

Multiple awards



OUR PERFORMANCE
makes THE DIFFERENCE



Englisch - English Version 11



ORIGINAL Welding table systems 28 | 16
ProfiLine | ExpertLine | EcoLine | HobbyLine
Welder's abc
New product developments



Formulas and Tables
Parts list System 28 and 16
Benefits of the ORIGINAL demmeler welding table system
Interesting industry applications
Sales-competency worldwide

Demmeler – from the German Allgäu region into the world

From garage operation to model company



1961 Founded by Ludwig Demmeler as a garage operation



Currently: a total of 35.000 m² factory area / 10.000 m² hall area



Preface

For nearly five decades now, the name of Demmeler has been synonymous with innovative flagship solutions in machine and systems engineering. Five decades, during which a small turning shop, with a great level of high commitment and ingenuity, has developed into a modern, powerful and successful international company with over 200 employees.

With its products, Demmeler is now setting industry standards for the benefit of its customers. In 1992, understanding the meaning of uncompromising quality, and Demmeler's consistent objective of optimising economic efficiency while maintaining maximum flexibility, led Demmeler to the unique concept of a 3D modular clamping system. During the development phase, care was taken from the beginning to make sure that the multi-patented tools were fully able to meet the high demands on precision, speed and efficiency. At the first presentation already, Demmeler got a great response and received highest awards such as the German Federal Award (Deutscher Bundespreis) and the Bavarian State Prize for Innovation (Bayerischer Staatspreis für Innovation). It is with great pride that we can say that our original Demmeler 3-D clamping system has become an international industrial standard. Demmeler innovations are being used everywhere: from small local metalworking shops to major corporations. Our clamping systems have a wide range of applications and uses, for instance: steel construction, sheet metal processing, robot technology, assembly and measuring equipment, laser welding, laser cutting, prototype construction and body construction.

We consider it our obligation to continually develop our clamping systems and to invest into our company headquarters location of Germany in order to continue to be the perfect business partner for our customers because of an excellent price-performance ratio.

Demmeler 3D clamping system – often imitated but never duplicated!

Yours,

Johannes Demmeler / Managing Director

Introduction: The world of Demmeler 3D clamping systems

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3D welding tables



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Accessory sets for the professional welder



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Set 155, Set 255, Set 355

Demmeler novelties:

NEW

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- Shifting feet Page 106-107
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- Power screwdriver etc.

Manipulator

NEW



54 | 55 Ergonomix
M2000, M4000, M8000, M16000
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P4000, LP8000, LP16000

3D welding tables for manipulators



58 | 59 3D welding table Okto

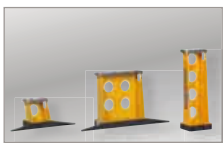
... Variety of products for professionals – order brochures now!



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Contents – It's your choice

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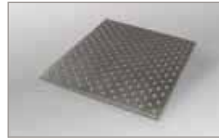


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- 78 | Clamping tables and exchangeable perforated table tops with holes Okto

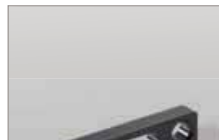


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NEW



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NEW



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Contents – It's your choice

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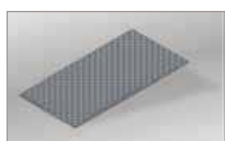
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ABC for welders

ABC



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Sales Training & Competence

State-of-the-art production processes

Global sales network

Demmeler online – available 24 h

Demmeler – success in detail

Demmeler – Global sales competency



Sales, development and training centre



Our friendly employees

Global sales and training competency

through sound training in the sales and development centre on site!



The large global demand for high-quality Demmeler products can be seen by our above-average percentage of exports. We accommodate the wishes of our customers' high requirements with a wide-ranging sales structure and a global retail network. Our core area of expertise is finding the best solution for our customers by providing professional advice. Demmeler is active around the world and always available where you need them.



First-class, practice-oriented training and advice at Demmeler



State-of-the-art machining at our production site in Heimertingen (Germany)

Modern production processes and an ongoing drive toward optimisation mean that the Demmeler products have a unique price-performance ratio.



Global trade fair presence

www.demmeler.com – also available for you online

www.demmeler.com – Information on the company!



Please visit our new website!

- A wide range of product information
- D28 / D16 welding tables/ assembly benches online with interesting campaigns and offers
- Brochures also available as online flash catalogues
- In "media information", we inform you about our highlights from our product and business divisions
- Apply online for our current vacancies or find out about our vocational training opportunities
- If you simply want to find out more about Demmeler: Just visit us at:

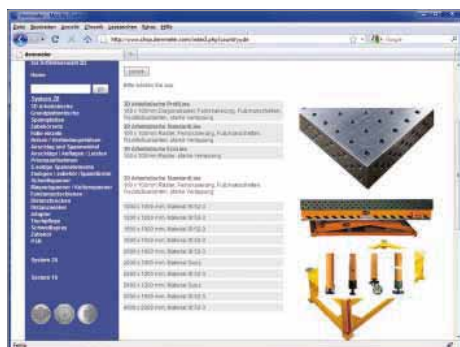
www.demmeler.com

Online shop: Original Demmeler welding and assembly tables

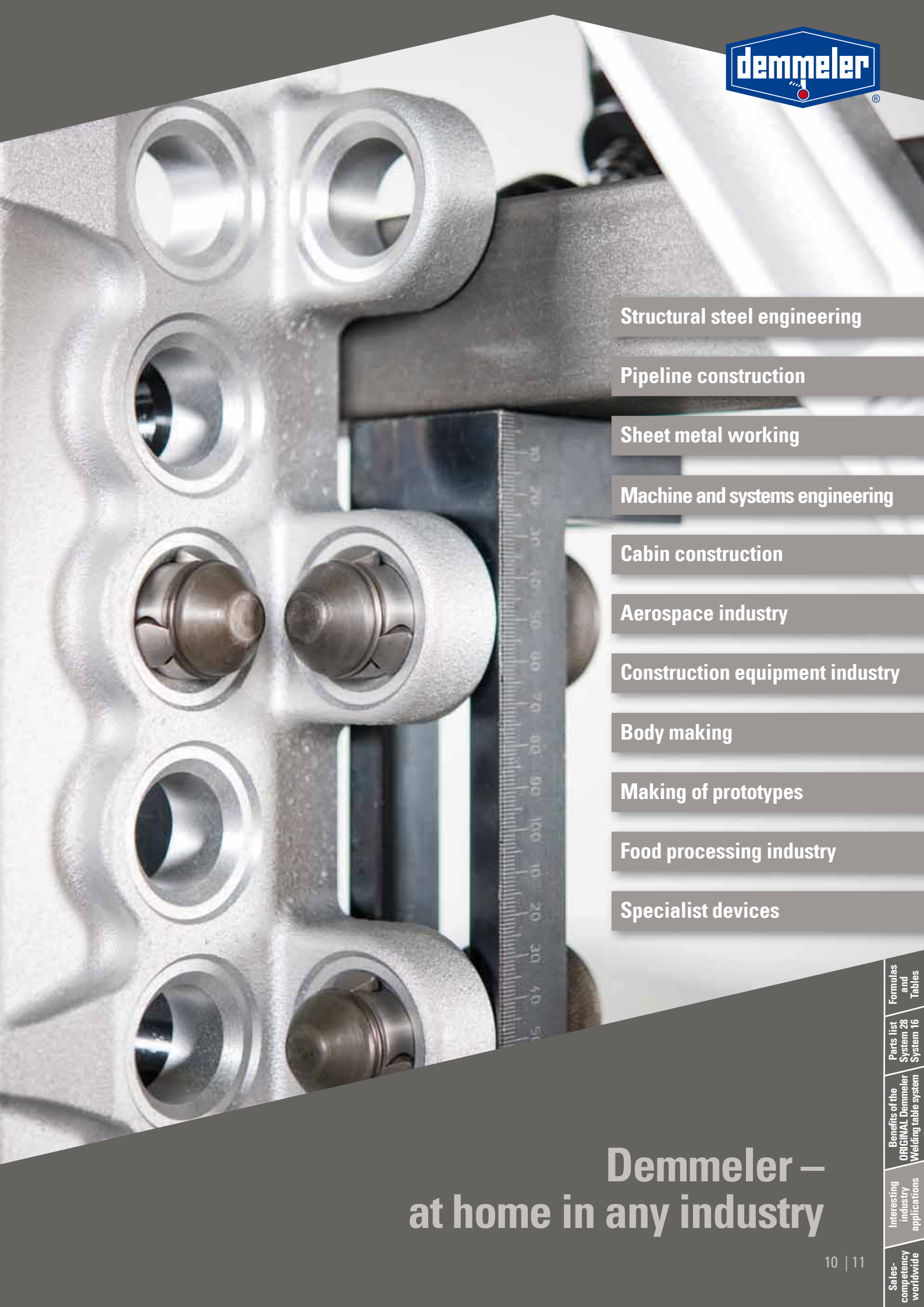


This is where you find everything you need for clamping of your workpieces!

Our professional field service supports you with pleasure, of course. You can also quickly find out about your on site consultant by using our representative search online. We, at Demmeler, are also always there to assist you with advice and deeds.



- 1 operation by understandable image illustration
- 2 Big set choice from among the list of extensive accessories made by Demmeler.
- 3 Generous equipment range to satisfy all your needs. Logical product links take you to your goal quickly.
- 4 Detailed descriptions of the products give you all the information you need.
- 5 Numerous application examples with final product context
- 6 Comprehensive Demmeler item list



Structural steel engineering

Pipeline construction

Sheet metal working

Machine and systems engineering

Cabin construction

Aerospace industry

Construction equipment industry

Body making

Making of prototypes

Food processing industry

Specialist devices

**Demmeler –
at home in any industry**

Formulas
and
Tables

Parts list
System 28
System 16

Benefits of the
ORIGINAL Demmeler
Welding table system

Interesting
industry
applications

Sales-
competency
worldwide

Demmeler – Railing construction in record time

Structural steel engineering



Demmeler applications



Pipeline construction



Demmeler applications



**Demmeler – The right solution
for each pipe diameter**

Demmeler – gets your machine tool in shape

Sheet metal working



Demmeler applications



Gen. machine and systems engineering



Demmeler applications



Demmeler –
indispensable in many industries by now

Versatile – through modular design

Cabin construction



Demmeler applications



Aerospace industry

Demmeler applications



Device for helicopter tail boom.

Construction equipment industry



Demmeler applications



Go for it – with Demmeler

Vehicle construction

Demmeler applications



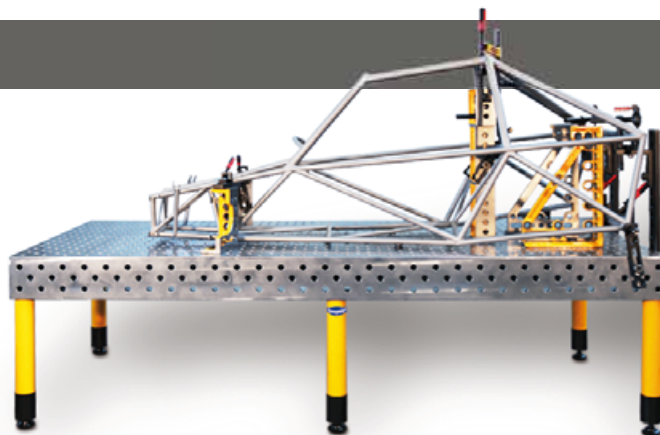
Demmeler applications



Making of prototypes

A great number of vehicle manufacturers, when it comes to the making of prototypes, rely on the merits of the Demmeler 3D clamping system.

This means you have shorter development times and thus save costs.



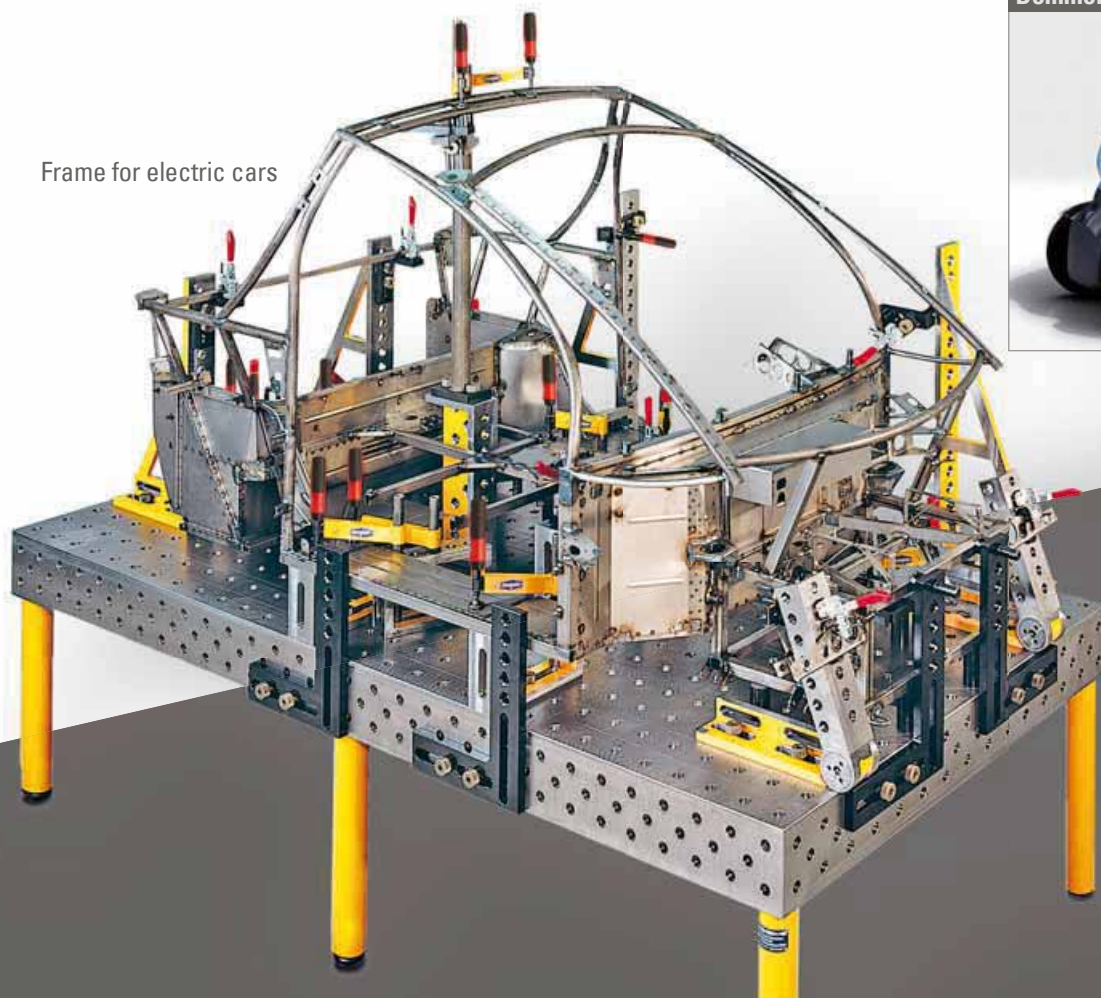
Demmeler applications



Demmeler applications

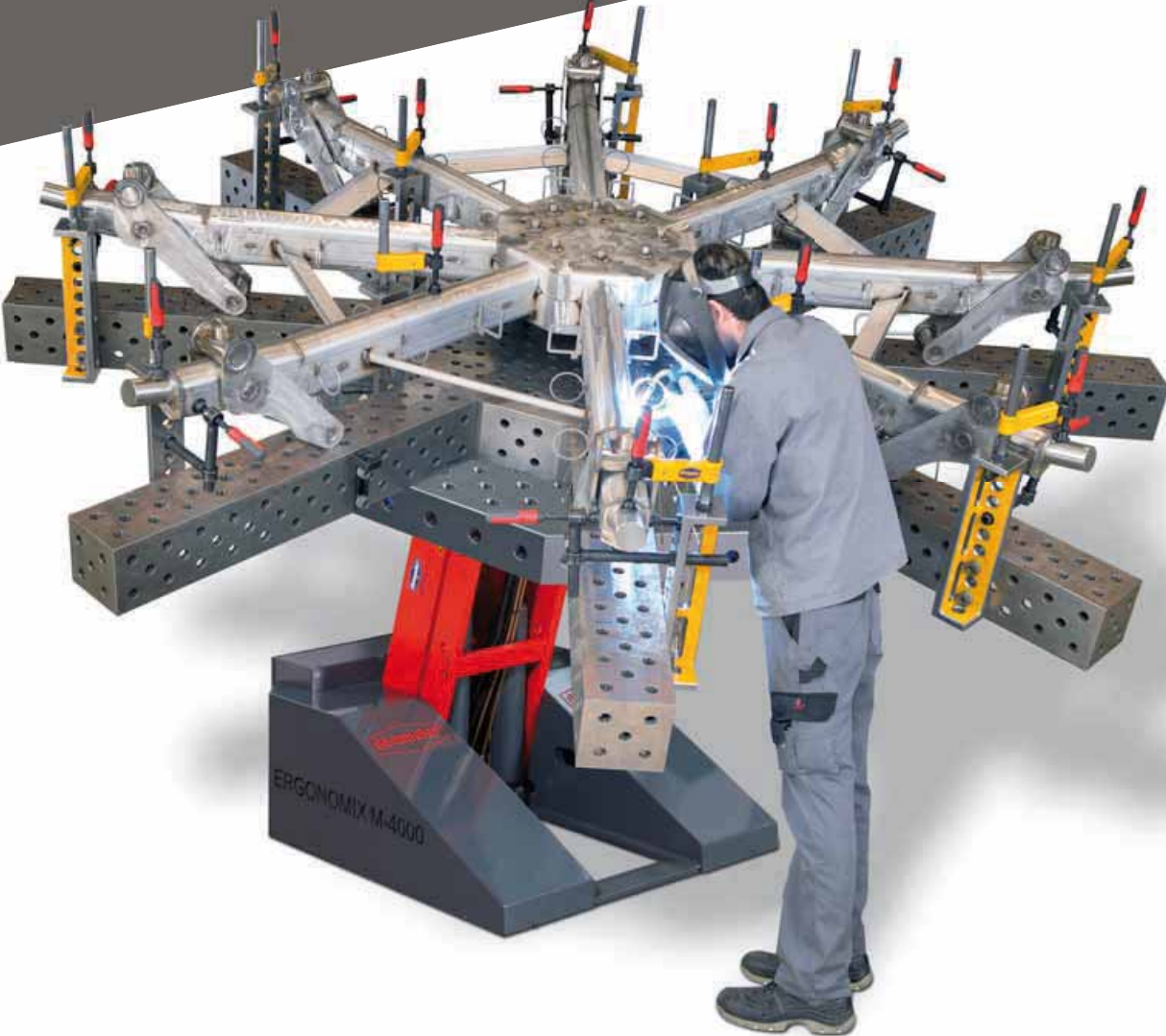


Frame for electric cars



Demmeler – enjoy our diversity

Food processing industry



Demmeler applications



Source: KRONES AG

Demmeler applications



Source: KRONES AG

Special device for parts of a bottling plant in the beverage industry



Short throughput time of your components and easy handling
thanks to devices made by Demmeler

Demmeler applications

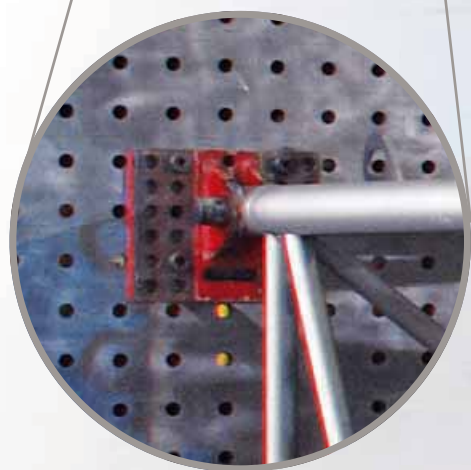


Source: KRONES AG

Original Demmeler welding jig – for precise-fit workpieces



Crawler cranes



Lattice mast junction point

Demmeler applications



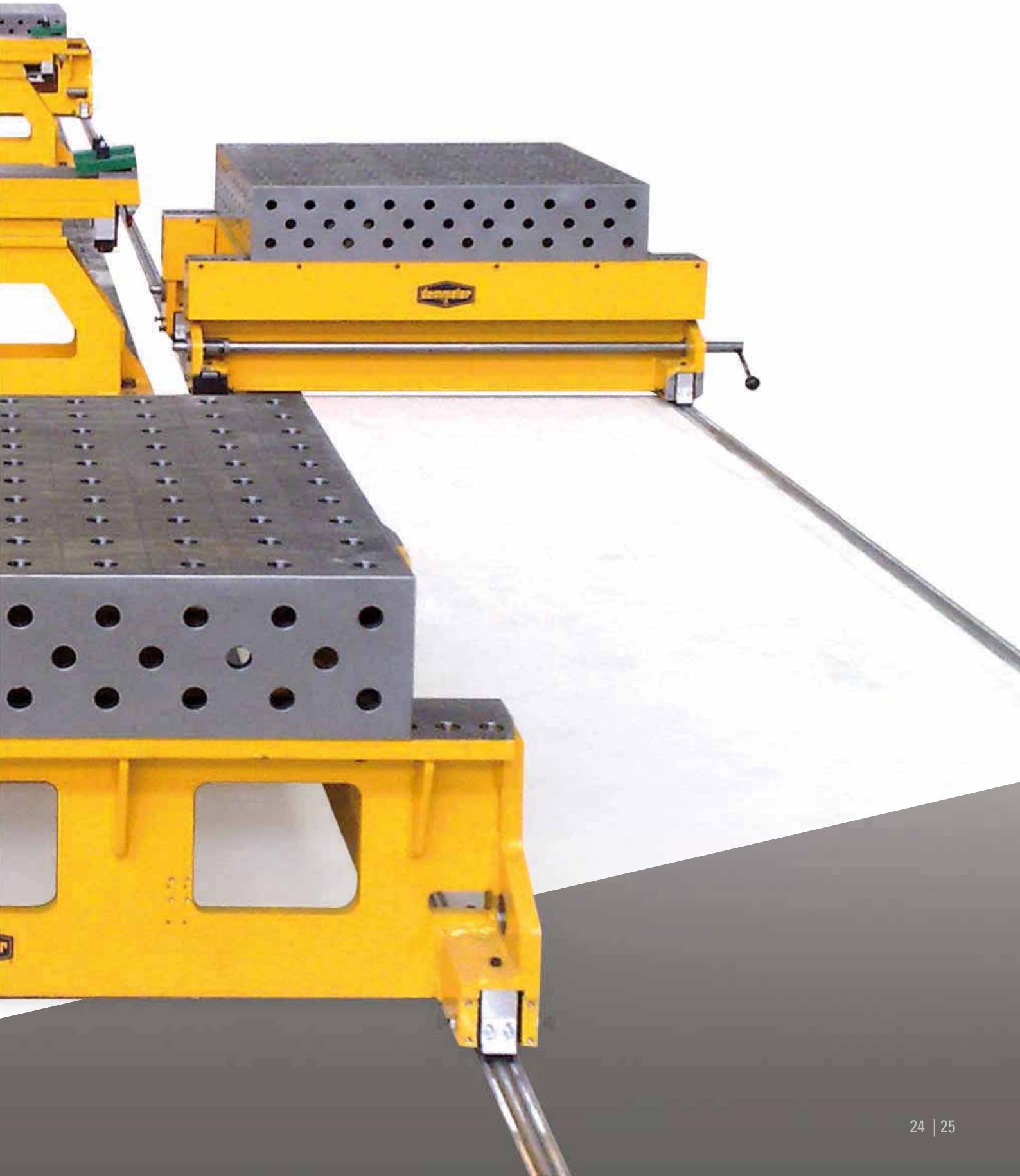


Individually tailored to your component size



Demmeler rail system – and it works

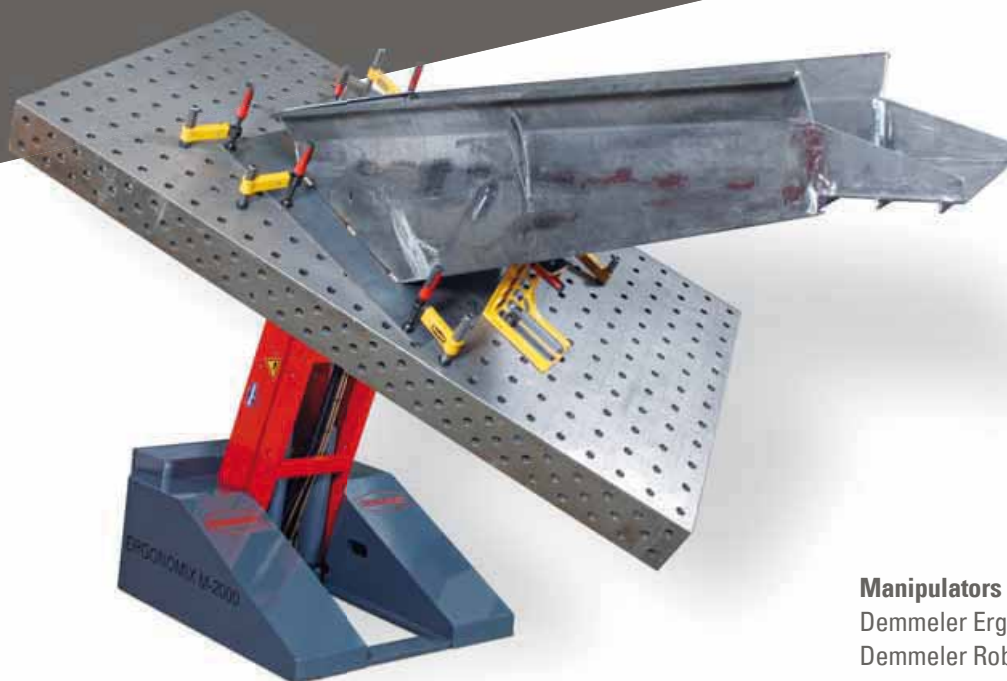




Manipulators – Welding always in ideal position

3D clamping system on manipulator

NEW



Manipulators
Demmeler Ergonomix
Demmeler Robotix on page 54-57.

Demmeler applications





Economic efficiency

Modularity down to the finest detail

The original – patented

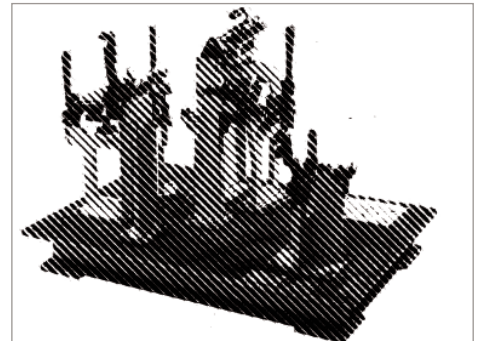
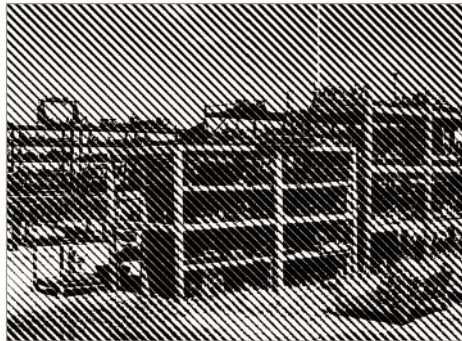
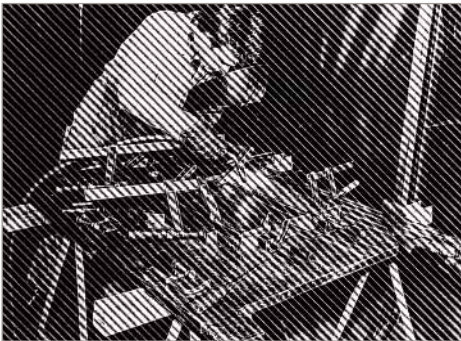
2 system sizes – 28 and 16

4 product ranges for every need

Invest into the future – 5 benefits of the Demmeler clamping systems

1) Welding fixtures are a thing of the past – the future belongs to 3D economical clamping systems

No more fixture construction of yesteryear!



Does your state-of-the-art company also have certain production areas where it seems as though technology had almost come to a standstill?

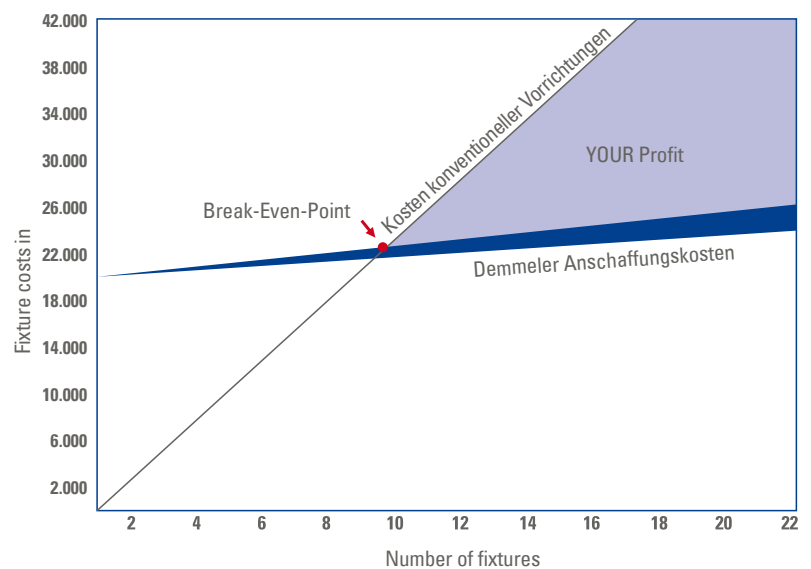
Then you have come to the right place at Demmeler! We offer you qualified advice in addition – FREE OF CHARGE!

Your ROI can be achieved faster than you think!

Investments must pay off!

With Demmeler 3D clamping systems, you not only achieve your return on investment very quickly but also increase your productivity.

Do your own calculation and check your equipment including its storage, maintenance, preparation before use times and equipping times.



Calculation example: Depending on application

Original Demmeler 3D-Clamping systems – Economical, flexible, patented, proven !

The Universal 3D work bench and welding table can meet all horizontal and vertical requirements. Precisely, quickly and in no time at all, you can erect your system with these modular parts: machine housing, racks, frames, crossbars, brackets, railings, stairs, doors, control cabinets, metal cladding panelling etc. Conventional devices, elaborate and cost-intensive, are therefore a thing of

the past. This system, for every workpiece you process, allows you achieve quick, precise adjustment and fixing of the target dimensions. During the entire stapling and welding process, your individual weldments are clamped at the corresponding surfaces or points and thus are in the best possible position.



Flexibility through state-of-the-art structure and grid system

The sturdy, high loading-bearing 3-D work and welding table is machined on all 5 sides with a regular hole grid pattern. As a result, all workpieces can be infinitely positioned and clamped by the appropriate clamping components of the system using the patented positioning and clamping bolts on the complete 3-D work and welding table. Several 3-D tables can be connected directly together on any of the 5 sides or spacers. This modular system fulfils a versatile function: Place, fasten and clamp.



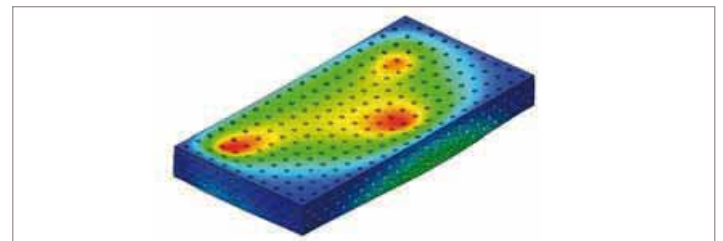
Simple reproducibility of clamping devices

By means of CAD, reproducible virtual jigs can be very comfortably set up already in the planning process.



Accuracy down to the smallest detail!

3D coordinate measuring machines, laser measuring systems and optical test equipment are used for this purpose to ensure the high-precision requirements of the products.



Optimisation of all system components by FEM-calculations

The 3D workbench and welding table only needs a light coating of antispatter agent or spray once a day for additional protection, to make it insensitive to dirt, scale, spatter and sand. Proven technology in practice, many times over.

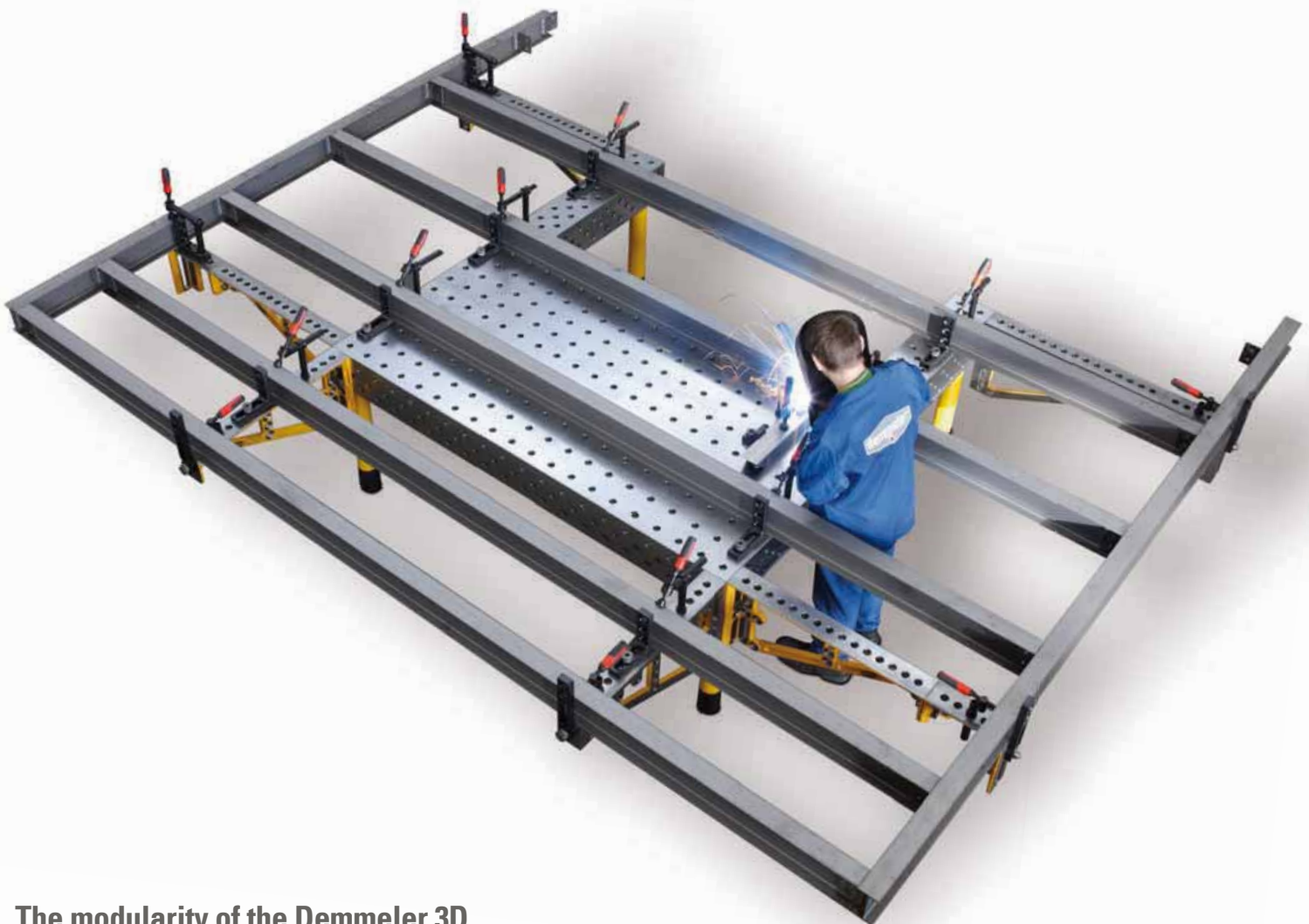
Robust table surface



Beating the rest – with original Demmeler 3D concepts

2) Cost-efficient start – efficient and modular enlargement

Modular down to detail!

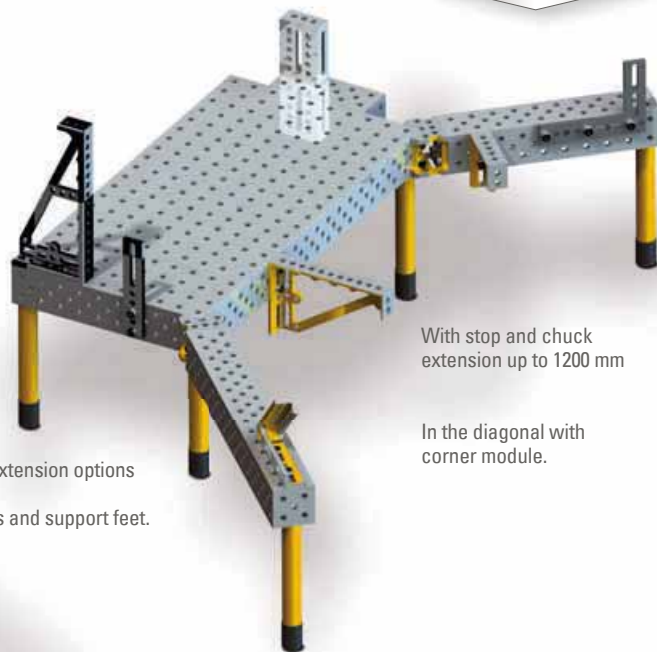


The modularity of the Demmeler 3D clamping system allows you to start with a small welding table but still clamp XXL workpieces in the future.

Ingeniously simple - simply ingenious!

PATENT
by demmeler

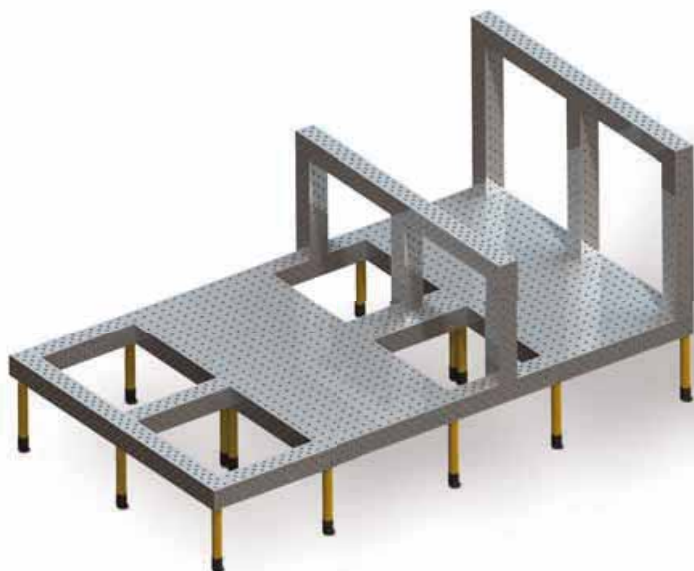
You can arbitrarily extend your 3D welding table in all directions through the modular design.



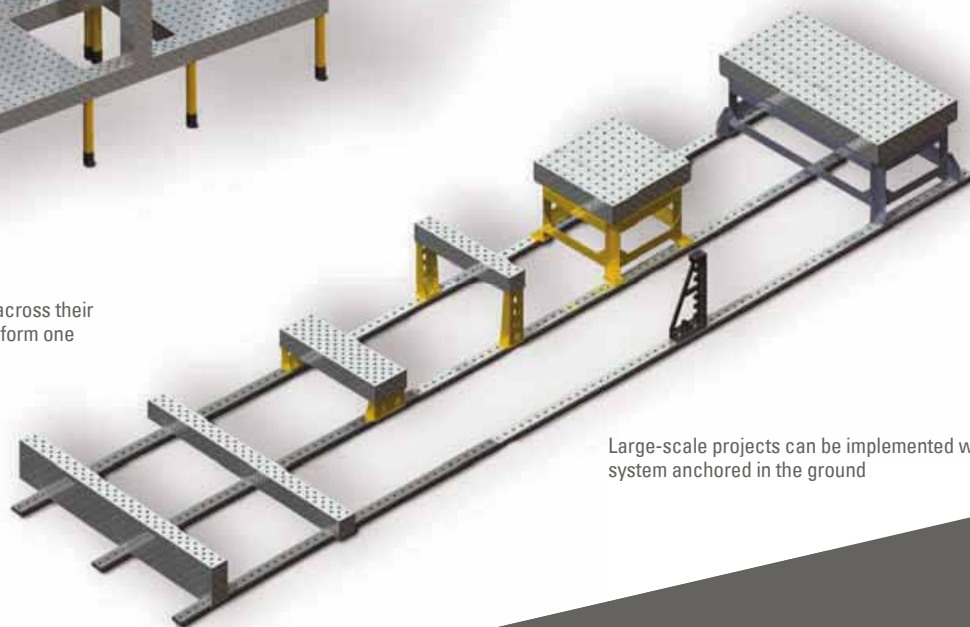
With stop and chuck extension up to 1200 mm

In the diagonal with corner module.

Great extension options with spacers and support feet.



Several tables can be connected together across their length or width, with or without spacers, to form one large plate.



Large-scale projects can be implemented with the rail system anchored in the ground

3) The ORIGINAL – often imitated but never duplicated patented quality

The new generation: World first DEMMELER PPS bolt D28!

WORLDWIDE
BREAKTHROUGH

The PPS bolt is a quantum leap for your most diverse clamping tasks!

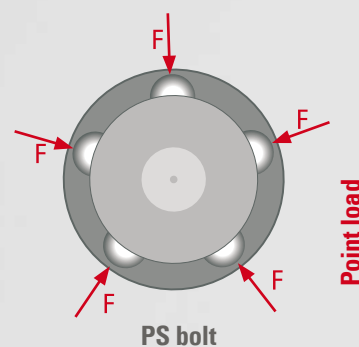
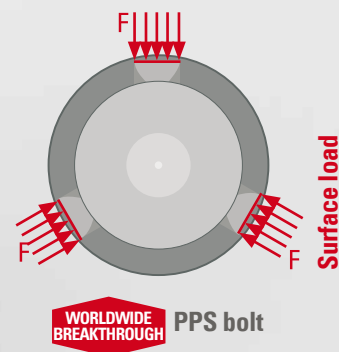
3 polygon shaped expansion elements combine major advantages für supporting axial forces:

- precise self-centring
- force-fit all-over
- self-locking
- contact-protecting (damage to system bore impossible)

Your benefits:

- Suitable for power screwdriver
- Increased strength due to significantly higher material profile
- Simple and comfortable clamping due to optimised force distribution in the expansion segments
- Very low sensitivity to dirt due to the polygon design
- Standard at Demmeler for high life-span: high-strength, hardened and sharpened
- DEMMELER develops a new dimension of applications due to perfect force distribution





Optimised force distribution

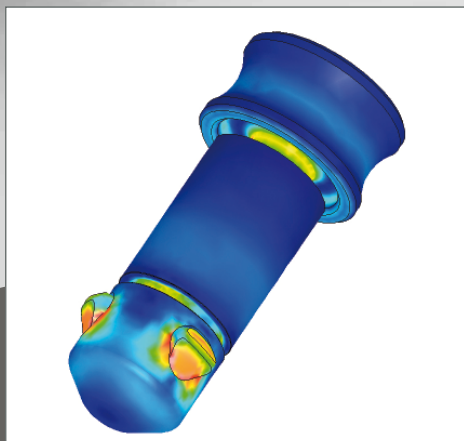
Simulation with the latest FEM technology

Material-protecting clamping

Damaging the system bore is impossible even with high clamping forces due to even force distribution.

The new PPS bolt

Opens up numerous new clamping options



Contact area 100 times larger compared to the PS bolt

PATENT
by demmeler



Your benefits:

- 1 Highest clamping force with high clamping stroke
- 2 Ergonomically knurled bolt head for fast one-hand operation
- 3 With wide clamping ranges
- 4 High quality, hardened steel; High precision through ground finish
- 5 O-Rings prevent simultaneous rotation when tightening and at the same time clean the system bores.
- 6 3 clamping polygons, which are mechanically secured against falling out!

PATENT
by demmeler



Your benefits:

- 1 Workpiece clamping true to position and location through differential compensation
- 2 Tension tube can be replaced quickly; available in different lengths
- 3 with adjustment ring for height fixing
- 4 Actuation type can be changed (Spindle, short boring spindle, quick-action clamping cylinder, pneumatic cylinder)
- 5 Pressure plate can be exchanged when clamping other materials like e.g. stainless steel
- 6 Intake by any system bore (self-clamping effect)



New Clamping pads System 28



Your benefits:

- 1 Handle with a special surface and rubberised inserts for rich and non-slip grip!
- 2 Spindle with integral hexagonal surface for perfect clamping with standard straddle wrench!
- 3 Modularity down to detail: The Demmeler clamping bush can be used in any system bore. This allows for a number of clamping options in a few simple steps!
- 4 Clamping handle can be tilted up to 15° at full power transmission, therefore enough room for welding!
- 5 Pressure plate can be exchanged and also be used in system bores as support or abutment surface. Standard for all System 28 screw clamps New thrust and support piece (see p. 132)

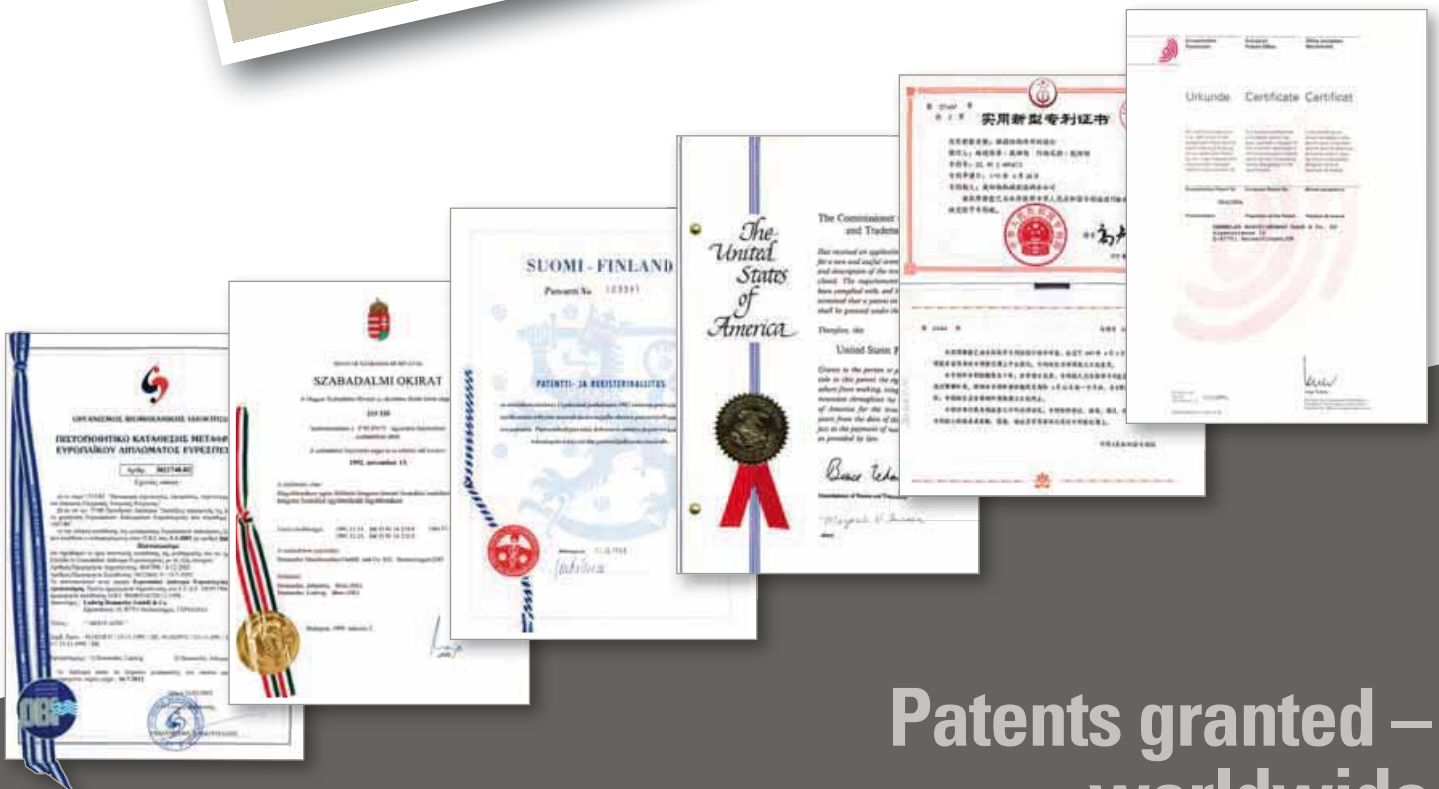


Patented flagship solutions

Our patented and frequently award-winning 3D-clamping systems have established themselves as a worldwide industry standard. The system sizes D28 and D16 can be interconnected almost compatibly, thereby resulting in countless areas of application. The modular concept allows you to set up very complex and precise fixtures in the shortest possible time. With both systems, you achieve a high degree of economic efficiency for both individual pieces as well as series produced parts.



Awards: Bayerischer Staatspreis and Deutscher Bundespreis (Bavarian State Award and German National Award)

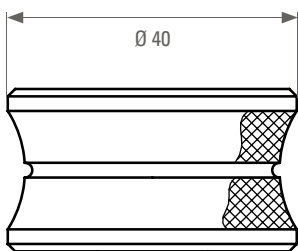


Patents granted – worldwide

4) System sizes 28 and 16 – for individual demands

Our preferred system size 28 – for everyday and large weldments

THE ORIGINAL 
Made in Germany



- Bores Ø 28
- Grid 100 x 100 mm
- Bore spacing 100 mm
- Table leg height 200 mm
- Material thickness approx. 25 mm
- For everyday and heavy weldments

28

In our product tables,
please take note of the
system size information

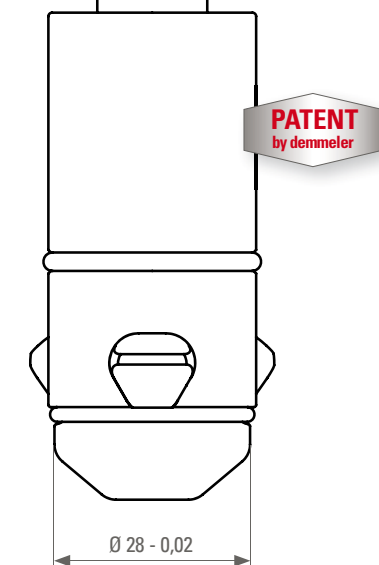
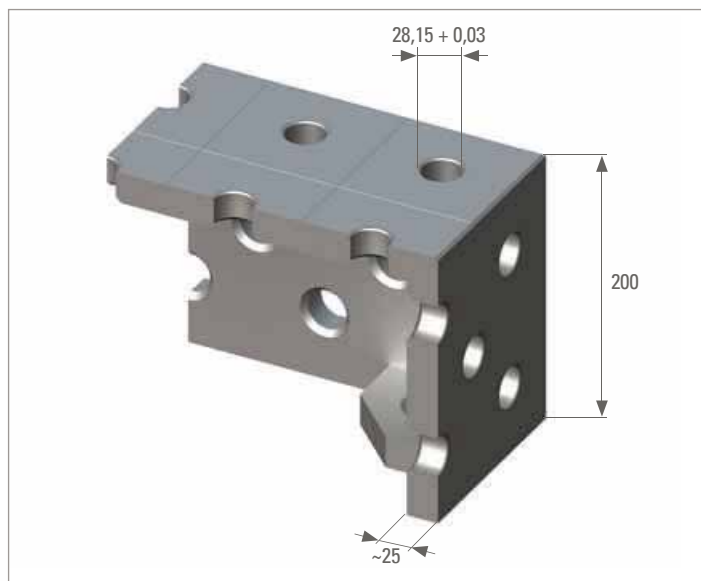


Illustration 1:1



• an extensive clamping product
range and range of accessories is
available for our system size 28

Our system size 16 – for filigree requirements!

THE ORIGINAL 
Made in Germany

16

In our product tables, please take note of the system size information

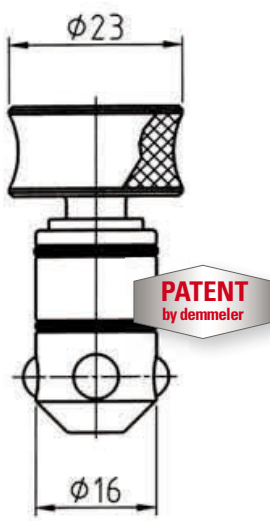
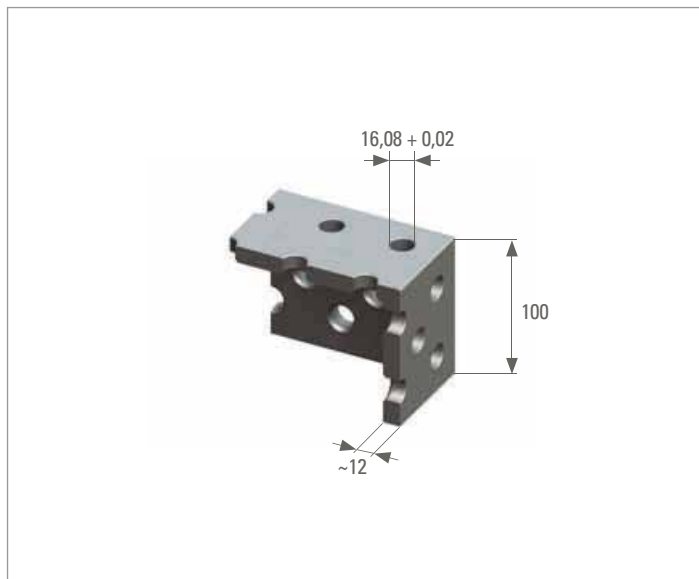


Illustration 1:1

- Bores Ø 16
- Grid 50 x 50 mm
- Bore spacing 50 mm
- Table leg height 100 mm
- Material thickness approx. 12 mm
- For easy clamping tasks



- Small but with substance – our range for system size 16



Demmeler –
Your investment
into the future

5) Profi-, Expert- & EcoLine welding tables— three lines for every need

ProfiLine P28

PATENT
by demmeler



- + ... for playing in the higher league! 80 % more bores through the diagonal grid— thus, with additional clamping options
- + 1 mm precision scaling completely integrated
- + grid lines every 100 mm + numbering
- + Axis indicators in x- and y-direction
- + with high fins and strongly ribbed, hence high intrinsic stability
- + Leg sleeves at the table feet prevent snagging snagging of welding cables and protect the thread from dirt
- + stable M30 x 2 threaded foot spindle ± 30 mm adjustable
- + Modularly expandable in all five directions over the entire length, width and height
- + without metre rule, it is possible to very quickly erect accurate clamping jigs
- + various foot type versions available

ExpertLine D28 / D16

PATENT
by demmeler

- + ... sound technology for everyday use!
- + 1 mm precision scaling completely integrated
- + grid lines every 100 mm + numbering
- + Axis indicators x, y
- + with high fins and strongly ribbed, hence high intrinsic stability
- + Leg sleeves at the table feet prevent snagging of welding cables and protect the thread from dirt
- + stable M30 x 2 threaded foot spindle ± 30 mm adjustable
- + Modularly expandable in all five directions over the entire length, width and height
- + without metre rule, it is possible to very quickly erect accurate clamping jigs
- + various foot type versions available



EcoLine E28 / E16

- ... this is how inexpensive starting off can be!
- modular system design
- upward compatible with other Demmeler product lines
- quality accessories available
- Modularly expandable in all five directions over the entire length, width and height
- low-cost 3D welding tables and tools for beginners
- Table foot versions: Standard foot, heavy duty wheels



Experience EcoLine – Products for beginners from page 161!

HobbyLine H28

NEW

HobbyLine – cost-efficient alternative for little charge – page 171 forward!

Modular, variable, expandable, sophisticated!

PATENT
by demmeler

	without	standard with pendular foot disc	Telescoping legs	Heavy duty wheels	Anchoring legs	Connecting frame	Table foot spacer angle	shifting foot	Scissors-type lifting platform	Base rail
P28	+	+	+	+	+	+	+	+	+	+
D28	+	+	+	+	+	+	+	+	+	+
E28	+	+		+						
D16	+	+	+	+	+				on request	
E16	+	+		+						

ⓘ ATTENTION: You will receive the item number on request when ordering the table top individually













Demmeler Product world – Placing, fastening, clamping

More than 20 Demmeler new products:

NEW

Manipulator	Page 54-57
Standard: VerschiebfüÙe	Page 64-65
PPS-Bolzen	Page 106-107
Power-Schrauber etc.	Page 108-109

Product range

	Welding tables
	Accessory set
	Manipulator
	Base elements
	Stops
	Brackets
	Supports
	Clamping means
	Clamping tools
	Accessories
	Care products
	ABC for welders

NEW





**OUR PERFORMANCE
makes THE DIFFERENCE**

Formulas
and
Tables

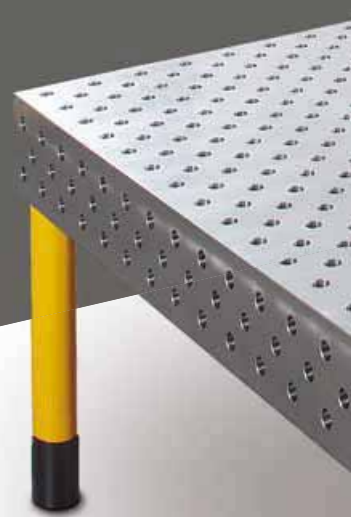
Parts list
System 28
System 16

Benefits of the
ORIGINAL Demmeler
Welding table system

Interesting
industry
applications

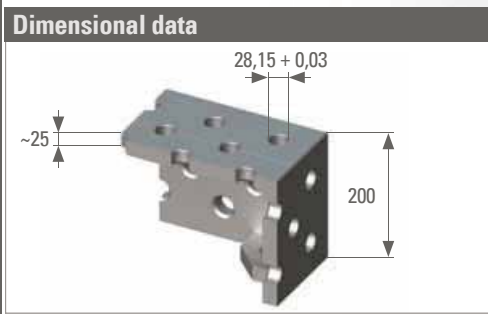
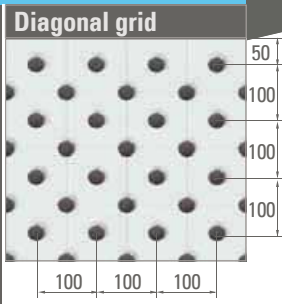
Sales-
competency
worldwide

ProfiLine welding tables ...







Your benefits at a glance:

- ... for playing in the higher league!
- 80 % more bores through the diagonal grid – thus, with additional clamping options
- 1 mm precision scaling completely integrated
- grid lines every 100 mm
- axis indicators in x- und y-direction
- with high fins and strongly ribbed, hence high intrinsic stability
- leg sleeves at the table feet prevent snagging of welding cables and protect the thread from dirt
- table M30 x 2 threaded foot spindle ± 30 mm adjustable
- modularly expandable in all five directions over the entire length, width and height
- without metre rule, it is possible to very quickly erect accurate clamping jigs
- various foot type versions available



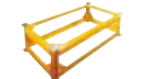


Demmeler ProfiLine

Product information							Article ID	
Leg version	L mm	B mm	H mm	approx. G/kg	max. load ²⁾	Number of legs	Standard ¹⁾	Surface-hardened
 3D welding table without legs	1000	1000	200	292		without legs	P28-01001-127 ¹⁾	P28-01001-133
	1200	1200	200	389		without legs	P28-01056-035 ¹⁾	P28-01056-025
	1500	1000	200	405		without legs	P28-01011-053 ¹⁾	P28-01011-061
	1500	1500	200	559		without legs	P28-01031-039 ¹⁾	P28-01031-051
	2000	1000	200	558		without legs	P28-01002-009 ¹⁾	P28-01002-123
	2400	1200	200	809		without legs	P28-01003-135 ¹⁾	P28-01003-010
	3000	1500	200	1177		without legs	P28-01004-115 ¹⁾	P28-01004-117
	4000	2000	200	2114		without legs	P28-01005-065 ¹⁾	P28-01005-073
 3D Welding Table with Standard legs	1000	1000	850 ± 30 fine	326	6000	4	P28-01001-001	P28-01001-007
	1200	1200	850 ± 30 fine	423	6000	4	P28-01056-001	P28-01056-024
	1500	1000	850 ± 30 fine	440	6000	4	P28-01011-001	P28-01011-019
	1500	1500	850 ± 30 fine	593	6000	4	P28-01031-001	P28-01031-008
	2000	1000	850 ± 30 fine	592	6000	4	P28-01002-001	P28-01002-011
	2400	1200	850 ± 30 fine	843	6000	4	P28-01003-001	P28-01003-020
	3000	1500	850 ± 30 fine	1223	9000	6	P28-01004-001	P28-01004-012
	4000	2000	850 ± 30 fine	2165	9000	6	P28-01005-001	P28-01005-010
 3D Welding Table with Telescoping legs	1000	1000	750-1100 ± 30 fine	334	6000	4	P28-01001-002	P28-01001-124
	1200	1200	750-1100 ± 30 fine	431	6000	4	P28-01056-014	P28-01056-033
	1500	1000	750-1100 ± 30 fine	449	6000	4	P28-01011-005	P28-01011-051
	1500	1500	750-1100 ± 30 fine	601	6000	4	P28-01031-002	P28-01031-044
	2000	1000	750-1100 ± 30 fine	600	6000	4	P28-01002-002	P28-01002-065
	2400	1200	750-1100 ± 30 fine	851	6000	4	P28-01003-002	P28-01003-050
	3000	1500	750-1100 ± 30 fine	1240	9000	6	P28-01004-002	P28-01004-039
	4000	2000	750-1100 ± 30 fine	2177	9000	6	P28-01005-002	P28-01005-010
 3D Welding Table with heavy duty wheel	1000	1000	850 ± 30 fine	337	2000	2 + 2 ¹⁾	P28-01001-003	P28-01001-027
	1200	1200	850 ± 30 fine	434	1600	2 + 2 ¹⁾	P28-01056-015	P28-01056-041
	1500	1000	850 ± 30 fine	452	1600	2 + 2 ¹⁾	P28-01011-004	P28-01011-048
	1500	1500	850 ± 30 fine	604	1600	2 + 2 ¹⁾	P28-01031-003	P28-01031-045
	2000	1000	850 ± 30 fine	603	1700	2 + 2 ¹⁾	P28-01002-003	P28-01002-048
	2400	1200	850 ± 30 fine	857	1500	2 + 2 ¹⁾	P28-01003-003	P28-01003-037



Demmeler ProfiLine

Product information							Article ID	
Leg version	L mm	B mm	H mm	approx. Gkg	max. load ¹⁾	Number of legs	Standard	Surface-hardened
 <p>3D Welding Table with anchoring legs incl. screws and hammer-set anchor</p>	1000	1000	850 ± 30 fine	332	6000	4	P28-01001-004	P28-01001-129
	1200	1200	850 ± 30 fine	419	6000	4	P28-01056-016	P28-01056-042
	1500	1000	850 ± 30 fine	436	6000	4	P28-01011-002	P28-01011-056
	1500	1500	850 ± 30 fine	599	6000	4	P28-01031-004	P28-01031-046
	2000	1000	850 ± 30 fine	598	6000	4	P28-01002-004	P28-01002-101
	2400	1200	850 ± 30 fine	849	6000	4	P28-01003-004	P28-01003-050
	3000	1500	850 ± 30 fine	1236	9000	6	P28-01004-003	P28-01004-116
	4000	2000	850 ± 30 fine	2173	9000	6	P28-01005-003	P28-01005-068
 <p>3D Welding Table with scissors-type lifting platform</p>	1000	1000	585 - 1510	570	650	with scissors-type lifting platform	P28-01001-005	P28-01001-130
	1200	1200	400 - 1100	920	1500	with scissors-type lifting platform	P28-01056-017	P28-01056-043
	1500	1000	400 - 1200	855	1500	with scissors-type lifting platform	P28-01011-006	P28-01011-057
	1500	1500	480 - 1280	1400	1350	with scissors-type lifting platform	P28-01031-005	P28-01031-047
	2000	1000	430 - 1430	1350	1350	with scissors-type lifting platform	P28-01002-005	P28-01002-020
	2400	1200	460 - 1760	1700	1100	with scissors-type lifting platform	P28-01003-005	P28-01003-007
 <p>3D Welding Table with connecting frame for positioning on base rails (pivoting legs M 27 see p. 155)</p>	1000	1000	800 ± 0,1	650	6000	with connecting frame	P28-01001-090	P28-01001-131
	1200	1200	800 ± 0,1	7801	6000	with connecting frame	P28-01056-040	P28-01056-045
	1500	1000	800 ± 0,1	975	6000	with connecting frame	P28-01011-054	P28-01056-059
	1500	1500	800 ± 0,1	950	6000	with connecting frame	P28-01031-050	P28-01031-049
	2000	1000	800 ± 0,1	940	6000	with connecting frame	P28-01002-160	P28-01002-091
	2400	1200	800 ± 0,1	1150	6000	with connecting frame	P28-01003-103	P28-01003-111
	3000	1500	800 ± 0,1	1170	9000	with connecting frame	P28-01004-070	P28-01004-071
	4000	2000	800 ± 0,1	2850	9000	with connecting frame	P28-01005-070	P28-01005-071

Pivoting foot M 27



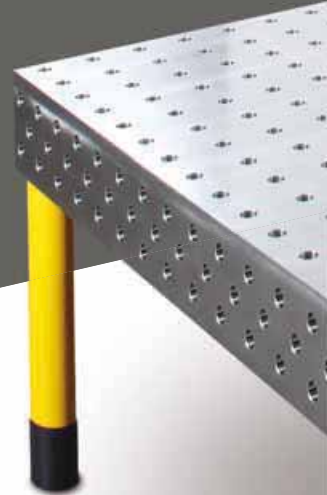
¹⁾ 2 castors with / 2 without brake
²⁾ approx. max. useful load (uniformly distributed load) in kg

³⁾ not for scissor-type lifting platform, connecting frame, shifting foot, foot spacer angle
⁴⁾ material S355J2+N and/or ST52-3N

... for playing in the higher league!

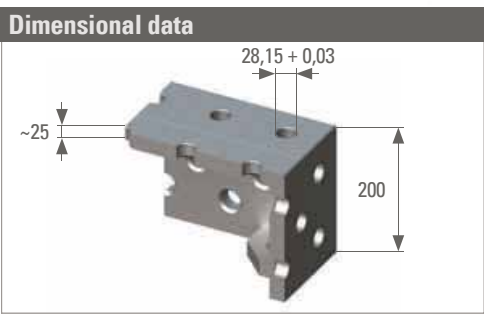
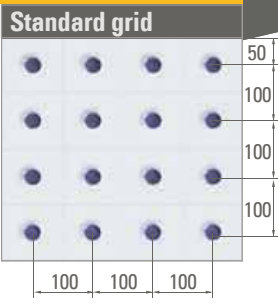


ExpertLine welding tables ...







Your benefits at a glance:

- + ... sound technology for everyday use!
- + 1 mm precision scaling completely integrated
- + grid lines every 100 mm
- + axis indicators in x- und y-direction
- + with high fins and strongly ribbed, hence high intrinsic stability
- + Leg sleeves at the table feet prevent snagging of welding cables and protect the thread from dirt
- + stable M3 x 2 threaded foot spindle ± 30 mm adjustable
- + Modularity expandable in all five directions over the entire length, width and height
- + without metre rule, it is possible to very quickly erect accurate clamping jigs
- + various foot type versions available






Demmeler ExpertLine

Product information							Article ID		
Leg version	L mm	B mm	H mm	approx. Gkg	max. load ^{EN}	Number of legs	Standard	Surface-hardened	Casting table
 3D welding table without legs	1000	1000	200	310		without legs	D28-01001-000 ^{EN}	D28-01001-025	-
	1200	1200	200	405		without legs	D28-01056-000 ^{EN}	D28-01056-032	-
	1500	1000	200	442		without legs	D28-01011-000 ^{EN}	D28-01011-029	-
	1500	1500	200	598		without legs	D28-01031-000 ^{EN}	D28-01031-007	-
	2000	1000	200	578		without legs	D28-01002-000 ^{EN}	D28-01002-034	D28-01002-040
	2400	1200	200	851		without legs	D28-01003-000 ^{EN}	D28-01003-021	D28-01003-030
	3000	1500	200	1246		without legs	D28-01004-000 ^{EN}	D28-01004-016	-
	4000	2000	200	2400		without legs	D28-01005-000 ^{EN}	D28-01005-011	-
 3D Welding Table with Standard legs	1000	1000	850 ± 30 fine	344	6000	4	D28-01001-001	D28-01001-017	-
	1200	1200	850 ± 30 fine	439	6000	4	D28-01056-001	D28-01056-024	-
	1500	1000	850 ± 30 fine	476	6000	4	D28-01011-001	D28-01011-019	-
	1500	1500	850 ± 30 fine	632 ^{EN}	6000	4	D28-01031-001	D28-01031-008	-
	2000	1000	850 ± 30 fine	612 ^{EN}	6000	4	D28-01002-001	D28-01002-011	D28-01002-019
	2400	1200	850 ± 30 fine	885 ^{EN}	6000	4	D28-01003-001	D28-01003-020	D28-01003-009
	3000	1500	850 ± 30 fine	1297	9000	6	D28-01004-001	D28-01004-012	-
	4000	2000	850 ± 30 fine	2451	9000	6	D28-01005-001	D28-01005-010	-
 3D Welding Table with Telescoping legs	1000	1000	750-1100 ± 30 fine	352	6000	4	D28-01001-002	D28-01001-127	-
	1200	1200	750-1100 ± 30 fine	447	6000	4	D28-01056-014	D28-01056-039	-
	1500	1000	750-1100 ± 30 fine	484	6000	4	D28-01011-005	D28-01011-049	-
	1500	1500	750-1100 ± 30 fine	640	6000	4	D28-01031-002	D28-01031-056	-
	2000	1000	750-1100 ± 30 fine	620 ^{EN}	6000	4	D28-01002-002	D28-01002-063	D28-01002-020
	2400	1200	750-1100 ± 30 fine	893 ^{EN}	6000	4	D28-01003-002	D28-01003-050	D28-01003-010
	3000	1500	750-1100 ± 30 fine	1288	9000	6	D28-01004-002	D28-01004-039	-
	4000	2000	750-1100 ± 30 fine	2463	9000	6	D28-01005-002	D28-01005-073	-
 3D Welding Table with heavy duty wheel	1000	1000	850 ± 30 fine	355	2000	2+2 ^{EN}	D28-01001-003	D28-01001-027	-
	1200	1200	850 ± 30 fine	450	1600	2+2 ^{EN}	D28-01056-015	D28-01056-042	-
	1500	1000	850 ± 30 fine	487	1600	2+2 ^{EN}	D28-01011-004	D28-01011-048	-
	1500	1500	850 ± 30 fine	643	1600	2+2 ^{EN}	D28-01031-003	D28-01031-032	-
	2000	1000	850 ± 30 fine	623 ^{EN}	1700	2+2 ^{EN}	D28-01002-003	D28-01002-048	D28-01002-021
	2400	1200	850 ± 30 fine	896 ^{EN}	1500	2+2 ^{EN}	D28-01003-003	D28-01003-037	D28-01003-011



Demmeler ExpertLine

Product information							Article ID		
Leg version	L mm	B mm	H mm	approx. Gkg	max. load ¹⁾	legs	Standard	Surface-hardened	Casting table
 <p>3D Welding Table with anchoring legs incl. screws and hammer-set anchor</p>	1000	1000	850 ± 30 fine	350	6000	4	D28-01001-004	D28-01001-128	-
	1200	1200	850 ± 30 fine	445	6000	4	D28-01056-016	D28-01056-043	-
	1500	1000	850 ± 30 fine	482	6000	4	D28-01011-002	D28-01011-054	-
	1500	1500	850 ± 30 fine	638	6000	4	D28-01031-004	D28-01031-067	-
	2000	1000	850 ± 30 fine	618 ²⁾	6000	4	D28-01002-004	D28-01002-101	D28-01002-022
	2400	1200	850 ± 30 fine	891 ³⁾	6000	4	D28-01003-004	D28-01003-090	D28-01003-012
	3000	1500	850 ± 30 fine	1305	9000	6	D28-01004-003	D28-01004-058	-
	4000	2000	850 ± 30 fine	2459	9000	6	D28-01005-003	D28-01005-074	-
 <p>3D Welding Table with scissors-type lifting platform</p>	1000	1000	585 - 1510	570	650		D28-01001-005	D28-01001-129	-
	1200	1200	400 - 1100	920	1500		D28-01056-017	D28-01056-044	-
	1500	1000	400 - 1200	855	1500		D28-01011-006	D28-01011-055	-
	1500	1500	480 - 1280	1400	1350		D28-01031-005	D28-01031-068	-
	2000	1000	430 - 1430	1350 ³⁾	1350		D28-01002-005	D28-01002-163	D28-01002-023
	2400	1200	460 - 1760	1700 ³⁾	1100		D28-01003-005	D28-01003-101	D28-01003-013
	3000	1500	550 - 2150	2800	1700		D28-01004-004	D28-01004-135	-
 <p>3D Welding Table with connecting frame for positioning on base rails (pivoting legs M 27 see p. 155)</p>	1000	1000	800 ± 0,1	650	6000		D28-01001-131	D28-01001-072	-
	1200	1200	800 ± 0,1	936	6000		D28-01056-047	D28-01056-046	-
	1500	1000	800 ± 0,1	975	6000		D28-01011-058	D28-01011-057	-
	1500	1500	800 ± 0,1	950	6000		D28-01031-029	D28-01031-030	-
	2000	1000	800 ± 0,1	940 ³⁾	6000		D28-01002-155	D28-01002-142	D28-01002-024
	2400	1200	800 ± 0,1	1150 ³⁾	6000		D28-01003-103	D28-01003-152	D28-01003-014
	3000	1500	800 ± 0,1	1170	9000		D28-01004-070	D28-01004-071	-
	4000	2000	800 ± 0,1	2850	9000		D28-01005-077	D28-01005-076	-

Pivoting foot M 27



- ¹⁾ 2 castors with / 2 without brak approx. max. useful load (uniformly distributed load) in kg
- ²⁾ Casting table weight approx. with factor 0.92

- ³⁾ not for scissor-type lifting platform, connecting frame, shifting foot, foot spacer angle S355J2+N and/or ST52-3N

... sound technology for everyday use!



Ergonomic working – variable working height by Demmeler

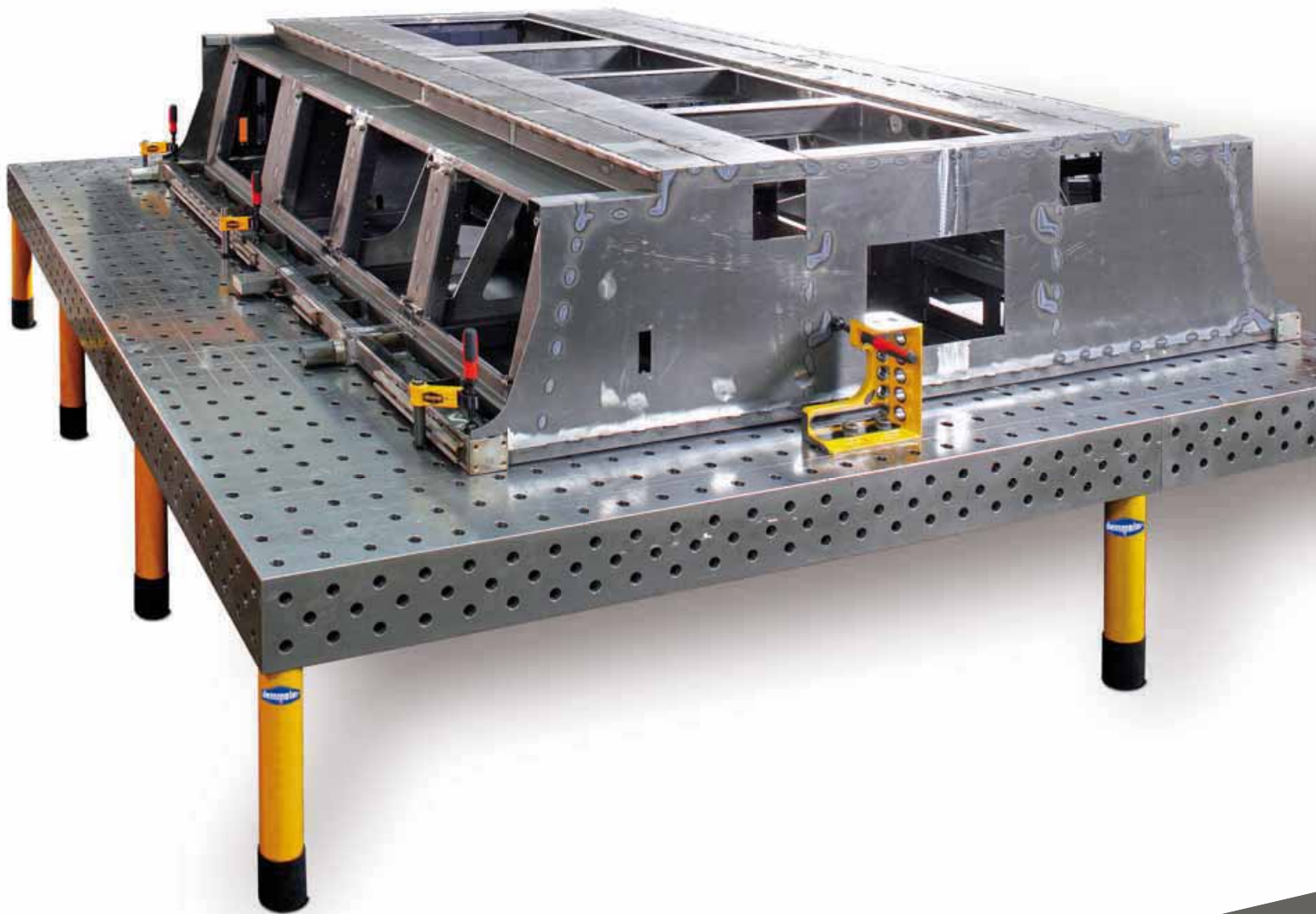
ExpertLine applications – with scissor lift, infinitely adjustable height



ExpertLine applications – with telescoping legs, adjustable height



Demmeler applications – large worktop



**Flexibility for your work –
by detachable table joints**

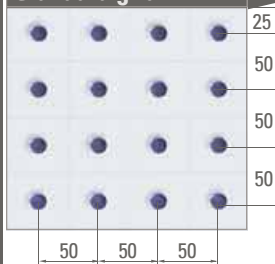
ExpertLine welding tables ...



Your benefits at a glance:

- + ... sound technology for everyday use!
- + 1 mm precision scaling completely integrated
- + grid lines every 50 mm + numbering
- + axis indicators x, y
- + with high fins and strongly ribbed, hence high intrinsic stability
- + leg sleeves at the table feet prevent snagging of welding cables and protect the thread from dirt
- + stable M30 x 2 threaded foot spindle ± 30 mm adjustable
- + modularly expandable in all five directions over the entire length, width and height
- + without metre rule, it is possible to very quickly erect accurate clamping jigs
- + various foot type versions available




Standard grid



Dimensional data

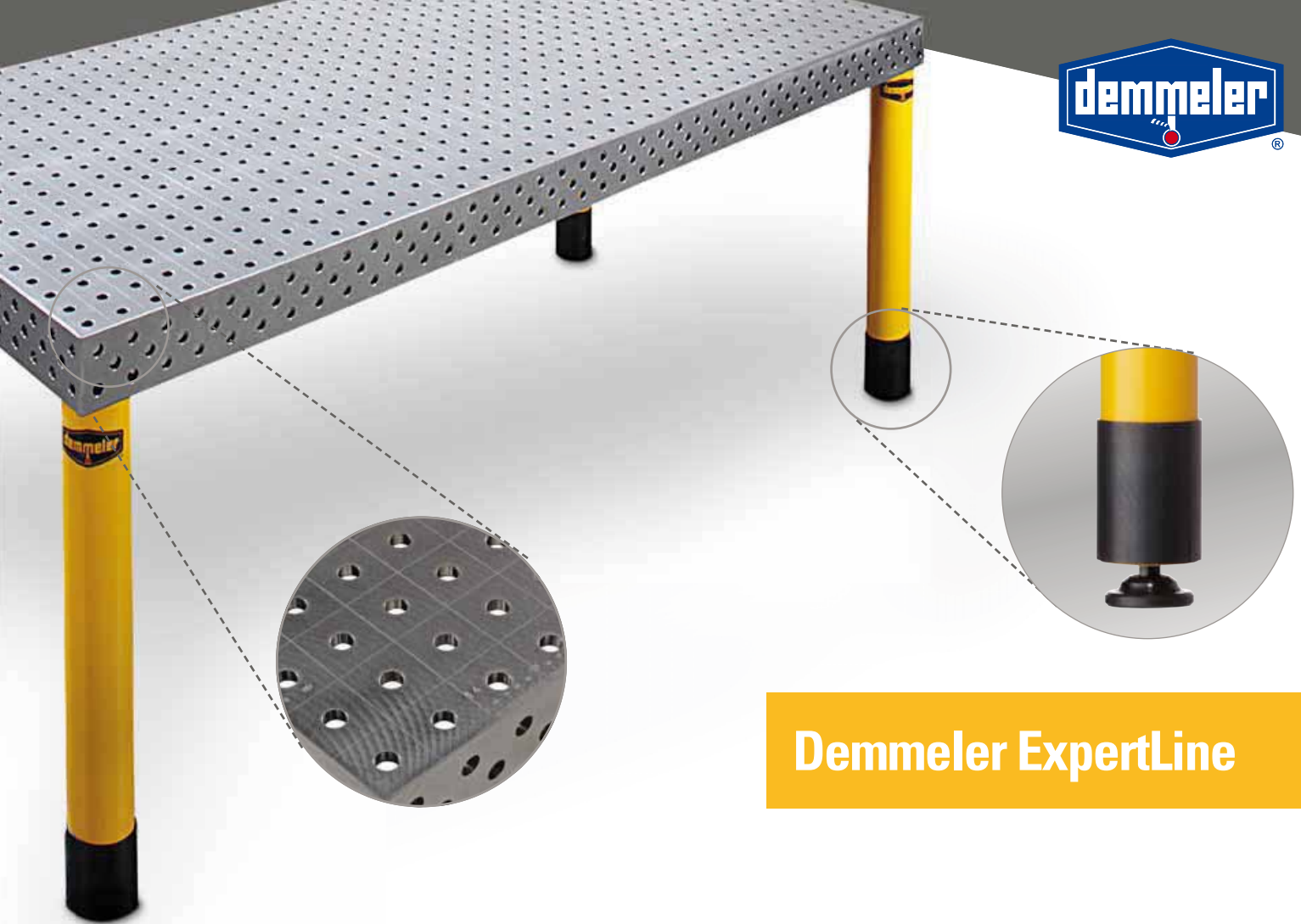


Demmeler ExpertLine



Product information							Article ID	
Leg version	L mm	B mm	H mm	approx. G kg	max. load ²⁾	Number of legs	Standard	Surface-hardened
 3D welding table without legs	1000	500	100	76		without legs	D16-01000-000 ³⁾	D16-01000-020
	1000	1000	100	144		without legs	D16-01001-000 ³⁾	D16-01001-015
	1200	1200	100	174		without legs	D16-01056-000 ³⁾	D16-01056-024
	1500	1000	100	188		without legs	D16-01017-000 ³⁾	D16-01017-013
	1500	1500	100	326		without legs	D16-01011-000 ³⁾	D16-01011-019
	2000	1000	100	252		without legs	D16-01002-000 ³⁾	D16-01002-018
	2400	1200	100	354		without legs	D16-01003-000 ³⁾	D16-01003-009
 3D Welding Table with Standard legs	1000	500	850 ± 30 fine	113	4000	4	D16-01000-001	D16-01000-019
	1000	1000	850 ± 30 fine	181	4000	4	D16-01001-001	D16-01001-012
	1200	1200	850 ± 30 fine	211	4000	4	D16-01056-004	D16-01056-023
	1500	1000	850 ± 30 fine	225	4000	4	D16-01017-001	D16-01017-014
	1500	1500	850 ± 30 fine	363	4000	4	D16-01011-010	D16-01011-015
	2000	1000	850 ± 30 fine	289	4000	4	D16-01002-001	D16-01002-009
	2400	1200	850 ± 30 fine	417	4000	4	D16-01003-001	D16-01003-025
 3D Welding Table with Telescoping legs	1000	500	650 - 1000 ± 30 fine	118	4000	4	D16-01000-002	D16-01000-024
	1000	1000	650 - 1000 ± 30 fine	186	4000	4	D16-01001-002	D16-01001-042
	1200	1200	650 - 1000 ± 30 fine	216	4000	4	D16-01056-002	D16-01056-025
	1500	1000	650 - 1000 ± 30 fine	230	4000	4	D16-01017-017	D16-01017-033
	1500	1500	650 - 1000 ± 30 fine	368	4000	4	D16-01011-009	D16-01011-016
	2000	1000	650 - 1000 ± 30 fine	294	4000	4	D16-01002-002	D16-01002-022
	2400	1200	650 - 1000 ± 30 fine	396	4000	4	D16-01003-002	D16-01003-008

²⁾ 2 castors with / 2 without brake
approx. max. useful load
(uniformly distributed load) in kg

³⁾ Material S355J2+N and/or ST52-3N



Demmeler ExpertLine

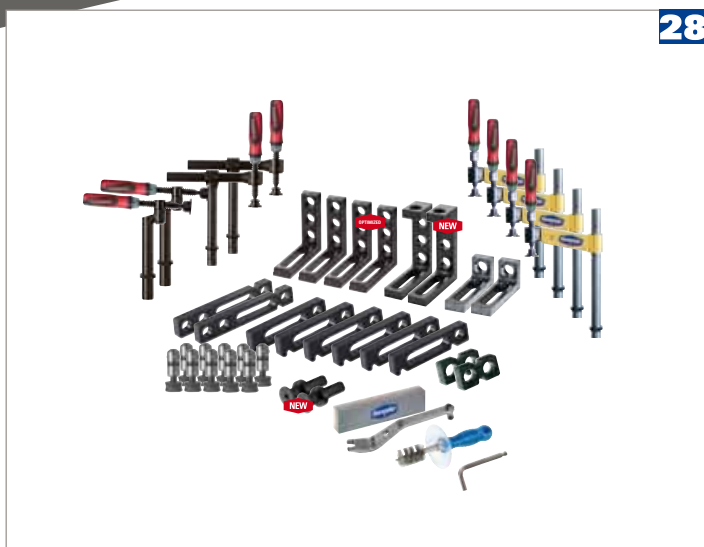
Product information							Article ID	
Leg version	L mm	B mm	H mm	approx. G/kg	max. load ^{EN}	Number of legs	Standard ^{EN}	Surface-hardened
 3D Welding Table with heavy duty wheel	1000	500	850 ± 30 fine	124	2000	2 + 2 ^{EN}	D16-01000-003	D16-01000-009
	1000	1000	850 ± 30 fine	192	2000	2 + 2 ^{EN}	D16-01001-003	D16-01001-027
	1200	1200	850 ± 30 fine	221	1600	2 + 2 ^{EN}	D16-01056-001	D16-01056-026
	1500	1000	850 ± 30 fine	235	1600	2 + 2 ^{EN}	D16-01017-003	D16-01017-010
	1500	1500	850 ± 30 fine	373	1600	2 + 2 ^{EN}	D16-01011-011	D16-01011-017
	2000	1000	850 ± 30 fine	299	1700	2 + 2 ^{EN}	D16-01002-003	D16-01002-016
	2400	1200	850 ± 30 fine	401	1500	2 + 2 ^{EN}	D16-01003-003	D16-01003-042
 3D Welding Table with anchoring legs incl. screws and hammer-set anchor	1000	500	850 ± 30 fine	119	4000	4	D16-01000-004	D16-01000-025
	1000	1000	850 ± 30 fine	186	4000	4	D16-01001-004	D16-01001-040
	1200	1200	850 ± 30 fine	217	4000	4	D16-01056-006	D16-01056-027
	1500	1000	850 ± 30 fine	231	4000	4	D16-01017-018	D16-01017-034
	1500	1500	850 ± 30 fine	369	4000	4	D16-01011-012	D16-01011-018
	2000	1000	850 ± 30 fine	295	4000	4	D16-01002-004	D16-01002-026
	2400	1200	850 ± 30 fine	397	4000	4	D16-01003-004	D16-01003-035

... sound technology for everyday use!



Extensive – Accessory sets for all tasks

Set 150 / D28-52000-150 / 42 parts



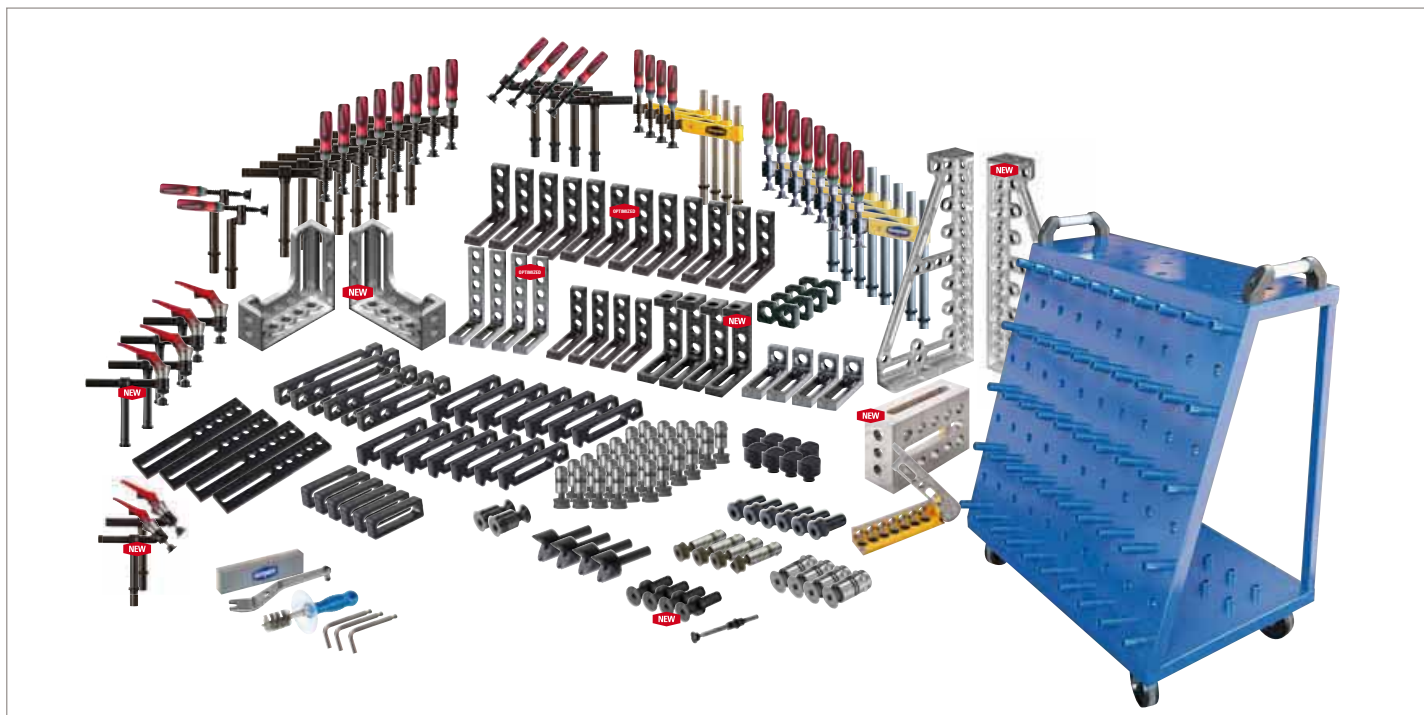
28	Number	Description	Item no.
	2	Universal-stop small / L100	D28-05002-000
	6	Universal-stop large with scaling L225	D28-05001-010
	2	Universal-stop L300	D28-05009-000
	2	Clamping and locating angle bore/oblong hole/ H75	D28-03001-005
	4	Clamping and locating angle bore/oblong hole/ H 175	D28-03001-000
	2	Clamping and locating angle bore/oblong hole/ bore	D28-03001-013
	2	Spacer set screwable	D28-09001-005
	10	PC bolt/short	D28-06001-000
	4	Compensating swing clamp 150 with spindle	D28-07001-000
	2	Swing clamp 180° with spindle	D28-07005-000
	2	Swing clamp 90°	D28-07008-000
	1	Assembly lift fork	D00-10016-001
	1	Allen wrench SW14	D28-10008-000
	1	Round brush 28 mm	D28-10002-000
	1	Whetstone	D00-10007-000

Set 250 / D28-52000-250 / 90 parts



28	Number	Description	Item no.
	4	Universal-stop small / L100	D28-05002-000
	8	Universal-stop/large with scaling/ L225	D28-05001-010
	2	Displacement-stop / L150	D28-05015-000
	2	Universal-stop L300	D28-05009-000
	2	Clamping and locating angle bore/oblong hole/ H75	D28-03001-005
	4	Clamping and locating angle bore/oblong hole / H175	D28-03001-000
	2	Clamping and locating angle bore/oblong hole/ bore	D28-03001-013
	4	Clamping and locating angle / H275	D28-03008-000
	1	Clamping and locating angle right (Alu-Titan) 300	D28-03002-010
	1	Clamping and locating angle left (Alu-Titan) 300	D28-03002-011
	4	Spacer set screwable	D28-09001-005
	8	V-block holder steel up to 70 mm pipes	D28-09003-000
	2	V-block holder steel (with shaft) up to 100 mm pipes	D28-09004-000
	20	PC bolt/short	D28-06001-000
	2	PC bolt/long	D28-06002-000
	4	Stop and positioning bolt	D28-06009-000
	4	Compensating swing clamp 150 with spindle	D28-07001-000
	2	Compensating swing clamp 200 with spindle	D28-07002-000
	2	Swing clamp 180° with spindle	D28-07005-000
	2	Swing clamp 180° with quick-action clamping cylinder	D28-07005-015
	2	Swing clamp 90°	D28-07008-000
	4	Swing clamp 45° with spindle	D28-07009-011
	1	Assembly lift fork	D00-10016-001
	1	Allen wrench SW14	D28-10008-000
	1	Round brush 28 mm	D28-10002-000
	1	Whetstone	D00-10007-000

Set 350 / D28-52000-350 / 170 parts



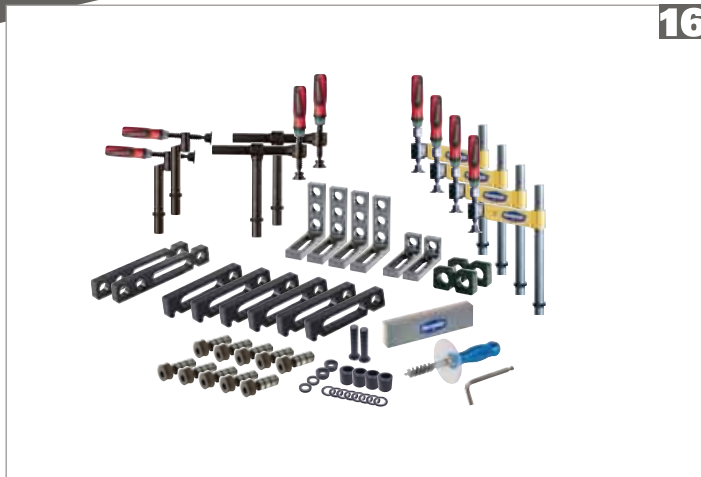
Number	Description	Item no.
4	Universal-stop small / L100	D28-05002-000
14	Universal-stop/ large with scaling / L225	D28-05001-010
6	Displacement-stop L150	D28-05015-000
4	Universal-stop L300	D28-05009-000
2	Universal-stop L500	D28-05009-008
4	Edge strip L800	D28-05003-001
4	Clamping and locating angle bore/oblong hole/ H75	D28-03001-005
12	Clamping and locating angle bore/oblong hole / H175	D28-03001-000
4	Clamping and locating angle bore/oblong hole/ bore	D28-03001-013
4	Clamping and locating angle / H275	D28-03008-000
1	Clamping and locating angle right (Alu-Titan) 300	D28-03002-010
1	Clamping and locating angle left (Alu-Titan) 300	D28-03002-011
1	Clamping and locating angle right (Alu-Titan) 800	D28-03004-014
1	Clamping and locating angle left (Alu-Titan) 800	D28-03004-015
1	Console right (Alu-Titan alloy)	D28-03005-011
1	Universal pivot and tilt angle right	D28-03007-000
4	Spacer set screwable	D28-09001-005
8	V-block holder steel up to 70 mm pipes	D28-09003-000
4	V-block holder steel (with shaft) up to 100 mm pipes	D28-09004-000
34	PC bolt/short	D28-06001-000

Number	Description	Item no.
4	PC bolt/long	D28-06002-000
4	PC countersunk bolt/short	D28-06004-000
6	Stop and positioning bolt	D28-06009-000
2	Connecting sleeve/short with screw	D28-06003-000
8	Compensating swing clamp 150 with spindle	D28-07001-000
4	Compensating swing clamp 200 with spindle	D28-07002-000
8	Swing clamp 180° with spindle	D28-07005-000
4	Swing clamp 180° with quick-action clamping cylinder	D28-07005-015
2	Swing clamp 90°	D28-07008-000
4	Swing clamp 45° with spindle	D28-07009-011
2	Swing clamp 45° with quick-action clamping cylinder	D28-07009-001
1	Adjusting spindle	D28-09008-000
1	Accessory cart	D28-11001-000
1	Assembly lift fork	D28-10016-001
1	Allen wrench SW8	D28-10008-005
1	Allen wrench SW10	D28-10008-001
1	Allen wrench SW14	D28-10008-000
1	Round brush 28 mm	D28-10002-000
1	Whetstone	D00-10007-000

16

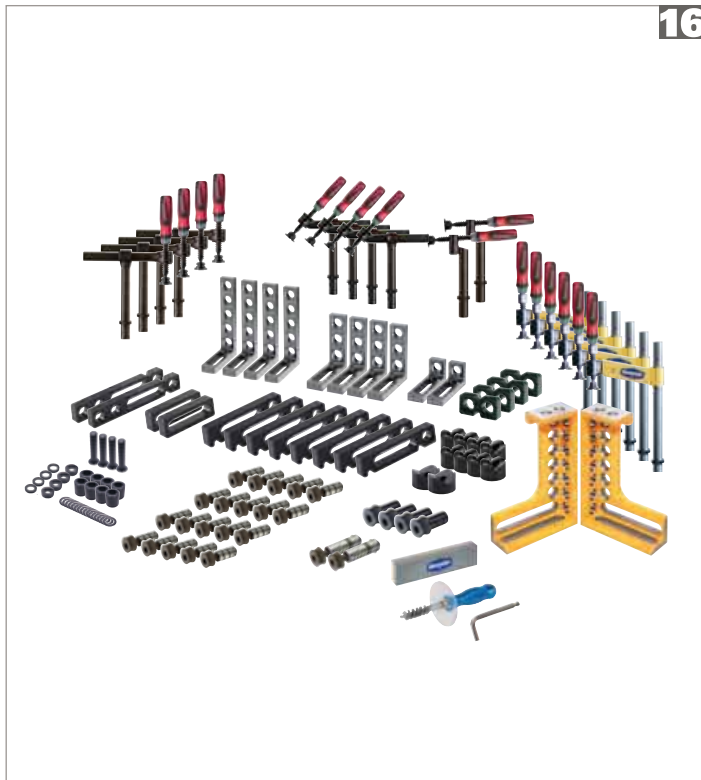
Extensive – Accessory sets for all tasks

Set 155 / D16-52000-155 / 39 parts



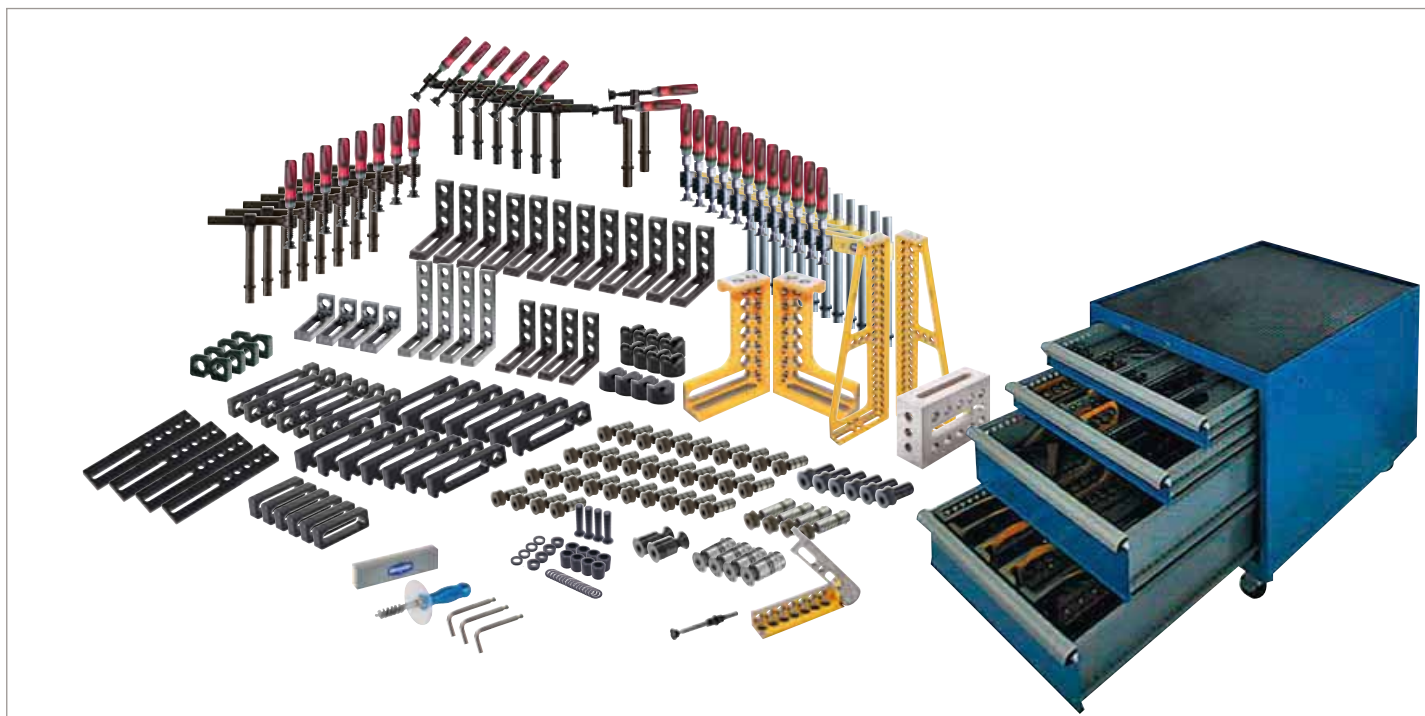
16 Number	Description	Item no.
2	Universal-stop/ small / L55	D16-05002-000
6	Universal-stop with scaling / L115	D16-05001-004
2	Universal-stop / 165	D16-05009-000
2	Clamping and locating angle bore/oblong hole / H 37,5	D16-03001-002
4	Clamping and locating angle bore/oblong hole / H 90	D16-03001-000
2	Spacer set 9-pieces	D16-09001-000
10	PC bolt / short	D16-06001-000
4	Compensating swing clamp 100 with spindle	D16-07001-000
2	Swing clamp 180° with spindle	D16-07005-000
2	Swing clamp 90°	D16-07008-000
1	Allen wrench SW8	D16-10008-000
1	Round brush 16 mm	D16-10002-000
1	Whetstone	D00-10007-000

Set 255 / D16-52000-255 / 87 parts



16 Number	Description	Item no.
4	Universal-stop/ small / L55	D16-05002-000
8	Universal-stop with scaling / L115	D16-05001-004
2	Displacement stop / L150	D16-05015-000
2	Universal-stop / L165	D16-05009-000
2	Clamping and locating angle bore/oblong hole / H 37,5	D16-03001-002
4	Clamping and locating angle bore/oblong hole / H 90	D16-03001-000
4	Clamping and locating angle H140	D16-03008-000
1	Clamping and locating angle right cast 200	D16-03002-000
1	Clamping and locating angle left cast 200	D16-03002-001
4	Spacer set 9-pieces	D16-09001-000
8	V-block holder steel up to 70 mm pipes	D16-09004-000
2	V-block holder steel up to 140 mm pipes	D16-09003-000
20	PC bolt / short	D16-06001-000
2	PC bolt / long	D16-06002-000
4	Stop and positioning bolt	D16-06009-000
6	Compensating swing clamp 100 with spindle	D16-07001-000
4	Swing clamp 180° with spindle	D16-07005-000
2	Swing clamp 90°	D16-07008-000
4	Swing clamp 45° with spindle	D16-07009-000
1	Allen wrench SW8	D16-10008-000
1	Round brush 16 mm	D16-10002-000
1	Whetstone	D00-10007-000

Set 355 / D16-52000-355 / 161 parts



Number	Description	Item no.
4	Universal-stop/ small / L55	D16-05002-000
14	Universal-stop with scaling / L115	D16-05001-004
6	Displacement stop L150	D16-05015-000
6	Universal-stop L165	D16-05009-000
4	Edge strip L400	D16-05003-001
4	Clamping and locating angle bore/oblong hole / H37,5	D16-03001-002
12	Clamping and locating angle bore/oblong hole / H90	D16-03001-000
4	Clamping and locating angle H140	D16-03008-000
1	Clamping and locating angle right cast 200	D16-03002-000
1	Clamping and locating angle left cast 200	D16-03002-001
1	Clamping and locating angle right cast 600	D16-03004-000
1	Clamping and locating angle left cast 600	D16-03004-001
1	Console right cast	D16-03005-001
1	Universal-pivot and tilt angle right	D16-03007-000
4	Spacer set 9-pieces	D16-09001-000
8	V-block holder steel up to 70 mm pipes	D16-09004-000
4	V-block holder steel up to 140 mm pipes	D16-09003-000

Number	Description	Item no.
34	PC bolt / short	D16-06001-000
4	PC bolt / long	D16-06002-000
4	PC countersunk bolt / short	D16-06004-000
6	Stop and positioning bolt	D16-06009-000
2	Connecting sleeve / short with screw	D16-06003-000
12	Compensating swing clamp 100 with spindle	D16-07001-000
8	Swing clamp 180° with spindle	D16-07005-000
2	Swing clamp 90°	D16-07008-000
6	Swing clamp 45° with spindle	D16-07009-000
1	Adjusting spindle	D16-09008-000
1	Accessory cart	D16-11001-000
1	Allen wrench SW8	D16-10008-000
1	Allen wrench SW6	D16-10008-001
1	Allen wrench SW4	D16-10008-002
1	Round brush 16 mm	D16-10002-000
1	Whetstone	D00-10007-000

Demmeler Ergonomix M – turns your workpiece on its head!

Demmeler Ergonomix-Manipulator for flexible welding and assembly

NEW

Your benefits

- 1 Large work area
- 2 Low work surface height
- 3 Unique swiveling range up to 180°
- 4 Ergonomic working conditions
- 5 Higher flexibility
- 6 Safer working environment
- 7 Increased productivity

Unique swiveling
range up to 180°

PROPERTY RIGHT
APPLIED FOR

The ideal daily tool for welding
or assembling!

Lifting

Rotating

ERGONOMIX M-2000



Demmeler Ergonomix M:
Awarded the 2011 German Federal Award for
innovative trade services

Demmeler Ergonomix M - simple positioning with much workspace

Description

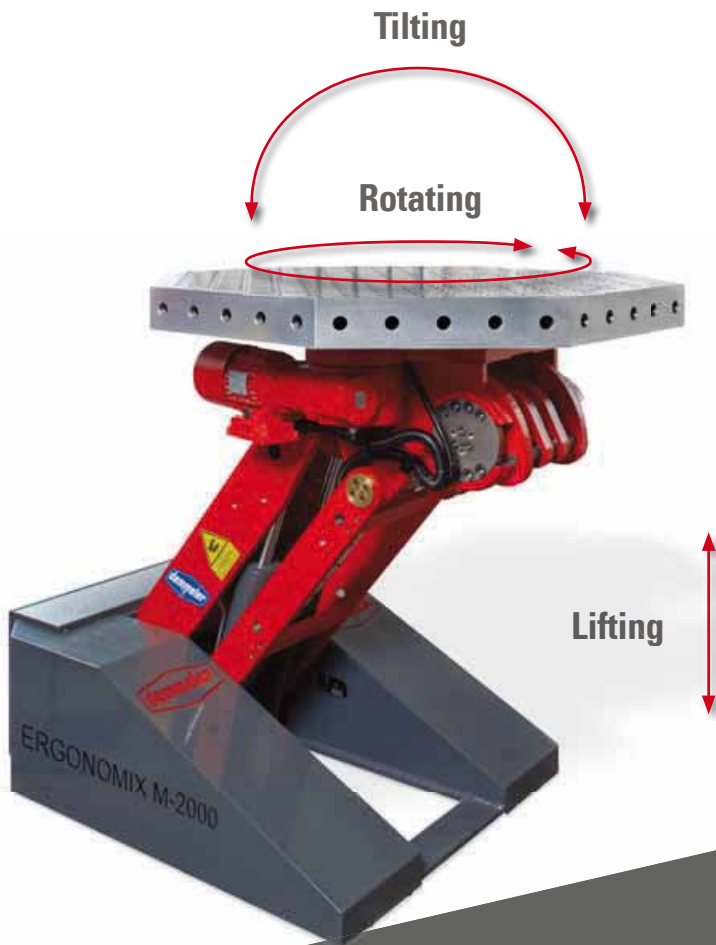
A well-designed ergonomic work station facilitates more efficient and error-free work and protects the personnel against damage to health even in the long term. The manipulator offers preventive work protection, more safety in the workspace, a higher profitability and thereby increased production quality. No matter how you look at it, the Demmeler manipulator is indispensable.

Quality improvement:

- by working in ideal position and height
- less weld distortion due to optimised weld order

Productivity increase:

- time-consuming turning and rotating the workpieces several times e.g. by crane can be dispensed; thereby clear reduction of downtime and significant increase in productivity
- higher melting deposition rate during welding since the weld seams can be executed in ideal position (tub position)
- operator fatigue decreased due to ideal working position



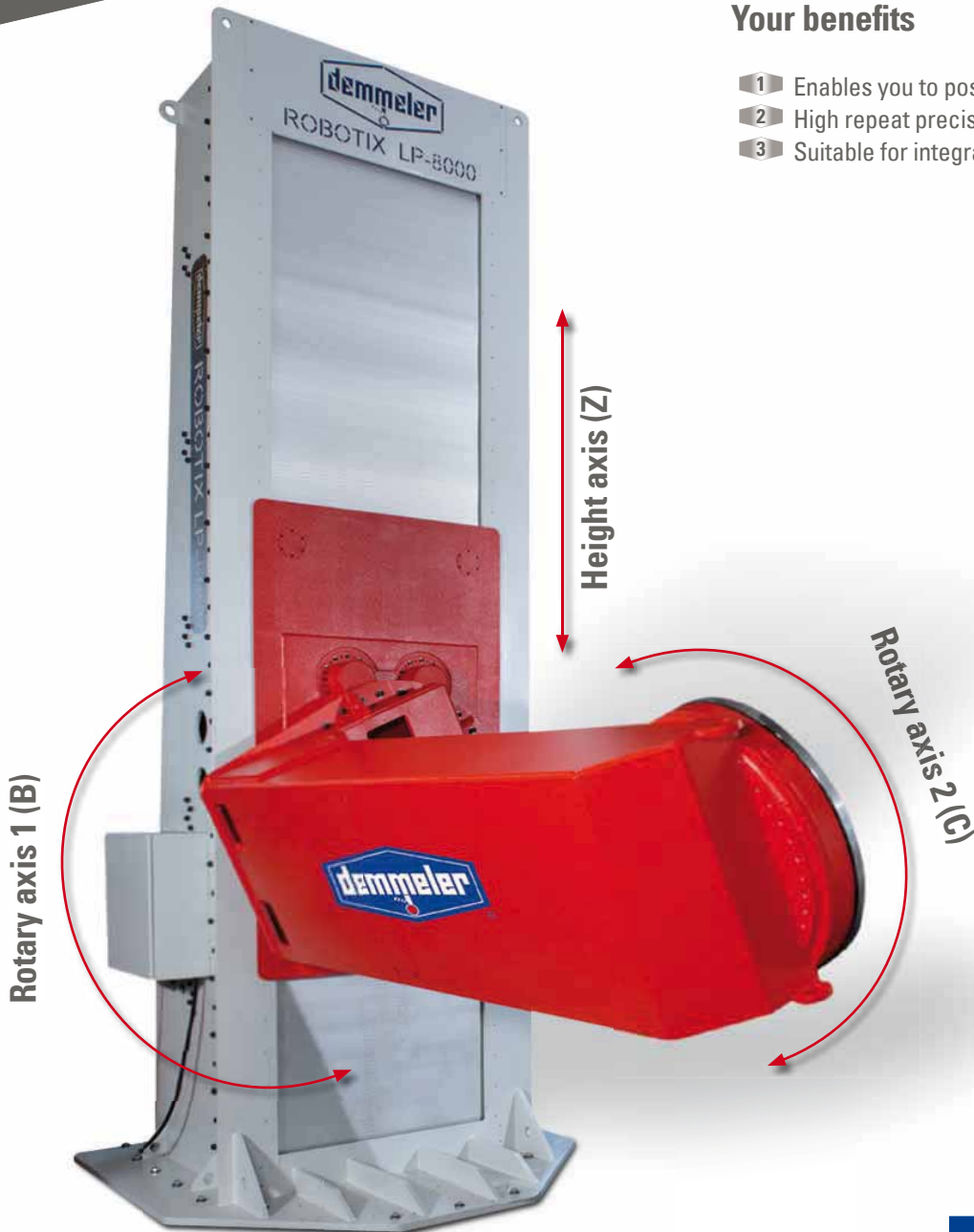
The ideal work companion for every day – whether welding or assembling!

Demmeler Robotix LP – no matter how you look at it

Demmeler Robotix LP – precise positioning in all degrees of freedom

Your benefits

- 1 Enables you to position workpieces exactly
- 2 High repeat precision
- 3 Suitable for integration into a robotic cell



Catalogue manipulators

Request our catalogue now and discover the excellent manipulators!

Make your request now!



Description

The Demmeler product line Demmeler Robotix is particularly recommended when it comes to positioning workpiece very precisely and with repeat accuracy in all degrees of freedom. The positioner is available in three versions.

- 1.) With vertical axis only
- 2.) With vertical axis and rotary axis 1
- 3.) With vertical axis, rotary axis 1 and boom with rotary axis 2

In expansion stage 3.) You have the option to position your workpiece at any angle and height. The positioner can also be used with manual control at manual work stations; optionally the Robotic LP is suitable for integration into a robot cell. Details on request.

All axes are integrated freely programmable via the robot controls at that. You will also receive the ideal table top or appliance by us for this manipulator model. We can also deliver the entire periphery including linear axes on request.

Standard product line available:

- Bearing load of 2.000 - 25.000 kg
- LP-2000, LP-4000, LP-8000, LP-16000, LP-25000



always in ideal position

Automated – 3D Welding tables on manipulators of robot cells

Demmeler applications



3D welding table Okto and accessories, on L positioner

Demmeler applications



3D frame made up of Demmeler system components: spacer angle U-shape and two 3D welding tables Okto on rotary manipulator with counter bearing

Demmeler applications



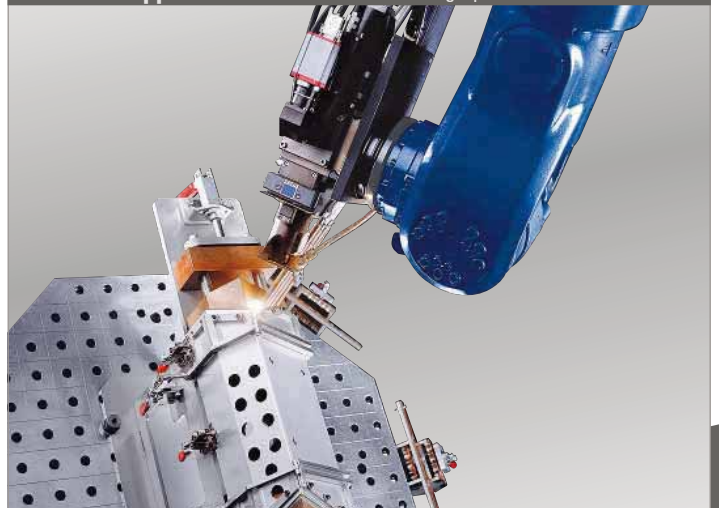
Demmeler applications



Two 3D welding tables Okto in alternating operation in robot cell. For optimum robot use: possible through prefitting.

Demmeler applications

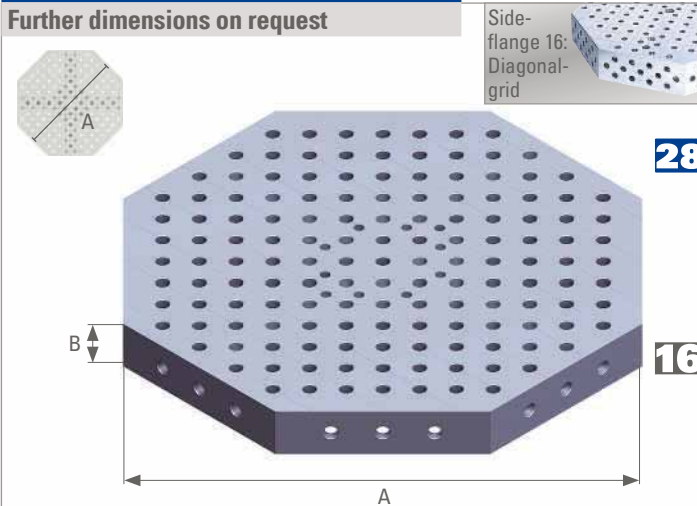
Photograph: TRUMPF GmbH & Co. KG



Manipulator with Demmeler 3D welding table Okto in a laser welding cell by Trumpf

3D welding table Okto

Further dimensions on request



28	A mm	B mm	approx. w kg	Description	Item no.
	SW 600	100	100	Diagonal grid 100 x 100	D28-11008-006
	SW 800	100	160	Diagonal grid 100 x 100	D28-01013-000
	SW 1000	100	240	Diagonal grid 100 x 100	D28-01038-000
	SW 1200	100	360	Diagonal grid 100 x 100	D28-01020-000

16	A mm	B mm	approx. w kg	Description	Item no.
	SW 600	100	50	Standard grid 50 x 50	D16-01009-000
	SW 800	100	80	Standard grid 50 x 50	D16-01008-000
	SW 1000	100	120	Standard grid 50 x 50	D16-01024-000
	SW 1200	100	180	Standard grid 50 x 50	D16-01070-000

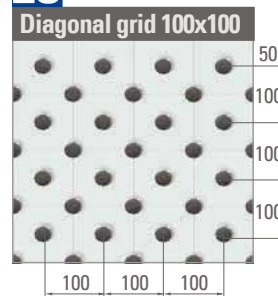
Description

- Preferred use on manipulators of robot cells
- on all nine clamping surfaces, a number of clamping options

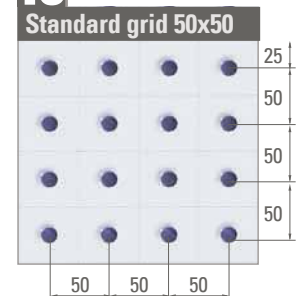
The following add-on options are available on request:

- high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength
- with special connection hole pattern, adapted to the faceplate of your manipulator (Please request providing information on manipulator type and adding drawing of connection hole pattern – can be offered at an additional cost!)
- D16 also with diagonal grid
- with table legs

28



16

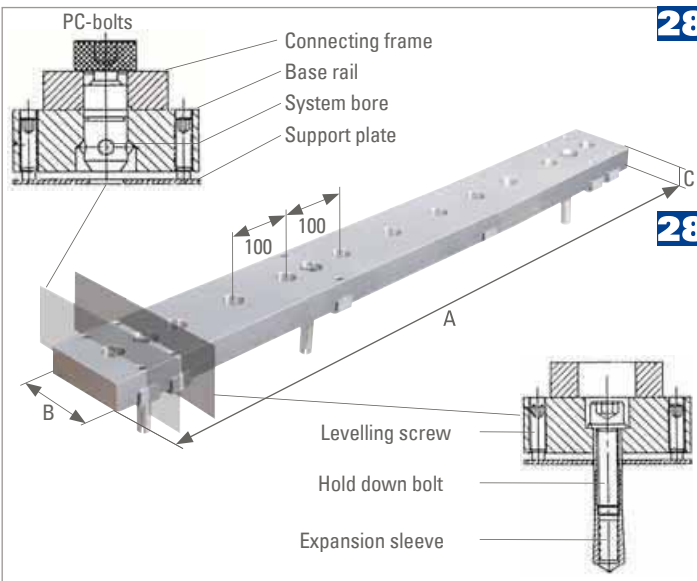


Versatile use –
The 3D welding table Okto

Demmeler base rails – ideal for fixture of large parts



Base rail



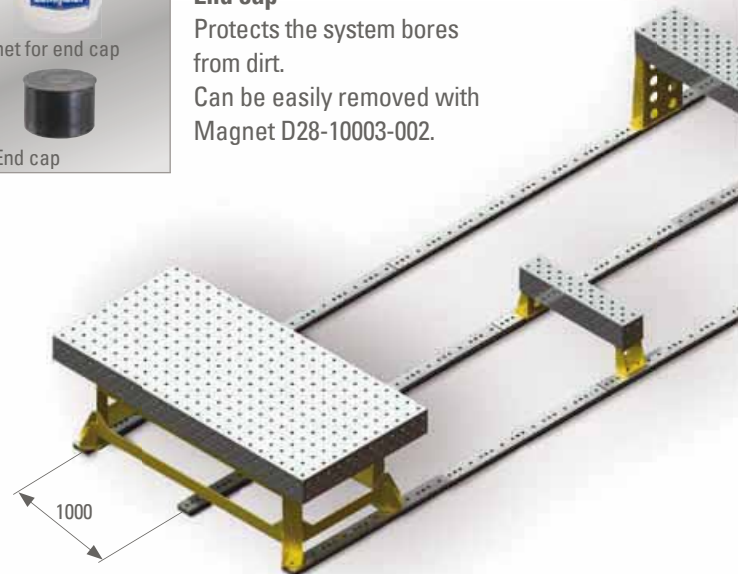
28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	1000	120	40	42		D28-02003-000
	2000	120	40	84		D28-02003-001
	3000	120	40	126	Preferred length	D28-02003-002
	6000	120	40	252	Preferred length	D28-02003-041

28	Description	Item no.
	End cap D28	D28-10003-000
	10 x End capn D28	D28-10003-001
	Magnet for end cap D28 Ø 32 mm	D28-10003-002



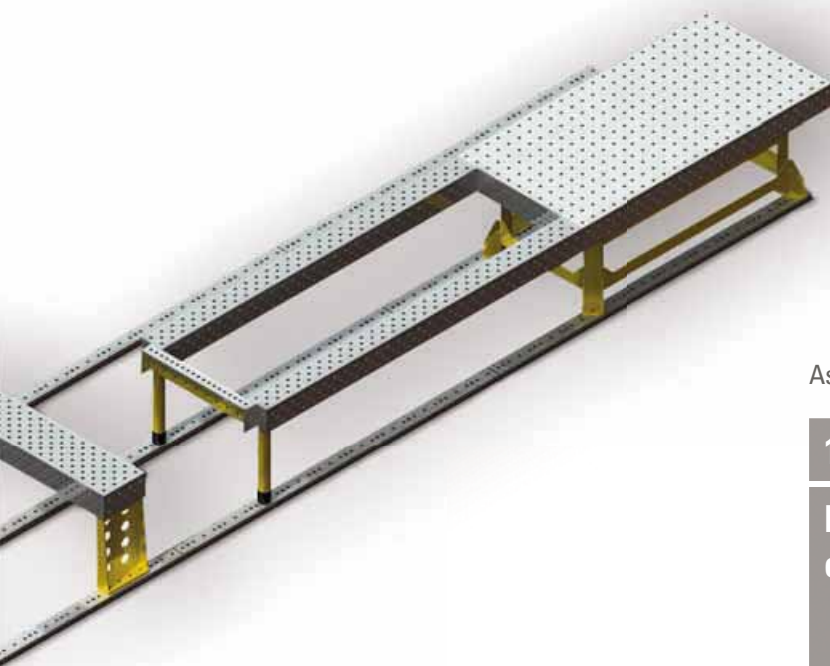
End cap

Protects the system bores from dirt.
Can be easily removed with Magnet D28-10003-002.



Description

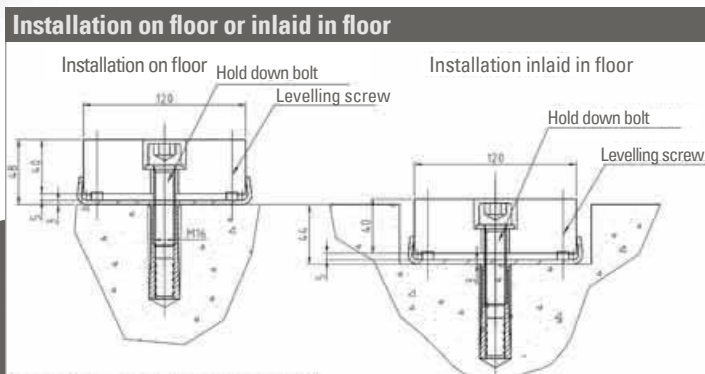
- Serves to build much larger grid patterns.
- Fixture large parts both directly on the rails or indirectly on system components
- Anchored to the floor and levelled during the mounting process, Installation on floor or inlaid in floor both possible
- Screw sets, anchor bolts and levelling plates included.
- An assembly kit with template is available on loan for the installation.
- Installation proposal on request



Assembly set with stencils

14 days free assembly stencils!

Request a quote now for complete assembly of your rail system!

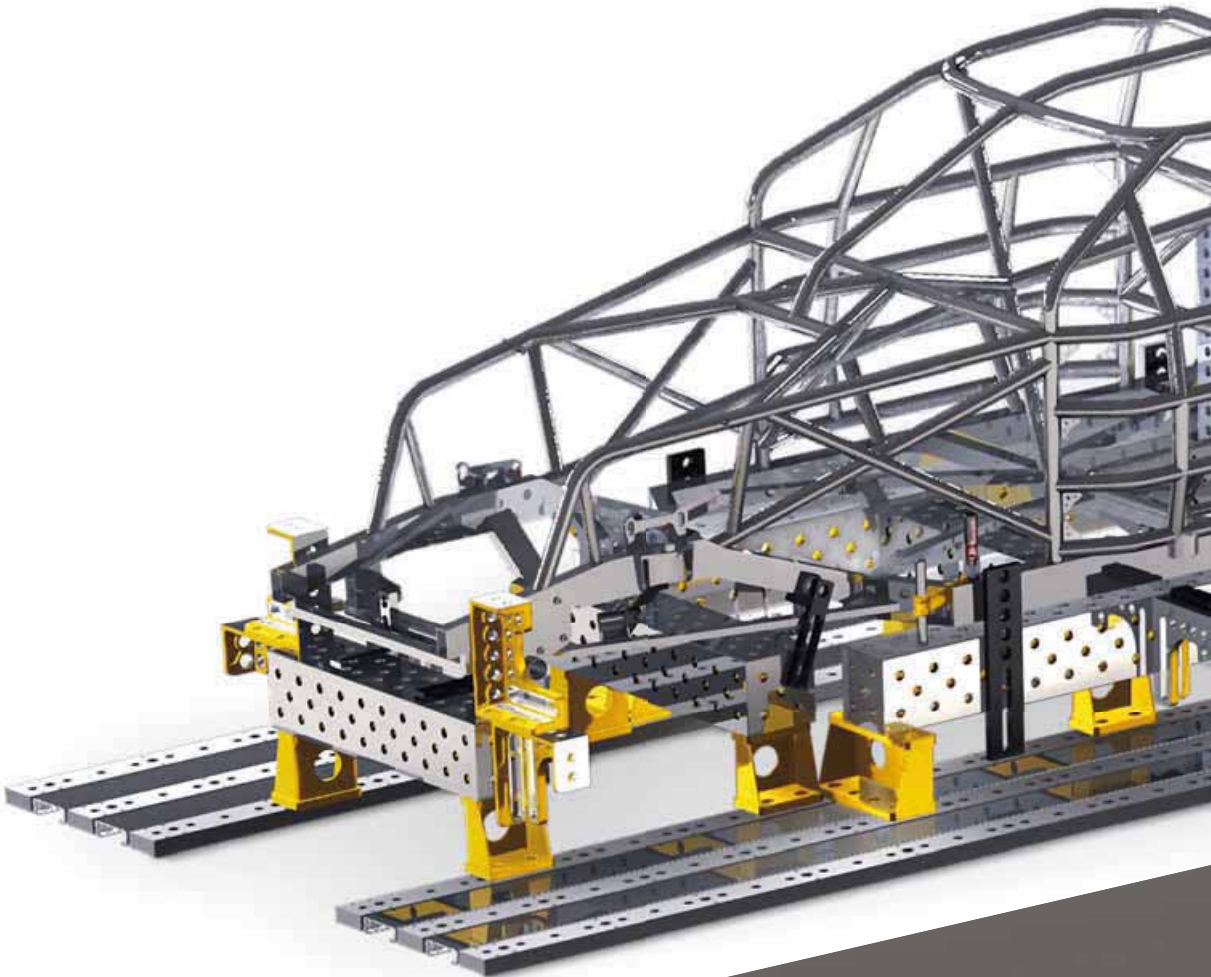


OUR PERFORMANCE makes the difference

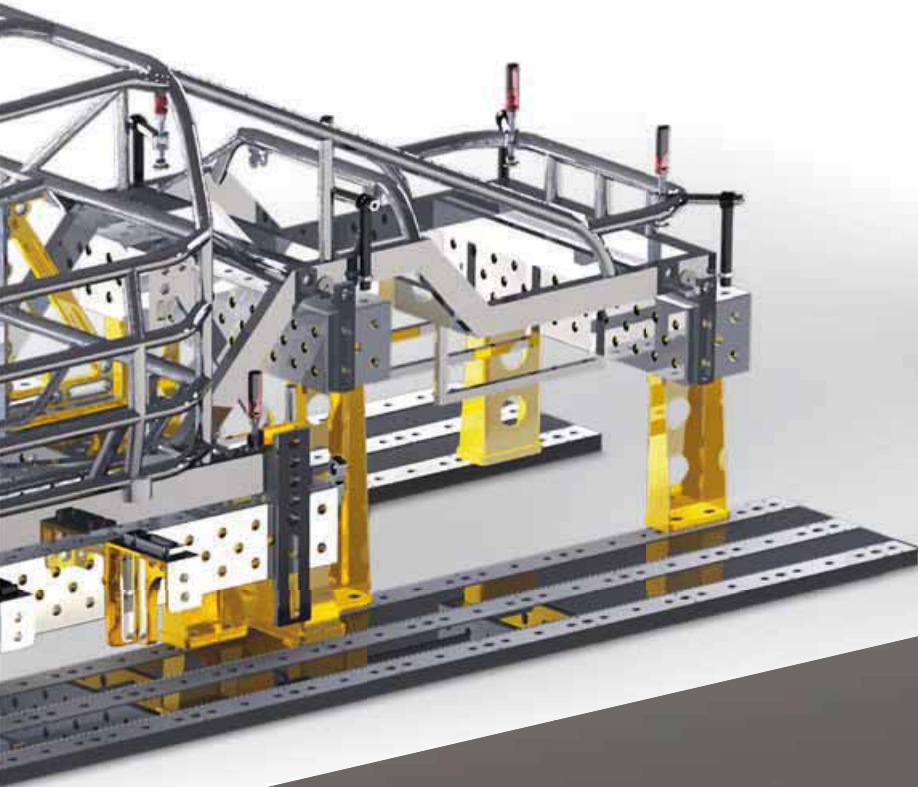


Large dimensions –

Demmeler applications



Demmeler applications



The rail system applications

Increase your performance – with the new shifting foot!

Expand your work station constantly!

**WORLDWIDE
BREAKTHROUGH**

Due to the latest innovation of shifting feet mounted on roller bearings you have the option to increase your working area by simple positioning the 3D workbenches and spacer angle U-shape on the foundation rails manually.

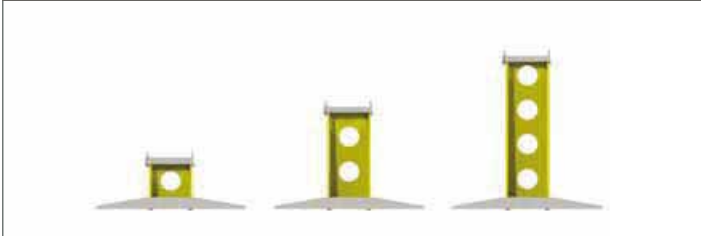
- Without use of lifting gear or crane
- Different heights in structure can be adjusted to the workpiece simply by changing the table feet
- Flexibility generates ergonomics – ergonomics increase profitability
- Highest load capacity in working position due to spring-loaded rollers



**PROPERTY RIGHT
APPLIED FOR**



Shifting foot 200

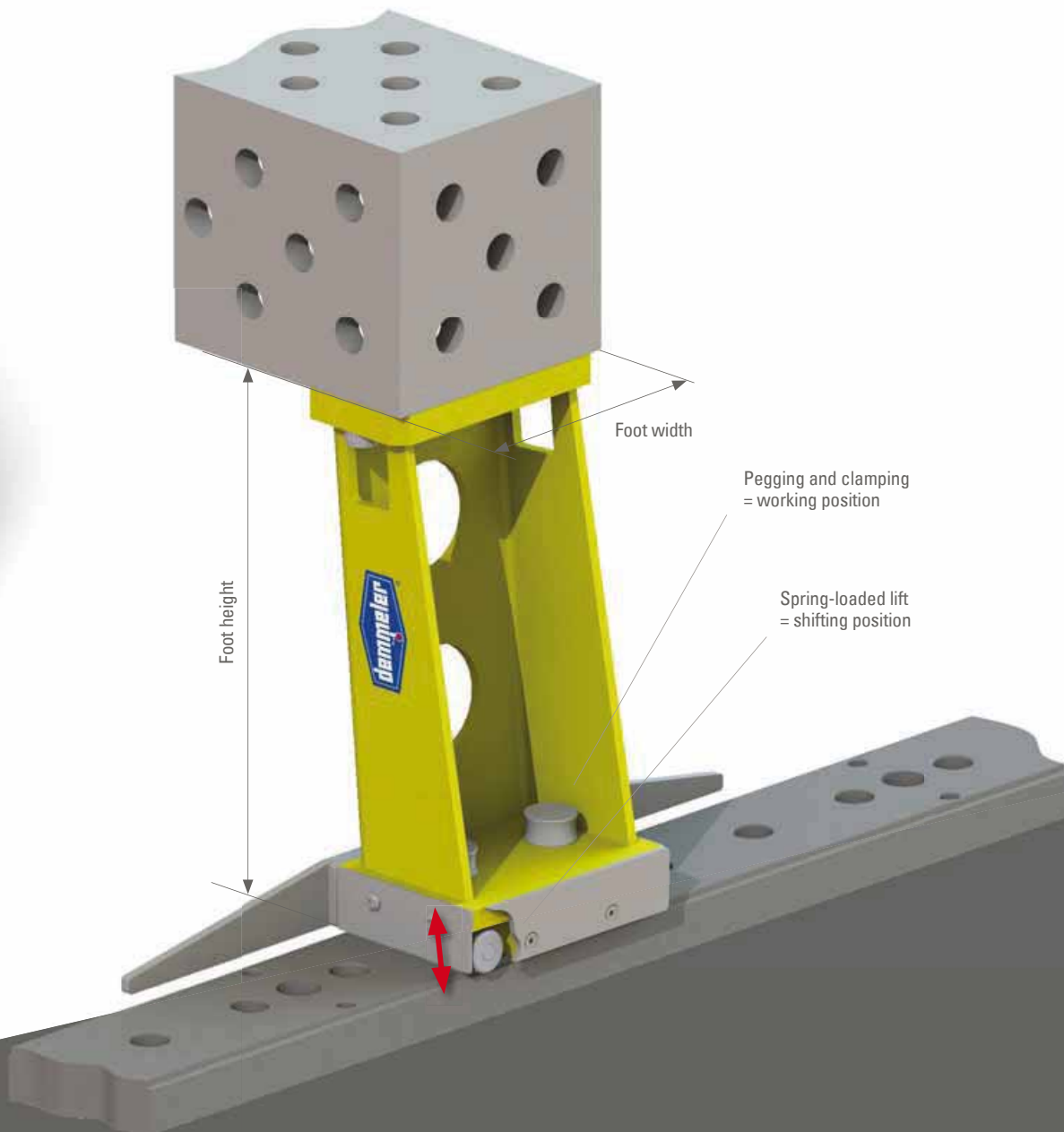


Foot width	Foot height	Article ID
200	200	D00-10017-025
200	400	D00-10017-026
200	600	D00-10017-027

Shifting foot 400



Foot width	Foot height	Article ID
400	200	D00-10017-028
400	400	D00-10017-029
400	600	D00-10017-030



spacer angle in U-shape— modular upgrade

NEW

Demmeler applications

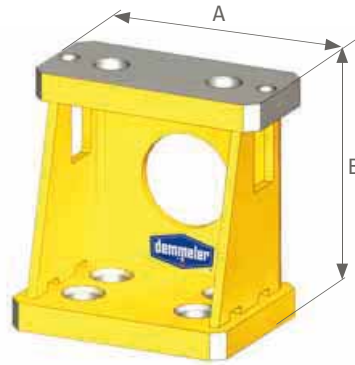
Leg for space bracket,
u-shape will be fixated
directly

Leg for
Spacer block
D00-10017-***



Leg for spacer angle U-shape

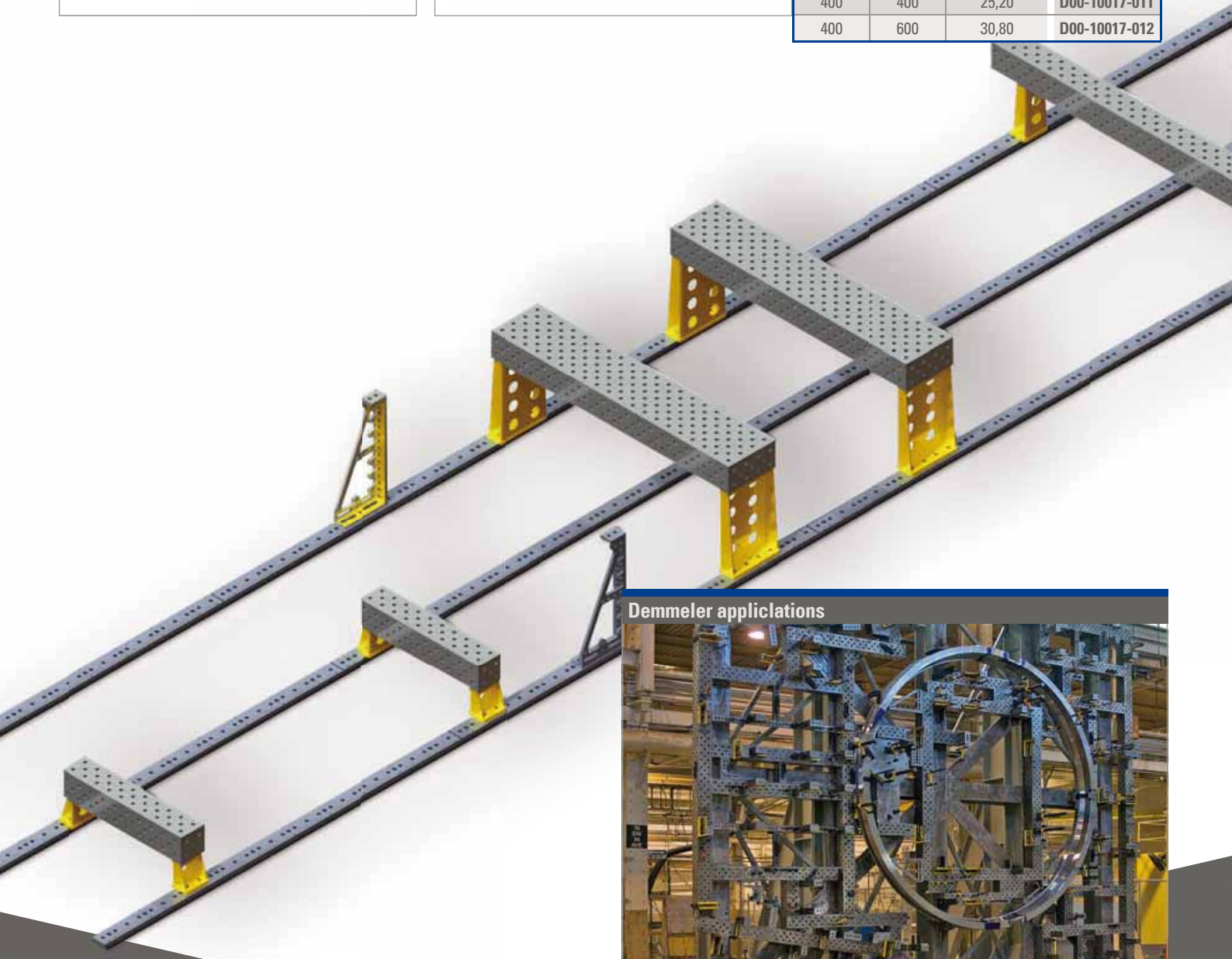
for mounting shoulder screws on spacing
bracket, u-shape



Description

- Connector between spacing bracket, u-shape, (see page 67), topper and foundation bar (see page 60)
- 2 or rather 4 PS studs D28-06001-000 or connecting sleeves D28-06003-000 required per foot
- incl. 2x shoulder screws M12-16 H8x30

A mm	B mm	approx. w kg	Item no.
200	200	9,90	D00-10017-000
200	400	13,90	D00-10017-001
200	600	17,50	D00-10017-002
400	200	19,00	D00-10017-010
400	400	25,20	D00-10017-011
400	600	30,80	D00-10017-012



Demmeler applications

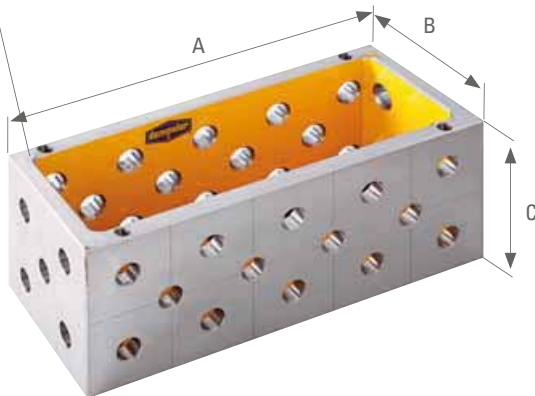


Spacer angle U-shape

OPTIMIZED

further dimensions on request

Fit bore with thread M12 for fastening the table foot D00-10017-*** or the base plate 00060364 and accordingly 00060369 with socket shoulder screws



Description

- can be optimally used on rail systems (see p. 60, 61)
- In combination with D00-10017-*** (see p. 66) or set-up of a frame: (see ill. right) bolt tight, using connecting sleeves D28-06003-000.
- for use as table extension; from 1 m length
- For additional table foot D00-10010-*** in connection with base plate 00060364 and accordingly 00060369
- Use: 5-sided
- Bore spacing for socket shoulder screws bottom, adjusted to foundation rail width 1000, 2000, 3000 und 4000

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	500	200	200	55	Diagonal grid 100x100	D28-04002-000
	1000	200	200	102	Diagonal grid 100x100	D28-04002-001
	1200	200	200	120	Diagonal grid 100x100	D28-04002-018
	1500	200	200	188	Diagonal grid 100x100	D28-04002-002
	2000	200	200	200	Diagonal grid 100x100	D28-04002-003
	2400	200	200	240	Diagonal grid 100x100	D28-04002-032
	3000	200	200	285	Diagonal grid 100x100	D28-04002-004
	4000	200	200	374	Diagonal grid 100x100	D28-04002-005
	500	400	200	81	Diagonal grid 100x100	D28-04002-211
	1000	400	200	149	Diagonal grid 100x100	D28-04002-222
	1200	400	200	174	Diagonal grid 100x100	D28-04002-223
	1500	400	200	219	Diagonal grid 100x100	D28-04002-224
	2000	400	200	281	Diagonal grid 100x100	D28-04002-225
	2400	400	200	329	Diagonal grid 100x100	D28-04002-226
	3000	400	200	410	Diagonal grid 100x100	D28-04002-227
	4000	400	200	534	Diagonal grid 100x100	D28-04002-228

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	500	100	100	19	Diagonal grid 50x50	D16-04002-000
	1000	100	100	38	Diagonal grid 50x50	D16-04002-001
	1500	100	100	57	Diagonal grid 50x50	D16-04002-002
	2000	100	100	93	Diagonal grid 50x50	D16-04002-003

Demmeler applications

foot will be fixed with table plate as intermediate element

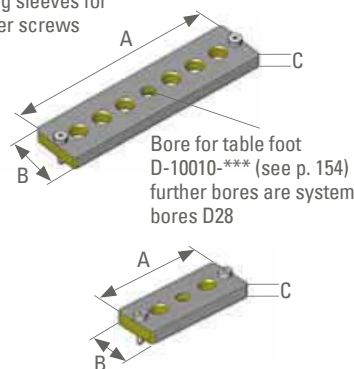
Standard table leg D00-10010-***

Foot plate
Spacer block



Foot plate for Spacer block U-Form

2x fitting sleeves for shoulder screws



Description

- Base plate for spacer angle U-shape D28-04002-xxx
- For fastening of table foot D00-10010-xxx; from 1 m length
- incl. 2x shoulder screws M12-16 H8x30

A in mm	B in mm	C in mm	approx. w kg	Item no.
200	100	25	0,665	00060364
400	100	25	1,165	00060369

spacer angle in C- und L-Form – modular upgrade

DEMMELER TOPSELLER: spacer angle L-Form

TOPSELLER

with grid lines



Description

- as table connection for connecting multiple 3D welding tables
- third axis extension as a clamping tower or as a lateral table locator
- Connection of system components
- powder-coated
- Use: 4-sided
- approx. 25 kg per 500 mm

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	500	200	100	26	Diagonal grid 100x100	D28-04001-000
	1000	200	100	52	Diagonal grid 100x100	D28-04001-001

spacer angle C-shape

with grid lines

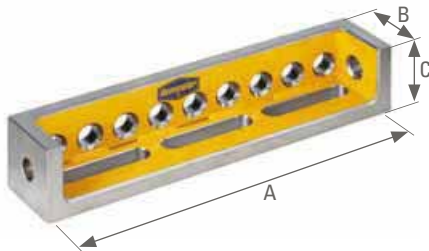


Description

- as table extension between two 3 D welding tables bolt tight, using connecting sleeves D28-06003-000
- connection of system components
- as table stop
- infinitely adjustable thanks to oblong holes
- Use: 5-sided

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	500	200	100	31	right	D28-04003-010
	500	200	100	31	left	D28-04003-002
	1000	200	100	62	right	D28-04003-011
	1000	200	100	62	left	D28-04003-003

Connection angle



Description

- Use as a bridge between clamping and locating angles or 3D tables
- Usable as a 4-sided locating support or table extension
- For use where space is limited
- many application opportunities owing to system bores and oblong holes
- powder-coated

28

A mm	B mm	C mm	approx. w kg	Item no.
500	100	100	15	D28-04004-000

Demmeler applications



Consoles –

DEMMELE TOPSELLER: Console cast

TOPSELLER

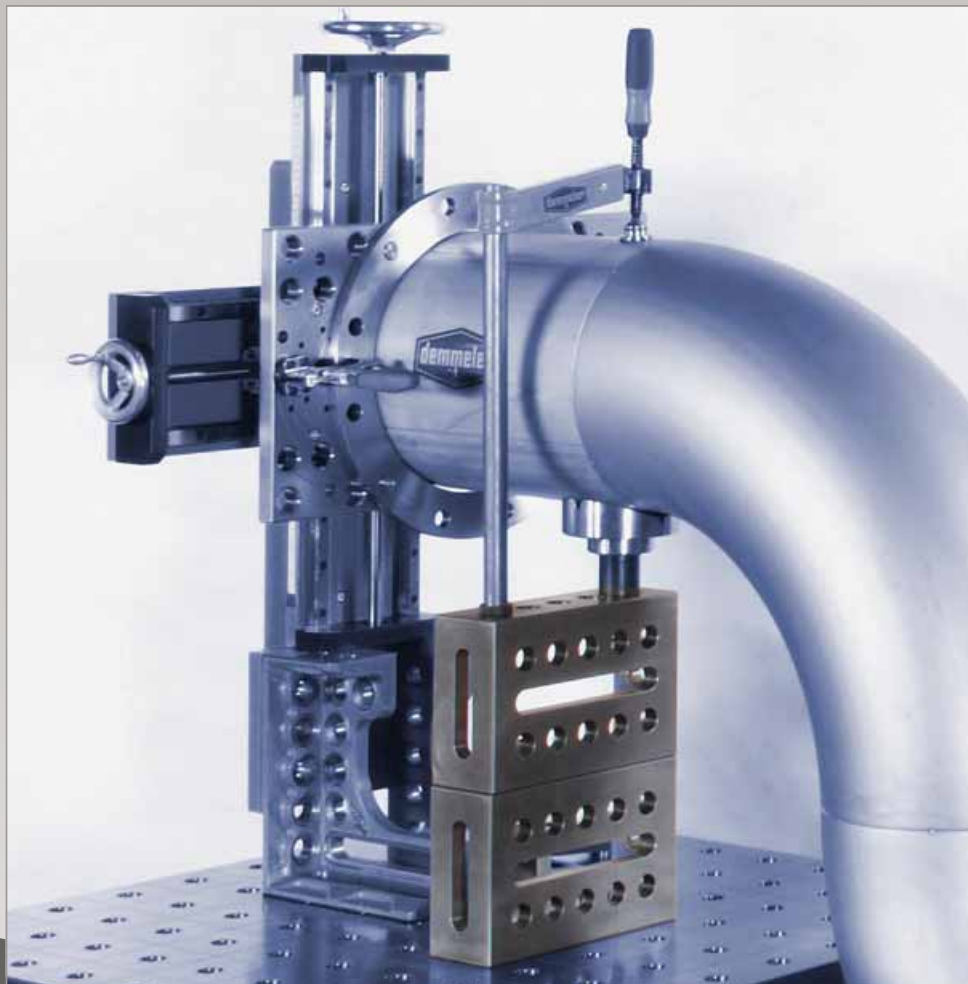


Description

- Five full clamping sides with system bores provide a multitude of application possibilities.
- As connecting elements between different system parts
- very versatile combination options:
 - >> through system bore
 - >> variable adjustment through oblong holes
- made as a single casting, thus high stability and service life
- use as a riser or an extension
- powder-coated

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	300	200	100	15,00	right	D28-03005-001
	300	200	100	15,00	left	D28-03005-004

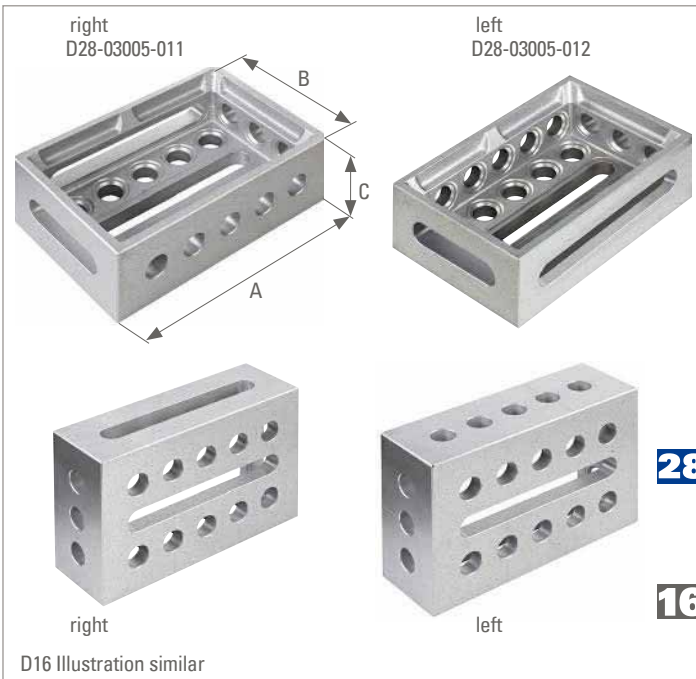
16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	150	100	50	1,98	right	D16-03005-001
	150	100	50	1,98	left	D16-03005-004



Our ideas– Your benefits

- 1 New now also in aluminium / titanium alloy. Approx. 10 % more flexural strength at over 60 % less weight, thus improved ergonomics at the workstation
- 2 5-sided use
- 3 erection of larger clamping towers is also possible – with connecting element e. g. D28-06001-000 (see p. 110) connect the consoles

Console aluminium / titanium alloy – higher strength at less weight



Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast
- Five full clamping sides provide a multitude of clamping possibilities
- variable adjustment through oblong holes
- anodised

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	300	200	100	5,92	right	D28-03005-011
	300	200	100	5,92	left	D28-03005-012

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	150	100	50	0,78	right	D16-03005-010
	150	100	50	0,78	left	D16-03005-012

Demmeler applications



Demmeler applications

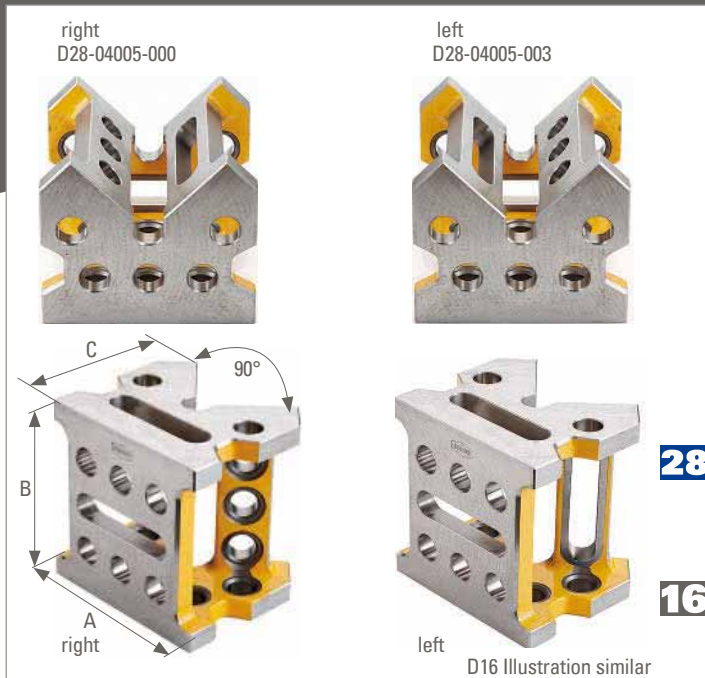


ergonomical, flexible and light



Corner module – diagonal table extension

Corner module cast



Description

- ▣ diagonal table extension
- ▣ flexible use as V-block, support and locator etc.

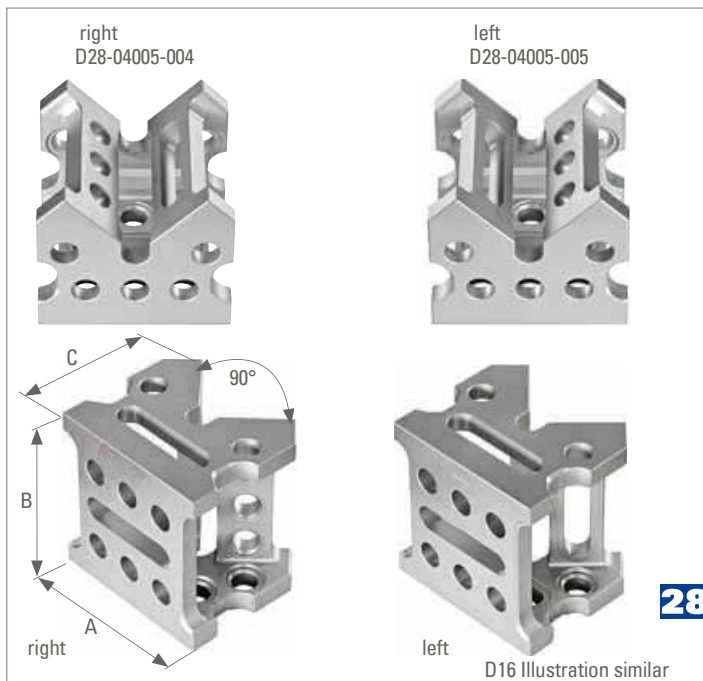
28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	200	200	175	12,12	right	D28-04005-000
	200	200	175	12,12	left	D28-04005-003

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	100	100	85	1,96	right	D16-04005-000
	100	100	85	1,96	left	D16-04005-003

Demmeler applications



Corner module aluminium / titanium alloy



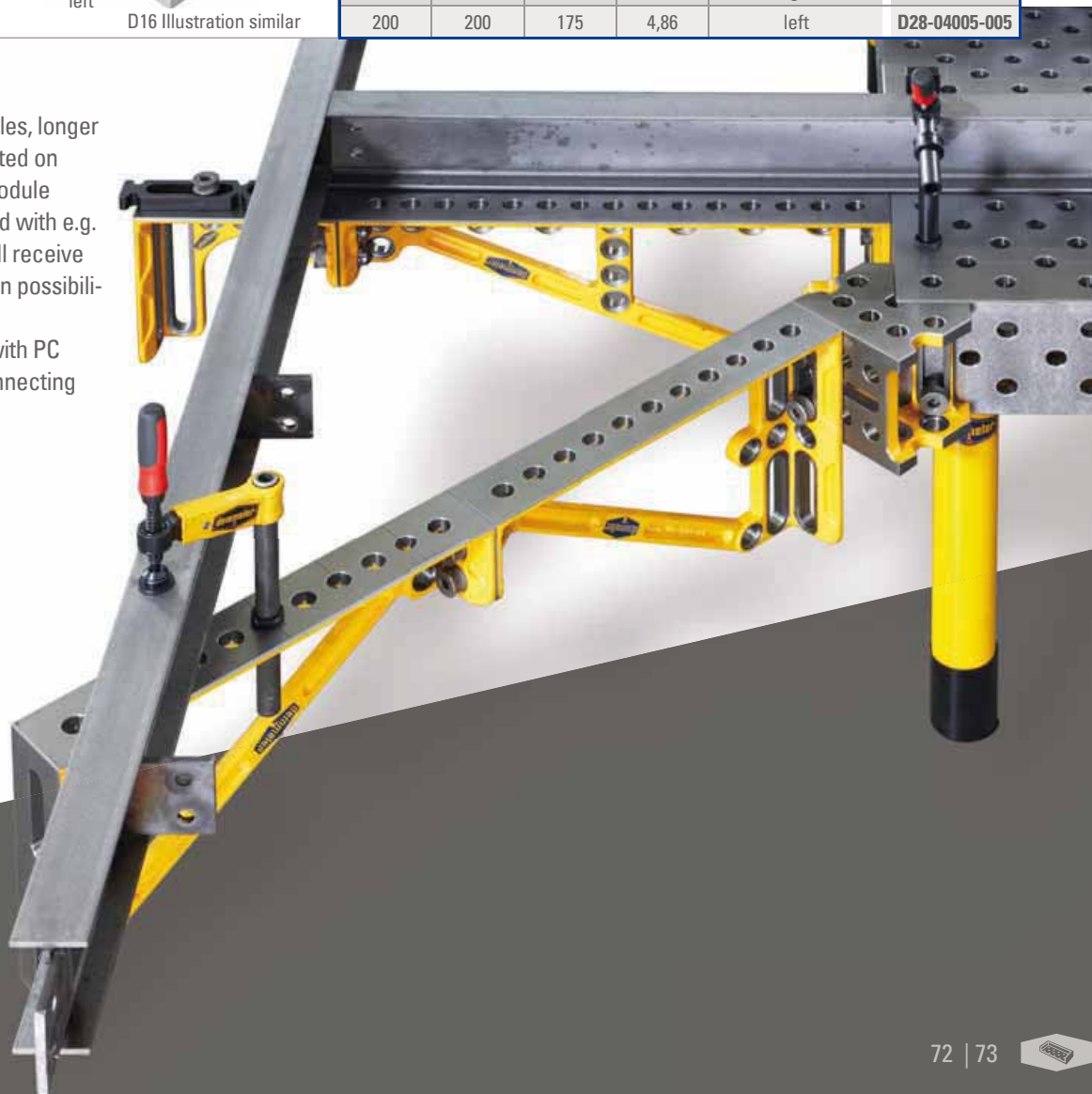
Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast
- diagonal table extension
- flexible use as V-block, support and locator etc.

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	200	200	175	4,86	right	D28-04005-004
	200	200	175	4,86	left	D28-04005-005

Using the Demmeler corner modules, longer sections and beams can be mounted on smaller welding tables - corner module placed in the corner and expanded with e.g. two angles D28-03003-***. You will receive the maximum number of expansion possibilities for mounting.

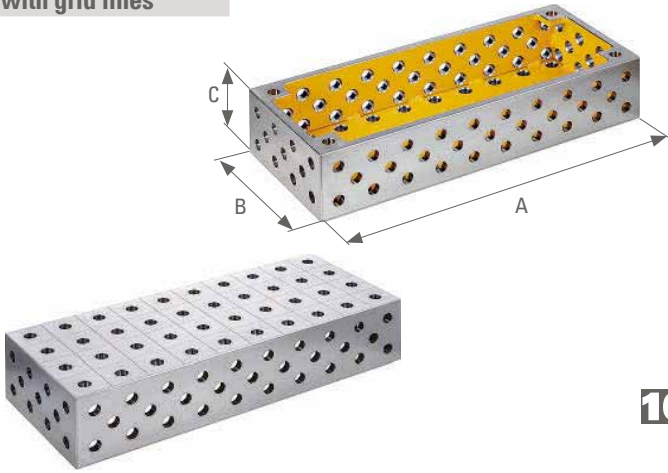
Fix system components in place with PC bolts-06001-000 (see p. 110) or connecting sleeves-06003-000 (see p. 115).



clamping block and clamping track – flexible extension tools

clamping block

with grid lines



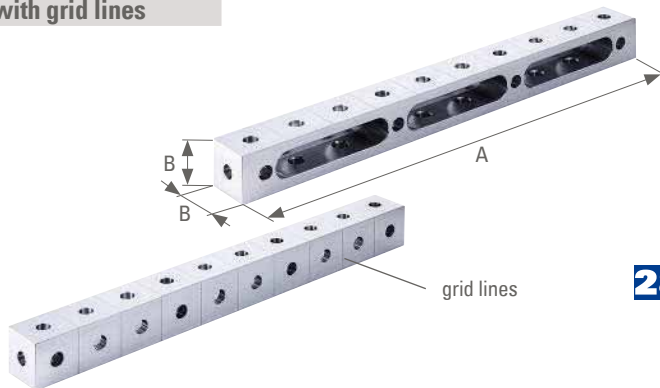
Description

- Use: 5-sided
- as table connection for connecting multiple 3D tables
- third axis extension as a clamping tower or as a lateral table locator
- Connection of system components

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	500	200	100	18,6	Grid 50x50	D16-04010-000
	500	500	100	35	Grid 50x50	D16-04011-000

clamping track

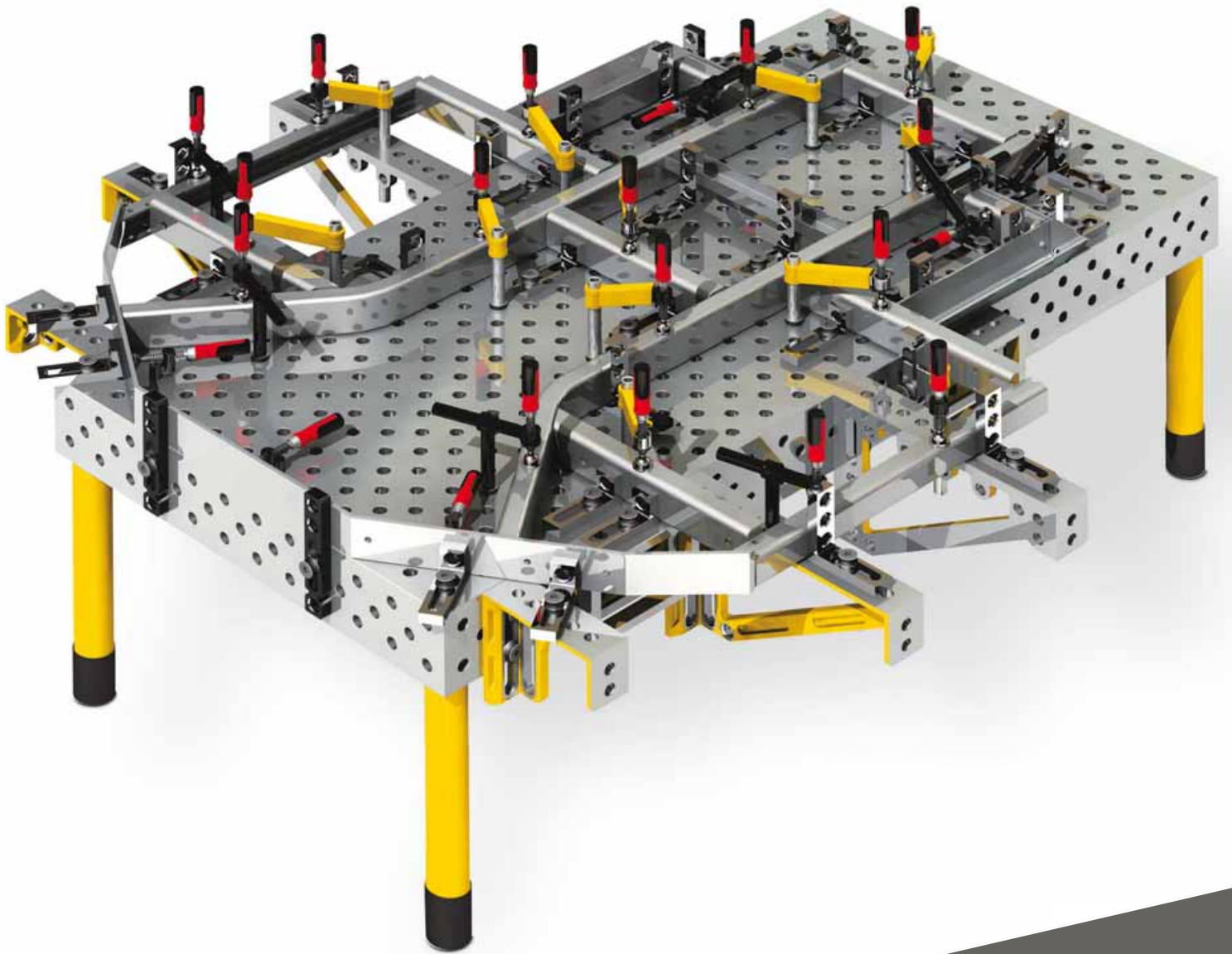
with grid lines



Description

- 6 clamping sides
- 3 System bore lines Grid 100 x 100

28	A mm	B mm	approx. w kg	Description	Item no.
	1000	100	48	Grid 100 x 100	D28-04010-001
	2000	100	96	Grid 100 x 100	D28-04010-002
	3000	100	144	Grid 100 x 100	D28-04010-003



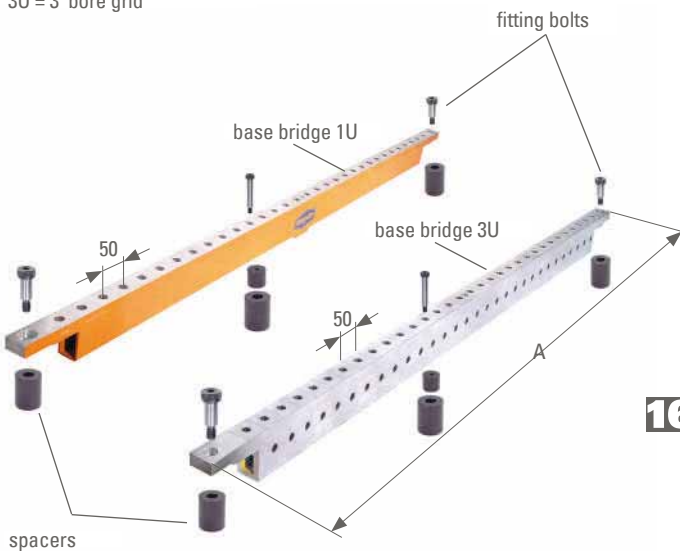
Base bridge & Segment-grid plate – Especially often in use in connection with base bridges on 3D laser machines



Photograph: TRUMPF GmbH & Co. KG

base bridge

1U = 1 bore grid
3U = 3 bore grid



spacers and fitting bolts depending on version. Illustration similar

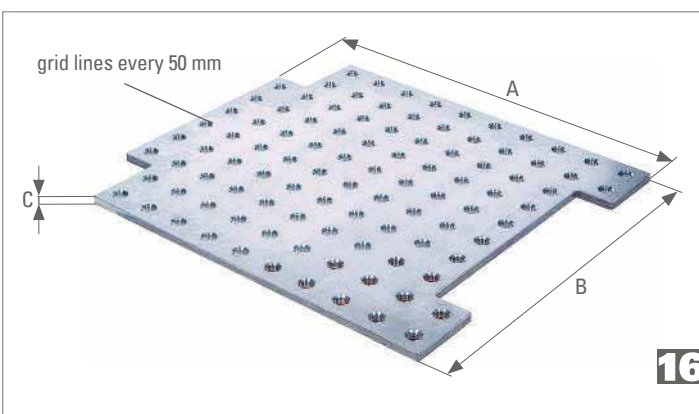
Description

- Especially designed for use with laser machines (e. g. Trumpf Lasercell 105, 1005, 6005, 7040)
- in connection with segment grid plate D16-02100-000 many clamping options
- direct intake of clamping components possible
- incl. Assembly equipment like fitting bolts and spacers for laser machine mounting
- grid lines every 50 mm, system bores every 50 mm

16	A mm	approx. w kg	Description	Item no.
	1366	-	1 Bore grid, for Trumpf Lasercell 105	D16-04100-010
	1682	-	1 Bore grid, for Trumpf Lasercell 1005	D16-04100-009
	2182	-	1 Bore grid, for Trumpf Lasercell 6005	D16-04100-013
	1500	-	1 Bore grid, for Trumpf Lasercell 7040	D16-04100-027
	1366	-	3 Bore grid, for Trumpf Lasercell 105	D16-04100-008
	1682	-	3 Bore grid, for Trumpf Lasercell 1005	D16-04100-005
	2182	-	3 Bore grid, for Trumpf Lasercell 6005	D16-04100-012
	1500	-	3 Bore grid, for Trumpf Lasercell 7040	D16-04100-026



Segment grid plate

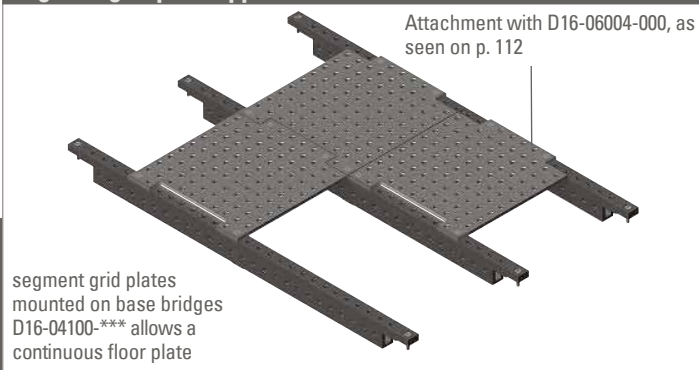


Description

- ▀ very flexible clamping options owing to 50 mm grid
- ▀ Through nesting of the contours, a continuous floor plate is made possible.
- ▀ Especially often in use in connection with base bridges on 3D laser machines

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	548	498	12	20	Grid 50 x 50	D16-02100-000

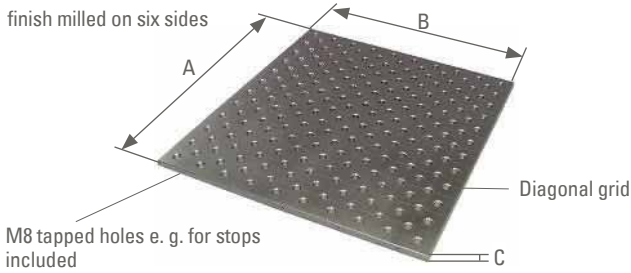
Segment grid plate applications



Clamping tables and exchangeable perforated table tops with holes – the miniature welding table

Clamping and adapter plate

with grid lines



further dimensions on request

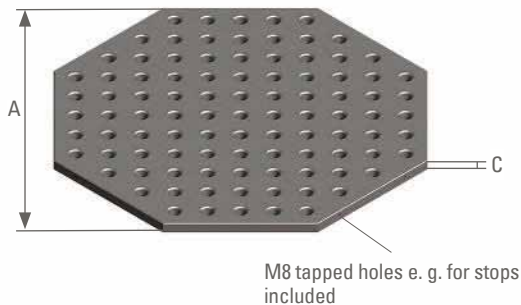
Description

- Use in connection with 3D tables, manipulators and rotary welding tables
- as an adaptor plate: 2-sided use

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	1000	800	25	140	Diagonal grid 100 x 100	D28-02001-000

adapter plate Okto SW

with grid lines



further dimensions on request

Description

- Use in connection with 3D tables, manipulators and rotary welding tables
- two-sided use as adapter plate

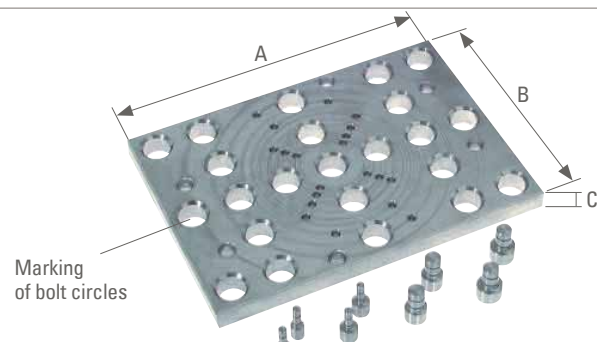
28	A mm	C mm	approx. w kg	Description	Item no.
	SW 600	25	-	Diagonal grid 100 x 100 mm	D28-02001-201
	SW 800	25	-	Diagonal grid 100 x 100 mm	D28-02001-202
	SW 1000	25	-	Diagonal grid 100 x 100 mm	D28-02001-203
16	A mm	C mm	approx. w kg	Description	Item no.
	SW 400	12	-	Diagonal grid 50 x 50 mm	D16-02100-053
	SW 600	12	-	Diagonal grid 50 x 50 mm	D16-02100-052
	SW 800	12	-	Diagonal grid 50 x 50 mm	D16-02100-051

adapter plates for flanges

- Pipe flanges can be mounted quickly and accurately with alignment pins on a bolt circle and attached with quick release skewer D28-08001-000. The system bores D28 handle the clamping elements of the system.

- Alignment pins are included in the scope of delivery
- Adaptor plates for other flanges on request

adapter plates for flanges DIN 2633 / 2632



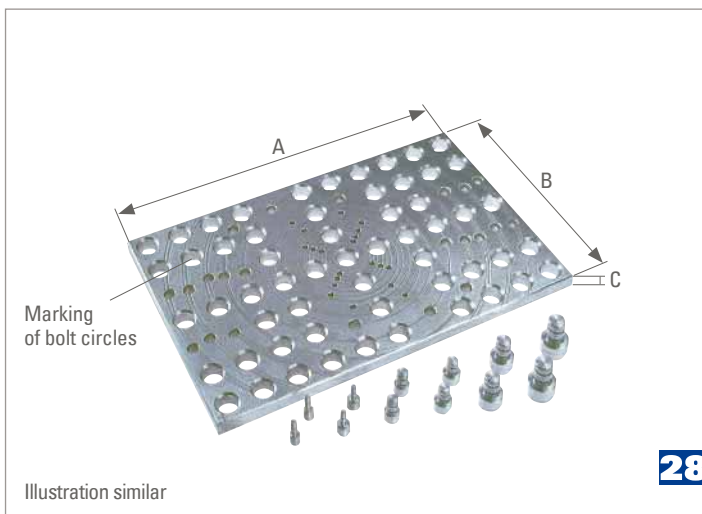
Description

- DIN 2633 Nominal width DN 15 - DN 200
- DIN 2632 Nominal width DN 200
- incl. locking bolts:
 - 2 x Ø 13.8 mm
 - 2 x Ø 17.8 mm
 - 2 x Ø 21.8 mm
 - 2 x Ø 25.8 mm

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	350	250	25	12	incl. locking bolts	D28-02005-000

adapter plates for flanges DIN 2632 / 2633 / 2634 / 2635

OPTIMIZED



Description

- DIN 2632 nominal widths DN 200 - DN 400
- DIN 2633 nominal widths DN 15 - DN 400
- DIN 2634 nominal widths DN 200 - DN 400
- DIN 2635 nominal widths DN 50 - DN 400
- incl. locking bolts:

2 x Ø 13.8 mm	2 x Ø 17.8 mm
2 x Ø 21.8 mm	2 x Ø 25.8 mm
2 x Ø 29.8 mm	2 x Ø 32.8 mm
2 x Ø 35.8 mm	2 x Ø 38.8 mm

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	550	350	25	30	incl. locking bolts	D28-02006-000

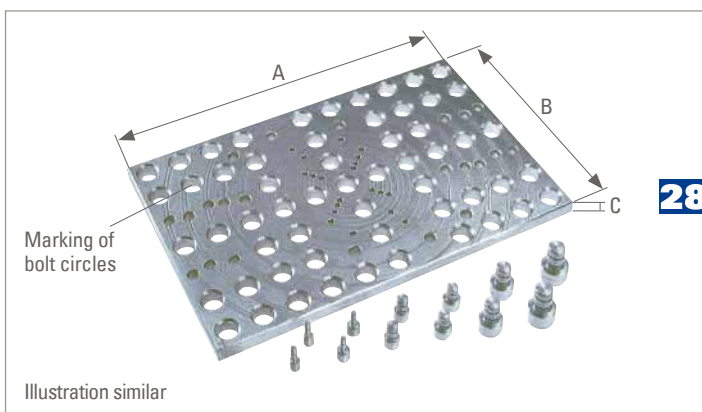
Demmeler applications: adapter plates for flanges



Demmeler applications: adapter plates for flanges



adapter plates for Ansi flanges (ANSI-Norm B 16.5)



Description

- all clamping plates inclusive of locking bolts

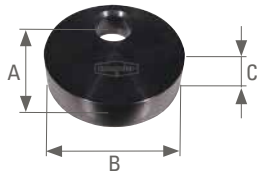
28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	350	250	25	12	150 lbs - 1/2" - 08"	D28-02005-011
	350	250	25	12	300 lbs - 1/2" - 08"	D28-02005-012
	350	250	25	12	600 lbs - 1/2" - 06"	D28-02005-013
	550	350	25	30	150 lbs - 1/2" - 12"	D28-02006-026
	550	350	25	30	300 lbs - 1/2" - 10"	D28-02006-024
	550	350	25	30	600 lbs - 1/2" - 08"	D28-02006-025

**Clever –
the right plate for your flange**



Demmeler stopper means – Professional clamping

Locating disk

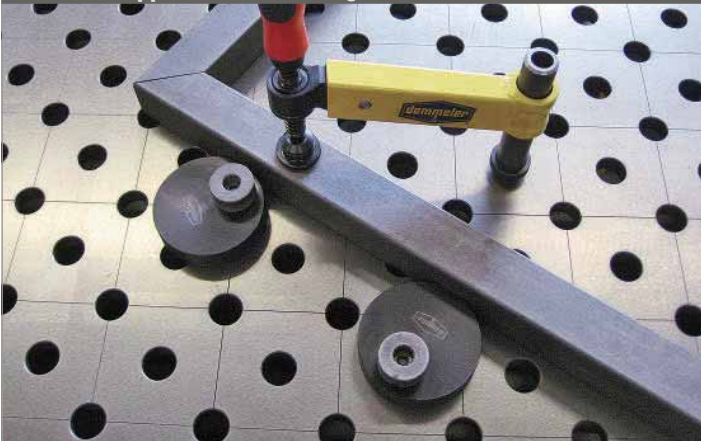


Description

- ☛ use as a stop or a support
- ☛ Attachment with PC bolts D28-06001-000 (p. 110) or connection bolts D28-06003-000 (p. 115)
- ☛ infinitely adjustable by rotating (adjustment track A)
- ☛ low space requirement

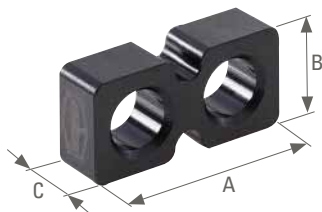
28	A mm	B = Ø mm	C mm	approx. w kg	Item no.
	50	75	25	0,7	D28-05013-000
	75	100	25	1,3	D28-05013-001

Demmeler applications: Locating disk



low space requirement , infinitely adjustable by rotating – easy!

Universal-stop small



Description

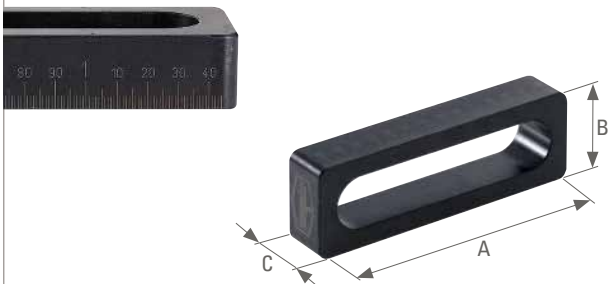
- ☛ preferred use where space is limited

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	100	50	25	0,64	-	D28-05002-000

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	55	25	12	0,08	-	D16-05002-000

Displacement-stop

bilateral precision scaling



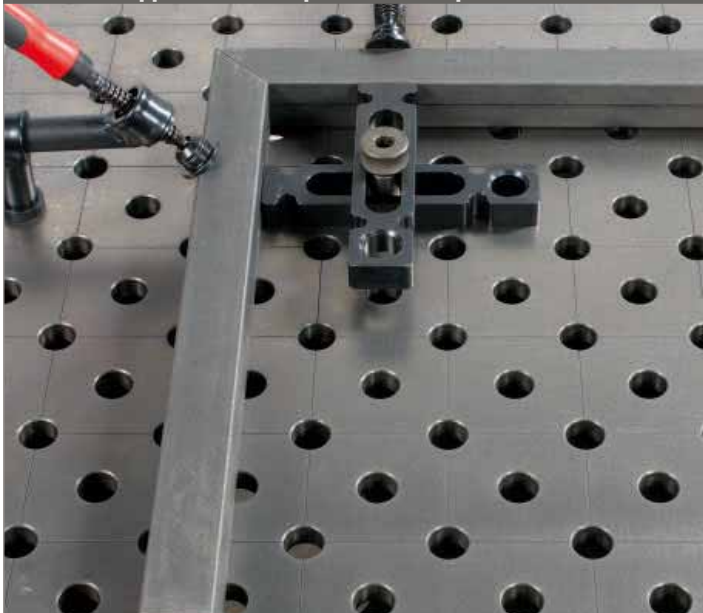
Description

☛ infinitely adjustable by bilateral scale

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	150	50	25	0,9	bilateral scale	D28-05015-000

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	150	25	12	0,18	bilateral scale	D16-05015-000

Demmeler applications: Displacement-stop

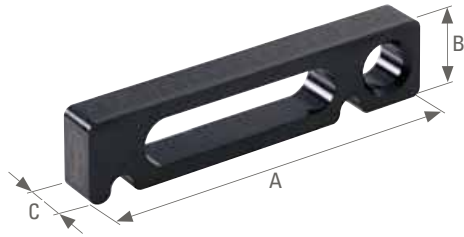


Universal-Stops – made by Demmeler

DEMMELEER TOPSELLER: Universal-stop large with precision scaling

TOPSELLER

with 1mm precision scaling



Description

- Combination System bore / Oblong hole hence many clamping options
- incl. 1 mm precision scaling
- blued

28	A mm	B mm	C mm	approx. G kg	Item no.
	225	50	25	1,32	D28-05001-010

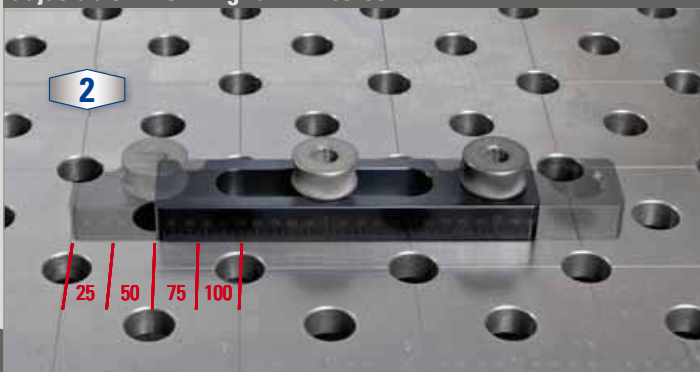
16	A mm	B mm	C mm	approx. G kg	Item no.
	115	25	12	0,14	D16-05001-004



Our ideas – Your benefits

- 1 adjustment through precision scaling using grid lines
- 2 in table bore pattern lockable 5-sided by means of PC bolts in 25 mm-Grid
- 3 in position 360°: adjustable
- 4 additional gaps for clamping, ideal as corner stop
- 5 infinitely adjustable through oblong holes

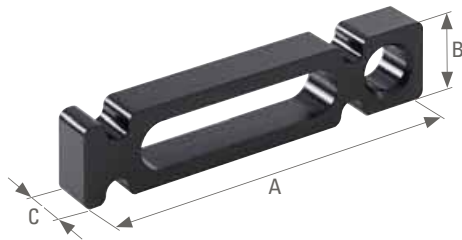
adjustable in 25 mm grid with bores



Demmeler precision scaling for precise, infinitely variable positioning



Universal-stop large



Description

- Combination System bore / Oblong hole hence many clamping options
- in table bore pattern lockable and attachable 5-sided by means of PC bolts in 25 mm-grid
- in position 360°: adjustable in 45° steps
- infinitely adjustable through oblong holes
- blued

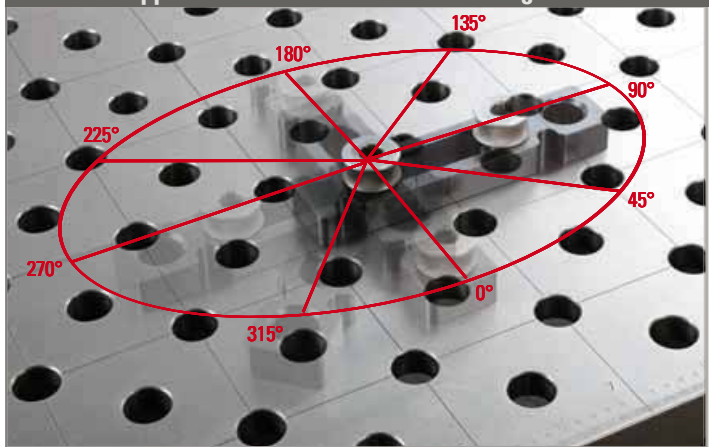
28	A mm	B mm	C mm	approx. G kg	Item no.
	225	50	25	1,2	D28-05001-000

16	A mm	B mm	C mm	approx. G kg	Item no.
	115	25	12	0,14	D16-05001-000

Demmeler applications



Demmeler applications: 360° flexible use on the grid



Flexible in any clamping situation – the Universal-stops made by Demmeler!

Demmeler applications



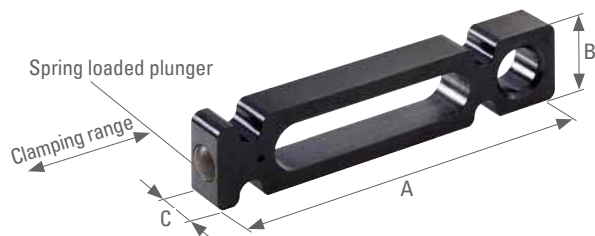
**Demmeler –
safe fastening in any clamping situation**



Universal-Stops – precise fixing of workpieces

Universal-stop large with plunger

5mm Clamping range



Description

- like Universal-stop large D28-05001-000 (see p. 83)
- with additional spring loaded plunger especially for clamping of sheet metal and formed parts, hence no additional clamping of the workpieces is required

28	A mm	B mm	C mm	approx. G kg	Item no.
	225	50	25	1,2	D28-05001-001

16	A mm	B mm	C mm	approx. G kg	Item no.
	115	25	12	0,14	D16-05001-001

Universal-stop L 165 / L 300 / L 500



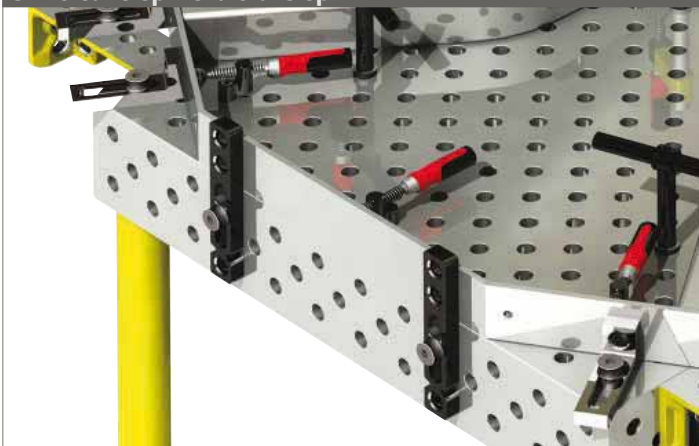
Description

- larger setting range than Uni- stop large
- three and/or seven system bores
- to bridge over larger locating surfaces
- as lateral stop for large supports

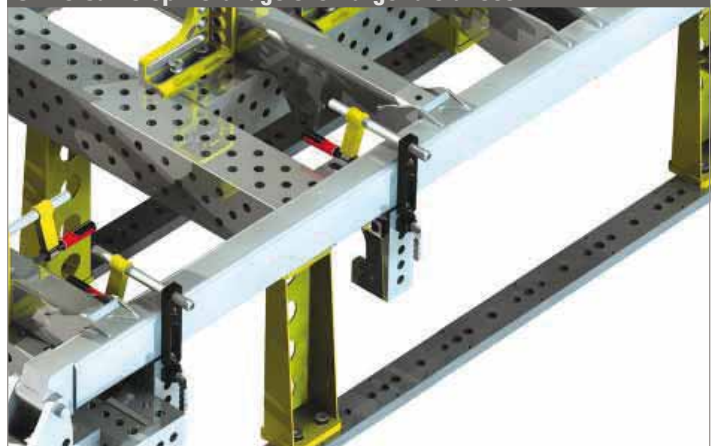
28	A mm	B mm	C mm	approx. G kg	Item no.
	300	50	25	1,80	D28-05009-000
	500	50	25	3,22	D28-05009-008

16	A mm	B mm	C mm	approx. G kg	Item no.
	165	25	12	0,22	D16-05009-000

Universal-stop: As lateral stop

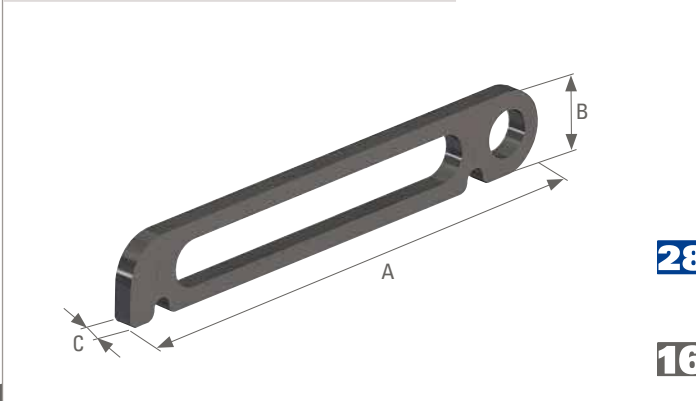


Universal- stop : to bridge over larger distances



Contours-stop 325 / 6

with 1mm precision scaling



Description

- serves as support and stopper elements for light workpieces
- clamping through PC bolts and spacer disk of the spacer set
- economical

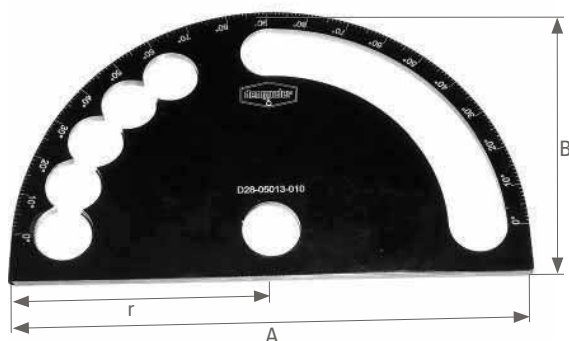
28	A mm	B mm	C mm	approx. G kg	Item no.
	325	50	6	-	D28-05016-000

16	A mm	B mm	C mm	approx. G kg	Item no.
	187,5	25	6	-	D16-05016-000

Universal-Stops – Flexibility in small steps

Angle-setting template

precision scaling bilateral



Description

- The angle-setting template is highly flexible as it has scales 1° on both sides.
- infinitely adjustable 0°-90°
- quick to mark out 0-60° (15° steps)
- r = Radius 125 mm (28) and/or 75 mm (16)

28	A mm	B mm	C mm	approx. G kg	Item no.
	250	150	5	0,88	D28-05013-010

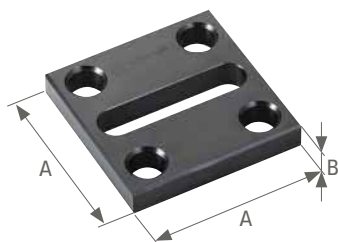
16	A mm	B mm	C mm	approx. G kg	Item no.
	150	87,5	5	0,32	D16-05013-010

Demmeler applications



Firmly adjustable in 15° steps (0° - 60°) and also infinitely 0-90°

Adapter plate



Description

- as interface between 3D system and individual components, i. e. to weld on / bolt on special elements provided by the customer

28	A mm	B mm	approx. G kg	Item no.
	150	25	3,18	D28-05010-000

16	A mm	B mm	approx. G kg	Item no.
	75	12	0,36	D16-05010-000

DEMMELE TOPSELLER: stop-strip L500

TOPSELLER



Description

- Combination System bore / Oblong hole hence many clamping options

28	A mm	B mm	C mm	approx. G kg	Item no.
	500	100	25	7,00	D28-05003-000
	800	100	25	14,00	D28-05003-001
	1000	100	25	16,48	D28-05003-008

16	A mm	B mm	C mm	approx. G kg	Item no.
	250	50	12	0,90	D16-05003-000
	400	50	12	1,48	D16-05003-001

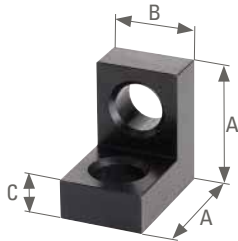
Our ideas – Your benefits

- very long and robust design with large surface for large components or large distances
- infinitely adjustable through oblong holes
- Combination Oblong hole, System bore, hence many clamping options
- blued



Clamping and locating angle – infinitely variable clamping options

clamping and locating angle bores / Bores small



Description

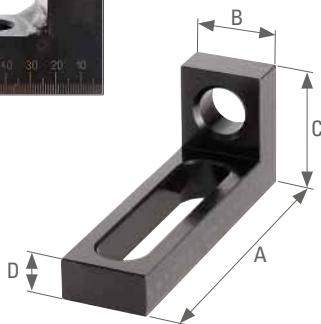
- ideal for confined spaces
- infinitely variable height-adjustable support surfaces e.g. in connection with D28-03001-003 (S. 90), connected with D28-06003-003 (p.115)
- blued

28	A mm	B mm	C mm	approx. G kg	Item no.
	75	50	25	0,98	D28-03001-008

16	A mm	B mm	C mm	approx. G kg	Item no.
	37,5	25	12	0,12	D16-03001-008

clamping and locating angle bores / Oblong hole small

precision scaling bilateral



Description

- Measuring alignment using the grid lines on 3D welding table possible
- fixed and infinitely adjustable via oblong holes
- ideal for confined spaces
- combination Bores / Oblong hole
- blued

28	A mm	B mm	C mm	D mm	approx. G kg	Item no.
	175	50	75	25	1,40	D28-03001-005

16	A mm	B mm	C mm	D mm	approx. G kg	Item no.
	90	25	37,5	12	0,16	D16-03001-002

Demmeler applications: precise adjustment with precision scaling



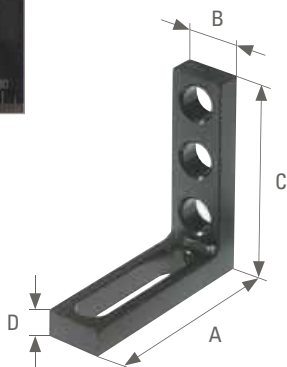
Demmeler applications: safe clamping



DEMMELE TOPSELLER: Clamping and locating angle Bores / Oblong hole medium

TOPSELLER

precision scaling bilateral



D16 Illustration similar

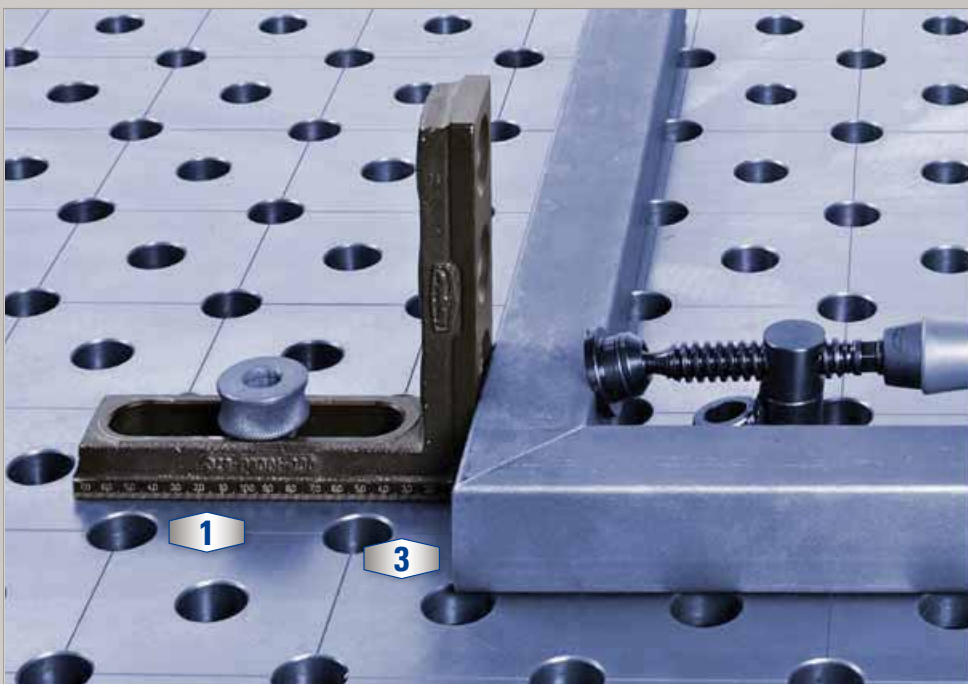
Description

- Combination system bores / Oblong hole hence many clamping options
- black galvanized (28) and/or blued (16)

OPTIMIZED

28	A mm	B mm	C mm	D mm	approx. G kg	Item no.
	175	50	175	25	2,02	D28-03001-000

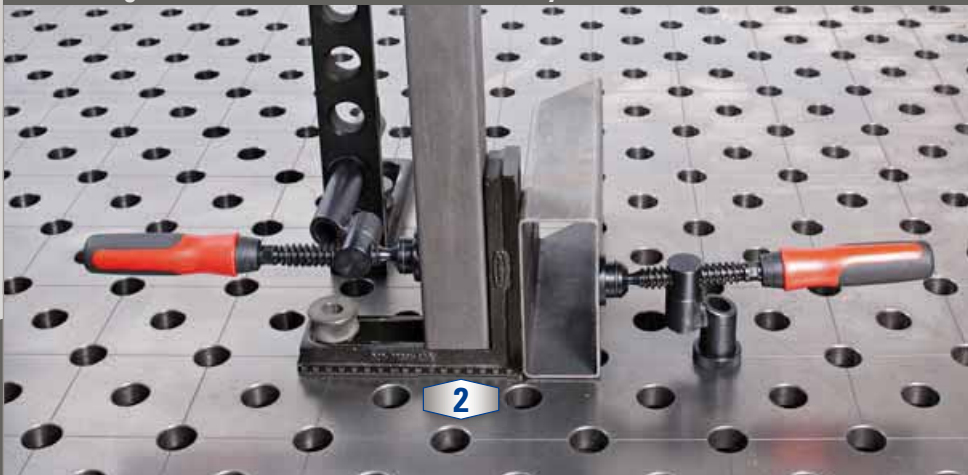
16	A mm	B mm	C mm	D mm	approx. G kg	Item no.
	90	25	90	12	0,24	D16-03001-000



Our ideas– Your benefits

- precision scaling bilateral
- two full angle areas hence can be used bilaterally (28)
- Measuring alignment using the grid lines on 3D welding table possible
- Compatible with all clamping and locating angles. Hence, by means of the oblong hole, a height-adjustable support can be achieved.
Connecting element D28-06003-003 (see p. 115)

two full angle areas – hence can be used bilaterally



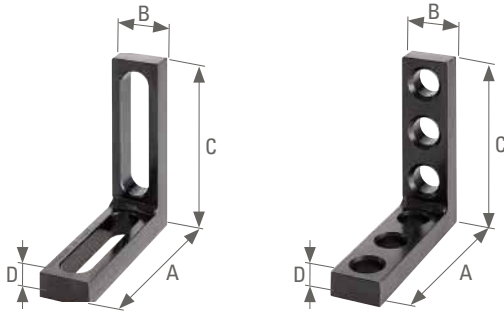
height-adjustable support



Clamping and locating angle – versatile bore variants

Clamping and locating angle medium

precision scaling bilateral



Oblong hole / Oblong hole

Bores / Bores without scales

Description

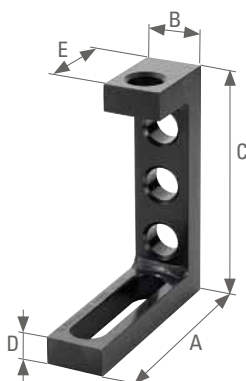
- Measuring alignment using the grid lines
- on 3D welding table possible
- fixed and infinitely adjustable
- ideal for confined spaces
- blued

28	A mm	B mm	C mm	D mm	approx. G kg	Description	Item no.
	175	50	175	25	1,74	Oblong hole / Oblong hole	D28-03001-003
	175	50	175	25	2,34	Bore / Bore	D28-03001-004

16	A mm	B mm	C mm	D mm	approx. G kg	Description	Item no.
	90	25	90	12	0,20	Oblong hole / Oblong hole	D16-03001-003
	90	25	90	12	0,28	Bore / Bore	D16-03001-004

Clamping and locating angle bores / Bores / Oblong hole medium

precision scaling bilateral



Bores / Bores / Oblong hole

Description

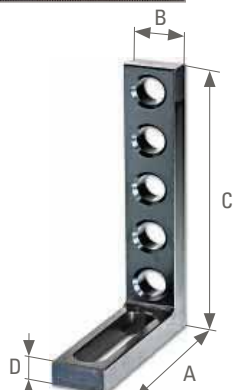
- Combination system bores / Oblong hole hence many clamping options
- with additional head plate for further add-ons
- precision scaling bilateral
- Measuring alignment using the grid lines on 3D welding table possible
- blued

28	A mm	B mm	C mm	D mm	E mm	approx. G kg	Description	Item no.
	175	50	200	25	75	2,70	Bore / Bore / Oblong hole	D28-03001-013

Clamping and locating angle bores / Oblong hole large

OPTIMIZED

precision scaling bilateral



Bores / Oblong hole

D16 Illustration similar

Description

- Combination system bores / Oblong hole hence many clamping options
- precision scaling bilateral
- two full angle areas, hence can be used bilaterally (28)
- Measuring alignment using the grid lines on 3D welding table possible
- Compatible with all clamping and locating angles. Hence, by means of the oblong hole, a height-adjustable support can be achieved.

Connecting element D28-06003-003 (p. 115)

- black galvanized (28) and/or blued (16)

28	A mm	B mm	C mm	D mm	approx. G kg	Description	Item no.
	175	50	275	25	2,74	Bore / Oblong hole	D28-03008-000

16	A mm	B mm	C mm	D mm	approx. G kg	Description	Item no.
	90	25	140	12	0,32	Bore / Oblong hole	D16-03008-000

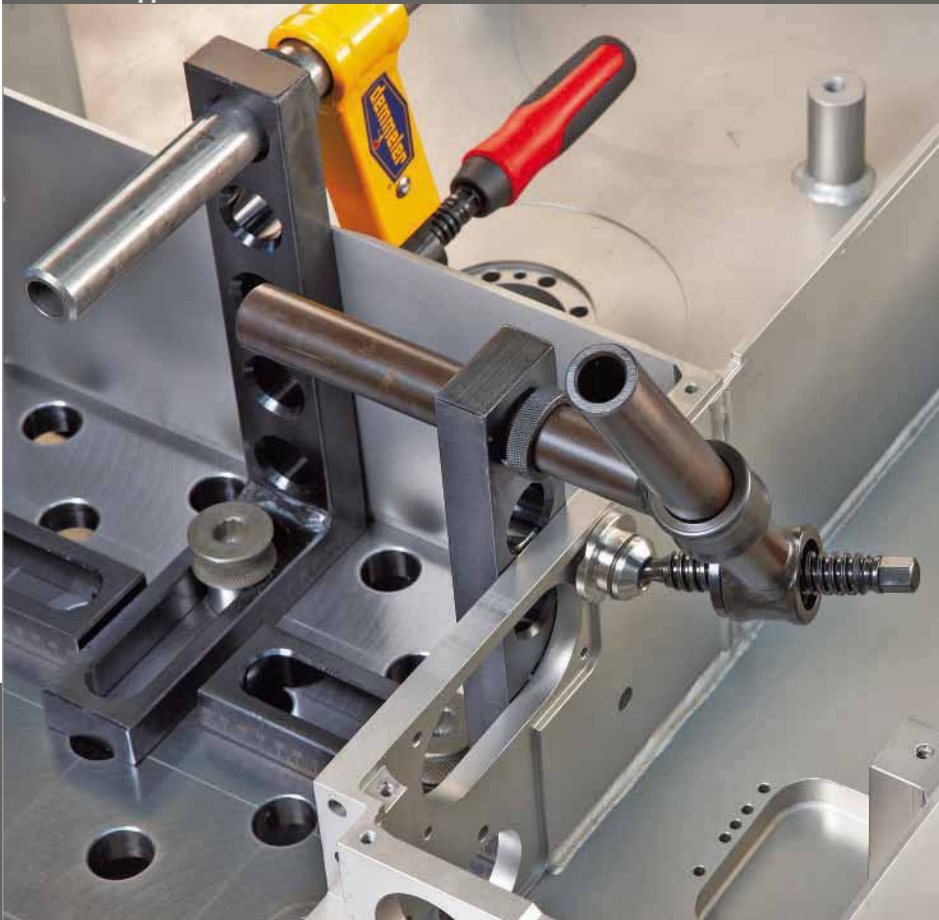
Demmeler applications



Two brackets as height-adjustable support

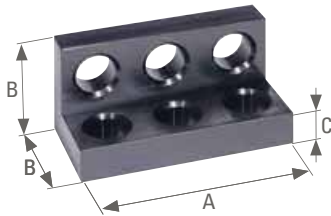


Demmeler applications



Clamping and locating angle – strong connection of workpieces

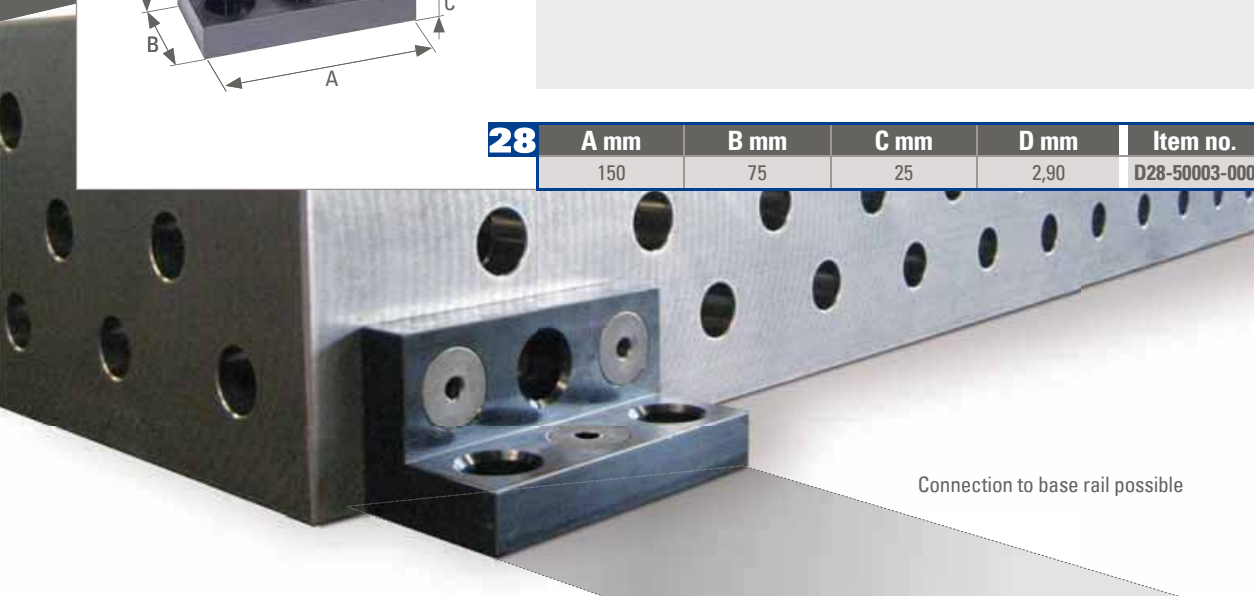
Angle bracket



Description

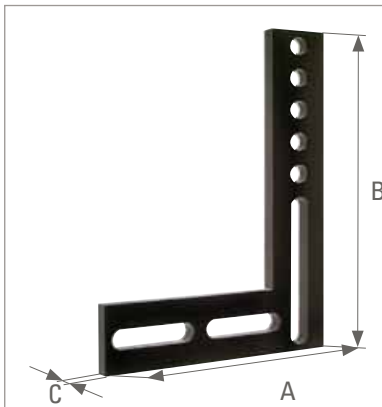
- very sturdy clamping- and stop angle for workpieces and system parts
- direct connection of 3D welding table and base rail

28	A mm	B mm	C mm	D mm	Item no.
	150	75	25	2,90	D28-50003-000



Connection to base rail possible

Flat angle bar



Description

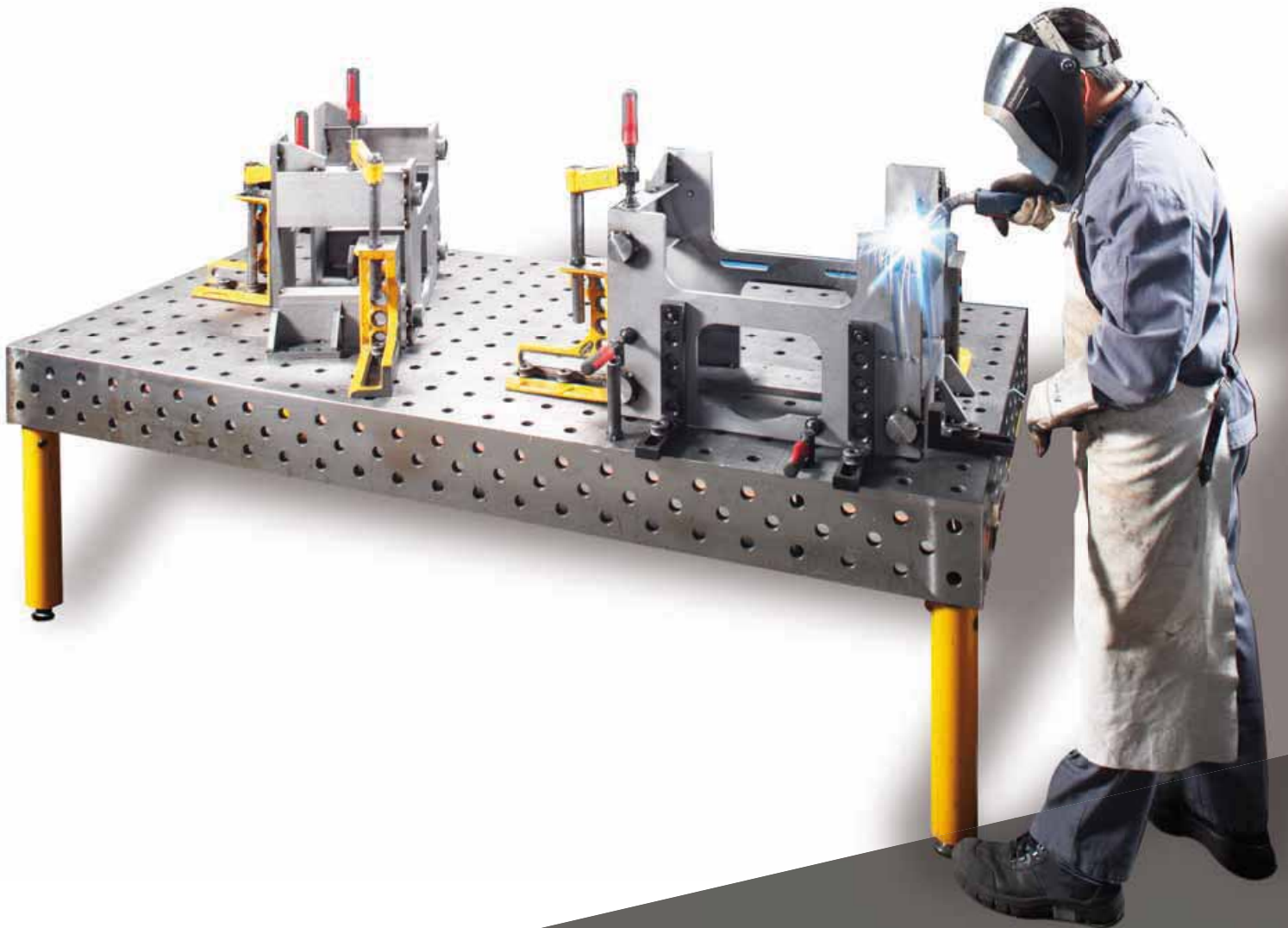
- full stop surfaces interior and exterior
- many options through oblong holes und system bores
- infinitely shiftable through oblong holes

28	A mm	B mm	C mm	approx. G kg	Item no.
	375	500	25	11,84	D28-03006-000

16	A mm	B mm	C mm	approx. G kg	Item no.
	187,5	250	12	1,46	D16-03006-000

Demmeler applications





Clamping and locating angles cast – highest stability and tenacity

DEMMELE TOPSELLER: Clamping and locating angles 300

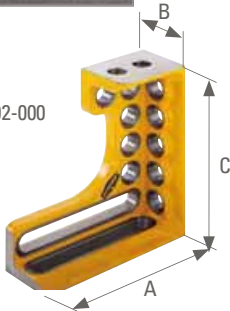
TOPSELLER

28 with precision scaling

with grid lines



right
D28-03002-000



left
D28-03002-001



Illustration D16 similar

Description

☛ ordering in pairs is recommended

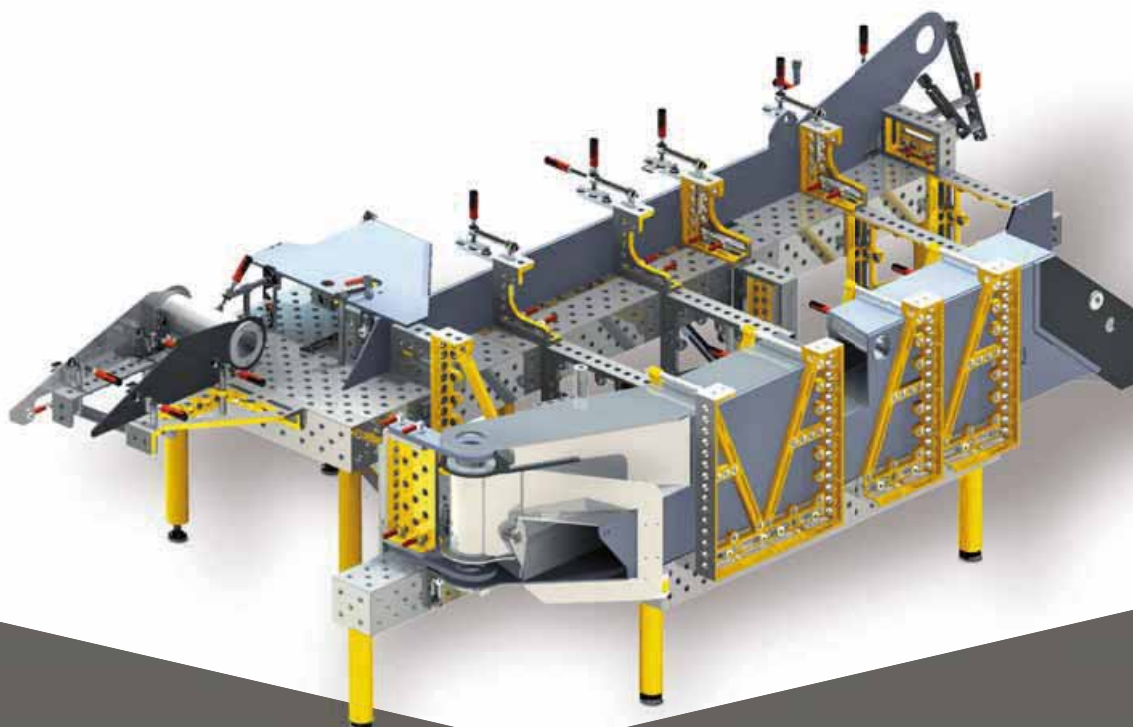
28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	275	100	300	11,10	right	D28-03002-000
	275	100	300	11,10	left	D28-03002-001

16	A mm	B mm	C mm	approx. G kg	Description	Item no.
	137,5	50	200	1,70	right	D16-03002-000
	137,5	50	200	1,70	left	D16-03002-001



Our ideas – Your benefit

- 1 fixed and infinitely adjustable
- 2 Three full clamping sides with system bores
- 3 All support surfaces for the PC bolts have been machined, hence no jamming at bolt head
- 4 with oblong holes for infinite adjustment
- 5 incl. precision scaling for clamping dimension adjustment (28)
- 6 Better gliding behaviour through combination cast on steel
- 7 grid lines curtail installation time
- 8 with head plate for further add-ons
- 9 Special cast: highest stability and tenacity
- 10 powder-coated
- 11 Use e.g. as high stop or table extension

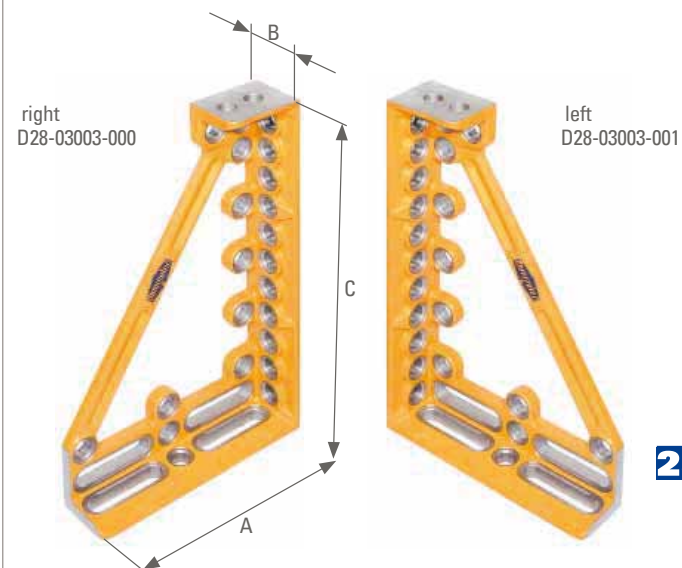


DEMMELE TOPSELLER: Clamping and locating angles 600

TOPSELLER

28 with precision scaling

with grid lines



Description

☛ ordering in pairs is recommended

Illustration D16 similar

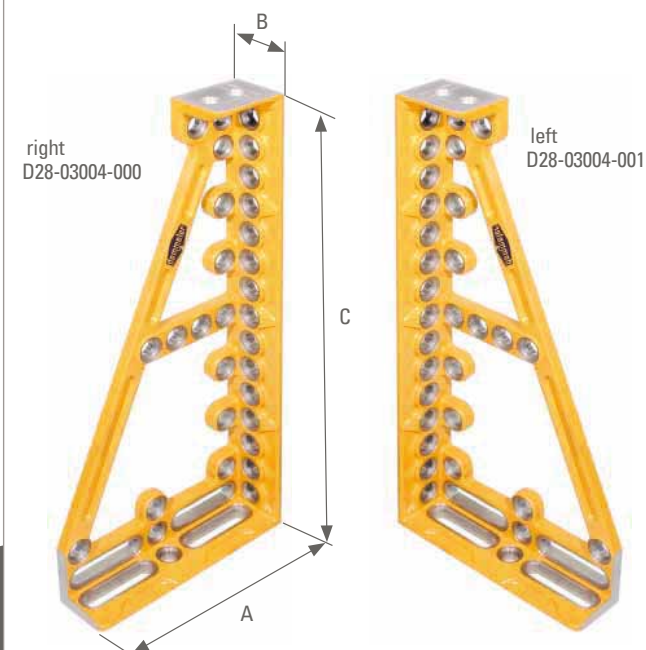
28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	375	100	600	19,54	right	D28-03003-000
	375	100	600	19,54	left	D28-03003-001

16	A mm	B mm	C mm	approx. G kg	Description	Item no.
	187,5	50	400	3,58	right	D16-03003-000
	187,5	50	400	3,58	left	D16-03003-001

DEMMELE TOPSELLER: Clamping and locating angles 800

TOPSELLER

28 with precision scaling and clamping bar with grid lines



Description

☛ ordering in pairs is recommended

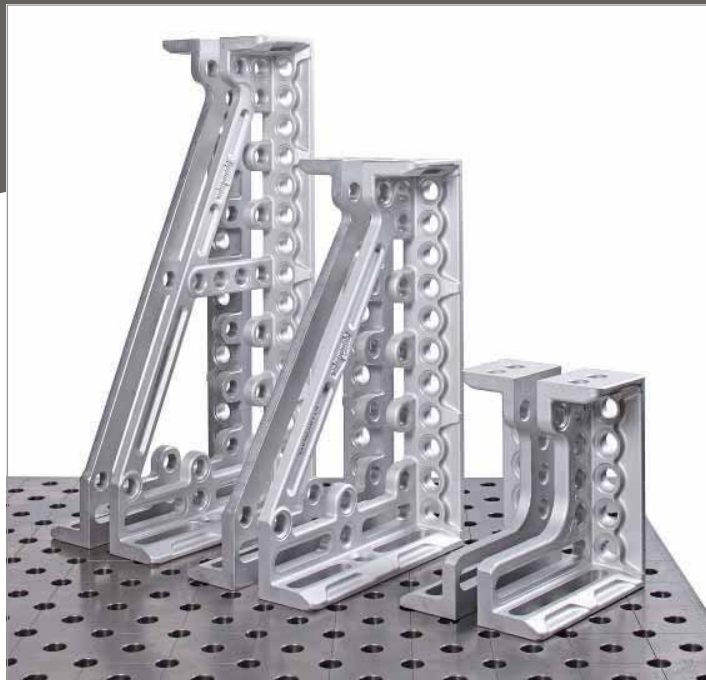
Illustration D16 similar

28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	375	100	800	24,40	right	D28-03004-000
	375	100	800	24,40	left	D28-03004-001

16	A mm	B mm	C mm	approx. G kg	Description	Item no.
	187,5	50	600	5,20	right	D16-03004-000
	187,5	50	600	5,20	left	D16-03004-001

Clamping and locating angle aluminium / titanium alloy – work can be so easy

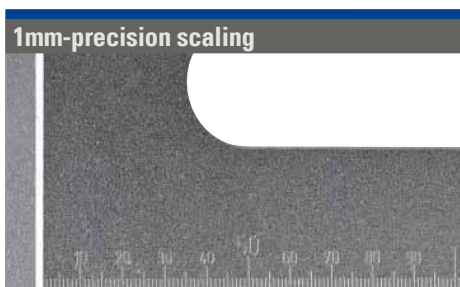
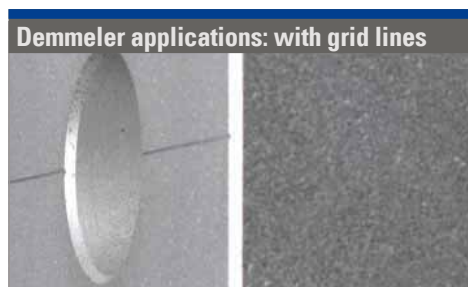
Clamping and locating angle aluminium / titanium alloy



Why carry heavy system parts?

60% weight saved, 10% more flexural strength

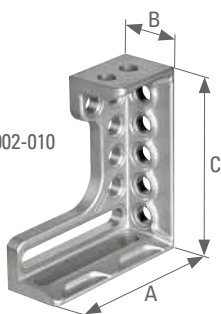
Aluminium / Titanium-angles:



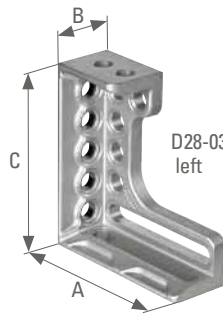
Clamping and locating angle aluminium / titanium alloy 300

1mm-precision scaling

D28-03002-010
right



D28-03002-011
left



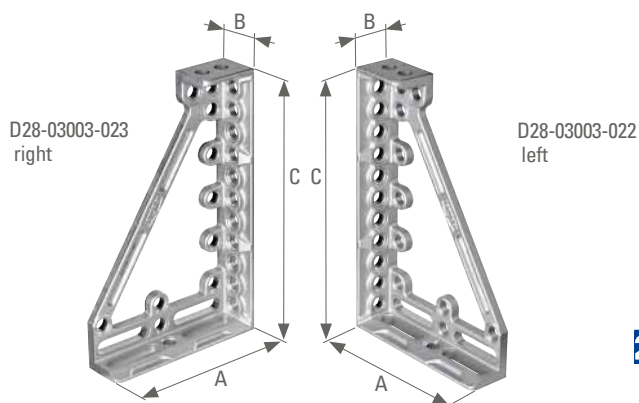
Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast easy to handle
- ordering in pairs(left and right) is recommended

28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	275	100	300	4,68	right	D28-03002-010
	275	100	300	4,68	left	D28-03002-011

Clamping and locating angle aluminium / titanium alloy 600

1 mm-precision scaling



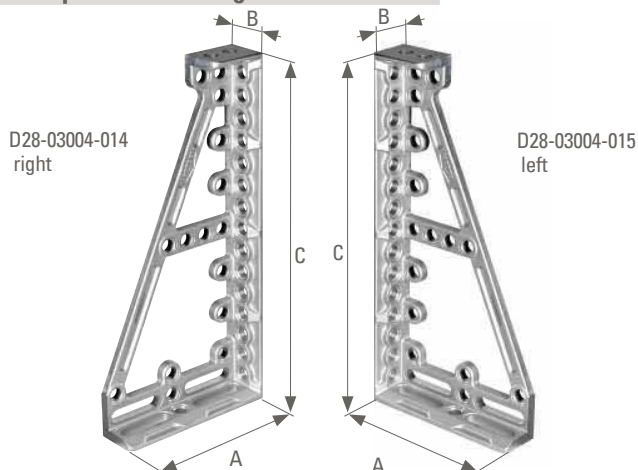
Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast easy to handle
- ordering in pairs(left and right) is recommended

28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	375	100	600	7,80	right	D28-03003-022
	375	100	600	7,80	left	D28-03003-023

Clamping and locating angle aluminium / titanium alloy 800

1 mm-precision scaling



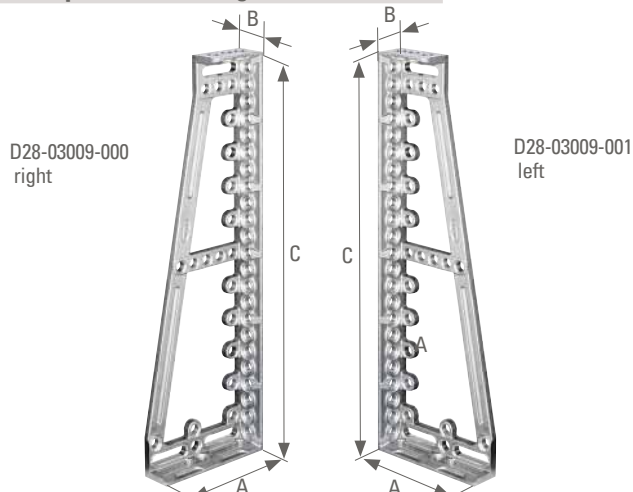
Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast easy to handle
- ordering in pairs(left and right) is recommended

28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	375	100	800	9,74	right	D28-03004-014
	375	100	800	9,74	left	D28-03004-015

Clamping and locating angle aluminium / titanium alloy 1200

1 mm-precision scaling



Description

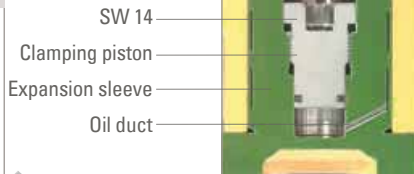
- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength compared to cast easy to handle
- ordering in pairs(left and right) is recommended

28	A mm	B mm	C mm	approx. G kg	Description	Item no.
	375	100	1200	16,8	right	D28-03009-000
	375	100	1200	16,8	left	D28-03009-001

pivot and tilt angle – continuously adjustable inclination from 0 - 225°

Universal pivot and tilt angle

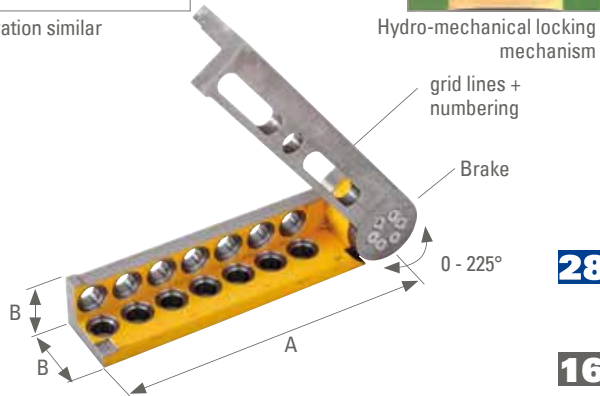
with 1° precision scaling



Description

- infinitely adjustable by mean of precision scaling, from 0°-225°
- hydro-mechanical locking mechanism:
 - >> totally maintenance-free
 - >> holding force to 1600 Nm torque (System 28)
- can be combined with other system components
- horizontal and vertical use
- powder-coated

D16: Illustration similar

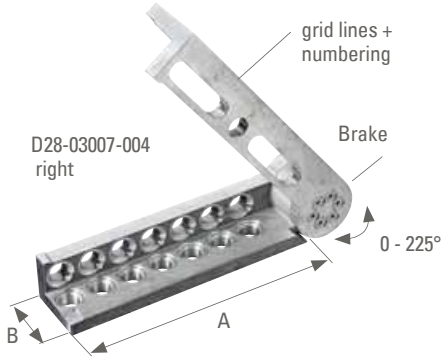


28	A mm	B mm	approx. G kg	Description	Item no.
	425	100	22	right	D28-03007-000

16	A mm	B mm	approx. G kg	Description	Item no.
	225	50	6	right	D16-03007-000

Universal pivot and tilt angle Aluminium / Titanium

with 1° precision scaling



Description

- in high-strength aluminium / titanium alloy, thus approx. 60 % less weight and approx. 10 % more flexural strength
- compared to cast
- Infinitely adjustable by means of precision scaling: from 0°-225°
- hydro-mechanical locking mechanism:
 - >> totally maintenance-free
 - >> holding force to 1600 Nm torque (System 28)
- can be combined with other system components
- horizontal and vertical use
- powder-coated

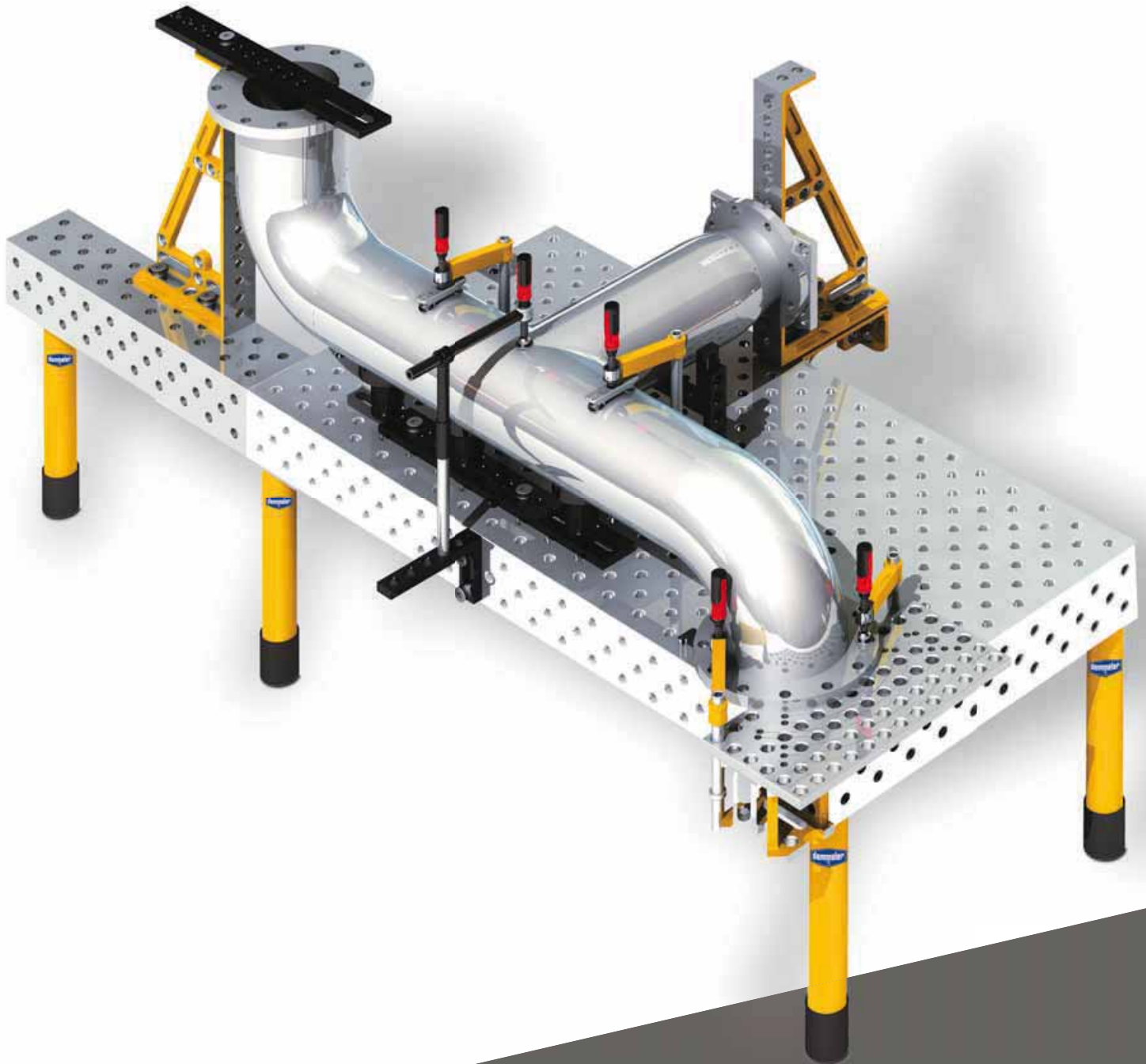
28	A mm	B mm	approx. G kg	Description	Item no.
	425	100	10,00	right	D28-03007-004
	425	100	10,00	left	D28-03007-005

The hydro-mechanical locking mechanism



Demmeler applications





Supports – Height adjustment in mm-range

DEMMELE TOPSELLER: spacer set 11-pieces / 9-pieces

TOPSELLER

spacer set 11-part



Description

- for adjustment of 5-100 (28) and/or 5-50 mm (16) height difference above the reference surface
- smallest increment 1mm
- including 1/10 inch spacer (2.54 mm)
- with sizes etched on the surface of each spacer
- fits all system bores
- self-locking with o-ring
- top surface has an M10 (28) and/ M8 (16) tapped hole for customer-specific components or V-blocks comprising: (28) support mandrel individual + bearer sleeves L1-L50 (16) support mandrel individual + bearer sleeves L1-L20

Support mandrel



bearer sleeve

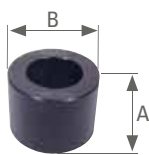


Illustration D 16 similar

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	120+5	28	1,96	Spacer set 11-pieces	D28-09001-000
	120+5	28	0,60	Support mandrel individual	00043256
	1	50	0,02	Bearer sleeve L1	00000132
	2	50	0,02	Bearer sleeve L2	00000131
	2,5	50	0,02	Bearer sleeve L2,5	00003933
	3	50	0,04	Bearer sleeve L3	00000130
	4	50	0,04	Bearer sleeve L4	00000129
	5	50	0,04	Bearer sleeve L5	00000128
	10	50	0,08	Bearer sleeve L10	00000127
	20	50	0,20	Bearer sleeve L20	00000126
	40	50	0,40	Bearer sleeve L40	00000125
	50	50	0,48	Bearer sleeve L50	00000124

16	A mm	Ø B mm	approx. G kg	Description	Item no.
	55+5	16	0,220	Spacer set 9-pieces	D16-09001-000
	55+5	16	0,100	Support mandrel individual	00059333
	1	25	0,004	Bearer sleeve L1	00000403
	2	25	0,008	Bearer sleeve L2	00000402
	2,5	25	0,010	Bearer sleeve L2,5	00003934
	3	25	0,015	Bearer sleeve L3	00000401
	4	25	0,020	Bearer sleeve L4	00000400
	5	25	0,020	Bearer sleeve L5	00000399
	10	25	0,020	Bearer sleeve L10	00000398
	20	25	0,040	Bearer sleeve L20	00000397



Our ideas – Your benefits

- 1 Precise positioning of your height via bearer sleeves at different lengths or through spacer set infinite bolting (see D28-09001-005, p. 101)

Spacer set, screwable

0.1 mm precision scaling



Description

- as reference surface at system components or directly on the table
- adjustment path from 22-105 mm infinitely variable
- with 0.1 mm precision scaling
- max. load 500 kg
- blued
- incl. counternut M28

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	120+5	50	0,72	Spacer screwable	D28-09001-005

Demmeler applications



Demmeler applications



counternut

Adjustment V-block




Description

- Cam adjustment via offset plate
- flexibly adjustable brackets of 180 - 90 °
- Height setting through clamp bushing
- synchronous adjustment through interlocking

28	A mm	B mm	approx. G kg	Description	Item no.
	200	100	1,2	Adjustment V-block	D28-09015-000

Supports – precision intake of pipe elements

V-block locations for pipe diameters up to 100 mm



Description

- screwed in with countersunk screw
- for pipe diameters up to 70 mm

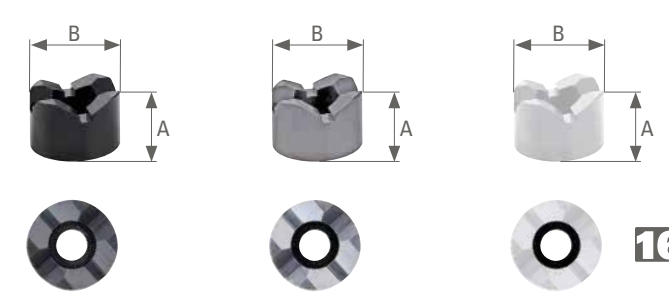
28	A mm	Ø B mm	approx. G kg	Angle	Description	Item no.
	35	58	0,68	130°	Steel, blued	D28-09003-000
	35	58	0,70	130°	Stainless steel	D28-09003-002
	35	58	0,14	130°	Polyamide	D28-09003-001

V-block intake for pipe diameters up to 70 mm

with dual V-block

Description

- screwed in with PC bolts
- for pipe diameters up to 70 mm
- Dual V-block for more options
- also suited for rectangular pipes



16	A mm	Ø B mm	approx. G kg	Angle	Description	Item no.
	35	50	0,36	120 / 90°	Steel, blued	D16-09004-000
	35	50	0,38	120 / 90°	Stainless steel	D16-09004-002
	35	50	0,06	120 / 90°	Polyamide	D16-09004-003

Demmeler applications: V-block locations



V-block locations with holding mandrel for pipe diameters up to 100 mm

with dual V-block

Steel, blued
D28-09004-000

Stainless steel
D28-09004-003

Polyamide
D28-09004-001

Description

- with screwed in surface tower
- for pipe diameters up to 100 mm
- also suited for rectangular pipes
- Dual V-block for more options
- Height adjustment through bearing sleeves for holding mandrel (see p. 100) or infinitely variable adjustment with spacer set screwable D28-09001-005 (p. 101) or with adjustable spacer D28-09009-000 (p. 104)

28	A mm	Ø B mm	C mm	approx. G kg	Angle	Description	Item no.
	180	80	60	2,16	90 / 90°	Steel, blued	D28-09004-000
	180	80	60	2,18	90 / 90°	Stainless steel	D28-09004-003
	180	80	60	0,88	90 / 90°	Polyamide	D28-09004-001

V-block locations for pipe diameters up to 140 mm

with dual V-block

Steel, blued
D16-09003-000

Stainless steel
D16-09003-002

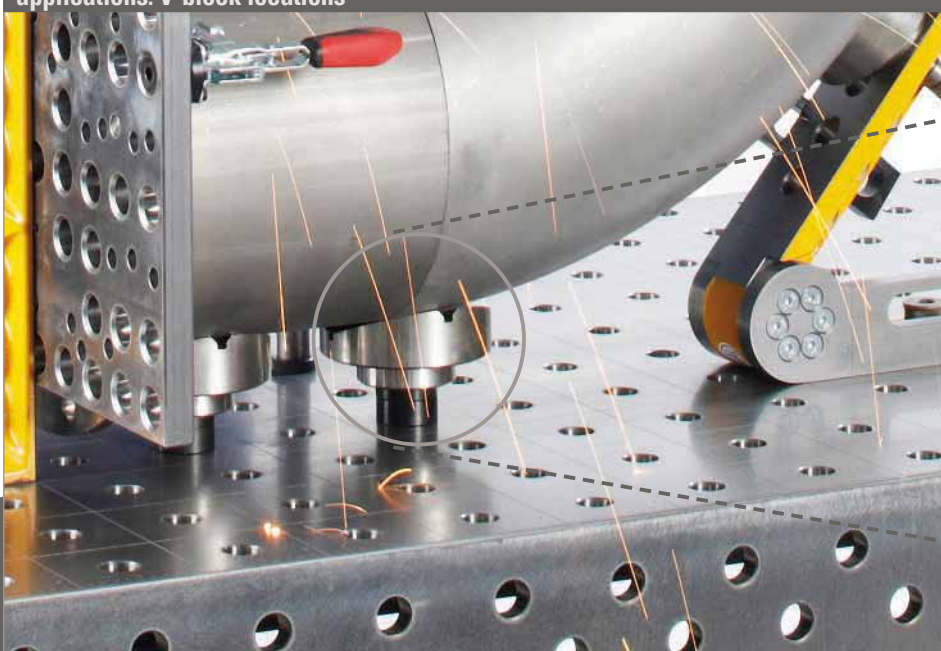
Polyamide
D16-09003-003

Description

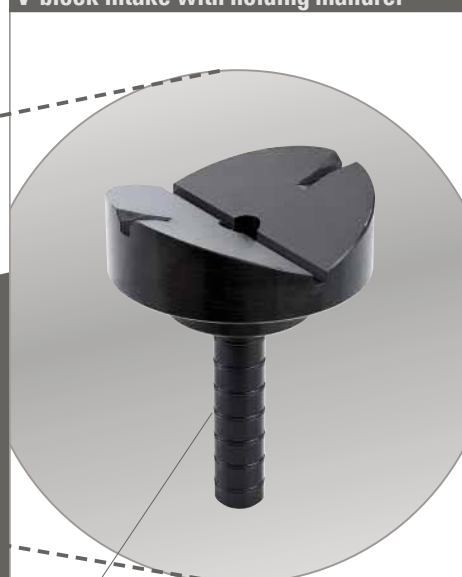
- screwed in with PC bolts
- for pipe diameters up to 140 mm
- dual V-block for more options
- also suited for rectangular pipes

16	A mm	Ø B mm	approx. G kg	Angle	Description	Item no.
	50	80	1,46	120 / 90°	Steel, blued	D16-09003-000
	50	80	1,46	120 / 90°	Stainless steel	D16-09003-002
	50	80	0,22	120 / 90°	Polyamide	D16-09003-003

applications: V-block locations



V-block intake with holding mandrel

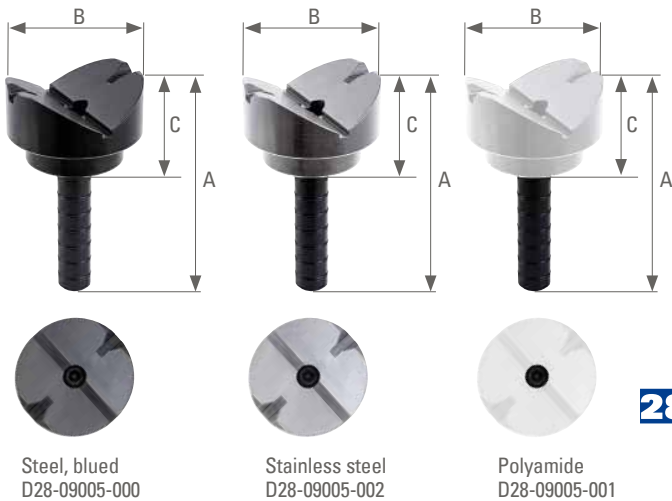


Bearing sleeves for holding mandrel at various heights (see p. 100)

Supports – precision intake of pipe elements

V-block locations with holding mandrel for pipe diameters up to 180 mm

with dual V-block



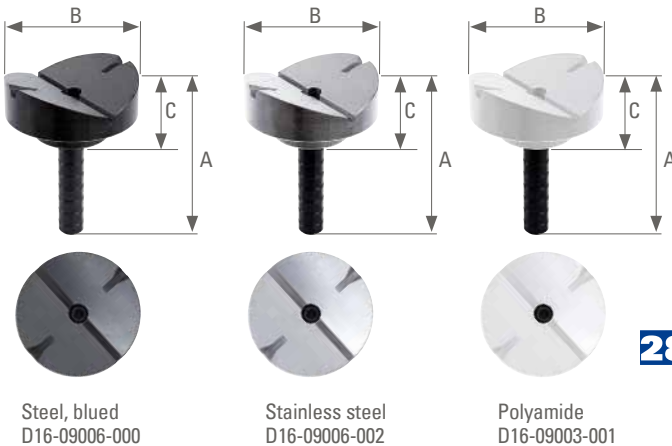
Description

- with screwed in surface tower
- for pipe diameters up to 180 mm
- dual V-block for more options
- Height adjustment through bearing sleeves for holding mandrel see (p. 100) or infinitely variable adjustment with spacer set screwable D28-09001-005 (p. 101) or with adjustable spacer D28-09009-000 (p. 104)

28	A mm	Ø B mm	C mm	approx. G kg	Angle	Description	Item no.
	190	110	70	3,70	120 / 90°	Steel, blued	D28-09005-000
	190	110	70	3,82	120 / 90°	Stainless steel	D28-09005-002
	190	110	70	1,10	120 / 90°	Polyamide	D28-09005-001

V-block locations with holding mandrel for pipe diameters up to 400 mm

with dual V-block



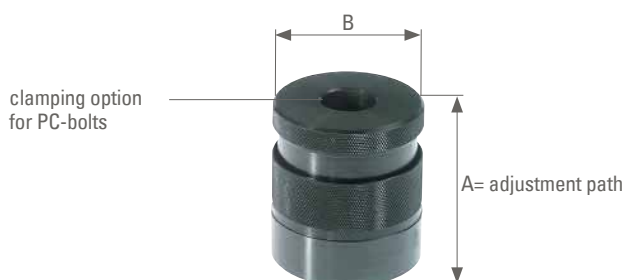
Description

- with screwed in surface tower
- for pipe diameters up to 400 mm
- dual V-block for more options
- Height adjustment through bearing sleeves for holding mandrel see (p. 100) or infinitely variable adjustment with spacer set screwable D28-09001-005 (p. 101) or with adjustable spacer D28-09009-000 (p. 104)

28	A mm	Ø B mm	C mm	approx. G kg	Angle	Description	Item no.
	190	140	70	5,22	140 / 90°	Steel, blued	D28-09006-000
	190	140	70	5,30	140 / 90°	Stainless steel	D28-09006-002
	190	140	70	1,32	140 / 90°	Polyamide	D28-09006-001

adjustable spacer / bolt contact area

with adjustment path



Description

- Support height infinitely variable adjustment from 75 - 95 mm
- Specially suited for V-block locations with holding mandrel for direct use in adjustable spacer
- Stops etc. can also be clamped in the system bore by means of PC bolts

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	75-95	80	2,34	with adjustment path A	D28-09009-000

The New Generation: world first DEMMELER PPS-Bolts D28!



**WORLDWIDE
BREAKTHROUGH**

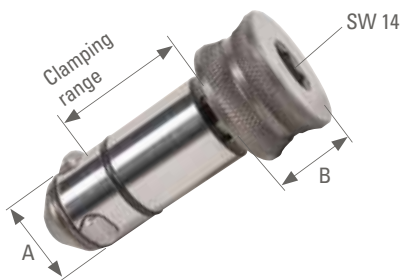
**Demmeler PC bolts – THE ORIGINAL
100,000-fold proven in practice**

The new generation - Demmeler PPS bolt D28!

DEMMELEER WORLDWIDE BREAKTHROUGH: PPS bolt, short

WORLDWIDE
BREAKTHROUGH

PATENT
by demmeler



Description

- Specially made for Demmeler power screwdriver
- Operation possible with only one hand
- Increased strength due to significantly higher material profile
- Simple, comfortable clamping by optimised force distribution in the expansion segments
- Very low sensitivity to dirt due to the polygon design
- Standard at Demmeler for high life-span: high-strength, hardened and sharpened
- DEMMELEER develops a new dimension of applications due to perfect force distribution

28 Clamping range		approx. w kg		Description	Item no.
41-47	28-0,01	20	0,40	Locking force approx. 25 kN Shearing force approx. 200 kN Tightening torque: 70 Nm	D28-06025-000

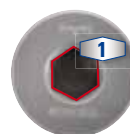


Your benefits:

- 1 Demmeler system locking for Demmeler power screwdriver for plugging and tightening as well as loosening and pulling
- 2 with grooved marking for Demmeler power screwdriver
- 3 Premium hardened steel, highest precision due to ground design
- 4 O-ring prevents accidental turning during tightening and simultaneously cleans the system bore
- 5 polygon-shaped expansion elements for perfect force distribution: self-centring, force-fit and contact-protecting

PPS bolt by Demmeler

PATENT
by demmeler



PPS bolt, short applications



Easy handling by locking bolt and screwdriver

DEMMELE power screwdriver – incl. accessory package

WORLDWIDE
BREAKTHROUGH

Power screwdriver with quick-change coupling for the new PPS bolt: 10 times faster than conventional screwdrivers!

- 1 Particularly designed for use with the new PPS bolt:
With the DEMMELE system locking between PPS bolt and impact wrench the plugging and tightening as well as loosening and pulling of the bolt is possible with only one hand. You will always have one free hand this way.
- 2 A minimum of effort for a maximum of clamping force
- 3 Simple and efficient table servicing with the included cleaning plate and circular brush attachment
- 4 Clamping with a maximum of force and speed



Description

- Cordless impact wrench with a defined torque incl. rechargeable lithium-ion battery and recharger
- Quick-change coupling for accepting the PPS bolt and accessories
- Attachment nut for tightening and loosening the spindle of screw clamps, etc. Suitable for quick-change coupling
- Cleaning plate Ø 115 mm for fast cleaning of the table surface; attachment suitable for quick-change coupling
- Circular brush attachment Ø 28 mm for efficient cleaning of the system holes, suitable for quick-change coupling
- Convenient carrying case for all accessories

Power screwdriver composed of:



	Description	
1	Power screwdriver	D28-13050-000
1 + (2)	Recharger + (rechargeable battery)	*
1	Circular brush attachment 28 ø	*
1	Twin quick coupling	*
1	Socket adapter 14 AF to 13 AF	*
1	Cleaning plate ø 115	*
1	Case	*

* only available as a set

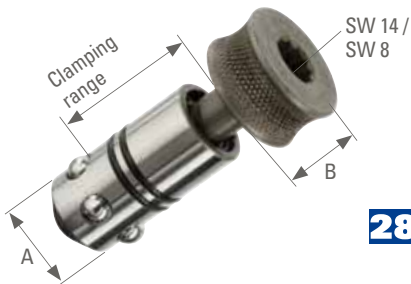


The perfect set

Bolting is no piece of cake – 100.000-fold proven

DEMMELE TOPSELLER: PC-bolts, short

TOPSELLER



Description

- Connecting element for all system parts on table, adapter plates etc. or for special fixtures
- very fast connection with simultaneous large clamping range
- very high clamping force generated by a planetary gear-like action (a double-start thread is not used)
- self-centering with an O-ring and positive force driven outward
- with clamping range

28	Clamping range	Ø A mm	B mm	approx. w kg	Description	Item no.
	41-47	28-0,01	20	0,40	Locking force approx. 25 kN Shearing force approx. 200 kN Tightening torque: 70 Nm	D28-06001-000

16	Clamping range	Ø A mm	B mm	approx. w kg	Description	Item no.
	22	16-0,01	12	0,08	Locking force approx. 10 kN Shearing force approx. 50 kN Tightening torque: 20 Nm	D16-06001-000

Explanation
Clamping range Page 111

D16 Illustration similar

Our ideas – Your benefits

- very high clamping force at large clamping range by means of inbus key with double hex SW 14 (28) and/or SW 8 (16) with torque wrench
- Ergonomically formed bolt head with grip groove for fast one-hand operation
- High quality, hardened steel; High precision through ground finish
- O-Rings prevent the bolt from turning during tightening and at the same time clean the system bores
- To guarantee even tensioning with 5 (28) and 4 (16) tensioning balls

PC bolts by Demmeler

PATENT
by demmeler



PC-bolt, long



Description

- Use for simultaneous clamping of two system parts
- Connecting element for all system parts on table, adapter plates etc. or for special fixtures
- very fast connection with simultaneous large clamping range
- very high clamping force generated by a planetary gear-like action (a double-start thread is not used)
- self-centering with an O-ring and positive force driven outward
- with clamping range

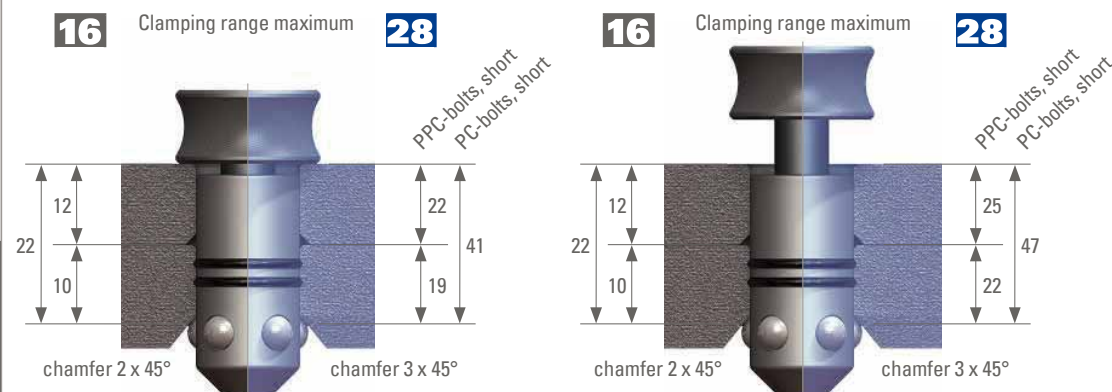
28	Clamping range	Ø A mm	B mm	approx. w kg	Description	Item no.
	66-72	28-0,01	20	0,50	Locking force approx. 25 kN Shearing force approx. 200 kN Tightening torque: 70 Nm	D28-06002-000

16	Clamping range	Ø A mm	B mm	approx. w kg	Description	Item no.
	34	16-0,01	12	0,10	Locking force approx. 10 kN Shearing force approx. 50 kN Tightening torque: 20 Nm	D16-06002-000



Clamping range PPC-bolts / PC-bolts

THE ORIGINAL Made in Germany

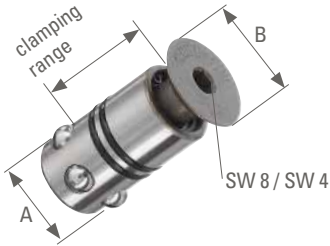


Functioning:

By turning the ergonomically shaped bolt head the balls of the patented PC bolt dock onto the chamfer on the bottom of the welding table via point contact. By further turning, the Original Demmeler PC bolt is clamped.

Bolts – always best possible positioning

PC countersunk bolt short



Description

- Tapered bolt head (eliminates interference)
- only for use in bores (not slots)
- clamp using hex key SW 8 (28) / SW 4 (16) or torque wrench

28	Clamping range	Ø A mm	Ø B mm	approx. w kg	Description	Item no.
	41-47	28-0,01	31,6	0,24	Locking force approx. 10 kN Shearing force approx. 200 kN Tightening torque: 50 Nm	D28-06004-000

16	Clamping range	Ø A mm	Ø B mm	approx. w kg	Description	Item no.
	22	16-0,01	18,6	0,04	Locking force approx. 3 kN Shearing force approx. 50 kN Tightening torque: 10 Nm	D16-06004-000

PC countersunk bolt long



Description

- Tapered bolt head (eliminates interference)
- only for use in bores (not slots)
- clamp using hex key SW 8 (28) / SW 4 (16) or torque wrench
- for simultaneous clamping of two system components atop each other on the welding table

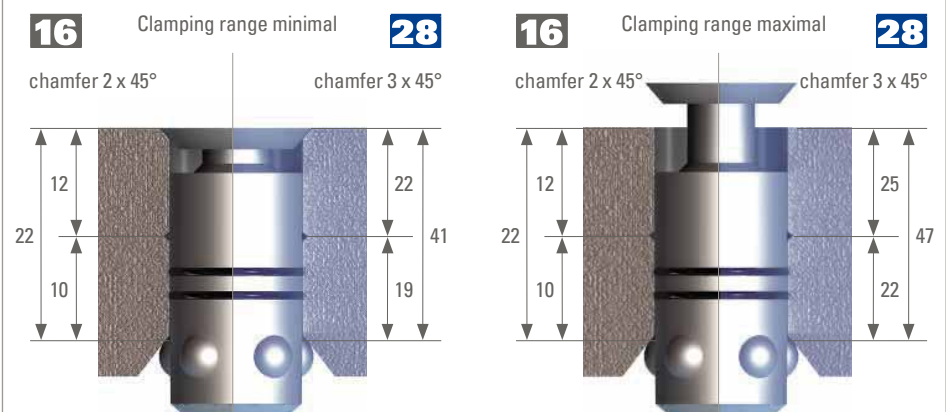
28	Clamping range	Ø A mm	Ø B mm	approx. w kg	Description	Item no.
	66-72	28-0,01	31,6	0,36	Locking force approx. 10 kN Shearing force approx. 200 kN Tightening torque: 50 Nm	D28-06005-000

16	Clamping range	Ø A mm	Ø B mm	approx. w kg	Description	Item no.
	34	16-0,01	18,6	0,06	Locking force approx. 3 kN Shearing force approx. 50 kN Tightening torque: 10 Nm	D16-06005-000

PC countersunk bolt short applications

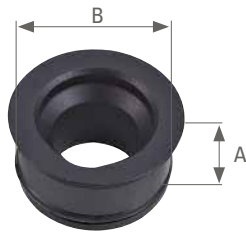


Clamping range countersunk bolt



Adaptor for PC bolts D16 to D28

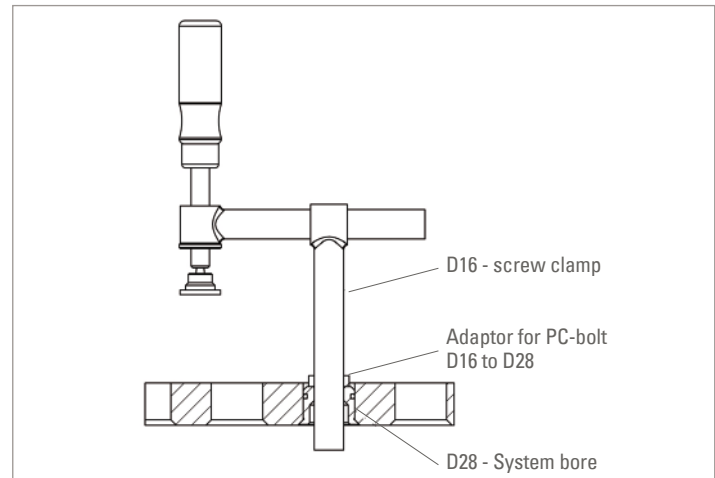
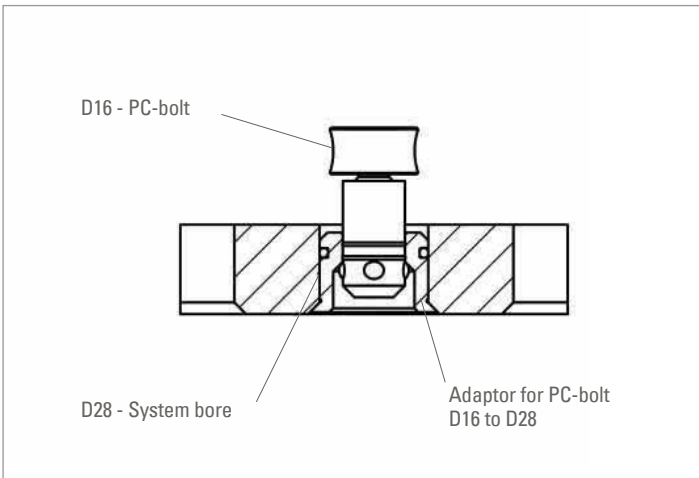
NEW



Description

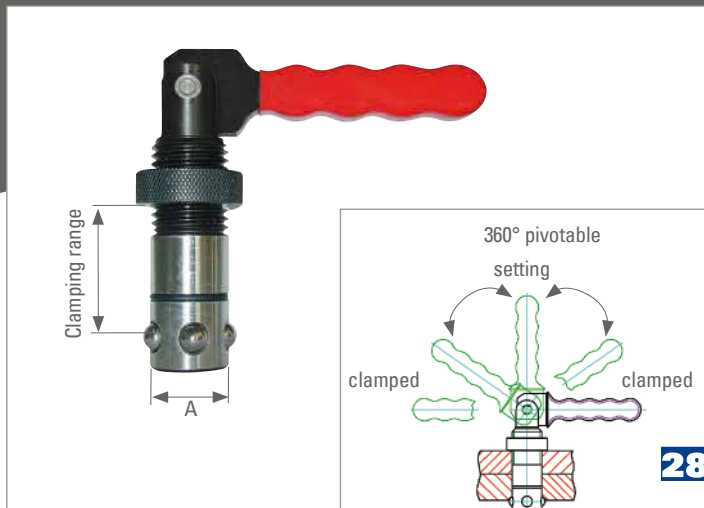
- Interface between System D28 and D16
- completely compatible with System D28 and System D16
- self-centering with an O-ring and positive force driven outward
- O-Ring prevents the bolt from turning during tightening
- System bore cleaning by O-Ring

28	A mm	Ø B mm	approx. w kg	Description	Item no.
	20,5	28-0,01	0,05		D00-06010-002



Short and long term connections – maximum clamping force

FPC bolts with handle



Description

- Connecting element for all system parts on table, adapter plates etc. or for special fixtures
- Defined position when adjusting and optimum implementation guaranteed constantly maximum clamping force
- high locking and shearing force
- can be operated without the need for additional tools
- for fast clamping of workpieces

28	Clamping range	Ø A mm	approx. w kg	Item no.
	31 - 50	28-0,01	0,62	D28-06007-000

stop and positioning bolt



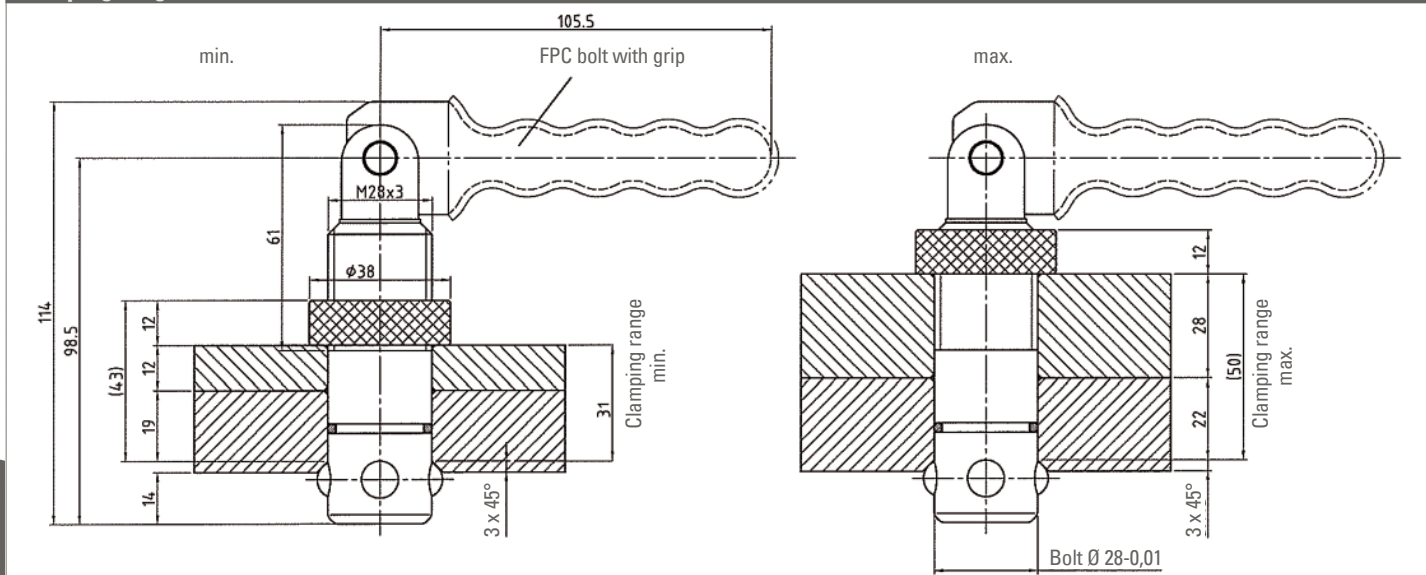
Description

- for positioning system components
- as positioning fixation e.g. for brackets and/or stops, for economical replacement of a second clamping bolt
- blued

28	Ø A mm	Ø B mm	C mm	D mm	approx. w kg	Item no.
	28	40	74	25	0,28	D28-06009-000

16	Ø A mm	Ø B mm	C mm	D mm	approx. w kg	Item no.
	16	25	37	25	0,08	D16-06009-000

Clamping range FPC bolt



connection bolt short with screw



Description

- Use as long term connection
- both ends with tapered locking heads, self centering
- suitable for system bores
- clamp using inbus key SW 10 (28) / SW 6 (16)
- optimally suited for joining welding tables with U-spacers etc.
- blued

	A mm	Ø B mm	approx. w kg	Item no.
28	35,5	28	0,18	D28-06003-000
16	17	16	0,04	D16-06003-000

connection bolt long with screw



Description

- Use as long term connection
- both ends with tapered locking heads, self centering
- suitable for system bores
- clamp using inbus key SW 10 (28) / SW 6 (16)
- for joining three system parts and/or two system components on the welding table

	A mm	Ø B mm	approx. w kg	Item no.
28	45	28	0,26	D28-06006-000
16	25	16	0,05	D16-06006-000

connection bolt short with stud

NEW



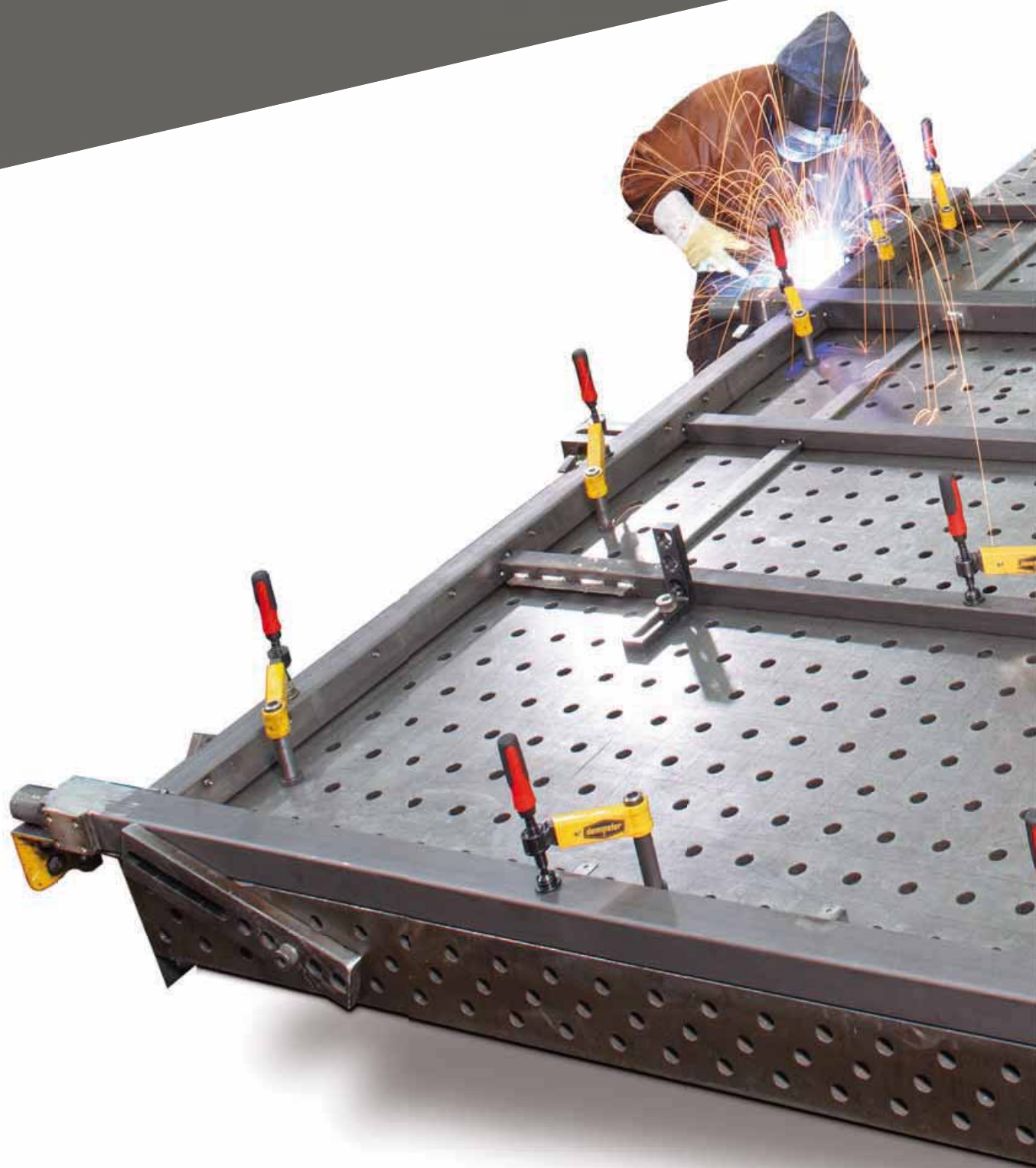
Description

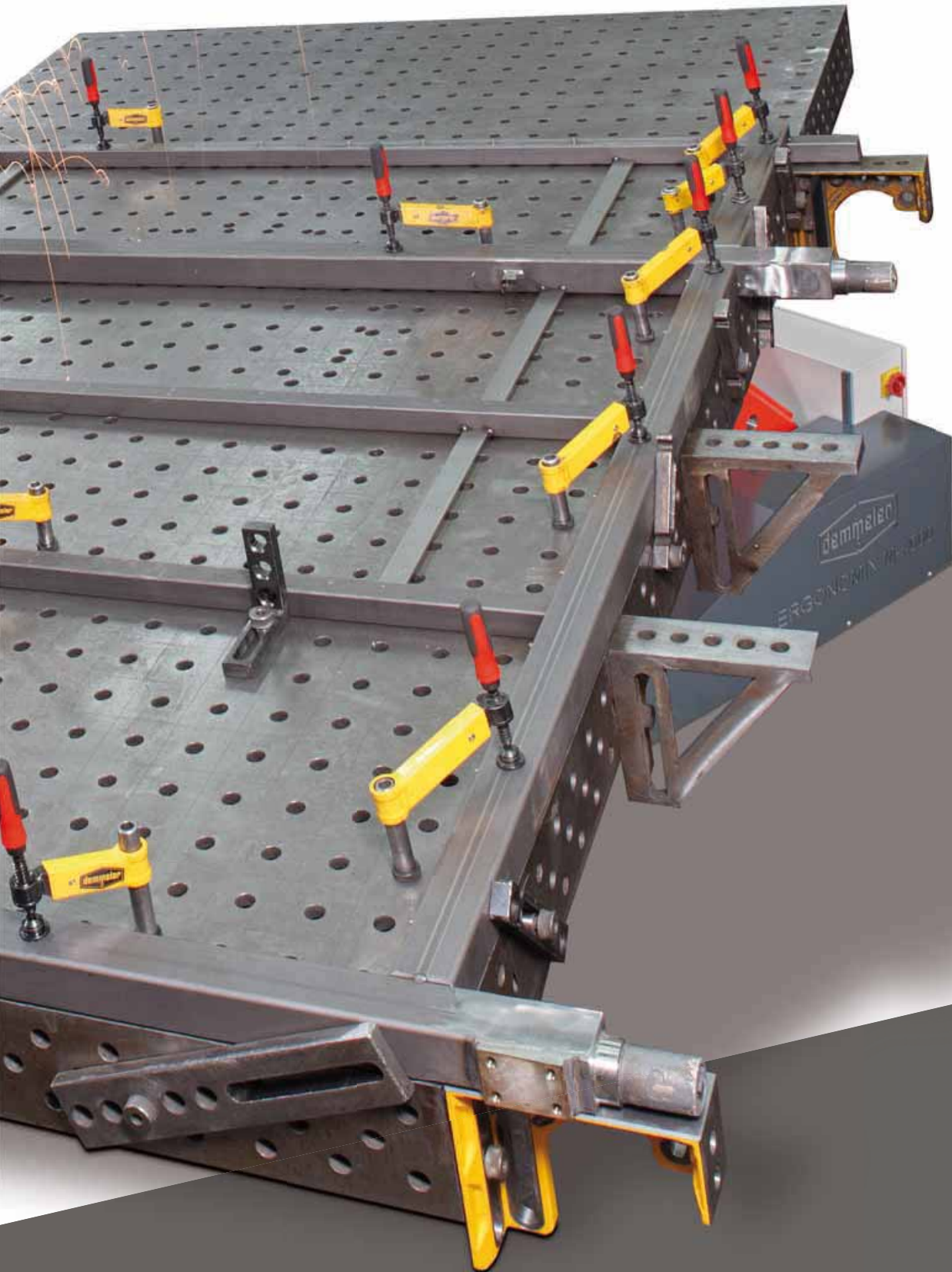
- Use as long term connection
- for joining two system components
- suitable for System bore / Oblong hole
- tighten with inbus key SW 10 (28) / SW 6 (16)

	A mm	Ø B mm	C mm	approx. w kg	Item no.
28	35	28	10	0,26	D28-06003-003
16	22	16	10	0,032	D16-06003-002



**Demmeler –
quick, safe and strong clamping action**






Compensating swing clamps – for profiles that tend to tilt

DEMMELEER TOPSELLER: Compensating swing clamp with spindle

TOPSELLER

16

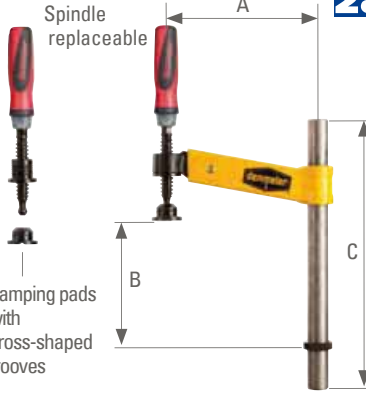
25 mm adjustment range



2816

Spindle replaceable

Clamping pads with cross-shaped grooves



Description
see below

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	150	max. 280	350	2,62	D28-07001-000
	200	max. 280	350	2,88	D28-07002-000

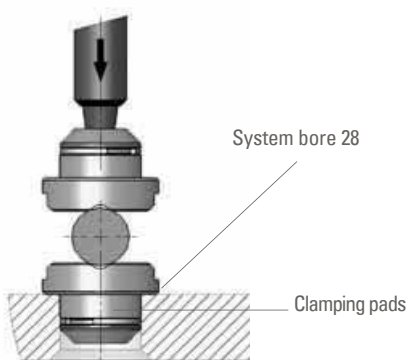
16	A mm	B Span mm	C mm	approx. w kg	Item no.
	100-125	max. 200	250	0,66	D16-07001-000



Our ideas – Your benefits

- 1 For fast and powerful, accurately positioned clamping of the most different workpieces
- 2 Workpiece clamping true to position and location through differential compensation
- 3 with adjustment ring for height fixing
- 4 Actuation type can be changed (e.g. Spindle, short boring spindle, quick-action clamping cylinder)
- 5 Clamping pads can be exchanged when clamping other materials like e.g. stainless steel – use of a clamping bridge D28-07018-000 is possible
- 6 New Clamping pads Standard – the added value for your screw clamps
- 7 Clamping tubes replaceable, available in various lengths see Page 135

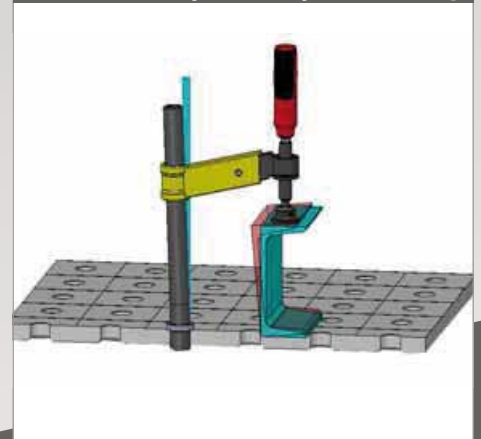
Pressure plate as support



Spindle directly in system bore



Differential compensation prevents titling



Compensating swing clamp with quick-action clamping cylinder



Description

- Clamping up to 5 x faster than with conventional screw clamps.
- achieving high clamping force with little effort
- 360° pivotable lever avoids interference
- large clamping range 9 mm

	A mm	B Span mm	C mm	approx. w kg	Item no.
28	150	max. 280	350	2,92	D28-07001-001
	200	max. 280	350	3,12	D28-07002-001
16	100-125	max. 280	250	0,68	D16-07001-001

New quick-action clamping cylinder (System D28) – discover your benefits with products made by Demmeler

NEW



- 1 Safe scanning mechanism:**
The scanning mechanism provides for controlled, fast and vibration-proof clamping.
- 2 Highest stability:**
Allows an even clamping force build-up with great power reserves. self-centered clamping of the contact and support piece, which can be replaced, at the workpiece.
- 3 The powder-coated clamping lever:**
is especially ergonomically formed and 360° pivotable – therefore any interference is avoided. The plastic-coated release lever with slip guard provides a safe grip when undoing the clamp.
- 4 Large clamping range: 9 mm**

Demmeler applications



Compensating swing clamps

Compensating Swing Clamp with short boring spindle

PATENT
by demmeler

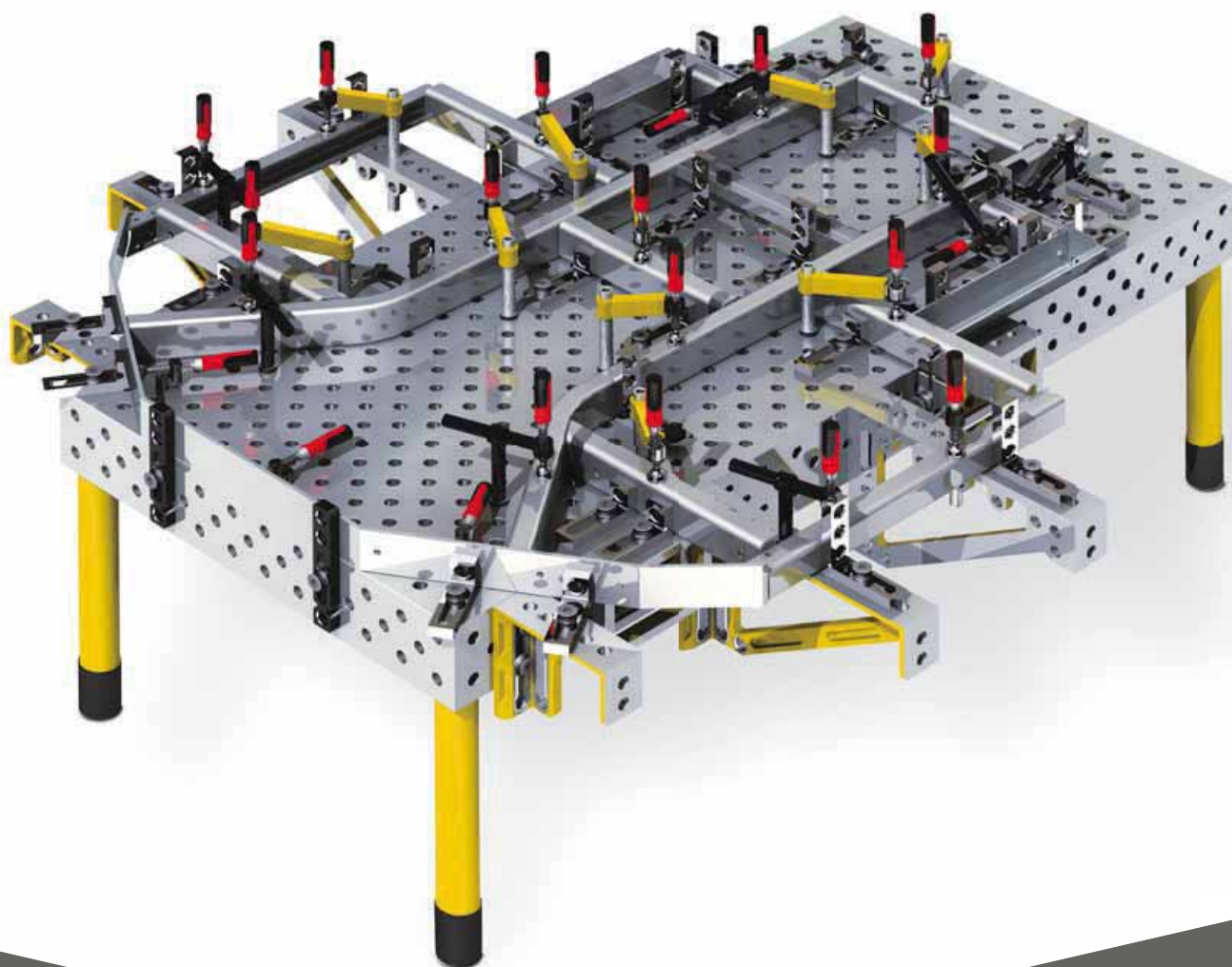


Description

- Operated via SW 13 (28) / SW 14 (16) hex wrench
- Especially recommended for use where space is tight

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	150	max. 280	350	2,54	D28-07001-002
	200	max. 280	350	2,74	D28-07002-002

16	A mm	B Span mm	C mm	approx. w kg	Item no.
	100-125	max. 200	250	0,6	D16-07001-002



Compensating Clamping Arm with short boring spindle for heavy workpieces



Description

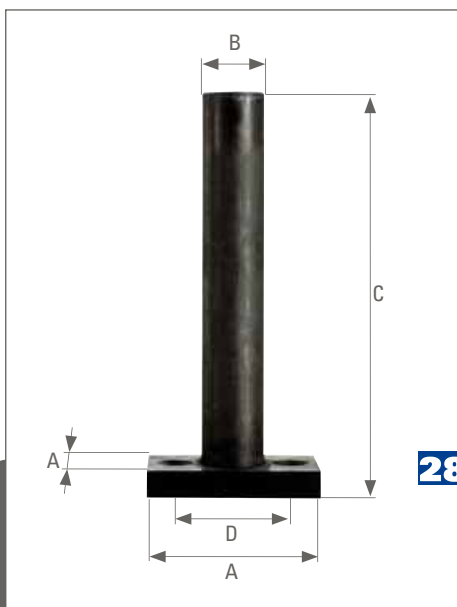
- Displacement-free workpiece clamping through differential compensation
- Only used with the multi-clamping and support tower
- Very heavy design
- Suitable for clamping of heavy workpieces.
- Fast and secure clamping
- through combination with the multi-clamping and support tower (see below) large adjustment range
- Clamping force approx. 20 kN
- powder-coated

28	A mm	B = Ø mm	approx. w kg	Item no.
	180	55	2,26	D28-05007-000

Demmeler applications: Compensating Clamping Arm with Hex Head Screw



Multi-Clamping and Support Tower



Description

- for Compensating Clamping Arm with Hex Head Screw D28-05007-000 (see above)
- Fastened to the table with 2 PC-bolts D28-06001-000 (see p. 108)
- Very stable design
- System bore allows combination with other system parts e.g. stops
- blued

Clamping possibility for PC-bolt D28-06001-000

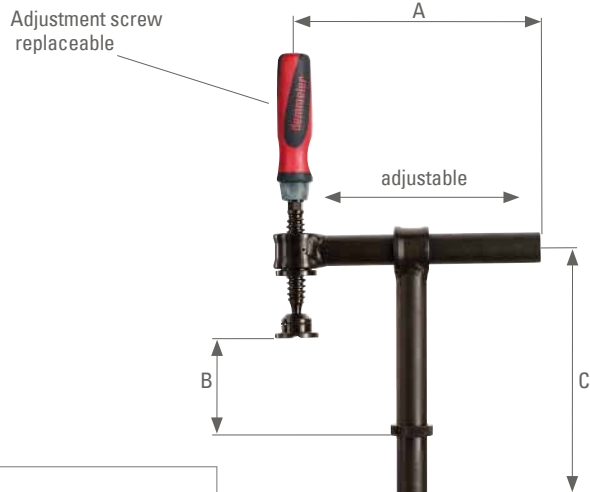


28	A mm	B mm	C mm	D mm	approx. w kg	Item no.
	150	55	200	100	3,98	D28-05004-003
	150	55	350	100	5,22	D28-05004-000
	150	55	700	100	8,38	D28-05005-000
	150	55	1000	100	10,94	D28-05006-000

screw clamp 180° – with adjustable, sturdy round pipe

DEMMELEER TOPSELLER: screw clamp 180° with spindle

TOPSELLER



Description

- Each tube can be used individually, too.
- Reach is adjustable
- insertible in system bore, hence no unnecessary interference.
- highest power transmission through sturdy round pipes
- complete gripping mechanism replaceable

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	220	max. 140	220	2,00	D28-07005-000
	220	max. 270	350	2,38	D28-07005-014
	220	max. 420	500	2,81	D28-07005-033

16	A mm	B Span mm	C mm	approx. w kg	Item no.
	50	max. 90	130	0,52	D16-07005-000



4 good reasons: Demmeler thread



non-slip handle due to rubberised insets

Clamp with standard-hex wrench

Insert nuts fit any system bore

Clamping pads replaceable and can be used as support in system bore



One screw clamp – many options



Clamping with hex wrench

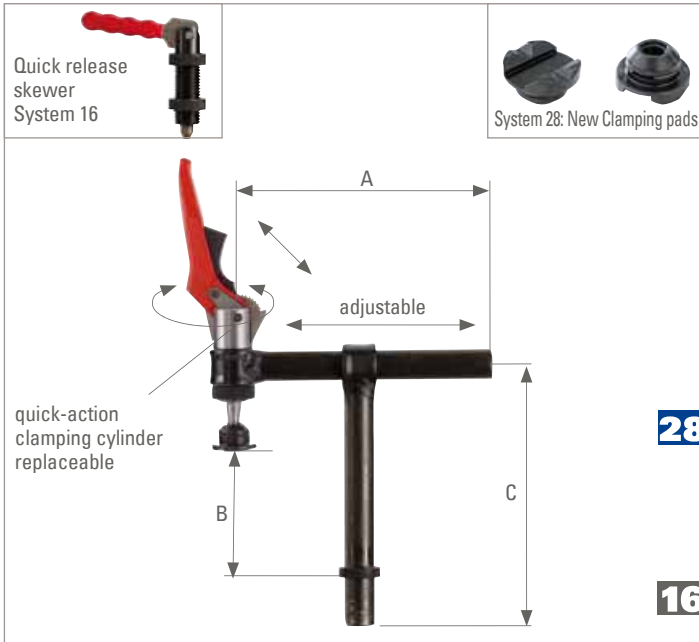


Tilts up to 15° at full power



D28 Insert nuts can be used as adaptors for our D16 screw clamps.

screw clamp 180° with quick-action clamping cylinder



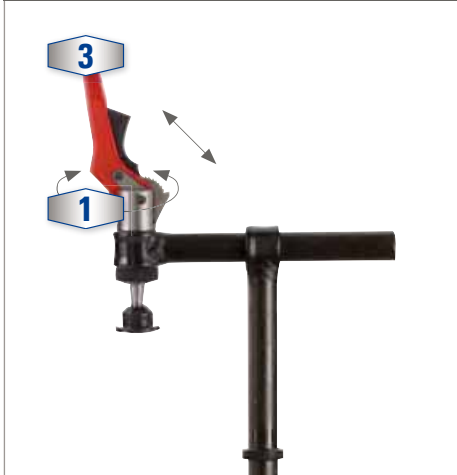
Description

- Clamping is up to 5 x faster than with conventional screw clamps
- achieving high clamping force quickly with little effort
- 360° rotating lever avoids protruding edges
- highest power transmission through sturdy round pipes
- complete gripping mechanism replaceable
- with wide clamping range 9 mm

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	220	max. 140	220	2,22	D28-07005-001
	220	max. 270	350	2,60	D28-07005-015
	220	max. 420	500	2,72	D28-07005-041

16	A mm	B Span mm	C mm	approx. w kg	Item no.
	130	max. 90	130	0,58	D16-07005-001

New quick-action clamping cylinder (System 28) – discover your benefits derived from products made by Demmeler



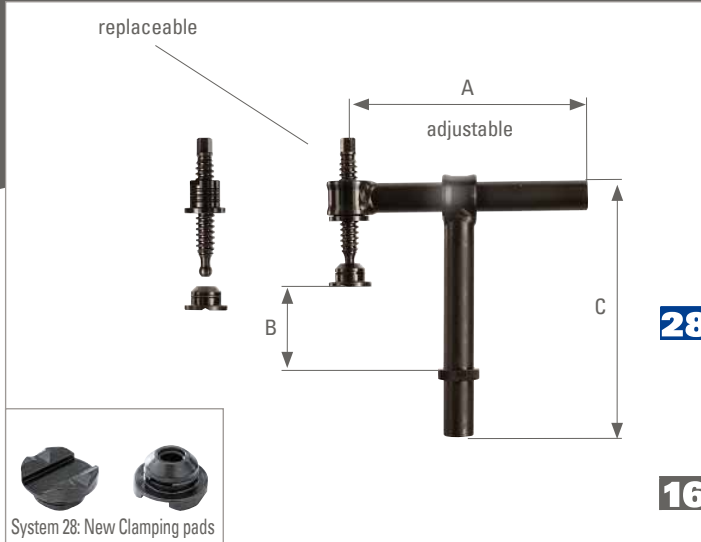
- ➊ Safe scanning mechanism:
The scanning mechanism provides for controlled, fast and vibration-proof clamping.
- ➋ Highest stability:
Allows an even clamping force build-up with great power reserves.
Self-centred clamping of the contact and support piece, which can be replaced, at the workpiece.
- ➌ The powder-coated clamping lever :
is especially ergonomically formed and 360 ° pivotable, therefore any interference is avoided. The plastic-coated release lever with slip guard provides a safe grip when undoing the clamp.
- ➍ Large clamping range: 9 mm

Demmeler applications: Versatile use through modularity



screw clamp 180° – with short boring spindle

screw clamp 180° with short boring spindle



Description

- highest power transmission through sturdy round pipes
- Operated via SW 13 (28) / SW 14 (16) hex wrench
- Especially recommended for use where space is tight
- Each tube can be used individually, too.
- complete gripping mechanism replaceable

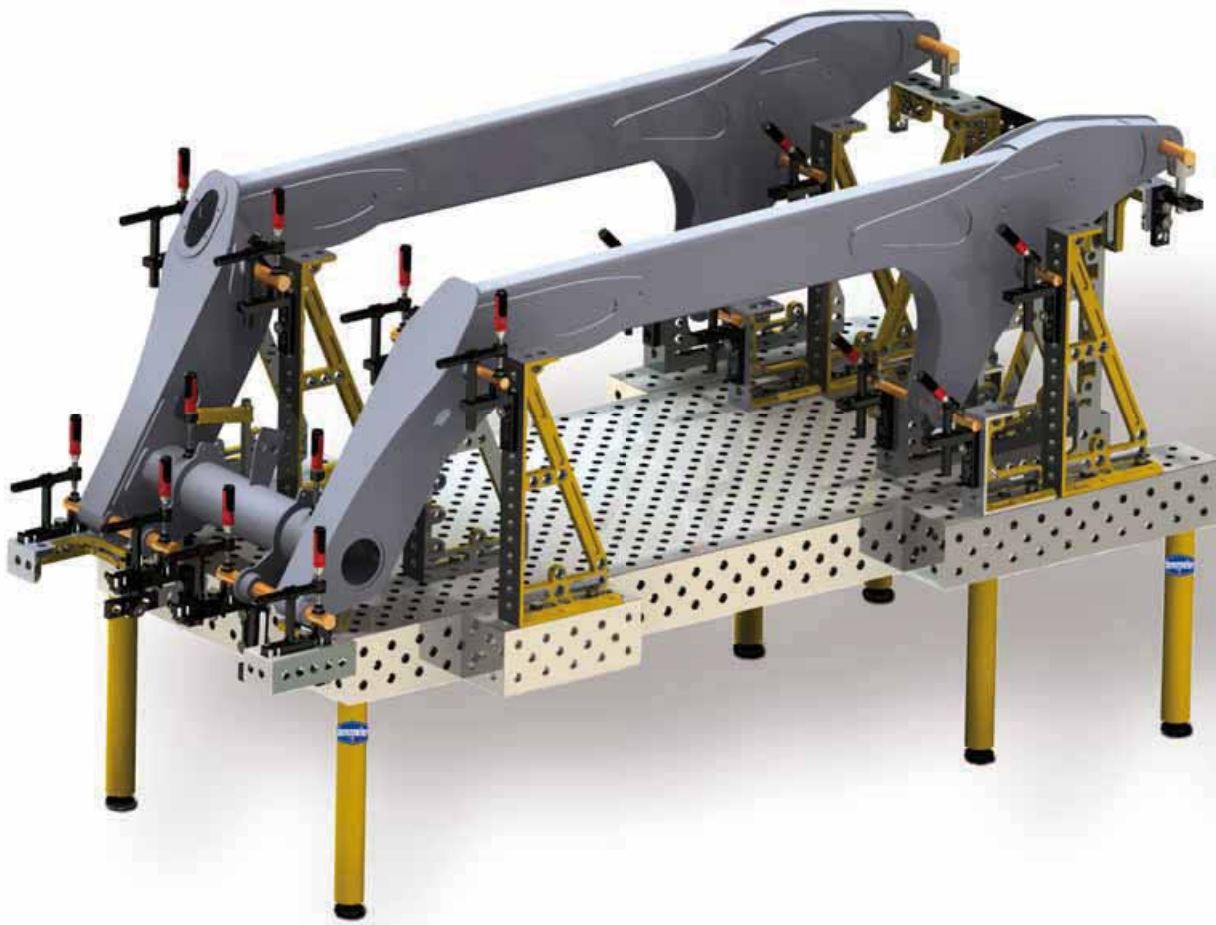
28	A mm	B Span mm	C mm	approx. w kg	Item no.
	220	max. 140	220	2,00	D28-07005-002
	220	max. 270	350	2,38	D28-07005-016
	220	max. 420	500	2,81	D28-07005-036

16	A mm	B Span mm	C mm	approx. w kg	Item no.
	130	max. 90	130	0,50	D16-07005-002

Demmeler applications: with short boring spindle for use where space is tight



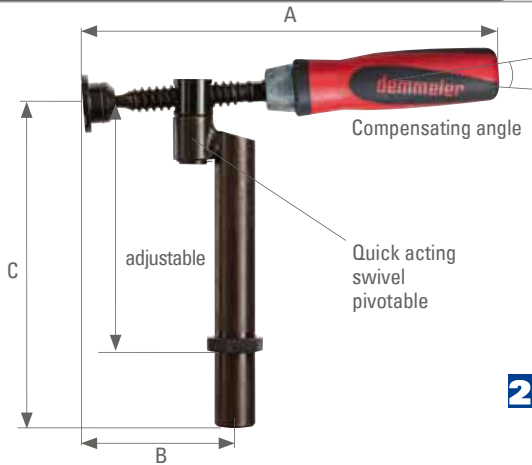
Demmeler applications



Horizontal swing clamps 90°/45°

DEMMELEER TOPSELLER: Swing clamp 90°

TOPSELLER



Description

- Orientation 90° to system bore
- Clamping stroke approximately 70 mm
- 180° Quick acting swivel with detent
- Height adjustment with stop ring
- Use of clamping bridge is possible
- highest power transmission through sturdy round pipes

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	250	max. 100	220	1,22	D28-07008-000
	250	max. 100	350	1,65	D28-07008-010
	250	max. 100	500	2,08	D28-07008-012



System 28: New Clamping pads

16	A mm	B mm	C mm	approx. w kg	Item no.
	150	–	170	0,30	D16-07008-000



Our ideas – Your benefits

- ➊ 180° Quick acting swivel with detent
- ➋ Height adjustment with stop ring
- ➌ Clamping pads replaceable

Quick acting swivel, hence saves time!



Demmeler applications



Swing clamp 45° with adjustment screw



Description

- highest power transmission through sturdy round pipes
- optimally suited for clamping prismatic parts but also square profiles or rectangular profiles
- complete gripping mechanism replaceable

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	220	max. 140	220	1,98	D28-07009-000
	220	max. 270	350	2,34	D28-07009-011
	220	max. 420	500	2,77	D28-07009-026

16	A mm	B Span mm	C mm	approx. w kg	Item no.
	130	max. 90	130	0,50	D16-07009-000

Demmeler applications: Swing clamp 45° with adjustment screw



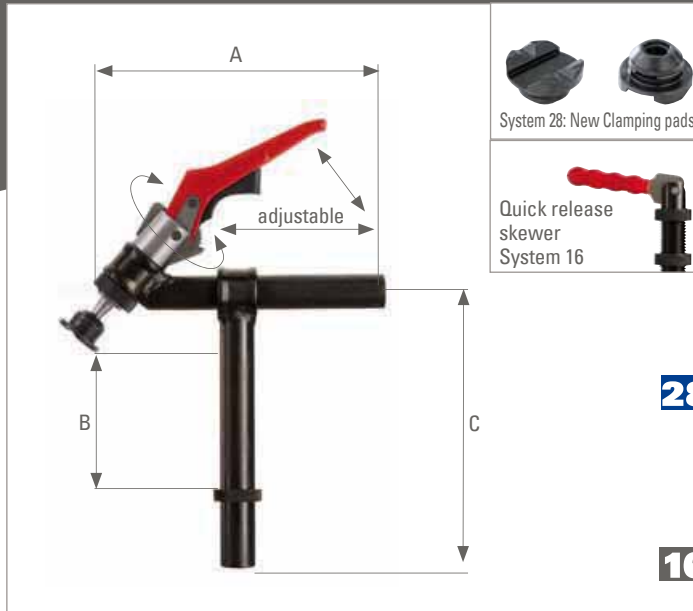
Demmeler applications



Best possible force effect –
perfect positioning on all stop areas!

Swing clamp 45° with adjustable, sturdy and pivotable round pipe

Swing clamp 45° with quick-action clamping cylinder



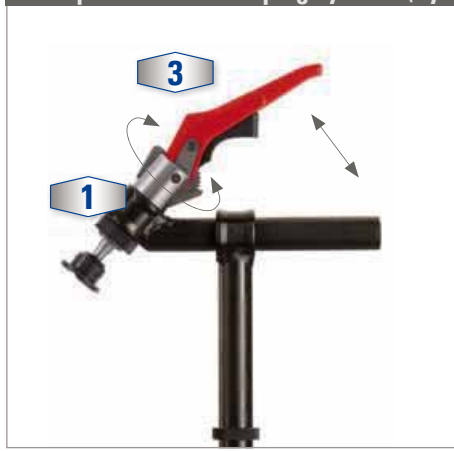
Description

- clamping up to 5 x faster than with conventional screw clamps
- achieving high clamping force quickly with little effort
- 360° rotating lever avoids protruding edges
- Maximum power transmission through the most stable circular tube
- complete gripping mechanism replaceable
- with large clamping range 9 mm

28	A mm	B Span mm	C mm	approx. w kg	Item no.
	220	140	220	2,20	D28-07009-001
	220	270	350	2,58	D28-07009-012
	220	420	500	3,01	D28-07009-027

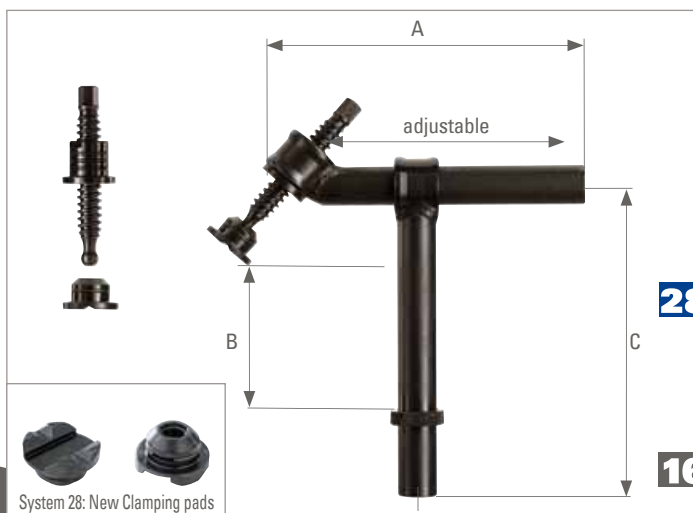
16	A mm	B Span mm	C mm	approx. w kg	Item no.
	230	130	130	0,58	D16-07009-001

New quick-action clamping cylinder (System 28) – discover your benefits derived from products made by Demmeler



- Safe scanning mechanism:**
The scanning mechanism provides for controlled, fast and vibration-proof clamping.
- Highest stability:**
Allows an even clamping force build-up with great power reserves .
Self-centred clamping of the contact and support piece, which can be replaced, at the workpiece.
- The powder-coated clamping lever:**
is especially ergonomically formed and 360 ° pivotable, therefore any interference is avoided. The plastic-coated release lever with slip guard provides a safe grip when undoing the clamp.
- Large clamping range:** 9 mm

Swing clamp 45° with short boring spindle



Description

- highest power transmission through sturdy round pipes
- Operated via SW 13 (28) / SW 14 (16) hex wrench
- Especially recommended for use where space is tight
- complete gripping mechanism replaceable

28	A mm	B mm	C mm	approx. w kg	Item no.
	220	140	220	1,80	D28-07009-002
	220	270	350	2,23	D28-07009-013
	220	420	500	2,66	D28-07009-028

16	A mm	B mm	C mm	approx. w kg	Item no.
	180	130	130	0,46	D16-07009-002

Adjusting spindle



Description

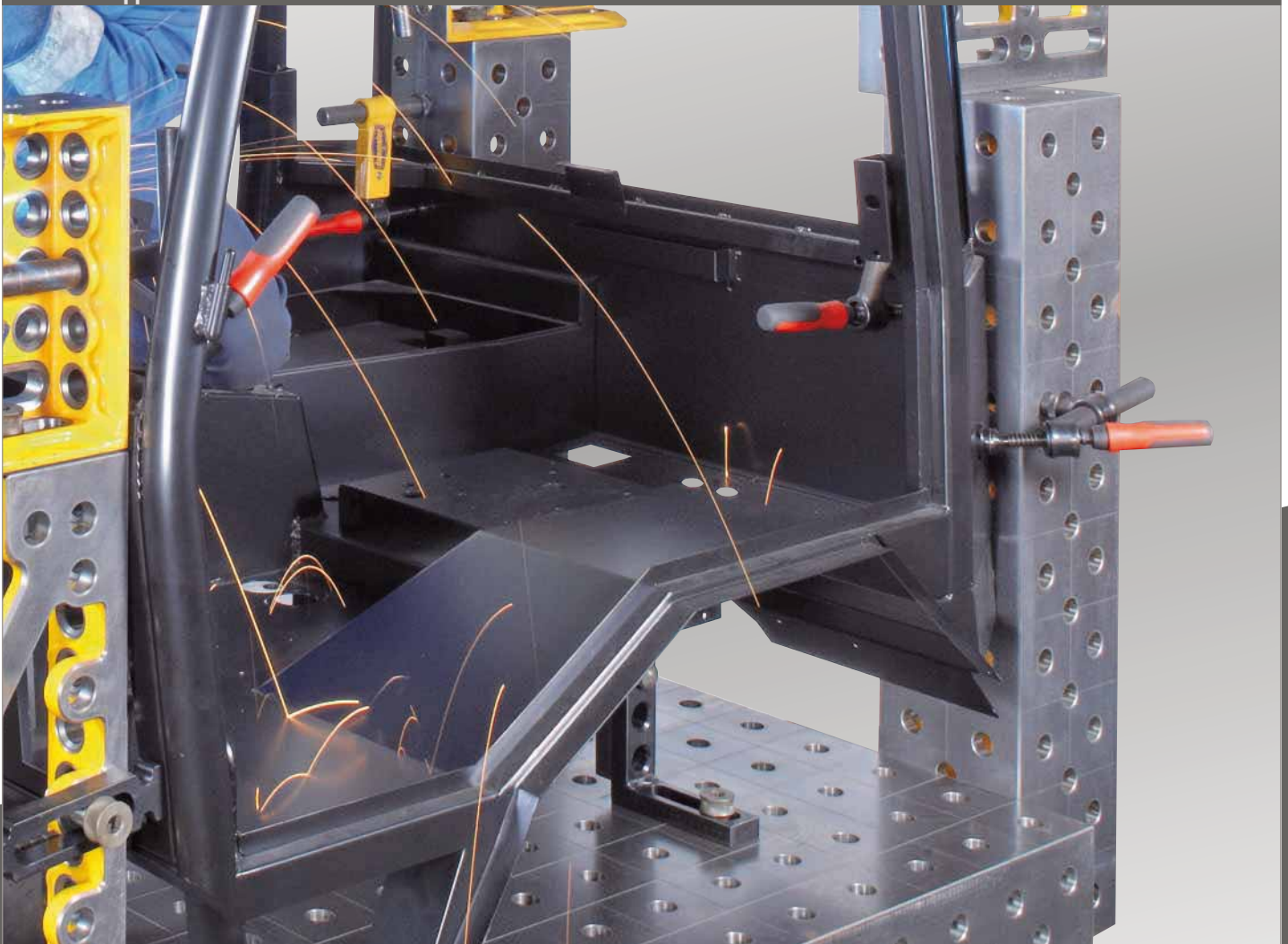
- to adjust an infinitely variable support
- clamping in positions which are hard to reach



System 28: New Clamping pads

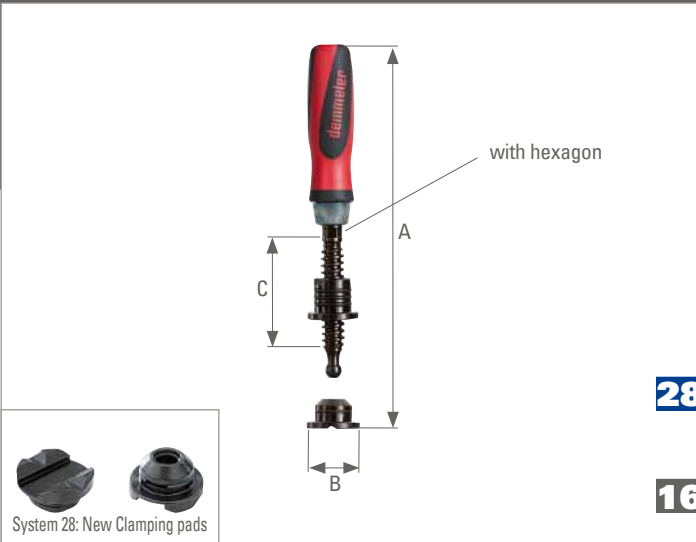
28	A mm	B mm	approx. w kg	Item no.
	255	28	0,64	D28-09008-000
16	A mm	B mm	approx. w kg	Item no.
	180	16	0,18	D16-09008-000

Demmeler applications



Screw clamps Accessories Replacement parts

Adjustment screw with bushing and clamping pads



Description

- quality 2-component plastic handle
- with hexagon for additional clamping
- long thread
- insert nut can be inserted in any system bore
- Clamping pads replaceable (plastic, stainless steel – see p. 132 forward)
- suited for pre-loading workpieces

28	A mm	Ø B mm	C mm	approx. G kg	Item no.
	ca. 255	40	70	0,5	D28-07020-000

16	A mm	Ø B mm	C mm	approx. G kg	Item no.
	ca. 148	22	45	0,14	D16-07020-000

Demmeler applications



quick-action clamping cylinder with clamping pads



16

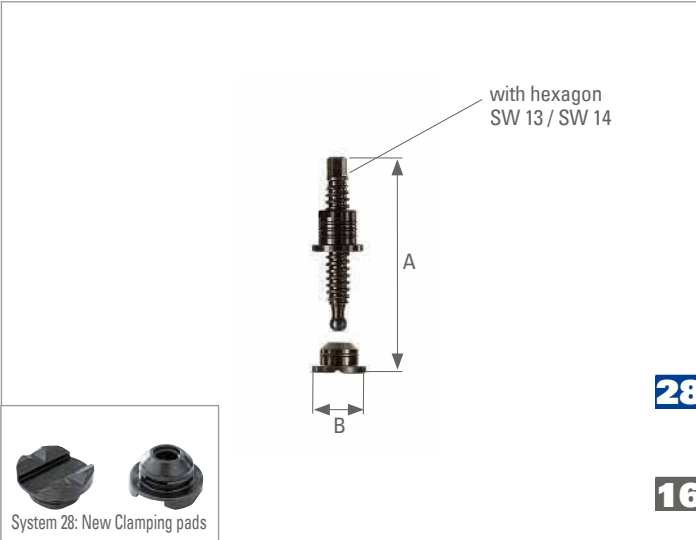
Description

- Clamping is up to 5 x faster than with conventional screw clamps.
- The scanning mechanism provides for controlled, fast and vibration-proof clamping
- achieving high clamping force quickly with little effort
- Large clamping range 9 mm
- Self-centred clamping of the contact and support piece, which can be replaced, at the workpiece.
- The powder-coated clamping lever is especially ergonomically formed
- the plastic-coated release lever with slip guard provides a safe grip when undoing the clamp

28	A mm	Ø B mm	C mm	approx. G kg	Item no.
	ca. 105 + 9	40	70	0,88	D28-07021-004

16	A mm	Ø B mm	C mm	approx. G kg	Item no.
	ca. 66 + 3	22	45	0,18	D16-07021-000

Short boring spindle with bushing and clamping pads



Description

- Especially recommended for use where space is tight
- Operated via SW 13 (28) / SW 14 (16) hex wrench
- Fits directly into system bores
- Ideal also for pre-loading workpieces

28	A mm	Ø B mm	approx. G kg	Item no.
	120	40	0,36	D28-07022-000

16	A mm	Ø B mm	approx. G kg	Item no.
	70	22	0,06	D16-07022-000

Adapter for PC bolts D28 to D16



Description

- serves bore diameter of screw clamps Ø 16 mm in system bores D28
- quick-action clamping cylinder D16 can be used in system D28
- and be used at the same time as support or stop
- insert nut for D28 screw clamp

28	A mm	Ø B mm	Ø C mm	D mm	approx. G kg	Item no.
16	30	28	16	25	0,10	D00-06012-000

Demmeler applications: Adapter for PC bolts D28 to D16



Screw clamps Accessories Replacement parts

Clamping with the ORIGINAL Demmeler clamping system can be so versatile

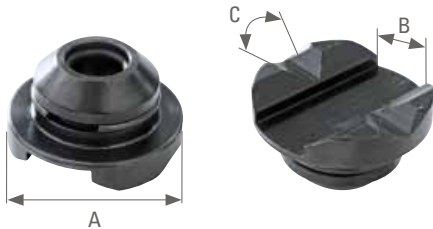
THE ORIGINAL
Made in Germany



Plunger and contact piece/ Clamping pads with V-block

Plunger and contact piece from 8 to 80 mm

PROPERTY RIGHT
APPLIED FOR

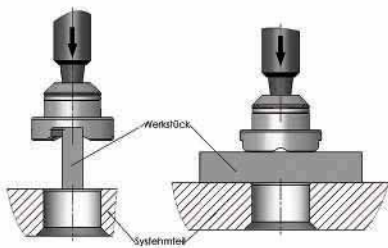


☛ Ideal for any material

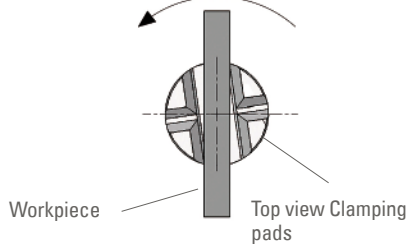
28	A mm	B mm	C °	Amount	Item no.
	40	15,5	120	1 Piece	D28-07011-022
	40	15,5	120	10 Piece	D28-07011-023

16	A mm	B mm	C °	Amount	Item no.
	22	8	120	1 Piece	D16-07011-013
	22	8	120	10 Piece	D16-07011-014

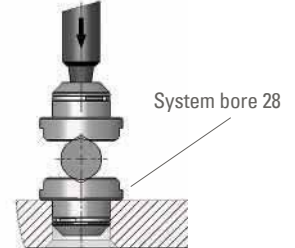
Positioning: flat or on end



Self-centring clamping at the workpiece



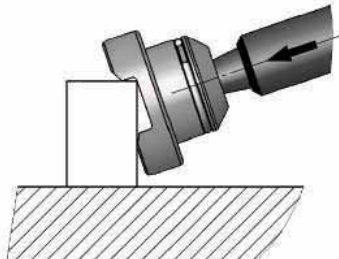
Also as contact piece in system bore



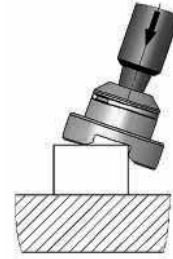
Large diameter clamping: no problem



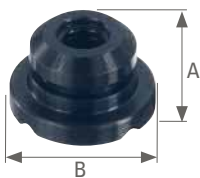
No sliding or tilting off possible



... regardless of where the force impact is! No sliding off



Steel blued



Stainless steel



Polyamide



Description

- ☛ Quickly and easily changed: without tools or threads
- ☛ O-Ring prevents entry of dirt in the ball joint
- ☛ Available in various materials
- ☛ Pivoting compensation allows full surface contact with the part
- ☛ with cross-shaped grooves for clamping of round/ rectangular tubes
- ☛ Can also be used as support in any system bore

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	22	40	0,10	Steel, blued	D28-07011-000
	22	40	0,10	Stainless steel	D28-07011-001
	22	40	0,018	Polyamide	D28-07011-002

16	A mm	Ø B mm	approx. G kg	Description	Item no.
	13	22	0,019	Steel, blued	D16-07011-000
	13	22	0,019	Stainless steel	D16-07011-001
	13	22	0,004	Polyamide	D16-07011-002

Clamping pads steel both sides

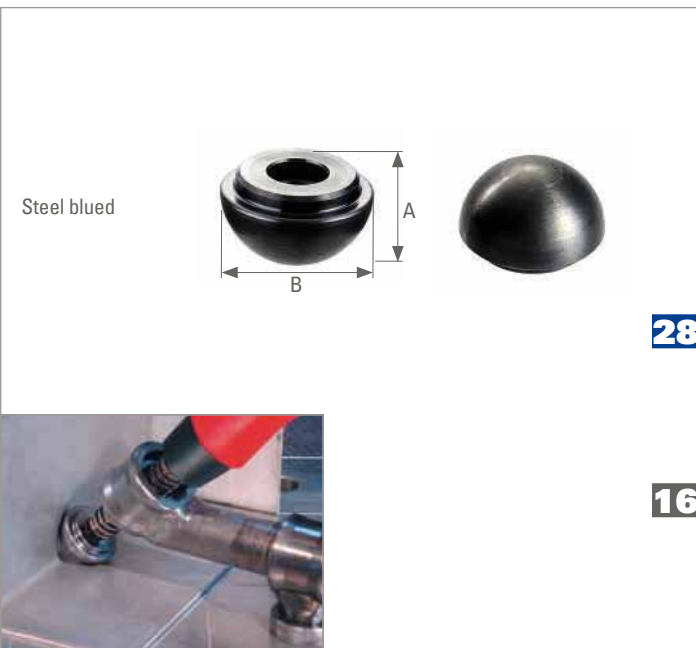


Description

- Quickly and easily changed without tools or screws
- O-Ring prevents entry of dirt in the ball joint
- Available in various materials
- Pivoting compensation allows full surface contact with the part with cross-shaped grooves for clamping of round / rectangular tubes
- Can also be used as support in any system bore
- Can be used bilaterally

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	25	40	0,08	Steel, blued	D28-07011-010

Clamping pads with spherical shape



Description

- Quickly and easily changed without tools or screws
- O-Ring prevents entry of dirt in the ball joint
- Available in various materials
- The ball is particularly useful in clamping corner profiles
- The clamping pad adjusts for angular error
- Pivoting compensation allows full surface contact with the part

28	A mm	Ø B mm	approx. G kg	Description	Item no.
	21	35	0,09	Steel, blued	D28-07011-004
	21	35	0,09	Stainless steel	D28-07011-005
	21	35	0,014	Polyamide	D28-07011-006
	21	35	-	Aluminium	D28-07011-020
16	A mm	Ø B mm	approx. G kg	Description	Item no.
	14	20	0,018	Steel, blued	D16-07011-005
	14	20	0,018	Stainless steel	D16-07011-006
	14	20	0,004	Polyamide	D16-07011-007
	14	20	-	Aluminium	D16-07011-012

Clamping pads blank



Description

- For customer specific machining
- Bore diameter for Demmeler system swing clamps already available
- Steel / bare

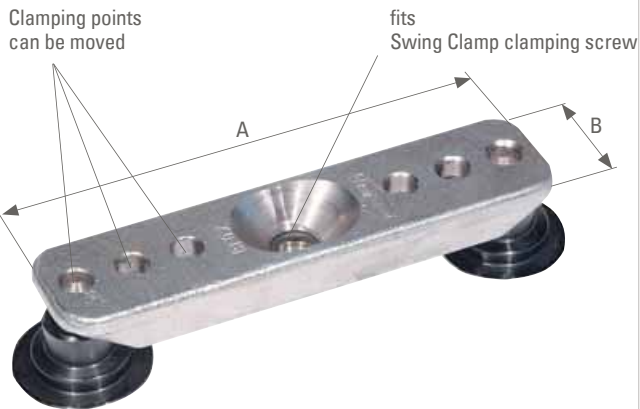
28	A mm	Ø B mm	approx. G kg	Description	Item no.
	35	50	0,32	Steel, blued	D28-07014-000
16	A mm	Ø B mm	approx. G kg	Description	Item no.
	25	22	0,05	Steel, blued	D16-07014-000



Screw clamps Accessories Replacement parts

DEMMELER TOPSELLER: 2P. Clamping bridge with 2 Clamping pads steel

TOPSELLER



Description

- Two clamping points
- Clamp difficult to reach places
- Simultaneous clamping of multiple parts
- Clamping uneven surfaces with pivoting compensation
- Adjustable spacing of the clamping pads using self-locking ball pins
- Clamping pads are changeable
- Plugs into every clamping Screw ball end
- very stable design
- Scope of delivery: Clamping bridge, 2 ball pins and 2 clamping pads(Steel)

28

A mm

B mm

approx. G kg

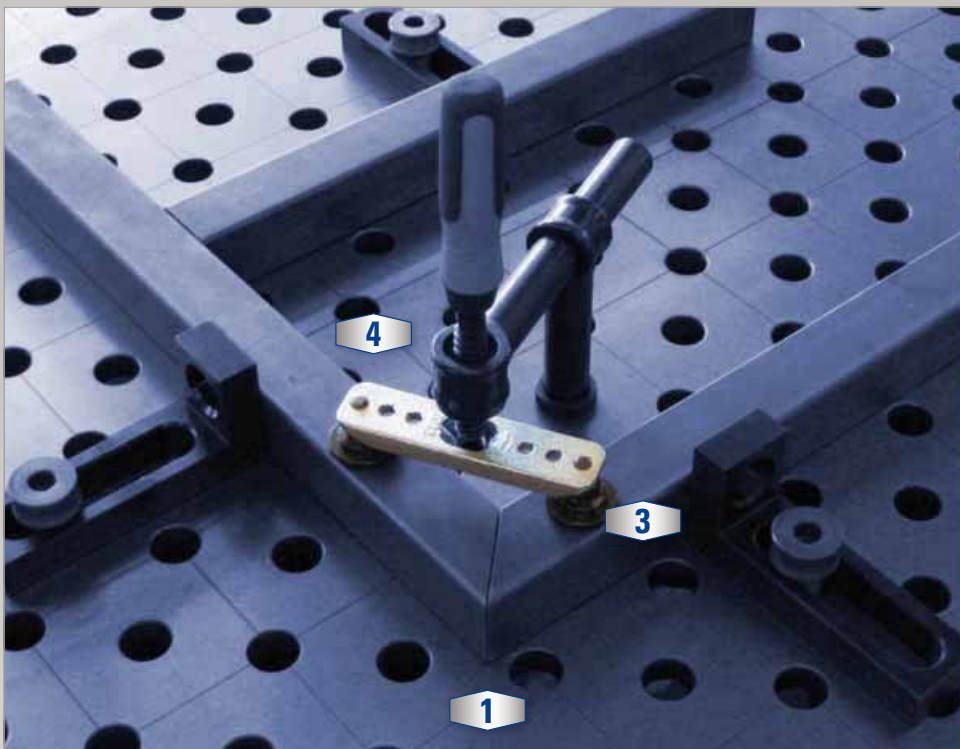
Item no.

130 / 97 / 65

35

0,56

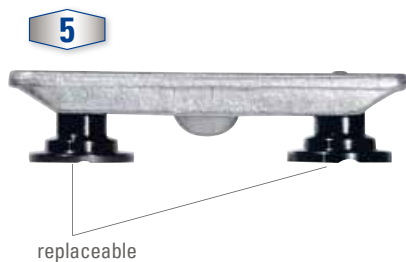
D28-07018-000



Our ideas – Your benefits!

- 1 two clamping points
- 2 Clamping uneven surfaces and/or 2 different heights
- 3 Clamping pads replaceable
- 4 adjustable clamping width
- 5 galvanised

replaceable



Height differences – no problem!



... whether tubular steel or flats



Clamping Tube



Description

- Precision clamping tube fits all system bores
- e.g. for compensating swing clamps (see from p. 118 onward)

28	A mm	Ø B mm	approx. G kg	Item no.
	200	28	0,57	D28-07004-000
	350	28	1,00	D28-07004-001
	600	28	1,70	D28-07004-002
	1000	28	2,16	D28-07004-003

16	A mm	Ø B mm	approx. G kg	Item no.
	125	16	0,15	D16-07004-000
	250	16	0,30	D16-07004-001
	600	16	0,72	D16-07004-002
	1000	16	1,15	D16-07004-003

Stop ring VARIO for tubular steel swing clamps



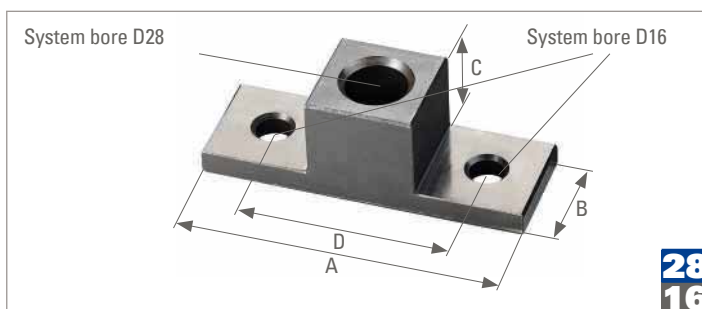
Description

- for height adjustment of screw clamps
- included in scope of delivery with all tubular steel swing clamps

28	A mm	Ø B mm	approx. G kg	Item no.
	10	28	0,034	D28-07003-000

16	A mm	Ø B mm	approx. G kg	Item no.
	6	16	0,006	D16-07003-000

Reduction bushing for clamping tubes System 28 to System 16



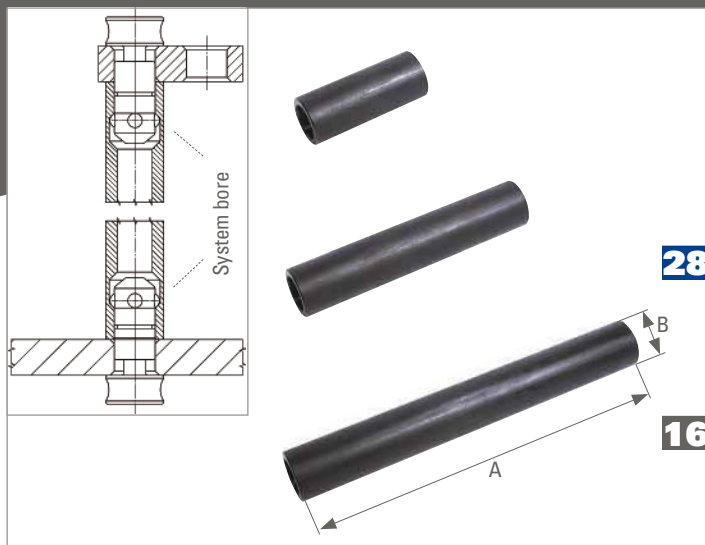
Description

- Interface between System 28 and System 16

28	A mm	B mm	C mm	D mm	approx. G kg	Item no.
16	150	50	50	100	1,04	D00-06015-000

Screw clamps Accessories Replacement parts

Adapter tube



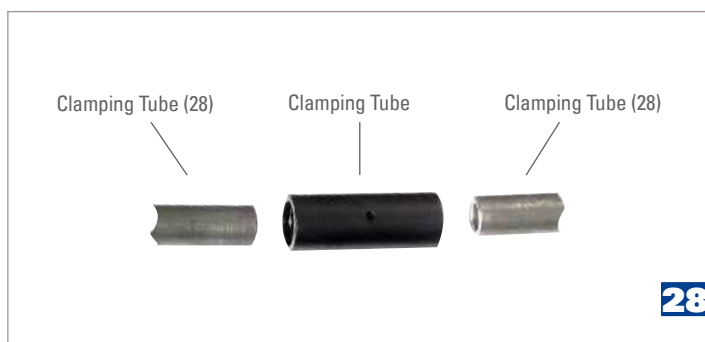
Description

- Extension of the support and clamping points
- Adjustable using the tube of a swing clamp
- Clamping using a PC bolt is possible bilaterally

28	A mm	Ø B mm	approx. G kg	Item no.
	100	28 / 40	0,36	D28-09010-000
	200	28 / 40	1,04	D28-09010-001
	300	28 / 40	1,66	D28-09010-002

16	A mm	Ø B mm	approx. G kg	Item no.
	100	16 / 40	0,34	D16-09010-000
	200	16 / 40	0,76	D16-09010-001
	300	16 / 40	1,18	D16-09010-002

Clamping Tube

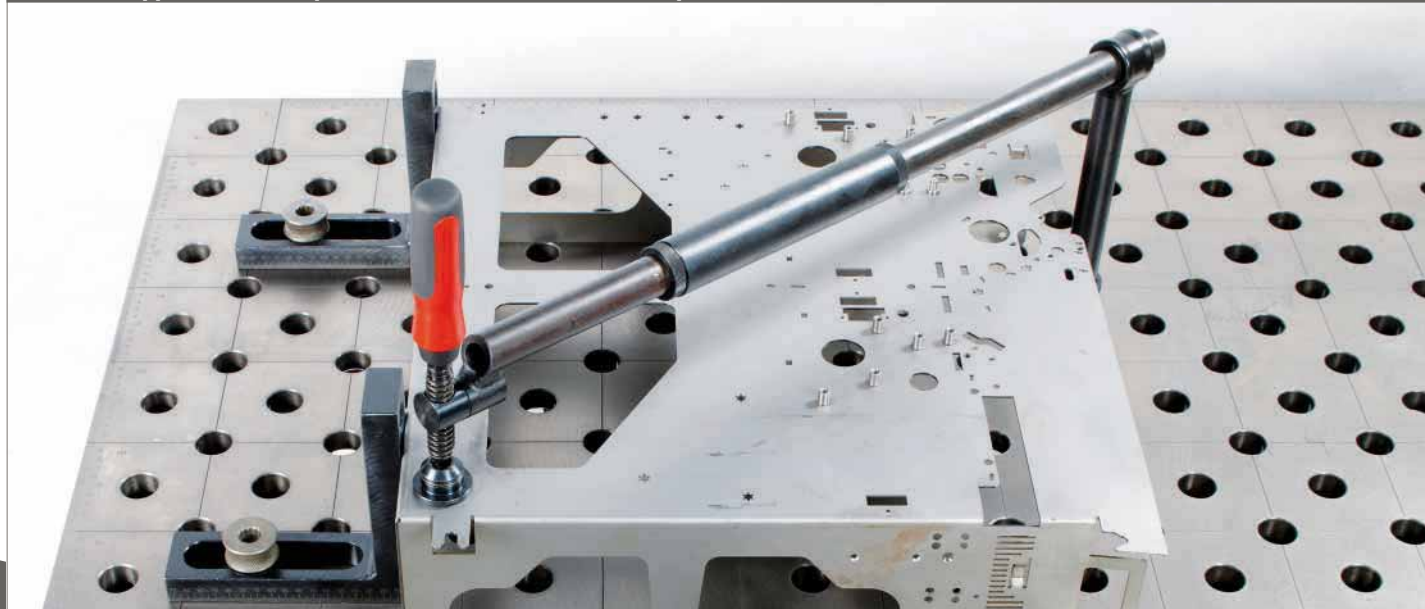


Description

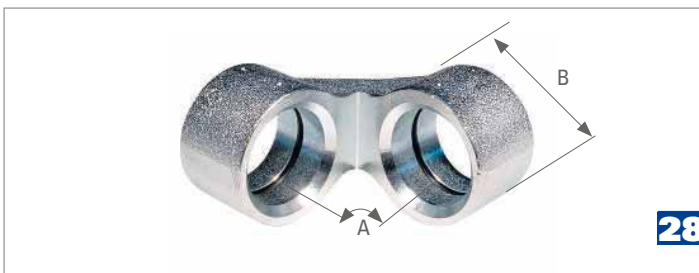
- Used as a connector between two clamping tubes
- Used as a connector between screw clamp and clamping tube
- blued

28	A mm	Ø B mm	approx. G kg	Item no.
	100	28 / 34	0,36	D28-07010-000

Demmeler applications: Adapter tube 200 mm with screw clamp



Clamping Sleeve 90°

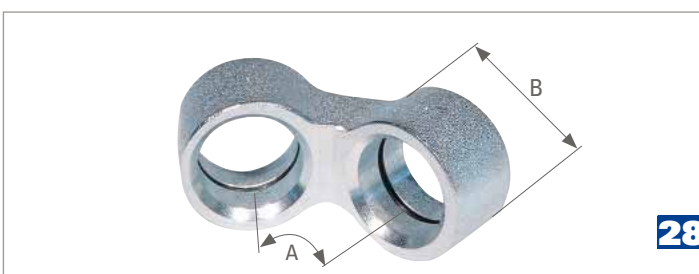


Description

- Can be used as a corner stop
- Centre distance 50 mm

28	A °	Ø B mm	approx. G kg	Item no.
	90	28	0,28	D28-07034-000

Clamping Sleeve 45°



Description

- Can be used as a corner stop
- Centre distance 50 mm

28	A °	Ø B mm	approx. G kg	Item no.
	45	28	0,26	D28-07035-000

Indexable Bushing 90° with precision scaling in 15° steps

precision scaling



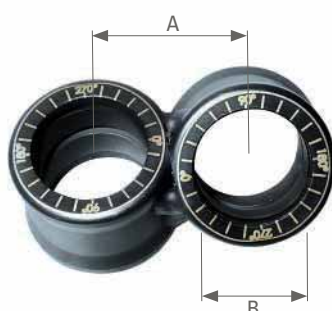
Description

- easy to operate with 360° precision scaling
- especially easy in combination with horizontal toggle clamps
- can also be used in combination with short or standard screw with insert nut
- Centre distance 50 mm

28	A mm	Ø B mm	approx. G kg	Item no.
	38	28	0,31	D28-07034-010

Indexable Bushing 45° with precision scaling in 15° steps

precision scaling



Description

- easy to operate with 360° precision scaling
- especially easy in combination with horizontal toggle clamps
- (see p. 142 forward)
- can also be used in combination with short or standard screw with insert nut
- Centre distance 50 mm

28	A mm	Ø B mm	approx. G kg	Item no.
	38	28	0,31	D28-07035-010



Accessories for the Positioning and clamping tube

Ball clamp with chamfered head



Stainless steel plunger

Description

- high quality stainless steel piston
- self-locking in every position thanks to O-ring
- 4 mm stroke
- 120 N tensile force

28	A mm	Ø B mm	Description	Item no.
	43	28	with chamfered head	D28-07017-010

Demmeler applications: Frame for trailers



Pneumatic toggle clamps – automate your clamping system

Pneumatic toggle clamps S



Description

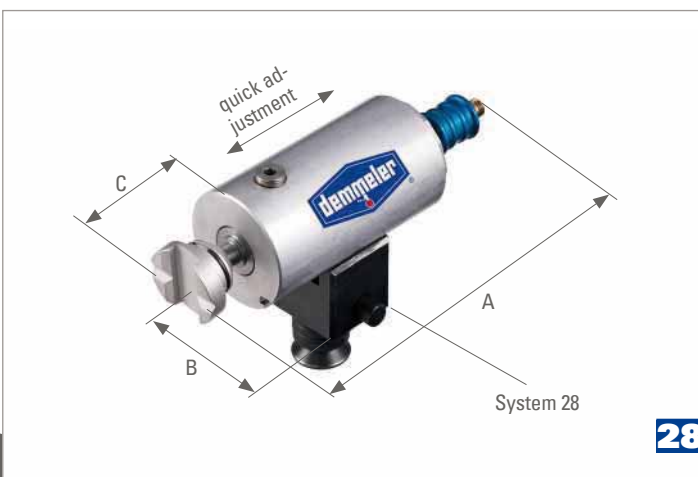
- simple effect pneumatic cylinder
- with compression spring reset and 3/2 directional valve
- fits all D28-bores
- Lift 30 mm
- Force $F_6 = 41 \text{ N}$ at 6 bar $F_8 = 117 \text{ N}$ at 8 bar
 $F_{10} = 193 \text{ N}$ at 10 bar $F_{20} = 573 \text{ N}$ at 20 bar
 $F_{30} = 953 \text{ N}$ at 30 bar $F_{40} = 1146 \text{ N}$ at 40 bar
- Recommended accessories pressure force booster p. 141

28	A mm	Ø B mm	C mm	Item no.
	159	28	34	D28-13010-000

Demmeler applications: Pneumatic toggle clamps S



Pneumatic toggle clamps XL

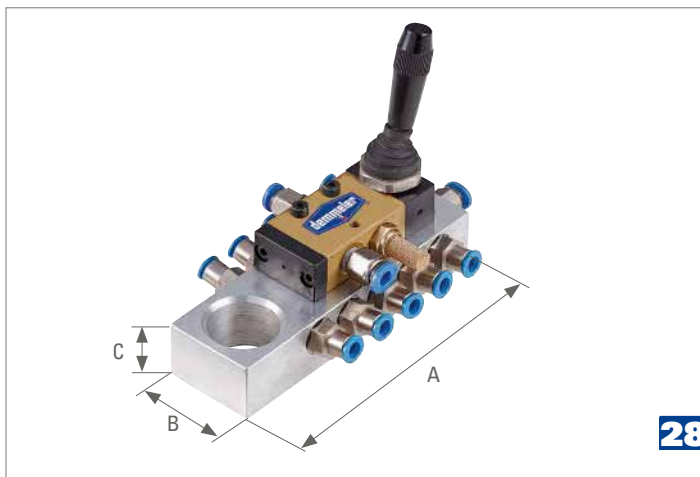


Description

- simple effect pneumatic cylinder
- with compression spring reset and 3/2 directional valve
- Bore diameter in D28 bores with quick-action adjustment and Grid every 35 mm
- Lift 40 mm
- Force $F_6 = 680 \text{ N}$ at 6 bar $F_8 = 931 \text{ N}$ at 8 bar
 $F_{10} = 1182 \text{ N}$ at 10 bar $F_{20} = 2364 \text{ N}$ at 20 bar
 $F_{40} = 4728 \text{ N}$ at 40 bar

28	A mm	Ø B mm	C mm	Item no.
	193	50	33,52	D28-13015-000

Manifold block with hand valve



Description

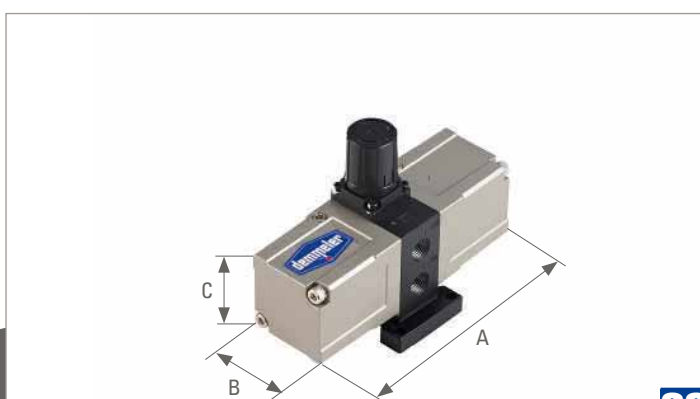
- Valve block 10-terminals with check valve 1/8"
- Hand valve: 3/2 directional valve 1/8"
- incl. 20 m hose

28	A mm	B mm	C mm	Item no.
	130	40	25	D28-13020-000

Demmeler applications: Pneumatic toggle clamps XL



Pressure force booster



Description

- For doubling and/or quadrupling pneumatic clamping forces:
Pressure booster 2 : 1 max. 20 bar
Pressure booster 4 : 1 max. 41 bar
- incl. couplings and tubes

28	A mm	B mm	C mm	Description	Item no.
	150	50	65	2 : 1	D28-13020-001
	200	150	140	4 : 1	D28-13020-002

Illustration similar

Quick release skewer Horizontal toggle clamp / 2-point clamp

Quick release skewer

- for fast clamping and fastening with lighter clamping force
- for production runs (short clamping times)
- fits in all system bores

- Pneumatic toggle clamps see p. 140, on request hydraulic clamping components also available
- Adapter blued

Horizontal toggle clamp with insert nut with clamping range 30 mm



Description

- Long rod-guide with attaching thread and nut
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- with tempered, galvanised clamping screw
- incl. insert nut for use with any system bore
- 32 mm lift
- Clamp galvanised and passivated, Adapter blued

28	A mm	B Ø mm	C mm	approx. G kg	Item no.
	30	28	-	0,4	D28-08000-000

Horizontal toggle clamp with Adapter and Countersunk head screw



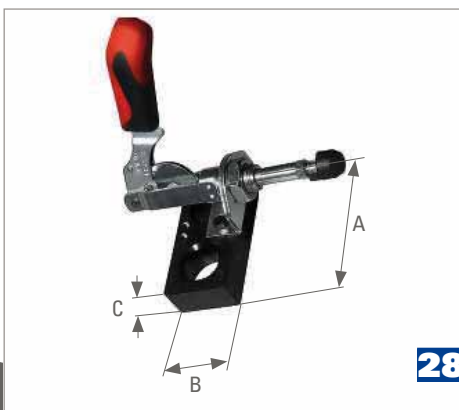
Description

- Long rod-guide with attaching thread and nut
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- with tempered, galvanised clamping screw
- 32 mm lift
- with adapter and countersunk head screw for accommodation by any system bore
- Clamp galvanised and passivated, Adapter blued
- For indirect accommodation by means of universal-stop (e.g. p. 82), therefore adjustable
- in an infinitely variable manner

28	A mm	B Ø mm	Description	approx. G kg	Item no.
	27	50	Threaded rod=32x20 mm	0,74	D28-08002-000

16	A mm	B Ø mm	Description	approx. G kg	Item no.
	15	38	Threaded rod=24x16 mm	0,22	D16-08002-000

Horizontal toggle clamp-Uni (with universal stop)

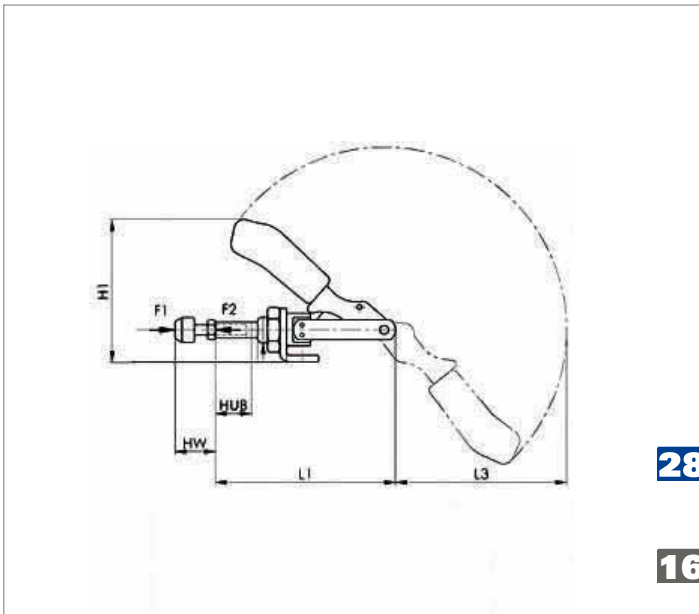


Description

- Long rod-guide with attaching thread and nut
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- with tempered, galvanised clamping screw
- 32 mm lift
- incl. universal-stop with thread for moving the horizontal toggle clamp
- Clamp galvanised and passivated, stop blued

28	A mm	B mm	C mm	approx. G kg	Item no.
	100	50	25	1,08	D28-08001-010

Horizontal toggle clamp: Technical information



28	H1	L1	L3	HW	HUB	F1 in kN	F2 in kN
	110	140	129	22 - 35	32	2,5	2,5
16	H1	L1	L3	HW	HUB	F1 in kN	F2 in kN
	60	91	72	12 - 20	20	1	1

2-point clamp with adaptor

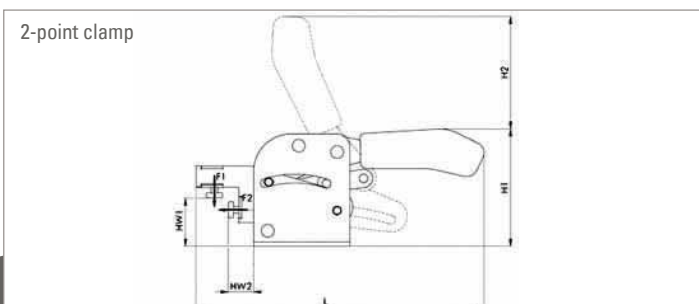


Description

- Positioning and clamping in one operation
Explanation: The combination clamp transforms the movement of the lever arm into a horizontal and vertical clamping motion by which the work piece is positioned and clamped at the same time, which means huge savings potential.
- Robust and stable design
- easy withdrawal of the workpiece through completely retracted clamping arm
- with adaptor for accommodation in any system bore infinitely variable adjustment
- Clamp galvanised and passivated, Adaptor blued

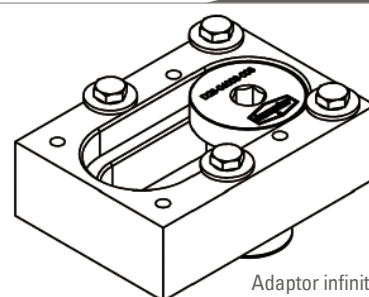
28	A mm	B mm	C mm	approx. G kg	Item no.
	100	70	30	1,8	D28-08007-000

2-point clamp: Technical information



28	H1	H2	L1	HW1	HW2	F1 in kN	F2 in kN
	94	87	219	30 - 40	10 - 20	2	2

Adaptor



Adaptor infinitely variable adjustment

Quick release skewer Vertical toggle clamp / Horizontal acting toggle clamp

Vertical toggle clamp with adaptor & countersunk head screw

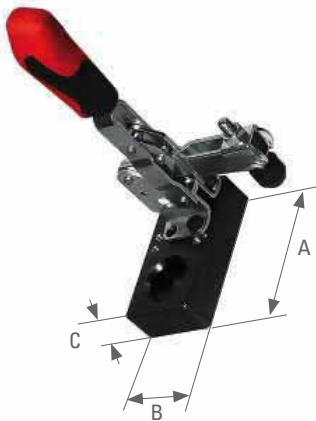


Description

- with open holding arm and horizontal foot
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- Safety clamping piece with finger protection
- Loss prevention device for the clamping screw at the end of the clamping arm
- with Adapter and Countersunk head screw for accommodation in any system bore
- Clamping range 0-50 mm (28) and/or 0-25 mm (16)
- Clamp galvanised and passivated, Adapter blued
- for indirect accommodation by means of universal-stop (e.g. p. 82), therefore infinitely variable adjustment

28	A mm	B Ø mm	Description	approx. G kg	Item no.
	27	50	Threaded rod=32x20 mm	0,74	D28-08001-000
16	A mm	B Ø mm	Description	approx. G kg	Item no.
	15	38	Threaded rod=24x16 mm	0,22	D16-08001-000

Vertical toggle clamp-Uni (with universal stop)

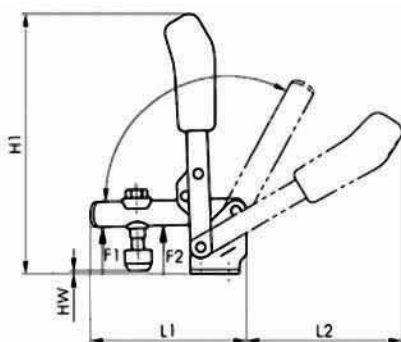


Description

- with open holding arm and vertical foot
- lubricated bearings
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- Safety clamping piece with finger protection
- Loss prevention device for the clamping screw at the end of the clamping arm
- Clamping range 0-50 mm (28)
- incl. universal-stop with thread for moving the vertical toggle clamp
- Clamp galvanised and passivated, Adapter blued

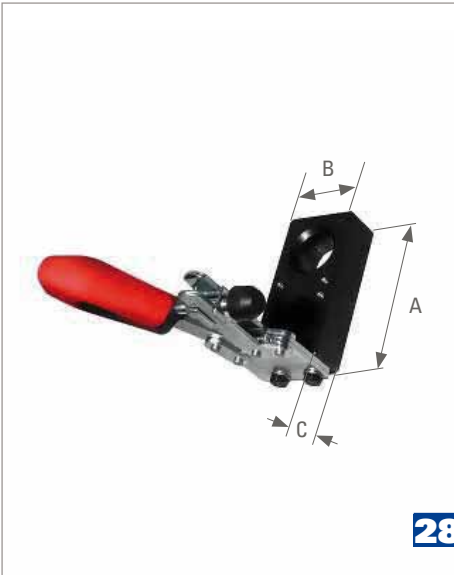
28	A mm	B mm	C mm	approx. G kg	Item no.
	100	50	25	0,98	D28-08003-010

Vertical toggle clamp: Technical information



28	H1	L1	L2	HW	F1 in kN	F2 in kN
	186	112	112	2 - 11	1,1	2,5
16	H1	L1	L2	HW	F1 in kN	F2 in kN
	98,5	61	59	-4 - 2	0,6	1,1

Horizontal acting toggle clamp - Uni (with universal stop)

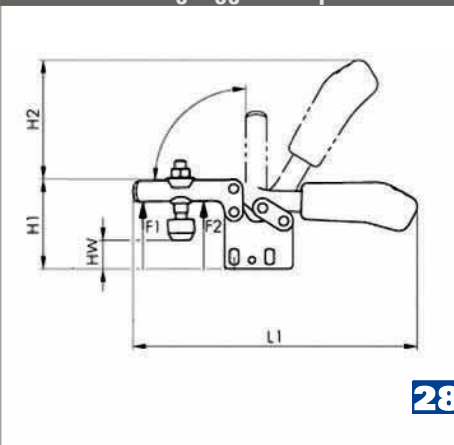


Description

- with open holding arm and vertical foot
- lubricated bearings
- ergonomic, oil-resistant handle with large hand contact surface and soft component
- with loss prevention device for the clamping screw
- incl. universal-stop with thread for moving the horizontal toggle clamp Clamp galvanised and passivated, stop blued

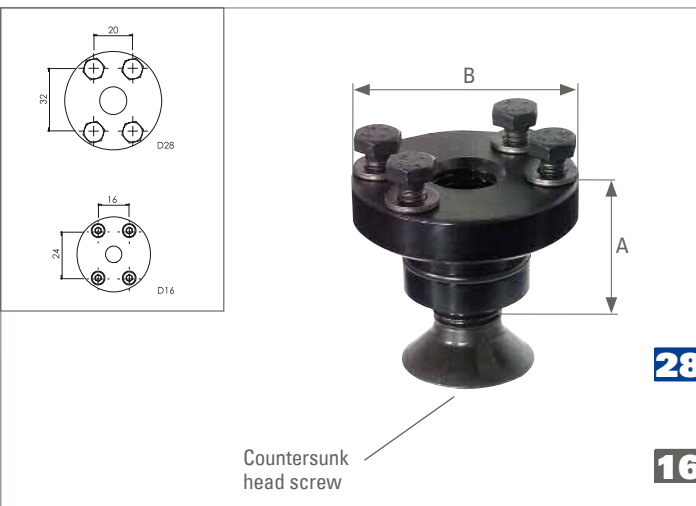
28	A mm	B mm	C mm	approx. G kg	Item no.
	100	50	25	1,06	D28-08002-010

Horizontal acting toggle clamp : Technical information



28	H1	H2	L1	HW	F1 in kN	F2 in kN
	65	86	206	14,5 - 26	1,8	2,5

Adapter for Quick release skewer with countersunk head screw



Description

- Adapter for accommodation of standard toggle clamps
- Scope of delivery (28): 1 x Adapter, 4 x hex head screw M6 x 12, 1 x Countersunk head screw M16 x 30
- Scope of delivery(16): 1 x Adapter, 4 x cheese-head screw M4 x 10, 1 x Countersunk head screw M10 x 20

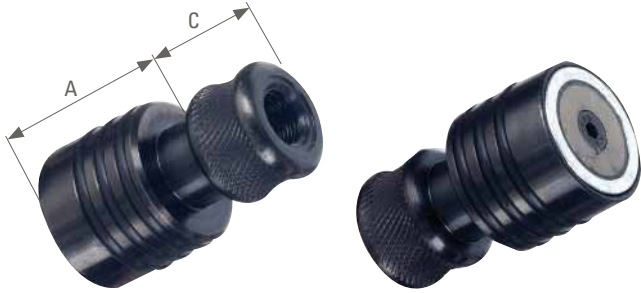
28	A mm	Ø B mm	approx. G kg	Description	Item no.
	27	50	0,26	Thread pitch = 32 x 20 mm	D28-08005-000

16	A mm	Ø B mm	approx. G kg	Description	Item no.
	15	38	0,08	Thread pitch = 24 x 16 mm	D16-08005-000



Magnetic chuck

Magnetic chuck System 28



Description

- fits directly into all system bores
- Holding force approx. 70 N

28	A mm	Ø B mm	C mm	approx. G kg	Item no.
	24	28	25	0,16	D28-13001-002
	47	28	25	0,26	D28-13001-003

Demmeler applications: Magnetic chuck System 28



Demmeler applications:

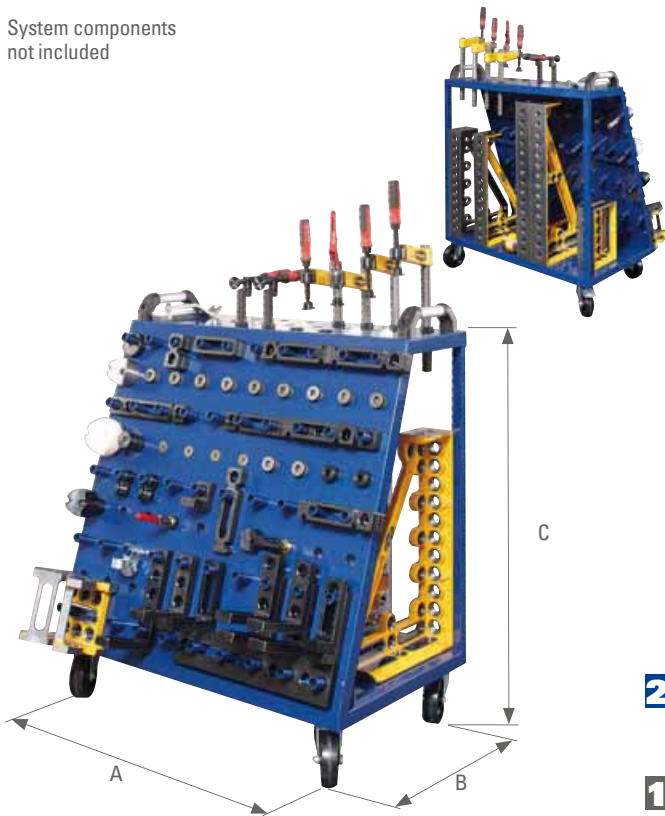


Accessories – tidy up your system

DEMMELEER TOPSELLER: Accessory cart

TOPSELLER

System components not included



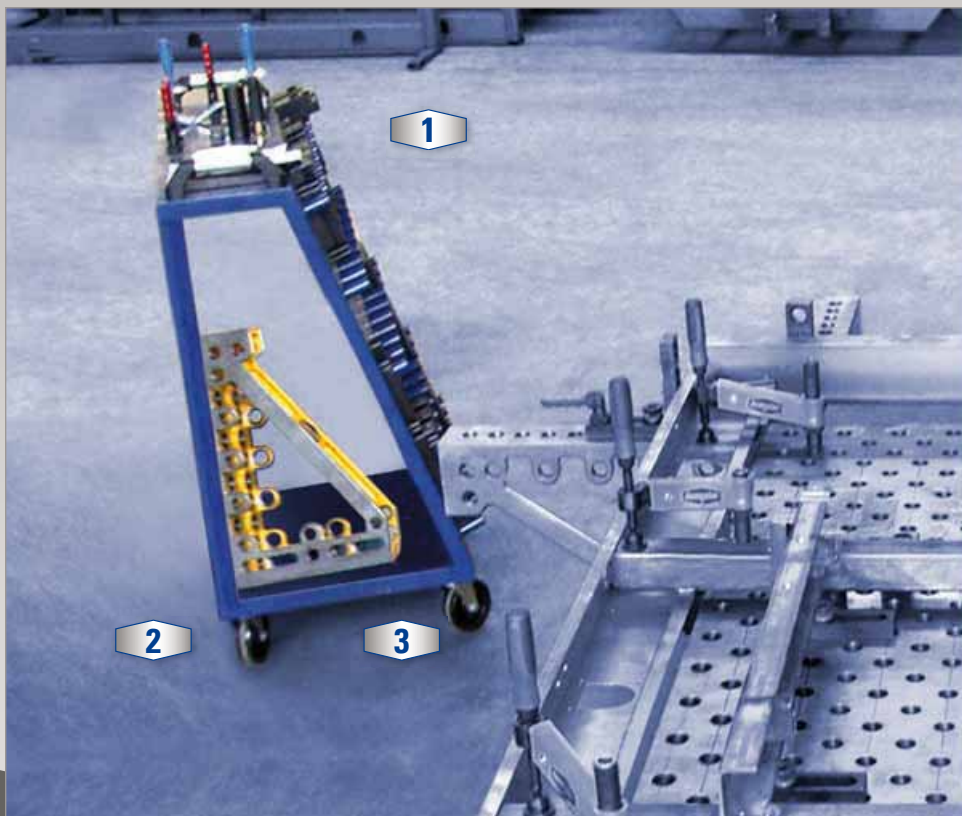
Description

- for easy removal of PC-bolts
- keeps everything easy to find and organised at the workstation
- fast access to system components
- Large brackets can be securely and conveniently stored on the inside of the cart.
- fast transportation owing to 4 sturdy 360° pivotable rollers, one of these lockable

Now also for D16!

28	A mm	B mm	C mm	approx. G kg	Item no.
	approx. 1000	approx. 650	approx. 1010	-	D28-11001-000

16	A mm	B mm	C mm	approx. G kg	Item no.
	approx. 600	approx. 450	approx. 800	-	D16-11001-002

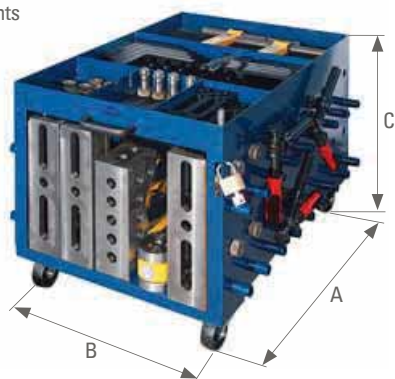


Our ideas – Your benefits!

- ➊ clear arrangement of your system components
- ➋ Large brackets can be securely and conveniently stored
- ➌ fast transportation owing to 4 sturdy and pivotable rollers
- ➍ Low centre of gravity owing to ideal placement of the clamping tools

Accessory cart compact

System components not included



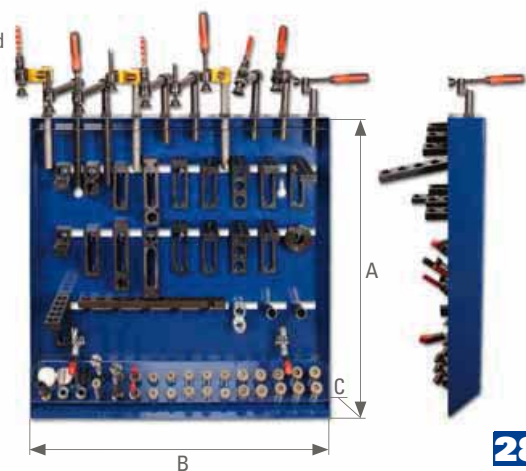
Description

- keeps everything easy to find and organised at the workstation
- fast access to system components
- saves a lot of space since it can be positioned under the 3D welding table
- mobile due to its four sturdy rollers

28	A mm	B mm	C mm	approx. G kg	Item no.
	1000	720	600	-	D28-11001-002

Pegboard for wall or table mounting

System components not included



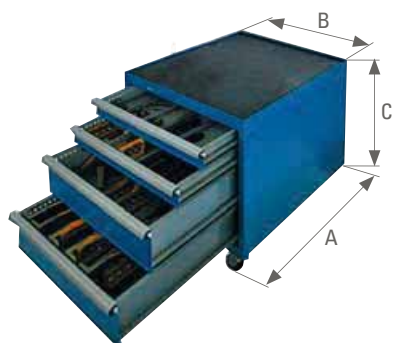
Description

- keeps everything easy to find and organised at the workstation
- The pegboard can be either mounted to the table by means of 2 PC-bolts D28-06001-000 (see p. 110) or on the wall.

28	A mm	B mm	C mm	approx. G kg	Item no.
	1010	1000	100	-	D28-11001-010

Mobile tool cart System 16

System components not included



Description

- keeps everything easy to find and organised at the workstation
- fast access to system components
- four closed drawers provide protection from dirt
- lockable
- mobile: four sturdy rollers, two of these pivotable and lockable

16	A mm	B mm	C mm	approx. G kg	Item no.
	740	560	970	-	D16-11001-000



Accessories – protected from dirt

Cover for accessory cart (D28-11001-000)



Description

- very massive cover
- protects your accessory cart from dirt and moisture
- firmly seamed edges
- Front with 2 sturdy zippers for removal of parts in the front without the need of removing the cover
- for Accessory cart D28-11001-000

28	A mm	B mm	approx. G kg	Item no.
	-	-	-	D28-11001-020

Cover for accessory cart compact (D28-11001-002)



Description

- very massive cover
- protects your accessory cart from dirt and moisture
- 4 sturdy zippers in the corners for removal of parts on the side without the need of removing the cover
- for Accessory cart D28-11001-002

28	A mm	B mm	approx. G kg	Item no.
	-	-	-	D28-11001-021

cover for your original Demmeler 3D welding table

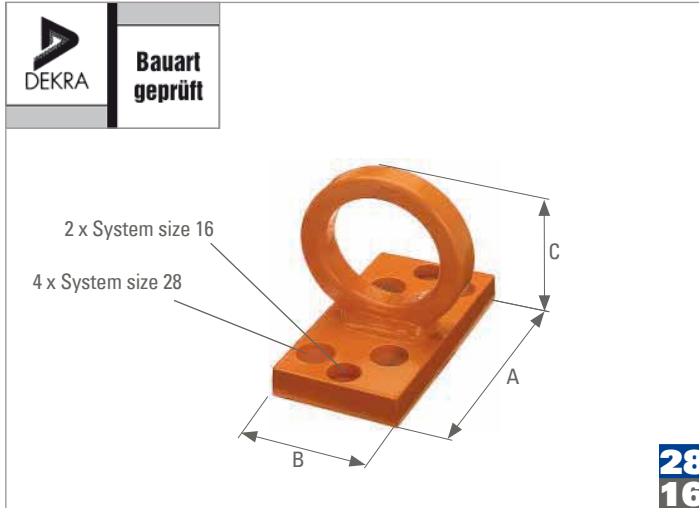


Description

- very massive cover
- protects your table from dirt and moisture
- firmly seamed edges

28	A mm	B mm	C mm	Description	Item no.
16	1000	1000	200	Cover sheet for table	D00-10030-000
	1200	1200	200	Cover sheet for table	D00-10030-001
	1500	1000	200	Cover sheet for table	D00-10030-002
	1500	1500	200	Cover sheet for table	D00-10030-003
	2000	1000	200	Cover sheet for table	D00-10030-004
	2400	1200	200	Cover sheet for table	D00-10030-005
	3000	1500	200	Cover sheet for table	D00-10030-006
	4000	2000	200	Cover sheet for table	D00-10030-007

Transport ring D28 and D16



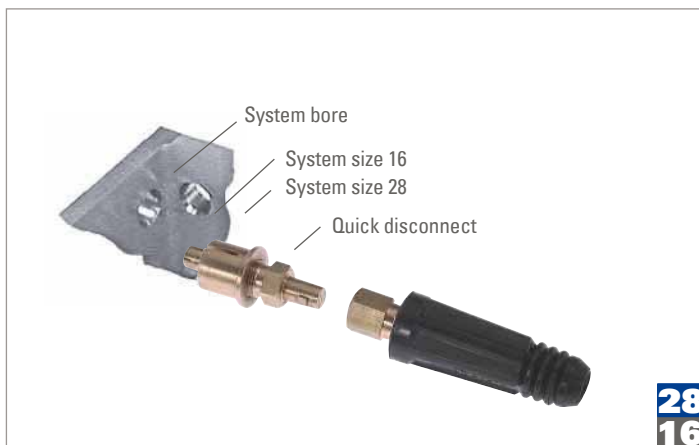
**Bauart
geprüft**

Description

- for quick, easy and safe transport of all heavy system parts (e.g. welding table)
- Attachment by means of 2 PC-bolts (D28-06001-000 (28) and/or D16-06001-000 (16) - see p. 110)
- Dekra inspected
- powder-coated
- Load capacity 2.5 t

28	A mm	B mm	C mm	approx. G kg	Item no.
16	190	100	165	4,72	D00-10001-000

Ground connector D16 und D28



Description

- fits in any system bore
- 100 % contact, no overheating of the ground cable >> higher efficiency
- for cable cross section of 50 - 70 mm², for loads up to 500 A
- simple and safe assembly (without interference)
- compatible with standard ground cables

28	A mm	B mm	C mm	approx. G kg	Item no.
16	-	-	-	0,34	D00-10009-000

Demmeler applications: Transport ring



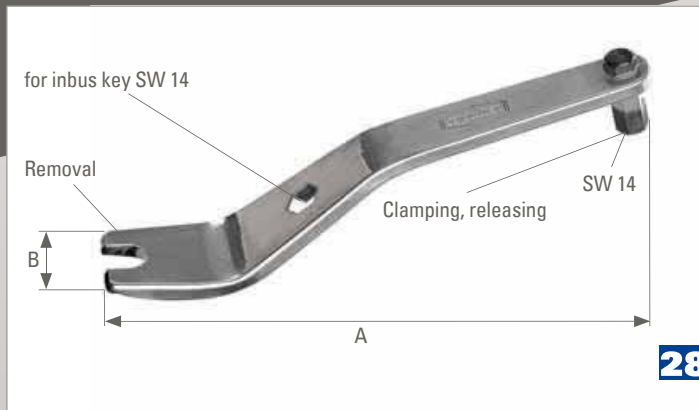
Demmeler applications:



Accessories – clamping and detaching becomes a piece of cake

DEMMELEER TOPSELLER: Assembly lever

TOPSELLER



Description

- For clamping/releasing of PC bolts D28-06001-000
- for easy removal of PC bolts D28
- Handle simultaneously serves for pre-centring

A mm	B mm	approx. G kg	Item no.
250	40	0,72	D00-10016-001



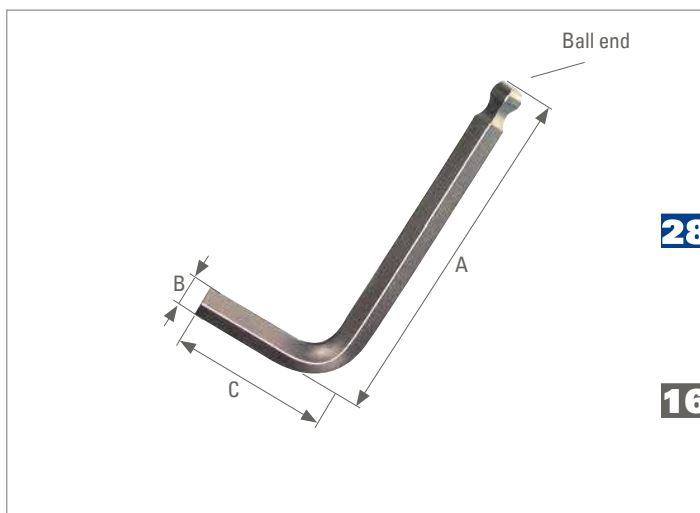
Our ideas – Your benefits!

- 1** Opening for removal of D28 PC bolts(see p. 110)
- 2** Clamping of the PC-bolts D28 with integrated inbus SW 14 from two sides

clamping and detaching becomes a piece of cake



Hexagon allen wrench (for inbus key)



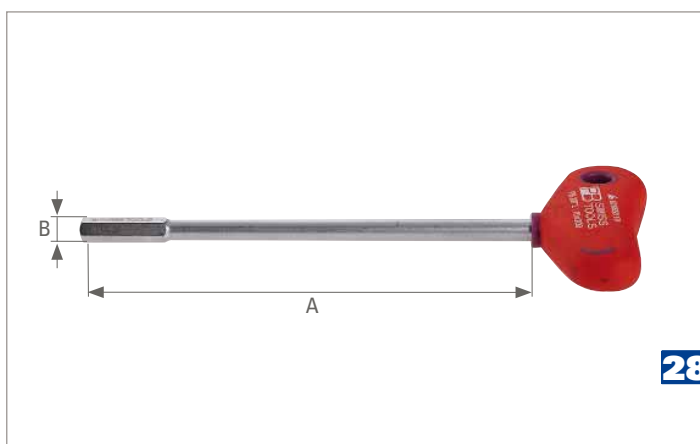
Description

- for PC bolts and compensating clamping arm with hex head screw
- Good accessibility with the additional ball end

28	A mm	B mm	C mm	approx. G kg	Item no.
	ca. 104	SW 8	ca. 42	0,06	D28-10008-005
	ca. 112	SW 10	ca. 55	0,10	D28-10008-001
	ca. 150	SW 14	ca. 69	0,26	D28-10008-000

16	A mm	B mm	C mm	approx. G kg	Item no.
	ca. 71	SW 4	ca. 25	0,01	D16-10008-002
	ca. 94	SW 6	ca. 38	0,02	D16-10008-001
	ca. 104	SW 8	ca. 42	0,06	D16-10008-000

Hexagonal wrench with T-handle (for inbus key)

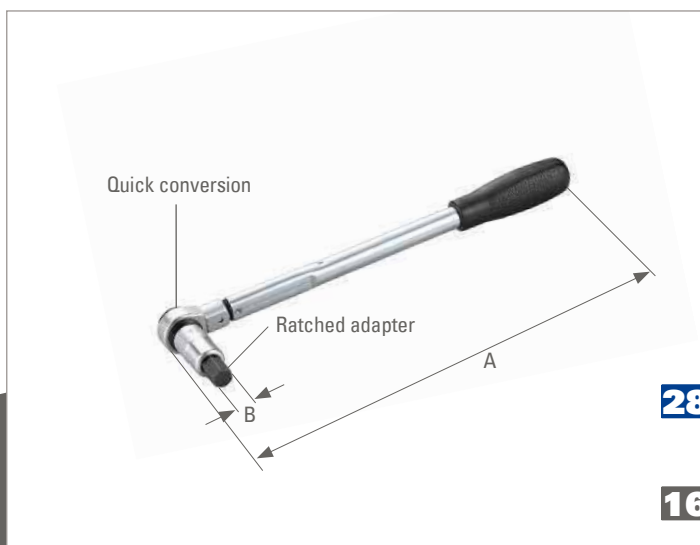


Description

- ergonomic handle, hence optimally suited for tightening
- SW 10 specially suited for PSR

28	A mm	B mm	approx. G kg	Item no.
	150	SW 8	0,12	D28-10008-004
	200	SW 10	0,18	D28-10008-003

Torque wrench



Description

- Preset to 70 Nm (28) and/or 20 Nm (16), for controlled tightening of PC bolts. Eliminates over-tightening and damage to system.
- incl. 1 x Ratched adapter, alternating (left, right) 1/2" (28) and/ or 3/8" (16) and 2 x socket SW 8 and SW 14 (28) and/or SW 4 and SW 8 (16)

28	A mm	B mm	approx. G kg	Item no.
	348	SW 8 / SW 14	0,76	D28-10015-000

16	A mm	B mm	approx. G kg	Item no.
	212	SW 4 / SW 8	0,52	D16-10015-000

Table leg, complete – custom lengths on request

Complete table foot Standard



Description

- Pivoting feet, ± 30 mm adjustable
- with stable M30 thread
- Leg sleeves protect the thread from dirt and prevents the cable and hose bundle from jamming
- also as supporting leg for a U-Form Spacer Block from 1m length (see p. 67)
- incl. assembly- countersunk head screw M24 x 60
- Foot pipe powder-coated

28 16	A mm	Description	approx. G kg	Item no.
	650 \pm 30	for 28 and 16	8,44	D00-10010-000
	750 \pm 30	for 28 and 16	9,24	D00-10010-022

Complete table foot Telescoping



Description

- Range of adjustment Telescoping 350 mm in 50 mm increments
- Leg sleeves protect the thread from dirt and prevents the cable and hose bundle from jamming
- Pivoting feet, ± 30 mm adjustable
- For flexible height adjustment of the work tables
- stable M30 thread
- incl. assembly- countersunk head screw M24 x 60
- Foot pipe powder-coated

28 16	A mm	Description	approx. G kg	Item no.
	550 - 900 \pm 30	for 28 and 16	10,5	D00-10010-001

Complete table foot with heavy duty wheels

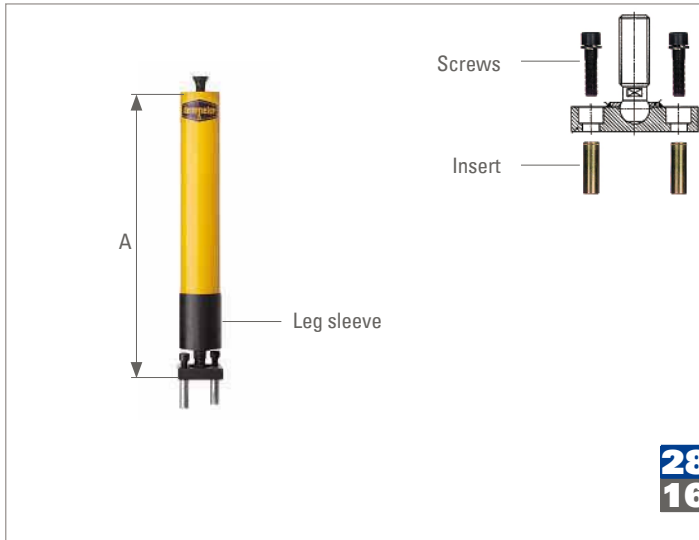


Description

- sturdy design
- with 360° steerable wheel
- Leg sleeves protect the thread from dirt and prevents the cable and hose bundle from jamming
- Fine adjustment ± 30 mm
- incl. assembly-Countersunk head screw M24 x 60
- Foot tube powder-coated
- Load capacity max. 650 kg

28 16	A mm	Description	approx. G kg	Item no.
	650 \pm 30	for 28 and 16, Wheel with brake	11,40	D00-10010-002
	650 \pm 30	for 28 and 16, Wheel without brake	10,70	D00-10010-007
	750 \pm 30	for 28 and 16, Wheel with brake	12,20	D00-10010-005
	750 \pm 30	for 28 and 16, Wheel without brake	11,50	D00-10010-010

Complete table foot with Anchoring Pad



Description

- for firm anchoring on hall floor, to protect against pulling, pressure and shifting (e.g. Robot use)
- Adjustment ± 30 mm
- Leg sleeves at the table feet prevent snagging of welding cables and protect the thread from dirt
- incl. assembly-Countersunk head screw M24 x 60 s as well as for firm anchoring on ground 2 x insert, 2 x cheese-head screw M16 x 40
- Foot tube powder-coated

	A mm	Description	approx. G kg	Item no.
28	650 \pm 30	for 28 and 16	9,90	D00-10010-003
16	750 \pm 30	for 28 and 16	10,40	D00-10010-016

Pivoting foot M 27 for system bores D28 (not for leg feet edges)



Description

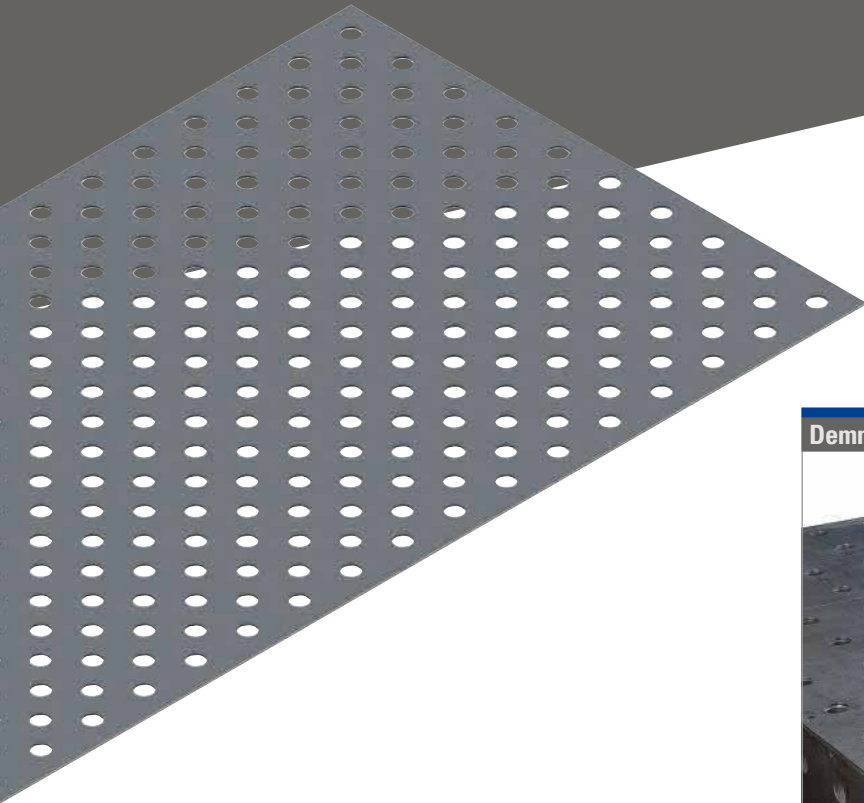
- This leg spindle can be used with any system bore System 28. For instance in order to place connection frames or other system components onto pivoting feet.
- Scope of delivery: Sturdy M27 thread with ball end, pivoting leg disc and 2 x M27 nuts

	A mm	\varnothing B mm	\varnothing C mm	Item no.
28	140	M27	80	D28-10010-000

Demmeler applications: M27 thread for System 28



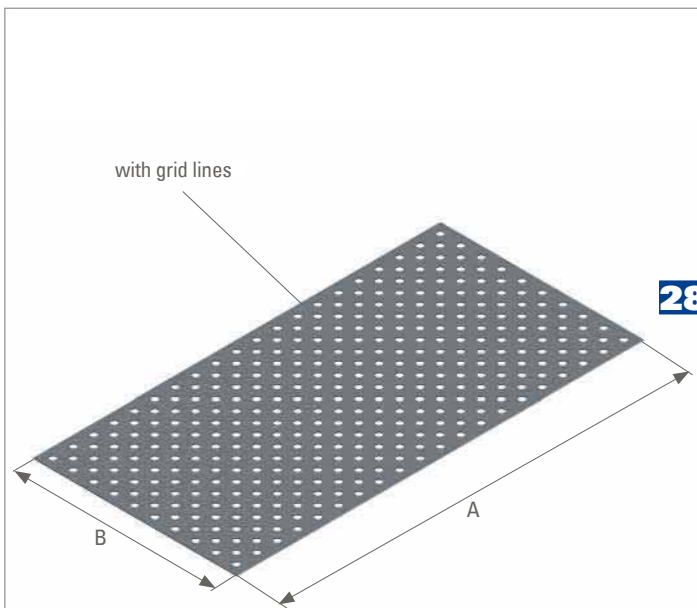
Protective plate for welding tables



Demmeler applications: Especially for stainless steel welding



Protective plate for welding table with diagonal grid



Description

- The protective plates are suited especially for stainless steel welding.
- with diagonal grid 100 x 100 mm
- incl. grid lines
- t=3

28

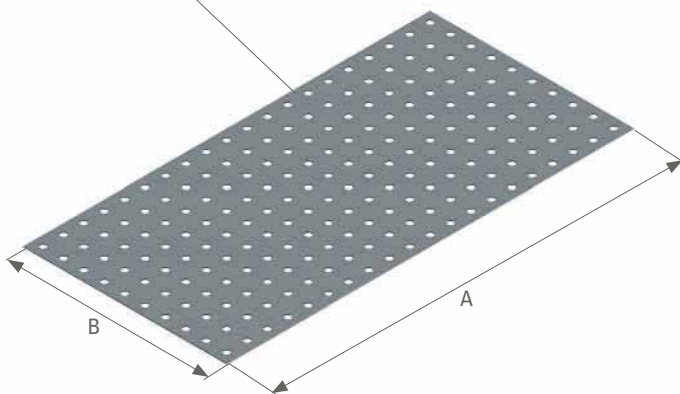
A mm	B mm	Description	Item no.
1000	1000	Stainless steel	P28-50021-001
1000	1000	Aluminium	P28-50021-002
1200	1200	Stainless steel	P28-50021-003
1200	1200	Aluminium	P28-50021-004
1500	1000	Stainless steel	P28-50021-005
1500	1000	Aluminium	P28-50021-006
1500	1500	Stainless steel	P28-50021-007
1500	1500	Aluminium	P28-50021-008
2000	1000	Stainless steel	P28-50021-009
2000	1000	Aluminium	P28-50021-010
2400	1200	Stainless steel	P28-50021-011
2400	1200	Aluminium	P28-50021-012
3000	1500	Stainless steel	P28-50021-013
3000	1500	Aluminium	P28-50021-014
4000	2000	Stainless steel	P28-50021-015
4000	2000	Aluminium	P28-50021-016

Protective plate for welding table with standard grid

Description

- The protective plates are suited especially for stainless steel welding.
- with grid 100 x 100 mm (28) and/or 50 x 50 mm (16)
- incl. grid lines
- System 28 t=3, System 16 t=2

with grid lines



28	A mm	B mm	Description	Item no.
	1000	1000	Stainless steel	D28-50021-012
	1000	1000	Aluminium	D28-50021-019
	1200	1200	Stainless steel	D28-50021-020
	1200	1200	Aluminium	D28-50021-013
	1500	1000	Stainless steel	D28-50021-018
	1500	1000	Aluminium	D28-50021-008
	1500	1500	Stainless steel	D28-50021-007
	1500	1500	Aluminium	D28-50021-011
	2000	1000	Stainless steel	D28-50021-005
	2000	1000	Aluminium	D28-50021-003
	2400	1200	Stainless steel	D28-50021-010
	2400	1200	Aluminium	D28-50021-006
	3000	1500	Stainless steel	D28-50021-014
	3000	1500	Aluminium	D28-50021-015
	4000	2000	Stainless steel	D28-50021-021
	4000	2000	Aluminium	D28-50021-022

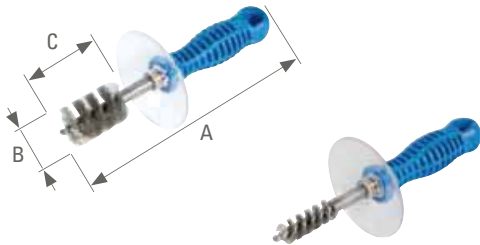
16	A mm	B mm	Description	Item no.
	1000	1000	Stainless steel	D16-50030-000
	1000	1000	Aluminium	D16-50030-008
	1200	1200	Stainless steel	D16-50030-009
	1200	1200	Aluminium	D16-50030-004
	1500	1000	Stainless steel	D16-50030-010
	1500	1000	Aluminium	D16-50030-011
	1500	1500	Stainless steel	D16-50030-012
	1500	1500	Aluminium	D16-50030-013
	2000	1000	Stainless steel	D16-50030-005
	2000	1000	Aluminium	D16-50030-014
	2400	1200	Stainless steel	D16-50030-001
	2400	1200	Aluminium	D16-50030-015

Especially for stainless steel welding

Table care products

Round brush

System 28



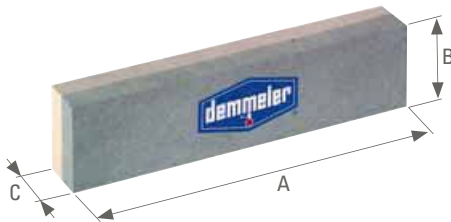
System 16

Description

- for cleaning of system bores
- with splash guard

			approx. G kg	
28	200	28	45	0,12
				D28-10002-000
16	200	16	45	0,10
				D16-10002-000

Bench stone



Description

- For maintaining the system surfaces of welding tables and system components

2816	A mm	B mm	C mm	approx. G kg	Item no.
	200	50	25	0,56	D00-10007-000

Pump bottle with welding table system protection spray



Description

- pressurized container, sturdy design
- including the welding table system's protective spray
- Capacity: 1 litre
- Note: cannot be diluted with water

2816	A mm	B mm	Description	Item no.
	280	100	Without welding spray	D00-10004-000
	280	100	With 1 litre welding spray	D00-10005-000

Welding table system protection spray in a can



Description

- release agent for welding thin and/or pre-heated sheet metal as well as for multi-layer welding
- protection for welding tables, system parts, welding nozzles, and other welding accessories

Areas of application

- for welding VA materials, steel and other metals

28

230	200	5 litre can	D00-10006-000
310	200	10 litre can	D00-10006-001
400	350	30 litre can	D00-10006-002

Your benefits

- 1 prevents adhesion of weld spatter to the surface
- 2 temporary corrosion protection for approx. one day
- 3 good cleaning effect
- 4 incombustible
- 5 without chlorinated hydrocarbons
- 6 biodegradable
- 7 silicon-free



Demmeler EcoLine

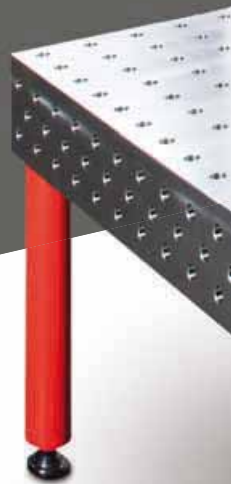


EcoLine Welding tables

EcoLine Sets

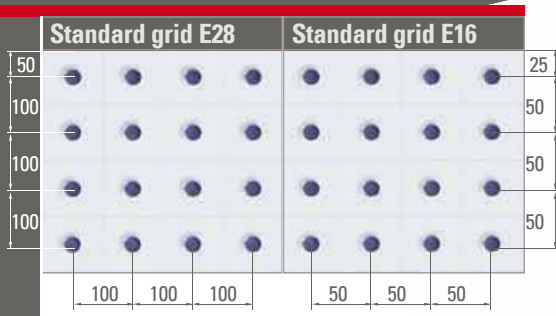
EcoLine Individual parts

Low-cost entrance
into the world of Demmeler

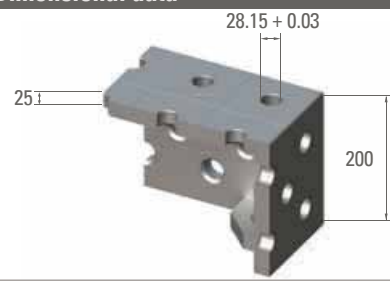


Your benefits at a glance:


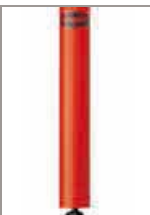

- + this is how economical it can be to get in!
- + modular system design
- + upward compatible with other Demmeler product lines D (ExpertLine) and P (ProfiLine)
- + Modularly expandable in all five directions over the entire length, width and height
- + Economical 3D welding tables and tools for beginners
- + without precision scaling, without leg sleeves



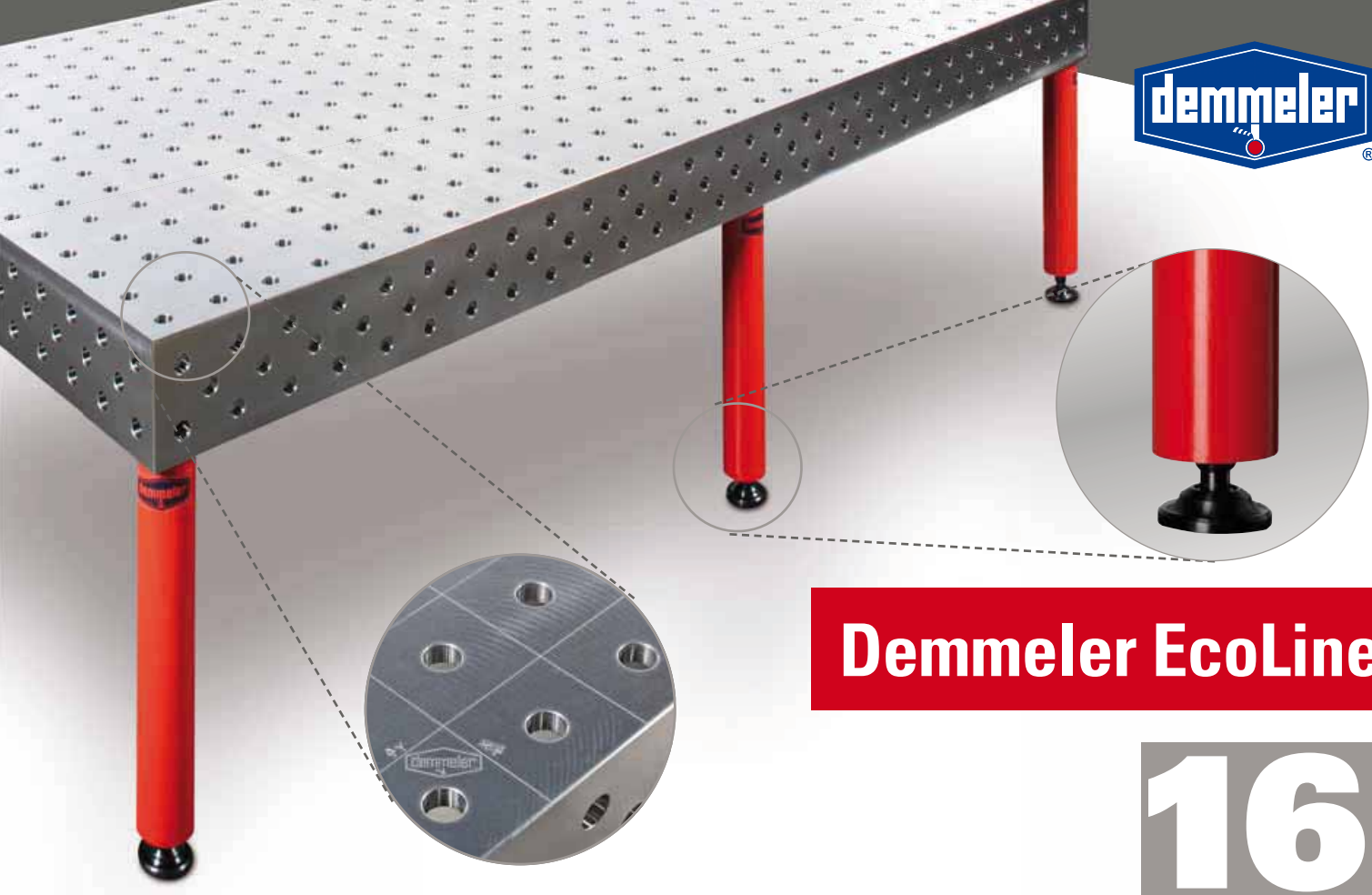
Dimensional data



Demmeler EcoLine


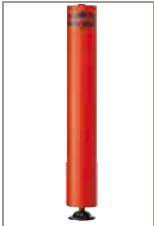








Product information							Article ID	
Fußvariante	L mm	B mm	H mm	approx. w kg	max. load ²	Number of legs	Standard	Surface-hardened
 3D welding table without legs	1000	1000	200	310		without legs	E28-01001-000	E28-01001-008
	1200	1200	200	405		without legs	E28-01056-000	E28-01056-003
	1500	1000	200	442		without legs	E28-01011-000	E28-01011-020
	1500	1500	200	598		without legs	E28-01031-000	E28-01031-003
	2000	1000	200	578		without legs	E28-01002-000	E28-01002-005
	2400	1200	200	851		without legs	E28-01003-000	E28-01003-011
	3000	1500	200	1247		without legs	E28-01004-000	E28-01004-004
	4000	2000	200	2450		without legs	E28-01005-000	E28-01005-004
 3D Welding Table with Standard legs	1000	1000	850 + 30 fine	344	6000	4	E28-01001-001	E28-01001-007
	1200	1200	850 + 30 fine	439	6000	4	E28-01056-001	E28-01056-018
	1500	1000	850 + 30 fine	476	6000	4	E28-01011-001	E28-01011-019
	1500	1500	850 + 30 fine	632	6000	4	E28-01031-001	E28-01031-002
	2000	1000	850 + 30 fine	612	6000	4	E28-01002-001	E28-01002-004
	2400	1200	850 + 30 fine	885	6000	4	E28-01003-001	E28-01003-005
	3000	1500	850 + 30 fine	1298	9000	6	E28-01004-001	E28-01004-002
	4000	2000	850 + 30 fine	2501	9000	6	E28-01005-001	E28-01005-002
 3D Welding Table with heavy duty wheel NEW	1000	1000	850 + 30 fine	355	2000	2 + 2 ¹	E28-01001-003	E28-01001-085
	1200	1200	850 + 30 fine	450	1600	2 + 2 ¹	E28-01056-002	E28-01056-025
	1500	1000	850 + 30 fine	487	1600	2 + 2 ¹	E28-01011-003	E28-01011-071
	1500	1500	850 + 30 fine	643	1600	2 + 2 ¹	E28-01031-007	E28-01031-032
	2000	1000	850 + 30 fine	623	1700	2 + 2 ¹	E28-01002-003	E28-01002-048
	2400	1200	850 + 30 fine	896	1500	2 + 2 ¹	E28-01003-088	E28-01003-014

¹ 2 castors with / 2 without brake
² max. useful load (uniformly distributed load) in kg
³ Table comprises two individual tables 1500 x 1500 mm



Demmeler EcoLine

16

Product information							Article ID	
Fußvariante	L mm	B mm	H mm	G in kg	max. load ³⁾	Number of legs	Standard	Surface-hardened
 3D welding table without legs	1000	500	100	76		without legs	E16-01000-000	E16-01000-005
	1000	1000	100	144		without legs	E16-01001-000	E16-01001-015
	1200	1200	100	174		without legs	E16-01056-000	E16-01056-005
	1500	1000	100	188		without legs	E16-01017-000	E16-01017-008
	1500	1500	100	326		without legs	E16-01011-000	E16-01011-006
	2000	1000	100	252		without legs	E16-01002-000	E16-01002-050
	2400	1200	100	354		without legs	E16-01003-000	E16-01003-002
3000	1500	100	652		without legs	E16-01004-000	E16-01004-026	
 3D Welding Table with Standard legs	1000	500	850 + 30 fine	110	4000	4	E16-01000-001	E16-01000-002
	1000	1000	850 + 30 fine	178	4000	4	E16-01001-001	E16-01001-012
	1200	1200	850 + 30 fine	208	4000	4	E16-01056-001	E16-01056-028
	1500	1000	850 + 30 fine	222	4000	4	E16-01017-001	E16-01017-014
	1500	1500	850 + 30 fine	360	4000	4	E16-01011-001	E16-01011-005
	2000	1000	850 + 30 fine	286	4000	4	E16-01002-001	E16-01002-009
	2400	1200	850 + 30 fine	388	4000	4	E16-01003-001	E16-01003-025
3000	1500	850 + 30 fine	720	8000	8	E16-01004-001 ³⁾	E16-01004-025	
 3D Welding Table with heavy duty wheel NEW	1000	500	850 + 30 fine	121	2000	2 + 2 	E16-01000-003	E16-01000-006
	1000	1000	850 + 30 fine	189	2000	2 + 2 	E16-01001-003	E16-01001-027
	1200	1200	850 + 30 fine	219	1600	2 + 2 	E16-01056-003	E16-01056-029
	1500	1000	850 + 30 fine	232	1600	2 + 2 	E16-01017-003	E16-01017-015
	1500	1500	850 + 30 fine	371	1600	2 + 2 	E16-01011-003	E16-01011-017
	2000	1000	850 + 30 fine	297	1700	2 + 2 	E16-01002-003	E16-01002-052
	2400	1200	850 + 30 fine	399	1500	2 + 2 	E16-01003-034	E16-01003-037

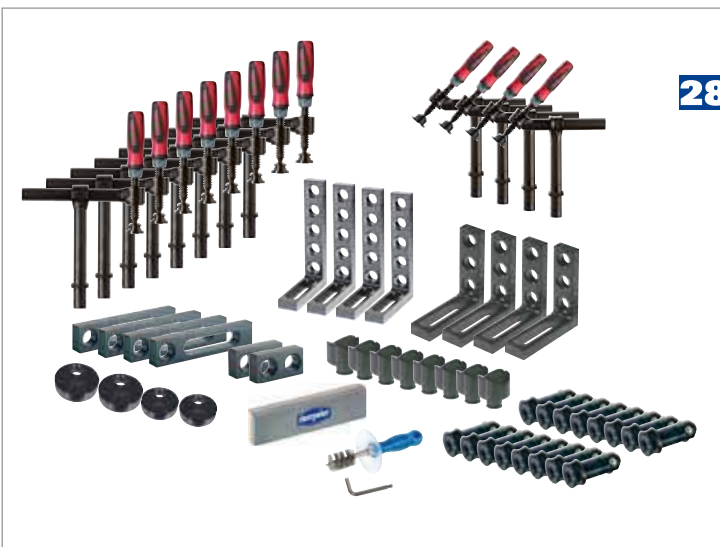
... this is how easy it can be to get in!

Set E110 / E28-52000-110 / 25 parts



28	Number	Description	Item no.
	4	* Clamping and locating angle H = 175	E28-03001-000
	4	* Universal-stop / large	E28-05001-000
	2	* Universal-stop/ small	E28-05002-000
	8	* EcoLine- bolt / short	E28-06001-000
	4	* Swing clamp 180° with spindle	E28-07005-000
	1	* Round brush 28 mm	E28-10002-000
	1	* Whetstone	E28-10007-000
	1	* Allen wrench SW 8	E28-10008-000

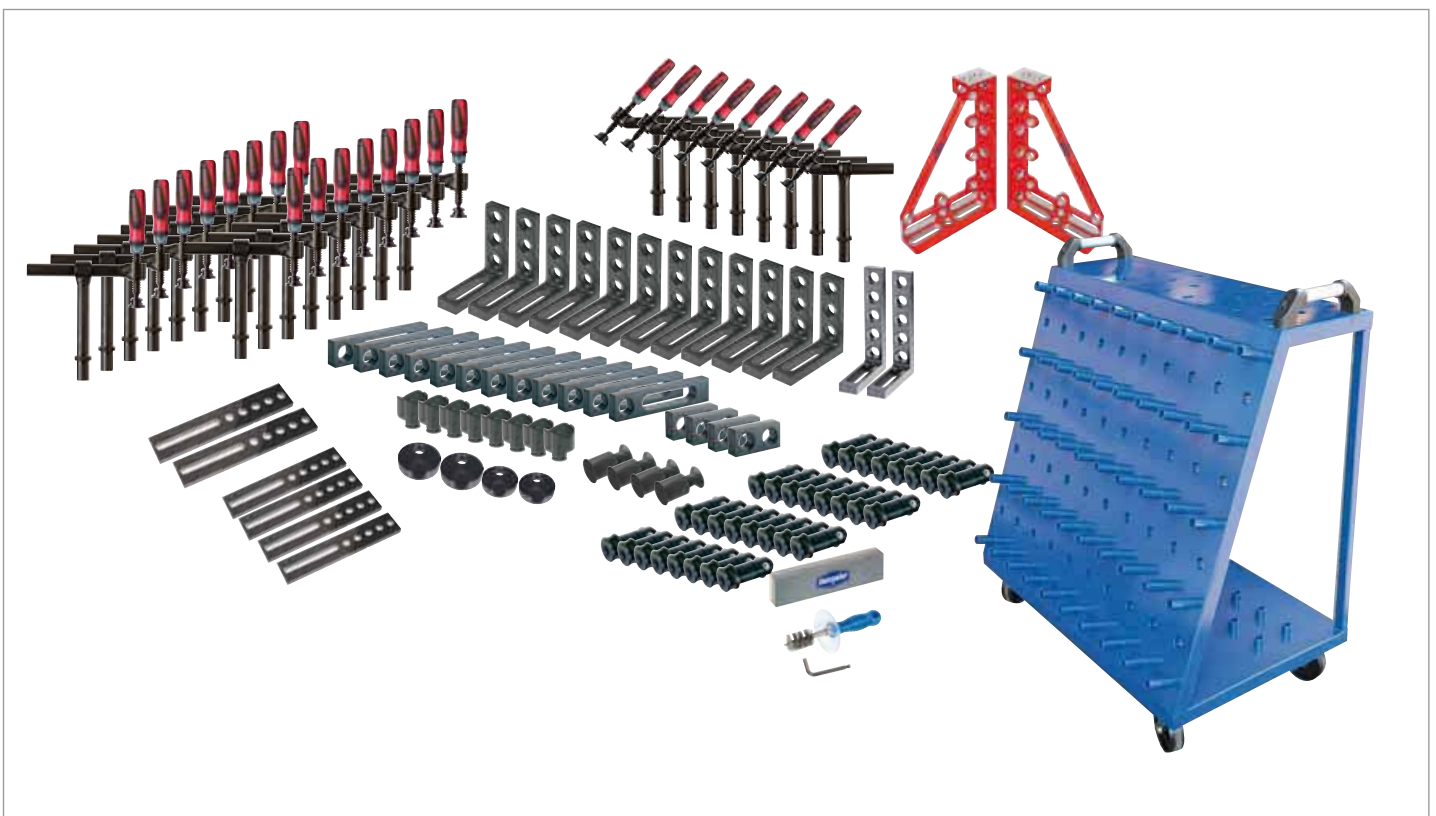
Set E210 / E28-52000-210 / 57 parts



28	Number	Description	Item no.
	4	* Clamping and locating angle H = 175	E28-03001-000
	4	* Clamping and locating angle H = 275	E28-03008-000
	4	* Universal-stop / large	E28-05001-000
	2	* Universal-stop/ small	E28-05002-000
	2	* Locating disk 25-50 mm	E28-05013-000
	2	* Locating disk 25-70 mm	E28-05013-001
	16	* EcoLine-bolt / short	E28-06001-000
	8	* Swing clamp 180° with spindle	E28-07005-000
	4	* Swing clamp 45° with spindle	E28-07009-000
	8	V-block holder steel	E28-09003-000
	1	* Round brush 28 mm	E28-10002-000
	1	* Whetstone	E28-10007-000
	1	* Allen wrench SW 8	E28-10008-000

* simple version, e.g.: without scaling, with Standard Clamping pads (D28-07011-000 and/or D16-07011-000), without clamping range, without grid lines, without additional gaps

Set E310 / E28-52000-310 / 114 parts

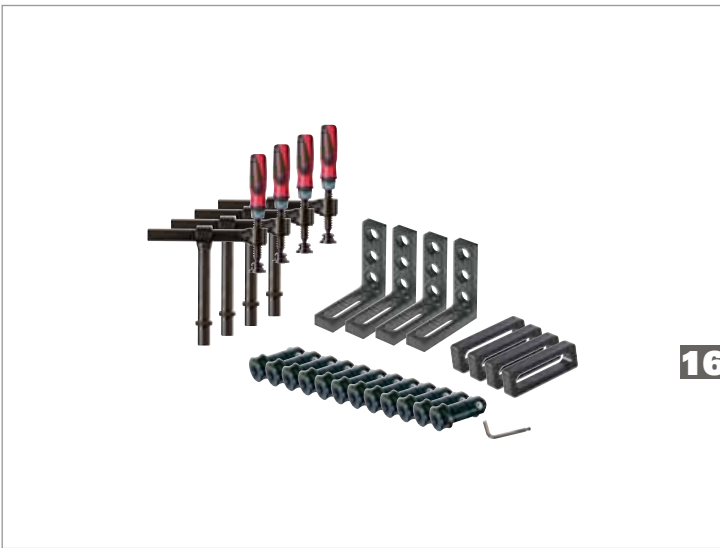


Number	Description	Item no.
12	* Clamping and locating angle H = 175	E28-03001-000
1	* Clamping and locating angle cast 600	E28-03003-000
1	* Clamping and locating angle cast 600	E28-03003-001
2	* Clamping and locating angle H = 275	E28-03008-000
12	* Universal-stop / large	E28-05001-000
4	* Universal-stop/ small	E28-05002-000
4	* Edge strip 500 mm	E28-05003-000
2	* Edge strip 800 mm	E28-05003-001
2	* Locating disk 25-50 mm	E28-05013-000
2	* Locating disk 25-70 mm	E28-05013-001

Number	Description	Item no.
32	* EcoLine- bolt / short	E28-06001-000
4	* Connecting sleeve / short	E28-06003-000
16	* Swing clamp 180° with spindle	E28-07005-000
8	* Swing clamp 45° with spindle	E28-07009-000
8	* V-block holder steel	E28-09003-000
1	* Round brush 28 mm	E28-10002-000
1	* Whetstone	E28-10007-000
1	* Allen wrench SW 8	E28-10008-000
1	* Accessory cart	E28-11001-000

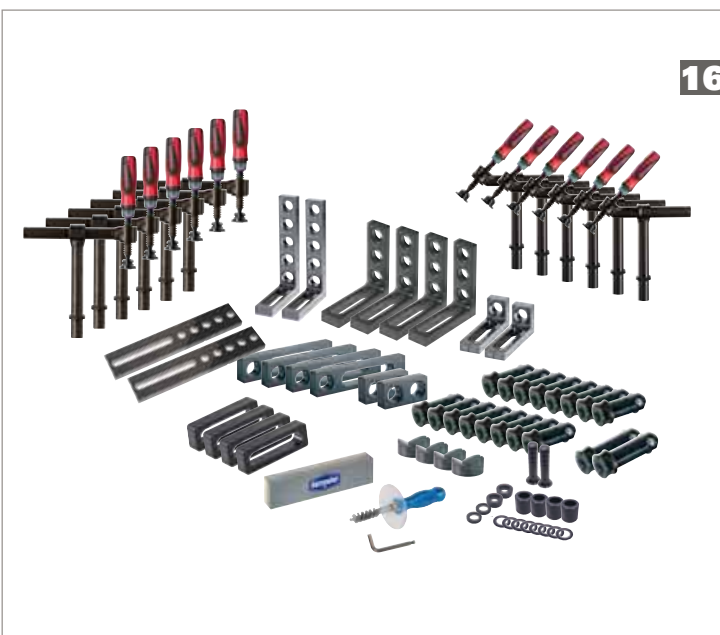
* simple version, e.g.: without scaling, with Standard Clamping pads (D28-07011-000 and / or D16-07011-000), without clamping range, without grid lines, without additional gaps

Set E100 / E16-52000-100 / 25 parts



16 Number	Description	Item no.
4	* Clamping and locating angle H = 90	E 16-03001-000
4	* Displacement-stop	E 16-05015-000
12	* EcoLine- bolt / short	E 16-06001-000
4	* Swing clamp 180° with spindle	E 16-07005-000
1	* Allen wrench SW 5	E 16-10008-000

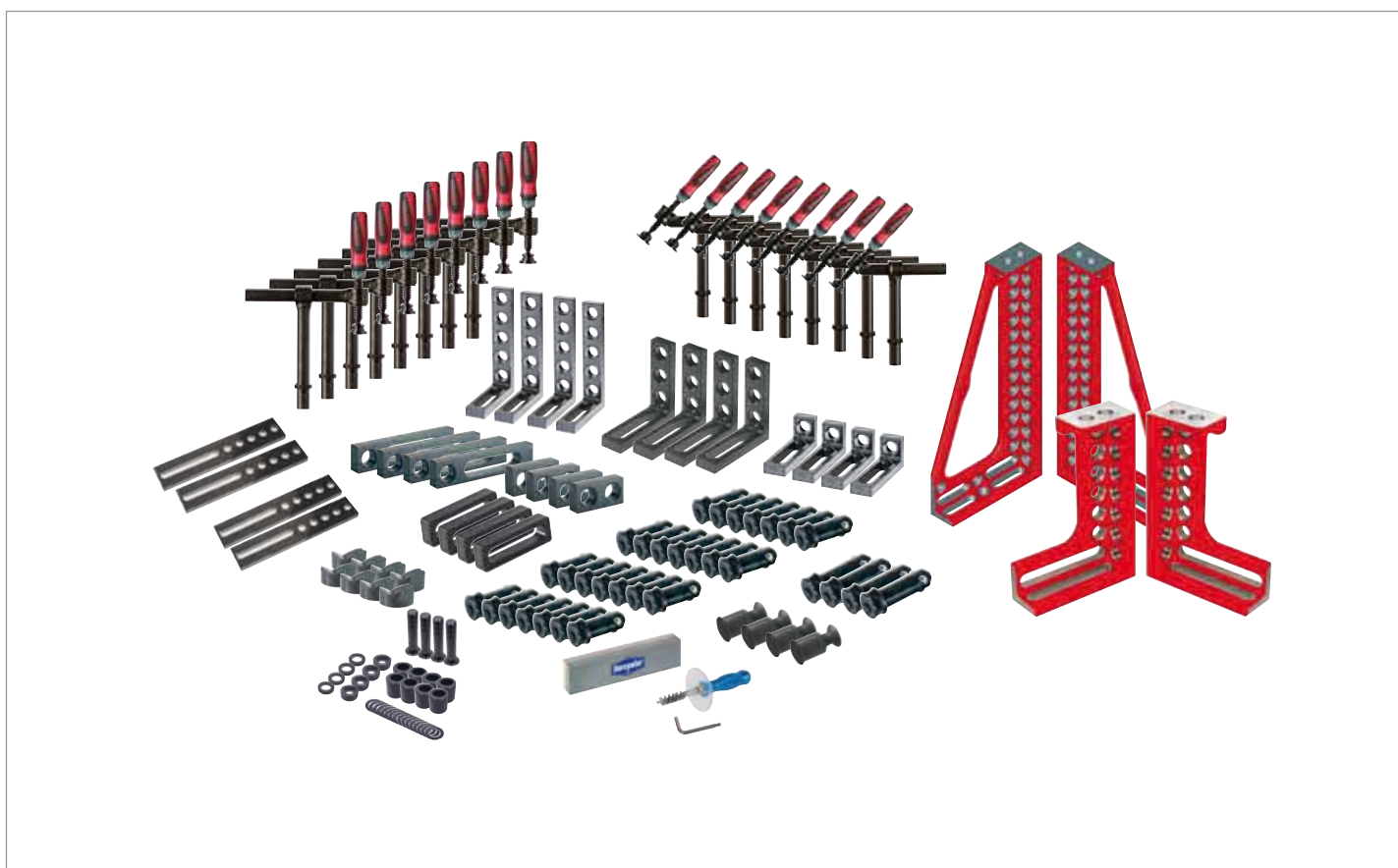
Set E200 / E16-52000-200 / 59 parts



16 Number	Description	Item no.
4	* Clamping and locating angle H = 90	E 16-03001-000
2	* Clamping and locating angle H = 37,5	E 16-03001-002
2	* Clamping and locating angle H = 140	E 16-03008-000
4	* Universal-stop / large	E 16-05001-000
2	* Universal-stop / small	E 16-05002-000
2	* Edge strip 250 mm	E 16-05003-000
4	* Displacement-stop	E 16-05015-000
16	* EcoLine- bolt / short	E 16-06001-000
2	* EcoLine-Bolzen / lang	E 16-06002-000
6	* Swing clamp 180° with spindle	E 16-07005-000
6	* Swing clamp 45° with spindle	E 16-07009-000
2	* Spacer set 9-pieces	E 16-09001-000
4	* V-block holder steel	E 16-09003-000
1	* Round brush 16 mm	E 16-10002-000
1	* Whetstone	E 16-10007-000
1	* Allen wrench SW 5	E 16-10008-000

* simple version, e.g.: without scaling, with Standard Clamping pads(D28-07011-000 and/or D16-07011-000), without clamping range, without grid lines, without additional gaps

Set E300 / E16-52000-300 / 99 parts



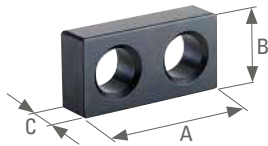
Number	Description	Item no.
4	* Clamping and locating angle H = 90	E 16-03001-000
4	* Clamping and locating angle H = 37,5	E 16-03001-002
1	* Clamping and locating angle cast 200	E 16-03002-000
1	* Clamping and locating angle cast 200	E 16-03002-001
1	* Clamping and locating angle cast 400	E 16-03003-000
1	* Clamping and locating angle cast 400	E 16-03003-001
4	* Clamping and locating angle H = 140	E 16-03008-000
4	* Universal-stop / large	E 16-05001-000
4	* Universal-stop / small	E 16-05002-000
2	* Edge strip 250 mm	E 16-05003-000
2	* Edge strip 400 mm	E 16-05003-001

Number	Description	Item no.
4	* Displacement-stop	E 16-05015-000
28	* EcoLine- bolt / short	E 16-06001-000
4	* EcoLine-Bolzen / lang	E 16-06002-000
4	* Connecting sleeve / short	E 16-06003-000
8	* Swing clamp 180° with spindle	E 16-07005-000
8	* Swing clamp 45° with spindle	E 16-07009-000
4	* Spacer set 9-pieces	E 16-09001-000
8	* V-block holder steel	E 16-09003-000
1	* Round brush 16 mm	E 16-10002-000
1	* Whetstone	E 16-10007-000
1	* Allen wrench SW 5	E 16-10008-000

* simple version, e.g.: without scaling, with Standard Clamping pads(D28-07011-000 and/orD16-07011-000), without clamping range, without grid lines, without additional gaps

EcoLine individual parts

EcoLine Universal-stop small



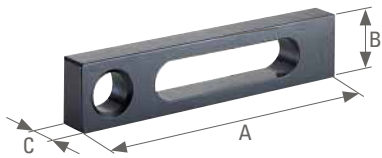
Description

- preferred use in tight spaces
- simple design

28	A mm	B mm	C mm	approx. w kg	Item no.
	100	50	25	0,72	E28-05002-000

16	A mm	B mm	C mm	approx. w kg	Item no.
	55	25	12	0,08	E16-05002-000

EcoLine Universal-stop large



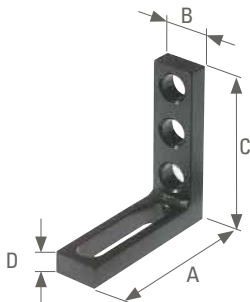
Description

- Combination system bores / Oblong hole hence many clamping options
- simple design without scaling

28	A mm	B mm	C mm	approx. w kg	Item no.
	225	50	25	1,40	E28-05001-000

16	A mm	B mm	C mm	approx. w kg	Item no.
	115	25	12	0,16	E16-05001-000

EcoLine Clamping and locating angle bores / Oblong hole



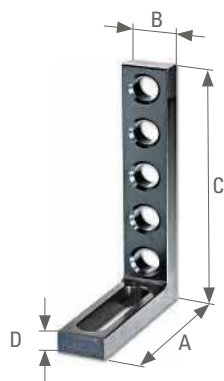
Description

- Combination system bores / Oblong hole hence many clamping options
- simple design without scaling

28	A mm	B mm	C mm	D mm	approx. w kg	Description	Item no.
	175	50	175	25	2,06	bore / oblong hole	E28-03001-000

16	A mm	B mm	C mm	D mm	approx. w kg	Description	Item no.
	90	25	90	12	0,24	bore / oblong hole	E16-03001-000

EcoLine Clamping and locating angle



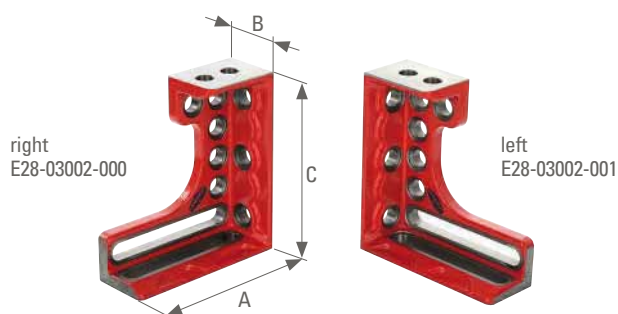
Description

- Combination system bores / Oblong hole hence many clamping options
- simple design without scaling

28	A mm	B mm	C mm	D mm	approx. w kg	Description	Item no.
	175	50	275	25	2,70	bore / oblong hole	E28-03008-000

16	A mm	B mm	C mm	D mm	approx. w kg	Description	Item no.
	90	25	140	12	0,32	bore / oblong hole	E16-03008-000

EcoLine Clamping and locating angle



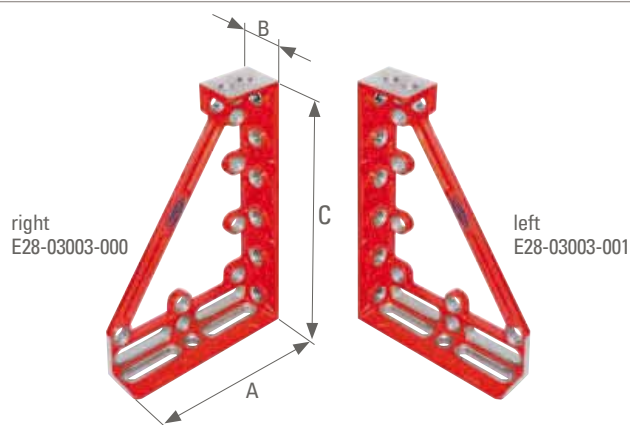
Description (ordering in pairs is recommended)

- three full clamping sides with system bores
- Special cast - highest stability and tenacity
- simple version without scaling
- powder-coated

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	275	100	300	11,46	right	E28-03002-000
	275	100	300	11,46	left	E28-03002-001

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	137,5	50	200	1,76	right	E16-03002-000
	137,5	60	200	1,76	left	E16-03002-001

EcoLine Clamping and locating angle



Description (ordering in pairs is recommended)

- three full clamping sides with system bores
- Special cast - highest stability and tenacity
- simple version without scaling
- powder-coated

28	A mm	B mm	C mm	approx. w kg	Description	Item no.
	375	100	600	20,46	right	E28-03003-000
	375	100	600	20,46	left	E28-03003-001

16	A mm	B mm	C mm	approx. w kg	Description	Item no.
	187,5	50	400	3,78	right	E16-03003-000
	187,5	50	400	3,78	left	E16-03003-001

EcoLine Individual parts

EcoLine Clamping bolt short

Clamping of 2 system components
(e.g. stop on welding table)



Description

- Connecting element for system components
- for clamping a system component on welding table
- simple version without clamping range

28	A mm	approx. w kg	Item no.
	28	0,44	E28-06001-000

16	A mm	approx. w kg	Item no.
	16	0,08	E16-06001-000

EcoLine Clamping bolt long

Clamping of 3 system components
(e.g. stops on welding table)



Description

- Connecting element for system components
- for clamping 2 system components on welding table
- simple version without clamping range

16	A mm	approx. w kg	Item no.
	16	0,10	E16-06002-000

EcoLine Ball end hex wrench



Description

- for EcoLine bolts

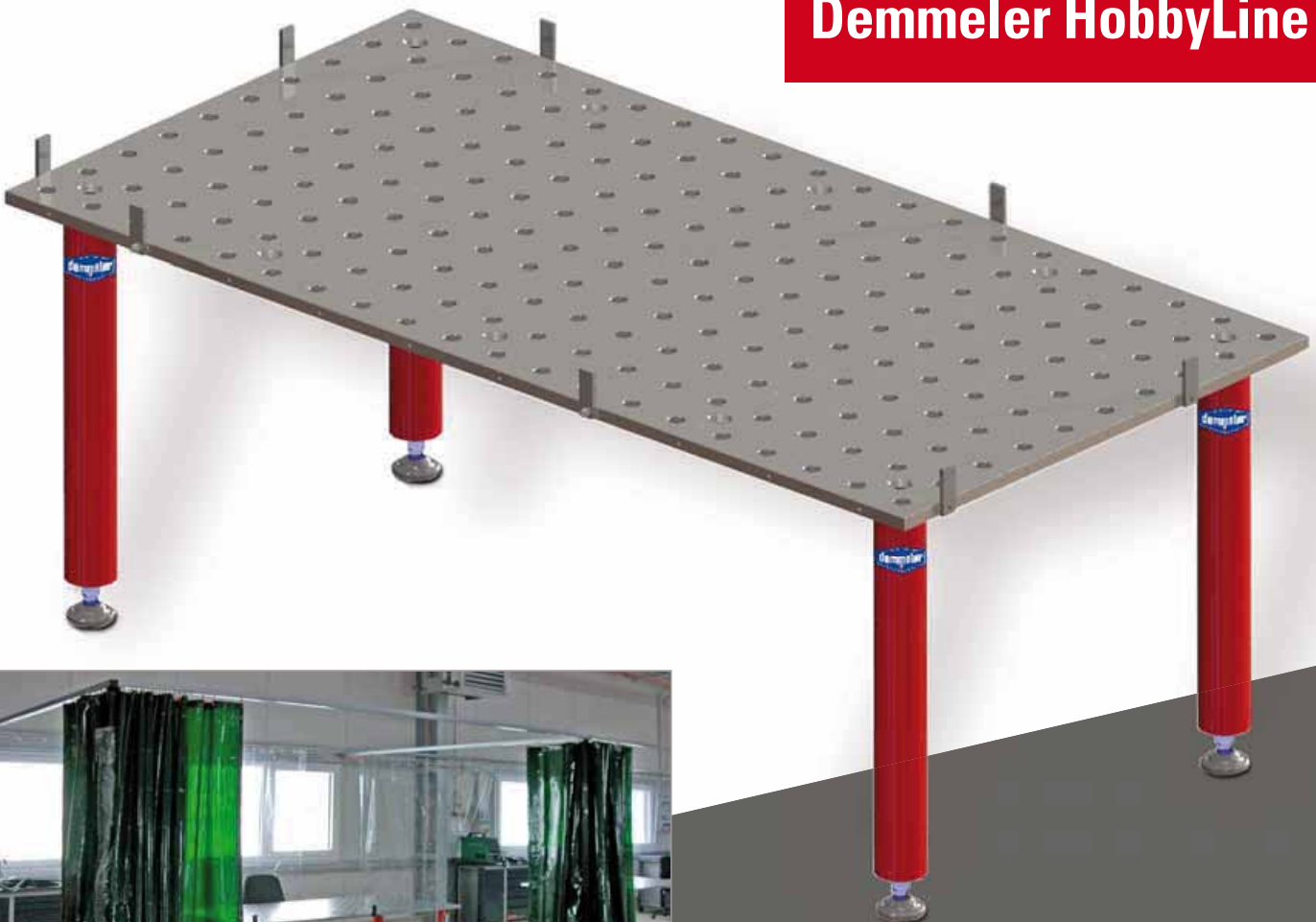
28	A mm	B mm	approx. w kg	Item no.
	-	SW 8	0,06	E28-10008-000

16	A mm	B mm	approx. w kg	Item no.
	-	SW 5	0,04	E16-10008-000

Cost-efficient alternative for little charge



Demmeler HobbyLine

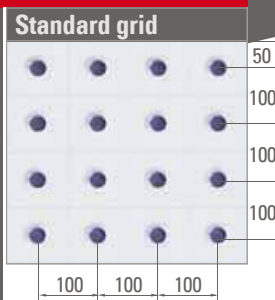



Demmeler HobbyLine

Demmeler HobbyLine

Your benefits at glance:

- + ... cost-efficient alternative for little charge!
- + accessories from E (EcoLine), D (ExpertLine) und P (ProfiLine) suitable
- + **table top thickness approx. 25 mm**
- + sideways all around with M8 tapped holes
- + **incl. 8 outside stops with handhold screw for crabbing**



Product information							Article ID
Leg version	L mm	B mm	H mm	approx. w kg	max. load ¹	Number of legs	Standard
 3D welding board with Standard leg	1000	1000	850 ± 30 fine	220	600	4	H28-01001-001
	1200	1200	850 ± 30 fine	310	600	4	H28-01056-001
	1500	1000	850 ± 30 fine	320	600	4	H28-01011-001
	2000	1000	850 ± 30 fine	420	600	4	H28-01002-001
	2400	1200	850 ± 30 fine	600	600	4	H28-01003-001



¹ max. useful load
(uniformly distributed load) in kg



Welding processes

Welding electrodes / power sources

Inert gas

Welding positions

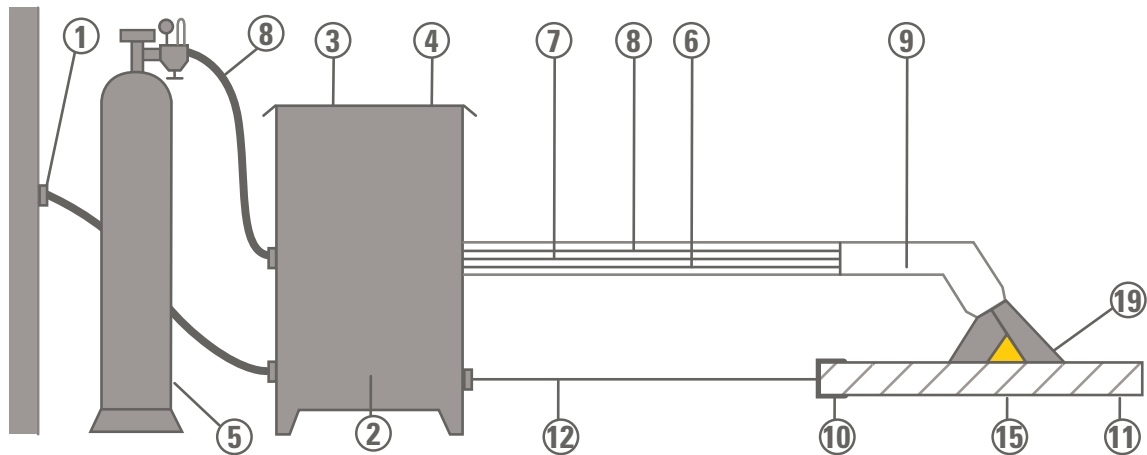
Labels / welding symbols

Standards

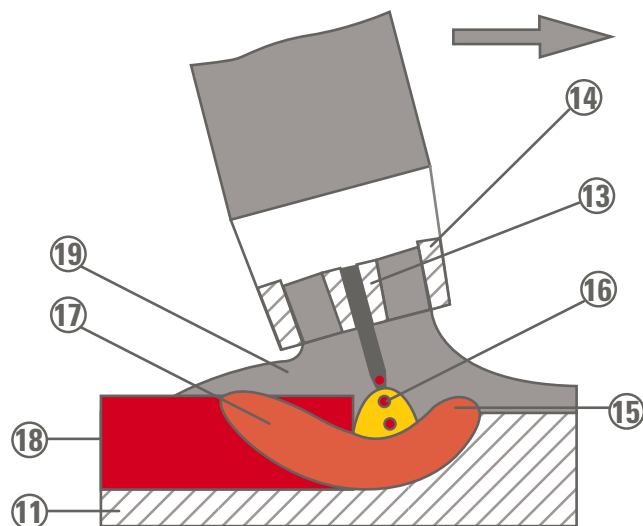
ABC for welders
Helpful tables and charts
all about welding

Welding processes

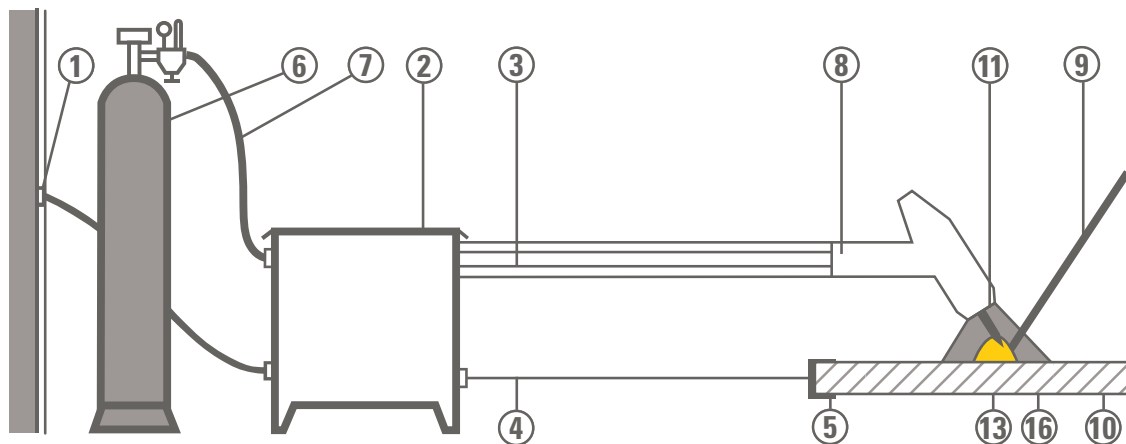
Metal-inert gas welding (MSG; MIG/MAG)



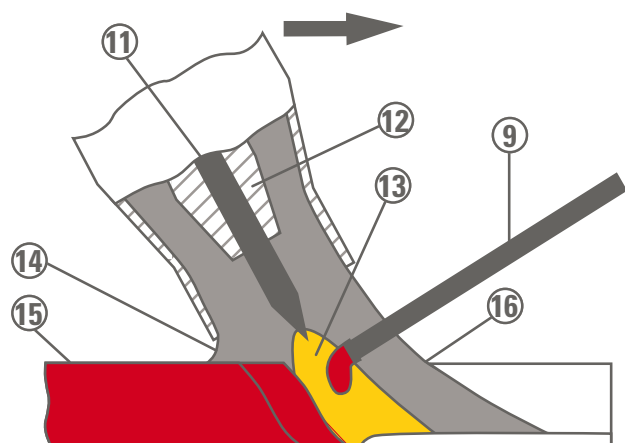
- ① Mains connection
- ② Welding power source
- ③ Spooled wire electrode
- ④ Wire conveying means
- ⑤ Inert gas cylinder with pressure reducer and gas flow meter
- ⑥ Welding power supply
- ⑦ Wire electrode
- ⑧ Protective gas supply
- ⑨ Blowtorch
- ⑩ Workpiece clamp
- ⑪ Workpiece
- ⑫ Welding return current cable
- ⑬ Current contact pipe
- ⑭ Inert gas nozzle
- ⑮ Arc
- ⑯ Droplet transfer
- ⑰ Weld pool
- ⑱ Solid weld metal
- ⑲ Inert-gas envelope



Tungsten inert gas (TIG) welding













- ① Mains connection
- ② Welding power source
- ③ Cable and hose bundle with welding power supply and protective gas supply
- ④ Welding return current cable
- ⑤ Workpiece clamp
- ⑥ Inert gas cylinder with pressure reducer and gas flow meter
- ⑦ Inert gas hose
- ⑧ Blowtorch
- ⑨ Welding rod
- ⑩ Workpiece
- ⑪ Tungsten electrode
- ⑫ Clamping sleeve and power cable
- ⑬ Arc
- ⑭ Liquid weld material
- ⑮ Solid weld metal
- ⑯ Inert-gas envelope



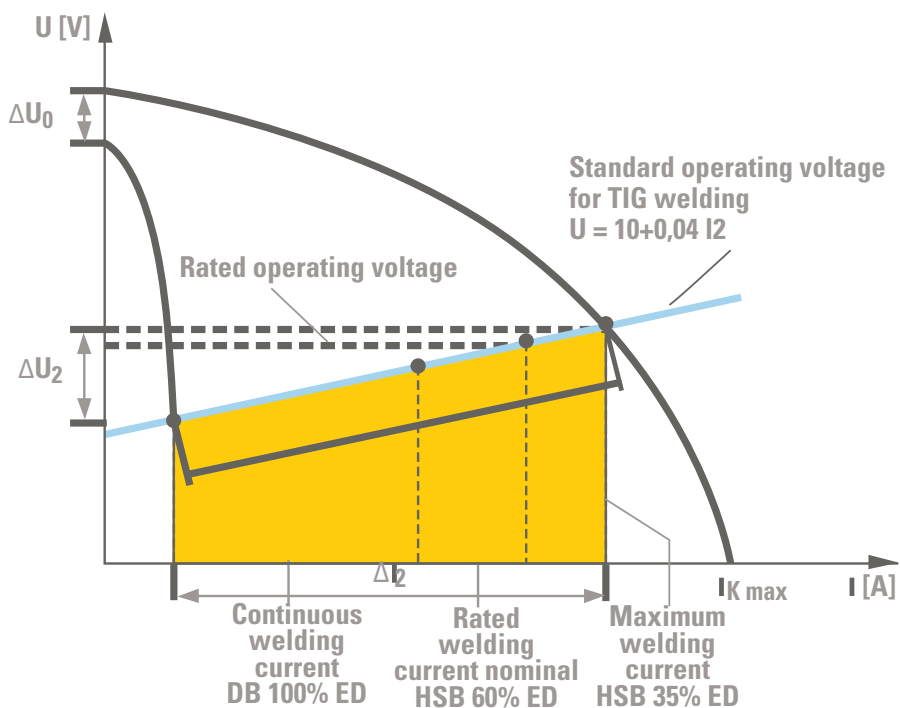
Welding electrodes / power sources

Tungsten electrodes DIN EN ISO 6848

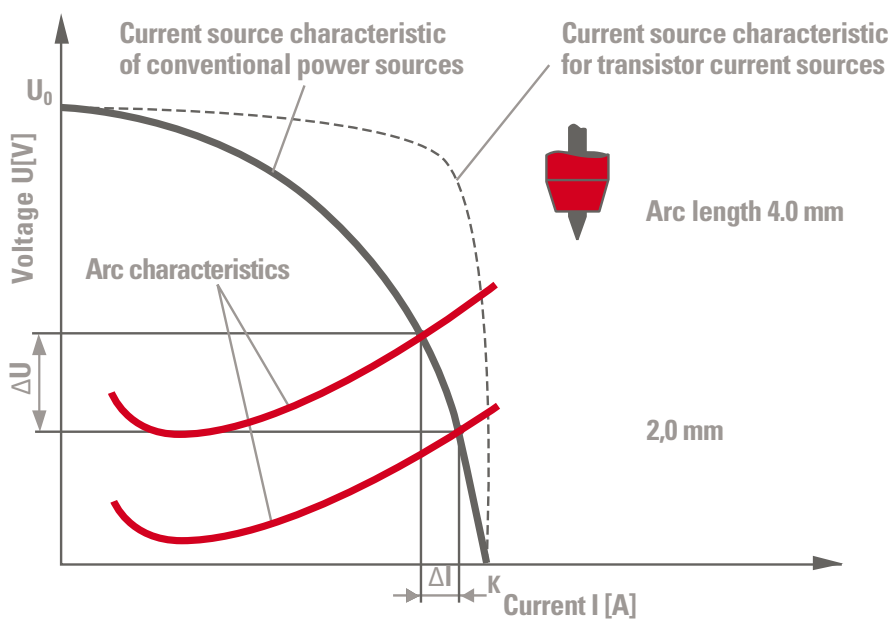
Symbol	Principal oxide	Proportion in %	Identifying colour
	No	-	
WCe 20	Cerium oxide	1.8 to 2.2	
WLa 10	Lanthanum oxide	0.8 to 1.2	
WLa 15	Lanthanum oxide	1.3 to 1.7	
WLa 20	Lanthanum oxide	1.8 to 2.2	
WTh 10	Thorium oxide	0.8 to 1.2	
WTh 20	Thorium oxide	1.7 to 2.2	
WTh 30	Thorium oxide	2.8 to 3.2	
WZr 3	Zirconium oxide	0.15 to 0.5	
WZr 8	Zirconium oxide	0.7 to 0.9	

*** ATTENTION - Thorium oxide contains quantities of radioactive material**

Adjustment range for TIG power source



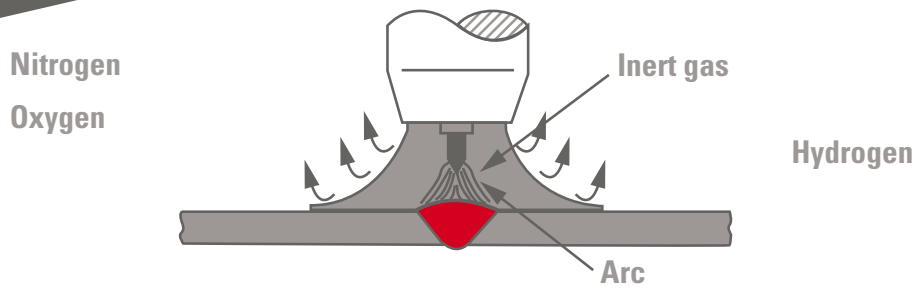
Adjustment range with a TIG power source with a steeply falling curve



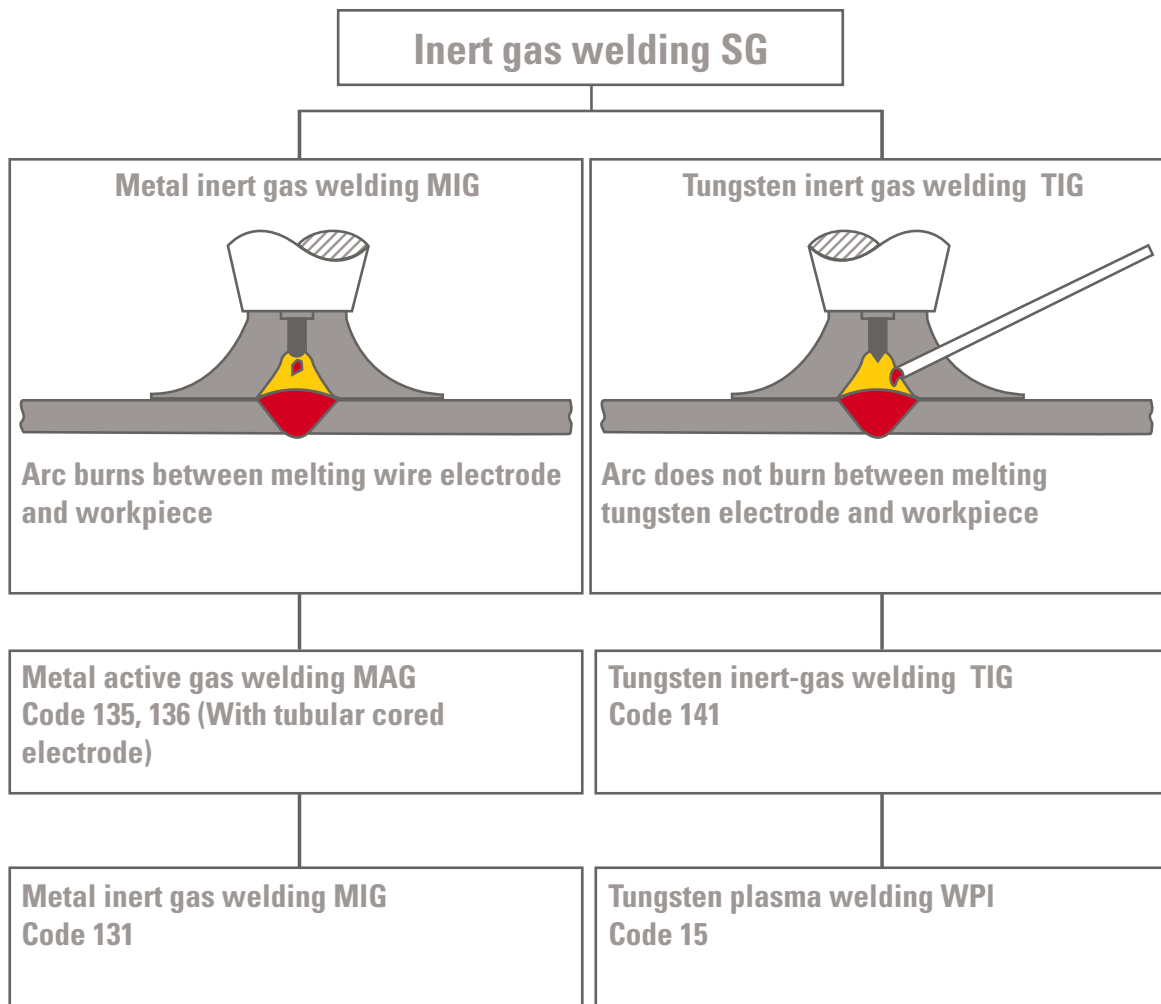
Power source characteristics, arc characteristics and working points in TIG welding

Inert gas

Inert gas application



Classification of inert gas welding processes



Classification of inert gas for joint welding according to DIN EN ISO 14175

Abbreviated designation		Components in volume percent					
Main group	Sub-group	Oxidizing		Inert		Reducing	Slow to react
		CO ₂	O ₂	Ar	He	H ₂	N ₂
I	1			100			
	2				100		
	3			Rest	0,5 ≤ He ≤ 95		
M1	1	0,5 ≤ CO ₂ ≤ 5		Rest ^{a)}		0,5 ≤ H ₂ ≤ 5	
	2	0,5 ≤ CO ₂ ≤ 5		Rest ^{a)}			
	3		0,5 ≤ O ₂ ≤ 3	Rest ^{a)}			
	4	0,5 ≤ CO ₂ ≤ 5	0,5 ≤ O ₂ ≤ 3	Rest ^{a)}			
M2	0	5 < CO ₂ ≤ 15		Rest ^{a)}			
	1	15 < CO ₂ ≤ 25		Rest ^{a)}			
	2		3 < O ₂ ≤ 10	Rest ^{a)}			
	3	0,5 ≤ CO ₂ ≤ 5	3 < O ₂ ≤ 10	Rest ^{a)}			
	4	5 < CO ₂ ≤ 15	0,5 ≤ O ₂ ≤ 3	Rest ^{a)}			
	5	5 < CO ₂ ≤ 15	3 < O ₂ ≤ 10	Rest ^{a)}			
	6	15 < CO ₂ ≤ 25	0,5 ≤ O ₂ ≤ 3	Rest ^{a)}			
7	15 < CO ₂ ≤ 25	3 < O ₂ ≤ 10	Rest ^{a)}				
M3	1	25 < CO ₂ ≤ 50		Rest ^{a)}			
	2		10 < O ₂ ≤ 15	Rest ^{a)}			
	3	25 < CO ₂ ≤ 20	2 < O ₂ ≤ 10	Rest ^{a)}			
	4	5 < CO ₂ ≤ 25	10 < O ₂ ≤ 15	Rest ^{a)}			
	5	25 < CO ₂ ≤ 50	10 < O ₂ ≤ 15	Rest ^{a)}			
C	1	100					
	2	Rest	0,5 ≤ O ₂ ≤ 30				
R	1			Rest ^{a)}		0,5 ≤ H ₂ ≤ 15	
	2			Rest ^{a)}		15 ≤ H ₂ ≤ 50	
N	1						100
	2			Rest ^{a)}			0,5 ≤ N ₂ ≤ 5
	3			Rest ^{a)}			5 < N ₂ ≤ 50
	4			Rest ^{a)}		0,5 ≤ H ₂ ≤ 10	0,5 ≤ N ₂ ≤ 5
	5					0,5 ≤ H ₂ ≤ 50	Rest
O	1		100				
Z	Mixed gases with components which are not listed in the table or Mixed gases with a composition outside the specified areas ^{b)}						


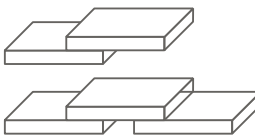

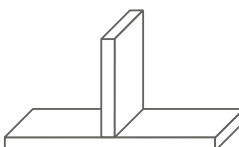
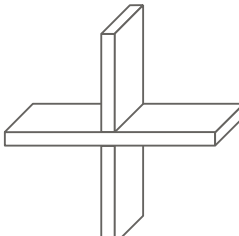
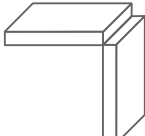
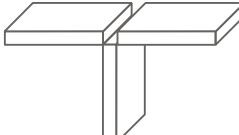

a) For this classification, argon may be replaced in part or in whole by helium.

b) Two mixed gases with the same Z-classification should not be interchanged.

Welding positions

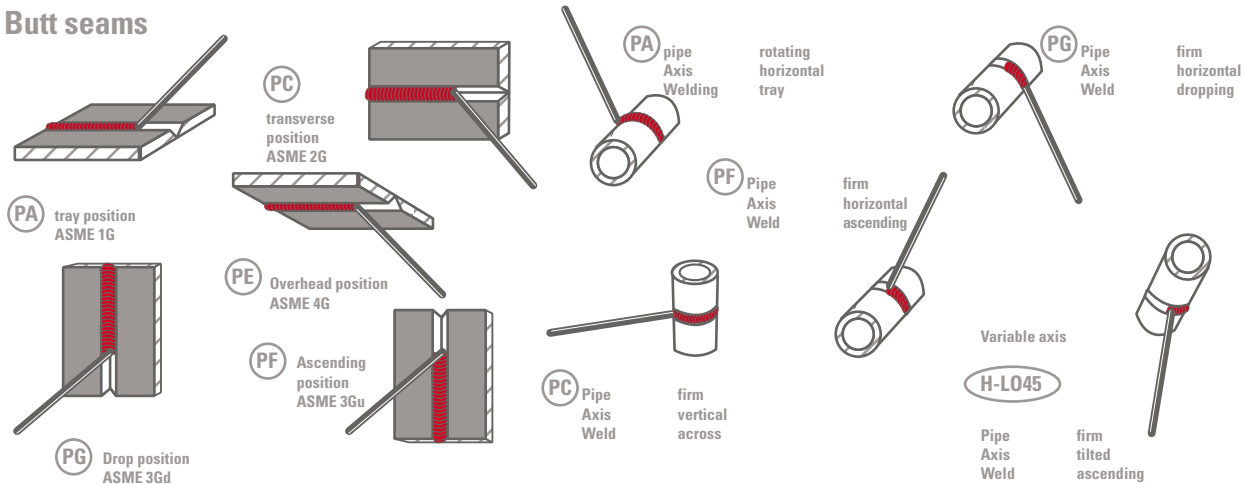
Welded joint

The weld joint is the area in which the components are joined together by welding. According to the structural arrangement, the joint types differ as shown here.

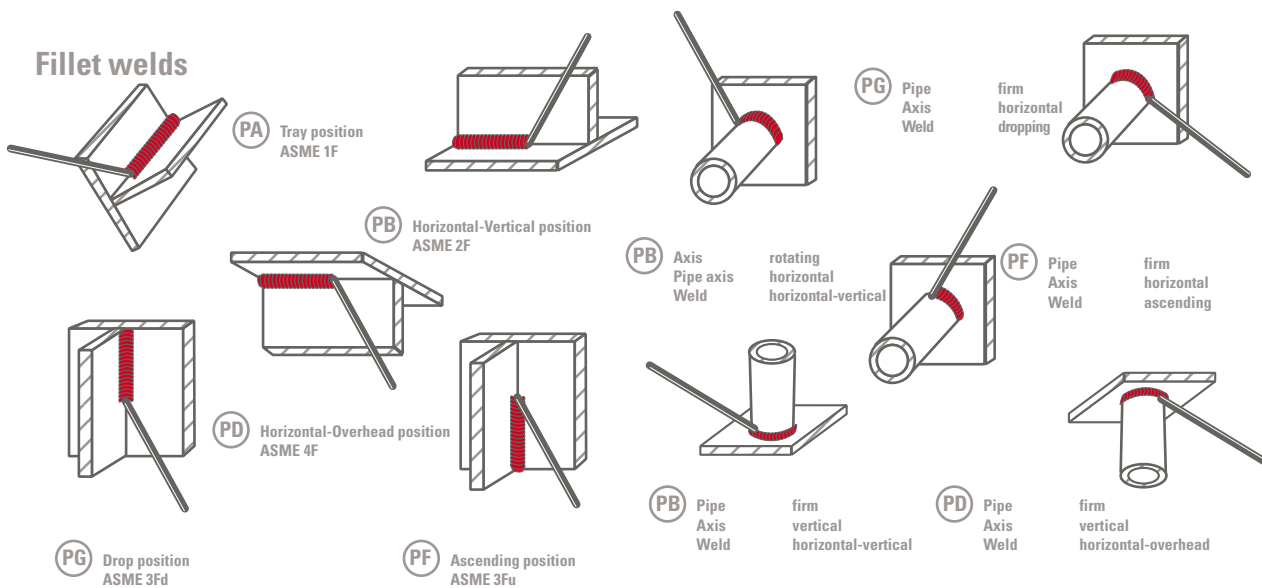
	Butt joint	The parts are in one level and touching on the front side.
	Lap joint	The components are stacked on top of each other in parallel. They overlap.
	Parallel joint	The components are stacked on top of each other in parallel. One plate is completely covered by another.
	T-joint	The parts are placed one face to another in form of a T.
	Double T-joint	Two parts placed horizontally on one level bump with respectively one front end at right angles against a third part in between.
	Corner joint	Two components will abut each other at any angle $> 30^\circ$ (corner). The front sides of both plates will be welded.
	Multiple joint	Three or more components will abut each other at any angles.
	Diagonal joint	One part's end diagonally touches another.

E-manual welding – Welding positions according to EN 287 / EN ISO 6947

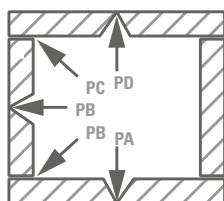
Butt seams



Fillet welds



Explanations of symbols



PA horizontal welding of butt joints and fillet welds in tray positions

PB horizontal welding of fillet welds (regular position)

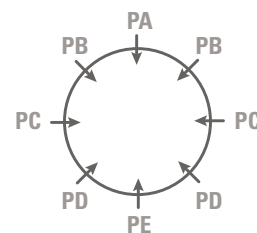
PC Transverse position

PD Horizontal-Overhead position

PE Overhead position

PF vertical rising

PG vertical dropping



Labels / welding symbols

Welding process labels

Welding process identification





G	Gas fusion welding
E	Manual arc welding
UP	Submerged arc welding
U	Submerged rail welding
SG	Inert gas welding
MSG	Metal-Inert gas welding
MIG	Metal-Inert gas welding
MAG	Metal-Active gas welding
WSG	Tungsten-Inert gas welding

Welding process identification


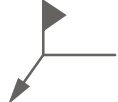
WIG	Tungsten-Inert gas welding
WP	Tungsten-Plasma welding
WHG	Tungsten-hydrogen welding
US	Ultrasonic welding
FR	Friction welding
FS	Forge welding
D	Diffusion welding
GP	Gas pressure welding
KP	Cold pressure welding

Supplementary symbols for surface seams according to DIN 1912 (excerpt) and ISO 2553

Additional Symbols surface shape

	hollow (concave)
	flat (usually refinished flat)
	curved (convex)
	Sealing bead (opposing position)

Supplementary symbols course and type of seam

	Circular seam
	Assembly seam

Welding symbols for welded joints

Welding symbol	Welding seam	Illustration	Welding symbol	Welding seam	Illustration
	Edge-formed seam Flange edge			I-seam Square groove	
	Double I-seam Double square groove			V-seam V groove	
	VU-seam VU groove			Double V-seam Double V groove	
	HV-seam Bevel groove			Double HV-seam Double bevel groove	
	Y-seam Y groove			Double Y-seam Double Y groove	
	HY-seam J groove			Double HY-seam Double J groove	
	U-seam U groove			Double U-seam Double U groove	
	J-seam / HU-seam / Jot-seam J groove			Double J-seam Double J groove	
	Fillet weld Fillet			Double Fillet weld Double fillet	
	Pitting seam Plug or slot			Spot Welding Spot or projection	
	Continuous weld Seam			Steep side seam	
	Edge-joint weld			Surface joint	
	Sloping seam			Folded seam	
	Deposit welding Surfacing			Circular fillet weld	
	Fillet weld on the counter surface/ Opposite side of joint			Circular fillet weld with seam thickness 5	
5 3x10 (20)	Interrupted fillet weld at seam thickness 5, 3 individual seams, individual seam length 10, seam spacing 20		5 5x100 (50) 4 5x100 (50)	Offset, interrupted fillet weld, Seam thickness 5 and/or 4 on counter surface	

Standards

Summary of fusion welding norms

Quality requirements for fusion welding

DIN EN ISO3834-1 bis -5, DIN FB CEN ISO/TR 3834-6

Arc weldin

	Steel	Aluminium
Classification of Materials	CEN ISO/TR 15608, 20172; ISO/TR 20173, 20174	
Recommendation for welding	DIN EN 1011-1 (ISO/TR 17671-1)	
	DIN EN 1011-2, -3	DIN EN 1011-4
Temperature measurement	DIN EN ISO 13916	
Welder test	DIN EN 287-1	DIN EN ISO 9606-2
Operator test	DIN EN 1418 (ISO 14732)	
Welding Supervisor	DIN EN ISO 14731	
WPS	DIN EN ISO15609-1, -2	
Qualification of procedures	DIN EN ISO15607, 15610, 15611, 15612, 15613	
	DIN EN ISO 15614-1	DIN EN ISO15614-2, -4
Qualification of procedures	DIN EN ISO 17662	
Heat treatment	DIN EN ISO 17663, DIN EN 10052	

Irregularities, joint preparation

	Steel	Aluminium
Group fusion welding	DIN EN ISO 5817 + Ber. 1DIN EN ISO 10042	
Group steel welding	DIN EN ISO 13919-1	DIN EN ISO13919-2
Thermal cutting	DIN EN ISO 9013	
Joint preparation	DIN EN ISO9692-1, -2, DIN EN ISO9692-3	
Connecting elements Pressurized and non-internally pressurized components	DIN EN 1708-1, -2; prEN 1708-3	
	DIN 2559-2, DIN 2559-3	
Geometric irregularities Fusion pressure welding	DIN EN ISO 6520-1, -2	
Geometric irregularities Thermal cuts	DIN EN 12584 (ISO 17658)	
Conc. system irregularities	DIN ISO/TS 17845	
Weldability	DIN FB ISO/TR 581	

Arc welding equipment, industrial safety

	Steel	Aluminium
Welding power sources	DIN EN 60974-1, 50504; DIN EN IEC 60974-4	
Wire feeders, torches, rod electrode holders, connectors for welding cables	DIN EN 60974-5, -7, -11, -12	
Gas hoses, fittings, pressure gauge	DIN EN 559, 560, 561, 562, 13918; DIN EN ISO 7291, DIN EN ISO 14113, (E DIN EN ISO 3821, 5171)	
Flashback arresters	DIN EN 730-1, -2	
Protective clothing, gloves	DIN EN ISO 11611, DIN EN 12477, DIN EN 731	
Eye Protection	DIN EN 169, DIN EN 379	
Welding curtains	DIN EN 1598	
Environmental Checklist	DIN EN 14717	
Air purification systems	DIN EN ISO 15012-1, -2	
Welding fumes laboratory procedures	DIN EN ISO 15011-1 bis -4, DIN ISO/TS 15011-5	
Welding fumes Sampling	DIN EN ISO 10882-1, -2	

Non-destructive testing

Training for staff	DIN EN 473 (ISO 9712)
Rules for ZIP	DIN EN 12062 (ISO 17635)
Visual inspection	DIN EN 970 (ISO 17637)
Ultrasonic testing	DIN EN 1714 (ISO 17640)
Penetration test	DIN EN 571-1; DIN EN ISO 3452-5, -6
Magnetic particle testing	DIN EN ISO 17638
Eddy current testing	DIN EN 1711 (ISO 17643)
Hardness Testing	DIN EN 1043-1, -2 (ISO 9015-1, -2)
Time-of-flight diffraction technique testing (TOFD-procedure)	E DIN EN ISO 10863, DIN EN 583-6
Phased Array	E DIN EN 16018

Destructive testing

Transverse tensile test	DIN EN 895 (ISO 4136)
Longitudinal tensile test SG	DIN EN 876 (ISO 5178)
Cross tensile testing	DIN EN ISO 9018
Bending test	DIN EN 910 (E DIN EN ISO 5173)
Fracture test	DIN EN 1320 (ISO 9017)
Charpy impact test	DIN EN 875 (ISO 9016)
Hardness test	DIN EN 1043-1, -2 (ISO 9015-1, -2)
Micro-and macroscopic testing	DIN EN 1321 (ISO 17639)
Etching for micro-and macroscopic testing	DIN V 1739 (ISO/TR 16060)
Hot cracking test	DIN EN ISO 17641-1, -2, -3
Cold cracking test	DIN EN ISO 17642-1, -2, -3
Determination ferrite content	DIN EN ISO 8249, 17655

Terms, Definitions

Terms, Definitions	DIN EN 22553
Procedure and No.	DIN EN ISO 4063
Terms metal welding	DIN EN 14610 (ISO857-1, -2)
Terms and Definitions	DIN FB CEN/TR 14599 DIN FB ISO/TR 25901
Multilingual naming with pictures	DIN EN 1792, DIN EN ISO 17659
Welding positions	DIN EN ISO 6947 DIN V 2308 (CEN/TR 14633)
Welding tolerances	DIN EN ISO 13920

Other standards

Welder certification copper	DIN EN ISO 9606-3
Welder certification nickel	DIN EN ISO 9606-4
Welder certification titanium	DIN EN ISO 9606-5
Welder certification cast iron	E DIN EN 287-6
Welding specifications gas	DIN EN ISO 15609-2
Procedural test copper	DIN EN ISO 15614-6
Procedural test nickel	DIN EN ISO 15614-1
Procedural test titanium	DIN EN ISO 15614-5
VP cast iron	DIN EN ISO 15614-3
VP deposit welding	DIN EN ISO 15614-7
VP shrink-wrapping pipes in tube sheet	DIN EN ISO 15614-8
VP Production welding of cast steel	DIN EN ISO 11970
Welding of cast iron	DIN EN 1011-8
Welding of platings	DIN EN 1011-5

ZIP exception criteria

	Steel	Aluminium
VT	DIN EN ISO 5817	DIN EN ISO 10042
RT	DIN EN 12517-1 (ISO 16075-1)	DIN EN 12517-2
UT	DIN EN 1712, 1713, E DIN EN ISO 22825, DIN EN 15617 (für TOFD)	
PT	E DIN EN ISO 23277	
MT	DIN EN ISO 23278	
HT	DIN EN ISO 18265	

Filler materials

General product standard	DIN EN 13479
QA requirement for production	DIN EN 12074
Technical delivery condition	DIN EN ISO 544
Guidelines for Procurement	DIN EN ISO 14344
Testing and QA	DIN EN 14532-1, -2, -3; DIN EN ISO 15792-1, -2, -3
Test methods	DIN EN ISO 15792-1, -2, -3; DIN EN ISO 6847, 14372, 8249, 3690, DIN EN ISO 22401
Tungsten electrode	DIN EN ISO 6848
Additives for hard deposition welding	DIN EN 14700
Additives for cast iron	DIN EN ISO 1071

	non-alloyed/FK steels	high-strength steels	hear-resistant steels	stainless steels	Nickel /	Copper /	Aluminium /	Titanium /
Rod electrodes (E)	DIN EN ISO 2560	DIN EN 757 (ISO 18275)	DIN EN ISO 3580	DIN EN 1600 (ISO3581)	DIN EN ISO 14172			
Wire electrodes (MSG)	DIN EN ISO 14341	DIN EN ISO 16834	DIN EN ISO 21952	DIN EN ISO 14343	DIN EN ISO 18274	DIN EN ISO 24373	DIN EN ISO 18273	DIN EN ISO 24034
Rod/wire (WIG)	DIN EN ISO 636	DIN EN ISO 16834	DIN EN ISO 21952	DIN EN ISO 14343	DIN EN ISO 18274	DIN EN ISO 24373	DIN EN ISO 18273	DIN EN ISO 24034
Wire (UP)	DIN EN 756 (E DIN EN ISO 14171)	DIN EN ISO 26304	DIN EN ISO 24598	DIN EN ISO 14343	DIN EN ISO 18274			
Powder (UP)	DIN EN 760 (E DIN EN ISO 14174)							
Cored wire (MSG)	DIN EN ISO 17632	DIN EN ISO 18276	DIN EN ISO 17634	DIN EN ISO 17633				
Autogenios rod (G)	DIN EN 12536		DIN EN 12536					
Inert gas	DIN EN ISO 14175, DIN EN 1089-3							

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Demmeler Maschinenbau
GmbH & Co. KG
Alpenstraße 10
87751 Heimertingen / Germany

Telephone: + 49 (0) 83 35 / 98 59 - 0
Telefax: + 49 (0) 83 35 / 98 59 - 27
E-Mail: verkauf@demmeler.com
Internet: www.demmeler.com