

STATIONARY WORKHOLDING TECHNOLOGY VOL. 1





**YOU BUY THE MACHINE,
WE DO THE REST.**

YOU BUY THE MACHINE, WE DO THE REST.

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State of the market

The persistent lack of skilled labor, immense cost pressure, and the desire for ever shorter delivery times require effective solutions. Despite the demand for flexibility in production, manufacturers cannot afford compromises in quality – the accuracy of the parts they produce is of utmost importance.

Markets are changing more rapidly, which is why the focus in industry is on automation and digitization of

processes. Otherwise, it would not be possible to respond quickly to short-term changes in production and to achieve efficient personnel planning.

And that is where we enter the picture. We show you new production philosophies, and how you can integrate additional automated processes such as measuring, cleaning and deburring.

Your benefits

- Complete solution based on your requirements, from a single source: Workholding technology, robot cell and software
- Handling weights from ten grams to five tons are possible
- One point of contact for automation of milling, turning and grinding processes
- Unattended 24/7 or > 48 hour production
- Modular design for high cost efficiency
- Automated changing of fixtures, workpieces and tools even in one-off production
- Connection to any machine tool as well as peripheral equipment, such as lift systems, measuring machines, deburring stations, labeling systems, cleaning equipment, etc.
- Master computer software available in all development stages, as well as connection to an ERP system
- Potential cost reductions of € 200,000 / per year or more



M1425 100.002



ABOUT US

Palette
6551-1453
1



ABOUT US

The merger of Vischer & Bolli Automation (VBA) with HAINBUCH GmbH enables us to offer the entire range of workholding technology, for both manual and automated processes. Overall concepts for milling, turning, grinding, assembly, etc. are developed by a single company. As a machine tool specialists and

general contractor, we offer solutions for the automation of entire manufacturing cells as well as custom solutions for stationary and rotary operations.

You have a single contact – for automation and workholding technology!

What we have to offer

- Decades of experience in automation even in one-off production
- Expertise in machining and tool clamping
- Workholding technology solutions for advanced applications
- Automation of machining centers with use of the zero-point clamping system vb DockLock® for milling, turning and grinding
- Comprehensive solutions for fabricating jigs, fixtures and stationary workholding devices
- Concepts for high-performance cutting with standard tools and custom tools
- Innovative clamping technology for cold pressing tools, also with automated clamping and unclamping



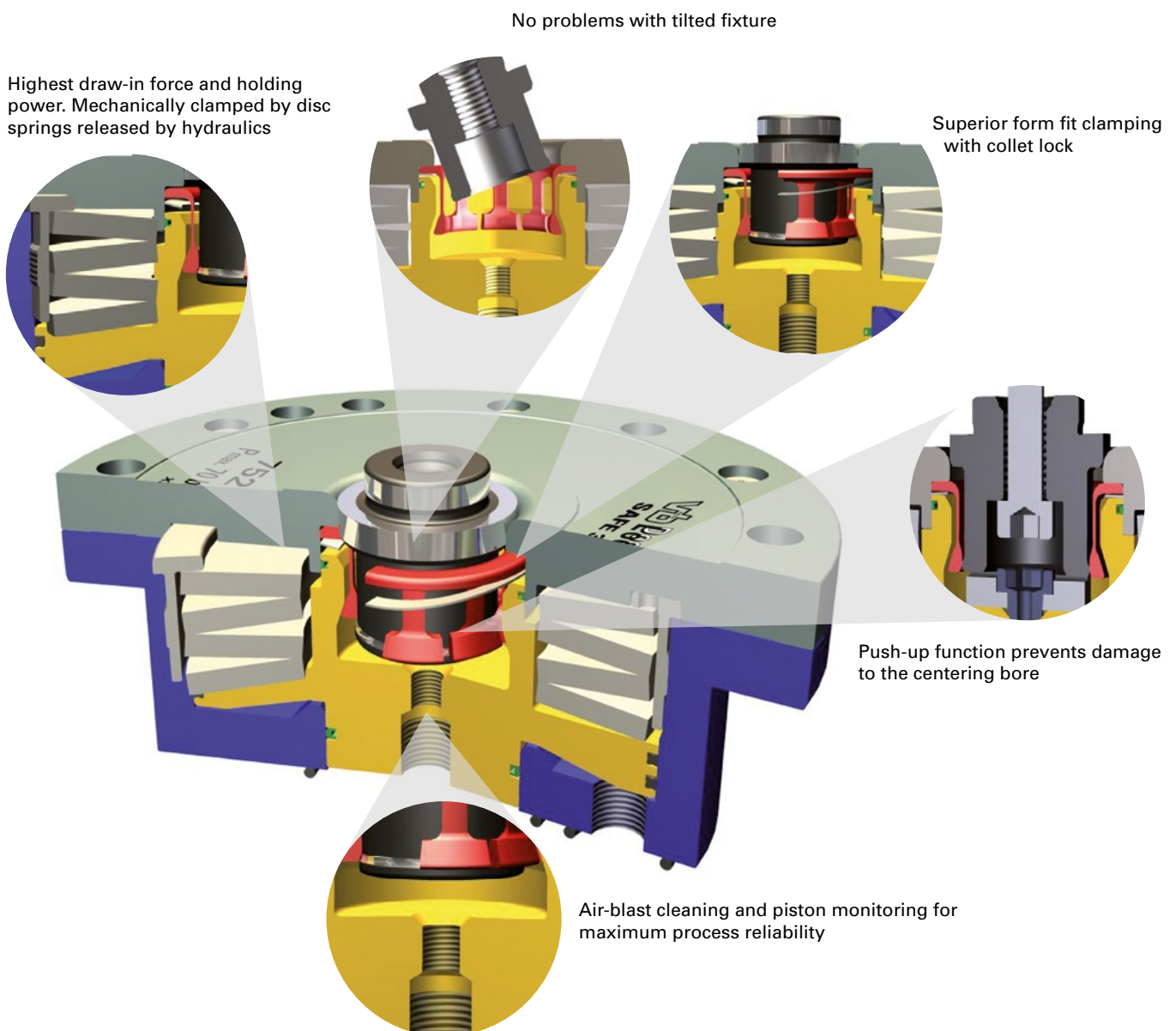


vb DockLock® SAFE 20

vb DockLock® SAFE 20

HYDRAULIC ZERO-POINT CLAMPING SYSTEM

Form fit clamping with a collet for maximum draw-in forces; extremely low wear, since there are only 3 moving parts. With diagonal pull handling and push-up function.



Draw-in force: **> 12'500N**

Holding power: **> 40'000N**

Repeatability: **< 5 µm**

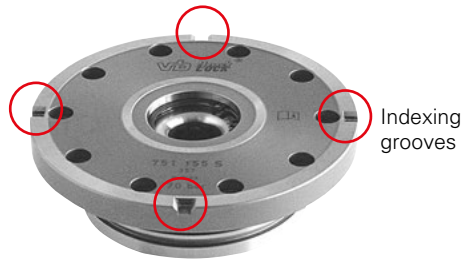
► For draw-in forces up to 30'000N and holding power up to 90'000N, please request the separate catalog for vb DockLock® SAFE 30 and SAFE 50.

vb DockLock® SAFE 20 BUILT-IN CYLINDER

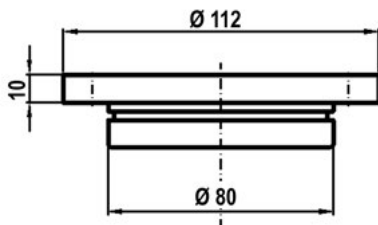
Standard



Index

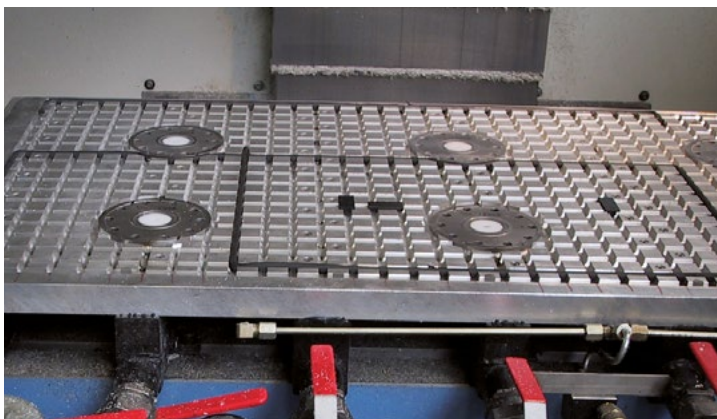


Automation



Art. no.	Description		
752150	Standard		
752150 L	with air-blast cleaning		
752150 I	with indexing grooves		
752150 LI	with air-blast cleaning and indexing grooves		
752150 LA	with air-blast support isles	Draw-in force	9,000N

Piston position can be checked via hydraulic line

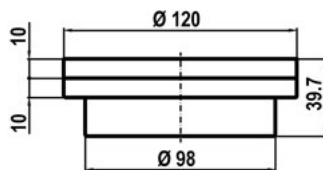


vb DockLock® SAFE 20 FLANGED CYLINDERS

Standard



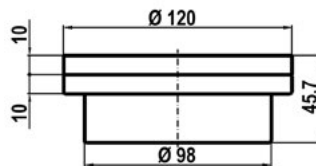
**752160
752160 I**



Index



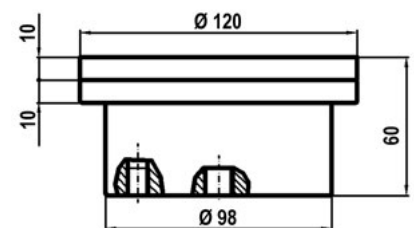
**752160 L
752160 LI
752160 LA**



Automation



**752160 LU
752160 LIU
752160 LAU**



Art. no.	Description		
752160	Standard		
752160 L	with air-blast cleaning		
752160 LU	with air-blast cleaning and underside media connection		
752160 I	with indexing grooves 4 x 90°		
752160 LI	with air-blast cleaning and indexing grooves 4 x 90°		
752160 LIU	with air-blast cleaning, indexing grooves 4 x 90° and underside media connection		
752160 LA	with air-blast cleaning and air-blast support isles	Draw-in force	9,000N
752160 LAU	with air-blast cleaning, air-blast support isles and underside media connection	Draw-in force	9,000N

Piston position can be checked via hydraulic line

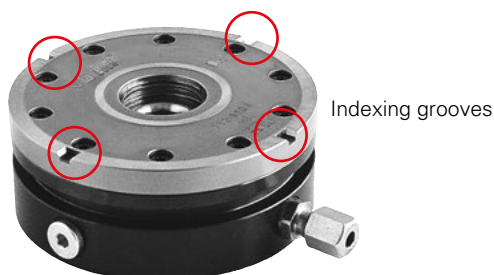
► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLock® SAFE 30 and SAFE 50.

vb DockLock® SAFE 20 BUILT-UP CYLINDERS

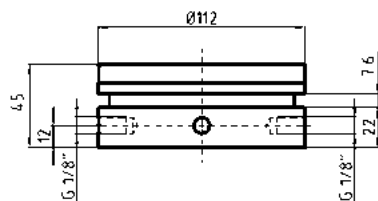
Standard



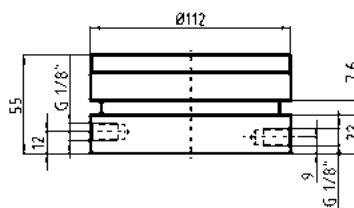
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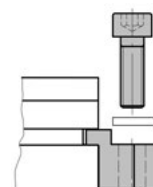
**752110
752110 I**



**752110 L
752110 LI**



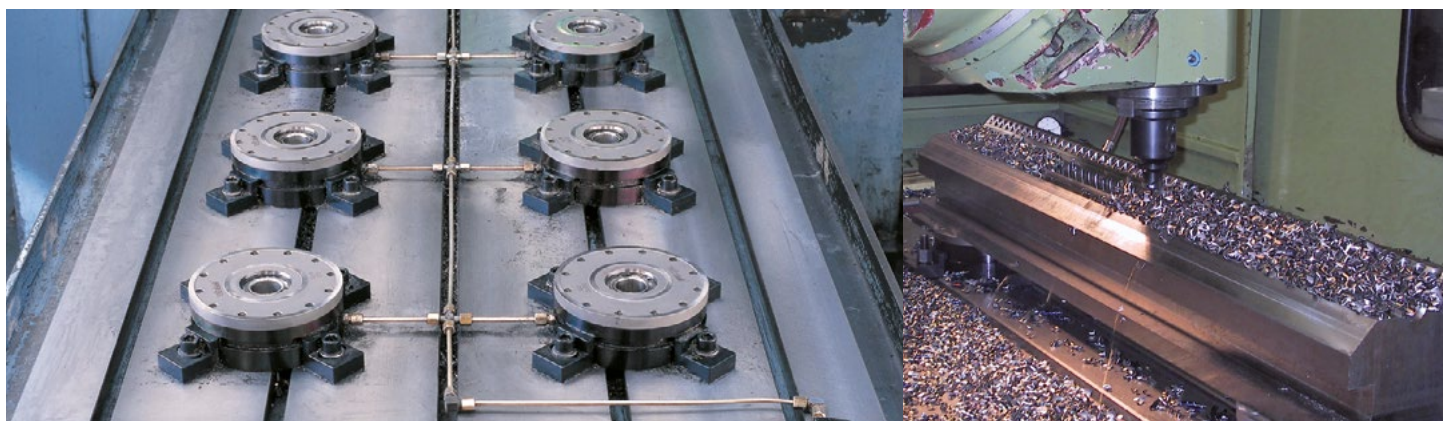
Cylinder head screw M12x35



Bracket 751172

Art. no.	Description
752110	Standard
752110 L	with air-blast cleaning
752110 I	with indexing grooves
752110 LI	with air-blast cleaning and indexing grooves

Piston position can be checked via hydraulic line

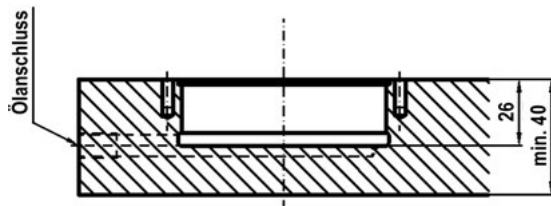


vb DockLock® SAFE 20 INSTALLATION

For in-house installation, please request complete checklist! Max. operating pressure 70 bar.

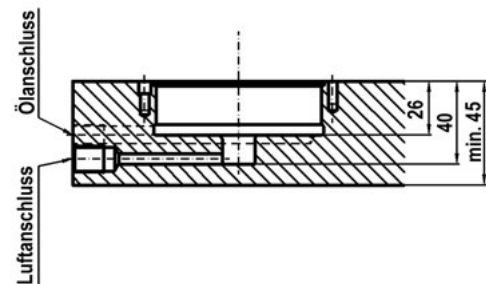
752150 / 752150 I

Installation drawing



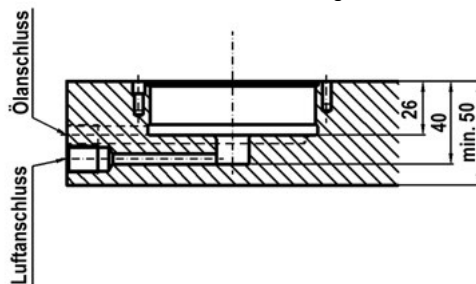
752150 L / 752150 LI

Installation drawing



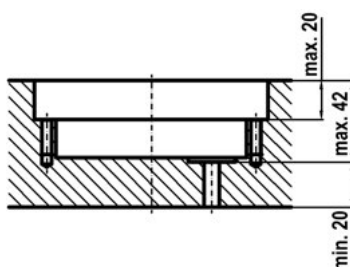
752150 LA

Installation drawing



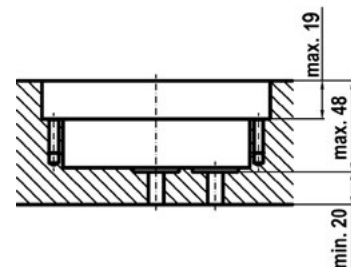
752160 / 752160 I

Installation drawing



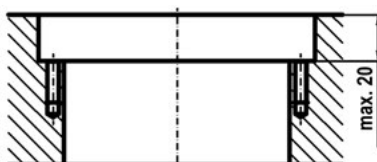
752160 L / 752160 LI / 752160 LA

Installation drawing



752160 LU / 752160 LIU / 752160 LAU

Installation drawing



► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLock® SAFE 30 and SAFE 50.

vb DockLock® SAFE 20 CLAMPING BOLT

Long

752500



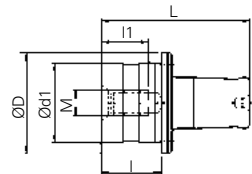
752504



752510

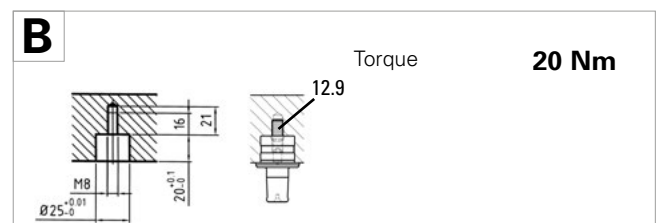
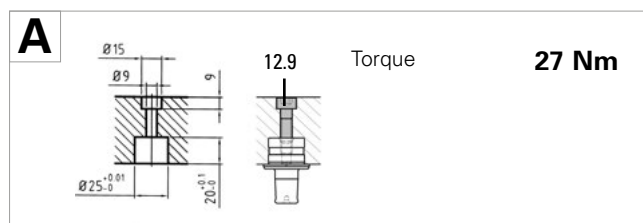


752520

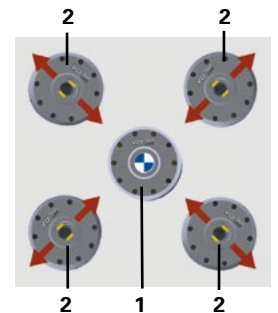
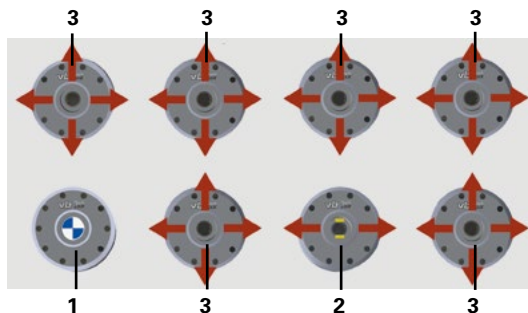
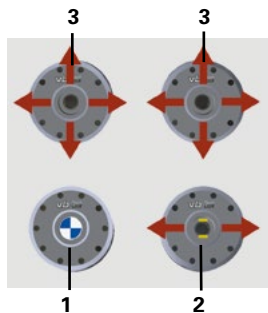


Art. no.	Description	L	l	l1	M	D	d1	without air-blast cleaning	with air-blast cleaning	Installation variant A	Installation variant B
752500	Centering clamping bolt	46.65	19	15	M8	32	25	x		x	x
752504	Centering clamping bolt	46.65	19	15	M8	32	25		x	x	x
752510	Clamping bolt without centering function	46.65	19	15	M8	30	25	x	x	x	x
752520	Compensating clamping bolt	46.65	19	15	M8	32	25	x	x	x	x

Installation variants (for installation of the clamping bolt, variant **A** is preferred)



Recommended clamping bolt layout



1 Centering clamping bolt defines the zero position

2 Compensating clamping bolt positions the pallet in the x or y axis

3 Clamping bolt without centering function

vb DockLock® SAFE 20 CLAMPING BOLT

Short

752502



752505



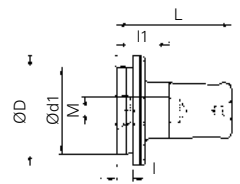
752512



752522

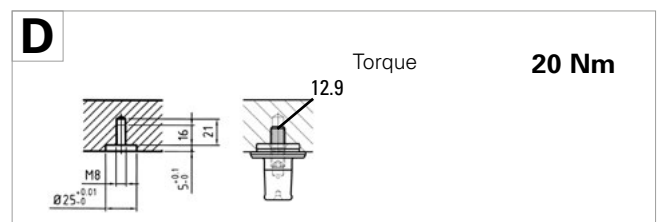
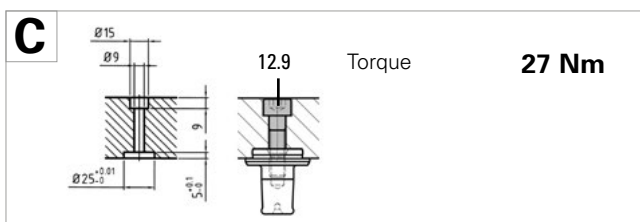


752523



Art. no.	Description	L	I	I1	M	D	d1	without air-blast cleaning	with air-blast cleaning	Installation variant C	Installation variant D
752502	Centering clamping bolt	32.45	4.8	15	M8	32	25	x		x	x
752505	Centering clamping bolt	32.45	4.8	15	M8	32	25		x	x	x
752512	Clamping bolt without centering function	32.45	4.8	15	M8	30	25	x	x	x	x
752522	Compensating clamping bolt	32.45	4.8	15	M8	32	25	x	x	x	
752523	Compensating clamping bolt, two-piece	32.45	4.8	15	M8	32	25	x	x		x

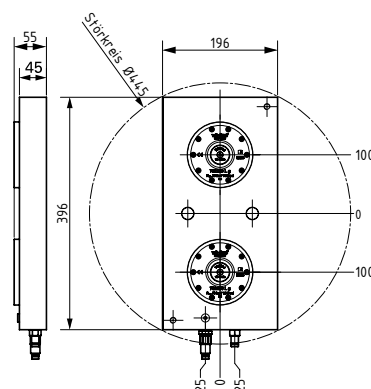
Installation variants (for installation of the clamping bolt, variant **C** is preferred)



► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLock® SAFE 30 and SAFE 50.

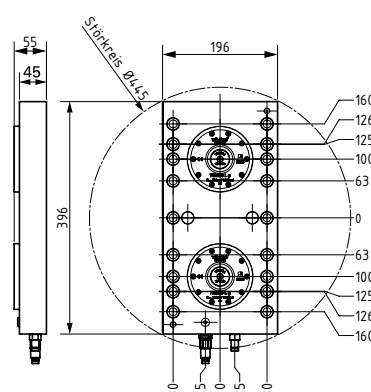
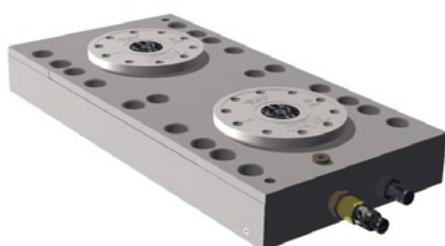
vb DockLock® SAFE 20 BASE PLATES

2x



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752220-1	396 x 196 x 55 mm	200 mm ± 0.01	with air-blast cleaning	Ø 445 mm
752225-1	396 x 196 x 55 mm	200 mm ± 0.01	without air-blast cleaning	Ø 445 mm

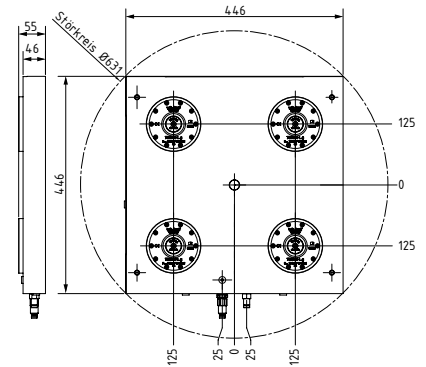
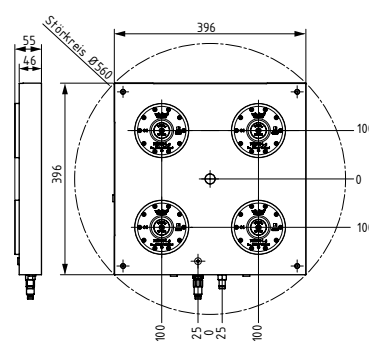
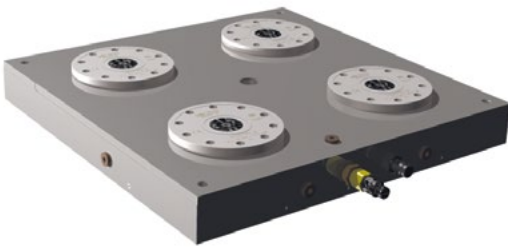
2x ECO



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752220 ECO	396 x 196 x 55 mm	200 mm ± 0.01	with air-blast cleaning	Ø 445 mm
752225 ECO	396 x 196 x 55 mm	200 mm ± 0.01	without air-blast cleaning	Ø 445 mm

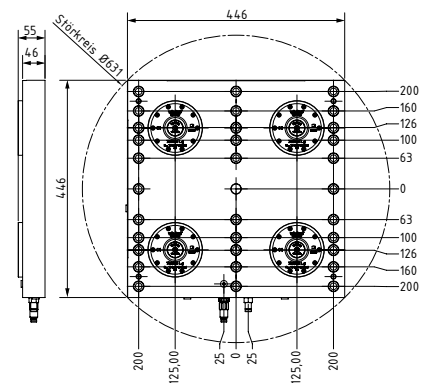
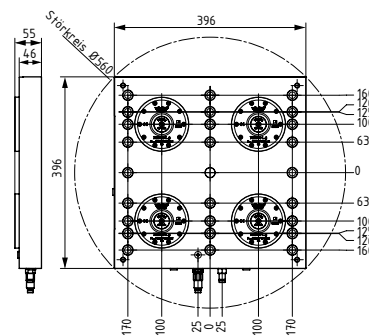
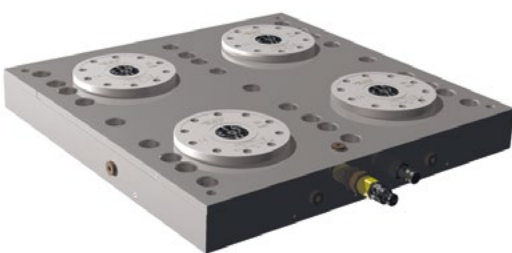
vb DockLock® SAFE 20 BASE PLATES

4x



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752200-1	396 x 396 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 560 mm
752205-1	396 x 396 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 560 mm
752250-1	446 x 446 x 55 mm	250 x 250 mm ± 0.01	with air-blast cleaning	Ø 631 mm
752255-1	446 x 446 x 55 mm	250 x 250 mm ± 0.01	without air-blast cleaning	Ø 631 mm

4x ECO

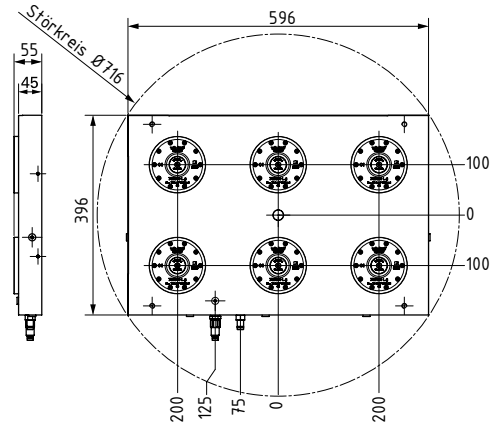
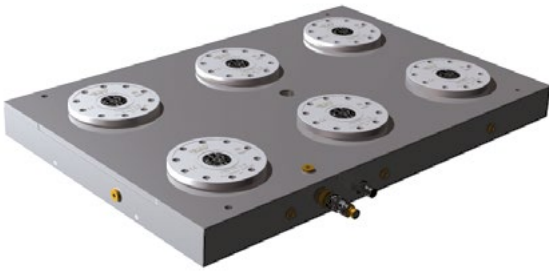


Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752200 ECO	396 x 396 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 560 mm
752205 ECO	396 x 396 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 560 mm
752250 ECO	446 x 446 x 55 mm	250 x 250 mm ± 0.01	with air-blast cleaning	Ø 631 mm
752255 ECO	446 x 446 x 55 mm	250 x 250 mm ± 0.01	without air-blast cleaning	Ø 631 mm

► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLo[®]k® Safe 30 and Safe 50.

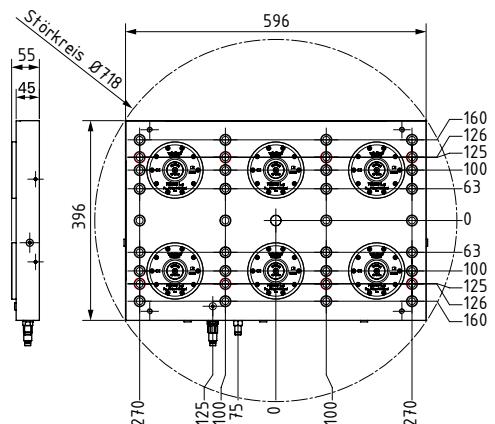
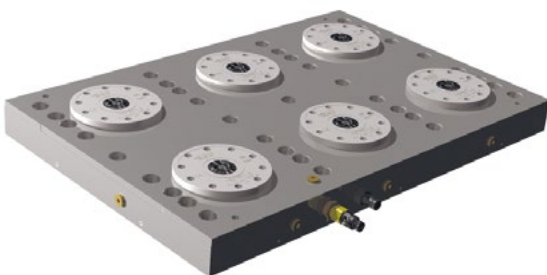
vb DockLock® SAFE 20 BASE PLATES

6x



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752270-1	396 x 596 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 716 mm
752275-1	396 x 596 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 716 mm

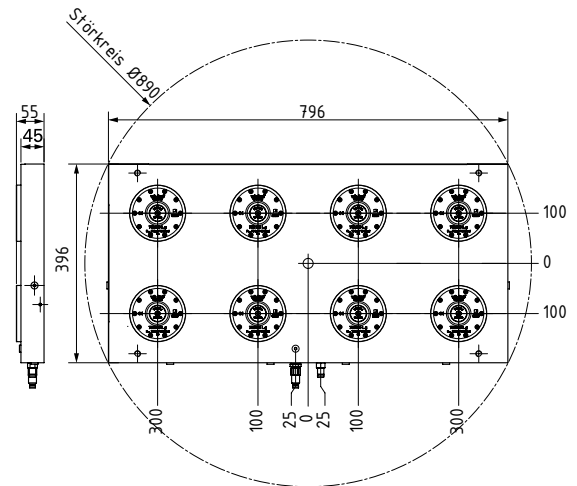
6x ECO



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752270 ECO	396 x 596 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 716 mm
752275 ECO	396 x 596 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 716 mm

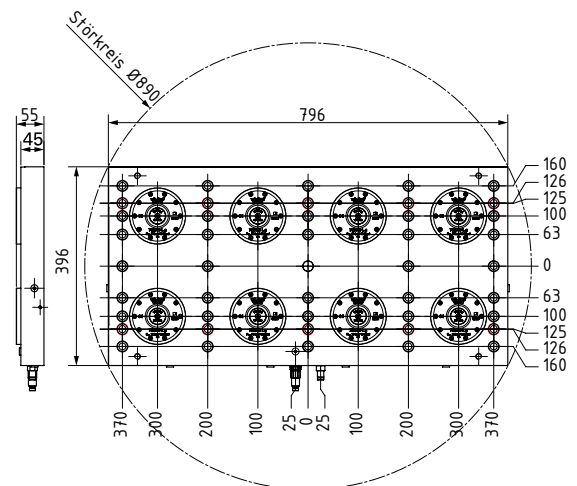
vb DockLock® SAFE 20 BASE PLATES

8x



Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752280-1	396 x 796 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 890 mm
752285-1	396 x 796 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 890 mm

8x ECO

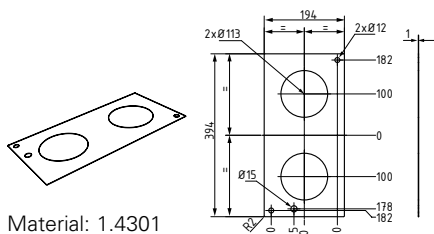


Art. no.	Outer dimensions	Spacing	Optional	Swing circle
752280 ECO	396 x 796 x 55 mm	200 x 200 mm ± 0.01	with air-blast cleaning	Ø 890 mm
752285 ECO	396 x 796 x 55 mm	200 x 200 mm ± 0.01	without air-blast cleaning	Ø 890 mm

► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLo[®]k® Safe 30 and Safe 50.

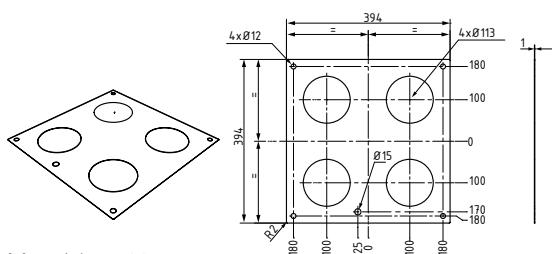
vb DockLock® SAFE 20

SHEET METAL COVERS

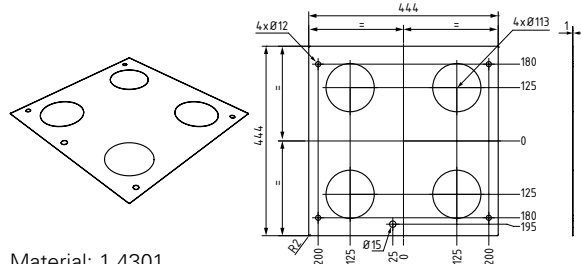


Material: 1.4301

Art. no.	Description
752220 AB	Cover plate for 2-unit base plate

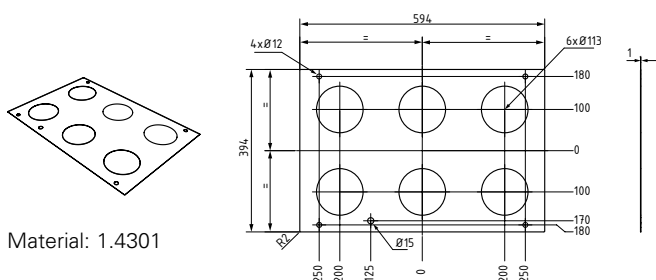


Material: 1.4301



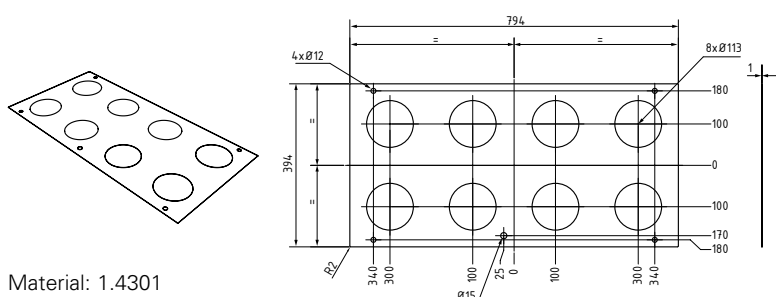
Material: 1.4301

Art. no.	Description
752200 AB	Cover plate for 4-unit base plate 394 x 394 for 200 mm spacing
752250 AB	Cover plate for 4-unit base plate 444 x 444 for 250 mm spacing



Material: 1.4301

Art. no.	Description
752270 AB	Cover plate for 6-unit base plate

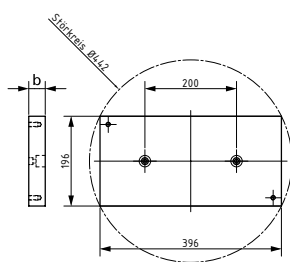
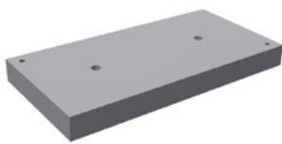


Material: 1.4301

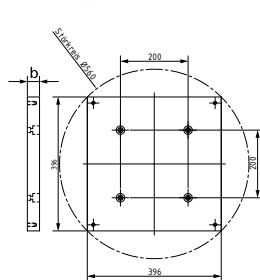
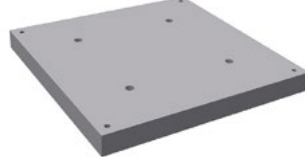
Art. no.	Description
752280 AB	Cover plate for 8-unit base plate

vb DockLock® SAFE 20 PALLETS

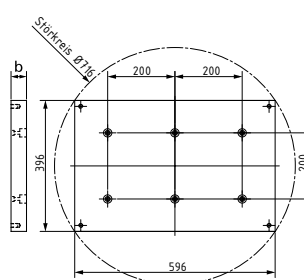
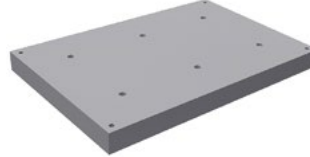
75161. ECO-2



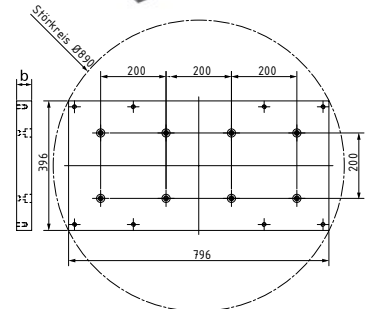
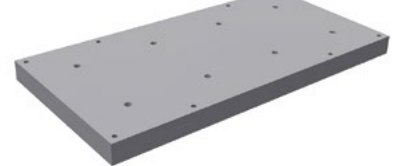
75161. ECO-4



75161. ECO-6



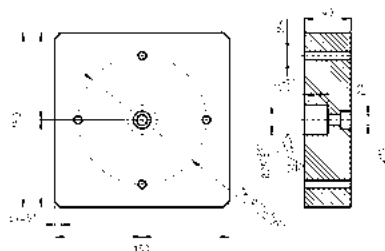
75161. ECO-8



Spacing 200 mm $\pm$ 0.01

Art. no.	L x W x b (mm)	Description	Weight (kg)
751610 ST-2	196 x 396 x 36	Tool steel, with machined support surface and top	22.0
751615 AL-2	196 x 396 x 40	High-strength aluminum, machined support surface, rough machined top face	8.5
751610 ST-4	396 x 396 x 36	Tool steel, with machined support surface and top	44.0
751615 AL-4	396 x 396 x 40	High-strength aluminum, machined support surface, rough machined top face	17.5
751610 ST-6	596 x 396 x 46	Tool steel, with machined support surface and top	67.0
751615 AL-6	596 x 396 x 50	High-strength aluminum, machined support surface, rough machined top face	33.0
751610 ST-8	796 x 396 x 46	Tool steel, with machined support surface and top	113.0
751615 AL-8	796 x 396 x 50	High-strength aluminum, machined support surface, rough machined top face	44.0

Basic pallet, indexed



751580
Threaded indexing pin
(hardened)

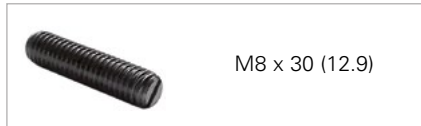


Art. no.	Description
751601-1	Index pallet, square, of high-strength aluminum incl. positioning pins

► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLo[®]k® Safe 30 and Safe 50.

vb DockLock® SAFE 20

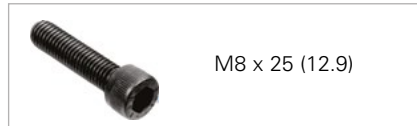
ACCESSORIES



M8 x 30 (12.9)

751550

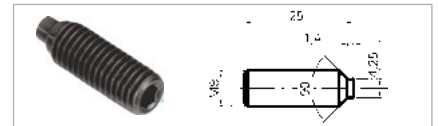
Threaded pin for fastening the clamping bolt from below



M8 x 25 (12.9)

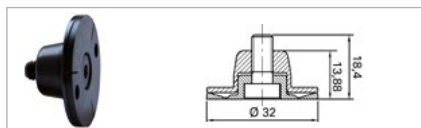
751551

Cylinder head screw for fastening the clamping bolt from above



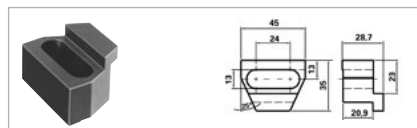
751580

Threaded indexing pin, hardened, for mini basic pallet 751601



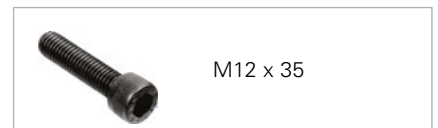
752534

2-piece cover bolt



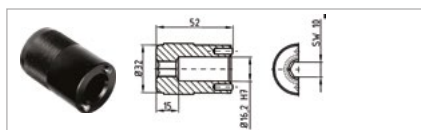
751172

Bracket



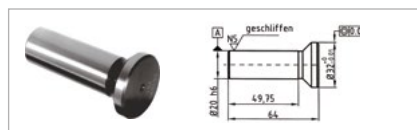
751175

Cylinder head screw for bracket 751172



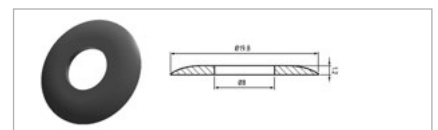
751570

Screw-in adapter for clamping bolt



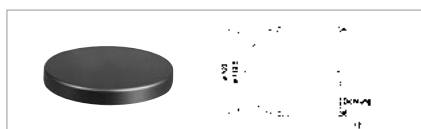
751590

Setup plug for built-up cylinders



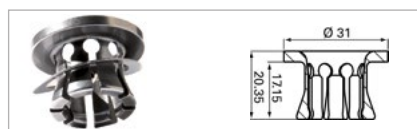
752004-1.2

Insertion disc for diagonal pull-out



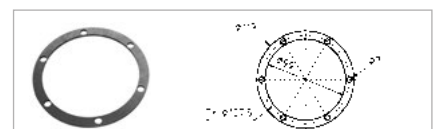
751159

Aluminum cover



752 00090 SET

Collet and spring washer



752165K

Support ring for height adjustment of the flanged cylinders

Contamination protection for countersunk screws



751998*

D Ø 10.5 $^{+0}_{-0.10}$ mm

Thickness 1 mm

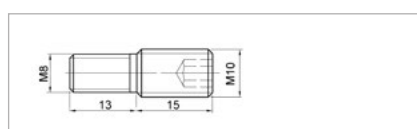
751999**

D Ø 8.55 $^{+0}_{-0.05}$ mm

Thickness 1 mm

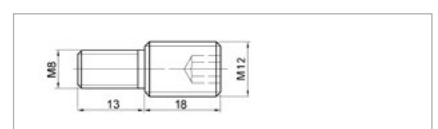
* for 752160

** for 752110 / 752150



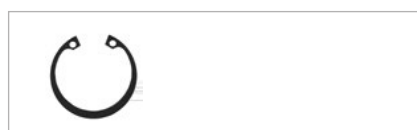
751552

Stud bolt (12.9) for fastening the DockLock® clamping bolt to M10 threads



751548

Stud bolt (12.9) for fastening the DockLock® clamping bolt to M12 threads

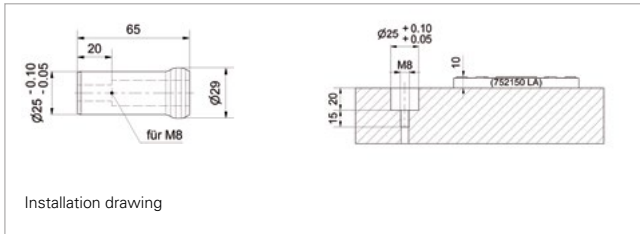


75100091

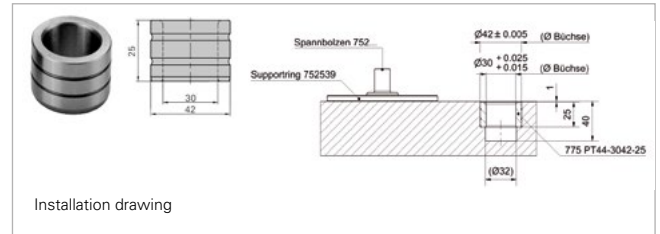
Retainer ring

vb DockLock® SAFE 20

ACCESSORIES



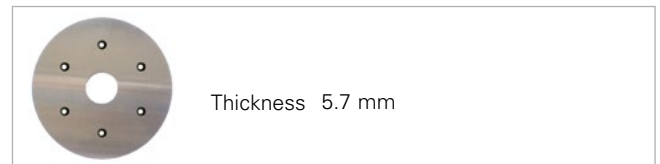
752529 Pre-centering bolt for base plate



775 PT44-3042-25 Positioning sleeve in pallet



758800-1 Elec. hydraulic pump 220V/50Hz



752539 Hardened support ring



758808-2M 2 m replacement hose without coupling

758808-3M 3 m replacement hose without coupling

758808-4M 4 m replacement hose without coupling



758812 Coupling plug G 1/4" oil

758812-1 Dust cap



758813 Coupling sleeve G 1/4" oil

758813-1 Dust cap

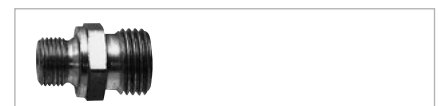


758811 Coupling plug G 1/8" air

758811-1 Dust cap



758816 Coupling sleeve G 1/8" air



758850 Reducing adapter
G 1/4" x G 1/8"



758852 Threaded plug G 1/4"



758853 Threaded plug G 1/8"

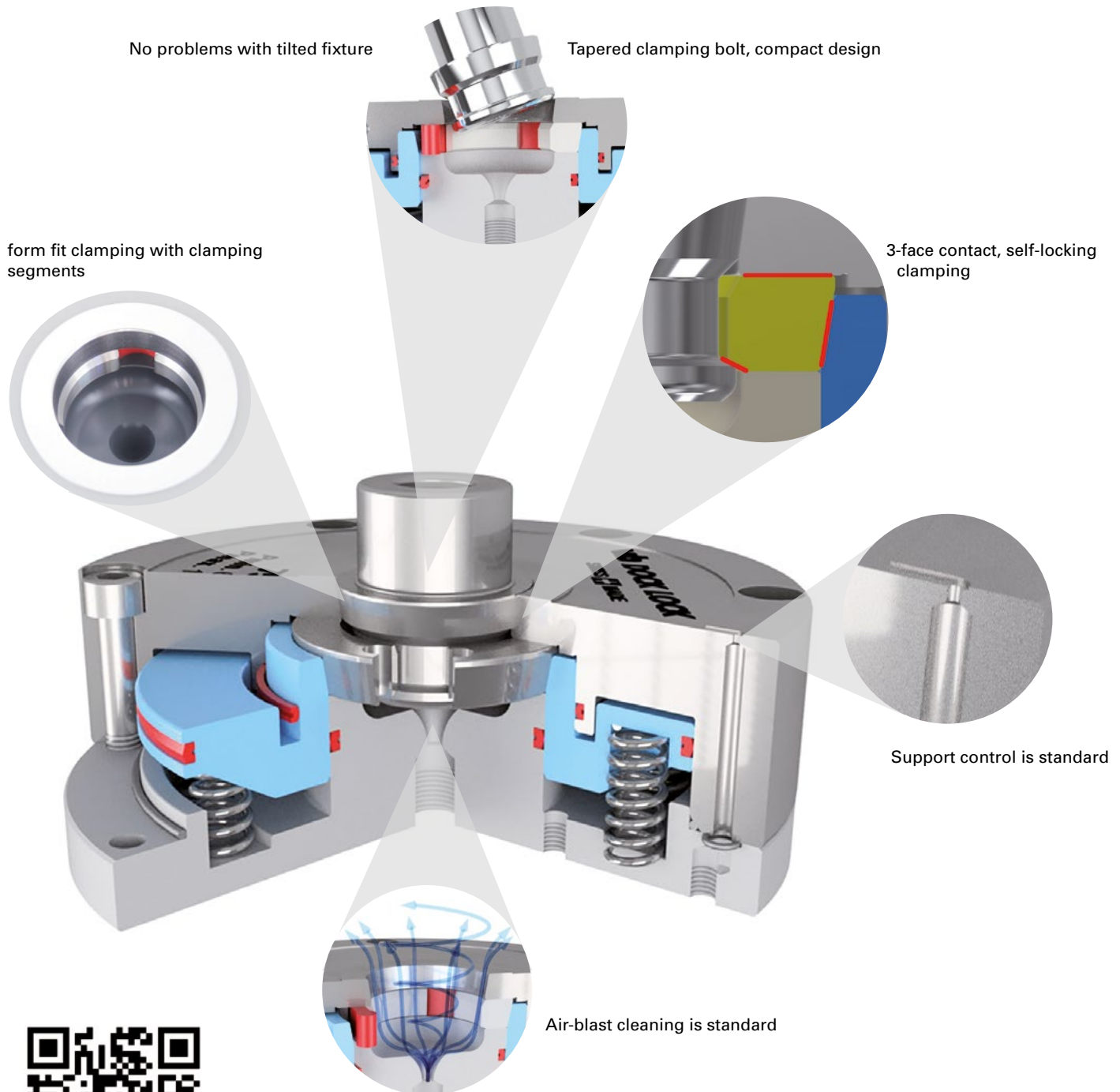
► For draw-in forces up to 30,000N and holding power up to 90,000N, please request the separate catalog for vb DockLo[®]k® Safe 30 and Safe 50.



vb DockLock® *AirLine*

vb DockLock AirLine

PNEUMATIC ZERO-POINT CLAMPING SYSTEM



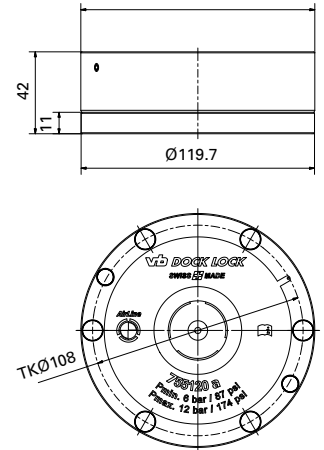
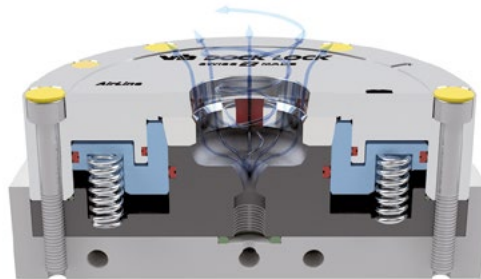
Draw-in force: **> 12'500N**

Holding power: **> 40'000N**

Repeatability: **< 5 µm**

vb DOCK LOCK AirLine **FLANGED CYLINDERS**

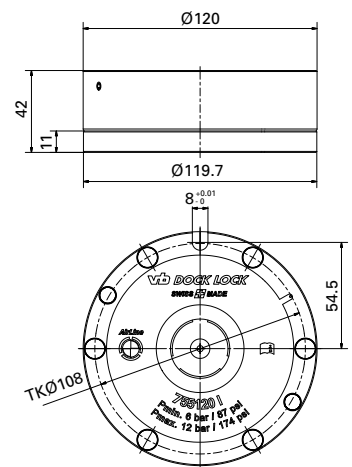
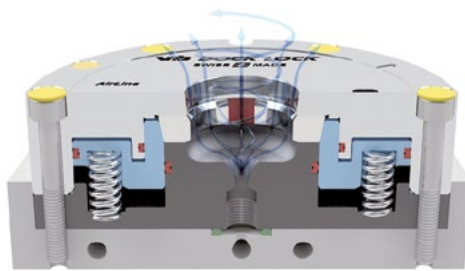
755120 Standard



755120 I Index

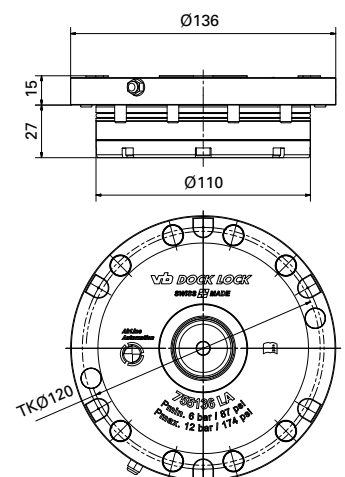
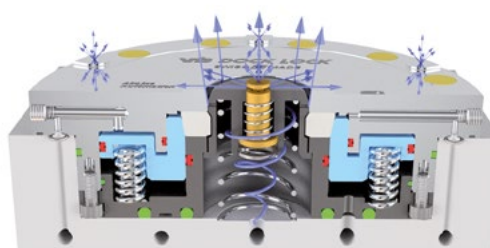
- For use of pallets with only one clamping bolt

Indexing grooves



755136 LA Automation

- Piston position control
- Full protection against contamination
- Contact control

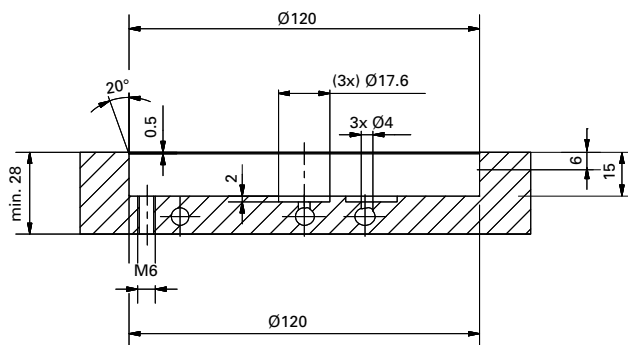


vb DockLock AirLine

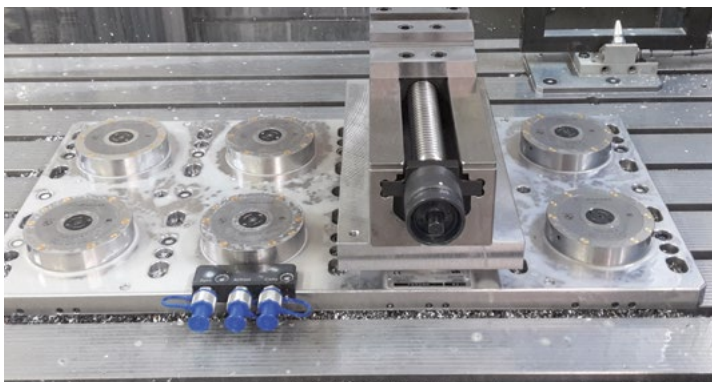
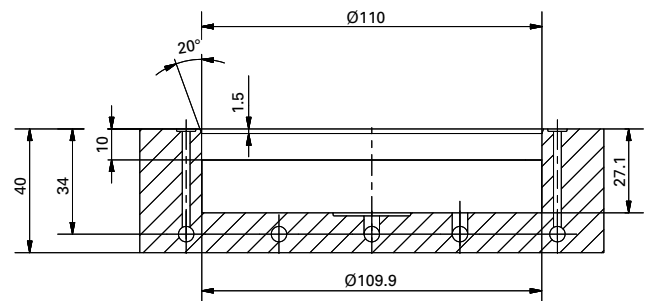
INSTALLATION

For in-house installation, please request complete checklist! Max. operating pressure 12 bar.

755120 / 755120 I
Installation drawing



755136 LA
Installation drawing



vb DockLock AirLine

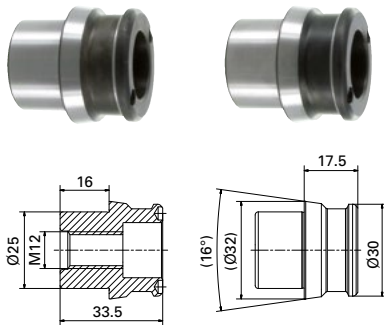
CLAMPING BOLT

Long version

755500

755510

755520



Art. no.	Description
755500-M12	Centering clamping bolt
755510-M12	Clamping bolt without centering function
755520-M12	Compensating clamping bolt

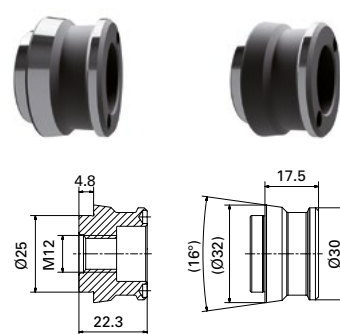
- Screw-in adapter 755570 for clamping bolt

Short version

755502

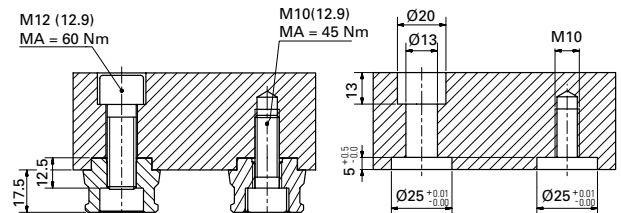
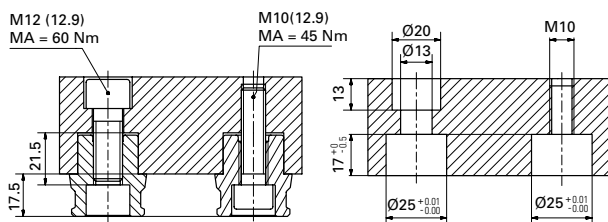
755512

755522

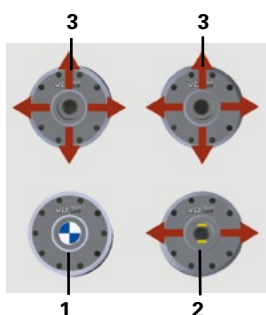


Art. no.	Description
755502-M12	Centering clamping bolt
755512-M12	Clamping bolt without centering function
755522-M12	Compensating clamping bolt

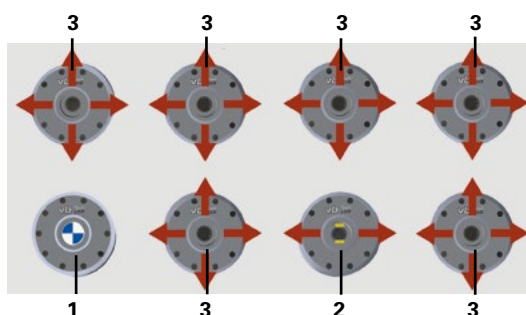
Installation variants



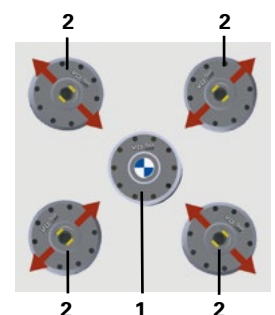
Recommended clamping bolt layout



1 Centering clamping bolt defines the zero position



2 Compensating clamping bolt positions the pallet in the x or y axis

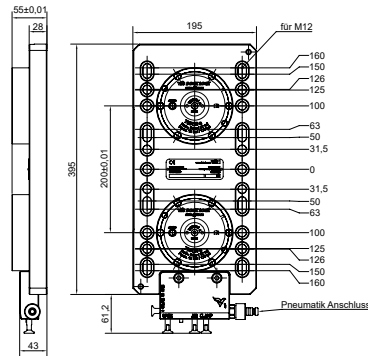


3 Clamping bolt without centering function

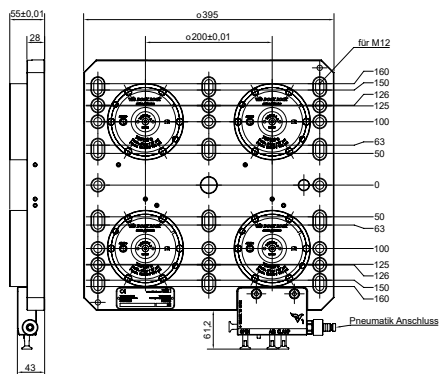
vb DockLock AirLine

BASE PLATES

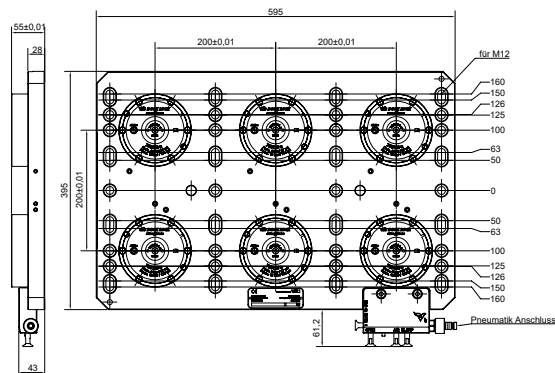
755220 NA 2x
Spacing 200 mm $\pm$ 0.01



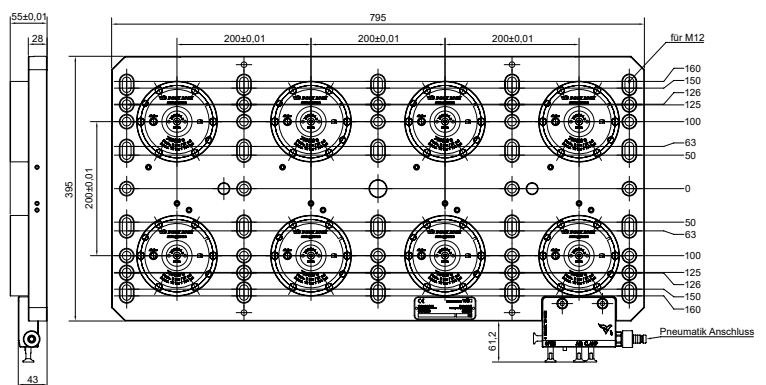
755240 NA 4x
Spacing 200 mm $\pm$ 0.01



755260 NA 6x
Spacing 200 mm $\pm$ 0.01



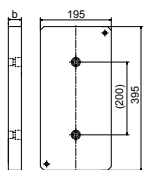
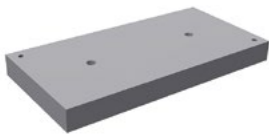
755280 NA 8x
Spacing



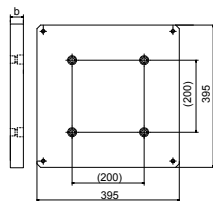
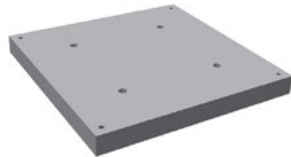
vb DOCK LOCK AirLine

PALLETS

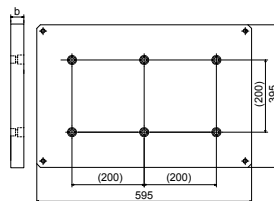
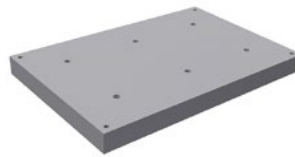
755620



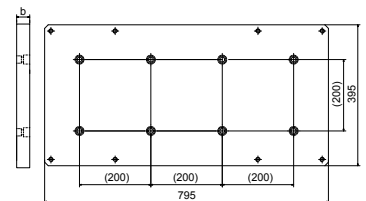
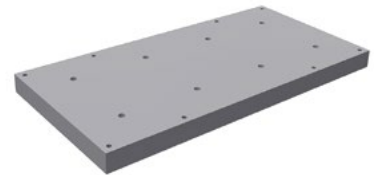
755640



755660



755680

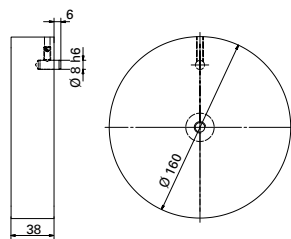


Spacing 200 mm $\pm$ 0.01

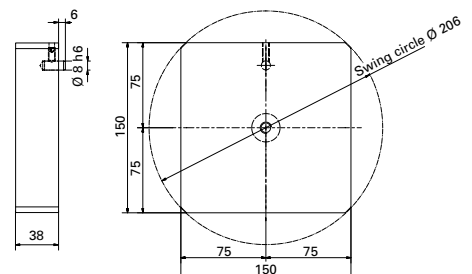
Art. no.	L x W x b (mm)	Description	Weight (kg)
755620-AL	195 x 395 x 38	Basic pallet, 2-unit, high-strength aluminum	8.2
755620-ST	195 x 395 x 40	Basic pallet, 2-unit, tool steel	24.0
755640-AL	395 x 395 x 38	Basic pallet, 4-unit, high-strength aluminum	18.0
755640-ST	395 x 395 x 40	Basic pallet, 4-unit, tool steel	48.5
755660-AL	595 x 395 x 48	Basic pallet, 6-unit, high-strength aluminum	32.0
755660-ST	595 x 395 x 45	Basic pallet, 6-unit, tool steel	82.0
755680-AL	795 x 395 x 48	Basic pallet, 8-unit, high-strength aluminum	42.0
755680-ST	795 x 395 x 45	Basic pallet, 8-unit, tool steel	110.0

Basic pallet, indexed

755601-1

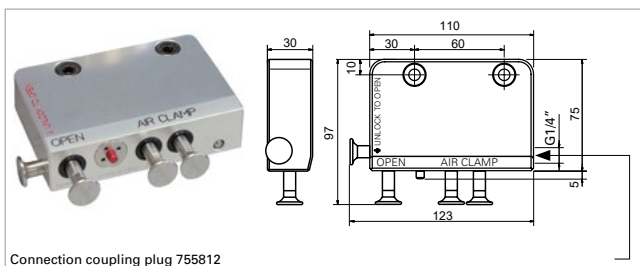


755602-1



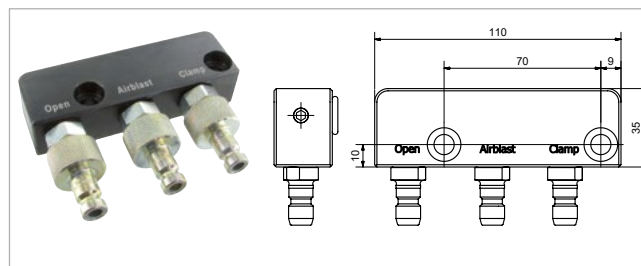
Art. no.	Description	Weight (kg)
755601-1	Index pallet, round, of high-strength aluminum incl. positioning pin	2.2
755602-1	Index pallet, square, of high-strength aluminum incl. positioning pin	2.4

vb *DOCK LOCK* **AirLine**
ACCESSORIES



Connection coupling plug 755812

755-VBLK Valve block



755-3PKL Connection block with couplings



755812 Coupling plug NW6 AIR



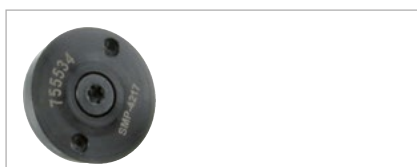
755813 Coupling sleeve NW6 AIR



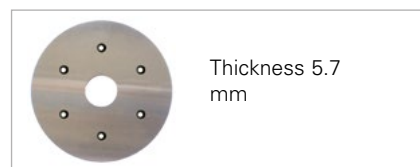
755812-1 Dust cap for coupling plug



755820 Air hose, 6 mm

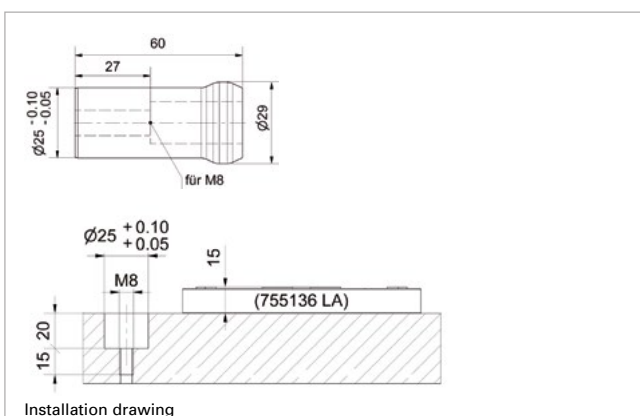


755534 2-piece cover bolt



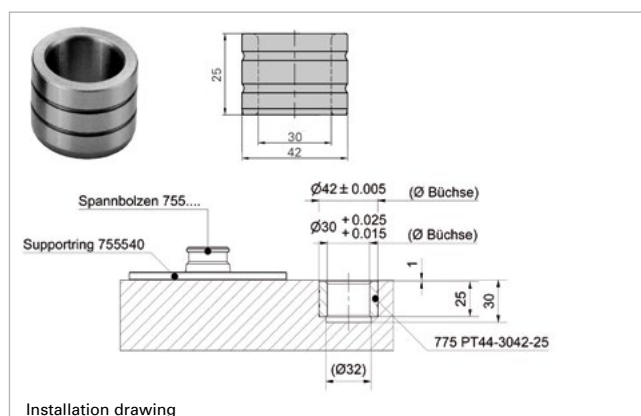
Thickness 5.7
mm

755540 Hardened support ring



Installation drawing

755529	Pre-centering bolt for base plate
---------------	-----------------------------------



Installation drawing

775 PT44-3042-25 Positioning bushing in pallet



VBA CNC VISE

CNC HIGH-PRESSURE MACHINE VISE

CNC high-pressure clamping vise with constant overall length for use with high-precision parts in horizontal and vertical machining centers.

- Sturdy basic body of nodular cast iron GJS-600
- Guide tracks are hardened and precision ground
- Axial and radial grooves 20 H7 for alignment on the machine table, with 2 locating holes $\varnothing$ 25 H7 for use with zero-point clamping systems
- Exact precision clamping force pre-selection
- Two-sided connecting threads for side end-stop
- Profile jaws for large clamping widths
- Quick change-over system for optional profile rails
- Mechanic-hydraulic spindle is completely encapsulated, low-wearing and maintenance-free
- Threaded holes for attachment of facing jaws (accessory)
- Bayonet-mounted spindle for fast removal
- Operating key included for optional direct clamping
- Sturdy, replaceable sheet metal covers



Scope of delivery:

4 clamps, 1 hand crank, 1 operating key

Variants:

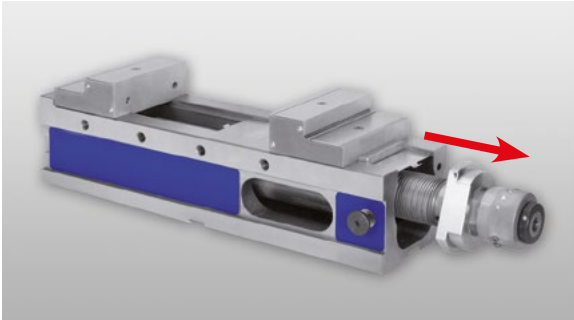
Horizontal application

- The vise is mounted on the base surface

Machining all over application

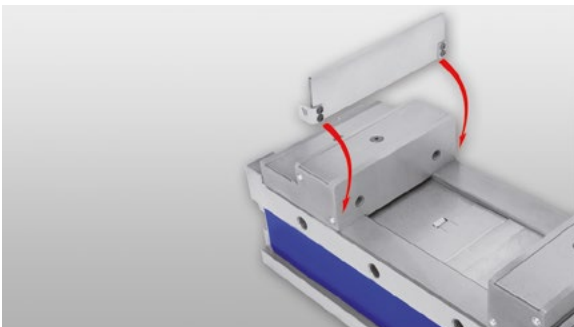
- The vise can be used on the front face of the base surface for vertical set-ups or horizontally on the side

CNC HIGH-PRESSURE MACHINE VISE



Fast removal of the spindle unit:

- Vise can be screwed on through the basic body
- Optimal cleaning capabilities



Quick profile rail change-over system

- Profile rails are snapped into place by hand – without tools
- No chips can enter the area under the profile rail
- Secure and stable holding, also when compressed air is used
- Available in different heights (accessories)



Angled drive

- Operation over table with pre-mounted angled drive (accessories)
- Optimal accessibility for adjustment of force



Quick jaw change-over system

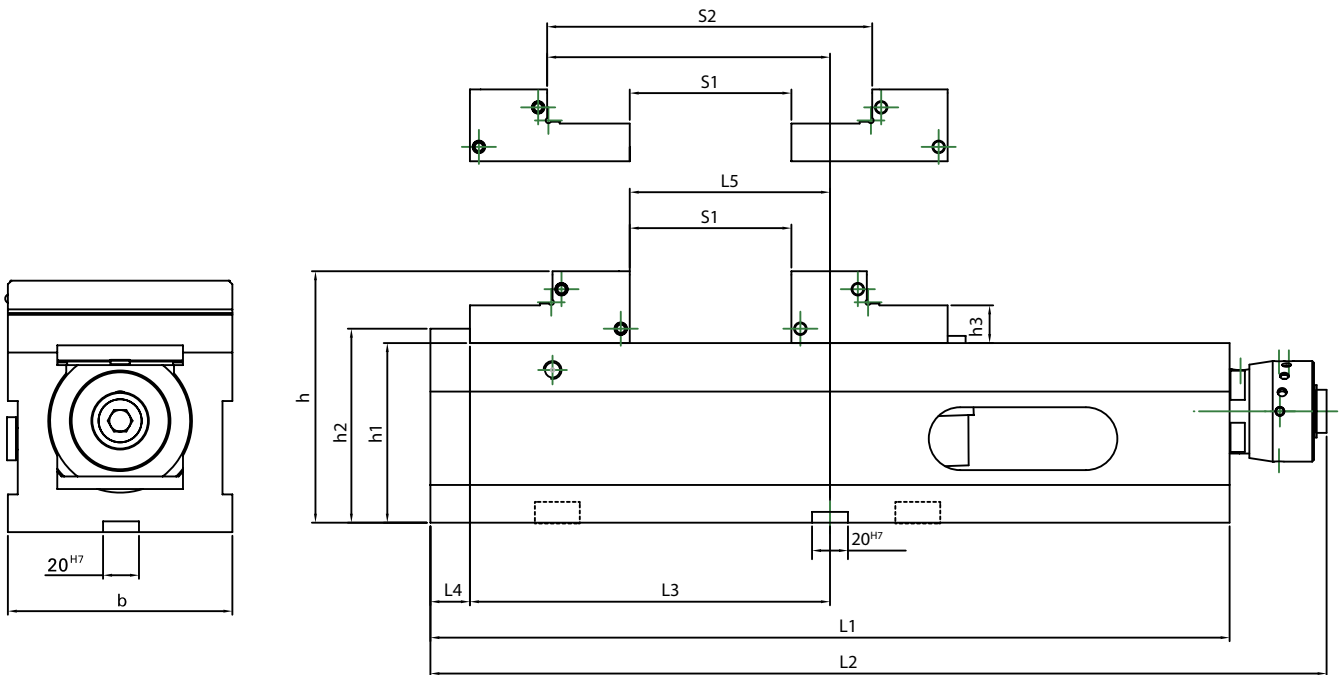
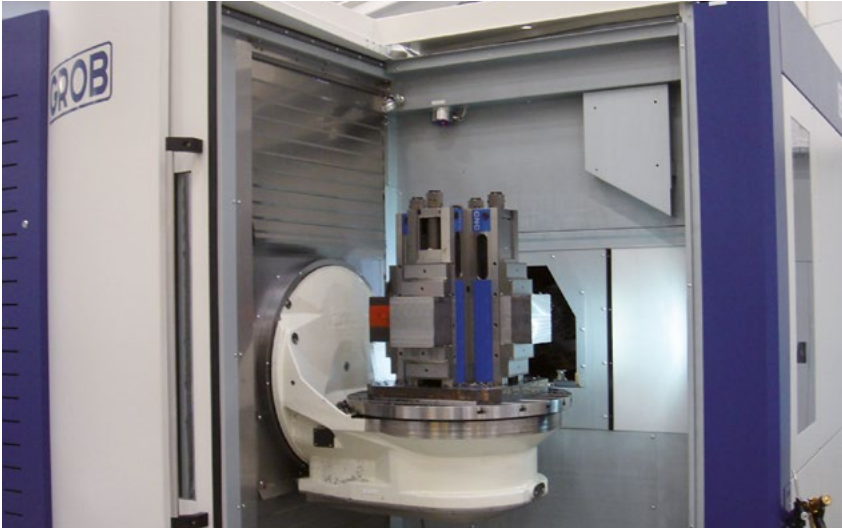
- Fast turning or change-over of serial top jaws (only 2 mounting screws have to be opened with one turn)
- Fast changing of specially constructed jaws



CNC pendulum jaw (accessories)

- With serration and spring plate, 360° pendulum motion
- For non-parallel workpieces

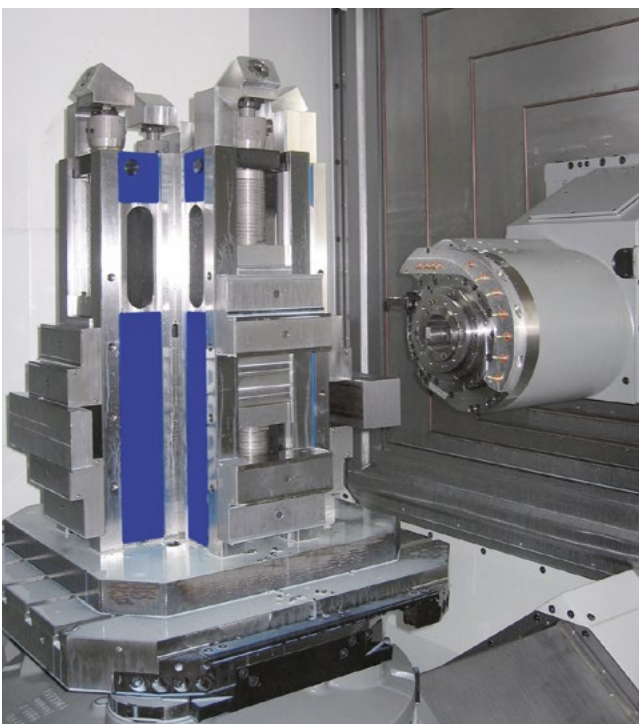
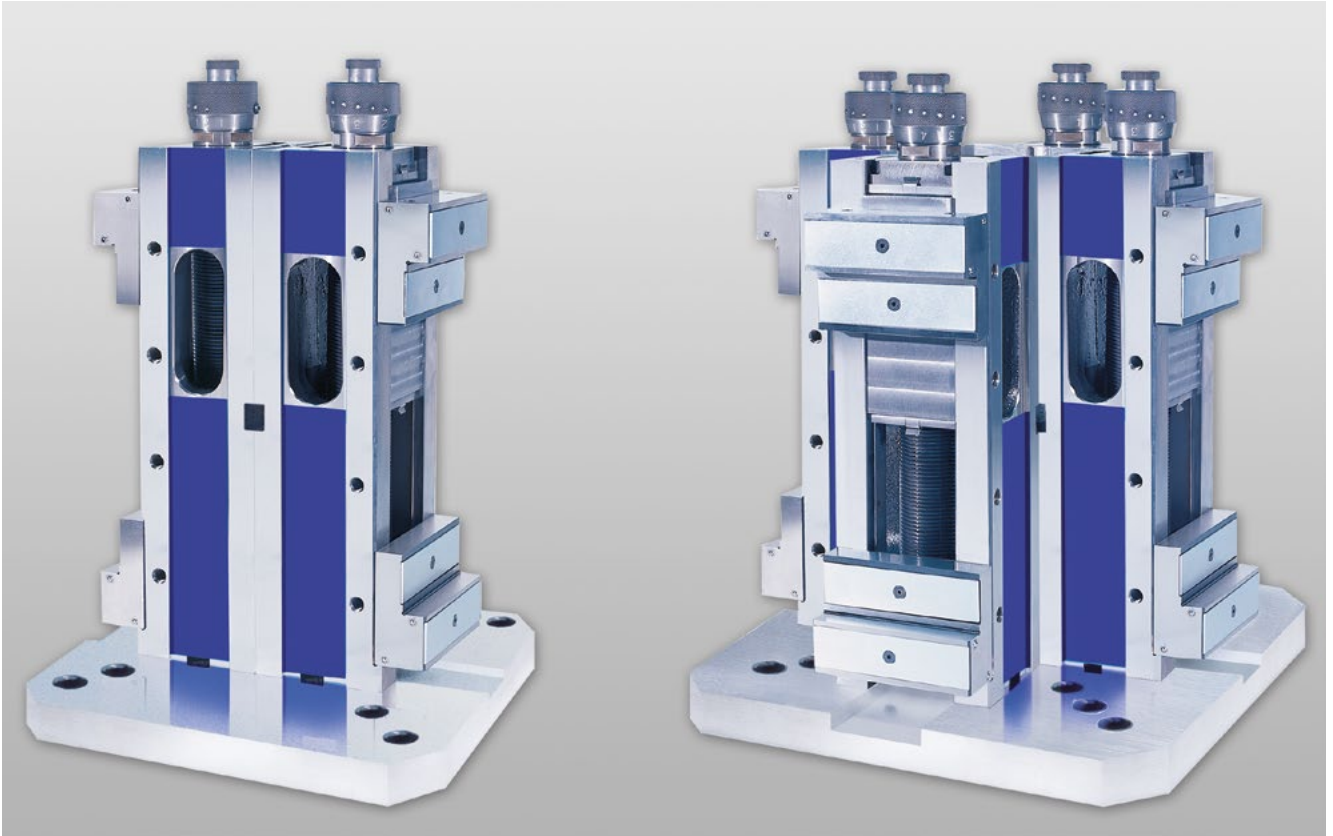
CNC HIGH-PRESSURE MACHINE VISE



Size b	Order no.		Basic body width b	Clamping range		Clamping force in kN	Weight in kg
	for horizontal use	for 3-level clamping set-up		Profile 1	Profile 2		
125	04.25.160.050.9	04.25.160.001.9	126	0 - 210	91 - 301	40	34
160	04.25.260.050.9	04.25.260.001.9	162	0 - 289	113 - 402	60	60

h	h1 ±0.01	h2	h3	L1	L2	L3	L4	L5	L6	L7	L8
140	100	108	22	445	499	200.5	22	111.5	157.5	150	50
165	115	123	30	580	655	288.5	25	176.5	233.5	-	-

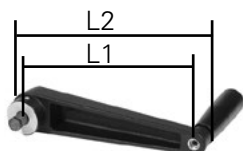
CNC HIGH-PRESSURE MACHINE VISE SET-UPS



We offer the optimal set-up for your special requirements

- The vertical layout of single clamping vises enables optimal accessibility to the machine spindle
- As opposed to the monoblock design, star set-ups feature a very versatile design for adaptation to custom requirements; they can also be dismantled into single vises, as required
- Flexibly manufactured base plates to fit your machine

CNC HIGH-PRESSURE MACHINE VISE ACCESSORIES



Hand crank standard design with retaining ring to prevent it from falling out due to machine vibrations

Size	Order no.	L1	L2	Width	Hexagon
160 – 200	03.15.203.002.4	160	190	127	SW 12



Hand crank in shortened design for use instead of the normal hand crank if the machine table clearance is too low

Size	Order no.	Length	Width	Hexagon
125 – 160	03.15.103.001.4	110	90	SW 12

Crank extension

For size	Order no.	Length	Hexagon
125	03.15.203.001.9	90 mm	SW 12



Smooth jaw, hardened, ground,



Smooth jaw, soft (1,2842), milled, for manufacture of form jaws



Jaw with axial grooves for firm gripping of workpieces

Size	Order no.	Height	Thickness
Smooth jaw, hardened			
125	01.25.152.014.4	39.2	12
160	01.10.201.004.4	49.2	16
Smooth jaw, soft			
125	01.11.105.002.5	39.2	12
160	01.11.205.002.4	49.2	16
Jaw with axial grooves			
125	01.11.105.001.5	39.2	12
160	01.11.205.001.5	49.2	16



Smooth jaw with profile, hardened and ground, for fewer support elements

Size	Order no.	Profile	Thickness	Height
125	01.11.105.003.5	3 x 6	12	39.2
125	01.11.105.008.5	5 x 10	12	39.2
160	01.11.205.003.4	5 x 8	16	49.2



Jaw with serration, hardened and ground

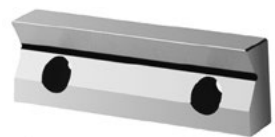
Size	Order no.	Height	Thick-ness	Gripper order no.	Thread
125	01.26.160.035.3	40	12	01.26.160.048.4	M10
160	01.26.260.030.3	50	16	01.26.260.080	M12

CNC HIGH-PRESSURE MACHINE VISE ACCESSORIES



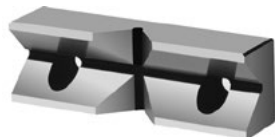
Grip jaw, hardened with profile

Size	Order no.	Height	Thickness	Profile
125	01.25.150.0002	40	12	3x3
160	01.25.260.0004	50	16	3x5



Prism jaws with horizontal prism 120°, hardened and ground

Size	Order no.	Height	Thick-ness	Clamping diameter	
				with 1 jaw	with 2 jaws
125	01.11.105.005.4	39.2	20	ø 9-50	ø 14-50



Prism jaws with horizontal and vertical prism 90°, hardened and ground

Size	Order no.	Height	Thick-ness	Clamping width	
				1 jaw	2 jaws
125	01.11.105.004.4	39.2	28	ø 15-42	ø 24-42
160	01.11.205.004.3	49.2	32	ø 18-50	ø 28-50



Pendulum jaws with smooth pendulum element, hardened and ground, for clamping conical workpieces

Size	Order no.	Height	Thickness
125	04.13.125.150.9	39.2	43
160	04.13.160.150.9	49.2	52



Pull-down jaws with exchangeable jaw. The workpiece is fixed securely and pressed against the support surface

Size	Order no.	Height	Thickness
125	04.13.125.200.9	39.2	25
160	04.13.160.200.9	49.2	28



Pull-down jaws for blanks with inserted spring plate for clamping blanks. The spring plates ensure a secure grip and a pull-down effect

Size	Order no.	Height	Thickness
125	04.13.125.250.9	40	21
160	04.13.160.250.9	50	24



Multi-jaws for flexible use with grip insert, as well as pendulum jaws and support elements

Size	Profile jaw, fixed Order no.	Profile jaw mobile Order no.	Length	Width	Height
125	04.25.160.1000	04.25.160.1001	170	105	25
160	04.25.260.1000	04.25.260.1001	200	115	25

CNC HIGH-PRESSURE MACHINE VISE ACCESSORIES

CNC accessories



Pendulum jaw to fit on movable multi-jaw for clamping non-parallel workpieces, cast parts and formed workpieces, scope of delivery: includes 2 carbide inerts

For size	Order no.	Length	Width	Height
125	04.25.150.052	156	65	20
160	04.25.265.1002	196	76	23



Universal top jaws with angular adjustment, hardened and ground

Size	Order no.	Height	Thickness
125	04.13.125.400.9	42	10
160	04.13.160.400.9	52	10



Adjustable workpiece end-stop

For size	Order no.	Thread
125	03.11.008.001.4	M 12



Profile rails

For size	Order no.	Height	Thickness
125	03.25.160.022.9	13	3
125	03.25.160.023.9	22	3
125	03.25.160.024.9	35	3
125	03.26.160.002.9	39	3
125	04.25.150.060	35	3
125	04.25.150.061	15	3
160	03.25.260.022.9	14	3
160	03.25.260.023.9	30	3
160	03.25.260.024.9	44	3
160	03.26.260.0001	49	3



CNC pendulum jaws with serration and spring plate, 360° pendulum motion

Size	Order no.	Height	Thickness
125	03.26.160.005.3	40	80
160	03.26.260.005.3	50	104

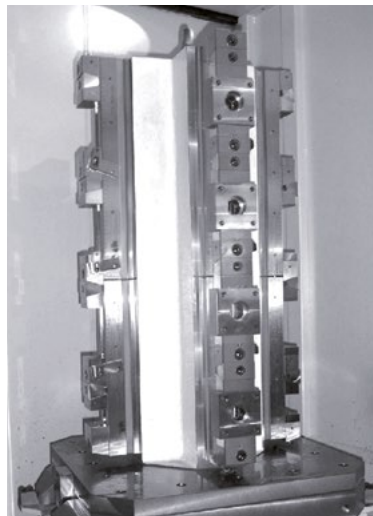
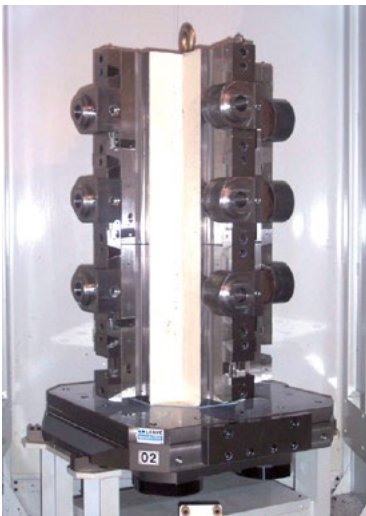


VBA multiple vise

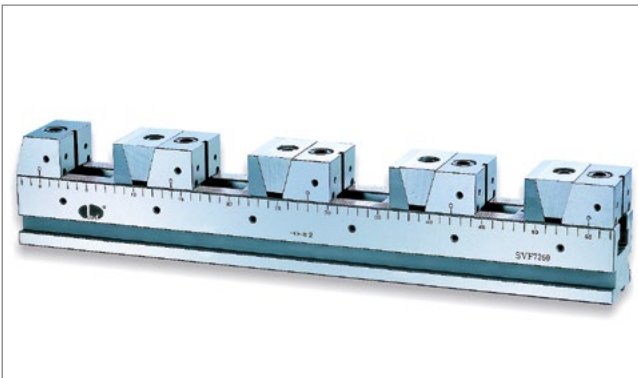
MODULAR MULTIPLE VISE

- A** With single-sided zero-point orientation
- B** With double-sided zero-point orientation

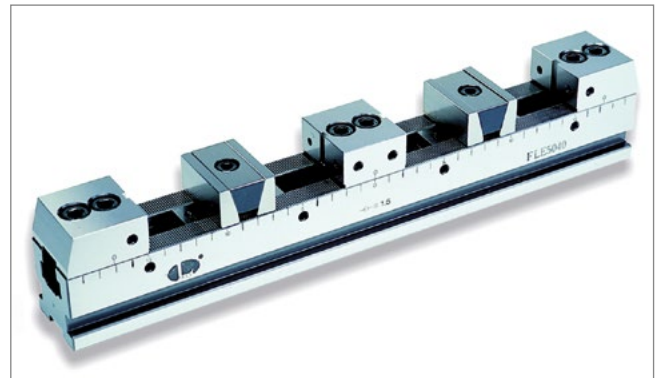
- BE** With double-sided zero-point orientation, narrower positive stops
- C** With flexible basic body



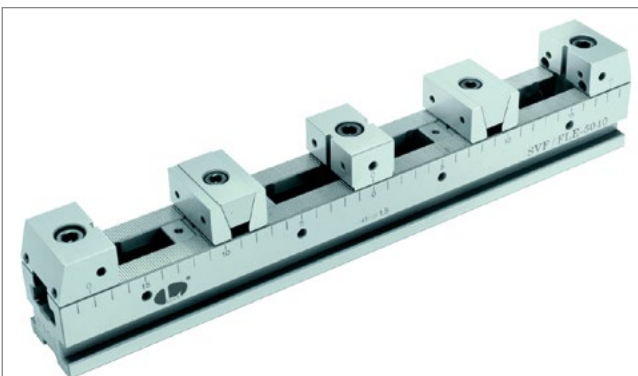
SVF-A



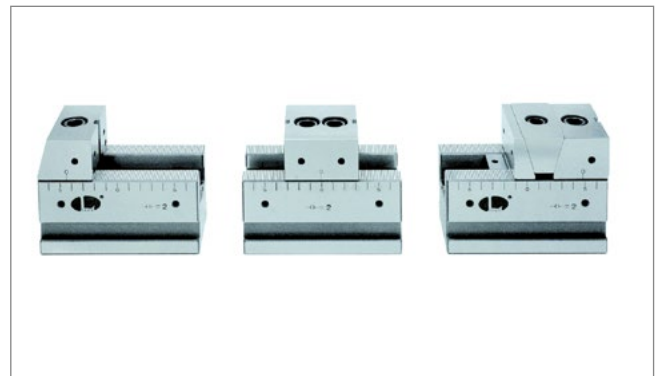
SVF-B



SVF-BE

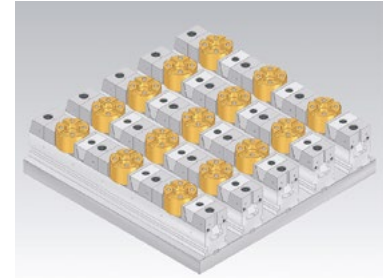
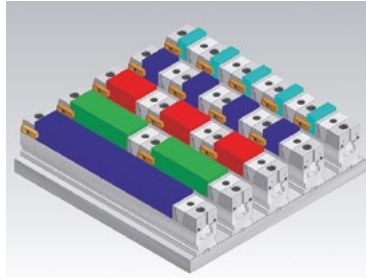


SVF-C

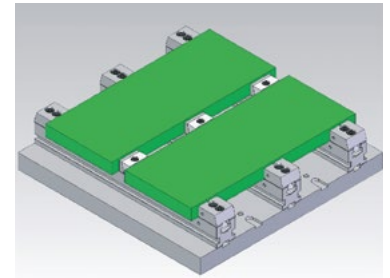
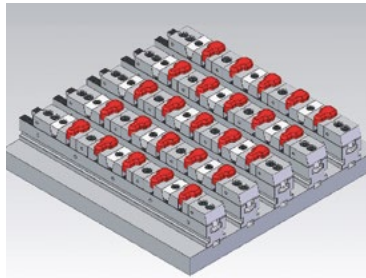


MODULAR MULTIPLE VISE CLAMPING EXAMPLES

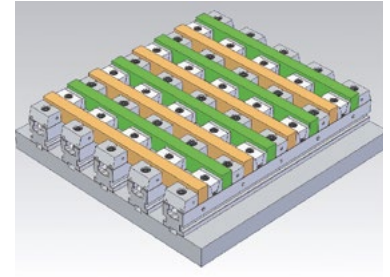
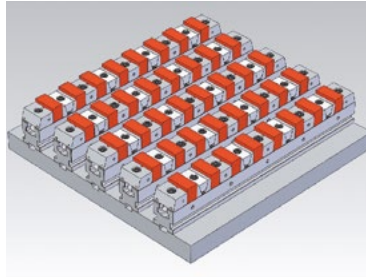
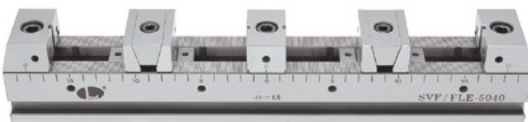
SVF-A



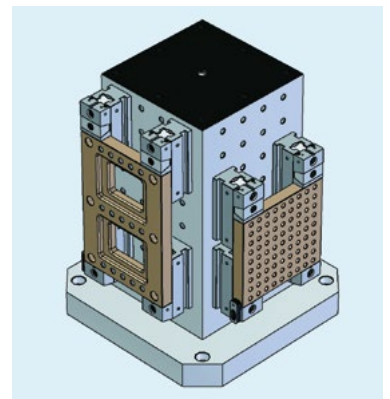
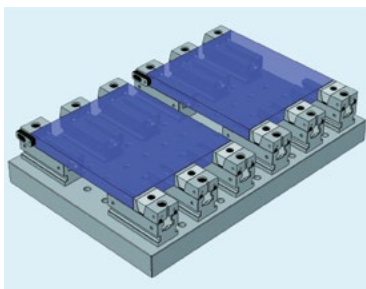
SVF-B



SVF-BE



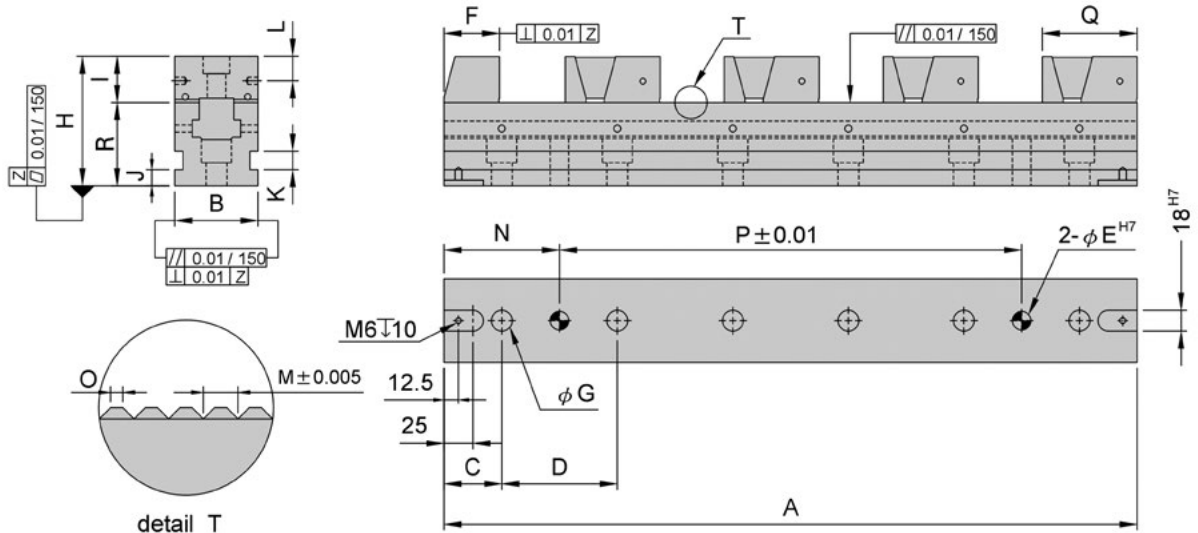
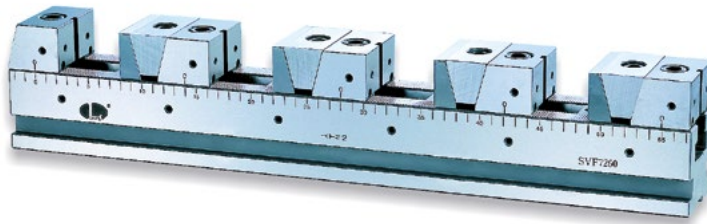
SVF-C



MODULAR MULTIPLE VISE

SVF-A

Single-sided zero-point orientation



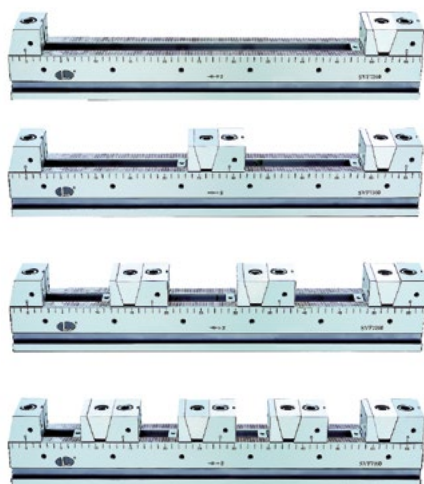
Ref.	A	B ±0.01	C	D	E	F	G	H	I	J	K	L	M ± 0.005	N	O	P	Q	R	kg
772-SVF-A 5030-80*	300	50	30	80	12	35	14	75	24.8	10	12	12.5	1.5	70	0.5	160	60.2	50	6.5
772-SVF-A 5030-100*	300	50	50	100	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	100	60.2	50	6.5
772-SVF-A 5040-80	400	50	40	80	12	35	14	75	24.8	10	12	12.5	1.5	80	0.5	240	60.2	50	8.5
772-SVF-A 5040-100	400	50	50	100	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	200	60.2	50	8.5
772-SVF-A 5050-80	500	50	50	80	12	35	14	75	24.8	10	12	12.5	1.5	90	0.5	320	60.2	50	10
772-SVF-A 5050-100	500	50	50	100	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	300	60.2	50	10
772-SVF-A 5060-80	600	50	60	80	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	400	60.2	50	11.5
772-SVF-A 5060-100	600	50	50	100	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	400	60.2	50	11.5
772-SVF-A 5070-80	700	50	70	80	12	35	14	75	24.8	10	12	12.5	1.5	110	0.5	480	60.2	50	13
772-SVF-A 5070-100	700	50	50	100	12	35	14	75	24.8	10	12	12.5	1.5	100	0.5	500	60.2	50	13
772-SVF-A 7240-100*	400	72	50	100	16	48	18	112	39.7	14	16	21.3	2.0	100	0.7	200	82.2	72	19
772-SVF-A 7250-100	500	72	50	100	16	48	18	112	39.7	14	16	21.3	2.0	100	0.7	300	82.2	72	24.5
772-SVF-A 7260-100	600	72	50	100	16	48	18	112	39.7	14	16	21.3	2.0	100	0.7	400	82.2	72	27
772-SVF-A 7270-100	700	72	50	100	16	48	18	112	39.7	14	16	21.3	2.0	100	0.7	500	82.2	72	30
772-SVF-A10040-100*	400	100	50	100	16	48	18	115	43.1	14	16	22.2	2.5	100	0.85	200	93.2	72	29
772-SVF-A10050-100	500	100	50	100	16	48	18	115	43.1	14	16	22.2	2.5	100	0.85	300	93.2	72	37
772-SVF-A10060-100	600	100	50	100	16	48	18	115	43.1	14	16	22.2	2.5	100	0.85	400	93.2	72	41
772-SVF-A10070-100	700	100	50	100	16	48	18	115	43.1	14	16	22.2	2.5	100	0.85	500	93.2	72	45

+ only 3 clamping stations, otherwise 4 clamping stations standard

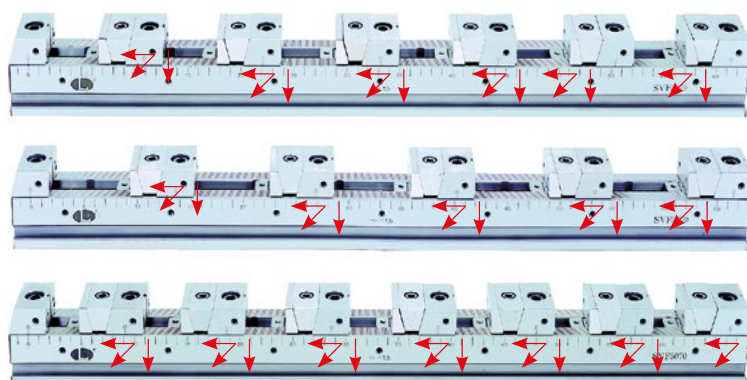
MODULAR MULTIPLE VISE

SVF-A

Maximum width of the workpieces that can be clamped



 Direction of the clamping forces



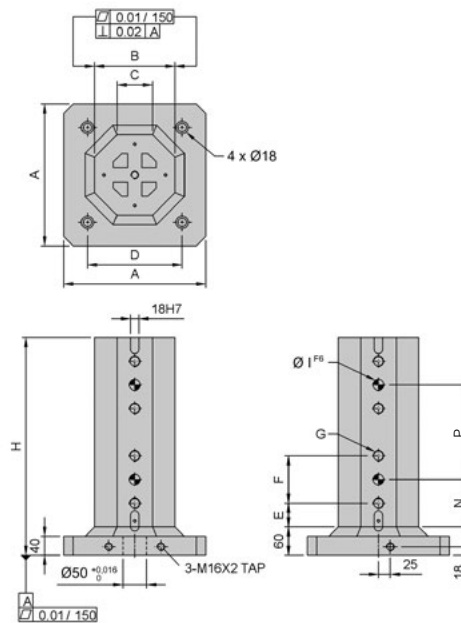
	1 workpiece	2 workpieces	3 workpieces	4 workpieces
				
772-SVF-A 5030	203 mm	71 mm	27 mm	—
772-SVF-A 5040	303 mm	121 mm	60 mm	30 mm
772-SVF-A 5050	403 mm	171 mm	94 mm	55 mm
772-SVF-A 5060	503 mm	221 mm	127 mm	80 mm
772-SVF-A 5070	603 mm	271 mm	160 mm	105 mm
772-SVF-A 7240	269 mm	93 mm	35 mm	—
772-SVF-A 7250	369 mm	143 mm	68 mm	30 mm
772-SVF-A 7260	469 mm	193 mm	101 mm	55 mm
772-SVF-A 7270	569 mm	243 mm	135 mm	80 mm
772-SVF-A10040	258 mm	82 mm	24 mm	—
772-SVF-A10050	358 mm	132 mm	57 mm	19 mm
772-SVF-A10060	458 mm	182 mm	90 mm	44 mm
772-SVF-A10070	558 mm	232 mm	124 mm	69 mm

	5 workpieces	6 workpieces	7 workpieces
			
772-SVF-A 5030	—	—	—
772-SVF-A 5040	12 mm	—	—
772-SVF-A 5050	32 mm	16 mm	—
772-SVF-A 5060	52 mm	33 mm	20 mm
772-SVF-A 5070	72 mm	50 mm	34 mm
772-SVF-A 7240	—	—	—
772-SVF-A 7250	—	—	—
772-SVF-A 7260	28 mm	—	—
772-SVF-A 7270	48 mm	26 mm	—
772-SVF-A10040	—	—	—
772-SVF-A10050	—	—	—
772-SVF-A10060	17 mm	—	—
772-SVF-A10070	37 mm	—	—

MODULAR MULTIPLE VISE

SVF-CB

Tower, excluding multiple vise



Ref.	A	B	C	D	E	F	G	H	I	N	P	kg
772-SVF 5030-300CB8-80	300	170	55	200	90	80	M12	360	12	130	160	61
772-SVF 5030-300CB8-100	300	170	55	200	110	100	M12	360	12	160	100	61
772-SVF 5030-320CB8-80	320	170	55	200	90	80	M12	360	12	130	160	65
772-SVF 5030-320CB8-100	320	170	55	200	110	100	M12	360	12	160	100	65
772-SVF 5040-300CB8-80	300	170	55	200	100	80	M12	460	12	140	240	73
772-SVF 5040-300CB8-100	300	170	55	200	110	100	M12	460	12	160	200	73
772-SVF 5040-320CB8-80	320	170	55	200	100	80	M12	460	12	140	240	76
772-SVF 5040-320CB8-100	320	170	55	200	110	100	M12	460	12	160	200	76
772-SVF 5050-400CB8-80	400	200	55	320	110	80	M12	560	12	150	320	118
772-SVF 5050-400CB8-100	400	200	55	320	110	100	M12	560	12	160	300	118
772-SVF 5050-500CB8-80	500	250	55	400	110	80	M12	560	12	150	320	163
772-SVF 5050-500CB8-100	500	250	55	400	110	100	M12	560	12	160	300	163
772-SVF 5060-400CB8-80	400	200	55	320	120	80	M12	660	12	160	400	132
772-SVF 5060-400CB8-100	400	200	55	320	110	100	M12	660	12	160	400	132
772-SVF 5060-500CB8-80	500	250	55	400	120	80	M12	660	12	160	400	181
772-SVF 5060-500CB8-100	500	250	55	400	110	100	M12	660	12	160	400	181
772-SVF 5070-500CB8-80	500	250	55	400	110	80	M12	760	12	130	480	199
772-SVF 5070-500CB8-100	500	250	55	400	130	100	M12	760	12	160	500	199
772-SVF 7240-300CB8-100	300	170	75	200	110	100	M16	460	16	160	200	76
772-SVF 7250-400CB8-100	400	200	75	320	110	100	M16	560	16	160	300	117
772-SVF 7250-500CB8-100	500	250	75	400	110	100	M16	560	16	160	300	167
772-SVF 7260-400CB8-100	400	200	75	320	110	100	M16	660	16	160	400	130
772-SVF 7260-500CB8-100	500	250	75	400	110	100	M16	660	16	160	500	185
772-SVF 7270-400CB8-100	400	250	75	320	110	100	M16	760	16	160	500	186
772-SVF 7270-500CB8-100	500	250	72	400	110	100	M16	760	16	160	500	204
772-SVF 10060-500CB8-100	500	250	105	400	110	100	M16	660	16	160	400	194
772-SVF 10070 500CB8-100	500	250	105	400	110	100	M16	760	16	160	500	21
772-SVF 10060-630CB8-100	630	300	105	500	110	100	M16	660	16	160	400	256
772-SVF 10070 630CB8-100	630	300	105	500	110	100	M16	760	16	160	500	279

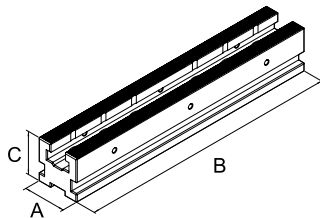
Also suitable for  zero-point clamping system

MODULAR MULTIPLE VISE

SPARE PARTS

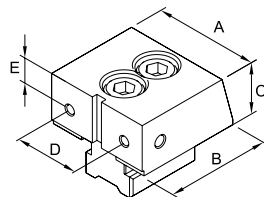
SVF

Basic body



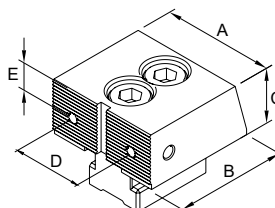
Ref.	A	B	C	kg	Use of series SVF -			
					A	B	BE	C
772-AB01-5030-80	50	300	50	4.0	•	•		
772-AB01-5030-100	50	300	50	4.0	•	•		
772-AB01-5040-80	50	400	50	5.3	•	•		
772-AB01-5040-100	50	400	50	5.3	•	•		
772-AB01-5050-80	50	500	50	7.0	•	•		
772-AB01-5050-100	50	500	50	6.7	•	•		
772-AB01-5060-80	50	600	50	8.0	•	•		
772-AB01-5060-100	50	600	50	8.0	•	•		
772-AB01-5070-80	50	700	50	9.5	•	•		
772-AB01-5070-100	50	700	50	9.5	•	•		
772-AB01-7240-100	72	400	72	11.2	•	•		
772-AB01-7250-100	72	500	72	14.0	•	•		
772-AB01-7260-100	72	600	72	17.0	•	•		
772-AB01-7270-100	72	700	72	20.0	•	•		
772-AB01-10050-100	100	500	72	20.0	•	•		
772-AB01-10060-100	100	600	72	24.0	•	•		
772-AB01-10070-100	100	700	72	28.0	•	•		

Stationary jaw, extra strong



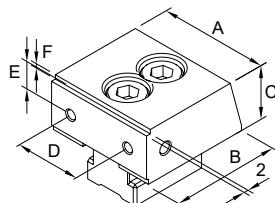
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-AB02-50	50	50	25	30	12.5	0.6		•		
772-SVF-AB02-72	72	74	40	44	21.5	2.0		•		
772-SVF-AB02-100	100	75	43	64	22.0	2.6		•		

Stationary jaw, grooved, extra strong



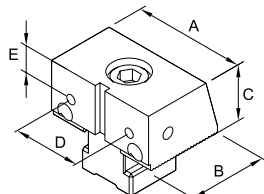
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-ABG02-50	50	50	25	30	12.5	0.4		•		
772-SVF-ABG02-72	72	74	40	44	21.5	1.1		•		
772-SVF-ABG02-100	100	75	43	64	22.0	1.7		•		

Stationary profile jaw, extra strong



Ref.	A	B	C	D	E	F	kg	Use of series SVF -			
								A	B	BE	C
772-SVF-ABS02-502	50	50	25	30	12.5	2	0.6				•
772-SVF-ABS02-505	50	50	25	30	12.5	5	0.6				•
772-SVF-ABS02-722	72	74	40	44	21.5	2	2.0				•
772-SVF-ABS02 725	72	74	40	44	21.5	5	2.0				•
772-SVF-ABS02-1002	100	75	43	64	22.0	2	2.6				•
772-SVF-ABS02-1005	100	75	43	64	22.0	5	2.6				•

Stationary jaw, standard



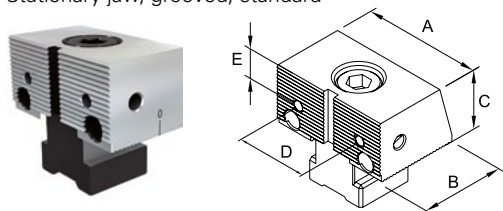
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-AB03-50	50	35	25	30	12.5	0.4	•		•	•
772-SVF-AB03-72	72	48	40	44	21.5	1.1	•		•	•
772-SVF-AB03-100	100	48	43	64	22.0	1.7	•		•	•

MODULAR MULTIPLE VISE

SPARE PARTS

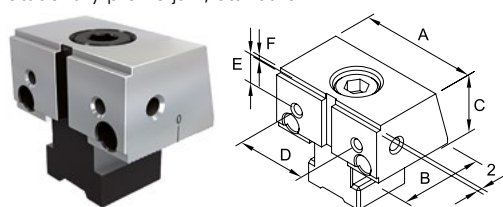
SVF

Stationary jaw, grooved, standard



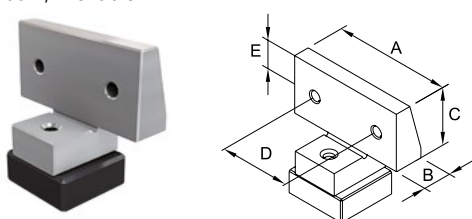
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-ABG03-50	50	50	25	30	12.5	0.4	•		•	•
772-SVF-ABG03-72	72	74	40	44	21.5	1.1	•		•	•
772-SVF-ABG03-100	100	75	43	64	22.0	1.7	•		•	•

Stationary profile jaw, standard



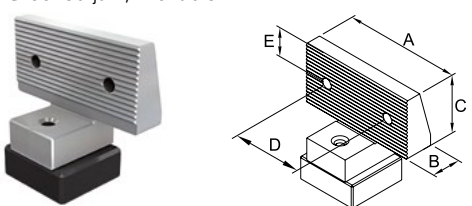
Ref.	A	B	C	D	E	F	kg	Use of series SVF -			
								A	B	BE	C
772-SVF-ABS03-502	50	35	25	30	12.5	2	0.4	•		•	•
772-SVF-ABS03-505	50	35	25	30	12.5	5	0.4	•		•	•
772-SVF-ABS03-722	72	48	40	44	21.5	2	1.1	•		•	•
772-SVF-ABS03-725	72	48	40	44	21.5	5	1.1	•		•	•
772-SVF-ABS03-1002	100	48	43	64	22.0	2	1.7	•		•	•
772-SVF-ABS03-1005	100	48	43	64	22.0	5	1.7	•		•	•

Jaw, movable



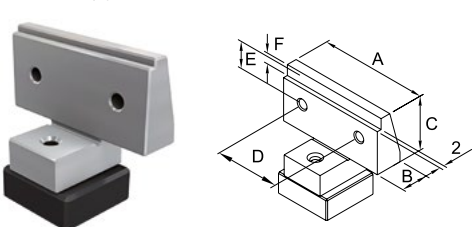
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-AB04-50	50	12	24.3	30	12.5	0.2	•	•	•	•
772-SVF-AB04-72	72	18	39.3	44	21.5	0.6	•	•	•	•
772-SVF-AB04-100	100	21	42.0	64	22.0	1.0	•	•	•	•

Grooved jaw, movable



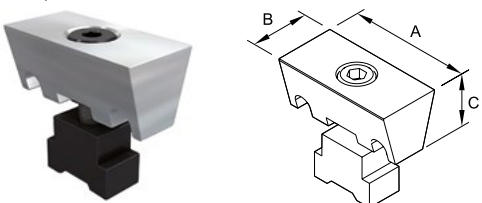
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-ABG04-50	50	12	24.3	30	12.5	0.2	•	•	•	•
772-SVF-ABG04-72	72	18	39.3	44	21.5	0.6	•	•	•	•
772-SVF-ABG04-100	100	21	42.0	64	22.0	1.0	•	•	•	•

Stationary jaw, movable



Ref.	A	B	C	D	E	F	kg	Use of series SVF -			
								A	B	BE	C
772-SVF-ABS04-502	50	12	24.3	30	12.5	2	0.2	•	•	•	•
772-SVF-ABS04-505	50	12	24.3	30	12.5	5	0.2	•	•	•	•
772-SVF-ABS04-722	72	18	39.3	44	21.5	2	0.6	•	•	•	•
772-SVF-ABS04-725	72	18	39.3	44	21.5	5	0.6	•	•	•	•
772-SVF-ABS04-1002	100	21	42.0	64	22.0	2	1.0	•	•	•	•
772-SVF-ABS04-1005	100	21	42.0	64	22.0	5	1.0	•	•	•	•

Jaw, movable



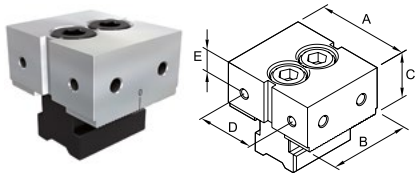
Ref.	A	B	C	kg	Use of series SVF -			
					A	B	BE	C
772-SVF-A01-50	50	24	22	0.2	•			
772-SVF-A01-72	72	35	35	0.6	•			
772-SVF-A01-100	100	45	38	1.2	•			

MODULAR MULTIPLE VISE

SPARE PARTS

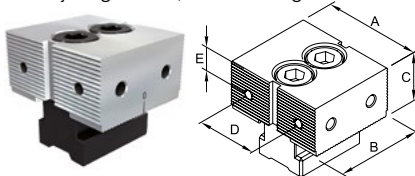
SVF

Fixed jaw, extra strong



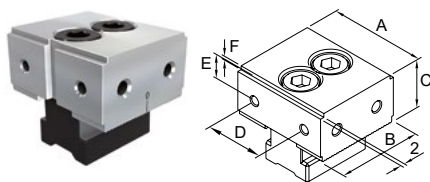
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-B01-50	50	44	25	30	12.5	0.5		•		•
772-SVF-B01-72	72	65	40	44	21.5	1.8		•		•
772-SVF-B01-100	100	70	43	64	22.0	2.6		•		•

Fixed jaw grooved, extra strong



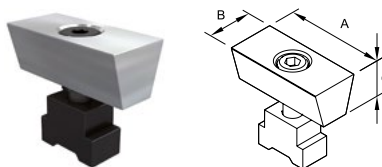
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-BG01-50	50	44	25	30	12.5	0.5		•		•
772-SVF-BG01-72	72	65	40	44	21.5	1.8		•		•
772-SVF-BG01-100	100	70	43	64	22.0	2.6		•		•

Fixed profile jaw, extra strong



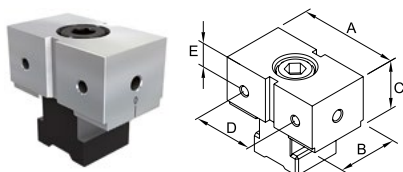
Ref.	A	B	C	D	E	F	kg	Use of series SVF -			
								A	B	BE	C
772-SVF-BS01-502	50	44	25	30	12.5	2	0.5		•		•
772-SVF-BS01-505	50	44	25	30	12.5	5	0.5		•		•
772-SVF-BS01-722	72	65	40	44	21.5	2	1.8		•		•
772-SVF-BS01 725	72	65	40	44	21.5	5	1.8		•		•
772-SVF-BS01-1002	100	70	43	64	22.0	2	2.6		•		•
772-SVF-BS01-1005	100	70	43	64	22.0	5	2.6		•		•

Jaw, movable



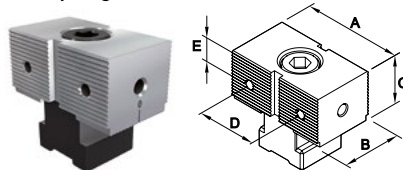
Ref.	A	B	C	kg	Use of series SVF -			
					A	B	BE	C
772-SVF-B02-50	50	22.5	18.0	0.2		•	•	
772-SVF-B02-72	72	35.0	29.0	0.6		•	•	
772-SVF-B02-100	100	45.0	32.9	1.3		•	•	

Fixed jaw, standard



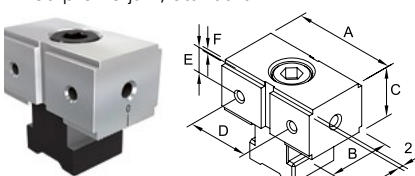
Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-B03-50	50	30	25	30	12.5	0.4		•	•	
772-SVF-B03-72	72	40	40	44	21.5	1.1		•	•	
772-SVF-B03-100	100	44	43	64	22.0	1.7		•	•	

Fixed jaw grooved, standard



Ref.	A	B	C	D	E	kg	Use of series SVF -			
							A	B	BE	C
772-SVF-BG03-50	50	30	25	30	12.5	0.4		•	•	
772-SVF-BG03-72	72	40	40	44	21.5	1.1		•	•	
772-SVF-BG03-100	100	44	43	64	22.0	1.7		•	•	

Fixed profile jaw, standard



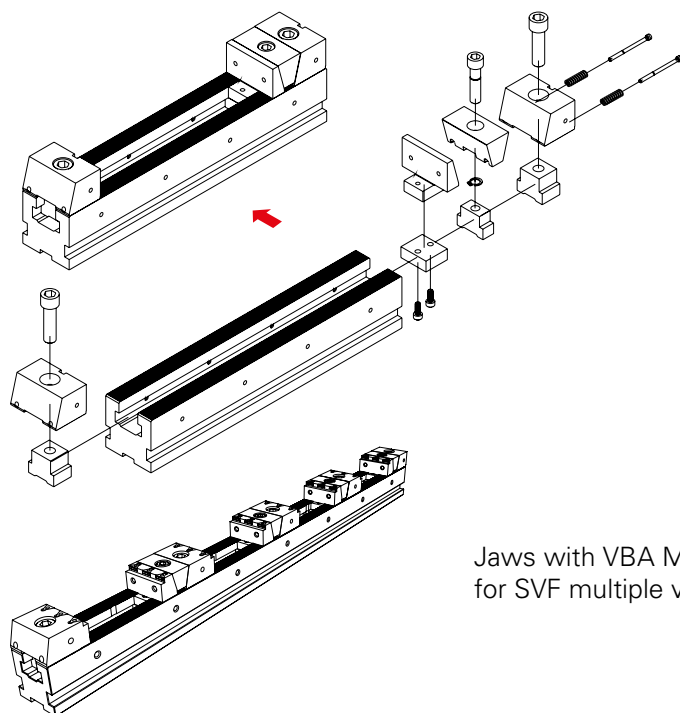
Ref.	A	B	C	D	E	F	kg	Use of series SVF -			
								A	B	BE	C
772-SVF-BS03-502	50	30	25	30	12.5	2	0.4		•	•	
772-SVF-BS03-505	50	30	25	30	12.5	5	0.4		•	•	
772-SVF-BS03-722	72	40	40	44	21.5	2	1.1		•	•	
772-SVF-BS03 725	72	40	40	44	21.5	5	1.1		•	•	
772-SVF-BS03 1002	100	44	43	64	22.0	2	1.7		•	•	
772-SVF-BS03-1005	100	44	43	64	22.0	5	1.7		•	•	

MODULAR MULTIPLE VISE

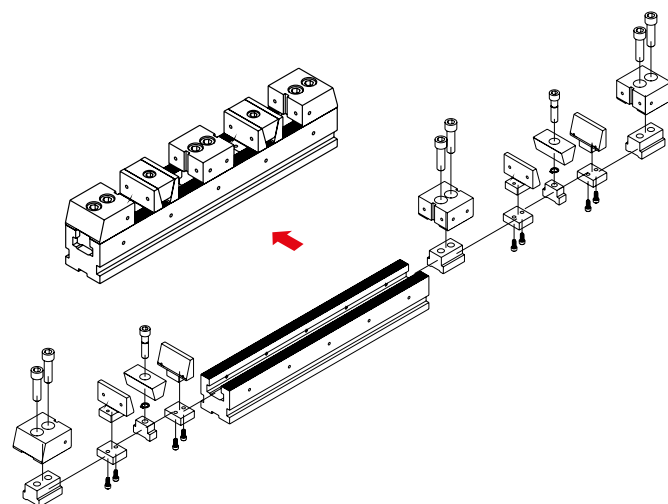
SPARE PARTS

SVF

SVF-A

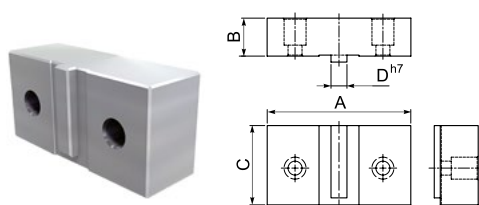


SVF-B



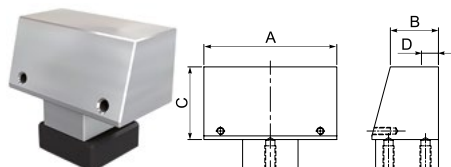
Jaws with VBA MasterGrip clamping inserts
for SVF multiple vise (VBA MasterGrip see page 62)

Fixed soft jaw



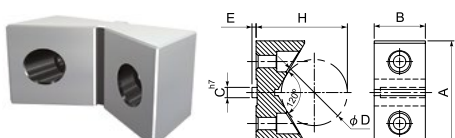
Ref.	A	B	C	Dh7	kg	Use of series SVF -		
						A	B	C
772-SVF-S01-50	50	17	25	5	0.2	•	•	•
772-SVF-S01-72	72	19	40	8	0.4	•	•	•
772-SVF-S01-100	100	25	43	10	0.9	•	•	•

Soft jaw, movable



Ref.	A	B	C	D	kg	Use of series SVF -		
						A	B	C
772-SVF-S02-50	50	21	24.5	13	0.3	•	•	•
772-SVF-S02-72	72	26	39.5	19	1.0	•	•	•
772-SVF-S02-100	100	35	42.5	25	2.0	•	•	•

Prism jaw



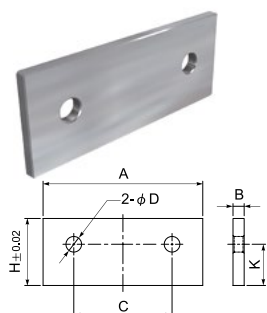
Ref.	A	B	C	D	E	H	D max	kg	Use of series SVF -		
									A	B	C
772-SVF-S03-50	50	25	5	42	2	54.98	Ø 70	0.2	•	•	•
772-SVF-S03-72	72	40	8	62	3	82.45	Ø 110	0.6	•	•	•
772-SVF-S03-100	100	43	10	62	4	90.24	Ø 160	1.2	•	•	•

MODULAR MULTIPLE VISE

SPARE PARTS

SVF

Base



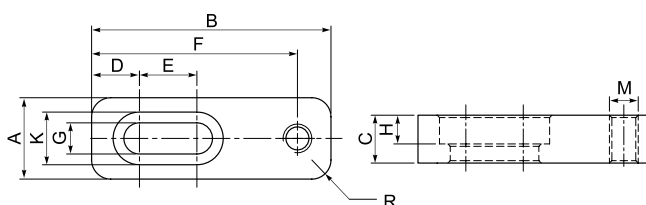
Ref.	A	B	C	D	H	K	kg	Use of series SVF -		
								A	B	C
772-SVF-S04-50-17	49.5	5	30	6	17	12.3	0.03	•	•	•
772-SVF-S04-50-20	49.5	5	30	6	20	12.3	0.04	•	•	•
772-SVF-S04-50-22	49.5	3	30	6	22	12.3	0.03	•	•	•
772-SVF-S04-72-25	71.5	5	44	7	25	18.4	0.07	•	•	•
772-SVF-S04-72-30	71.5	5	44	7	30	18.4	0.08	•	•	•
772-SVF-S04-72-35	71.5	5	44	7	35	18.4	0.10	•	•	•
772-SVF-S04-72-37	71.5	3	44	7	37	18.4	0.15	•	•	•
772-SVF-S04-100-29	99.5	8	64	9	29	21.0	0.18	•	•	•
772-SVF-S04-100-33	99.5	8	64	9	33	21.0	0.21	•	•	•
772-SVF-S04-100-38	99.5	8	64	9	38	21.0	0.24	•	•	•
772-SVF-S04-100-40	99.5	5	64	9	40	21.0	0.10	•	•	•

Spacer for end-stop rail



Ref.	A	B	C	kg	Use of series SVF -		
					A	B	C
772-SVF-S05-10	10	18	6.5	0.01	•	•	•
772-SVF-S05-15	15	18	6.5	0.02	•	•	•
772-SVF-S05-23	23	18	6.5	0.03	•	•	•
772-SVF-S05-100-15	15	25	9	0.03	•	•	•
772-SVF-S05-100-20	20	25	9	0.04	•	•	•
772-SVF-S05-100-25	25	25	9	0.05	•	•	•

End-stop for workpiece

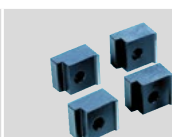


Ref.	A	B	C	D	E	F	G	H	K	M	R	kg	Use of series SVF -		
													A	B	C
772-SVF-S06-50	17	45	10	10	12	38	6.5	6	11	M6	4	0.03	•	•	•
772-SVF-S06-72	17	50	10	10	12	43	6.5	6	11	M6	4	0.04	•	•	•
772-SVF-S06-100	25	55	15	11.5	16	45	9.0	8.5	14	M8	5	0.14	•	•	•

Mounting elements included with all SVF multiple vises



T-slot nuts



Brackets



Screws



Positioning pins



Positioning keys



Allen wrench

MODULAR MULTIPLE VISE TORQUES

Clamping force F (kg)

Torque NM	SVF 50...	SVF 72...	SVF 100...
10			
15			
20			
25			
30	870	780	780
35	1100	1030	900
40	1400	1150	1050
50	2000	1300	1300
60		1700	1700
70		2000	1820
80		2300	2150
90			2350
100			2700
110			
120			
130			
140			
150			
160			
170			
180			

Please be aware that the clamping force depends to a large extent on the lubrication of the spindle and contact surfaces!

- Table applies to cleaned and lubricated spindles!
- Deviations of $\pm 10\%$ are possible

748-76-03 e

748-76-01-MSL

VB^{SWISS}
centro 76

VBA Eco Line centric vise

5581 0157 001

vb SWISS *centro 76*

SWISS MADE

For 5-sided machining of blanks

Standard design with pendulum jaw or floating center jaw

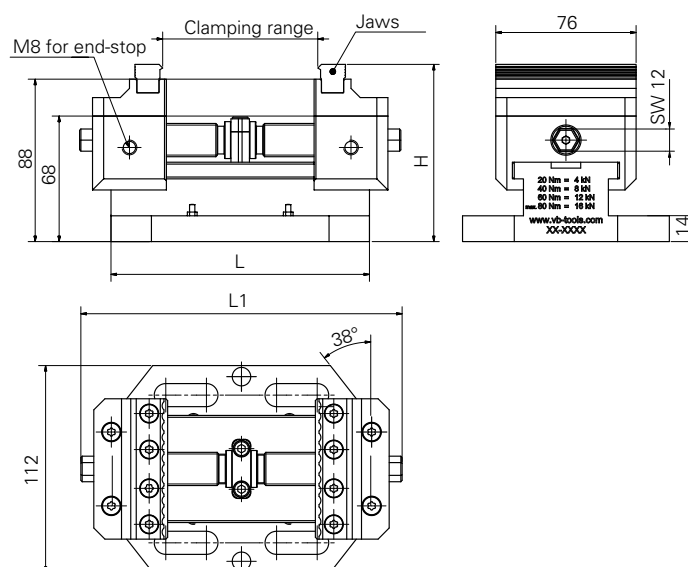
- Excellent accessibility
- High holding power
- Diverse mounting options are standard
- Pendulum jaw $\pm 2^\circ$ for blanks
- Jaw width 76 mm, clamping range up to 214 mm



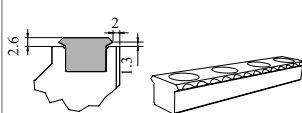
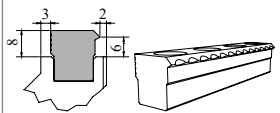
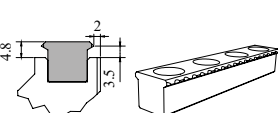
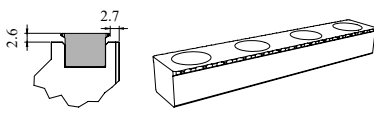
vb centro 76

STANDARD DESIGN

Model 748-76



Jaws

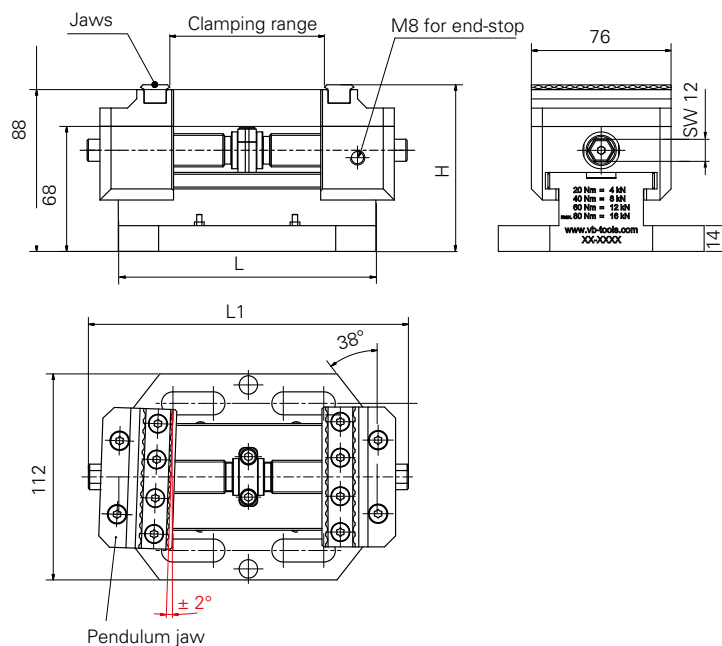
-ST  Grip jaw	-RG  Serrated/grip jaw	-AL  Grip jaw for aluminum	-L  Form fit jaws compatible with embossing systems
---	--	---	---

Model	Jaw	H	Clamping range	L	L1
748-76-140	- ST	90.6	5 – 74 mm 44 – 120 mm	140	174
	- RG	96.0			
	- AL	92.4			
	- L	90.6			
748-76-240	- ST	90.6	5 – 174 mm 45 – 214 mm	240	274
	- RG	96.0			
	- AL	92.4			
	- L	90.6			

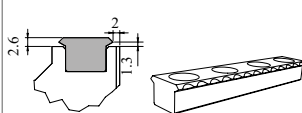
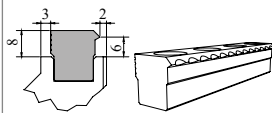
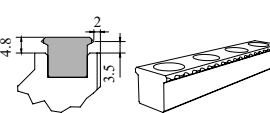
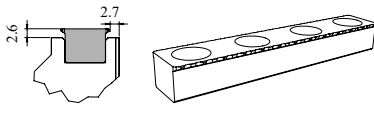
Example order: 1 pc. 748-76-140-ST

vb^{swiss} centro 76 **WITH PENDULUM JAW**

Model 748-76-P



Jaws

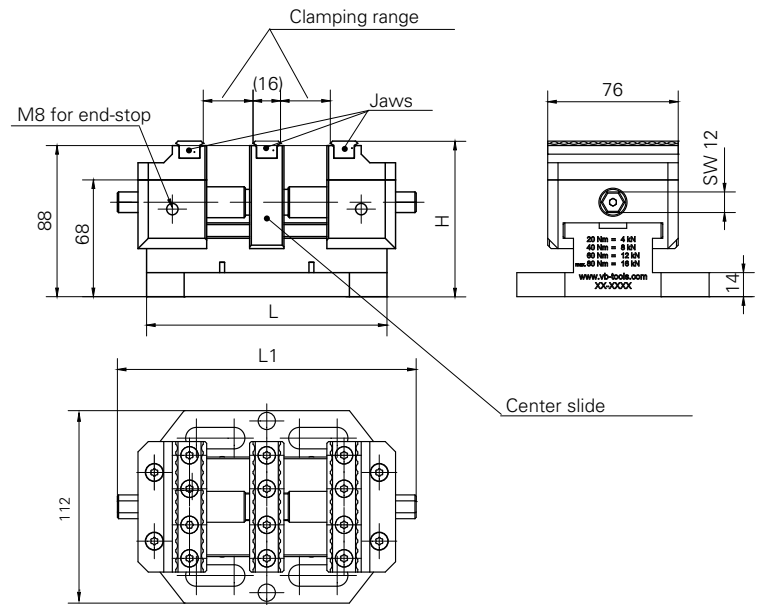
-ST  Grip jaw	-RG  Serrated/grip jaw	-AL  Grip jaw for aluminum	-L  Form fit jaws compatible with embossing systems
---	--	---	---

Model	Jaw	H	Clamping range	L	L1
748-76-140P	- ST	90.6	15 – 74 mm 60 – 120 mm	140	174
	- RG	96.0			
	- AL	92.4			
	- L	90.6			
748-76-240P	- ST	90.6	15 – 174 mm 60 – 214 mm	240	274
	- RG	96.0			
	- AL	92.4			
	- L	90.6			

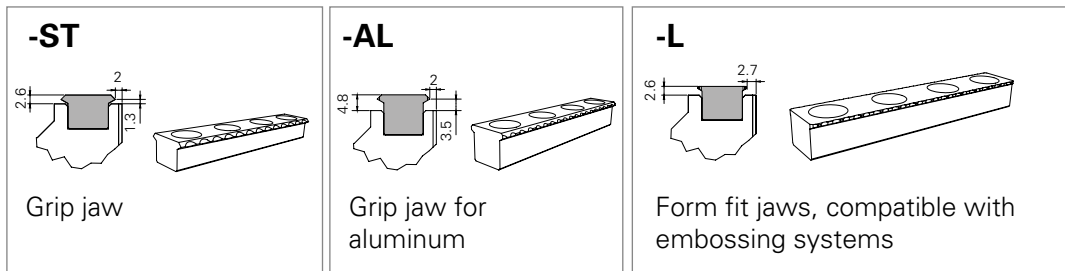
Example order: 1 pc. 748-76-140P-ST

vb centro 76 **WITH CENTER SLIDE**

Model 748-76-M



Jaws



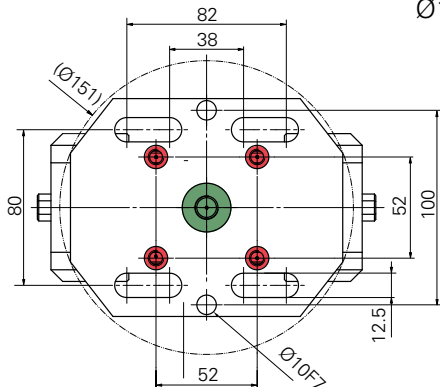
Model	Jaw	H	Clamping range	L	L1
748-76-140M	- ST	90.6	5 – 30 mm 25 – 50 mm	140	174
	- AL	92.4			
	- L	90.6			
748-76-240M	- ST	90.6	5 – 80 mm 25 – 100 mm	240	274
	- AL	92.4			
	- L	90.6			

Example order: 1 pc. 748-76-140M-ST

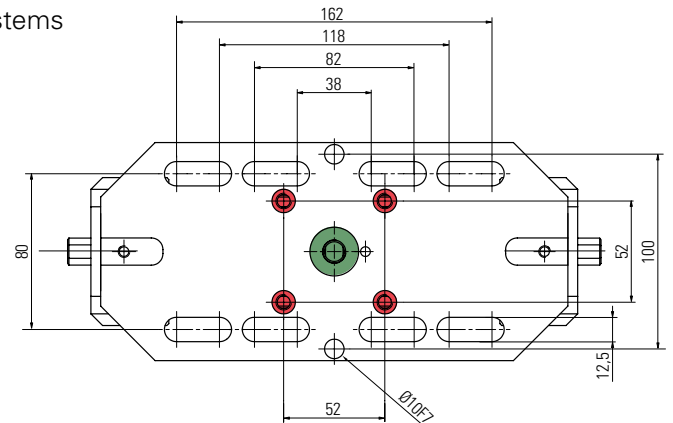
vb centro 76 **MOUNTING OPTIONS**

Model 748-76-140.....

- vb DockLock® Ø25 / M12
- Zero-point clamping systems Ø12 / M8

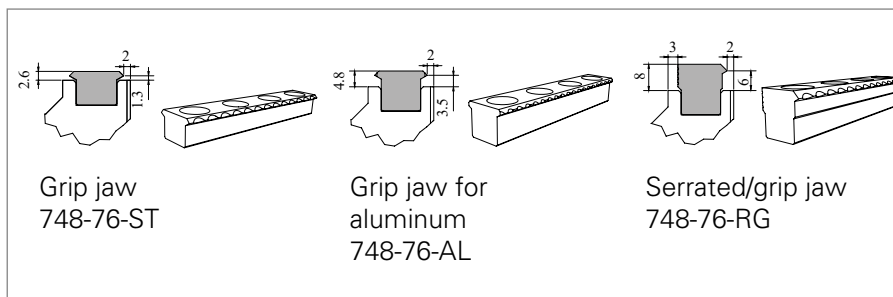


Model 748-76-240.....

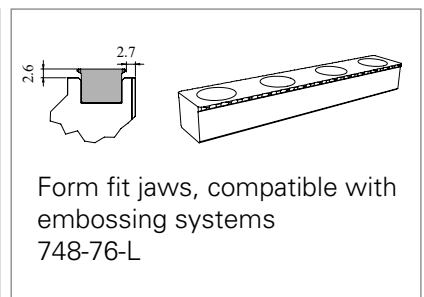


vb centro 76 **ACCESSORIES**

Grip jaws



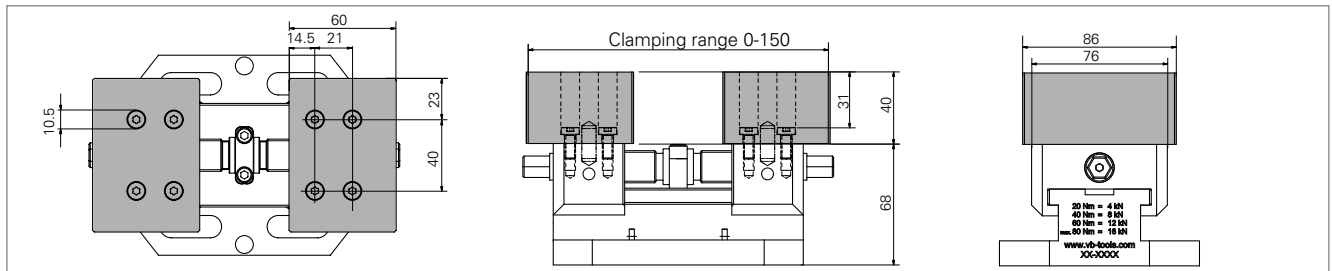
Form fit jaw



748-76-ST	Grip jaw (piece)
748-76-AL	Grip jaw for aluminum (piece), 4.8 mm clamping depth
748-76-RG	Serrated/grip jaw (piece)
748-76-L	Form fit jaw, compatible with embossing systems (piece)
751994	Replace screw

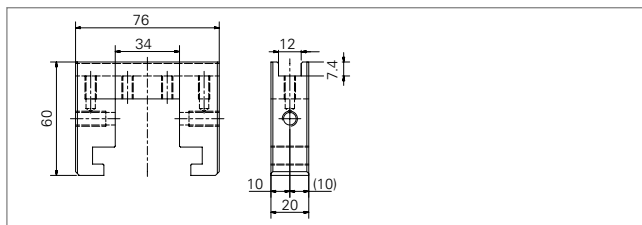
vb swiss centro 76 **ACCESSORIES**

Soft jaws



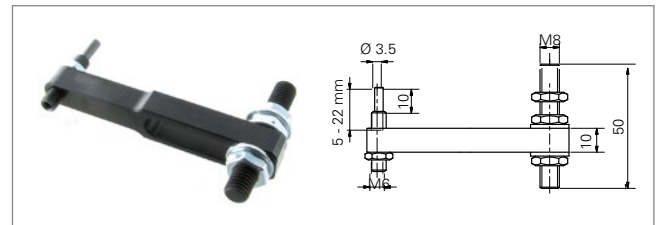
748-86-ST	Soft jaws (pair), Ck45	86 x 60 x 40 mm
748-86-AL	Soft jaws (pair), aluminum	86 x 60 x 40 mm

Center slide



748-76-11	Center slide
------------------	--------------

End-stop



748-76-M8	Workpiece end-stop
------------------	--------------------

Torque wrench



748-NM	Torque wrench 20-100 Nm with lever reversible ratchet, 1/2" drive
748-SW12	Socket 1/2" (hexagon) for 12 mm wrench size

vb centro 76

EXAMPLE IMAGES



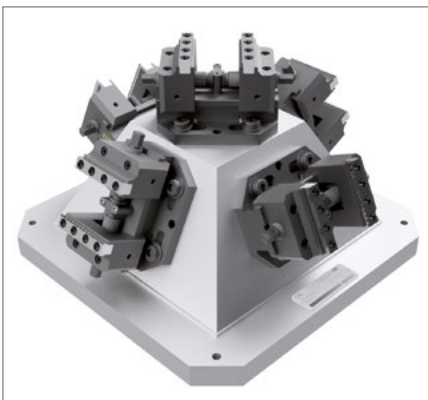
On vb DockLock® SV plate



3-unit pyramid



4-unit pyramid



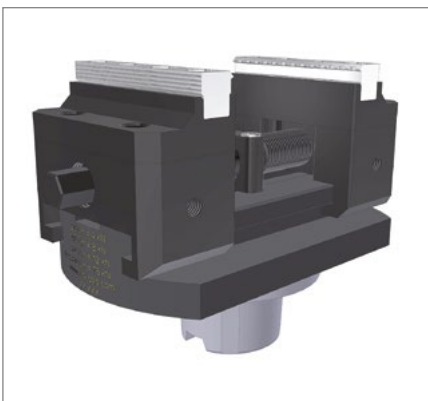
5-unit pyramid



vb DockLock® single pallet



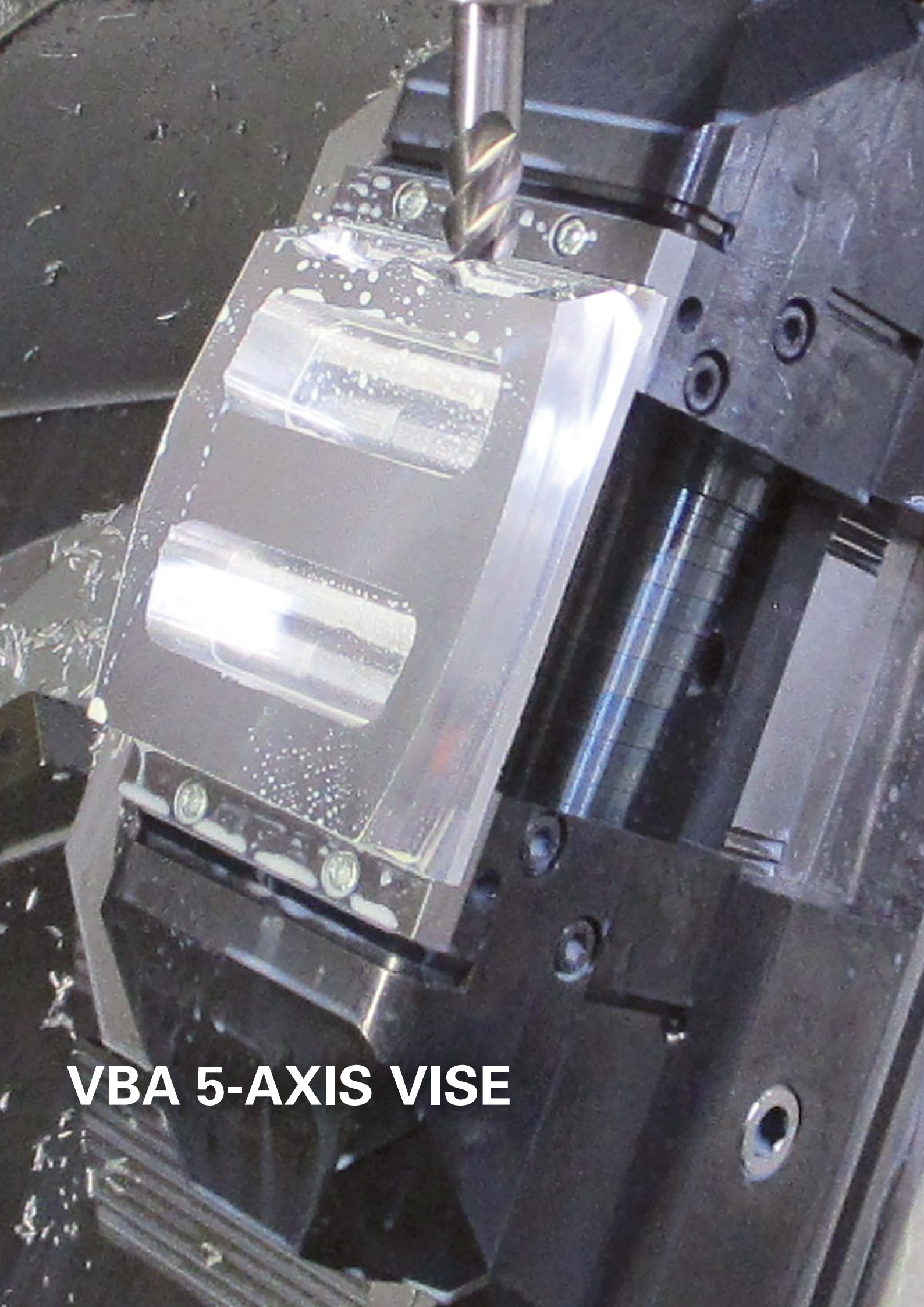
For mounting of RealPoint
zero-point clamping systems



Ripas (Lehmann rotary table)

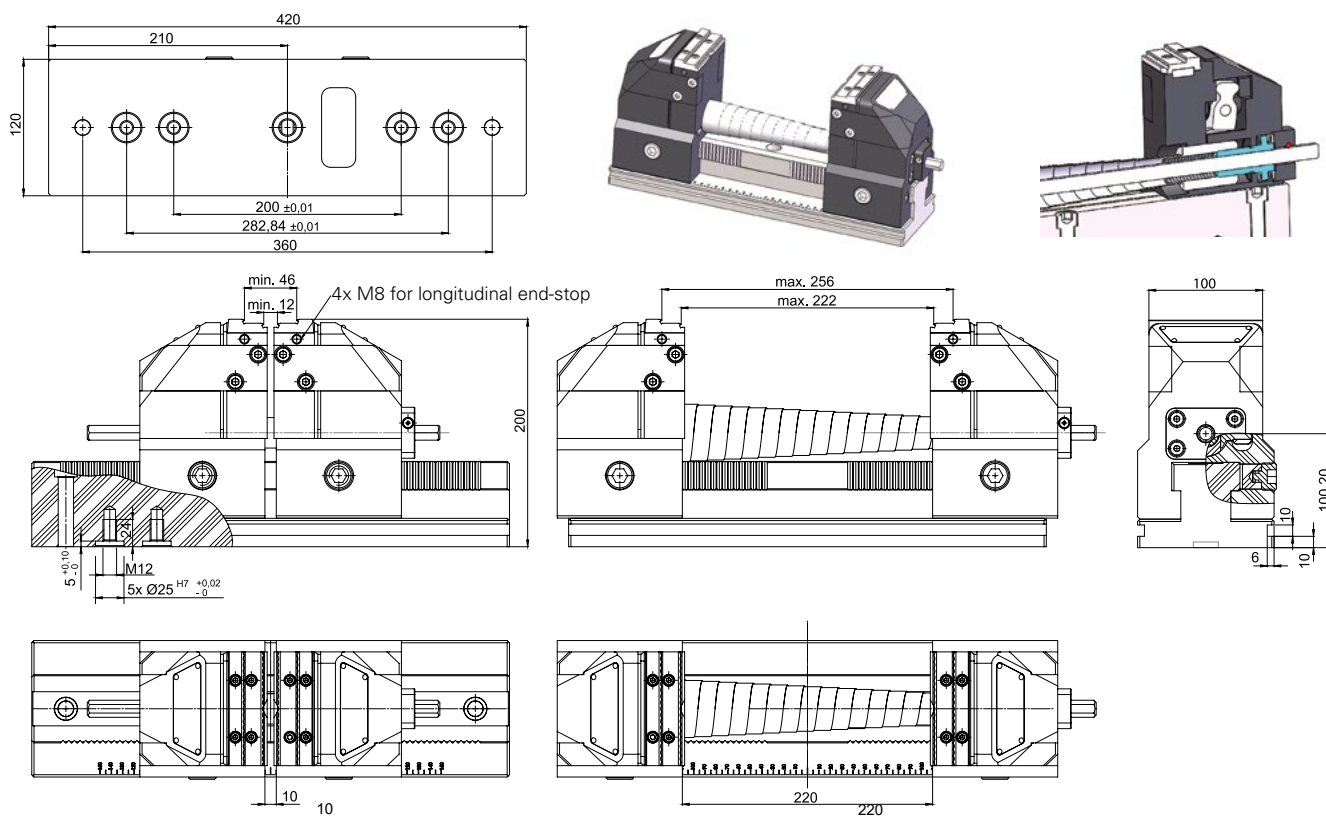


Example with Lehmann



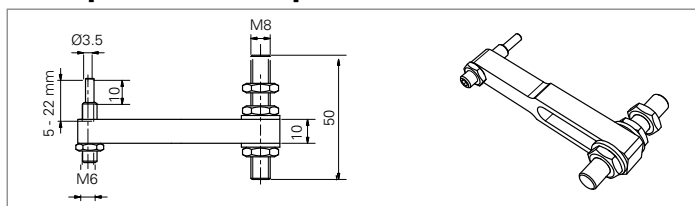
VBA 5-AXIS VISE

K5R-100 5-AXIS VISE



Art. no.	Description
K5R-100	5-axis vise

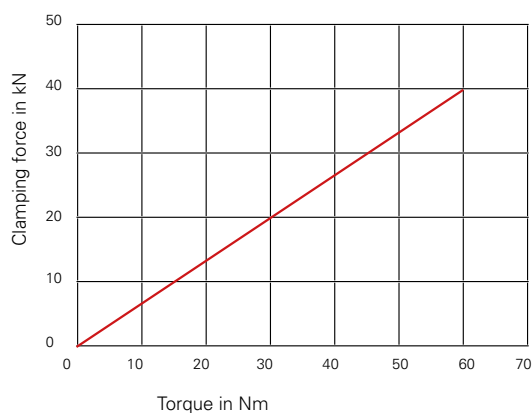
Workpiece end-stop



Torque wrench



Clamping force diagram



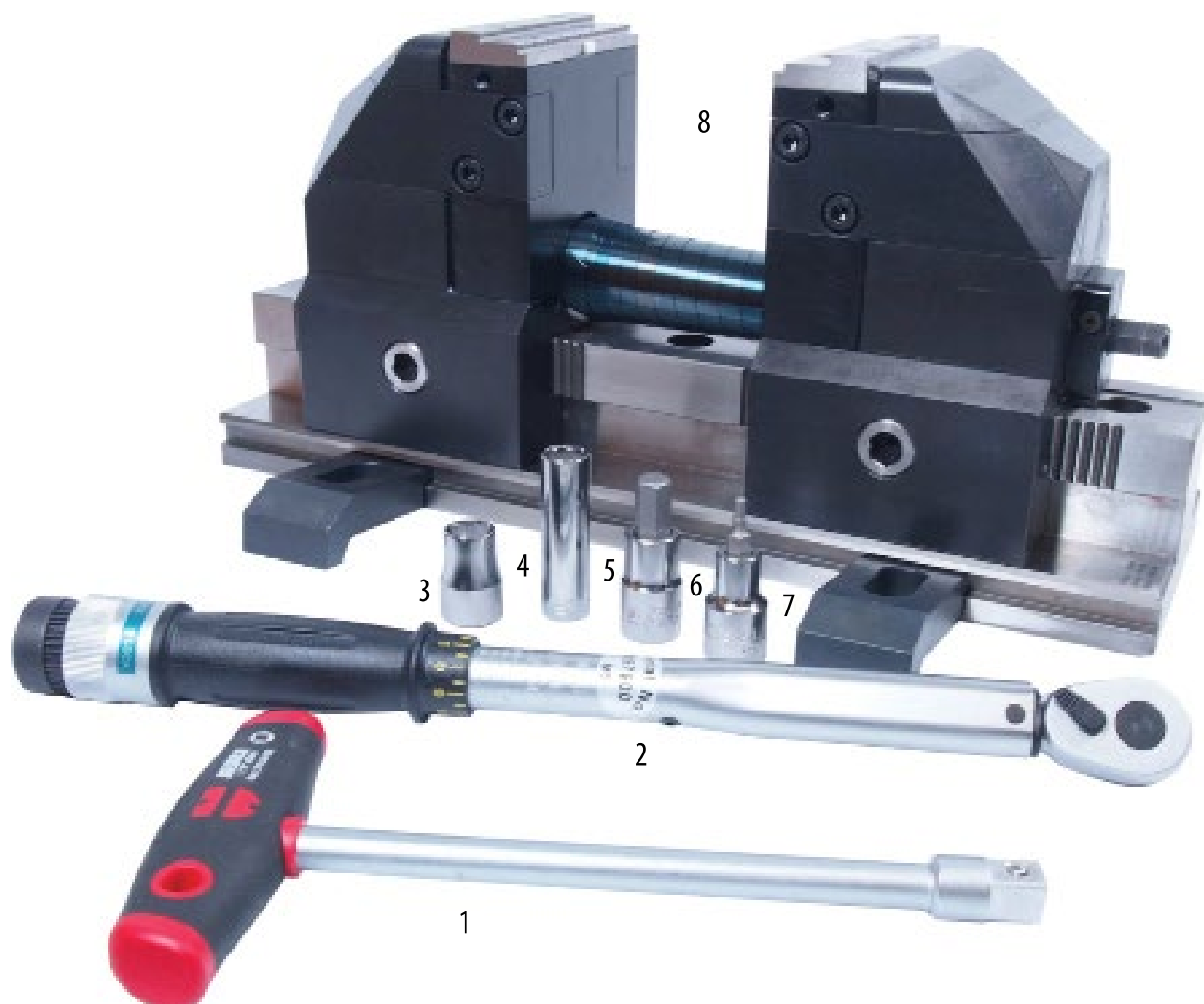
Art. no.	Description
748-76-M8	Workpiece end-stop
748-NM	Torque wrench 20-100 Nm with lever reversible ratchet, 1/2" drive
748-SW13	Socket 1/2" (hexagon) for 13 mm wrench size

K5R-100 5-AXIS VISE

ACCESSORIES

Accessories

No.	Description	Piece Unit	Article number
1	Hand wrench	1	ZSS 100 260 150 047
2	Torque wrench	1	ZSS 100 260 150 046
3	Short adapter wrench size 13 mm	1	ZSS 100 260 150 050
4	Long adapter wrench size 13 mm	1	ZSS 100 260 150 051
5	Adapter wrench size 12 hexagon insert	1	ZSS 100 260 150 052
6	Adapter wrench size 4 hexagon insert	1	ZSS 100 260 150 053
7	Clamp	4	ZSS 100 260 150 056
	End-stop	1	ZSS 100 260 150 060
	Alignment pin	2	ZSS 100 260 150 048 D25 DA...
	Clamping screw + T-slot nut	3	ZSS 100 260 150 062 B ..
	Short drive shaft	1	ZSS 100 260 150 033

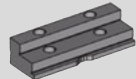
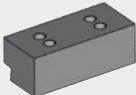


K5R-100 5-AXIS VISE

JAWS

Jaws

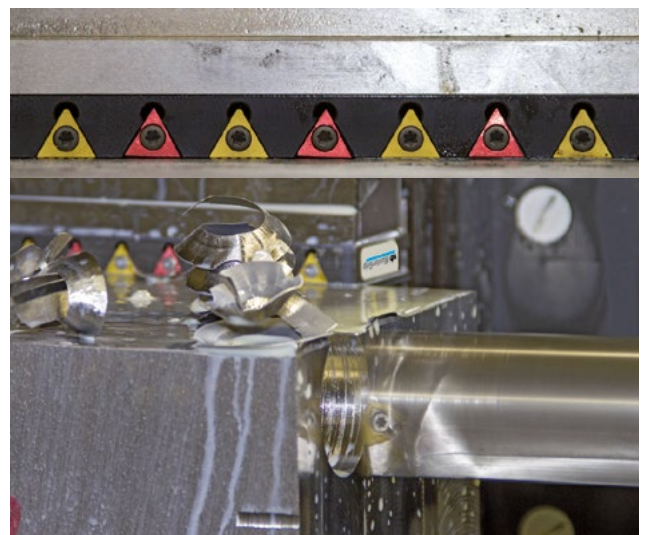
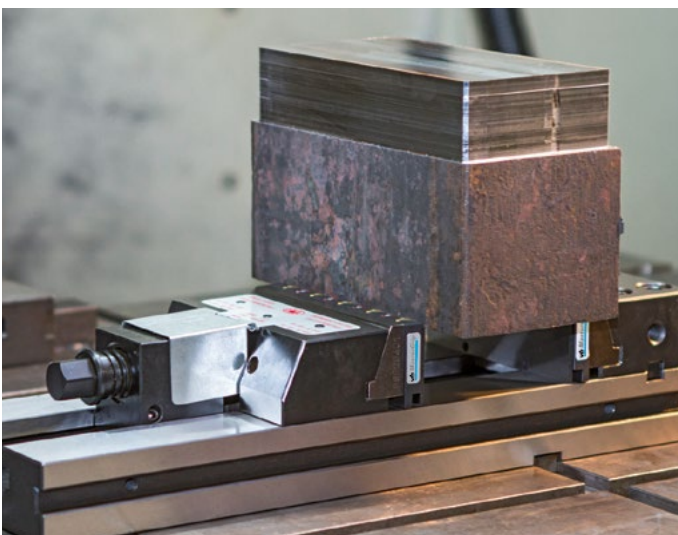
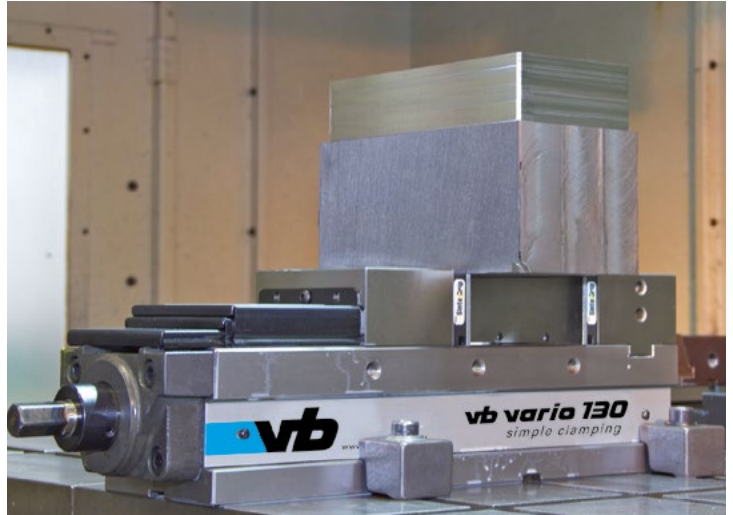


Description	Piece Unit		Article number
Grip jaw 3.5 mm	2		ZSB 100 260 150 015
Hardened smooth jaw 3.5 mm	2		ZSB 100 260 150 019
Grip jaw 10 mm	2		ZSB 100 260 150 020
Hardened smooth jaw 10 mm	2		ZSB 100 260 150 021
Soft jaw, steel	2		ZSB 100 260 150 022
Soft jaw, aluminum	2		ZSB 100 260 150 023
Pendulum jaw grip 3.5 mm	2		ZSB 100 260 150 044
Grip jaw with carbide insert	2		ZSB 100 260 150 042
Carbide insert + screw	16		ZSB 100 260 150 043



VBA MasterGrip and Claxx

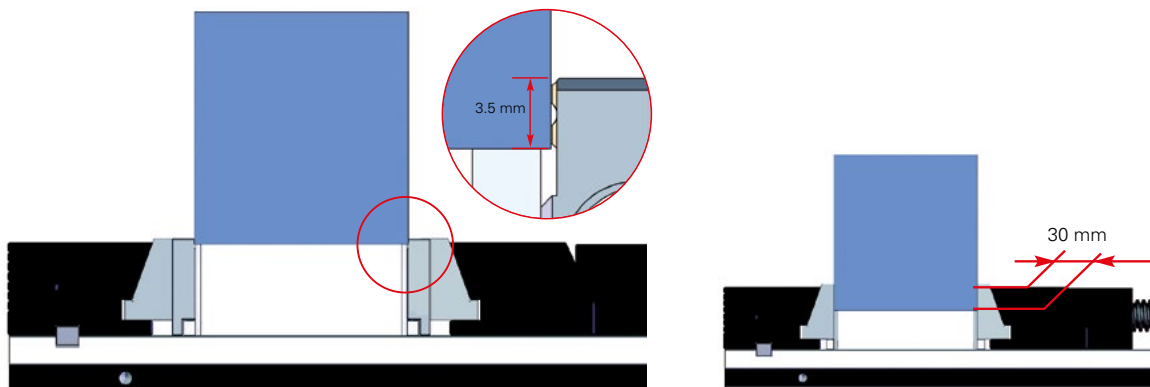
MASTER GRIP AND CLAXX USER EXAMPLES



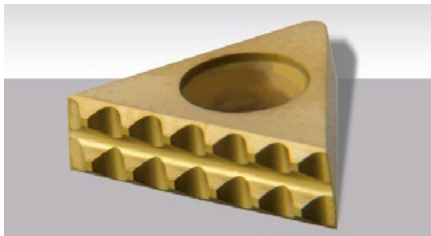
JAWS WITH CARBIDE GRIP INSERT ACCESSORIES

Only 3.5 mm clamping edge, without having to pre-stamp the workpiece. Very stable clamping, higher cutting speeds during machining. VBA MasterGrip offers advantages over conventional systems.

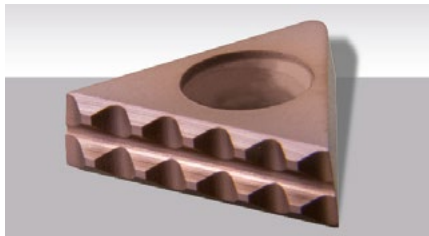
Conventional systems require a larger clamping surface for clamping the workpiece, which results in much more waste and expenditure of material. There is also a greater risk of workpiece deformation.



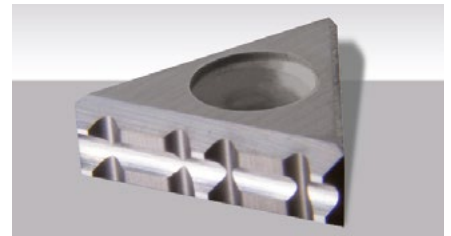
Sintered carbide inserts



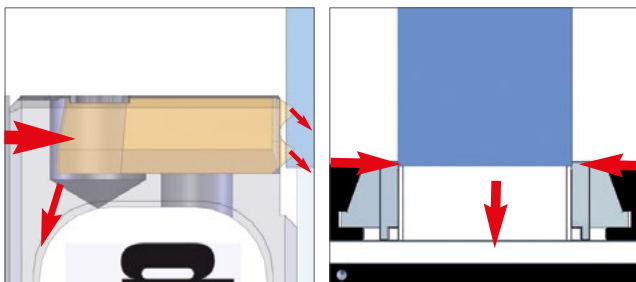
Insert for steel



Insert for hardened steel and TITANIUM
(UP TO 50-54 HRC)

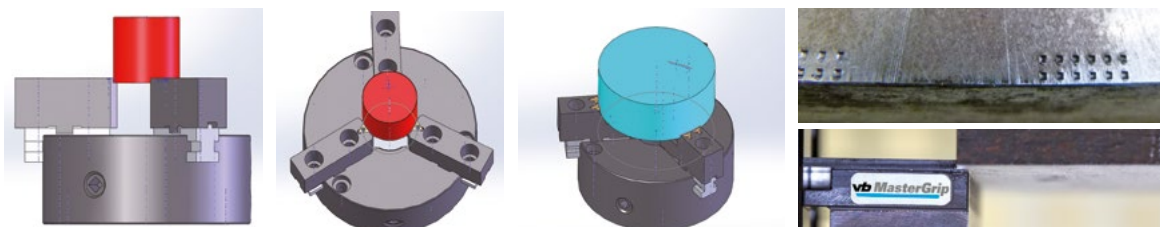


Insert for aluminum



The combination of the two elements (the conical shape and special geometry of the pyramid centers) creates a double pull-down effect.

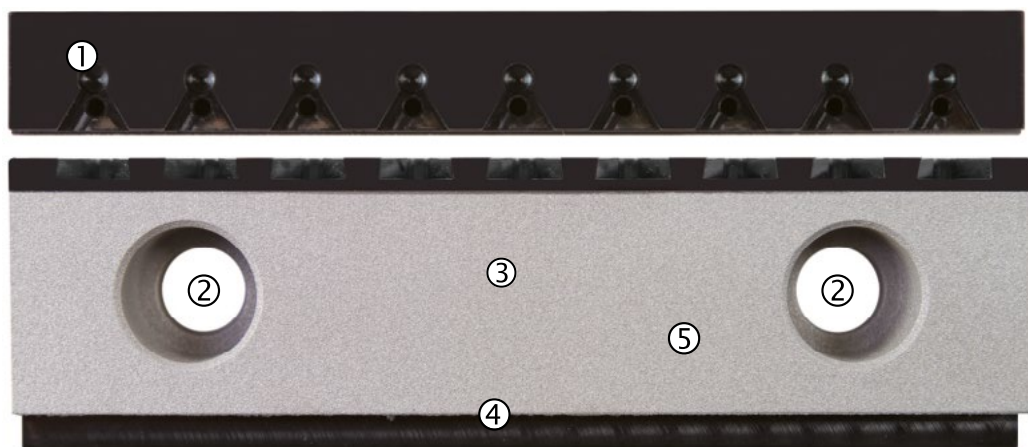
User examples



JAWS WITH CARBIDE GRIP INSERT

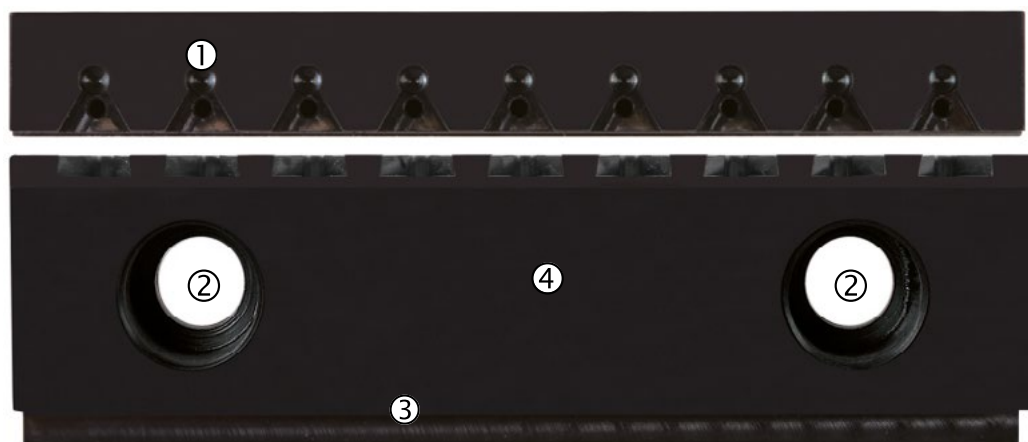
VBA MasterGrip can be used on any mechanical, hydraulic or mechanical-hydraulic clamping system. For all other clamping systems you must determine usability on an individual basis!

Basic+



- ① Shape of self-centering seat with dovetail interlocking
- ② Mounting bores for the vise
- ③ Tungsten carbide coating for a better grip in the 2nd clamping set-up
- ④ Seat for Clak system
- ⑤ Base jaw of nitrided tool steel with a tensile strength of $\approx 1080\text{N/mm}^2$

Basic



- ① Shape of self-centering seat with dovetail interlocking
- ② Mounting bores for the vise
- ③ Seat for Clak system
- ④ Base jaw of nitrided tool steel with a tensile strength of $\approx 1080\text{ N/mm}^2$

MASTER GRIP

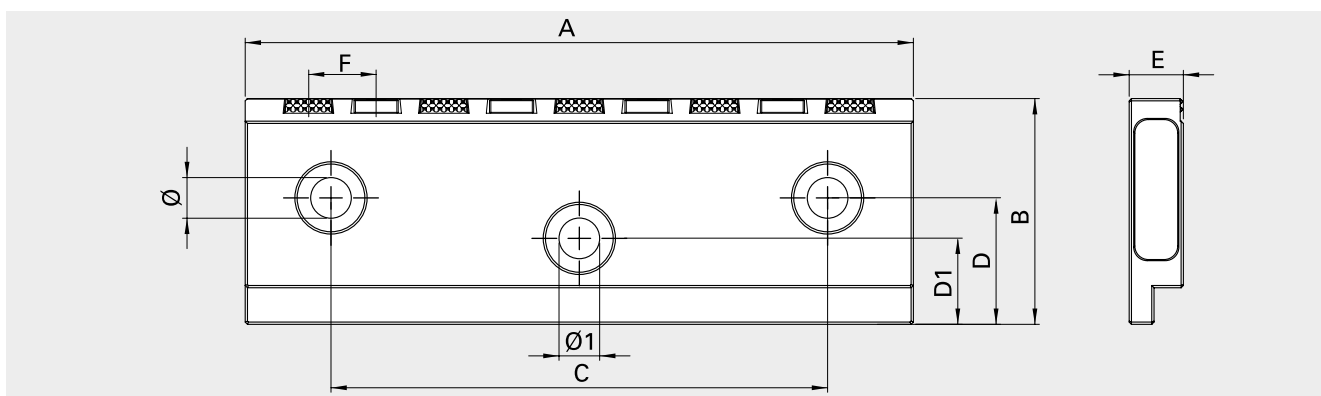
Basic+

Pair of jaws **with** tungsten carbide coating.
The set includes one jaw pair, one parallel strip pair (PP), 1 TORX T9 wrench and one set of 10 screws.



Basic

Pair of jaws **without** tungsten carbide coating.
The set includes one jaw pair, one parallel strip pair (PP), 1 TORX T9 wrench and one set of 10 screws.



Ref.	Model / Type	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	Number of inserts	Ø mm	Ø1 mm	PP
584 511 19 584 521 19 *	Allmatic - T-Rex / Titanium	124.5	39.5	88	12.3	18	12.3	14	9	7	11	36.5
584 511 29 584 521 29 *	Gresel/WNT/Schunk/Fresmak	125.0	40.0	80	15.0	-	12.0	14	9	9	-	36.5
584 511 39 584 521 39 *	Oml - Vise Power / vb vario 130	130.0	52.0	90	25.0	-	12.0	14	9	11	-	49.0
584 511 49 584 521 49 *	Hilma	125.0	45.0	80	14.0	-	12.0	14	9	9	-	42.0
584 512 19 584 522 19 *	Oml - Tc/Mc 150 Mm	148.0	50.0	110	28.0	-	12.0	15	9	9	-	47.0
584 512 29 584 522 29 *	Kurt 6	152.0	44.1	98.4	23.6	-	18.4	15.875	9	11	-	41.0
584 513 19 584 523 19 *	Allmatic - T-Rex / Titanium	160.0	49.8	88	12.3	20	12.0	14	11	7	11	47.0
584 513 29 584 523 29 *	Gresel/Wnt/Schunk/Fresmak	160.0	50.0	100	20.0	-	12.0	14	11	11	-	47.0
584 513 39 584 523 39 *	Oml - Vise Power / vb vario 160	160.0	55.0	90	25.0	-	12.0	14	11	11	-	52.0
584 513 49 584 523 49 *	Hilma	160.0	54.0	100	17.0	-	12.0	14	11	11	-	51.0
584 514 19 584 524 19 *	Oml - Tc/Mc 200 Mm	196.0	70.0	130	49	-	18.0	15	13	9	-	67.0

*Basic+ (tungsten carbide coating)

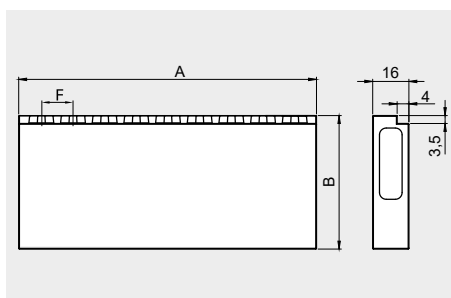
MASTER GRIP ACCESSORIES

Starter kit without bore

Pair of jaws.

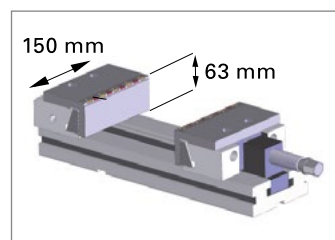
The set includes one jaw pair, 1 TORX T9 wrench and one set of 10 screws.

Ref.	A mm	B mm	F mm	Number of inserts
584 531 19	125	59	14	9
584 533 19	160	59	14	11
584 534 19	200	70	15	13



Basic

Ref.	Model	Number of inserts
584 512 39	OML - LC / GERARDI 150 mm	9
584 515 19	OML - GENIUS	5



Clamping inserts, carbide

Ref.	Description
584 501 19	Set of 10 STD inserts for steel
584 501 29	Set of 10 HRC inserts for hardened steel / titanium up to 50-54 HRC
584 501 39	Set of 10 inserts for aluminum



Accessories

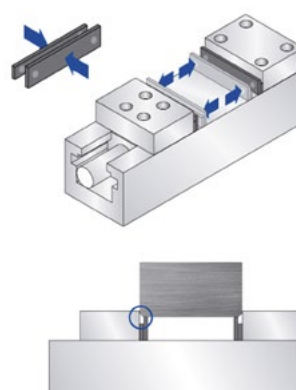
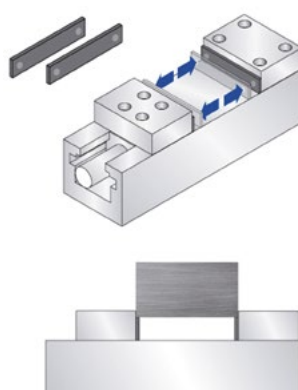
Ref.	Description
584 502 19	Kit 10 VTX30 x inserts
T09	TORX T9 screwdriver
584 504 10	D3 special cutter
584 505 19	Kit with 10 inserts for protecting the aluminum seats without screws



CLAXX SYSTEM ACCESSORIES

Parallel supports, ground, magnetic

Sets in storage case



Ref.	Width	Thickness	Height	
790-06 50 Set	50	2.5	15, 18, 20, 22	4 pairs per height (16 pairs)
790-06 70 Set	70	2.5	32, 35, 36, 37	4 pairs per height (16 pairs)
790-06-100 Set	100	2.5	20, 27, 29, 31, 32	1 pair per height (5 pairs)
790-06-125 Set1	125	2.5	15, 30, 35, 37, 39	1 pair per height (5 pairs)
790-06-125 Set2	125	2.5	15, 30, 31, 32, 33, 34, 35, 36, 37, 38	1 pair per height (10 pairs)
790-06-150 Set	150	2.5	25, 35, 40, 45, 47	1 pair per height (5 pairs)
790-06-160 Set1	160	2.5	22, 30, 37, 42, 47	1 pair per height (5 pairs)
790-06-160 Set2	160	2.5	22, 30, 37, 40, 41, 42, 43, 44, 45, 46, 47	1 pair per height (11 pairs)



CLAXX SYSTEM ACCESSORIES

Parallel supports, ground, magnetic

Parallel support pairs

2 button magnets each



Ref.	Width	Thickness	Height
790-06 50xx xx=height	50	2.5	12 - 22, 1 mm increment (16, 18, 20, 22 in stock; 3-week delivery period for others)
790-06 70xx xx=height	70	2.5	12 - 37, 1 mm increment (32, 35, 36, 37 in stock; 3-week delivery period for others)
790-06-100xx xx=height	100	2.5	12 - 40, 1 mm increment (20, 27, 29, 31, 32 in stock; 3-week delivery period for others)
790-06-125xx xx=height	125	2.5	12 - 40, 1 mm increment (15, 30, 35, 37, 39 in stock; 3-week delivery period for others)
790-06-150xx xx=height	150	2.5	12 - 48, 1 mm increment (25, 35, 40, 45, 47, 48 in stock; 3-week delivery period for others)
790-06-160xx xx=height	160	2.5	12 - 47, 1 mm increment (22, 30, 37, 42, 47 in stock; 3-week delivery period for others)
790-06 Magnet	Ø10	1.0	Hi-dyn button magnet

Custom **CLAXX** sets

Example:

25 pairs from 15 - 39 mm,
1 mm increment, including mount

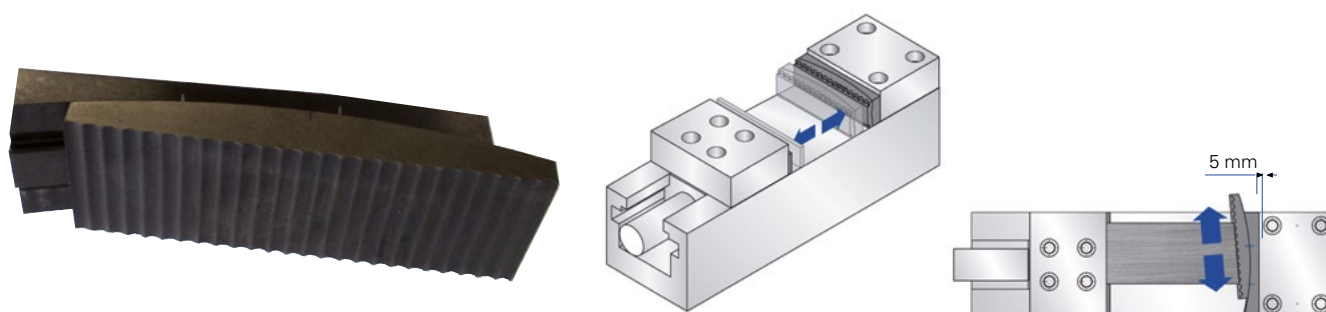


CLAXX SYSTEM ACCESSORIES

Deflectable jaw, magnetic

For clamping blanks (cut or burned)

Deflection up to ± 5 mm



Ref.	Width	Height
790-07 10000	100	34
790-07 12500	125	39
790-07 15000	150	49

CLAXX SYSTEM ACCESSORIES

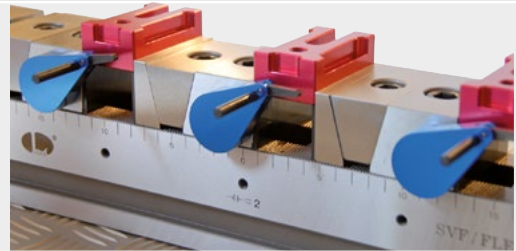
Workpiece end-stop, magnetic

790-05 0600

Magnetic base

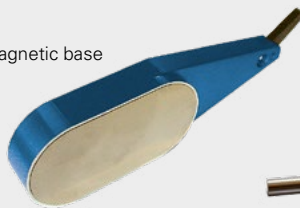


End-stop bar
D6 x 50 mm

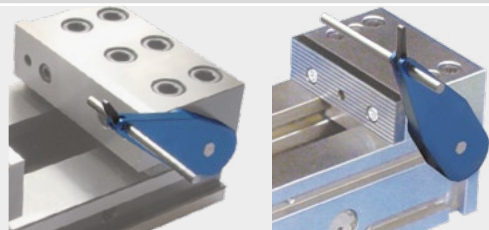


790-05 1000

Magnetic base

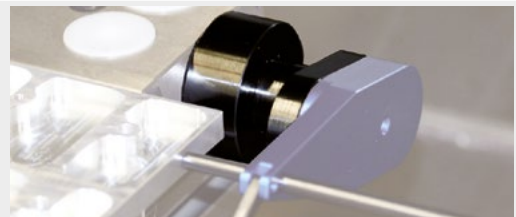


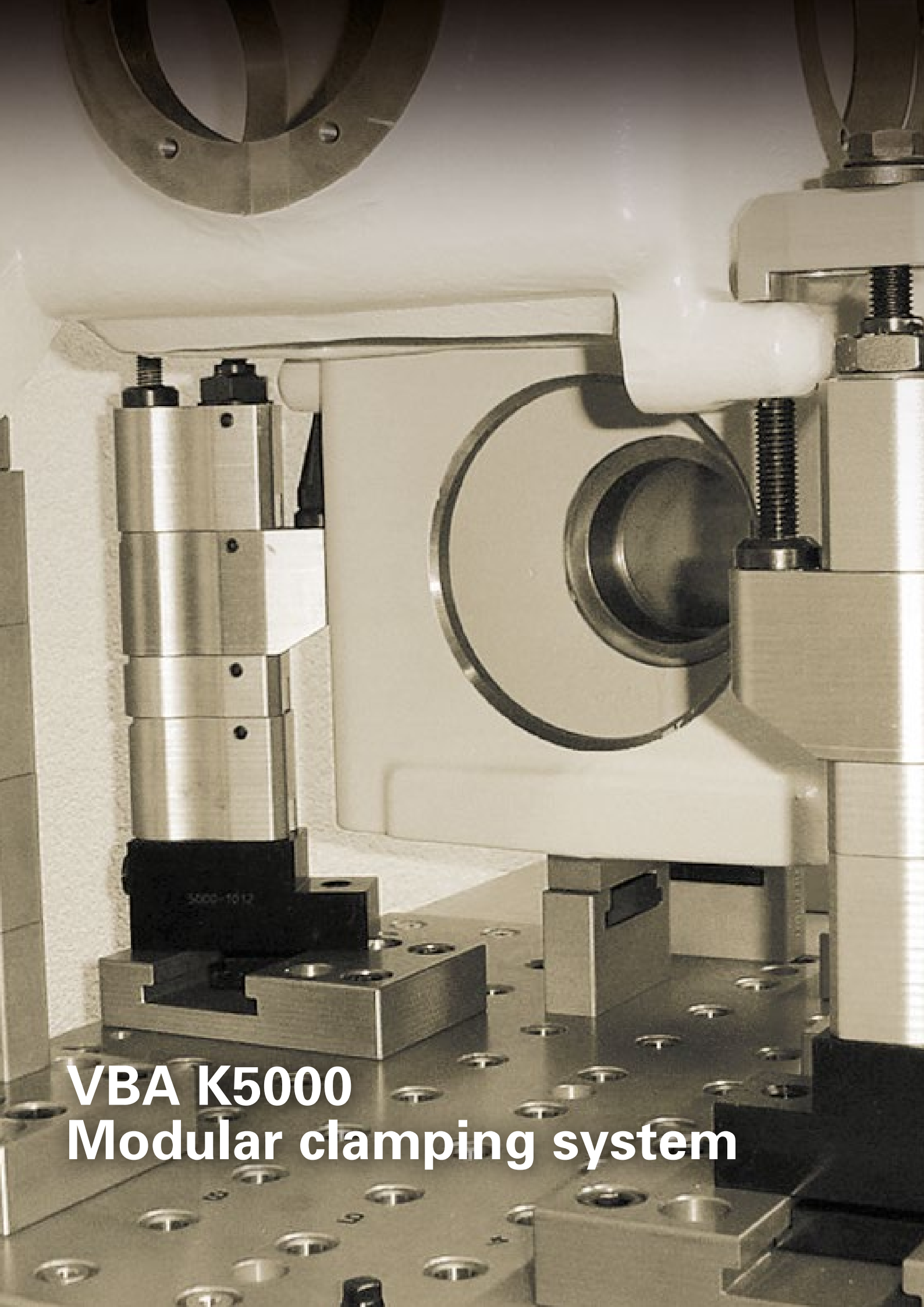
End-stop bar
D6 x 100 mm



New: with patented chip deflector and increased pressing force.

790-05 DH



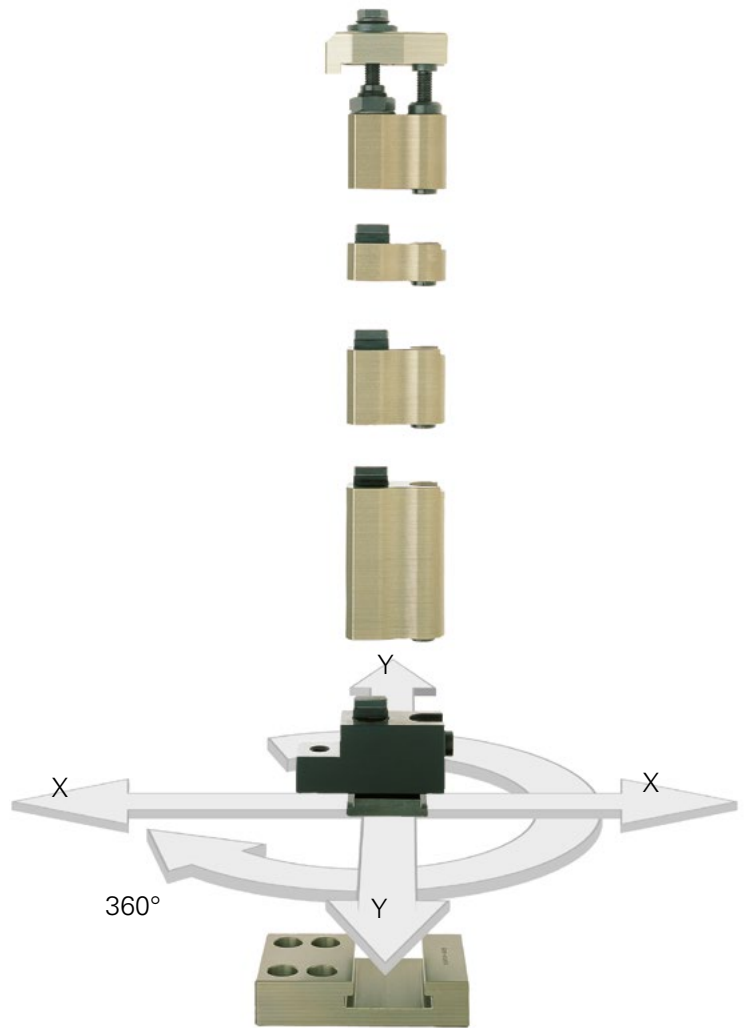
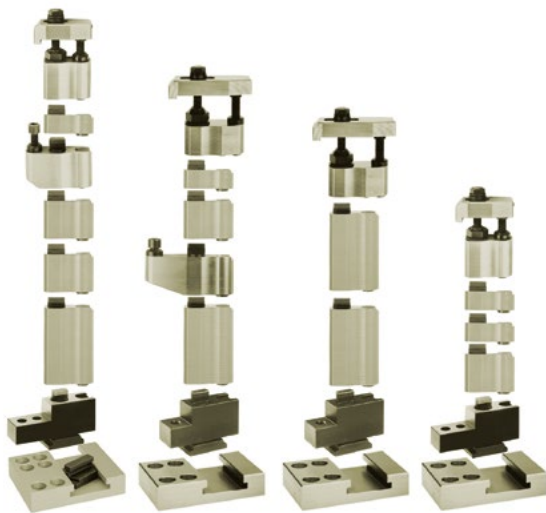


VBA K5000
Modular clamping system

K5000 MODULAR CLAMPING SYSTEM

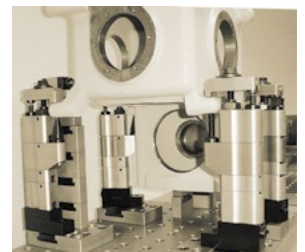
Starter kit

- Complete machining in one clamping set-up
- Continuously movable in X and Y (patented)
- 360° pivoting
- For locator grids and T-slot tables / pallets
(also on **vb DockLock®** zero-point clamping system)
- Replaces all custom fixtures

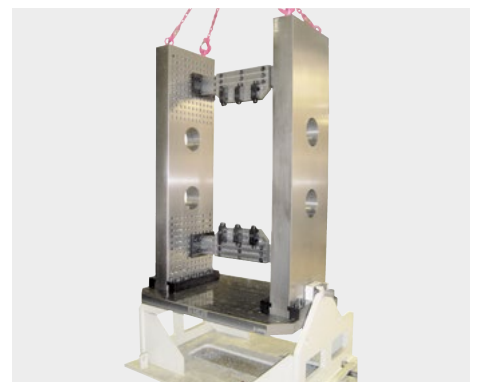
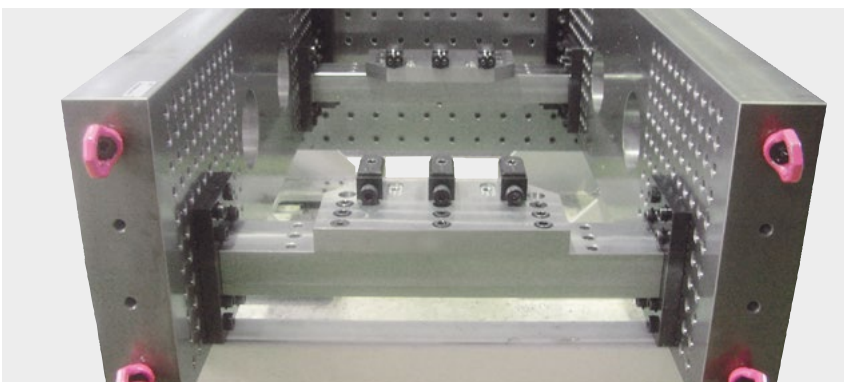
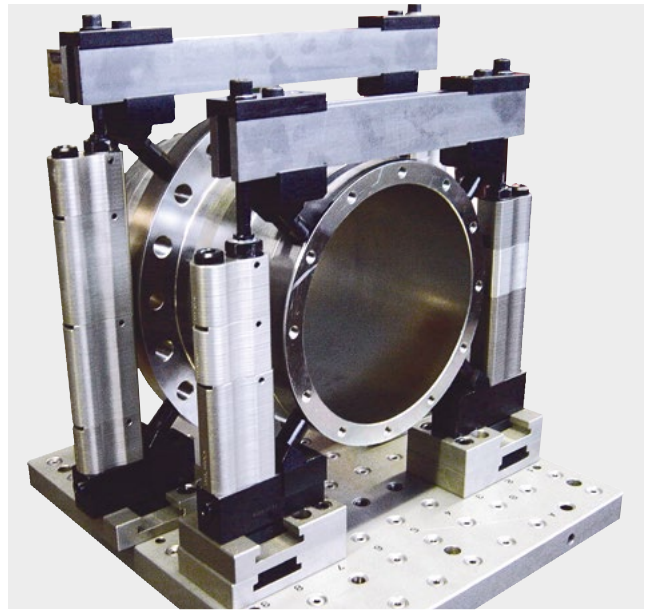
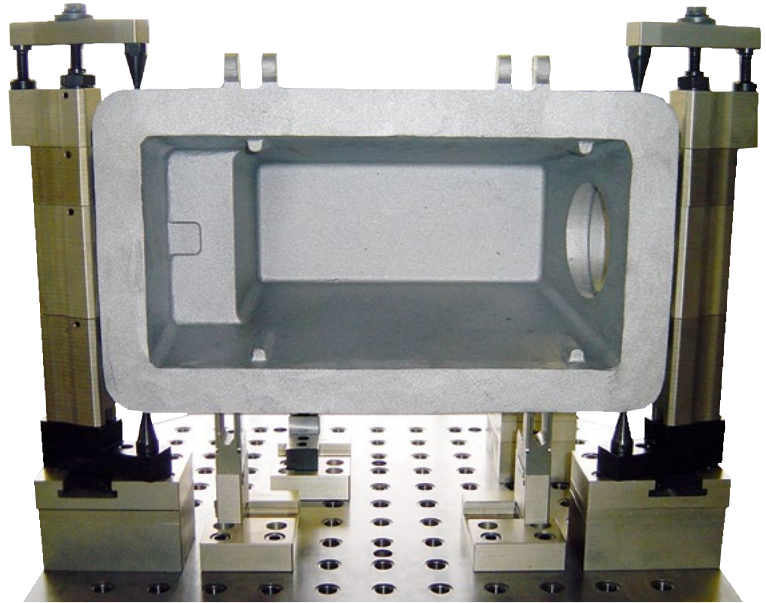
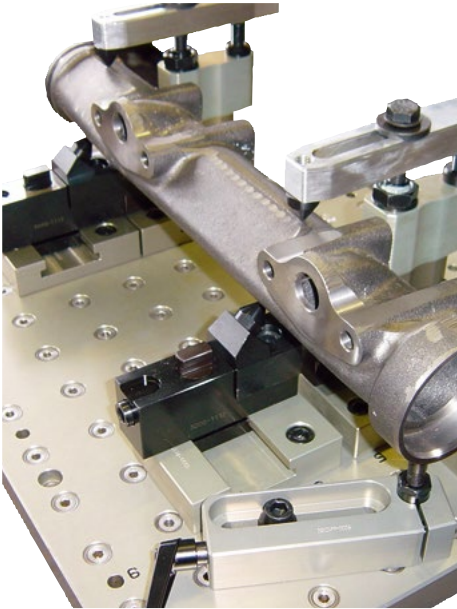


Complete machining in one clamping set-up

- For applications requiring a high level of flexibility
- For the design of fixtures with stringent clamping requirements
- Excellent for zero series, before the final custom fixture is constructed
- Ideal supplement to the K5001 line (clamping between columns), complete machining in just one clamping set-up
- Suitable for single components and large series, also for multiple clamping set-ups, manual or hydraulic versions

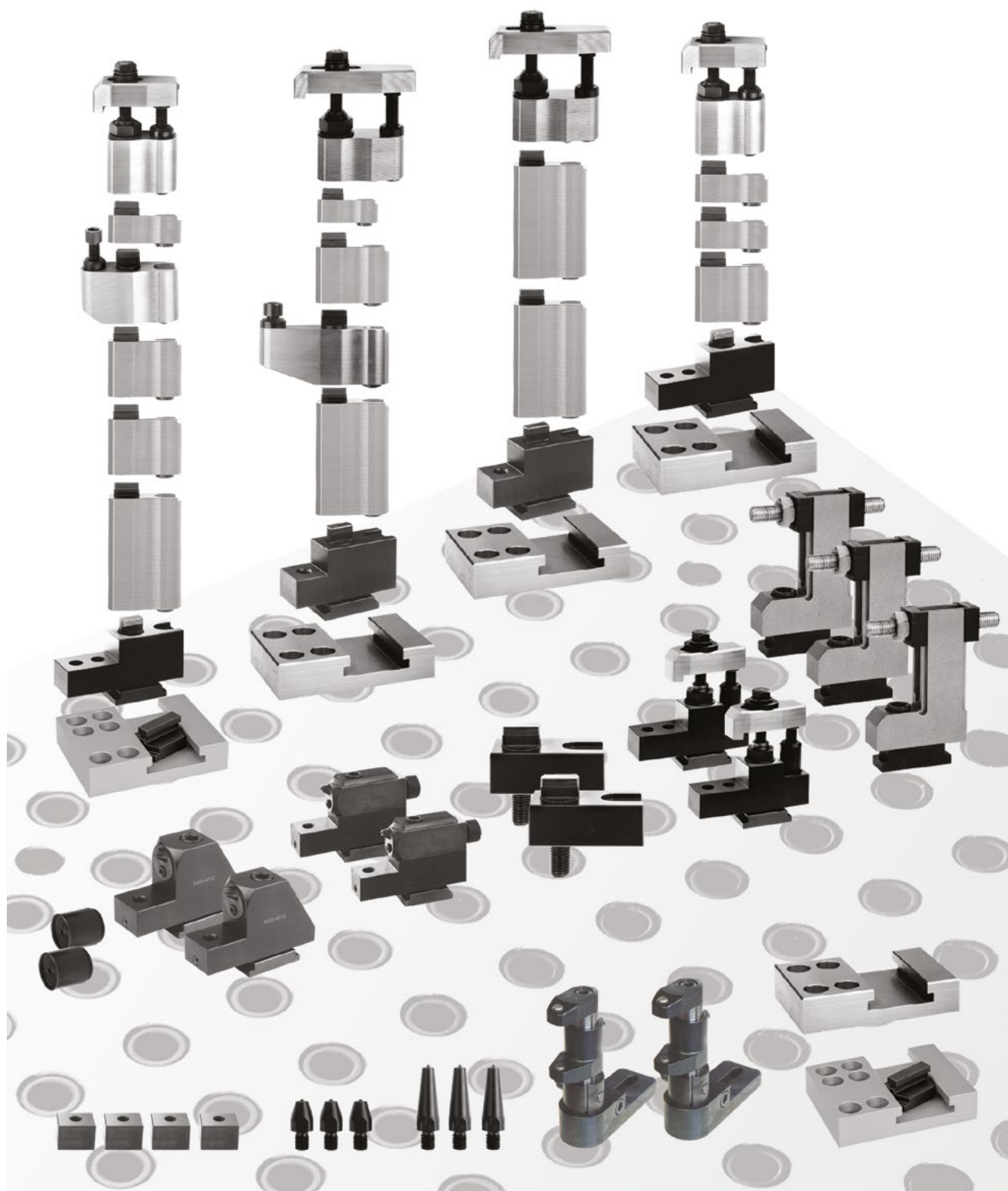


K5000 MODULAR CLAMPING SYSTEM PHOTOS FROM ACTUAL APPLICATIONS



K5000 MODULAR CLAMPING SYSTEM

Unlimited variation possibilities



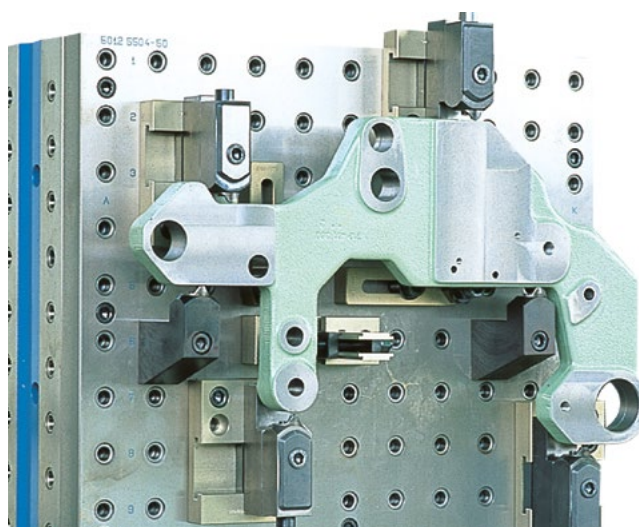
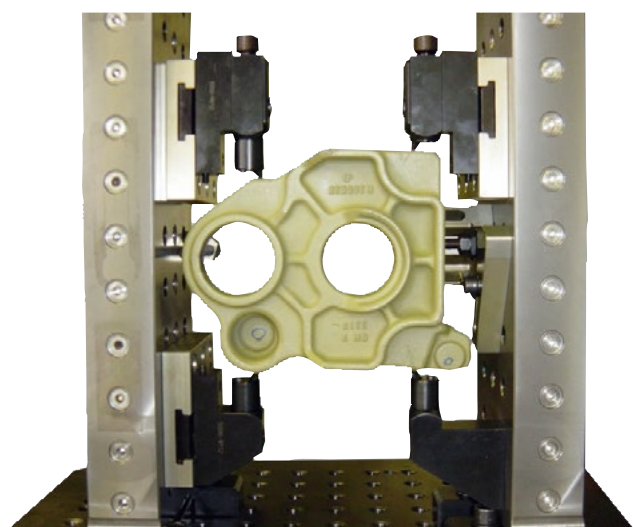
K5000 MODULAR CLAMPING SYSTEM

		Art. no.			Grid	
		5000-VB-SET M12 (starter kit)			40/M12	
		Components				
A		12	5000-9012	Lateral clamp	2 pcs.	
B		11	5000-7012	End-stop, adjustable	3 pcs.	
C		10	5000-2012	Clamping unit, form A	2 pcs.	
		9	5000-2512	Clamping unit, extended form A	2 pcs.	
		8	5000-3512 (L97 mm)	Intermediate supports	1 pc.	
D		8	5000-3612 (L144 mm)	Intermediate supports	1 pc.	
		7	5000-3012025 (H25 mm)	Height blocks	4 pcs.	
		7	5000-3012050 (H50 mm)	Height blocks	4 pcs.	
E		7	5000-3012100 (H100 mm)	Height blocks	4 pcs.	
		6	5000-1012	Base elements, modular movable in X and Y by 50 mm	2 pcs.	
12		5	5000-1112	Base element, modular, long movable in X and Y by 50 mm	2 pcs.	
		4	5000-1712025	Base element	2 pcs.	
		3	5000-0112	Clamping element, mono, long movable in X and Y by 50 mm	2 pcs.	
11		2	5000-4012075	Base plates	4 pcs.	
		1	5000-4212	Base plates with T-slot nut, 360° pivoting	2 pcs.	
		Accessories				
10		A	5000-8012	Soft supports	4 pcs.	
		B	5000-8512125	Clamping centers, short	3 pcs. each	
		B	5000-8812125	Clamping centers, long	3 pcs. each	
		C	5000-9012028	Extension for lateral clamp	2 pcs.	
9		D	5000-2712030	Compensating clamp	2 pcs.	
		E	5000-9112	Counter fixture, adjustable	2 pcs.	
		5000-VB-SET M16 (starter kit)			50/M16	
		Components				
8		12	5000-9016	Lateral clamp	2 pcs.	
		11	5000-7016	End-stop, adjustable	3 pcs.	
7		10	5000-2016	Clamping unit, form A	2 pcs.	
		9	5000-2516	Clamping unit, form A	2 pcs.	
		8	5000-3516 (L119 mm)	Intermediate supports	1 pc.	
6		8	5000-3616 (L144 mm)	Intermediate supports	1 pc.	
		7	5000-3016025 (H25 mm)	Height blocks	4 pcs.	
		7	5000-3016050 (H50 mm)	Height blocks	4 pcs.	
5		7	5000-3016100 (H100 mm)	Height blocks	4 pcs.	
		6	5000-1016	Base elements, modular movable in X and Y by 50 mm	2 pcs.	
4		5	5000-1116	Base element, modular, long movable in X and Y by 50 mm	2 pcs.	
		4	5000-1716030	Base element	2 pcs.	
3		3	5000-0116	Clamping element, mono, long movable in X and Y by 50 mm	2 pcs.	
		2	5000-4016095	Base plates	4 pcs.	
2		1	5000-4216	Base plates with T-slot nut, 360° pivoting	2 pcs.	
		Accessories				
1		A	5000-8016	Soft supports	4 pcs.	
		B	5000-8516125	Clamping centers, short	3 pcs. each	
		B	5000-8816125	Clamping centers, long	3 pcs. each	
		C	5000-9016036	Extension for lateral clamp	2 pcs.	
		D	5000-2716050	Compensating clamp	2 pcs.	
		E	5000-9116	Counter fixture, adjustable	2 pcs.	

K5000 MODULAR CLAMPING SYSTEM

LATERAL CLAMP SET

- Continuously adjustable in grid (X-Y)
- Form fit center clamping
- Clamping force up to 25 KN



Art. no.			Grid
5000-9012 Set M12			40 / M12
Contents:			
5000-4012075	Base plate	4 pcs.	
5000-9112	Counter fixture	2 pcs.	
5000-9012	Lateral clamp	2 pcs.	

Art. no.			Grid
5000-9016 Set M16			50 / M16
Contents:			
5000-4016095	Base plate	4 pcs.	
5000-9116	Counter fixture	2 pcs.	
5000-9016	Lateral clamp	2 pcs.	



Base plate



Counter fixture



Lateral clamp

K5000 MODULAR CLAMPING SYSTEM COMPENSATING CLAMP

Material: All parts made of steel.

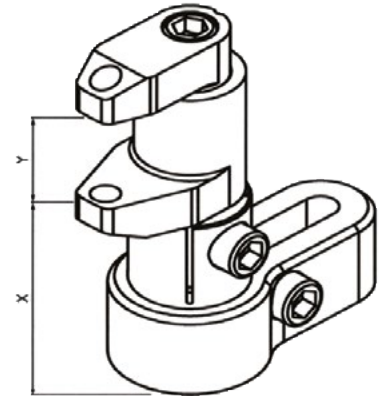
Version: Hardened and burnished.

Note: Workpieces can be clamped strain-free at 3 support points.

If additional clamping points are needed, they must be clamped to zero distortion with a dial indicator to prevent tension in the workpiece.

The compensating clamp is open in the vertical axis. The workpiece can be clamped and the compensating clamp adapts. Afterwards, the vertical axis is clamped.

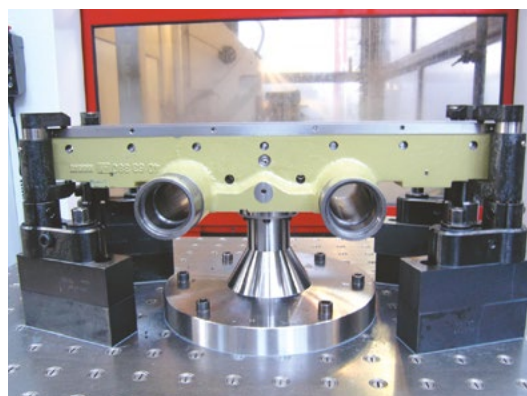
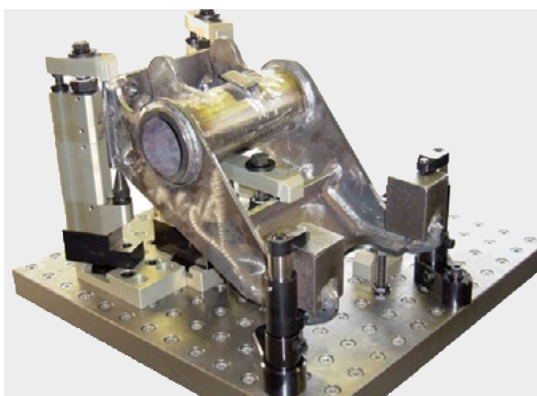
Important: The compensating clamp absorbs lateral pressures only to a limited extent.



Art. no.	Thread	Description	Y	X
5000-2712030	M12	Clamping range 30 – 45	30 – 45	86 – 95
5000-2712040	M12	Clamping range 40 – 65	40 – 65	86 – 95
5000-2712060	M12	Clamping range 60 – 85	60 – 85	86 – 95
5000-2716050	M16	Clamping range 50 – 70	50 – 70	115 – 124
5000-2716070	M16	Clamping range 70 – 100	70 – 100	115 – 124
5000-2716100	M16	Clamping range 100 – 130	100 – 130	115 – 124

K5000 MODULAR CLAMPING SYSTEM HEIGHT INCREASE SET

Art. no.	Thread	Description
5000-271200	M12	Height increases of 20, 40, 80 mm
5000-271600	M16	Height increases of 20, 40, 80 mm



Compensating clamp, no clamping of the workpiece on the "4th clamping point"

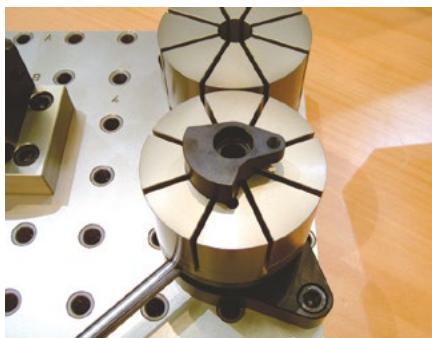
K5000 MODULAR CLAMPING SYSTEM

O.D. COLLET SET

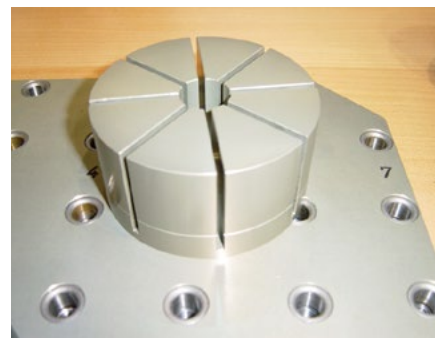
O.D. collet, Ø 99 mm (Ø 149 mm)



Cutting the workpiece profile



Form fit clamping

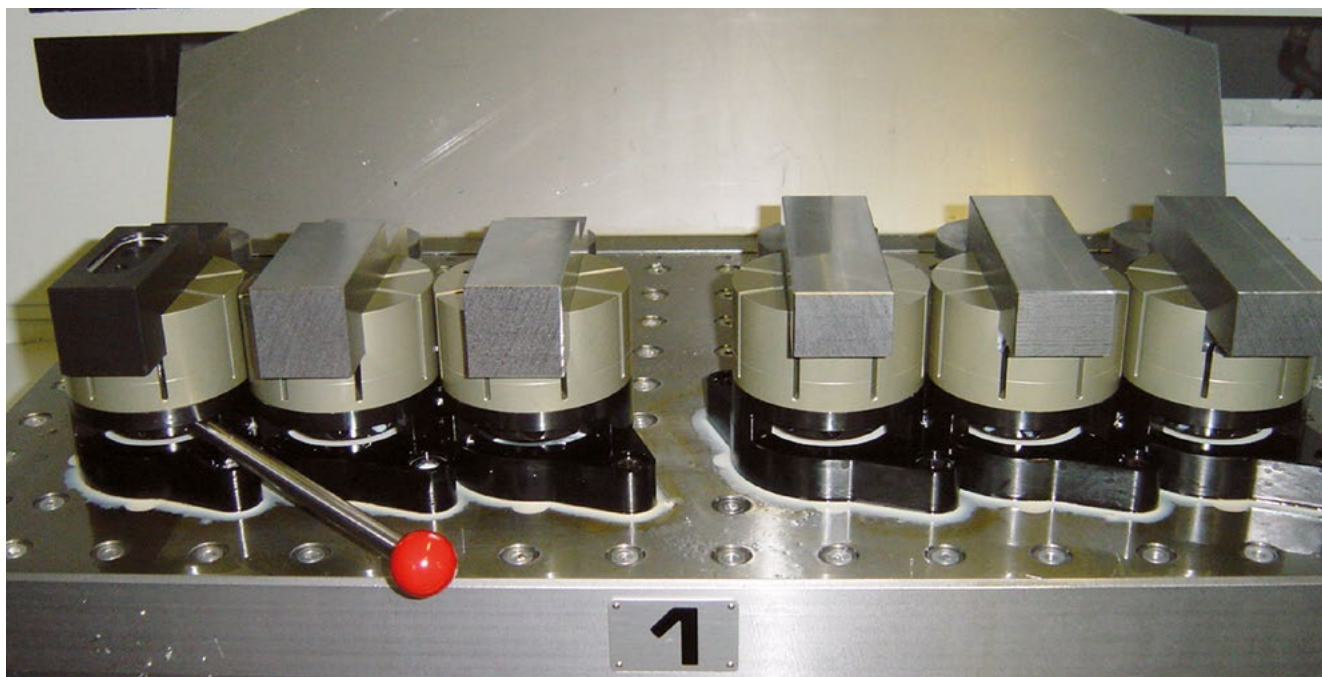


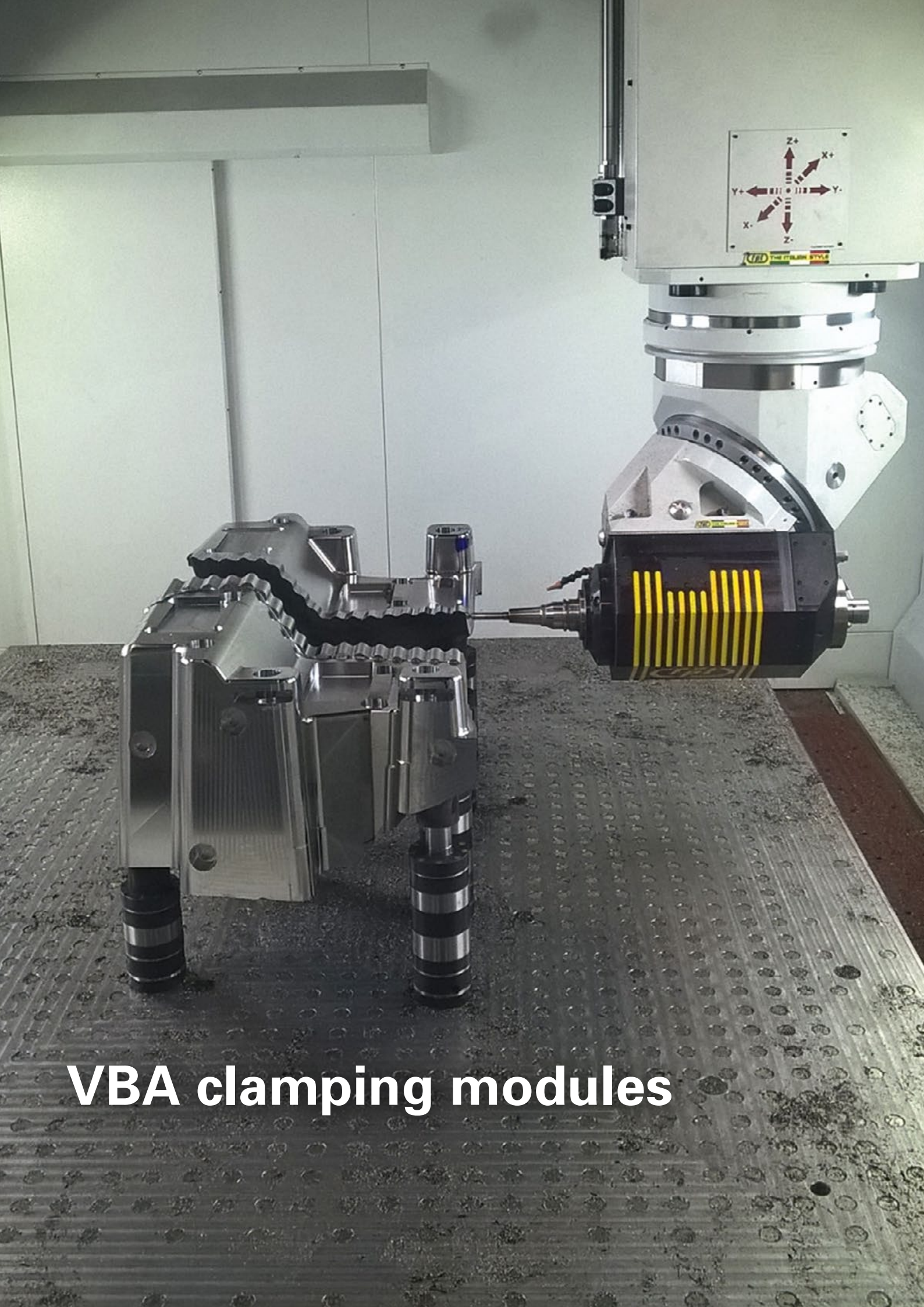
Replacement collet

Art. no.	Grid
5000-7712410 Set	40 / M12
Contents:	
5000-7712410 collet	1 pc.
5000-7712105 clamping element	1 pc.

Art. no.	Grid
5000-7712510 Set	50 / M16
Contents:	
5000-7712510 collet	1 pc.
5000-7712105 clamping element	1 pc.

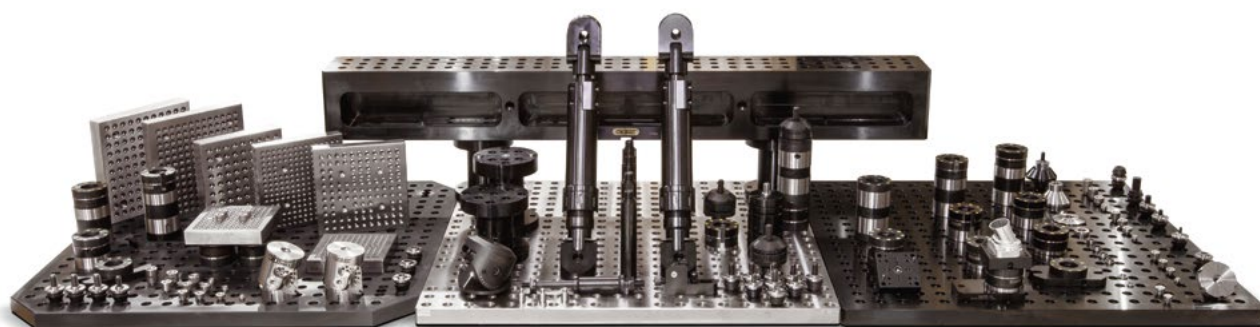
Other sizes (grids) and versions for automation (mechanical / hydraulic for single or multiple clamping up to 130 mm) on request.





VBA clamping modules

CLAMPING MODULES USER EXAMPLES



CLAMPING MODULES USER EXAMPLES



CLAMPING MODULES USER EXAMPLES



CLAMPING MODULES USER EXAMPLES



CLAMPING MODULES USER EXAMPLES



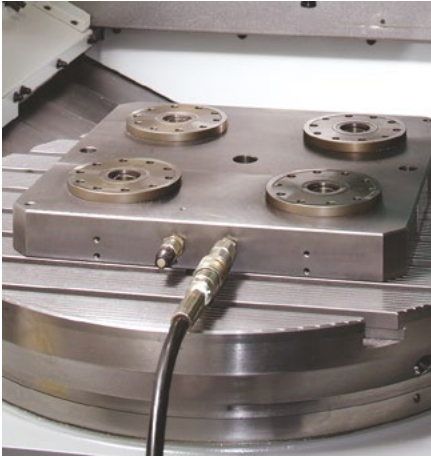
COMPLETE SOLUTIONS
STATIONARY WORKHOLDING TECHNOLOGY



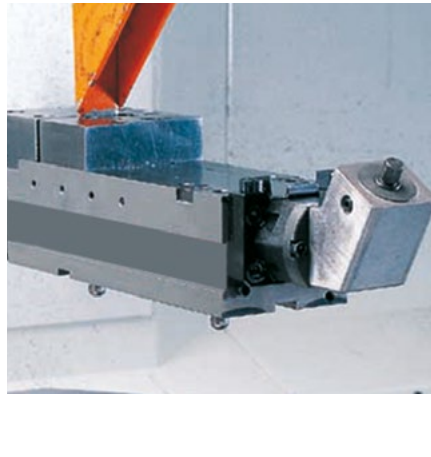
COMPLETE SOLUTIONS STATIONARY WORKHOLDING TECHNOLOGY

How to turn machine downtime into productivity:

Equip machine tables with **vb *lock*!**

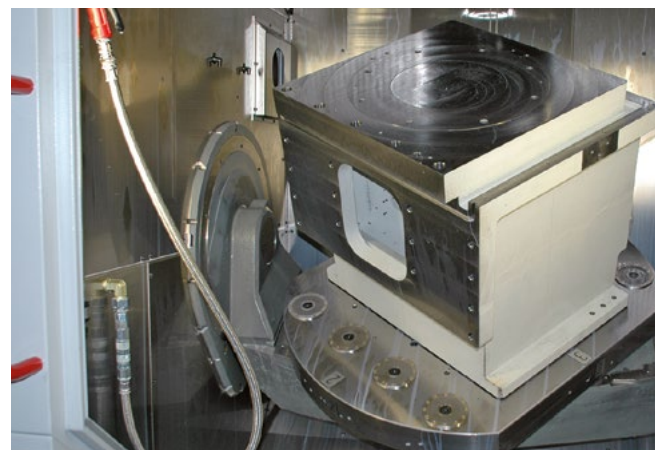
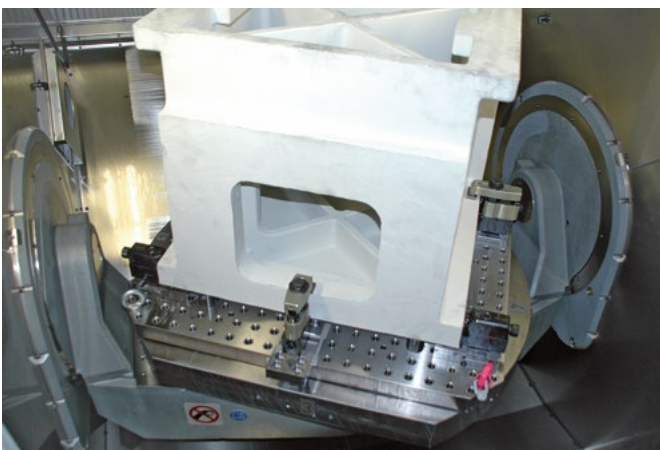


Equip clamping devices / fixtures with clamping bolts



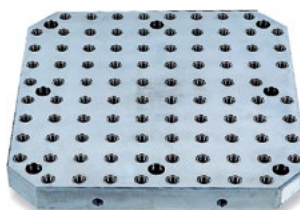
Position and start production 1st clamping set-up

2nd clamping set-up



CLAMPING BODIES

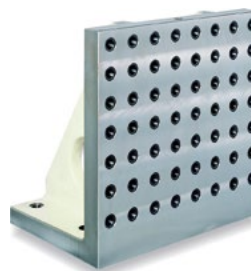
Grid plates T-slot plates



Clamping tower

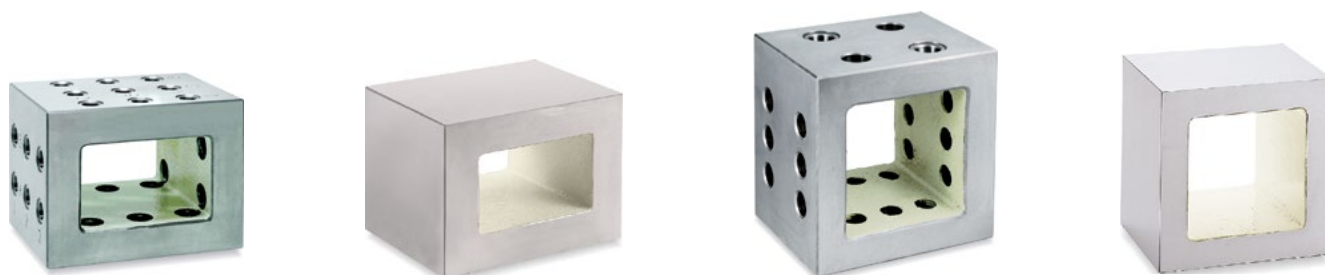


Clamping towers and angle plates



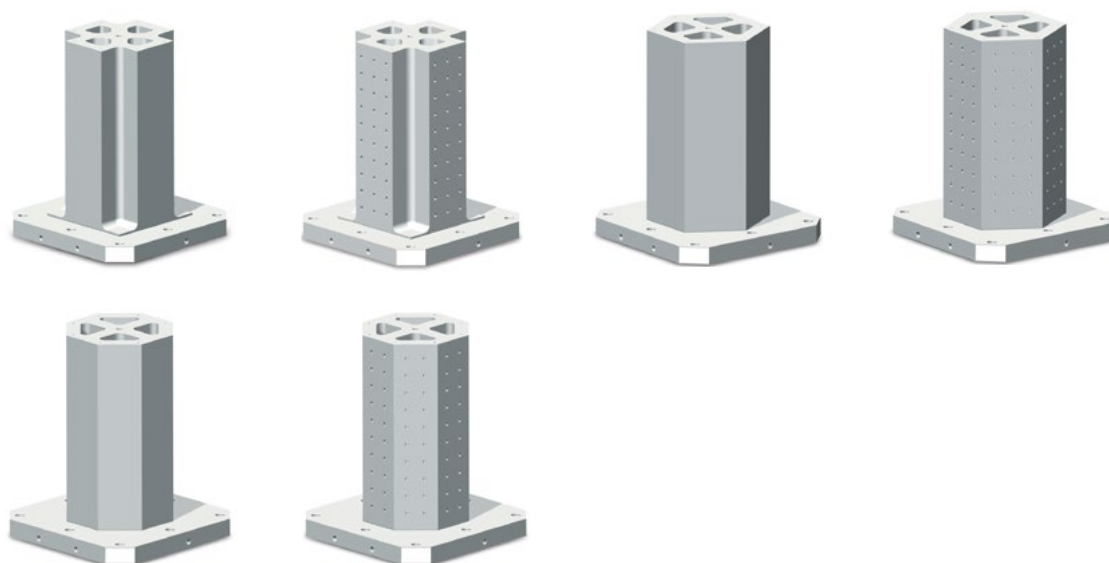
CLAMPING BODIES

Brackets



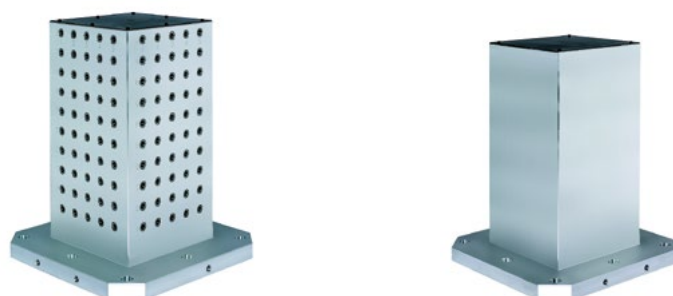
Clamping tower GG 30

Cross, hexagonal, octagonal



Clamping tower

Aluminum





VBA Profi Line centric vise

CE

www.vb-tools.com

vb

Vischer & Bolli AG
Werkzeug- und Spanntechnik
Im Schüssler 17
CH-8600 Dübendorf

Vischer & Bolli
Werkzeug- und Spanntechnik GmbH
Robert-Bosch-Strasse 29a
DE-86131 Lindau

766001

31 kg

CE

www.vb-tools.com

vb

Vischer & Bolli AG
Werkzeug- und Spanntechnik
Im Schüssler 17
CH-8600 Dübendorf

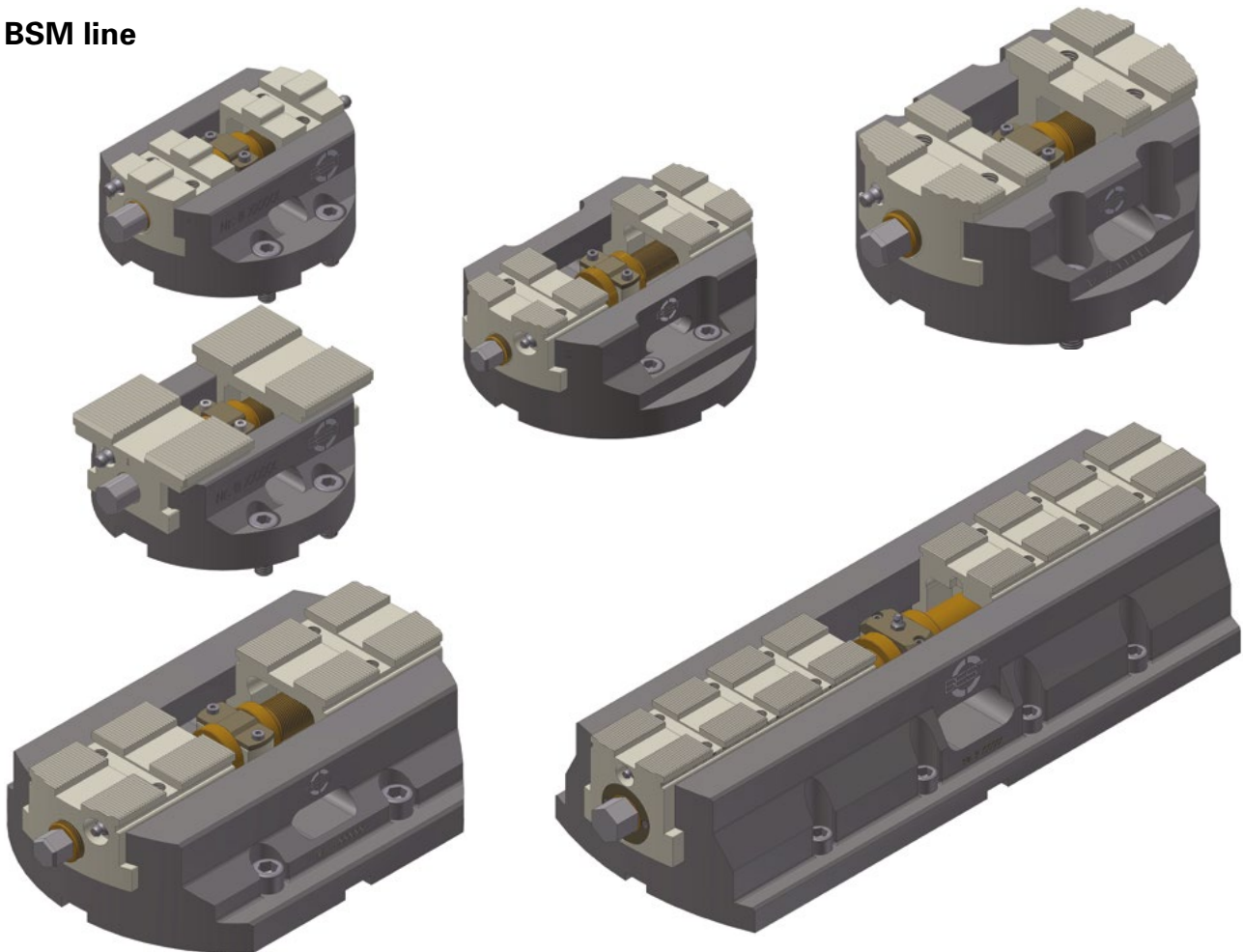
Vischer & Bolli
Werkzeug- und Spanntechnik GmbH
Robert-Bosch-Strasse 29a
DE-86131 Lindau

766030

40 kg

MECHANICAL CENTRIC CLAMPING VISE

BSM line

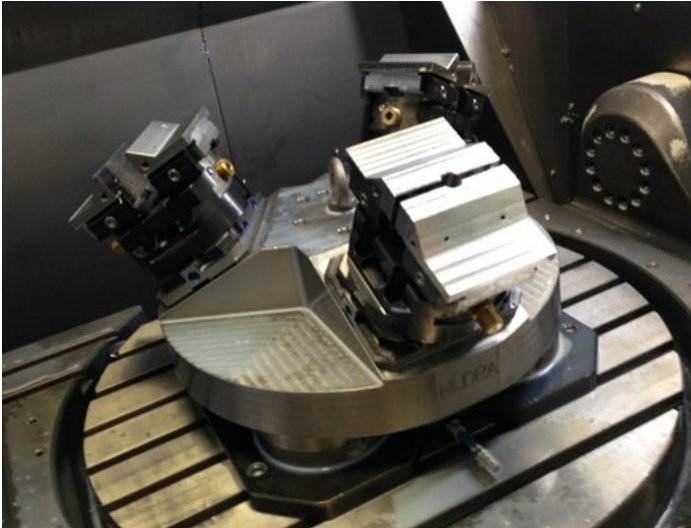


Advantages of BSM centric clamping vises:

- Low interference contours and extremely flat design for maximum flexibility and multi-axis machining centers
- Extremely high clamping forces (up to 100 kN)
- Up to 50 mm stroke / jaw
- Body sizes from 115 mm to 500 mm
- Repeatability of 0.005 mm (in combination with ground jaws)
- Centering accuracy of ± 0.01 mm (in combination with ground jaws)
- Clamping widths up to 500 mm
- Combined quick change-over jaw connection and cross offset starting with model size BSM140
- Ground threaded spindle
- Hardened surfaces for reduced wear
- Depending on the application the BSM centric clamping vise can be used in the conventional manner by bolting it to the machine table, or as an RPC zero-point centering unit on the RealPoint system
- The BSM centric clamping vise can be adapted to zero-point clamping units of other manufacturers

STATIONARY WORKHOLDING TECHNOLOGY

USER EXAMPLES

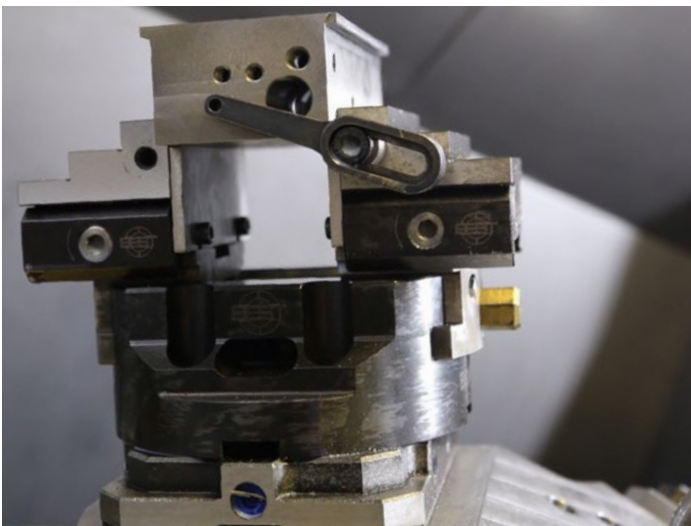


3 BSM-140 clamps with form jaws on LANG zero-point plate.

The custom fixture is clamped on zero-point clamping heads.



2 BSM-140 clamps with prism jaws clamp a shaft. The clamps can be moved on the base plate as needed. This allows clamping of shafts with different lengths and diameters.

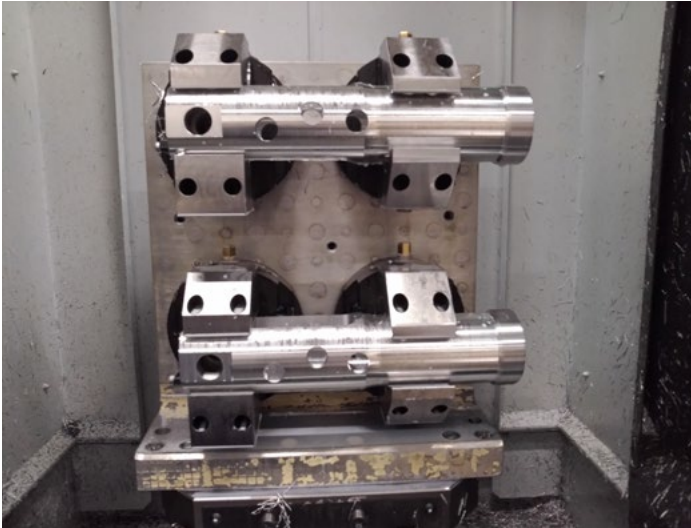


BSM-140 with profile jaws.

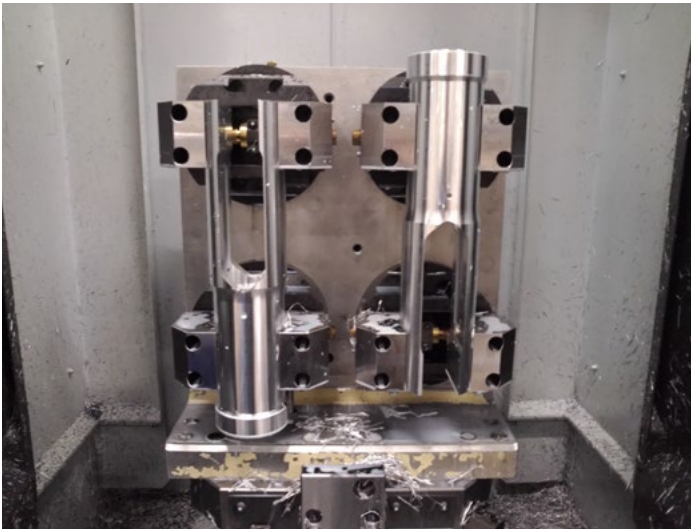
The workpiece being clamped is supported on parallel supports. The position is defined by a side end-stop.

STATIONARY WORKHOLDING TECHNOLOGY

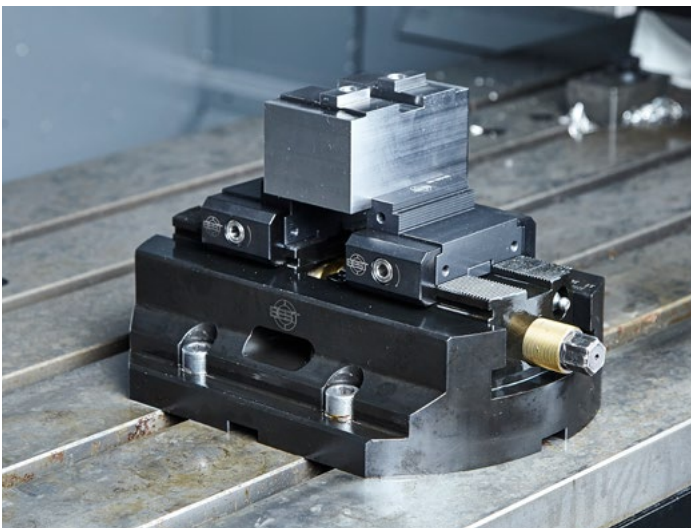
USER EXAMPLES



4 BSM-140 clamps on an angle plate with prism jaw. 2 clamps clamp a workpiece horizontally (OP10).



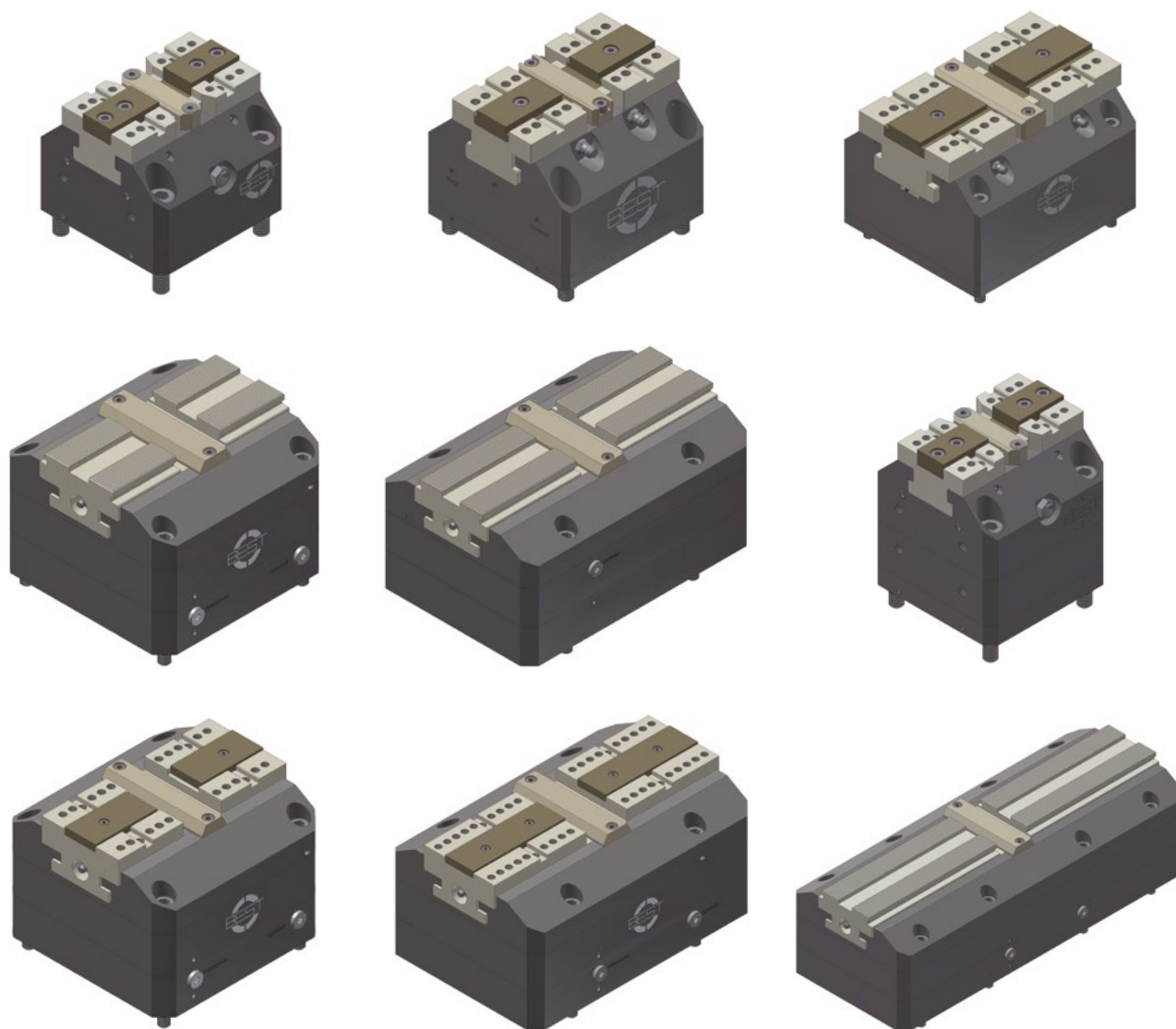
The BSM-140 clamps are turned 90° and now clamp the workpieces vertically (OP20).



BSM-250 with profile jaws (OP20).
The clamp is bolted directly onto the machine table.

CLAMPS FOR AUTOMATION SOLUTIONS

PNEUMATIC CENTRIC CLAMPING VISE

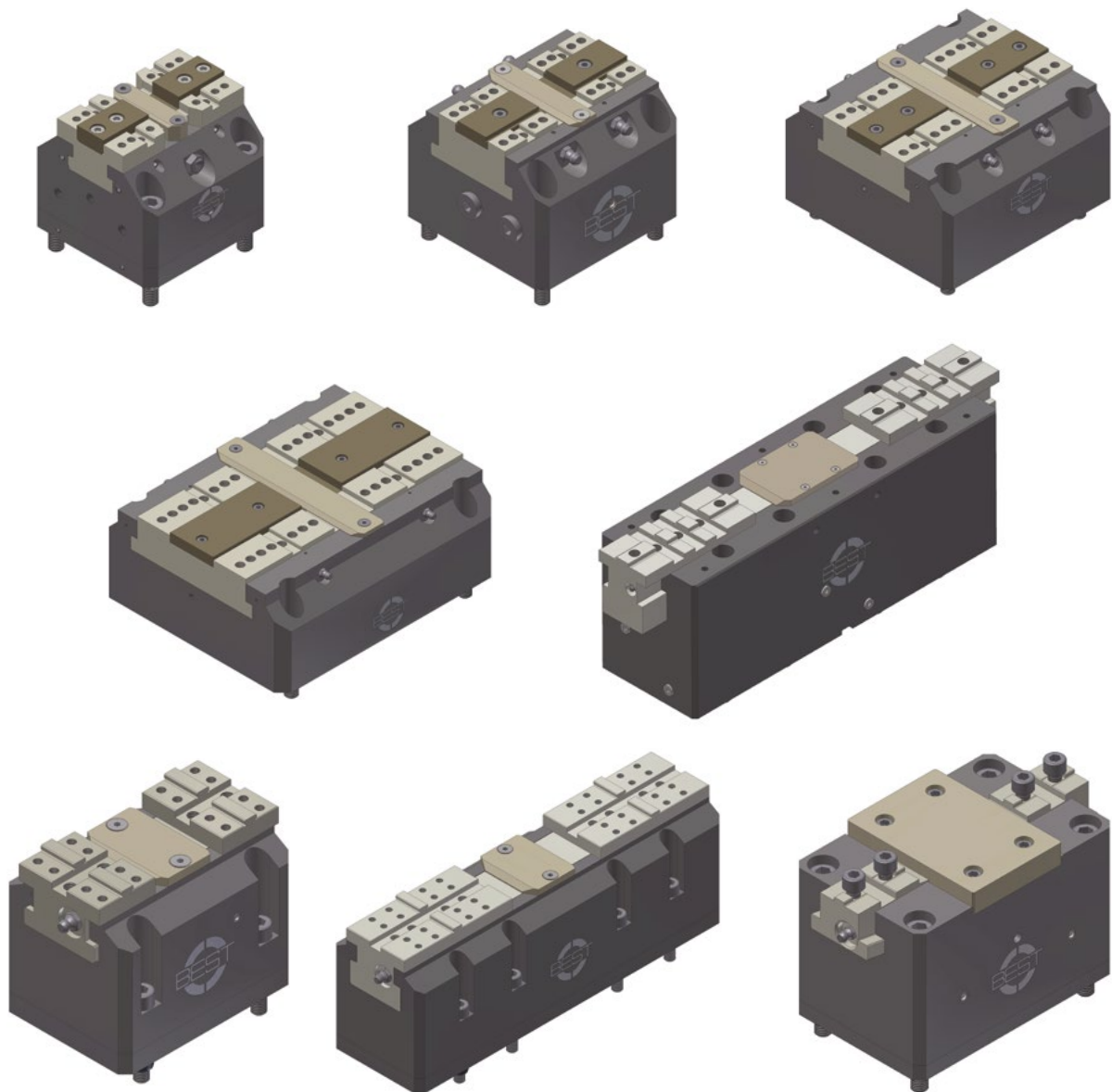


Advantages of VBA pneumatic vises:

- Solid construction for very high rigidity
- Extremely high clamping forces (up to 40 kN)
- Body sizes from 64 mm to 250 mm (standard version; larger models are available on request)
- Repeatability of 0.005 mm (in combination with ground jaws)
- Centering accuracy of ± 0.01 mm (in combination with ground jaws)
- Clamping widths up to 240 mm
- Hardened surfaces for reduced wear
- Suitable for I.D. and O.D. clamping
- Custom solutions / adaptations are possible upon request (please provide us with the data for your custom requirements, after which you will receive a technical draft with an offer for the required quantity)
- Compensating clamping

CLAMPS FOR AUTOMATION SOLUTIONS

HYDRAULIC CENTRIC CLAMPING VISE



Advantages of VBA hydraulic vises:

- Solid construction for very high rigidity
- Extremely high clamping forces (up to 50 kN)
- Body sizes from 64 mm to 500 mm
- Repeatability of 0.005 mm (in combination with ground jaws)
- Centering accuracy of ± 0.01 mm (in combination with ground jaws)
- Clamping widths up to 500 mm
- Hardened surfaces for reduced wear
- Suitable for I.D. and O.D. clamping
- Custom solutions / adaptations are possible upon request (please provide us with the data for your custom requirements, after which you will receive a technical draft with an offer for your required quantity)

vb DOCK LOCK ROBOT CELL

Video vb robot cell



vb DOCK LOCK ROBOT CELL





centering unit
CENTREX duo

CENTREX duo

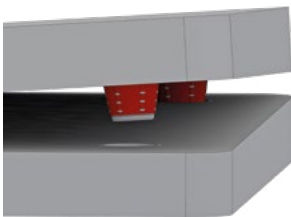
PRODUCT DESCRIPTION

Positioning repeatability of the parts to be manufactured and high process reliability are the top priorities in production. The CENTREX duo centering unit makes it easy for you to set up your components. Time-consuming alignment of components for machining is no longer necessary. CENTREX duo is designed for universal use in a wide range of applications.

Key advantages

- Centering element for high-precision positioning of two components
- Extremely high repeatability (≤ 0.003 mm)
- Designed for flexible custom integration, even in tight spaces
- Impervious to contamination and chips through vulcanization

User example: Pallet system



CENTREX duo

- Very user friendly
- No tilting during joining and no wear



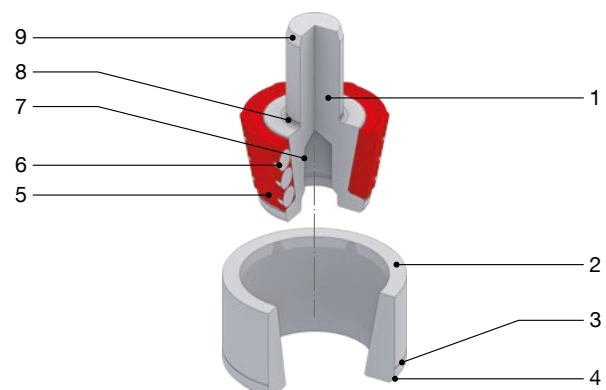
Standard centering pin

- Difficult handling, only parallel joining possible
- Tilted and worn out

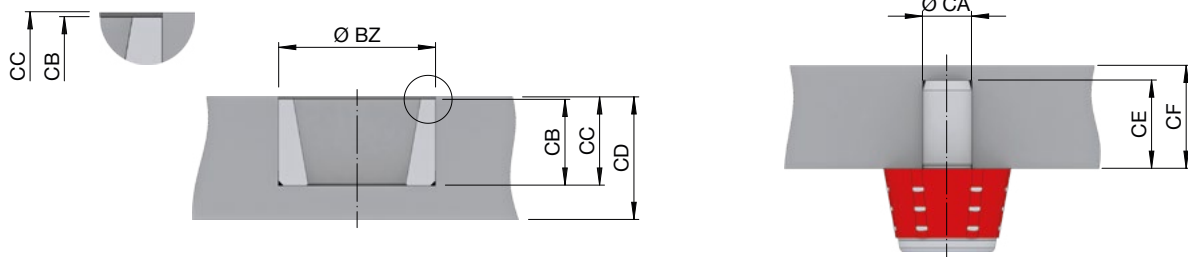
CENTREX duo in detail

Description

- 1 Positioning taper
- 2 Positioning bushing
- 3 Placement diameter for easy assembly
- 4 Lead-in chamfer for easy assembly
- 5 Rubber for positioning the precision balls
- 6 Precision balls as centering element
- 7 Disassembling thread
- 8 Neck for plane-parallel installation of the positioning taper
- 9 Lead-in chamfer for easy assembly

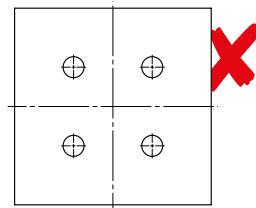
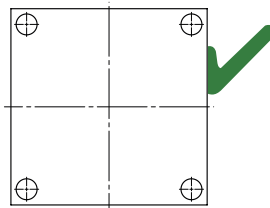


CENTREX duo INSTALLATION

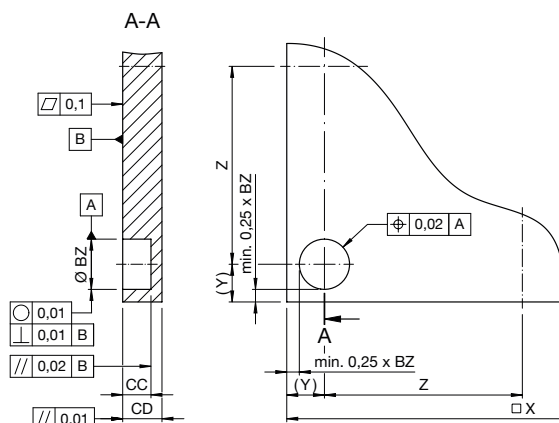


Description		Positioning bushing		Positioning taper	
Size		1	3	1	3
Repeatability ≤ (mm)		0,003			
Weight (kg)		0.01	0.05	0.01	0.04
Bore bush Ø (mm)	BZ	Ø 16 H7	Ø 32 H7		
Bushing height (mm)	CB	8.5	17.5		
Bore depth	CC	9 (+0.0 -0.1)	18 (+0.0 -0.1)		
min. plate thickness (mm)	CD	12.5	25		
Bore bolt Ø (mm)	CA			Ø 6 H7	Ø 10 H7
Bolt length (mm)	CE			9	18
Min. plate thickness (mm)	CF			12	21
In stock		✓	✓	✓	✓
Order no.		2096/0009	2096/0008	2097/0011	2097/0010

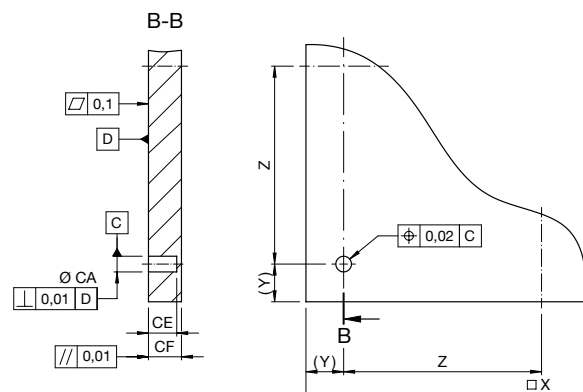
To achieve the best possible alignment of the two components, the CENTREX duo elements must be positioned as far away from each other as possible.



Installation dimensions of positioning bushing



Installation dimensions of positioning taper



CENTREX duo

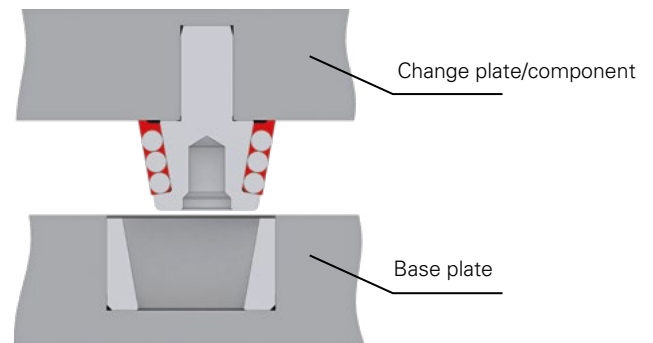
INSTALLATION

Draw-in mechanism (e.g. screw connection) for minimum pull-down force

Size	1		3	
Quantity CENTREX duo	1	4	1	4
Minimum pull-back force (kN)	1.5	6	2.5	10

The pull-back force due to the pull-in mechanism must be absorbed by the components, as the CENTREX duo elements are only suitable for centering and not for absorbing force. When applying the minimum pull-back effect, a friction lock occurs between the two components, whereby the CENTREX duo elements remain free of transverse forces.

- The maximum operating temperature is 80 °C
- Normally the positioning bushing is pressed into the base plate and the positioning taper is pressed into the changing plate or the component
- The maximum axis center offset of the positioning taper and bushing when joining must not exceed > 3 mm

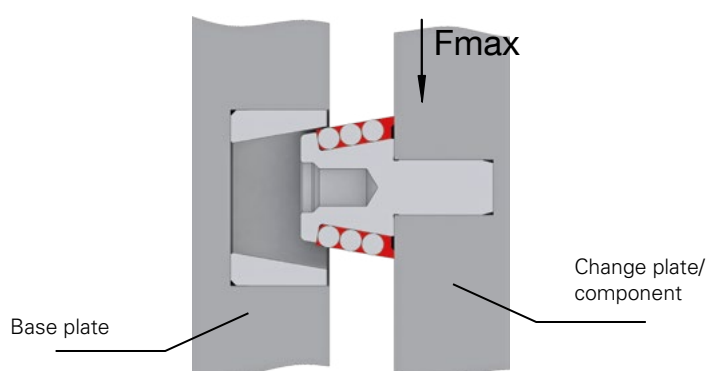


Particularities for horizontal installation

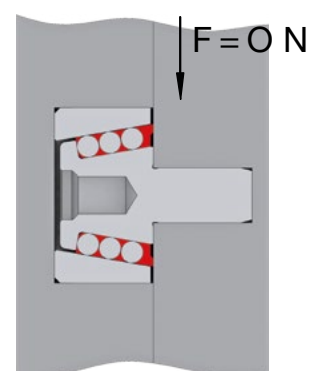
The same installation dimensions apply as for vertical installation. Since the components absorb the transverse forces in clamped status, the CENTREX duo is free of transverse force. When changing pallets or joining components CENTREX duo elements must only be subjected to the following transverse forces:

Size	1		3	
Quantity CENTREX duo	1	4	1	4
Transverse force Fmax (N)	35		250	

Joining

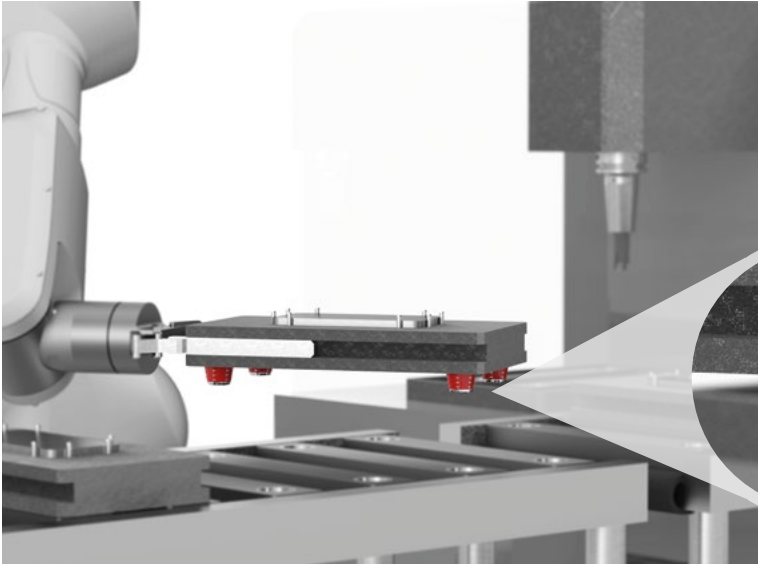


Clamped status

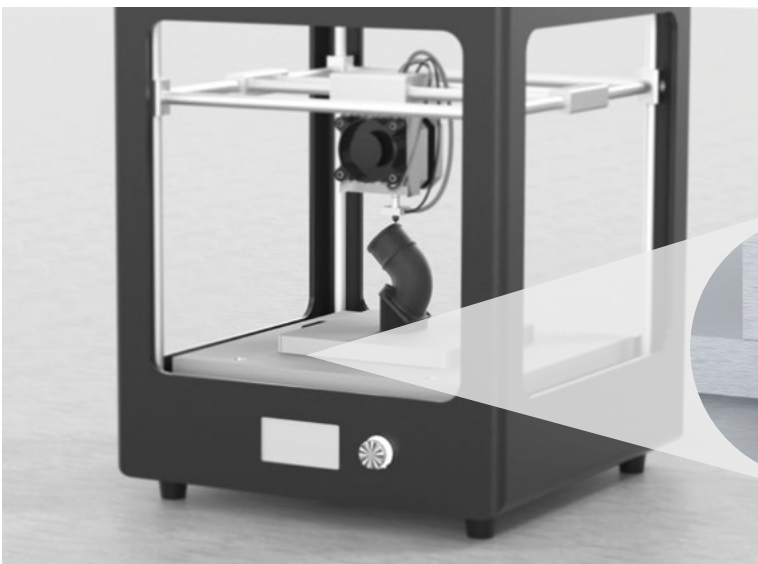


CENTREX duo

USER EXAMPLES



Workpiece carrier
CENTREX duo as a positioning element of workpiece carriers for multiple manufacturing and assembly stations [e.g. smartphone production].



Additive manufacturing
CENTREX duo as a positioning element for the base plate in 3D printers.

CENTREX duo

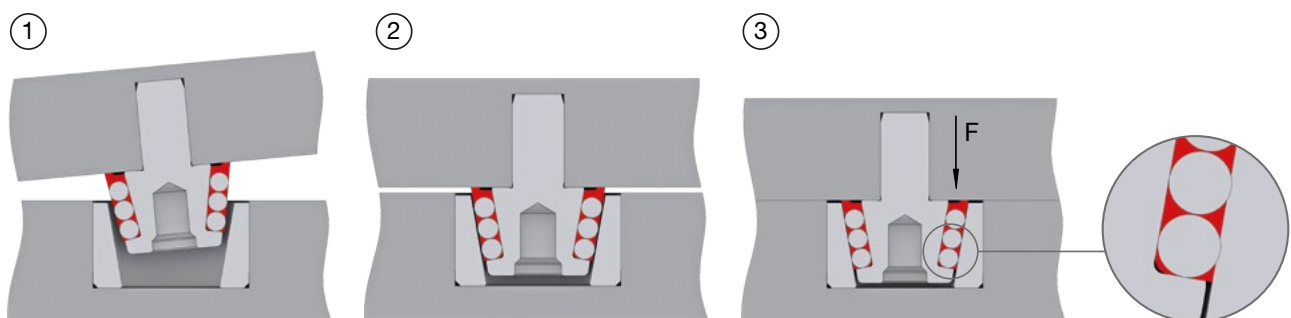
ADDITIONAL INFORMATION ON USE

- Temperature differences of up to 30 K can be compensated
- The rubber does not become brittle, and is impervious to contamination or chips
- Pressed-in chips are not harmful to the system
- Do not use cooling lubricants that contain ester or polar solvents; for replacement of the positioning bushing, an undercut should be made for removal of the bushing

CENTREX duo

FUNCTIONAL CHARACTERISTICS

- ① When joining two plates or components equipped with CENTREX duo, the positioning taper is pressed into the positioning bushing.
- ② In this process the balls of the positioning taper rest lightly on the positioning bushing, and the two plates are not yet in flat contact with each other.
- ③ When applying the pull-down force $[F]$ the precision balls press into the taper surface and the support surfaces of the two plates are aligned with each other. In this process the lateral surfaces of the tapered bushing and the taper mandrel are deformed elastically in the area of the precision balls. The lateral surfaces of the two tapers have the same hardness all over. Due to the prevailing equilibrium of forces, the positioning taper always strives to be aligned in the center of the tapered bushing. As a result of this centering process, the component is always precisely positioned in the axis with high repeatability.





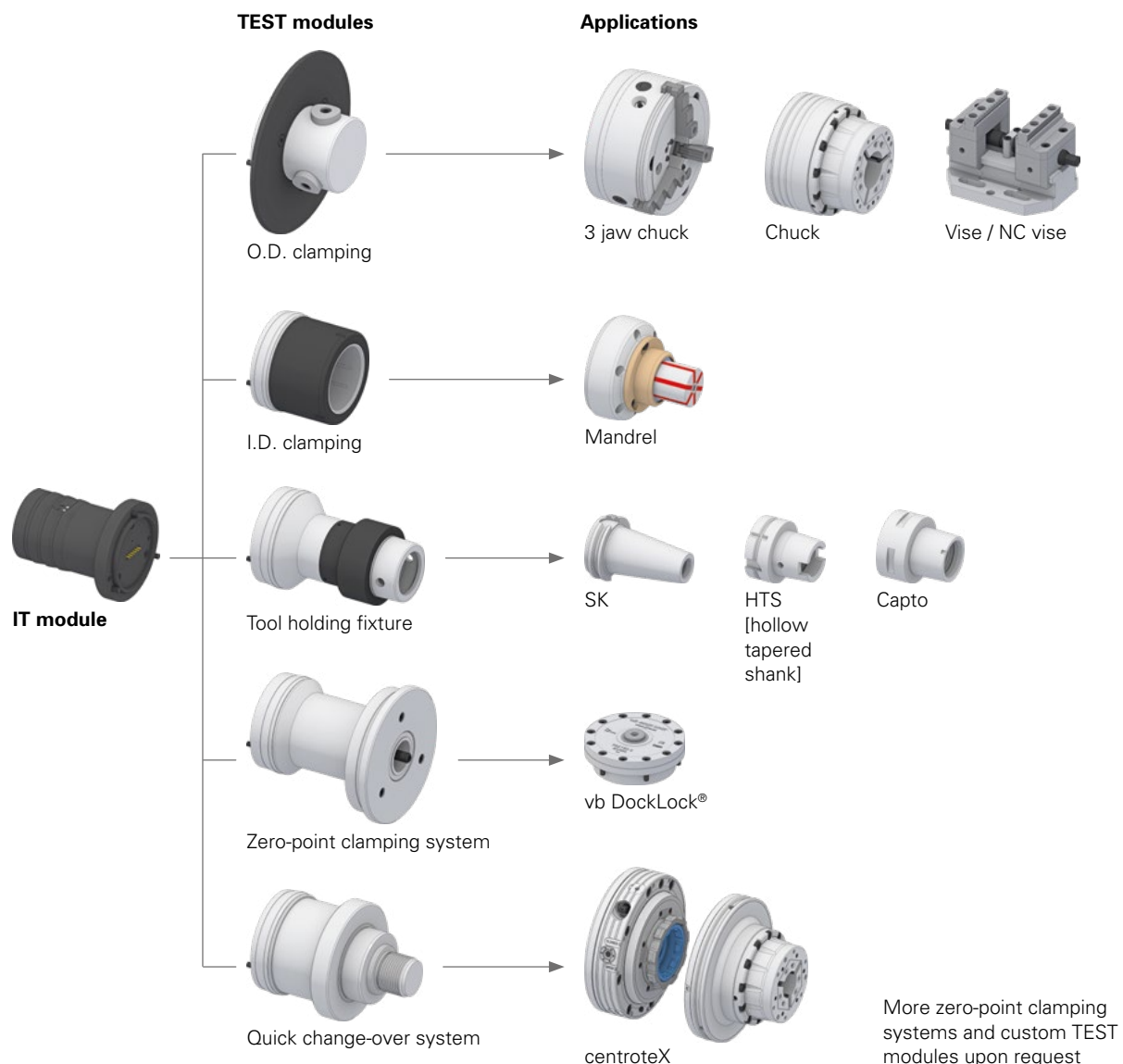
TESTING AND MEASURING TECHNOLOGY

TESTING AND MEASURING TECHNOLOGY

TESTit clamping force gauge from HAINBUCH – one for all

A regular check of the clamping force and draw-in force is essential for a safe, precise, and productive process. Nowadays, no one can afford to manufacture with “theoretical clamping/draw-in forces”. Not to mention the fact that DIN EN 1550 requires static clamping force measurements to be carried out at regular intervals. The TESTit clamping force gauge measures and logs the clamping force or O.D. and I.D. clamping, as well as the draw-in force of diverse systems, such as our zero-point clamping system vb DockLock®. The TESTit gauge consists of two elements: The base unit, or the IT module, and the

measuring units, or the TEST modules. You only need one IT module, regardless of whether you want to measure the clamping force or the draw-in force. It is, so to speak, the foundation. Depending on the measurement application, different TEST modules are available that are designed for plug & play connection to the IT module. Even custom versions of TEST modules fit on the IT module. All aspects have been carefully considered! TESTit gives you control over the clamping force and draw-in force, while preventing workpiece deformation and reducing scrap.

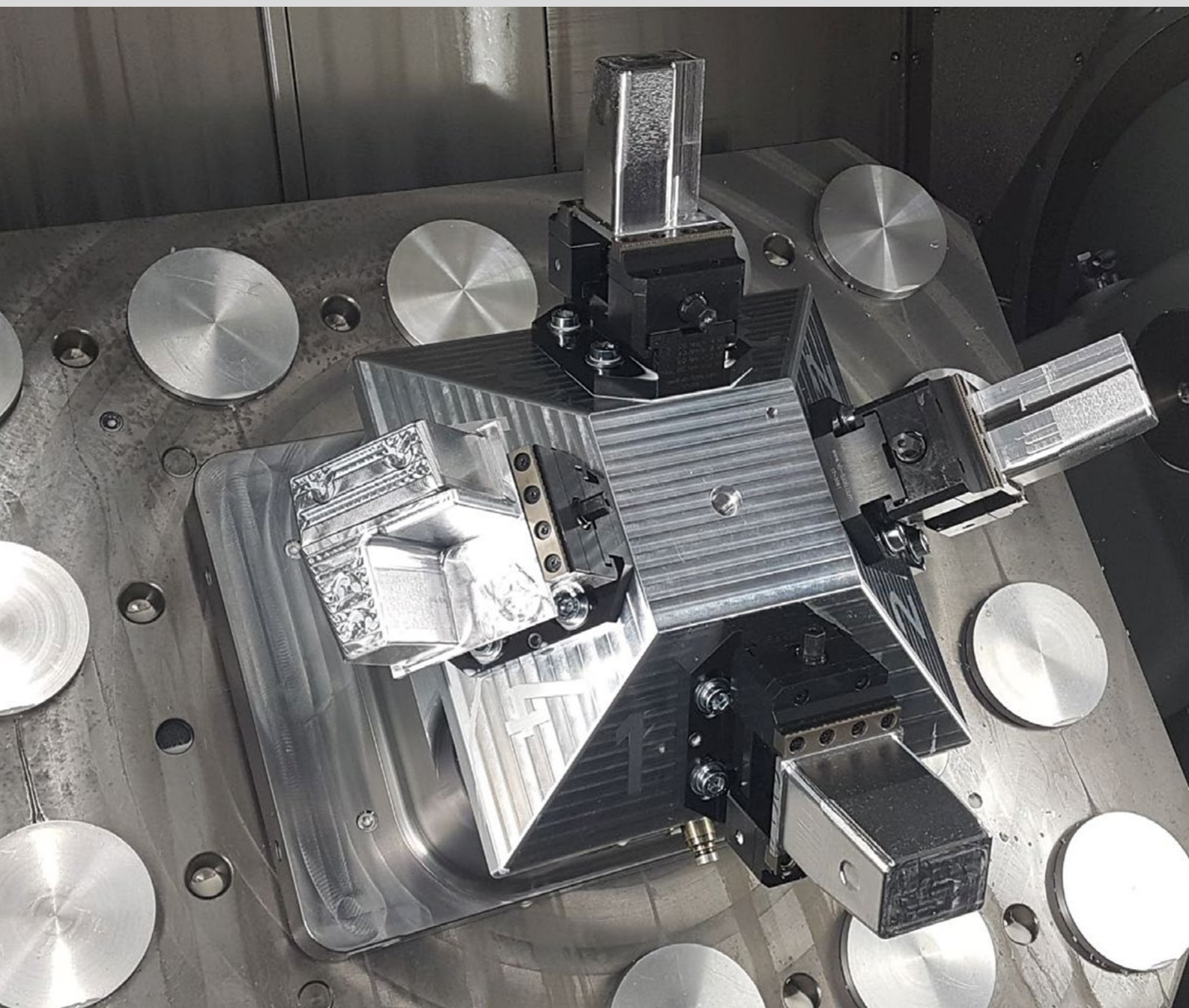






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Heuriedweg 34
88131 Lindau

Telephone: +49 8382 9619-0
Fax: +49 8382 9619-30
E-mail: verkauf@vb-automation.com



vb centro76 centric vise with pyramid, 4-unit