032

- Premium oil tanned leather rated for all weather use
- Modular system with double tine leather belt
- Reinforced points of wear for greater durability

#### ArmorPRO™ 6pc. Commercial Grade Nylon Rig



4031034

- Triple pouch design with easy access pockets
- Includes double tine leather belt

#### ArmorPRO 5pc Commercial Grade Nylon Rig



4031035

- Padded double tine leather belt
- Includes suspenders for balanced weight distribution

#### ArmorMAX™ 5pc. Polyester Construction Rig



4031036

- Premium oil tanned leather rated for all weather use
- Modular system with double tine leather belt
- Reinforced points of wear for greater durability

#### ArmorMAX 6pc. Polyester Construction Rig



4031049

- Triple pouch design with easy access pockets
- Includes double tine leather belt

#### 10 Pocket Oil Tanned Contractor's Apron



4031001

- Dual hammer holders
- Reinforced points of wear for greater durability
- Integrated leather belt

Description	Stock #
4 pc. Oil Tanned Contractor's Rig	4031032
ArmorPRO™ 6 pc. Commercial Grade Nylon Rig	4031034
ArmorPRO™ 5 pc. Commercial Grade Nylon Rig	4031035
ArmorMAX™ 5 pc. Polyester Construction Rig	4031036
ArmorMAX™ 6 pc. Polyester Construction Rig	4031049
10 Pocket Oil Tanned Contractor's Apron	4031001



**Full Grain Leather  
10 Pocket Contractor's Apron**



4031002

- Original full grain leather for extra durability
- Full size pockets with reinforced points of wear
- Includes saddle leather tape holder
- Includes integrated nylon belt

**12 Pocket Suede  
Carpenter's Apron**



4031004

- Genuine tanned leather for durability
- Dual hammer holders and tape holder
- Quick release belt
- Includes integrated nylon belt

**Suede Leather 10 Pocket  
Carpenter's Apron**



4031003

- Oversized center pocket for fasteners or tape
- Dual hammer holders
- Reinforced points of wear for greater durability
- Includes integrated nylon belt

**5 Pocket Journeyman's  
Apron**



4031014

- Perfect for small jobs
- Quick release belt
- Includes integrated nylon belt

**Lightweight Cotton 10  
Pocket Apron**



4031033

- Leather reinforced pockets
- Dual hammer holders
- Quick release belt
- Includes integrated nylon belt

**Lightweight Cotton  
2 Pocket Nail Apron**



4031051

- Machine washable

**Lightweight Cotton  
Machinist's Apron**



4031052

- "Bib" style provides full body protection
- Machine washable

**Fully Adjustable Belt**



4031029

- 3 piece adjustable padded belt fits waist sizes 31" - 53"
- Double tine roller buckle
- Attached D-rings for suspension suspenders

**Fully Adjustable  
Nylon Suspender**



4031048

- Easy vertical tool access  
Includes tape holder and key fastener

Description	Stock #
10 Pocket Full Grain Contractor's Apron	4031002
12 Pocket Suede Journeyman's Apron	4031004
10 Pocket Suede Carpenter's Apron	4031003
5 Pocket Journeyman's Apron	4031014
10 Pocket Cotton Apron	4031033
2 Pocket Cotton Nail Apron	4031051
5 Pocket Cotton Machinist's Apron	4031052
ArmorPRO™ Fully Adjustable Nylon Belt	4031029
Fully Adjustable Nylon Suspender	4031048

# WORKSITE PRODUCTS

## BELTS/POUCHES

### Suspenders



4031058

- Heavy duty 2" wide adjustable suspenders
- Nickel plated clips

### Support Belt



L-4031031  
XL-4031030

- M/L Fits waists 23" - 46"
- XL/XXL Fits waists 47" - 56"
- Elastic belt with contoured sides and breathable mesh back
- Includes 1-1/2" suspender straps

### Oil Tanned Leather 3" Belt



4031026

- Fits all standard pouches and belt accessories
- Rust resistant double tine metal buckle

### Full Grain Leather 2" Belt



4031025

- Fits all standard pouches and belt accessories
- Made of saddle leather for added durability

### ArmorPRO™ 2" Belt



4031028

- Fits all standard pouches and belt accessories

### Lightweight Cotton 2" Belt



4031027

- Fits all standard pouches and belt accessories

### Oil Tanned Leather 10 Pocket Contractor's Pouch



4031005

- Dual hammer holders
- Reinforced points of wear for greater durability

### Oil Tanned Leather 4 Pocket Contractor's Pouch



4031006

- Dual front pocket
- Reinforced points of wear for greater durability

### Oil Tanned Leather Electrician's Pouch



4031007

- Easy vertical tool access
- Includes tape holder and key fastener

WORKSITE PRODUCTS

Description	Stock #
Suspender (Black)	4031058
M/L Support Belt	4031031
XL/XXL Support Belt	4031030
3" Oil Tanned Leather Belt	4031026
2" Saddle Leather Belt	4031025
2" ArmorPRO™ Belt	4031028
2" Cotton Belt	4031027
4 Pocket Oil Tanned Contractor's Pouch	4031006
Oil Tanned Leather Electrician's Pouch	4031007

**Full Grain Leather  
10 Pocket Contractor's Pouch**



4031008

- Multi-tier design for separation of tools and fasteners
- Framing square pocket
- Reinforced points of wear for greater durability

**Full Grain Leather  
4 Pocket Contractor's Pouch**



4031009

- Unique dual front pockets designed to hold multiple fasteners in a single pouch
- Reinforced points of wear for greater durability

**Full Grain Leather 2 Pocket  
Contractor's Pouch**



4031010

- Full size easy access front pocket

**Full Grain Leather  
1 Pocket Drywall's Pouch**



4031011

- Full size easy access front pocket
- Versatile multi functional use

**Suede Leather 10 Pocket  
Journeyman's Pouch**



4031012

- Dual hammer holders
- Reinforced points of wear for greater durability

**Suede Leather 6 Pocket  
Journeyman's Pouch**



4031013

- Multi-use design with tape holder
- Reinforced points of wear for greater durability

**ArmorPRO™ 10 Pocket  
Commercial Grade Nylon Pouch**



4031039

- Easy access pocket design
- Versatile multi-functional use

**ArmorPRO 4 Pocket  
Commercial Grade Nylon Pouch**



4031040

- Easy access pocket design
- Versatile multi-functional use

**ArmorPRO 2 Pocket  
Commercial Grade Nylon Pouch**



4031041

- Easy access pocket design
- Versatile multi-functional use

**ArmorMAX™ 10 Pocket  
Contractor's Pouch**



4031042

- Easy access pocket design
- Versatile multi-functional use
- Dual hammer holders

**ArmorMAX 4 Pocket  
Contractor's Pouch**



4031043

- Easy access pocket design
- Versatile multi-functional use

**ArmorMAX 5 Pocket  
Contractor's Pouch**



4031044

- Includes tape holder
- Reinforced points of wear for greater durability

Description	Stock #
10 Pocket Full Grain Carpenter's Pouch	4031008
4 Pocket Full Grain Carpenter's Pouch	4031009
2 Pocket Full Grain Carpenter's Pouch	4031010
1 Pocket Full Grain Drywall's Pouch	4031011
10 Pocket Suede Journeyman's Pouch	4031012
6 Pocket Suede Journeyman's Pouch	4031013
ArmorPRO 10 Pocket Commercial Grade Nylon Pouch	4031039
ArmorPRO 4 Pocket Commercial Grade Nylon Pouch	4031040
ArmorPRO 2 Pocket Commercial Grade Nylon Pouch	4031041
ArmorMAX 10 Pocket Polyester Construction Pouch	4031042
ArmorMAX 4 Pocket Polyester Construction Pouch	4031043
ArmorMAX 5 Pocket Polyester Construction Pouch	4031044

WORKSITE PRODUCTS

# WORKSITE PRODUCTS

## ACCESSORIES

### ArmorMAX™ 1 Pocket Maintenance Pouch



4031045

- Easy access pocket design
- Includes tape holder and multi-purpose clip

### Light Cotton 10 Pocket Pouch



4031037

- 4 tier leather reinforced pockets
- Dual hammer holders
- Quick release belt

### Light Cotton 8 Pocket Pouch



4031038

- Leather reinforced pockets
- Dual hammer holders

### Saddle Leather Hammer Holder



- Metal hammer capture
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031015

### ArmorPRO™ Nylon Hammer Holder



- Metal hammer capture
- Made of 1000 Denier lightweight nylon

4031047

### Saddle Leather Hammer Holder



- Metal hammer capture
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031054

### Saddle Leather Tape Holder



- Snap strap holds tape in place
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031016

### Saddle Leather Tape Holder



- Snap strap holds tape in place
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031053

### Saddle Leather Utility Knife Holder



- Holds all standard utility knives
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031018

### Universal Tape and Drill Holder



- Holds all standard measuring tapes and cordless drills
- Fits all standard 2" belts

4031021

### Drill Holder



- Holds all standard cordless drills securely in place
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031017

### Flip Phone Holder



- Holds most flip phones
- Includes belt clip
- Fits all standard 2" belts

4031024

WORKSITE PRODUCTS

Description	Stock #
ArmorMAX™ Polyester Maintenance Pouch	4031045
Light Cotton 10 Pocket Pouch	4031037
Light Cotton 8 Pocket Pouch	4031038
Saddle Leather Hammer Holder Natural	4031015
ArmorPRO™ Nylon Hammer Holder	4031047
Saddle Leather Hammer Holder (Black)	4031054
Saddle Leather Tape Holder Natural	4031016
Saddle Leather Tape Holder (Black)	4031053
Saddle Leather Utility Knife Holder (Black)	4031018
Universal Tape and Drill Holder	4031021
Saddle Leather Drill Holder (Black)	4031017
Flip Phone Holder	4031024

**Power Tool Utility Hook**



- Unique swivel keeps the tool balanced
- Rotates 180°
- Stays balanced while climbing or bending

4031055

**Plier Holder**



- Fits all standard pliers
- Made of saddle leather for added durability
- Fits all standard 2" belts

4031023

**Universal Cell Phone Holder**



- Holds cell phones, two-way radios and walkie talkies
- Integrated belt hook and belt loop
- Fits all standard 2" belts

4031022

**24" Grout Bag**



- Allows for precise grout application
- Durable canvas construction for long life
- Washable

4031020

**Lightweight Cotton 6 Pocket Small Parts Organizer**



- Unique swivel keeps the tool balanced
- Rotates 180°
- Stays balanced while climbing or bending

4031056

**18" Utility Tote w/Rotating Handle**



- Rotating handle offers full access to entire storage compartment
- Collapsible design

4402023

**16" Utility Tote**



4402016

- Open main storage compartment, side pockets, 2" level storage
- Removable shoulder strap

**Electrician's Tote**



4402011

- Designed for easy vertical tool access
- Includes small parts organizer

**18" Tool Center**



4402013

- Includes webbing to hold 2" level, removable shoulder strap and padded handle
- Unique split sided design for easy access to both hand tools and power tools

**15" Tool Center**



4402012

- Includes webbing to hold 2" level, removable shoulder strap and padded handle
- Unique split sided design for easy access to both hand tools and power tools

**18" Compression Tool Bag**



4402015

- Large EVA foam-padded storage compartment provides added tool protection
- Water-resistant bottom

**14" Compression Tool Bag**



4402014

- Large EVA foam-padded storage compartment provides added tool protection
- Water-resistant bottom

Description	Stock #
Power Tool Utility Hook	4031055
Saddle Leather Plier Holder (Black)	4031023
Universal Cell Phone Holder	4031022
24" Grout Bag	4031020
6 Pocket Cotton Small Parts Organizer	4031056
Electrician's Tote	4402011
16" Utility Tote	4402016
18" Utility Tote With Rotating Handle	4402023
15" Tool Center	4402012
18" Tool Center	4402013
18" Compression Tool Bag	4402015
14" Compression Tool Bag	4402014

# WORKSITE PRODUCTS

## TOOL STORAGE

### 18" Double-Sided Tool Bag



4402017

- 3 zippered compartments for greater organization
- Includes 3 removable pouches

### Mini Double-Sided Tool Bag



4402018

- 2 separate storage areas with easy access exterior pockets
- Removable shoulder strap

### 16" Contractor's Bag



4402020

- Large zippered storage compartment
- Removable shoulder strap

### 12" Contractor's Bag



4402019

- Large zippered storage compartment
- Stay open design

### 54 Pocket Bucket Tool Organizer



4402021

- Tapered tool tunnels for quick access
- Small parts pockets

### 87 Pocket Bucket Tool Organizer



4402022

- Includes metal tape measure clip, hammer holder and internal drill pocket
- Tapered tool tunnels for quick access

### Pro Bucket Tool Organizer



420-001

- 56 pockets store and organize everything from screws to socket wrenches
- Easy to locate clip keeps keys and other small objects handy

### Pro Large Tool Organizer



420-002

- Large capacity storage
- Open at the top for quick and easy access
- False bottom provides separate storage for important items

### Pro Soft Side Tool Organizer



420-003

- Small, lightweight and strong
- Zippered for secure transport
- Padded handle with reinforced stitching for extra strength

### Pro Utility Tool Organizer



420-004

- Enough capacity to carry a broad range of tools and accessories
- Pockets and compartments designed to provide better organization

WORKSITE PRODUCTS

Description	Stock #
18" Double Sided Tool Bag	4402017
Mini Double Sided Tool Bag	4402018
16" Contractor's Bag	4402020
12" Contractor's Bag	4402019
54 Pocket Bucket Tool Organizer	4402021
87 Pocket Bucket Tool Organizer	4402022
Pro Bucket Tool Organizer	420-001
Pro Large Tool Organizer	420-002
Pro Soft Side Tool Organizer	420-003
Pro Utility Tool Organizer	420-004

**I-Gel™ Gum Rubber Kneepads**



4033005

- Skid-resistant gum rubber won't mar or scratch floors

**I-Gel Stabilizer Kneepads**



4033006

- Provides great stability for roofing and HVAC use

**I-Gel Tile Kneepads**



4033007

- Hard shell design provides easy side to side movement

**Universal Kneepads**



4033010

- Low profile design conforms to body for comfort and protection
- Acid, oil, water and heat resistant
- Most versatile design for any application

**Mason's Kneepads**



4033011

- Made of professional grade leather
- Traditional leather strap and buckle
- Resists wear on abrasive surfaces

**Non-Skid Kneepads**



4033012

- Skid and water-resistant
- Ideal for tile, hardwood flooring and general construction applications
- Dual strap design for versatility

**Hard Shell Kneepads**



4033014

- Exterior cap includes high density closed-cell foam providing maximum comfort
- Fully stitched cap keeps out debris
- Dual strap design for versatility

**Ultra Light Kneepads**



4033016

- Ideal for wet surfaces
- Dual strap design for versatility

Description	Stock #
I-Gel Gum Rubber Kneepads	4033005
I-Gel Stabilizer Kneepads	4033006
I-Gel Tile Kneepads	4033007
Universal Kneepads	4033010
Hard Shell Kneepads	4033014
Non-Skid Kneepads	4033012
Mason's Kneepads	4033011
Ultra Light Kneepads	4033016

# WORKSITE PRODUCTS

## WORK GLOVES

### InnerGrip Work Gloves



4403217

- Patent pending inside grips help prevent hand from slipping inside glove
- Padded knuckles provide added protection
- Terry cloth thumb for quick brow wipes
- Fingertip-Free style available for greater dexterity

### InnerGrip Fingertip-Free Work Gloves



4403221

- Maximum gripping power
- Open fingers provide maximum dexterity
- Patent-pending inside grips help prevent hand from slipping inside glove
- Padded knuckles provide added protection
- Terry cloth thumb for quick brow wipes

### ArmorDex Work Gloves



4403233

- Heavy duty material protects against abrasions, cuts & punctures
- Terry cloth thumb for quick brow wipes

### Jackhammer Work Gloves



4403225

- Gel-padded, anti-vibration palm provides maximum comfort & protection
- Terry cloth thumb for quick brow wipes
- Machine washable
- Fingertip-Free style available for greater dexterity

### Jackhammer Fingertip-Free Work Gloves



4403229

- Specifically designed for use with power tools
- Open fingers provide maximum dexterity
- Gel-padded, anti-vibration palm provides maximum comfort and protection
- Unique synthetic materials provide dexterity and durability
- Machine washable

### Demolition Work Gloves



4403237

- Patented SuperFabric™ & anti-abrasion materials protect against cuts & puncture
- Inner cuff keeps debris from entering glove

WORKSITE PRODUCTS

Description	Stock #
InnerGrip-M	4403217
InnerGrip-L	4403218
InnerGrip-XL	4403219
InnerGrip Fingertip-Free-M	4403221
InnerGrip Fingertip-Free-L	4403222
InnerGrip Fingertip-Free-XL	4403223
Jackhammer-M	4403225
Jackhammer-L	4403226
Jackhammer-XL	4403227
Jackhammer Fingertip-Free-M	4403229
Jackhammer Fingertip-Free-L	4403230
Jackhammer Fingertip-Free-XL	4403231
Armordex-M	4403233
Armordex-L	4403234
Armordex-XL	4403235
Demolition-M	4403237
Demolition-L	4403238
Demolition-XL	4403239



**Heavy Duty Jobsite Work Gloves**



432001

- TechnoGrip® reinforced palm, thumb and fingertips for extra durability and protection
- Designed for harsh applications and rough materials
- Knuckles padded with perforated Neoprene
- Breathable stretch materials add to comfort
- Slick hook and loop fastener does not snag or collect debris
- One-hand strap adjustment

**Carpenter Work Gloves**



432003

- Open finger design, allows for better dexterity
- TechnoGrip® reinforced palm, thumb and fingertips for extra durability and protection
- Knuckles padded with perforated Neoprene
- Breathable stretch materials add to comfort
- Slick hook and loop fastener does not snag or collect debris
- One-hand strap adjustment

**General Construction Work Gloves**



432005

- Two layers of synthetic suede on palm, thumb and fingers for comfort and extended wear
- Rubberized finger tips for better gripping
- Knuckles padded with perforated Neoprene
- Breathable stretch materials add to comfort
- Slick hook and loop fastener does not snag or collect debris
- One-hand strap adjustment

Description	Stock #
Heavy Construction-L	432001
Heavy Construction-XL	432002
Carpenter-L	432003
Carpenter-XL	432004
General Construction-L	432005
General Construction-XL	432006

\* TechnoGrip is a registered trademark of Eastex Products, Inc.



# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
0102L3	8	10310	112	1112	136	12073	149	1321	136	1423	136	1529	136
02	10	10311	112	1113	136	1208	136	1323	136	14233	53	1531	136
02059-SH	36	10312	112	11135	169	12087	149	1324	136	1424	136	15313	112
02060-SH	36	10313	112	11140	52	12088	148	1325	136	1425	136	1534	136
02089-SH	36	10314	112	1116	136	1209	136	1327	136	1427	136	1536	136
0302L3	8	1032	136	1117	136	12092	113	1329	136	1429	136	15370	53
04	10	1033	136	11170	53	1211	136	1331	136	1431	136	1539	136
0502L3	8	1034	136	1118	136	12115	149	1334	136	1434	136	1540	136
05T	8	1035	136	1119	136	1212	136	1336	136	1436	136	1544	136
0702L3	8	1036	136	11194	112	1213	136	1339	136	1439	136	1545	136
07T	8	10502	113	11195	112	1216	136	1340	136	1440	136	1546	136
08	10	10502CB	113	1120	136	1217	136	1344	136	1444	136	1548	136
0902L3	8	10505519	20	1121	136	1218	136	1346	136	1445	136	1549	136
09T	8	10505865	19	11212	148	1219	136	1348	136	1446	136	15502	113
1002	136	10505866	19	11214	148	1220	136	1349	136	1448	136	1552	136
1002L3	8	10505867	19	11220	54	1221	136	1352	136	1449	136	15530	52
1004	136	10505868	19	11221	148	1224	136	1354	136	1452	136	1554	136
10040	52	10505869	19	1124	136	1225	136	1356	136	1454	136	1556	136
1005	136	10505870	19	11240	52	1226	136	1357	136	1456	136	1557	136
1006	136	10505871	19	1125	136	1228	136	1358	136	1457	136	1558	136
1007	136	10505872	19	1126	136	1231	136	1360	136	1458	136	1560	136
1008	136	10505873	19	11270	53	1232	136	1361	136	1460	136	1561	136
1009	136	10505874	19	1128	136	1233	136	1363	136	1461	136	1563	136
1011	136	1078KB	12	1131	136	1234	136	1365	136	1463	136	1565	136
1012	136	1078TRAY	12	1132	136	1235	136	1366	136	1465	136	1566	136
1013	136	11008	148	1133	136	1236	136	1367	136	1466	136	1567	136
1016	136	11016	149	1134	136	12401	149	14011	54	1467	136	15702	52
1017	136	11017	149	1135	136	12402	149	14015	54	14T	9	1602L3	9
1018	136	11018	149	1136	136	12411	113	14017	54	1502L3	9	16101	112
1019	136	1102	136	11440	52	12412	113	14020	54	15030	52	16102	112
1020	136	11026	148	11580	112	12413	113	14023	54	1506	136	16103	112
1021	136	1102L3	9	11581	112	12415	149	14025	54	15070	53	16104	112
10220	112	1104	136	11670	53	12416	148	14027	54	15101	112	16105	112
10220CB	111	11040	52	11820	54	12421	148	14028	52	15102	112	165	10
10221	112	1105	136	11830	52	12428	148	14029	54	15103	112	17	10
10225	113	1106	136	11840	52	12435	148	1402L3	9	15104	112	1712	137
10228	113	1107	136	11850	53	12436	148	14030	52	1512	136	1713	137
10231	112	1108	136	11870	53	12445	148	14031	52	15120	54	1717	137
10231CB	111	1109	136	12001	149	12446	148	14050	53	1513	136	1718	137
10232	112	11101	112	12002	149	12450	149	14053	53	15130	52	1722	137
10232CB	111	11101CB	111	12008	148	12457	148	14070	53	15150	53	1723	137
10233	112	11102	112	12016	149	12473	149	14074	53	1520	136	1727	137
10233CB	111	11102CB	111	12017	149	12498	148	14076	53	1521	136	1729	137
10234	112	11103	112	12018	149	12L3	9	14080	53	15220	54	1731	137
10234CB	111	11103CB	111	1202	136	1302L3	9	14082	53	15221	112	1733	137
10235	112	11104	112	12021	148	13055	36	14083	53	1523	136	1734	137
10239	112	11104CB	111	12026	148	1306	136	14084	53	15230	52	1737	137
10239CB	111	11105	112	1204	136	13085	36	1412	136	1524	136	1738	137
1024	136	1111	136	1205	136	1312	136	1413	136	1525	136	1739	137
1025	136	11117	169	12050	149	13125	36	14130	52	15250	53	1740	137
1028	136	11118	169	1206	136	1313	136	1420	136	1527	136	1741	137
1031	136	11119	169	1207	136	1320	136	1421	136	15270	53	1742	137

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
1743	137	1908	138	20133	108	2031321B	34	2073113	32	2078611	16	2086102	48
1744	137	1909	138	20134	108	2031333	34	2073115	32	2078612	17	2086200	48
1749	137	1910	138	20135	108	2032101	36	2073211	32	2078613	17	2086201	48
1750	137	1911	138	20136	108	2032150	36	2073212	32	2078618	17	2086203	48
1752	137	1912	138	20137	108	2032160	35	2074110	21	2078624	17	2086300	48
1754	137	1920	147	20138	108	2032170	35	2074112	21	2078700	20	2086301	48
1755	137	1921	138	20139	108	2032171	35	2074114	21	2078701	20	2086403	48
1756	137	1922	147	20140	108	2032172	35	2074118	21	2078702	20	2086404	48
1759	137	1923	147	20141	108	2032173	35	2074124	21	2078703	20	2086405	48
1761	137	1924	140	2014100	43	2032174	35	2074136	21	2078704	20	2087100	46
1764	137	19T	10	2014102	43	2032175	35	2074148	21	2078705	20	2087102	46
1765	137	20	10	20142	108	2032176	35	2077703	12	2078706	20	2088100	46
1768	137	20040	52	2014200	43	2032177	35	2078108	14	2078707	20	2088300	46
1769	137	20101	108	20143	108	2032178	35	2078110	14	2078708	20	2088600	47
17T	10	20102	108	20144	108	2032179	35	2078112	14	2078709	20	2089100	47
18	10	20103	108	2014400	43	2032180	35	2078116	14	2078710	20	21	10
1812	137	20104	108	2014450	43	2033500	36	2078120	14	2078711	20	2101106HDDS	20
1817	137	20105	108	20145	108	2034204	37	2078208	17	2078712	20	211	10
1818	137	20106	108	2014500	43	2034205	37	2078209	17	2078713	20	21101	149
1822	137	20107	108	2014501	43	2034206	37	2078216	17	2078714	20	21102	149
1823	137	20108	108	20146	108	2034207	37	2078218	17	2078717	20	21110	149
1827	137	20109	108	20147	108	2034208	37	2078226	17	2078718	20	21112	149
1829	137	20110	108	20148	108	2034300	37	2078228	17	2078719	20	2120	141
1831	137	20111	108	20149	108	2034403	37	2078300	19	2078720	20	21201	149
1833	137	2011102	42	20150	108	2034404	37	2078305	19	2078900	15	21202	149
1834	137	2011104	42	20151	108	2034408	37	2078306	17	2078901	15	21210	149
1837	137	20112	108	2015100	43	2034409	37	2078307	17	2078904	19	21212	149
1838	137	2011200	42	20152	108	2034410	37	2078308	17	2078905	19	2123	141
1839	137	2011201	42	20153	108	2034411	37	2078309	19	2078909	18	2127	141
1840	137	2011202	42	20154	108	2035100	39	2078310	15	2078910	18	2129	141
1842	137	2011203	42	20155	108	2035101	39	2078316	19	2078915	19	21304	32
1844	137	2011204	42	2021406	25	2035102	39	2078317	19	2078925	19	213100	44
1849	137	20113	108	2021412	25	2035103	39	2078318	18	2078935	19	213101	44
1852	137	20114	108	2021418	25	2035104	39	2078328	18	2078945	19	213102	44
1855	137	20115	108	2021424	25	2035105	39	2078406	15	2078955	19	213103	44
1856	137	20116	108	2021436	25	2035106	39	2078408	15	2078965	19	213104	44
1859	137	20117	108	2021450	25	2035107	39	2078500	15	2081101	47	2134	141
1861	137	20118	108	2024100	27	2035108	39	2078506	15	20811011	47	2136	141
1864	137	20119	108	2025101	27	2035200	38	2078508	15	2081200	47	2139	141
1865	137	20120	108	2025102	27	2035201	38	2078510	15	2082100	47	2140	141
1868	137	20121	108	2025103	27	2035202	38	2078512	15	2082101	47	2144	141
1869	137	20122	108	2026500	27	2035203	38	2078516	15	2082200	47	2145	141
19	10	20123	108	2026501	27	2035204	38	2078601	16	2082300	47	2148	141
1902	138	20124	108	2031311	34	2035207	38	2078602	16	2083100	46	2149	141
1903	138	20125	108	2031313	34	2035400	39	2078603	16	2083200	46	2152	141
1904	138	20126	108	2031314DS	34	2035401	39	2078604	16	2084100	46	2154	141
1904P	138	20127	108	2031315DS	34	2035600	39	2078605	16	2084200	46	2158	141
1905	138	20128	108	2031316DS	34	2035601	39	2078606	17	2084300	46	2160	141
1905P	138	20129	108	2031317B	34	2035602	39	2078607	16	2084350	46	21830	52
1906	138	20130	108	2031318DS	34	2051100	18	2078608	17	2084400	46	21840	52
1906P	138	20131	108	2031319DS	34	2073111	32	2078609	16	2086100	48	218HP-300	44
1907	138	20132	108	2031320DS	34	2073112	32	2078610	17	2086101	48	22	10

# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
22007	32	24130	52	2731	137	30127	107	3016021	103	3019016B	100	3046003	128
22010	32	24233	53	2733	137	30128	107	3016022	103	3019017B	100	305030	72
22012	32	2449	138	2734	137	30129	107	3016023	103	3019018B	100	305031	72
222601	26	2459	138	2738	137	30130	107	3016024	103	3019019B	100	305032	72
222702	26	24605	157	2739	137	30131	107	3016025	103	3019020B	100	305033	72
222803	26	24606	155	2740	137	30132	107	3016026	103	3019021B	100	305034	72
223106	27	24612	158	274001SM	21	3015004	101	3016027	103	3019022B	100	305035	72
223112	27	24614	158	274101	21	3015005	101	3016028	103	3019023B	100	305036	72
223118	27	24640	154	274102	21	3015006	101	3016029	103	3019024B	100	30505	107
223124	27	24801	147	274103	21	3015007	101	3016030	103	3019025B	100	30507	107
223130	27	24839	147	274104	21	3015008	101	3016031	103	3019026B	100	30508	107
223136	27	25	11	274105	21	3015009	101	3016032	103	3019027B	100	30510	107
223212	27	25030	52	274106	21	3015010	101	3016125	103	3019028B	100	3051001	76
223218	27	251	11	274107	21	3015011	101	3016126	103	3019029B	100	3051002	76
223224	27	25130	52	274108	21	3015012	101	3016127	103	3019030B	100	3051003	76
223230	27	2518	137	2742	137	3015013	101	3016128	103	3019031B	100	3051004	76
224134	27	25230	52	2744	137	3015014	101	3016129	103	3019032B	100	3051005	76
224212	27	2524	137	275	10	3015015	101	3016130	103	3019125B	100	3051006	76
225101	27	2528	137	2752	137	3015016	101	3016131	103	3019126B	100	3051007	76
225102	27	2531	137	2756	137	3015017	101	3016132	103	3019127B	100	3051008	76
225103	27	25530	52	28	10	3015018	101	3016225	103	3019128B	100	3051009	76
225104	27	25701	146	29	11	3015019	101	3016226	103	3019129B	100	3051010	76
225105	27	25914	162	30	10	3015020	101	3016227	103	3019130B	100	3051011	76
225106	27	25941	161	300315	141	3015021	101	3016228	103	3019131B	100	3051012	76
225108	27	2606	137	300319	141	3015022	101	3016229	103	3019132B	100	3051013	76
225123	27	2610	137	300322	141	3015023	101	3016230	103	3025001SMHD	88	3051014	76
225134	27	2611	137	300323	141	3015024	101	3016231	103	3028	143	3051015	76
226100	28	2620	137	300325	141	3015025	101	3016232	103	303101	141	3051016	76
226200	28	2623	137	300326	141	3015026	101	3018002	114	303102	141	3051017	76
226303	28	2627	137	30104	107	3015027	101	3018002B	114	303103	141	3051018	76
226304	28	2629	137	30105	107	3015028	101	3018003	114	303205	141	3051019	76
226305	28	26313	158	30106	107	3015029	101	3018004	114	303319	141	3051020	76
226306	28	26317	155	30107	107	3015030	101	3018005	114	303322	141	30512	107
226340	28	26319	157	30108	107	3015031	101	3018006B	114	303323	141	30514	107
226361	28	2634	137	30109	107	3015032	101	3018008	113	3041001	119	30516	107
226410	28	2636	137	30110	107	3016004	103	3018009	115	3041001B	119	30518	107
226800	28	26376	150	30111	107	3016005	103	3018010	115	3041002	119	30519	107
23	11	26377	150	30112	107	3016006	103	3018011	114	3041002B	119	3052001	63
23007	32	2639	137	30113	107	3016007	103	3018024SM	115	3041003	119	3052001B	63
23010	32	26394	154	30114	107	3016008	103	3019003B	100	3041004	119	3052002	63
23012	32	2640	137	30115	107	3016009	103	3019004B	100	3041004B	119	3052002B	63
233250	36	2644	137	30116	107	3016010	103	3019005B	100	3041005	119	3052003	63
23614	162	2648	137	30117	107	3016011	103	3019006B	100	3041005B	119	3052003B	63
23622	163	2652	137	30118	107	3016012	103	3019007B	100	3041006	119	3052004	63
24020	54	2654	137	30119	107	3016013	103	3019008B	100	3041007	119	3052004B	63
24021	52	2658	137	30120	107	3016014	103	3019009B	100	3041007B	119	3052005	63
24028	52	2661	137	30121	107	3016015	103	3019010B	100	3041009	119	3052005B	63
24029C	54	2665	137	30122	107	3016016	103	3019011B	100	3041009B	119	3052006	63
24030	52	27	11	30123	107	3016017	103	3019012B	100	3041010M	119	3052006B	63
24031	52	2712	137	30124	107	3016018	103	3019013B	100	3042007	64	3052009	64
24035	52	2722	137	30125	107	3016019	103	3019014B	100	3046001	128	3052010	67
24070	53	2727	137	30126	107	3016020	103	3019015B	100	3046002	128	30512	107

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
30514	107	3053003	78	30532	107	3074003P25	60	3134	144	322013B25	89	322058	90
30516	107	3053004	63	3054001C	73	3074003P3	60	313433	140	322015	89	322058B25	90
30518	107	3053004B	63	3054002C	73	3074004P25	60	313434	140	322015B25	89	322059	90
30519	107	3053005	63	3056002	74	3074004P3	60	313435	140	322016	89	322061	90
3052001	63	3053005B	63	3056003C	75	3094001	172	313436	140	322016B25	89	322082	90
3052001B	63	3053006	63	3056004C	77	3095001	149	313437	140	322017	89	322085	90
3052002	63	3053006B	63	3056005	75	3095001A	149	313438	140	322017B25	89	322087	90
3052002B	63	3053007	63	3057002DS	79	3095001B	149	313439	140	322018	89	322089	90
3052003	63	3053007B	63	3057003DS	79	31	10	313440	140	322018B25	89	323000	91
3052003B	63	3053008	64	3057011DS	78	3101010	169	313441	140	322019	89	323001	91
3052004	63	3053010	71	3057013DS	79	310310	140	313445	140	322020	89	323002	91
3052004B	63	3053011	71	3057014	80	310312	140	314015	115	322021	89	323003	91
3052005	63	3053012	71	3057015	81	310315	140	314018	115	322022	89	323004	91
3052005B	63	3053013	71	3057016	83	310316	140	31520	107	322022B25	89	323005	91
3052006	63	3053014	71	3057017	81	310318	140	316015	115	322023	89	323006	91
3052006B	63	3053015	71	3057018	82	310319	140	316310	140	322024	89	323007	91
3052010	67	3053016	71	3057023	78	310320	140	316312	140	322024B25	89	323008	91
3052011	69	3053017	71	3057024	78	310322	140	316315	140	322025	89	323009	91
3052012	69	3053018	71	3057026	79	310323	140	316316	140	322026	89	323010	91
3052013	69	3053019C	68	3057031	80	310327	140	316318	140	322026B25	89	323011	91
3052014	69	3053021C	68	3057034	83	310328	140	316319	140	322027	89	323012	91
3052015	69	3053022C	68	3057041	80	310331	140	316320	140	322028	89	323014	91
3052016	69	3053023C	68	3061001	53	310332	140	316322	140	322029	89	323015	91
3052017	69	3053024C	68	3061002	53	310433	140	316323	140	322030	89	323016	91
3052018	69	3053025C	68	306205	141	310434	140	316327	140	322031	89	323017	91
3052019	69	3053026C	68	3071001	60	310435	140	316328	140	322031B25	89	323018	91
3052020	69	3053027C	68	3071300	60	310438	140	316331	140	322032	89	323020	91
3052022	70	3053028C	68	3071314	60	310439	140	316332	140	322033	89	323022	91
3052023	70	3053029C	68	3071320	60	310440	140	316433	140	322033B25	89	323023	91
3052024	70	3053037	70	3071336	60	310441	140	316434	140	322034	89	323024	91
3052025	70	3053038	70	3071406	60	310442	140	316435	140	322035	89	323025	91
3052026	70	3053039	70	3071410	60	310443	140	316438	140	322036	89	323028	91
3052027	70	3053040	70	3071410D	60	310444	140	316439	140	322037	89	323031	91
3052028	70	3053041	70	3071412	60	311088	148	316440	140	322038	89	323033	91
3052029	70	3053042	70	3072001	60	3111001	60	316441	140	322041	89	323034	91
3052030	70	3053043	70	3072300	60	3111002	60	316444	140	322042	89	323315	141
3052031	70	3053044	70	3072314	60	3120	144	318015	115	322042B25	89	323319	141
3052032	70	3053045	70	3072320	60	3127	144	322000	90	322043	89	323322	141
3052033	70	3053047	72	3072336	60	313310	140	322001	89	322044	89	323323	141
3052034	72	3053048	72	3072406	60	313312	140	322002	89	322045	89	323325	141
3052035	72	3053049	72	3072410	60	313315	140	322002B25	89	322046	89	323328	141
3052036	72	3053050	72	3072410D	60	313316	140	322003	89	322047	89	324000	92
3052037	72	3053051	72	3072412	60	313318	140	322003B25	89	322048	89	324001	92
30522	107	3053052	73	3073002	59	313319	140	322004	89	322049	89	324002	92
30524	107	3053053	73	3073003	59	313320	140	322004B25	89	322050	89	324003	92
30526	107	3053054	73	3073004	59	313322	140	322005	89	322051	89	324004	92
30528	107	3053055	73	3074000P25	60	313325	140	322005B25	89	322052	89	324005	92
30530	107	3053056	73	3074000P3	60	313326	140	322006	89	322053	89	324006	92
3053001	63	3053057	73	3074001P25	60	313327	140	322006B25	89	322054	89	324007	92
3053001B	63	3053058C	68	3074001P3	60	313328	140	322007	89	322055	89	324008	92
3053002	63	3053059C	68	3074002P25	60	313331	140	322007B25	89	322056	90	324009	92
3053002B	63	3053060C	68	3074002P3	60	313332	140	322013	89	322057	90	324010	92

# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
324011	92	324080	92	326013	88	333310	141	3512032C	65	3523701C	69	357320	78
324012	92	324081	92	326014	88	333312	141	35120525	65	3523993C	67	359001	141
324013	92	325000	93	326015	88	333315	141	3512052C	65	3524993C	69	359002	141
324015	92	325001	93	326015B25	88	333318	141	3512055B	65	353009	69	359003	141
324017	92	325002	93	326016	88	333320	141	351205XB	65	353202	73	359004	141
324018	92	325003	93	326017	88	333321	141	3512072C	65	3532022C	73	359005	141
324019	92	325004	93	326019	88	333322	141	3512232C	65	3532025B	73	359010	141
324020	92	325005	93	326020	88	333323	141	3512252C	65	353203	73	36	12
324021	92	325006	93	326021	88	334000	94	3512272C	65	3532035B	73	37	12
324022	92	325007	93	326022	88	334001	94	3513091C	68	3532993C	73	3712	143
324025	92	325008	93	326023	88	334003	94	3513121C	68	3533012C	73	3713	143
324026	92	325009	93	326024	88	334004	94	3513151C	68	3535092C	73	3716	143
324027	92	325010	93	326025	88	334005	94	3513181C	68	3535095B	73	3717	143
324028	92	325011	93	326026	88	334006	94	3513211C	68	3535252C	73	3718	143
324029	92	325012	93	326027	88	334009	95	3513241C	68	3535255B	73	3719	143
324030	92	325013	93	327001	93	334010	95	3513271C	68	3545973C	75	3720	143
324031	92	325014	93	327002	93	334011	94	351327XC	68	3545984C	75	3721	143
324033	92	325015	93	331000	94	334012	95	3513301C	68	3545993C	75	372110	57
324034	92	325016	93	331001	94	334014	95	3513331C	68	3547121C	75	372110B	57
324035	92	325017	93	331002	94	334020	94	3513361C	68	3547123B	75	372110BB	57
324036	92	325018	93	332000	94	334021	94	3514962C	68	3547321C	75	372110P2	57
324037	92	325019	93	332001	94	334022	94	3514972C	68	3547323B	75	372110P5	57
324038	92	325020	93	332003	94	334023	95	3514996C	68	3547521C	75	372118P5	57
324039	92	325021	93	332004	94	334025	95	3515997C	71	3547523B	75	372156	57
324040	92	325022	93	332006	94	341008	121	3520031C	64	3547721C	75	372156B	57
324041	92	325023	93	332008	94	3510052C	64	3520071C	64	3547723B	75	372156BB	57
324043	92	325024	93	332010	94	35101125	64	3520075B	64	3548121C	75	372156P2	57
324044	92	325025	93	332011	94	3510112C	64	3520075C	64	3548122B	75	372156P5	57
324050	92	325026	93	332012	94	3510115B	64	3520111C	64	3548123B	75	3724	143
324051	92	325027	93	332013	94	3510115C	64	3520231C	64	3548321C	75	372414P2	57
324052	92	325030	93	332014	95	351011XB	64	3520251C	64	3548322B	75	372414P5	57
324053	92	325031	93	332015	95	351011XC	64	3520291C	64	3548323B	75	372418P2	57
324054	92	326000	88	332016	95	3510192C	64	3520671C	64	3548521C	75	372418P5	57
324055	92	326000B25	88	332017	94	35104725	64	3520691C	64	3548523B	75	372424P2	57
324056	92	326001	88	332019	95	3510472C	64	3521091C	67	3548721C	75	372424P5	57
324057	92	326002	88	332020	95	3510475C	64	3521111C	67	3548723B	75	3725	143
324058	92	326002B25	88	332021	95	351047XB	64	3521131C	67	3555511C	74	3726	143
324059	92	326003	88	333000	94	351047XC	64	3521993C	64	3555531C	74	372606	57
324060	92	326003B25	88	333001	94	351064	64	3522031C	65	3557121C	74	372606B	57
324063	92	326005	88	333003	94	3510641C	64	3522051C	65	3557123B	74	372606C	57
324064	92	326005B25	88	333004	94	3510643B	64	3522055C	65	3557181C	74	372606P2	57
324065	92	326006	88	333006	94	3510831C	70	3522071C	65	3557183B	74	372606P5	57
324066	92	326006B25	88	333008	94	3510851C	70	3522311C	68	3558131C	75	372610	57
324067	92	326007	88	333010	94	3510871C	70	3522391C	66	3558133B	75	372610B	57
324068	92	326008	88	333012	94	3511051C	66	3522395C	66	3567611C	77	372610BB	57
324070	92	326008B25	88	333014	95	3511071C	66	3522993C	66	3567841C	77	372610P2	57
324071	92	326009	88	333015	95	3511111C	66	3523181C	69	3567951C	77	372610P5	57
324072	92	326009B25	88	333016	95	3511112C	66	3523211C	69	357020	81	372614	57
324073	92	326010	88	333017	94	3511131C	66	3523241C	69	357030	82	372614B	57
324074	92	326011	88	333019	95	3511132C	66	3523271C	69	357120	78	372614BB	57
324076	92	326011B25	88	333020	95	3511151C	66	3523301C	69	357220	78	372614P2	57
324078	92	326012	88	333021	95	3511152C	66	3523331C	69	357220C	78	372614P5	57

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
372618	57	373013BX	59	373218BX	59	3827	144	40010	127	4031035	174	406023	139
372618B	57	373015A	59	373234A	59	3829	144	40012	127	4031036	174	40-92	11
372618BB	57	373015BX	59	373234BX	59	3831	144	40-07	11	4031037	178	40EXT	11
372618P2	57	373034A	59	373238A	59	3834	144	40-08	11	4031038	178	40REP	11
372618P5	57	373034BX	59	373238BX	59	3836	144	40152	11	4031039	177	410010	139
372624	57	373058A	59	373250A	59	3839	144	40153	11	4031040	177	410015	139
372624B	57	373058BX	59	373250BX	59	3840	144	4020	144	4031041	177	410018	139
372624BB	57	373078A	59	373258A	59	3844	144	40-21	11	4031042	177	410019	139
372624P2	57	373078BX	59	373258BX	59	3845	144	40-22	11	4031043	177	410020	139
372624P5	57	373090A	59	373278A	59	3846	144	4023	144	4031044	177	410021	139
372645F	57	373090BX	59	373278BX	59	38904	127	4027	144	4031045	178	410022	139
372656	57	3731	143	373290A	59	38905	127	4029	144	4031047	178	410023	139
372656B	57	373100A	59	373290BX	59	38906	127	403015	139	4031048	175	410026	139
372656BB	57	373100BX	59	3733	143	38908	127	403017	139	4031049	174	410028	139
372656P2	57	373110A	59	373300A	59	38909	127	403019	139	4031051	175	4102	145
372656P5	57	373110BX	59	373300BX	59	38910	127	403021	139	4031052	175	4103	145
372666	57	373111A	59	373312A	59	38912	127	403022	139	4031053	178	4104	145
372666BB	57	373111BX	59	373312BX	59	39004	127	403023	139	4031054	178	4105	145
372666P5	57	373112A	59	373314A	59	39005	127	403025	139	4031055	179	413010	139
3728	143	373112BX	59	373314BX	59	39006	127	403028	139	4031056	179	413012	139
372803C	57	373113A	59	373318A	59	39007	127	4031001	174	4031058	176	413015	139
372810	57	373113BX	59	373318BX	59	39008	127	4031002	175	4033005	181	413016	139
372810B	57	373114A	59	373334A	59	39010	127	4031003	175	4033006	181	413018	139
372810BB	57	373114BX	59	373334BX	59	39104	127	4031004	175	4033007	181	413019	139
372810P2	57	373118A	59	373338A	59	39105	127	4031006	176	4033010	181	413020	139
372810P5	57	373118BX	59	373338BX	59	39106	127	4031007	176	4033011	181	413021	139
372818	57	373130A	59	373358A	59	39107	127	4031008	177	4033012	181	413022	139
372818B	57	373130BX	59	373358BX	59	39108	127	4031009	177	4033014	181	413023	139
372818BB	57	373134A	59	373378A	59	39109	127	4031010	177	4033016	181	413024	139
372818P2	57	373134BX	59	373378BX	59	39110	127	4031011	177	4034	144	413026	139
372818P5	57	373138A	59	373400A	59	39112	127	4031012	177	40-34	11	416010	139
372945F	57	373138BX	59	373400BX	59	394001	172	4031013	177	4036	144	416012	139
372956	57	373150A	59	373412A	59	394002	172	4031014	175	4039	144	416015	139
372956B	57	373150BX	59	373412BX	59	39404	127	4031015	178	4040	144	416016	139
372956BB	57	373158A	59	373414A	59	39405	127	4031016	178	4044	144	416018	139
372956P2	57	373158BX	59	373414BX	59	39406	127	4031017	178	4045	144	416020	139
372956P5	57	373170A	59	373418A	59	39408	127	4031018	178	4048	144	416022	139
372960	57	373170BX	59	373418BX	59	394100	172	4031020	179	4049	144	420-001	180
372960BB	57	373178A	59	373434A	59	39604	127	4031021	178	40-50	11	420-002	180
372960P5	57	373178BX	59	373434BX	59	39606	127	4031022	179	40-51	11	420-003	180
372966	57	373190A	59	373438A	59	39608	127	4031023	179	4052	144	420-004	180
372966BB	57	373190BX	59	373438BX	59	400015	139	4031024	178	40-52	11	42410	122
372966P5	57	3732	143	3735	143	400017	139	4031025	176	4054	144	42411	122
373000	58	373200A	59	373500BX	59	400019	139	4031026	176	4056	144	42412	122
373001	58	373200BX	59	373512BX	59	400021	139	4031027	176	4057	144	42413	122
373002	58	373210A	59	373600BX	59	400022	139	4031028	176	4058	144	42414	122
373003	58	373210BX	59	3813	144	400023	139	4031029	175	4060	144	42416	122
373004	58	373212A	59	3820	144	400025	139	4031030	176	406015	139	42418	122
373005	58	373212BX	59	3821	144	40004	127	4031031	176	406017	139	42420	121
373011A	59	373214A	59	3823	144	40005	127	4031032	174	406019	139	4261	144
373011BX	59	373214BX	59	3824	144	40006	127	4031033	175	406021	139	4263	144
373013A	59	373218A	59	3825	144	40008	127	4031034	174	406022	139	4265	144

# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
4266	144	43615	126	45409	126	46913	124	47913	123	502015	146	5060C	26
4267	144	43616	126	45411	126	46914	124	47915	123	502018	146	5102	145
42904	129	43624	126	45412	126	46915	124	47917	123	502019	146	5103	145
42906	129	43697	126	45513	126	47009	124	48109	123	502021	146	5104	145
42908	129	43904	129	45516	126	47010	124	48111	123	502022	146	5105	145
42910	129	43906	129	45606	126	47011	124	48113	123	502024	146	5120C	26
42912	129	43908	129	45608	126	47012	124	48211	123	502025	146	5180C	26
42914	129	43910	129	45611	126	47013	124	48213	123	502038	146	52201	170
42916	129	4402011	179	45612	126	47014	124	48215	123	502039	146	52202	170
42918	129	4402012	179	45613	126	47015	124	48311	123	502041	146	52203	170
42920	129	4402013	179	45614	126	47016	124	48313	123	502042	146	52204	170
42922	129	4402014	179	45616	126	47017	124	48315	123	502044	146	52205	170
42924	129	4402015	179	459001	140	47306	122	48317	123	502045	146	52206	170
42926	129	4402016	179	459002	140	47307	122	48508	124	502046	146	52207	170
42928	129	4402017	180	459003	140	47308	122	48509	124	502047	146	52208	170
42930	129	4402018	180	459004	140	47309	122	48511	124	502048	146	52401	168
42932	129	4402019	180	459005	140	47310	122	48513	124	502049	146	52402	168
42934	129	4402020	180	459006	140	47311	122	48609	124	502101	145	52403	168
42936	129	4402021	180	459007	140	47312	122	48709	124	5026000	96	52404	168
42940	129	4402022	180	459008	140	47313	122	48711	124	5026001	96	52405	168
43016	128	4402023	179	46606	123	47314	122	48713	124	5026002	96	52406	168
43018	128	4403217	182	46607	123	47315	122	48715	124	5026003	96	52407	168
43020	128	4403218	182	46608	123	47316	122	48717	124	5026005	96	52408	168
43022	128	4403219	182	46609	123	47317	122	49600	128	5026006	96	52409	168
43024	128	4403221	182	46610	123	47318	122	49612	128	5026008	96	52410	168
43028	128	4403222	182	46611	123	47319	122	49613	128	5026009	96	52425	168
43032	128	4403223	182	46612	123	47320	122	49614	128	5026011	96	52435	168
43034	128	4403225	182	46613	123	47321	122	49615	128	5026012	96	52445	168
43036	128	4403226	182	46614	123	47322	122	49616	128	5026013	96	52490	168
43041	128	4403227	182	46615	123	47324	122	49617	128	5026015	96	5240C	26
43047	128	4403229	182	46616	123	47326	122	49618	128	5026016	96	52601	167
4305	145	4403230	182	46617	123	47328	122	49904	125	5026019	96	52602	167
43058	128	4403231	182	4668	144	47332	122	49905	125	5026020	96	52603	167
4306	145	4403233	182	4669	144	47406	122	49906	125	5026021	96	52604	167
43074	128	4403234	182	4670	144	47407	122	49907	125	5026022	96	52605	167
432001	183	4403235	182	4671	144	47408	122	49908	125	5026023	96	52606	167
432002	183	4403237	182	46711	123	47409	122	49909	125	5026024	96	52607	167
432003	183	4403238	182	46713	123	47410	122	49910	125	504053	146	52635	167
432004	183	4403239	182	46716	123	47411	122	49911	125	504054	146	52655	167
432005	183	44202	128	4672	144	47412	122	49912	125	504057	146	53006	26
432006	183	44801	128	4673	144	47413	122	49913	125	504058	146	530062	26
43604	126	45002	128	4674	144	47414	122	49914	125	504059	146	53201	170
43605	126	45307	126	4675	144	47415	122	49915	125	504060	146	53202	170
43606	126	45308	126	46809	124	47416	122	49916	125	504061	146	53203	170
43607	126	45309	126	46810	124	47417	122	49918	125	504062	146	53204	170
43608	126	45311	126	46811	124	47418	122	49920	125	504063	146	53205	170
43609	126	45312	126	46812	124	47420	122	49922	125	50508	96	53206	170
43610	126	45313	126	46813	124	47422	122	49924	125	50512	96	53207	170
43611	126	45314	126	46909	124	47424	122	49998	125	50516	96	53208	170
43612	126	45316	126	46910	124	47811	125	49999	125	50520	96	53209	170
43613	126	45406	126	46911	124	47909	123	502009	146	50524	96	53210	170
43614	126	45407	126	46912	124	47911	123	502014	146	50532	96	53211	170



STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
53212	170	53906	171	60123	104	60528	104	62308	106	63131	103	63714	99
53213	170	53907	171	60124	104	60529	104	62309	106	63132	103	63715	99
53214	170	53908	171	60125	104	60530	104	62310	106	63137	114	63716	99
53215	170	53909	171	60126	104	60531	104	62311	106	63221	114	63717	99
53216	170	53910	171	60127	104	60532	104	62312	106	63425	102	63718	99
53217	170	53911	171	60128	104	60607	113	62313	106	63426	102	63719	99
53218	170	53912	171	60129	104	60608	113	62314	106	63427	102	63720	99
53219	170	53913	171	60130	104	60609	113	62315	106	63428	102	63721	99
53220	170	53914	171	60131	104	60610	113	62316	106	63429	102	63722	99
53221	170	53915	171	60132	104	60612	113	62317	106	63430	102	63723	99
53222	170	53916	171	60136	114	60614	113	62318	106	63431	102	63724	99
53223	170	53917	171	60137	114	60616	113	62319	106	63432	102	63725	99
53224	170	53918	171	60147	114	61108	96	62320	106	63503	102	63726	99
53225	170	54009	171	60148	114	61112	96	62321	106	63504	102	63727	99
53226	170	54019	171	60172	113	61116	96	62322	106	63505	102	63728	99
53226MT	170	54113	171	60221	114	61120	96	62323	106	63506	102	63729	99
53227	170	5412	26	60432	110	61124	96	62324	106	63507	102	63730	99
53227MT	170	54122	26	60436	110	61128	96	62325	106	63508	102	63731	99
53228	170	54125	172	60440	110	61132	96	62326	106	63509	102	63732	99
53228MT	170	541614	164	60444	110	61140	96	62327	106	63510	102	63737	114
53401	168	543715	164	60448	110	61148	96	62328	106	63511	102	63904	99
53402	168	546	26	60452	110	61170	96	62329	106	63512	102	63905	99
53403	168	5462	26	60456	110	61204	110	62330	106	63513	102	63906	99
53404	168	550QC	26	60460	110	61206	110	62331	106	63514	102	63907	99
53405	168	58100	26	60464	110	61208	110	62332	106	63515	102	63908	99
53406	168	58200	26	60468	110	61210	110	63104	103	63516	102	63909	99
53407	168	58300	26	60472	110	61212	110	63105	103	63517	102	63910	99
53535	168	59100	26	60480	110	61214	110	63106	103	63518	102	63911	99
53545	168	59200	26	60504	104	61216	110	63107	103	63519	102	63912	99
53601	167	59400	26	60505	104	61218	110	63108	103	63520	102	63913	99
53602	167	60101	104	60506	104	61220	110	63109	103	63521	102	63914	99
53603	167	60102	104	60507	104	61222	110	63110	103	63522	102	63915	99
53604	167	60103	104	60508	104	61224	110	63111	103	63523	102	63916	99
53605	167	60104	104	60509	104	61226	110	63112	103	63524	102	63918	99
53606	167	60105	104	60510	104	61228	110	63113	103	63525	102	63920	99
53607	167	60106	104	60511	104	61230	110	63114	103	63526	102	63922	99
53625	167	60107	104	60512	104	61232	110	63115	103	63527	102	63924	99
53635	167	60108	104	60513	104	61611	113	63116	103	63528	102	63926	99
53645	167	60109	104	60514	104	61620	113	63117	103	63529	102	63928	99
536QC	26	60110	104	60515	104	61630	113	63118	103	63530	102	63930	99
53700	168	60111	104	60516	104	62104	110	63119	103	63531	102	63932	99
53701	168	60112	104	60517	104	62108	110	63120	103	63532	102	63950	34
53702	168	60113	104	60518	104	62112	110	63121	103	63704	99	641	12
53703	168	60114	104	60519	104	62116	110	63122	103	63705	99	64100	37
53704	168	60115	104	60520	104	62120	110	63123	103	63706	99	64101	37
53705	168	60116	104	60521	104	62124	110	63124	103	63707	99	64102	37
53706	168	60117	104	60522	104	62128	110	63125	103	63708	99	6411	142
53901	171	60118	104	60523	104	62132	110	63126	103	63709	99	64110	34
53902	171	60119	104	60524	104	62304	106	63127	103	63710	99	64111	34
53903	171	60120	104	60525	104	62305	106	63128	103	63711	99	6412	142
53904	171	60121	104	60526	104	62306	106	63129	103	63712	99	6416	142
53905	171	60122	104	60527	104	62307	106	63130	103	63713	99	6418	142

# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
6424	142	65904	37	66611	110	67524	102	7245	145	73136	114	73628	102
6428	142	65905	37	66612	110	67525	102	7248	145	73137	114	73629	102
6431	142	6612	143	66613	110	67526	102	7249	145	73138	114	73630	102
64310	34	6613	143	66614	110	67527	102	7252	145	73149	114	73631	102
64311	34	6617	143	66615	110	67528	102	7254	145	73304	101	73632	102
6432	142	6618	143	66616	110	67529	102	7256	145	73305	101	7364	145
6435	142	66200	37	66617	110	67530	102	7257	145	73306	101	7365	145
64494	34	66202	37	66618	110	67531	102	7258	145	73307	101	7367	145
64495	34	66211	37	66619	110	67532	102	7260	145	73308	101	7373	145
64497	34	6622	143	66620	110	67825	102	7261	145	73309	101	73825	104
64498	34	66222	37	66621	110	67826	102	7263	145	73310	101	73826	104
64499	34	6623	143	66622	110	67827	102	7265	145	73311	101	73827	104
64550	34	66231	37	66623	110	67828	102	7266	145	73312	101	73828	104
64610	34	6627	143	66624	110	67829	102	7267	145	73313	101	73829	104
64801	35	6629	143	66625	110	67830	102	7268	145	73314	101	73830	104
64802	35	66300	36	66626	110	67831	102	7269	145	73315	101	73831	104
64901	35	66301	36	66627	110	67832	102	7270	145	73316	101	73832	104
64902	35	66302	36	66628	110	68	12	7271	145	73317	101	74	12
64903	35	66305SL	36	66630	110	6848	142	7272	145	73318	101	7402	146
64904	35	6631	143	66632	110	6849	142	7273	145	73319	101	7403	146
64905	35	6633	143	66704	110	6852	142	7274	145	73320	101	7404	146
64907	35	6634	143	66708	110	6854	142	7275	145	73321	101	7405	146
64908	35	6635	143	66712	110	6858	142	73	12	73322	101	7406	146
65101	35	6636	143	66716	110	6860	142	73104	101	73323	101	7407	146
65102	35	6637	143	66720	110	6949	143	73105	101	73324	101	7520	144
65103	35	6638	143	66724	110	6950	143	73106	101	73325	101	7523	144
65104	35	6639	143	66728	110	6952	143	73107	101	73326	101	7527	144
65105	35	6640	143	66732	110	6954	143	73108	101	73327	101	7529	144
65106	35	66400	36	6702	142	6955	143	73109	101	73328	101	7534	144
6512	142	66401	36	6703	142	6956	143	73110	101	73329	101	7536	144
6520	142	66402	36	6711	142	6959	143	73111	101	73330	101	7539	144
65201	35	66403	36	6712	142	6961	143	73112	101	73331	101	7540	144
65202	35	66404	36	67504	102	7004	142	73113	101	73332	101	7544	144
65205	35	66405	36	67505	102	7005	142	73114	101	73425	102	7545	144
65207	35	66406	36	67506	102	71	12	73115	101	73426	102	757KB	12
6523	142	6641	143	67507	102	71825	104	73116	101	73427	102	7648	144
6527	142	6642	143	67508	102	71826	104	73117	101	73428	102	7649	144
6529	142	6643	143	67509	102	71827	104	73118	101	73429	102	7652	144
6534	142	6644	143	67510	102	71828	104	73119	101	73430	102	7654	144
6536	142	66501	36	67511	102	71829	104	73120	101	73431	102	7658	144
6539	142	66506	36	67512	102	71830	104	73121	101	73432	102	7660	144
6540	142	66510	36	67513	102	71831	104	73122	101	7349	145	7720	145
6544	142	666012	36	67514	102	71832	104	73123	101	7350	145	7723	145
6545	142	66604	110	67515	102	7220	145	73124	101	7352	145	7727	145
65601	37	666042	36	67516	102	7223	145	73125	101	7355	145	7729	145
65602	37	66605	110	67517	102	7227	145	73126	101	7356	145	7734	145
65603	37	66606	110	67518	102	7229	145	73127	101	7358	145	7736	145
65604	37	666062	36	67519	102	7234	145	73128	101	7359	145	7739	145
65605	37	66607	110	67520	102	7236	145	73129	101	7361	145	7740	145
65901	37	66608	110	67521	102	7239	145	73130	101	73625	102	7744	145
65902	37	66609	110	67522	102	7240	145	73131	101	73626	102	7745	145
65903	37	66610	110	67523	102	7244	145	73132	101	73627	102	7748	145

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #		
7749	145	80136	105	80217	138	81135	105	8334	137	88886	121	91162	109
7752	145	80137	105	80220	138	81136	105	8335	137	88887	121	91163	109
7754	145	80138	105	80221	138	81137	105	8336	137	88888	121	91164	109
7756	145	80139	105	80222	138	81138	105	8337	137	88889	121	92001	64
7757	145	80140	105	80230	138	81139	105	8338	137	88890	121	92005	64
7758	145	80141	105	80232	138	81140	105	8339	137	88894	121	92007	64
7760	145	80142	105	80235	138	81141	105	8340	137	88898	121	92011	64
7761	145	80143	105	80238	138	81142	105	8341	137	90102	121	92019	64
7763	145	80144	105	8024	136	81143	105	8342	137	90106	121	92025	64
7765	145	80145	105	80242	138	81144	105	8343	137	90108	114	92027	64
7766	145	80146	105	80260	138	81145	105	8344	137	90112	121	92035	64
7767	145	80147	105	8028	136	81146	105	8461	142	90165	109	92039	64
7855	145	80148	105	8031	136	81147	105	8463	142	90166	109	92045	64
7859	145	80149	105	8032	136	81148	105	8465	142	90168	109	92047	64
7865	145	80150	105	80327	138	81149	105	8467	142	90170	109	92053	64
80101	105	80151	105	80334	138	81150	105	8564	143	90172	109	92073	64
80102	105	80152	105	80340	138	81151	105	8565	143	90174	109	92075	64
80103	105	80153	105	8035	136	81152	105	8568	143	90176	109	92077	64
80104	105	80154	105	81101	105	81153	105	8569	143	90180	109	92079	64
80105	105	80155	105	81102	105	81154	105	87908	120	90184	109	92083	70
80106	105	80156	105	81103	105	81155	105	87910	120	90188	109	92085	70
80107	105	80157	105	81104	105	81156	105	87912	120	90192	109	92087	70
80108	105	80158	105	81105	105	81157	105	87914	120	90196	109	92105	66
80109	105	80159	105	81106	105	81158	105	87916	120	91133	109	92107	66
80110	105	80160	105	81107	105	81159	105	87920	120	91134	109	92111	66
8011	136	80161	105	81108	105	81160	105	87924	120	91135	109	92113	66
80111	105	80162	105	81109	105	8120	136	87950	121	91136	109	92115	66
80112	105	80163	105	81110	105	8123	136	87950CS	121	91137	109	92117	66
80113	105	80164	105	81111	105	8127	136	88706	120	91138	109	92119	66
80114	105	80165	105	81112	105	8129	136	88708	120	91139	109	92135	66
80115	105	80166	105	81113	105	8134	136	88710	120	91140	109	92139	66
80116	105	80167	105	81114	105	8136	136	88712	120	91141	109	92141	66
80117	105	80168	105	81115	105	8139	136	88714	120	91142	109	92143	66
80118	105	80169	105	81116	105	8140	136	88716	120	91143	109	92145	66
80119	105	80170	105	81117	105	8144	136	88804	120	91144	109	92147	66
8012	136	80171	105	81118	105	8145	136	88805	120	91145	109	92163	66
80120	105	80172	105	81119	105	8148	136	88806	120	91146	109	92165	66
80121	105	80173	105	81120	105	8149	136	88807	120	91147	109	92169	66
80122	105	80174	105	81121	105	8152	136	88808	120	91148	109	92171	66
80123	105	80175	105	81122	105	8154	136	88809	120	91149	109	92173	66
80124	105	80176	105	81123	105	8158	136	88810	120	91150	109	92175	66
80125	105	80177	105	81124	105	8160	136	88811	120	91151	109	92177	66
80126	105	80178	105	81125	105	8202	138	88812	120	91152	109	92201	65
80127	105	80179	105	81126	105	8203	138	88813	120	91153	109	92203	65
80128	105	8018	136	81127	105	8312	137	88814	120	91154	109	92205	65
80129	105	80180	105	81128	105	8317	137	88815	120	91155	109	92207	65
80130	105	80181	114	81129	105	8318	137	88816	120	91156	109	92221	65
80131	105	80183	114	81130	105	8322	137	88818	120	91157	109	92223	65
80132	105	80185	139	81131	105	8323	137	88820	120	91158	109	92225	65
80133	105	80187	139	81132	105	8327	137	88822	120	91159	109	92227	65
80134	105	80209	138	81133	105	8331	137	88824	120	91160	109	92230	70
80135	105	80213	138	81134	105	8333	137	88874	121	91161	109	92231	70

# NUMERICAL INDEX

STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #	STOCK #	PAGE #
92232	70	92499	71	93063	64	93205	65	93346	69	93551	74	94204	76
92233	70	92507	71	93067	64	93207	65	93347	69	93553	74	94206	76
92234	70	92509	71	93069	64	93211	65	9335	142	93711	74	94209	76
92235	70	92511	71	93073	70	93213	65	93356	69	93712	74	94211	76
92236	70	92513	71	93077	70	93215	65	93357	69	93714	74	94212	76
92238	70	92515	71	93079	70	93219	65	93358	69	93715	74	94215	76
92240	70	92517	71	93103	67	93219C	65	93359	69	93717	74	94216	76
92306	68	92525	71	93105	67	93221	65	93360	69	93718	74	9423	142
92309	68	92527	71	93107	67	93221C	65	93361	69	93720	74	94231	76
92312	68	92529	71	93109	67	93223	65	93362	69	93721	74	94232	76
92315	68	92531	71	9311	142	93225	65	93363	69	93722	74	94251	76
92317	68	92533	71	93111	67	93226	65	93364	69	93723	74	94252	76
92318	68	92535	72	93113	67	93227	65	93365	69	93724	74	9427	142
92320	68	92536	72	93115	67	93230	65	93366	69	93728	74	94271	76
92321	68	92537	72	9312	142	93231	65	93367	69	93730	74	94272	76
92323	68	92538	72	93123	67	93232	65	93368	69	93732	74	9429	142
92324	68	92539	72	93125	67	93235	66	93369	69	93734	74	94291	76
92326	68	92540	72	93127	67	93237	66	93370	69	93736	74	94311	76
92327	68	92543	72	93129	67	93239	66	93371	69	93741	75	94312	76
92329	68	92545	72	93131	67	9324	142	93372	69	93748	77	94316	76
92330	68	92547	72	93133	67	93241	66	93373	69	93749	77	94331	76
92332	68	92549	72	93135	67	93245	66	93403	71	93755	77	94332	76
92333	68	92551	72	93139	67	93247	66	93405	71	93756	77	94335	76
92335	68	92563	73	93141	67	93249	66	93407	71	93758	77	94336	76
92336	68	92565	73	93143	67	93253	66	93409	71	93761	77	9434	142
92338	68	92567	73	93145	67	93255	66	93411	71	93763	77	94351	76
92361	68	92569	73	93147	67	93257	66	93413	71	93765	77	94352	76
92365	68	92571	73	93149	67	93263	66	93415	71	93771	77	94356	76
92369	68	92573	73	93151	67	93265	66	93419	71	93776	77	9436	142
92371	68	92595	72	93155	67	93267	66	93423	71	93777	77	94371	76
92377	68	92599	72	93157	67	9328	142	93427	71	93781	77	94372	76
92379	68	93003	64	93159	67	93306	69	93430	70	93782	77	9439	142
92381	68	93007	64	93161	67	93309	69	93431	70	93783	77	9440	142
92383	68	93011	64	93163	67	9331	142	93432	70	93784	77	94414	76
92403	71	93017	64	93165	67	93312	69	93433	70	93786	77	94416	76
92407	71	93019	64	93167	67	93315	69	93434	70	93787	77	94434	76
92411	71	93021	64	93173	67	93318	69	93435	70	93789	77	94436	76
92415	71	93023	64	93175	67	9332	142	93436	70	93792	77	9444	142
92419	71	93025	64	93177	67	93321	69	93438	70	93793	77	9445	142
92423	71	93029	64	93179	67	93324	69	93439	70	93795	77	94712	75
92427	71	93036	70	9318	142	93327	69	93463	72	93797	77	94732	75
92431	71	93037	70	93181	67	93330	69	93467	72	93811	75	94752	75
92437	71	93038	70	93183	67	93333	69	93471	72	93813	75	94772	75
92443	71	93039	70	93185	67	93336	69	93475	72	93815	75	94812	75
92451	71	93040	70	93186	66	93337	69	93481	72	93817	75	94832	75
92467	71	93041	70	93187	66	93339	69	93503	73	94112	76	94852	75
92483	71	93043	64	93188	66	93340	69	93509	73	94132	76	94872	75
92489	71	93047	64	93189	66	93341	69	93515	73	94152	76	9502	142
92491	71	93049	64	93191	66	93342	69	93521	73	94172	76	9503	142
92493	71	93053	64	93193	66	93343	69	93525	73	9420	142	97094	156
92495	71	93057	64	93195	66	93344	69	93543	73	94202	76	9712	143
92497	71	93059	64	93203	65	93345	69	93545	73	94203	76	9717	143

STOCK #	PAGE #	STOCK #	PAGE #
9718	143	M444/-3/4N	30
9722	143	M444/-3/8N	30
9723	143	M444/-5/8N	30
9727	143	M444/S4N	30
9731	143	M444/SB6N	30
97311	156		
97312	153		
9733	143		
9734	143		
9735	143		
9736	143		
9737	143		
9738	143		
9739	143		
9740	143		
9741	143		
9742	143		
9743	143		
9744	143		
97606	152		
98000	163		
98146	160		
98614	159		
99706	120		
99708	120		
99712	120		
99714	120		
99716	120		
99904	120		
99905	120		
99906	120		
99907	120		
99908	120		
99909	120		
99910	120		
99911	120		
99912	120		
99913	120		
99914	120		
99915	120		
99916	120		
99918	120		
99920	120		
99922	120		
99924	120		
M444/1N	30		
M444/-1/2N	30		
M444/-1/4N	30		
M444/-1/8N	30		
M444/1-1/2N	30		
M444/1-1/4N	30		
M444/2N	30		

Notes:

**Notes:**

**Notes:**



**Notes:**

**Notes:**

Notes:



**WISE-GRIP** **MARATHON** **QUICK-GRIP** **SPEEDBOR** **STRAIT-LINE** **Unibit** **HANSON**

Customer Service  
Phone: 1-800-866-5740  
Fax: 1-800-866-5742

©2008

**IRWIN**<sup>®</sup>  
Industrial Tools

Huntersville, NC 28078  
[www.irwin.com](http://www.irwin.com)

IRWFL08