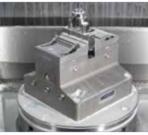


Solutions for automated manufacturing Clamping | Fixing | Testing | Automate









Up to 50 % discount on the list price

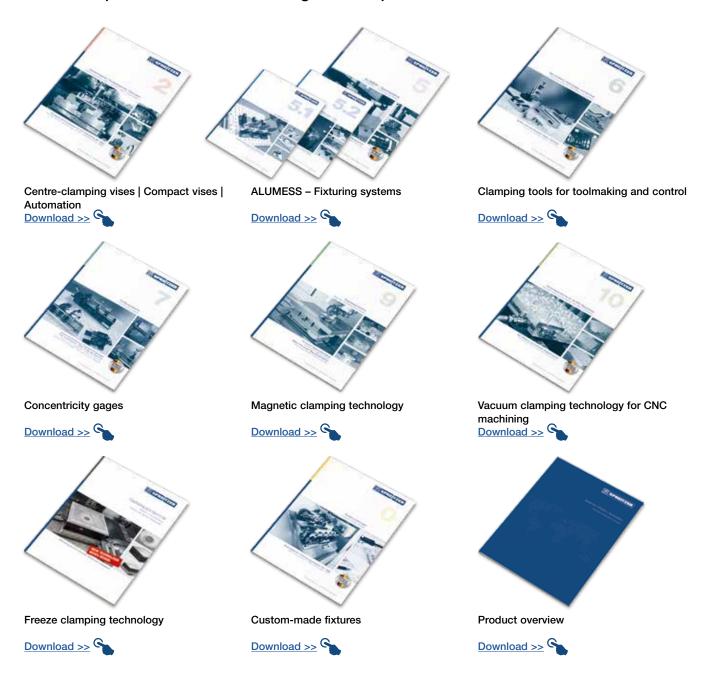
NEW PRODUCTS



"Through the use of our products and services, our customer's productivity of their production can be increased by 100 %, with their production costs being dramatically reduced."

Michael Spreitzer, Managing irector

Benefit from our attractive price campaign! Innovative products from the following different product areas:



Note on our prices!

Due to the current market situation and possible price increases, we reserve the right to adjust the promotional prices with a surcharge.

Inspection Arsenal® and Laser Arsenal® are registered trademarks of Phillips Precision, Inc., USA. Since 2021 we are the exclusive partner for Europe, Asia and other international sales territories.

Starter-Kits 3-axis machining centers

High price and cost pressure, ever shorter delivery times, small batch sizes with simultaneously high quality requirements. Only with increased flexibility, quality and productivity can manufacturers hold their own in global competition.

We are happy to help - with our innovative clamping solutions for your modern production.



Mechanical centric clamps & compact clamps

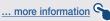
- · Wide range of sizes and designs
- · Powerful clamping
- · Secure clamping, without pre-stamping
- · Compact design

... more information



Mechanical double clamps & multiple clamping systems

- · Clamping of two workpieces
- · Large clamping range due to top reversible jaws
- · Highest flexibility





Power-operated centric clamps & compact clamps

- · Pneumatic / Hydraulic / Electromechanical
- · Short clamping time, automation capable
- · High clamping accuracy

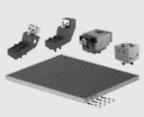
... more information



Clamping plates & grid plates

- · Modular clamping system
- · Maximum flexibility
- · Single clamping, multiple clamping

... more information



Mechanical zero point clamping system ZPS

- · Quick changeover, changeover
- · High repeatability
- · Positioning / clamping in one oper-





Clamping bridges for CNC rotary tables

- · Multi-sided machining
- Multiple clamping
- · Can be retrofitted at any time



... more information



Electro-permanent magnetic chucks

- · Deformation-free clamping



- · Force generation by current pulse
- · Extreme holding forces

... more information



Vacuum chucks

- · Efficient and universal
- · Modularly expandable
- · Clamping of flat components



... more information



For further information and clamping technique variants, see Product cataloge.

Starter-Kits 5-axis machining centers

We will show you how you can manufacture faster and more accurately by choosing the right clamping reduce set-up times and tool costs, and increase your productivity.

Clamping solutions for modern machining centers

Our centric clamps, compact clamps, double clamps and alternative clamping technology components have been regarded for years as innovative and powerful solutions on state-of-the-art machining centers.



Mechanical centric clamps & compact clamps

- · Wide range of sizes and designs
- · Powerful clamping
- · Secure clamping, without pre-stamping
- · Compact design

... more information



Substructures & adapter plates

- · Shortening Z-movement
- · Collision-free use of short tools
- Precisely fitting on machine table and rotary table





Mechanical zero point clamping system ZPS

- · Quick changeover, changeover
- · High repeatability
- Positioning / clamping in one operation





Mechanical three-jaw chuck

- · High accuracy
- · High clamping force
- · Large clamping width

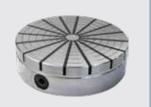




Permanent magnetic chucks

- · Manually operated
- · Low magnetic field
- · No thermal distortion





Power-operated centric clamps & compact clamps

- Pneumatic / Hydraulic / Electromechanical
- · Short clamping time, automation capable
- · High clamping accuracy

... more information



Electro-permanent magnetic chucks

- · Force generation by current pulse
- · Extreme holding forces

... more information

· Deformation-free clamping



Pyramids

- · Shortening Z-movement
- · Multiple clamping
- · Can be retrofitted at any time



... more information





Mechanical centre-clamping vises MZX

The centre-clamping vise series MZX is used as a powerful, universal and reliable clamping device on zero-point systems. The base body of the vise is provided with system holes suitable for LANG or market competitors, grid dimension 52×52 mm or 96×96 mm. Whether raw material clamping with or without prestamping. Our reversible jaw variants offer the perfect solution.

... more information



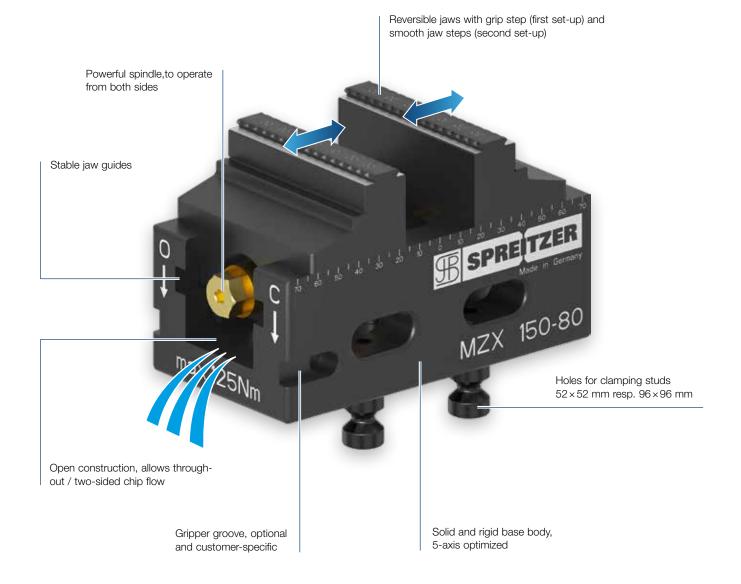
Application video





Strong Points

- Powerful, universal and process reliable
- Reversible jaws suitable for LANG stamping
- Body suitable for LANG zero-point system, or market competitors with a center dimension of 52×52 mm or 96×96 mm.



Mechanical centre-clamping vises MZX

Type LA

Reversible grip jaws according to the LANG system

· Pre-stamping the workpiece is required.

Type SP

Reversible grip jaws according to the SPREITZER system

· Clamping of raw parts without pre-stamping.

Type GL

Reversible step jaws with grip inserts

- · Flexible clamping of raw parts without pre-stamping.
- · Grip inserts / clamping inserts can be replaced depending on the workpiece requirements.



Application video





Accuracy

- · Repetition accuracy 0,01 mm
- · Pairing accuracy 0,03 mm



Practical advice

The outer contour of the centre-clamping vises can optionally be supplied with a customized gripper groove.



Clamping inserts see page 13

Туре	Order no.	L×B×H	Grid dimension	Stroke	Clamping width	Clamping force	M max	Weight	Price	
		[mm]	[mm]	[2×mm]	[mm]*	[N]**	[Nm]	[kg]	[Euro/Piece]
MZX 130-60 LA	B200500222	130×80×82	□ 52×52	32	114	22 500	60	4	650,00	552,50
MZX 130-60 SP	B200500223	130×80×83	□ 52×52	32	104	30 000	80	4,5	621,00	527,85
MZX 130-60 GL	B200500224	130×80×83	□ 52×52	32	93	30 000	80	4,5	678,00	576,30
MZX 150-80 LA	B200500225	150×80×89	□ 52×52	32	134	32 500	100	5	764,00	649,40
MZX 150-80 SP	B200500226	150×80×90	□ 52×52	32	124	40 000	125	5,5	730,00	620,50
MZX 150-80 GL	B200500227	150×80×90	□ 52×52	32	114	40 000	125	5,5	797,00	677,45
MZX 220-80 LA	B200500228	220×80×89	□ 52×52	67	204	32 500	100	7	871,00	740,35
MZX 220-80 SP	B200500229	220×80×90	□ 52×52	67	194	40 000	125	7	833,00	708,05
MZX 220-80 GL	B200500230	220×80×90	□ 52×52	67	184	40 000	125	7,5	909,00	772,65
MZX 150-125 LA	B200500231	150×125×89	□ 96×96	32	134	32 500	100	10,5	876,00	744,60
MZX 150-125 SP	B200500232	150×125×90	□ 96×96	32	124	40 000	125	11	838,00	712,30
MZX 150-125 GL	B200500233	150×125×90	□ 96×96	32	114	40 000	125	11,5	947,00	804,95
MZX 220-125 LA	B200500234	220×125×89	□ 96×96	67	204	32 500	100	11,5	995,00	845,75
MZX 220-125 SP	B200500235	220×125×90	□ 96×96	67	194	40 000	125	12	952,00	809,20
MZX 220-125 GL	B200500236	220×125×90	□ 96×96	67	184	40 000	125	12	1076,00	914,60
MZX 320-125 LA	B200500237	320×125×89	□ 96×96	116	304	32 500	100	18,5	1284,00	1.091,40
MZX 320-125 SP	B200500238	320×125×90	□ 96×96	116	294	40 000	125	19	1228,00	1.043,80
MZX 320-125 GL	B200500239	320×125×90	□ 96×96	116	284	40 000	125	19,5	1388,00	1.179,80

^{*} with reversible jaws / ** Clamping force is the arithmetic sum of the individual forces occuring at the jaws. For further sizes and types see product catalog.

Mechanical zero-point-system ZPS

For quick, easy and set-up time-optimized positioning and fastening of clamping devices, workpieces and pallets on the 4-point clamping unit. By actuating the central clamping screw, all four chucking spigots are clamped or unclamped at the same time.

- Quick set-up, conversion
- Clamping devices and pallets can be indexed through $4\times90^{\circ}$
- + High pull-in force, high holding force

... more information

Application video





Accuracy

Repetition accuracy 0,005 mm

Туре	Order no.	L×B×H [mm]	Grid dimension [mm]	Pull-in/locking force up to [mm]	Holding force [kN]	Weight [kg]	Price [Euro/Piece]	
ZPS 52	B900501180	160×118×27	□ 52×52	6	50	3,5	682,50	614,25
ZPS 96	B900501183	200×165×27	□ 96×96	6	50	5,9	834,50	751,05

For further sizes and types see product catalog.

Applications - Mechanical zero-point-system ZPS

The mechanical zero-point-system ZPS reduces setup times / setup costs up to 90 %. It allows rapid changes of different clamping devices on the base unit.



Three-jaw chuck DBF



Permanent magnetic chuck



Collet chuck ER 32-5X

indexierba indexable

Pneumatic centre-clamping vise PZS²



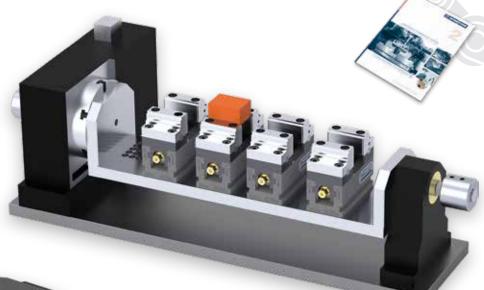
Mechanical centre-clamping vise MZU

Advanced functionality with accessories from Spreitzer

Effective. Productive.

With our range of base cubes, pyramids, adapter and grid plates as well as bridge units, you can expand your manufacturing capacity in no time. The multiple clamping on interchangeable pallets increases the effective machine running time of automated multi-axis machining centers and reduces cycle times significantly.

... more information



Bridge unit for CNC rotary table



Clamping tower with mechanical centre-clamping vises MZU



Pyramide with mechanical centre-clamping vises MZR

Mechanical centre-clamping vises MZR

The compact centre-clamping vise series MZR is used as a cost-effective clamping device for clamping raw parts on multi-axis machining centres and automation systems. The clamping range can be enlarged by means of one-piece reversible jaws with integrated grip steps.

- + Attractively priced basic modell
- Powerful form fit raw material clamping without pre-stamping
- + Reversible jaws for maximum clamping range

... more information

Application video





Accuracy

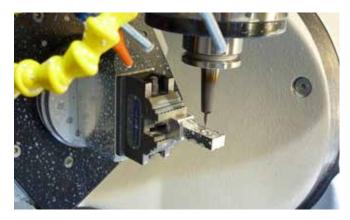
- · Repetition accuracy 0,01 mm
- · Pairing accuracy 0,03 mm

			STATISTICS.	
Clamping width [mm]*	Clamping force [N]**	M max [Nm]	Weight [kg]	Price [Euro/Piece]

Raw material clamping without pre-stamping

Туре	Order no.	L×B×H [mm]	Stroke [2×mm]	Clamping width [mm]*	Clamping force [N]**	M max [Nm]	Weight [kg]	Price [Euro/Piece]	
MZR 80-36	B200500139	$80 \times 36 \times 52$	19	59	16 000	30	0,8	397,00	337,45
MZR 120-60	B200500140	$120\times60\times84$	20	86	30 000	80	3,0	605,00	514,25
MZR 170-60	B200500141	$170\times60\times84$	45	136	30 000	80	4,0	645,00	548,25
MZR 220-80	B200500142	$220\!\times\!80\!\times\!94$	64	178	40 000	125	8,0	796,00	676,60
MZR 220-125	B200500173	$220\times125\times94$	64	178	40 000	125	10,0	985,00	837,25
MZR 320-125	B200500202	$320\times125\times94$	114	278	40 000	125	12,0	1267,00	1.076,95

^{*} with reversible jaws / ** Clamping force is the arithmetic sum of the individual forces occuring at the jaws. For further sizes and types see product catalog.









Mechanical centre-clamping vises MZU

The centre-clamping vise series MZU with reversible top jaws gives the user the highest level of flexibility on multi-axis machining centres. The reversible stepped jaws with 3 ground clamping steps offer maximum accessibility, even for short cutting tools.

- Large clamping range due to reversible top jaws
- Maximum flexibility
- Maximum accessibility

... more information

Application video





Accuracy

- · Centering accuracy ±0,015 mm
- · Repetition accuracy 0,01 mm
- Pairing accuracy 0,02 mm



Туре	Order no.	L×B×H [mm]	Stroke [2×mm]	Clamping width [mm]*	Clamping force [N]**	M max [Nm]	Weight [kg]*	Price [Euro/Piece]	
MZU 80-36	B200500100	$80\!\times\!36\!\times\!39$	19	78 / 70	16 000	30	1,0	429,00	364,65
MZU 120-60	B200500125	$120\times60\times70$	17	80 / 110	30 000	80	3,5	727,00	617,95
MZU 170-60	B200500066	$170\times60\times70$	42	130 / 160	30 000	80	4,5	878,00	746,30
MZU 220-80	B200500065	$220\!\times\!80\!\times\!75$	61	180 / 210	40 000	125	8,5	899,00	764,15
MZU 220-125	B200500195	$220\times125\times75$	61	180 / 210	40 000	125	14,8	1047,00	942,30
MZU 320-125	B200500201	320×125×75	111	270 / 310	40 000	125	19,5	1356,00	1.220,40

 $^{^{\}star}$ with reversible jaws / ** Clamping force is the arithmetic sum of the individual forces occuring at the jaws. For further sizes and types see product catalog.









Mechanical centre-clamping vises MSU

The mechanical compact vises MSU allow secure and precise clamping of workpieces to the defined fixed stop. The extensive jaw program of reversible top jaws provides maximum flexibility and optimum accessibility especially on multi-axis machining center. The fixed jaws can be mounted on the vise body at two positions.

- Compact design, maximum accessibility
- Wide clamping range by reversible top jaws
- Highest flexibility

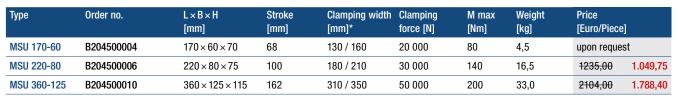
... more information G

Application video





Pairing accuracy 0,02 mm



^{*} with reversible stepped jaws resp. soft block jaws. For further sizes and types see product catalog.

Mechanical centre-clamping vises MZS

The high centering and repetition accuracy make this centre-clamping vise series MZS an universal clamping solution especially for already premachined workpieces or precision parts.

- High clamping accuracy
- High centering and repetition accuracy
- + Large variety



Application video





· Centering accuracy ±0,005 mm*

- · Repetition accuracy 0,003 mm
- · Pairing accuracy 0,01 mm
- * to the alignment holes on the bottom side



reversible stepped jaws

Clamping against fixed stop

Туре	Order no.	L×B×H [mm]	Stroke [mm]	Clamping width [mm]*	Clamping force [N]	M max [Nm]	Weight [kg]	Price [Euro/Piece]	
MZS 70-36 A	B200500069	$70 \times 36 \times 34$	11	70	10 000	8	0,5	1062,00	902,70
MZS 120-60 A	B200500071	$120\times60\times50$	23	120	16 000	30	2,8	1182,00	1.004,70
MZS 180-80 A	B200500072	180×80×74	35	180	30 000	50	7,5	1603,00	1.362,55

with soft block jaws (A)

^{*} Clamping force is the arithmetic sum of the individual forces occuring at the jaws. For further sizes and types see product catalog.

Mechanical centre-clamping vises MZC

The centre-clamping vise series MZC is characterized by a massive and torsion-free construction. The large clamping width and the high clamping force enable the universal and flexible use on multi-axis machining centres.

- + First and second setup in the highest quality
- + Unmachined and pre-machined workpieces
- + High clamping and holding force
- + 100 % encapsulated design



Application video



Accuracy

- · Centering accuracy ±0,005 mm*
- · Repetition accuracy 0,003 mm
- · Pairing accuracy 0,01 mm



Туре	Order no.	L×B×H [mm]	Stroke [2×mm]	Clamping width [mm]*	Clamping force [N]**	M max [Nm]	Weight [kg]*	Price [Euro/Piece]	
MZC 220-80 S	B200500113	$220\!\times\!80\!\times\!80$	30	185 / 218	40 000	125	9,5	2074,00	1.866,60
MZC 280-100 S	B200500117	$280\times100\times100$	40	245 / 298	50 000	140	20,0	2539,00	2.285,10
MZC 360-125 S	B200500148	360 × 125 × 125	50	310 / 374	70 000	200	39,0	3682,00	3.313,80

^{*} with reversible stepped jaws resp. soft block jaws.

For further sizes and types see product catalog.

Reversible stepped jaws with grip inserts

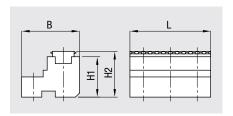
Universal stepped jaws reversible, with inte-grated grip inserts, ground clamping stages and threaded mounting hole for fixed stop. For form fit clamping of raw material or for clamping of finished parts on the smooth clamping stage. The hardened surface of the grip inserts deforms the workpiece sur-face during the clamping process and thus increases the holding force of the clamping location. The applied coating protects the grip inserts from premature wear. The grip inserts can be replaced, if necessary.





Application video





Suitable for:	Order no.	L [mm]	B [mm]	H1 [mm]	H2 [mm]	Price [Euro/Pair]	
MZC 220-80 E	B209800333	80	52	30	34	445,00	400,50
MZC 280-100 E	B209800368	100	70	40	44	501,50	451,35
MZC 360-125 E	B209800429	125	90	50	54	586,00	527,40

For further sizes and types see product catalog.







FREE EXPERT ADVICE



^{*} to the alignment holes on the bottom side

^{**} Clamping force is the arithmetic sum of the individual forces occuring at the jaws.

Clamping inserts, rough with coating / carbide coating

Depending on the type of application, the clamping inserts can be mounted on the reversible stepped jaws or in customized clamping jaws.

1. Side

For form fit clamping of high-strength raw material. The hardened and coated surface of the clamping jaws deforms the work-piece surface during the clamping process and thus increases the holding force of the clamping location.

2. Side

For clamping of grinded material. High hold-ing force through increased friction factor. The workpiece surface will not be damaged.







Suitable for:	Order no.	L [mm]	B [mm]	Clamping depth* [mm]	Positioning	Price [Euro/Pair]	
B209800333	B209800342	80	18	4	oriented	120,50	102,43
B209800368	B209800350	100	22	4	oriented	139,00	118,15
B209800429	B209800351	125	26	4	oriented	151,00	128,35

^{*} depending on the mounting situation

For further sizes and types see product catalog.

Pneumatic centre-clamping vises PZS²

Compact, pneumatic centre-clamping vise with high centering and repetition accuracy as well high clamp-ing force. Due to the pneumatic operation of this cen-tre-clamping vise series the clamping process can be shortened or completely automated by the use of indus-trial robots.

- Short clamping time, usable for automation
- High clamping accuracy
- Large jaw stroke





Application video

 $L \times B \times H$

 $80\!\times\!36\!\times\!58$

 $120 \times 60 \times 91$

 $180 \times 80 \times 108$

[mm]



Stroke

[2 × mm]

120

180

2,5

4,5



Type

PZS2 80-36

PZS² 120-60

PZS² 180-80

Accuracy

· Centering accuracy ±0,005 mm*

Order no.

B201000024

B201000018

B201000020

- · Repetition accuracy 0,003 mm
- · Pairing accuracy 0,01 mm



,	Clamping width	Clamping force	Weight	Price
<u> </u>	[mm]*	[N]**	[kg]	[Euro/Piece]
	80	6 500	1,5	1850,00 1.572,50

5,0

11,0

With pneumatic-booster the clamping force can be raised.

For further sizes and types see product catalog.



Power operated for the part handling





16 000

32 000

Hydraulic centre-clamping vises HZS

2341,00

3484,00

2.106,90

2.961,40

^{*} to the alignment holes on the bottom side.

Clamping force is the arithmetic sum of the individual forces occuring at the jaws.

Clamping solutions for part handling

Workholding Set for complete machining

This workholding set for workpiece automation or part handling includes everything you need for complete machining on 3- or 5-axis machining centers with two machining operations.

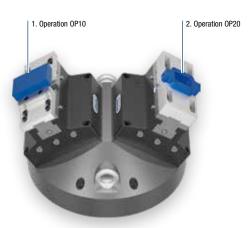
- Two powerful pneumatic centre-clamping vises mounted on a base plate or pyramid.
- The reversible stepped jaws with grip inserts is used for form fit clamping of raw material during the first clamping operation.
- The soft block jaws can be machined regarding on the workpiece for the second clamping operation.





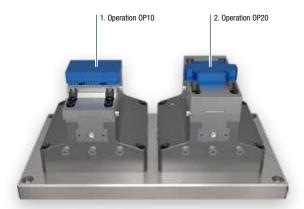
Application video





5-axis machining centers

Power operated for the part handling



3-axis machining centers

Туре	Order no.	Jaw width [mm]	Scope of delivery:	Price [Euro/Piece]
GP3X60	B209800619	60	 2 Pieces pneumatic centre-clamping vise PZS² 120-60* 1 Pair reversible stepped jaws with grip inserts 1 Pair soft block jaws 1 Base plate and mounting material 	upon request
GP3X80	B209800620	80	 2 Pieces pneumatic centre-clamping vise PZS² 180-80* 1 Pair reversible stepped jaws with grip inserts 1 Pair soft block jaws 1 Base plate and mounting material 	upon request
PY5X60	B209800621	60	 2 Pieces pneumatic centre-clamping vise PZS² 120-60* 1 Pair reversible stepped jaws with grip inserts 1 Pair soft block jaws 1 Base plate and mounting material 	upon request
PY5X80	B209800622	80	 2 Pieces pneumatic centre-clamping vise PZS² 180-80* 1 Pair reversible stepped jaws with grip inserts 1 Pair soft block jaws 1 Base plate and mounting material 	upon request

^{*} Technical data Daten see page 13











Clamping solutions for part handling

Electromechanical drive kit

Automated opening and closing mechanical vices.

- + "Plug & Play" integration
- Adjustable torque, 5 100 Nm
- Maintenance-free mechanics

... more information

Application video





Electromechanical centre-clamping vises EZC

Type with integrated gear motor for maximum clamping power. Energy-efficient clamping with highest precision.

- + Energy-efficient
- Self-locking
- + Integrated sensor system

... more information



Application video





Type with integrated servo motor for maximum opening and closing speed.

- + High efficiency
- + Fast response
- + Flexible control

... more information

Application video



Clamping solutions for pallet handling

Automation vises

Our mechanical, pneumatic or hydraulic automation vises with integrated interface to different zero-point systems provides optimum accessibility in the 5- and multi-maxis machining and low transport weight.

Integrated gripper contour



Strong points

- + No adapter plates
- + Less interfaces
- + Less weight



Mechanical centre-clamping vise MZR 150-60 PA, Erowa ITS 148



Mechanical centre-clamping vise MZE 150-60 PA, Erowa ITS 148



Mechanical centre-clamping vise MZU 160-60 PA, System 3R Magnum



Mechanical centre-clamping vise MZQ 160-60 PA, System 3R Magnum



Practical advice

The outer contour / gripper contour of the automation vises can be customized according to customer requirements.

Clamping solutions for pallet handling

Automation vises - Design examples of mechanical centre-clamping vises

Туре	Ø Body	Length body	Jaw width	Stroke	Clamping width	Clamping force	Available for: Zero-point-system /
	[mm]	[mm]	[mm]	[2×mm]	[mm]	[N]	palletizing system
MZR 80-36 PA	80	80	36	19	59	16 000	Erowa ITS 50
MZE 80-36 PA	80	80	36	18	40	16 000	System 3R GPS 70 System 3R Macro 54
MZU 80-36 PA	80	80	36	19	78	16 000	System 3R Macro 70
MZS 80-36 (A) PA	80	80	36	16	80	16 000	
MZR 120-36 PA	120	120	36	39	99	16 000	Erowa ITS 115 System 3R GPS 120
MZE 120-36 PA	120	120	36	39	80	16 000	System 3R Macro 70 System 3R Macro 116
MZU 120-36 PA	120	120	36	39	118	16 000	System 3R Matrix 110
MZR 150-60 PA	148	148	60	34	114	30 000	ITO 440 (MTO
MZE 150-60 PA	148	148	60	33	68	30 000	Erowa ITS 148 / MTS System 3R GPS 120
MZU 150-60 PA	148	148	60	31	108	30 000	System 3R Macro 116
MZQ 150-60 PA	148	148	60	34	104	30 000	System 3R Matrix 142
MZS 150-60 (A) PA	148	148	60	37	148	16 000	
MZR 160-60 PA	160	160	60	40	126	30 000	
MZR 160-80 PA	160	160	80	34	118	40 000	
MZE 160-60 PA	160	160	60	39	80	30 000	
MZE 160-80 PA	160	160	80	27	70	40 000	Erowa ITS 148 / MTS LANG Quick Point 52 / 96
MZU 160-60 PA	160	160	60	37	120	30 000	System 3R GPS 120
MZU 160-80 PA	160	160	80	31	120	40 000	System 3R Magnum
MZQ 160-60 PA	160	160	60	40	116	30 000	System 3R Matrix 142
MZQ 160-80 PA	160	160	80	30	108	40 000	_
MZS 160-60 (A) PA	160	160	60	43	160	16 000	_
MZS 160-80 (A) PA	160	160	80	25	160	30 000	

Other sizes and variants available on request.



Mechanical centre-clamping vise MZR 160-60 PA, customized version



Mechanical centre-clamping vise MZQ 170-60 PA, Erowa ITS 148

Automate

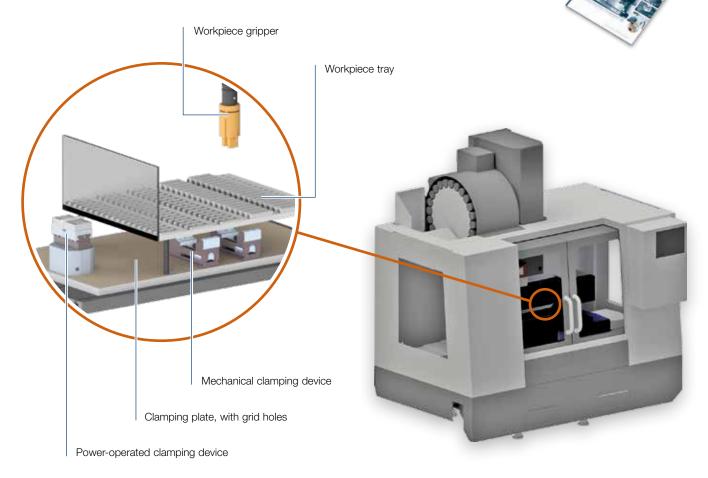
Workpiece gripper

Using the workpiece gripper, you use your existing machine tool as an automation cell. It is simply loaded into the machine from the tool changer.

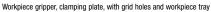


- + Cost-effective
- + Easy installation
- + High gripping force, adjustablew

... more information Application video









Pneumatic centre-clamping vise PZS 180-80 AT

Automate

Mobile robot system SP MR 1

This mobile and compact automation system enables a quick entry into robot automation. The system is easy to install, can be used on multiple machines.



Strong Points

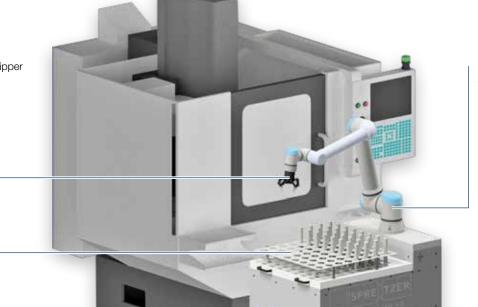
- + Compact design, 1200 × 800 mm
- + Easy handling
- + Flexible use
- + Usable without safety fence



Application video



Workpiece gripper



Collaborative robot with integrated sensors

Workpiece tray, customized

Drawer box pneumatic control integrated

integrated

Robot controller and



Mobile robot system SP MR 1 loads CNC lathe

Automate

Automatic pallet changer SP-APC

The pallet changer SP-APC 1 and 2 is suitable for different processing machines and is equally efficient, whether used in one-off or series production.

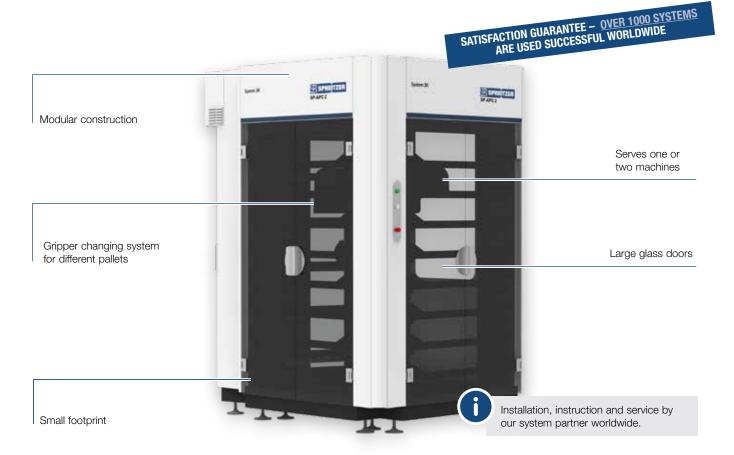


Strong Points

- + Compact design
- + Universally expandable, 10 240 pallets
- + Easy installation
- + Compatible with all common CNC controllers

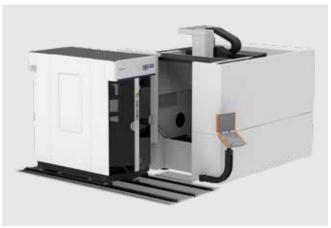








Application to multi-axis machining centre



Manual rail, for front-loaded machines

Permanent magnetic chucks SPPM

Extremely strong permanent magnetic chuck for heavy machining operations like milling in roughing. Workpieces also in rough or uneven surfaces.

- + Highly concentrated magnetic field with low flux depth.

 Low flux depth prevents magnetization of the tooling.
- + Coolant and water proof construction
- + Easy to activate and de-activate
- + High precision with no residual magnetism



Application video



Туре	Order no.	L×B×H [mm]	Pole pitch [mm]	Magnetic field height [mm]	Holding force [N/cm²]	Weight [kg]	Price [Euro/Piece]
SPPM 2515	B900501445	$250\times150\times60$	11 St + 4 Ms	12	180	17	950,00	855,00
SPPM 3515	B900501447	350×150×60	11 St + 4 Ms	12	180	24	1220,00	1.098,00
SPPM 4020	B900501450	400×200×60	11 St + 4 Ms	12	180	37	1519,00	1.367,10
SPPM 5020	B900501452	500×200×60	11 St + 4 Ms	12	180	46	1899,00	1.709,10
SPPM 6020	B900501453	600×200×60	11 St + 4 Ms	12	180	55	2280,00	2.052,00

For further sizes and types see product catalog.

Electro-permanent magnetic chuck SPQP-E with control unit

Powerful electro-permanent magnetic chucks with square pole technology, maximum rigidity and reliability. For use in tool and moldmaking as well as in mechanical engineering. Small and thin-walled workpieces, but also large workpieces can be machined. The magnetic chucks only need a short electrical impulse for switching and can be used independently. Without further energy consumption, without disturbing connections.

- · Delivery including control unit, modularly expandable
- · Workpiece larger than the table size are machinable
- · Square pole size 50 × 50 mm
- · Magnetic force >3500 N per pole
- · Distortion free clamping with auto-shim pole extensions
- + Magnetic force through a single current pulse
- + No heat distortion, no residual magnetism
- + Extreme holding force

... more information





Туре	Order no.	L×B×H [mm]	Qty. of poles	Pole pitch [mm]	Holding force [N]	Weight	Control unit	Voltage [V]	Price [Euro/Set]	
		[,,,,,,]		frimi	[IN]	[kg]		ΓΛΊ		
SPQP-E 3440 S	B900501812	$340\times400\times59$	20	50×50	70 000	60	SPCUA-H	400/480	2218,00	2.051,65
SPQP-E 3440*	B900501813	$340\times400\times59$	20	50×50	70 000	60	-	-	1338,00	1.237,65
SPQP-E 4046 S	B900501814	$400 \times 460 \times 59$	30	50×50	105 000	85	SPCUA-H	400/480	2883,00	2.666,78
SPQP-E 4046*	B900501815	$400 \times 460 \times 59$	30	50×50	105 000	85	-	-	2003,00	1.852,78
Kabel SPDXH	B900501816	_	_	_	_	_	_	400/480	229,00	211,83

* Delivery without control unit

For further sizes and types see product catalog.

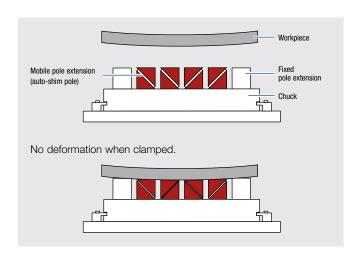
Pole extensions for electro-permanent magnetic chuck SPQP-E

Mobile and fixed pole extensions allow the clamping of raw and uneven workpieces. They adapt to the workpiece and clamp it safe. The points of contact between magnetic plate and workpiece can be defined individually. Pole extensions allowing drilling through the workpiece without damaging the magnetic clamping plate.

- + Compensation uneven workpieces
- + Evenly distributed magnetic clamping force
- + Deformation-free clamping



Application video





Fixed pole extensions FPS

Туре	Order no.	Dimensions [mm]	Function	Price [Euro/Piece]	
FPS-A-5020	B900501748	$50\times50\times20$	Z-support	10,50 9 ,	,98
FPS-A-5050	B900501749	$50 \times 50 \times 50$	Z-support	16,50 15 ,	,68
FPS-V-5020	B900501744	100×50×20	Z-support	22,70 21 ,	,57
FPS-S-5052	B900501750	Ø 50×52	Z-support	10,50 9 ,	,98
FPS-E-5020	B900501747	50×50×20	Z-support / Stop	16,50 15 ,	,68
FPS-X-5020	B900501746	100×50×20	Z-support / Stop	39,25 37,	,29
FPS-W-5020	B900501745	50×100×20	Z-support / Stop	39,25 37 ,	,29

Other sets upon request.

Mobile pole extensions MPE

Туре	Order no.	Dimensions [mm]	Function	Price [Euro/Piece]
MPE-C-5050	B900501752	$50\times50\times50$	Z-support movable	64,00 60,80
MPE-T-5052	B900501751	Ø 50×52	Z-support movable	64,00 60,80

Other sets upon request.

Electro-permanent magnetic chuck in solid steel design

High-precision electro-permanent magnetic chuck with square pole technology. Patented monobloc construction with solid steel surface. For use in tool and moldmaking as well as in mechanical engineering. The use of optional pole extensions on the magnetic chuck enables drilling through the workpiece without damaging the magnetic clamping plate.

The magnetic chucks only need a short electrical impulse for switching and can be used independently. Without further energy consumption, without disturbing connections.

- · Set variant, delivery including control unit
- Clamping surface can be expanded modularly
- Pole dimensions 50 × 50 mm
- Magnetic force > 3500 N/Pole
- Deformation-free clamping with moveable pole extensions
- Solid steel surface, without epoxy resin
- 100% protected against hot chips and coolant
- Highest clamping accuracy due to monoblock design
- + Magnetic force through a single current pulse
- No heat distortion, no residual magnetism
- + Extreme holding force







Туре	Order no.	L×B×H	Nos. of poles	Pole pitch	Holding force	Wight	Control unit	Voltage	Price
		[mm]			[N]	[kg]		[V]	[Euro/Piece]
SPQP-EST 4034*	B900501804	$400\times340\times39$	20	60	70 000	39	-		upon request
SPQP-EST 4034 S	B900501805	400×340×39	20	60	70 000	39	SPCUA-HG	240 400/480	upon request
SPQP-EST 4034 S	B900501806	400×340×39	20	60	70 000	39	SPCUA-MG	240 400/480	upon request

^{*} Delivery without control unit

For further sizes and types see product catalog.

Control units for electro-permanent magnetic chucks SPQP-EST

Robust, powerful control unit for milling and grinding applications. The standard version can be used at different voltage. Depending on the application, customer-specific versions are available.

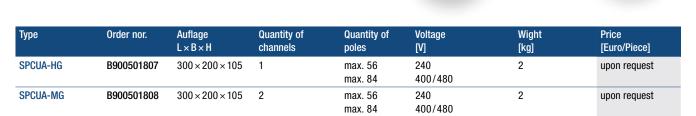
- · Modularly expandable, ready to use
- Delivery incl. cable set (each 5 meters)
- Condition monitoring (MAG/DEMAG)
- Universal intelligent control interface





Application video







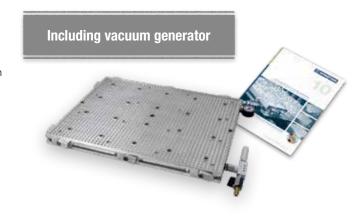
Vacuum plates SPVPL Pro

Vacuum plate with high holding force is made from cast aluminium. Due to the increased number of vacuum points the vacuum plate can be used universally. The integrated threaded grid holes and the workpiece stops provide great flexibility in positioning the workpiece to be machined.

- High inherent stability
- More vacuum points, more holding power
- Vacuum generator and pressure gauge included



Application video



Туре	Order no.	L×B×H [mm]	Clamping surface [mm]	Grid [mm]	Slot [mm]	Vacuum points	Price [Euro/Piece]	
SPVPL 3020 Pro	B900501280	$300\!\times\!200\!\times\!30$	$300\!\times\!200$	10	4	6	655,00	622,25
SPVPL 4030 Pro	B900501211	400×300×30	400×300	10	4	12	910,00	864,50
SPVPL 6040 Pro	B900501208	$600\!\times\!400\!\times\!30$	600×400	10	4	16	1395,00	1.290,38

For further sizes and types see product catalog.

Freeze plates SPGF

Ice provides excellent adhesion. The workpieces are placed on a moistened freeze plate, which is cooled with a compressed air heat exchanger. After few seconds water will freeze and the workpieces are clamped. The interchangeable freezer plate can be reworked or adapted to the specific workpiece.

- Sensitive parts are clamped without force
- High holding force
- No residue on the workpiece
- Freezer plate / clamping surface exchangeable









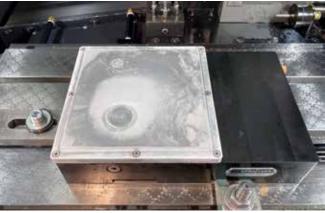
Туре	Order no.	Clamping surface [mm]	Max. holding force [N/cm²]	Price [Euro/Piece]	
SPGF 150-150	B110500002	150×150	150	4872,00	4.384,80
SPGF 250-150	B110500001	250×150	150	7308,00	6.577,20

For further sizes and types see product catalog.



Freeze plates SPGF 250-150 on a palletizing system





Clamping – grinding & EDM

Precision vise SP rust-resistant

The precision vice SP is designed for the universal use in the measuring and control room or for small maching work.

+ Material: Magnetizable chromesteel, rust-resistant

... more information

Application video



- · Square-accuracy 0,005 mm
- · Parallel-accuracy 0,003 mm



Туре	Order no.	L×B×H [mm]	Clamping width [mm]	Price [Euro/Piece]	
SP 25 VA	B601000005	$60 \times 25 \times 30$	26	315,00	267,75
SP 32 VA	B601000006	$78 \times 32 \times 38$	40	367,00	311,95
SP 50 VA	B601000008	135×50×54	81	622,00	528,70

For further sizes and types see product catalog.

Precision vise, 2 dimensional SPS - 2

The angle vise is used for accurate machining and inspection of surfaces and angular surfaces. The two-dimensional angle adjustment is done using vernier scale and fine adjustment screw.

- + Horizontally rotatable up to 360°
- Vertically adjustable up to $2 \times 60^{\circ}$
- Material: Tool-steel

... more information



Application video



Accuracy

- · Square-accuracy 0,003 mm
- · Parallel-accuracy 0,003 mm



Туре	Order no.	Jaw width [mm]	Clamping width max. [mm]	Jaw height [mm]	Total length min. [mm]	Total height [mm]	Price [Euro/Piece]
SPS 70 - 2	B600500001	70	80	30	160	137	1969,00 1.673,65
SPS 120 - 2	B600500002	120	150	40	270	210	upon request

For further sizes and types see product catalog.







FREE EXPERT ADVICE



Clamping - grinding & EDM

Precision tool maker vise EHS with spindle

The precision vises Type EHS are used on grinding machines, jig boring machines and other precision machines as well as universal clamping tool in the field of measuring and testing.

- Gauge accurate clamping
- All-round precision ground
- Pull-down system
- No lifting of the workpiece
- No vibration during machining
- Material: Tool-steel

... more information

Application video





Accuracy

- · Square-accuracy 0,003 mm
- · Parallel-accuracy 0,002 mm

Туре	Order no.	L×B×H [mm]	Clamping width max. [mm]	Clamping depth [mm]	Weight [kg]	Price [Euro/Piece]	
EHS 65	B601500002	220×65×75	100	37	4,5	1084,00	921,40
EHS 100	B601500003	270×100×80	140	40	9,5	1332,00	1.132,20
EHS 125	B601500004	300×125×88	160	43	14,5	1839,00	1.563,15

For further sizes and types see product catalog.

Precision tool maker vise EHS N without spindle

The precision vises Type EHS are used on grinding machines, jig boring machines and other precision machines as well as universal clamping tool in the field of measuring and testing

- + Gauge accurate clamping
- All-round precision ground
- Pull-down system
- No lifting of the workpiece
- No vibration during machining
- + Material: Tool-steel

... more information



Application video





Accuracy

- · Square-accuracy 0,003 mm
- · Parallel-accuracy 0,002 mm

Туре	Order no.	L×B×H [mm]	Clamping width max. [mm]	Clamping depth [mm]	Weight [kg]	Price [Euro/Piece]	
EHS 65 N	B601500007	230×65×75	130	37	4,5	979,00	832,15
EHS 100 N	B601500008	270×100×80	160	40	9,5	1362,00	1.157,70
EHS 125 N	B601500009	310×125×88	180	43	14,5	1620,00	1.377,00

For further sizes and types see product catalog.



Clamping - grinding & EDM

Recision tool maker vise N VA

The tool maker vise type N VA are for the universal use on surface grinding and EDM-machines, on machining centres as well as in the field of measuring and testing.

+ Material: Magnetizable chromesteel, rust-resistant

... more information

Application video





Accuracy

- · Square-accuracy 0,003 mm
- · Parallel-accuracy 0,003 mm



Туре	Order no.	L×B×H [mm]	Clamping width max. [mm]	Clamping depth [mm]	Price [Euro/Piece]	
N 36 VA	B600500004	$140\times36\times45$	80	22	629,00	534,65
N 50 VA	B600500005	$200\times50\times60$	125	30	821,00	697,85
N 75 VA	B600500006	$220\times75\times64$	125	32	1078,00	916,30
N 100 VA	B600500007	260×100×85	150	45	1609,00	1.367,65

For further sizes and types see product catalog.

Indexing unit VA with collet ER 32

This indexing unit with collet chuck is specially designed for use on wire-EDM machines provided. Through the mounting holes mounting on hole pattern 40 mm and 50 mm by M8 srews is possible. Indexing via indexing plate with 72 positions, the interim indexing positions by 360°-scale and nonius.

- + Fully sealed precision rolling bearings
- + Material: Magnetizable chrome steel, rust-resistant

... more information







Accuracy

- · Square-accuracy 0,005 mm
- · Parallel-accuracy 0,003 mm
- · Concentricity 0,01 mm
- · Indexing precision ±2'



Туре	Order no.	L×B×H [mm]	Collet Ø [mm]	Collet Type	Price [Euro/Piece]	
TA VA / ER 32	B609800003	133×75×75	2 – 20	ER 32	2285,00	1.942,25

For further sizes and types see product catalog.









Clamping – grinding & EDM

Permanent magnetic chucks SPPF

Low profile permanent magnetic chucks type SPPF for measuring, grinding work and EDM.

- + Especially suitable for thin workpieces
- Coolant und waterproof construction
- Easy to activate and de-activate
- High precision with no residual magnetism









Туре	Order no.	L×B×H [mm]	Pole pitch [mm]	Magnetic field height [mm]	Holding force [N/cm²]	Weight [kg]	Price [Euro/Piece]	
SPPF 1710	B900501403	175×100×49	1,5 St + 0,5 Ms	6	120	7	375,00	346,88
SPPF 2513	B900501405	$250\times130\times49$	1,5 St + 0,5 Ms	6	120	12	531,00	491,18
SPPF 3015	B900501410	$300\times150\times51$	1,5 St + 0,5 Ms	6	120	18	652,00	603,10
SPPF 3515	B900501411	$350\times150\times51$	11,5 St + 0,5 Ms	6	120	21	760,00	703,00
SPPF 4515	B900501413	450×150×51	1,5 St + 0,5 Ms	6	120	27	1172,00	1.084,10

For further sizes and types see product catalog.

Permanent magnetic blocks SP-PMB

SP-PMB magnetic clamping blocks have four clamping sides and can be activated using the rotary knob on the front. They can be used universally for surface grinding, angular grinding, coordinate grinding, EDM, measuring, etc.

- + Thinnest parts from 0.5 mm can be securely clamped
- + Hermetically sealed





Application video





Туре	Order no.	L×B×H [mm]	Clamping sides 4 pieces [mm]	Pole pitch [mm]	Magnetic field height [mm]	Holding force [N/cm²]	Weight [kg]	Price [Euro/Piece]	l
SP-PMB-L	B900500772	$195 \times 64 \times 64$	135×64	2 St + 2 Ms	2	80	3,8	793,00	753,35
SP-PMB-X	B900500773	$175 \times 64 \times 64$	115×64	2 St + 2 Ms	2	50	3,2	753,00	715,35
SP-PMBL-X	B900500774	$195 \times 64 \times 64$	135×64	2 St + 2 Ms	2	50	3,8	829,00	787,55

 $^{^{\}star}$ X = Rust-resistant version made of chrome steel – Caution when grinding, less holding force! For further sizes and types see product catalog.





Clamping - grinding & EDM

Permanent magnetic pallet chucks SPPF

Permanent magnetic chuck type SPPF. High-precision, low profile and powerful plates for clamping small and thin parts for precision grinding work and EDM. (Handles optional)

- + High-precision plate
- + Low magnetic field height
- + Low profile design

... more information

Application video



Туре	Order no.	L×B×H	Corner chamfer	Pole pitch	Magnetic field height	Holding force	Weight	Price	
		[mm]	[mm]	[mm]	[mm]	[N/cm ²]	[kg]	[Euro/Piece	e]
SPPF-2424/40	B900501536	$240\times240\times40$	10×45°	1,5 St + 0,5 Ms	6	120	16	1069,00	988,83
SPPF-2828/40	B900501537	$280\times280\times40$	10×45°	1,5 St + 0,5 Ms	6	120	22	1456,00	1.346,80
SPPF-3232/40	B900501538	$320\times320\times40$	40×45°	1,5 St + 0,5 Ms	6	120	28	1902,00	1.759,35

For further sizes and types see product catalog.

Permanent magnetic pallet chucks SPNM - EROWA UPC

Permanent magnetic chucks type SPNM, high-precision plates for clamping small and thin parts for precision grinding work and for EDM. The SPNM UPC pallet is supplied suitable for the Erowa UPC clamping system with original Erowa elements.

- + High-precision plate
- + Low magnetic field height
- + Base body, high-strength aluminum
- + Original EROWA components

... more information

Application video



Use in automation

Туре	Order no.	L×B×H	Corner chamfer	Pole pitch	Magnetic field height	Holding force	Weight	Price	
		[mm]	[mm]	[mm]	[mm]	[N/cm²]	[kg]	[Euro/Piece	e]
SPNM-AL 3232-48 UPC	B900501095	$320\times320\times40$	40×45°	1,4 St + 0,5 Ms	5	100	27	3215,00	3.054,25
Gripper Link	B900501096	_	-	_	-	-	-	194,00	184,30
Handles	B900501097	-	-	_	-	_	-	73,00	69,35

^{*} Stock items on sale. Only while supplies last. For further sizes and types see product catalog.





Clamping – grinding, EDM & turning

Permanent magnetic circular chuck SPMY

Powerful magnetic circular chuck with low height and neodymium magnet system.

- + Best for small and thin workpiece
- + Low height and light weight
- + High precision with no residual magnetism









Туре	Order no.	Ø	Н	Pole pitch	Magnetic field height	Holding force	Weight	Price	
		[mm]	[mm]	[mm]	[mm]	[N/cm ²]	[kg]	[Euro/Piece]
SPMY 10	B900501470	100	50	1,5 St + 0,5 Ms	6	120	3	318,00	286,20
SPMY 13	B900501471	130	50	1,5 St + 0,5 Ms	6	120	5	406,00	365,40
SPMY 15	B900501472	150	50	1,5 St + 0,5 Ms	6	120	7	501,00	450,90
SPMY 20	B900501474	200	52	1,5 St + 0,5 Ms	6	120	12	825,00	742,50
SPMY 25	B900501475	250	52	1,5 St + 0,5 Ms	6	120	19	1228,00	1.105,20

For further sizes and types see product catalog.

Permanent magnetic circular chuck SPNR

Super strong magnetic circular chuck for grinding and turning. Particularly suitable for annular workpieces and for hard machining of turned parts.

- + Concentric grooves simplify the centring of workpiece
- + Centre through hole is available on request for workpiece
- + T-slots available on request for pole extensions

... more information





Туре	Order no.	Ø	Н	Pole pitch	Magnetic field height	Holding force	Weight	Price	
		[mm]	[mm]		[mm]	[N/cm ²]	[kg]	[Euro/Piece]
SPNR 13	B900501480	130	60	radial	10	180	6	840,00	777,00
SPNR 15	B900501481	150	60	radial	10	180	8	895,00	827,88
SPNR 20	B900501483	200	60	radial	10	180	14	1191,00	1.101,68
SPNR 25	B900501484	250	60	radial	10	180	23	1434,00	1.326,45
SPNR 30	B900501485	300	60	radial	10	180	43	1995,00	1.845,38

For further sizes and types see product catalog.











Clamping – measuring & testing

Mini precision vise MP

For clamping small parts on a measuring microscope, profile projector as well as various other applications. Exchangeable jaws made of stainless steel and plastic are included in the scope of delivery.

+ With horizontally and vertically ground prism

... more information G

Application video





Accuracy

- · Square-accuracy 0,02 mm
- · Parallel-accuracy 0,02 mm



Туре	Order no.	Jaw width [mm]	L×B×H [mm]	Clamping width [mm]	Clamping depth [mm]	Material	Price [Euro/Piece]	
MP 15 AL	B900501794	15	$50 \times 15 \times 15$	14,5	6	Anodised aluminium	130,00	110,50
MP 25 AL	B900500094	25	$75\times25\times25$	24,5	10	Anodised aluminium	158,00	134,30
MP 35 AL	B900500095	35	100×35×35	34,5	14	Anodised aluminium	228,00	193,80

For further sizes and types see product catalog.

Swivel foot for precision vise MP

The swivel foot for mini precision vise MP and intexing unit TA can be rotated and swivelled in all directions.





Swivel foot (without mounting plate)

Suitable for:	Order no.	Price [Euro/Piece]	
MP 15	B900500097	158,00	134,30
MP 25	B900500097	158,00	134,30
MP 35	B900500098	158,00	134,30

Mounting plate, individually

Suitable for:	Order no.	Price [Euro/Piece]
MP 15	B900500099	41,00 34,85
MP 25	B900500100	42,00 35,70
MP 35	B900500113	45,00 38,25



Clamping - measuring & testing

Mini precision vises MP in set

- + with two or three Mini precision vises
- Additionally a pair plastic jaws, step jaws and prism jaws with a positioning pin
- + Delivery in a robust plastic case

... more information

Application video





Mini precision vises MP in set

- + One mini precision vice each with a jaw width of 15, 25 and 35 mm
- + Additionally a pair plastic jaws, step jaws and prism jaws with a positioning pin.
- Swivel foots for mini precision vise MP and intexing unit TA.
 Can be rotated and swivelled in all directions, including mounting plates.
- + 2 V-blocks with clamp
 Dimension: 25×20×20 mm
 Clamping range: 2 15 mm
- Clamping range: 2 15 mm + 2 Indexing units Clamping range: 0 – 2 mm
- Clamping range: 0 5 mm + Delivery in a robust plastic case`

... more information

Application video















Clamping - measuring & testing

Vacuum suction unit VS

Vacuum suction unit made of cast aluminum for flexible assembly on different machine tables. The vacuum suction units can be connected to one another. Especially small workpieces can be clamped with high holding force.

- 4 Vacuum suction unit
- Venturi vacuum generator
- Sealing rubber cord, adhesive film, vacuum hose
- Delivery in a robust plastic case









Туре	Order no.	L×B×H [mm]	Clamping surface [mm]	Nut [mm]	Weight [kg]	Price [Euro/Set]	
VS 66 Set	B900501340	$84 \times 60 \times 20$	60×60	3	1,0	446,00	401,40
VS 2112 Set	B900501341	150×120×20	120×120	4	1,5	530,00	477,00

For further sizes and types see product catalog.

ALUMESS-Magnetic clamping ball

The ALUMESS-Ball magnetic clamping balls of the highest fix workpieces for laser, welding, polishing, assembling and measuring in optimal working position. Depending on the workpiece geometry and weight swivelling angles can be adjusted to 90°.



Application video







Туре	Order no.	Ø [mm]	Height bei 0° [mm]	Holding force [N/cm²]	Pole pitch [mm]	Weight [kg]	Price [Euro/Piece]
ALUMESS Magnetic clamping ball 100	B509800034	100	129	100	1,5 + 0,5	7,0	861,00	817,95
ALUMESS Magnetic clamping ball 130	B509800035	130	145	100	1,5 + 0,5	11,0	1066,00	1.012,70
ALUMESS Magnetic clamping ball 160	B509800036	160	164	100	1,5 + 0,5	17,0	1293,00	1.228,35

For further sizes and types see product catalog.

Magnetic V-blocks SPPX

Magnetic prisms for measuring, grinding, eroding and mounting. SPPX Magnetic prisms, V-blocks, work with a very strong neodym-Magnetic-System. SPPX have three clamping areas. The backside and the both prism areas can be magnetized. Therefore it is possible to position workpieces horizontally and vertically and clamp the prism on a metallic surface at the same time.





Application video







Туре	Order no.	L×B×H [mm]	Clampable Ø D1 [mm]	Clampable Ø D2 [mm]	Weight [kg]	Price [Euro/Piece]	
SPPX 75	B900501491	$75 \times 69 \times 88$	4 – 65	4 – 28	2,9	354,00	336,30
SPPX 100	B900501493	$100 \times 69 \times 88$	4 – 65	4 – 28	3,9	429,00	407,55
SPPX 125	B900501495	125×69×88	4 – 65	4 – 28	4,8	505,00	479,75

For further sizes and types see product catalog.

Fixing - measuring & testing

ALUMESS.basic Starter kits

The fixing system with quick-change mechanism for tactile measurements at the measuring station or on coordinate measuring machines. The easy mounting of the elements to each other by chucking spigots and adapter bolts enables the rebuilding of the clamping device on the base plate by using single Allen key within seconds.

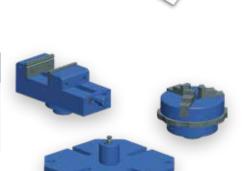
- + Easy mounting
- + Changeover in seconds
- + True-to-contour holding
- + Flexible combinations

Туре	Scope of delivery	Order no.	Price [Euro/Set]	
Starter kit .basic A	1 Base plate	B500100011	1797,00	1.527,45
(4 parts)	1 Spindle vise SP 75 AL			
	1 Clamping chuck 125 AL			
	1 Hexagon key L-wrench 4 mm			





Application video

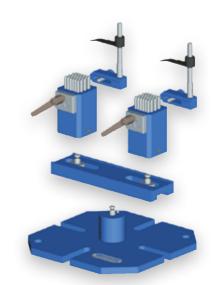


Quick Start

Туре	Scope of delivery	Order no.	Price [Euro/Set]		
Starter kit .basic C	1 Base plate	B500100012	2415,00	2.052,75	
(7 parts)	2 Pin support 35 × 35	2 Pin support 35 × 35			
	2 Hold down clamp, complete				
	1 Carrier plate				
	1 Hexagon key L-wrench 4 mm				



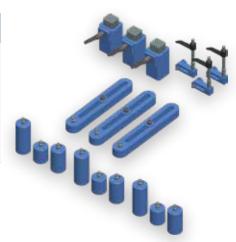
Application video



Туре	Scope of delivery:	Order no.	Price [Euro/Set]	
Starter kit .basic D	3 Connecting bolt height 40 mm	B500100028	3860,00	3.281,00
(19 parts)	3 Connecting bolt height 60 mm			
	3 Connecting bolt height 80 mm			
	3 Pin support 35 × 35			
	3 Hold down clamp, complete			
	3 Slide rail			
	1 Hexagon key L-wrench 4 mm			



Application video



Fixing - measuring & testing

ALUMESS.junior Starter kits

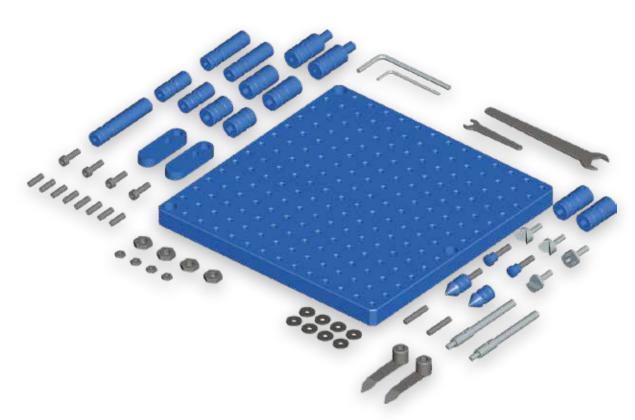
ALUMESS.junior offers the user a simple and inexpensive entry to the modular fixtuing for series measurement on tactile coordinate measuring machines. On the pallets equipped only with clamping threads different supporting, positioning and necessary clamping elements can be epending on the application, quickly and lexibly mounted. The mounting options of the components are uncomplicated, logical and user-friendly.

- + User-friendly
- + Low-priced
- + Flexible
- + Palletizable



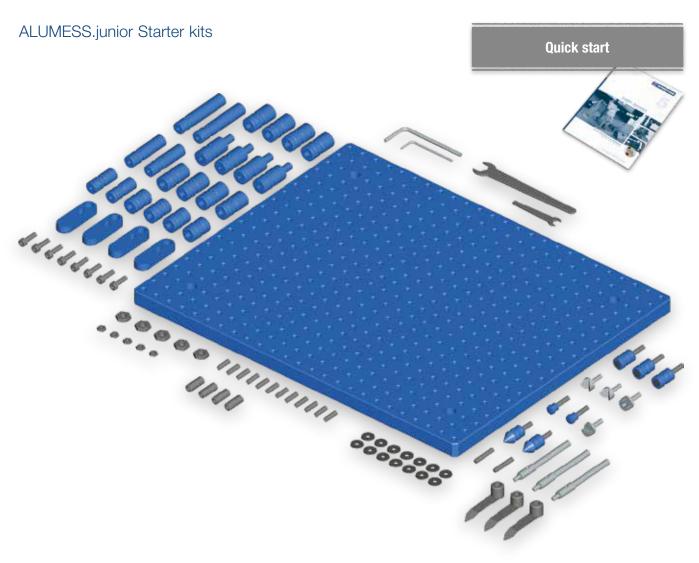
Application video





Туре	Scope of delivery:		Order no.	Price [Euro/Set]	
Starter kit .junior A	1 Pallet .junior 280 × 280	2 Receiver pin for hold down clampr	B500100030	1118,00	950,30
(66 parts)	2 Connector Ø 20 AM10-IM6	8 Threaded pin M6×20 DIN 913			
	2 Stud bolt Ø 16 × 40	4 Threaded pin M6 × 30 DIN 913			
	2 Stud bolt Ø 16 × 60	4 Cap screw M6×20			
	1 Stud bolt Ø 16 × 80	8 Plastic plain washer Ø 16 × 6 × 2			
	2 Stud bolt Ø 20 × 40	2 Supporting screw			
	2 Stud bolt Ø 20 × 30	4 Hexagon nut M6			
	2 Slide rail	4 Hexagon nut M10			
	2 Receiver .junior	2 Parallel pin 6m6 × 32 DIN7			
	1 Supporting pin X-stop .junior	1 Allen wrench SW3 short			
	2 Center Ø 16 × 33	1 Allen wrench SW5 short			
	1 Supporting pin XY-stop .junior	1 Open-ended wrench SW10			
	2 Supporting prism 90° .junior	1 Open-ended wrench SW17			
	2 Hold down clamp				

Fixing – measuring & testing



		\sim
 more	information	6

Application video

Туре	Scope of delivery:		Order no.	Price [Euro/Set]
Starter kit .junior B	1 Pallet .junior 500×400	3 Receiver pin for hold down clamp	B500100031	2004,00 1.703,40
(102 parts)	4 Connector Ø 20 AM10-IM6	12 Threaded pin M6 \times 20 DIN 913		
	2 Stud bolt Ø 16 × 40	4 Threaded pin $M6 \times 30$ DIN 913		
	2 Stud bolt Ø 16 × 60	4 Threaded pin M10×25 DIN 913		
	2 Stud bolt Ø 16 × 80	8 Cap screw M6×20		
	4 Stud bolt Ø 20 × 40	2 Supporting screw		
	4 Stud bolt Ø 20 × 30	5 Hexagon nut M6		
	4 Slide rail	5 Hexagon nut M10		
	4 Receiver .junior	14 Plastic plain washer \emptyset 16 \times 6 \times 2		
	1 Supporting pin X-stopjunior	2 Parallel pin 6m6 × 32 DIN7		
	2 Center Ø 16 × 33	1 Allen wrench SW3 short		
	1 Supporting pin XY-stop .junior	1 Allen wrench SW5 short		
	2 Supporting prism 90° .junior	1 Open-ended wrench SW10		
	3 Magnetic support Ø 16	1 Open-ended wrench SW17		
	3 Hold down clamp			





FREE EXPERT ADVICE



ALUMESS.easyloc Starter kit tactile measurement

Our ALUMESS.easyloc kits consist of modular, combinable and easy to install, magnetically interlocking quick-swap pallets.

Choosing the right components is very easy with preconfigured starter kits. Choose the combination of docking rails and pallets that best suits your machine and application. Different sets of clamping devices consisting of clamping, support and positioning elements make a useful addition.

- + User-friendly
- + Modular combinable
- + Palletizable

... more information

Application video



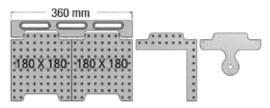


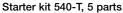
Quick start

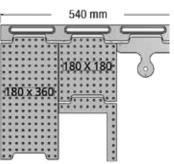
Туре	Description	Order no.	Price [Euro/Piece]	
360-TA	Starter kit 360-T + workholding kit TA	SYSM1_DK360TR03	2965,00	2.520,25
540-TA	Starter kit 540-T + workholding kit TA	SYSM2_DK540TR03	3215,00	2.732,75
720-TA	Starter kit 720-T + workholding kit TA	SYSM3_DK720TR03	4205,00	3.574,25

For further sizes and types see product catalog.

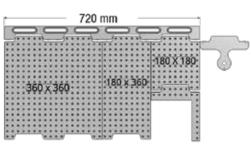
Starter kit 360-T, 5 parts



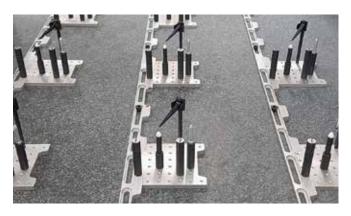




Starter kit 720-T, 5 parts









ALUMESS.easyloc Starter kit optical measurement

Our .ALUMESS.easyloc kits for optical measuring were specially developed for vision systems and offer the same profit-increasing advantages for measurements with direct and transmitted light as for tactile applications. The docking rails are black anodized. The transparent, scratch-resistant polycarbonate pallets offer maximum flexibility thanks to their M6 hole grid.

- + User-friendly
- + For direct and transmitted light
- + Modular combinable
- + Palletizable

... more information

Application video

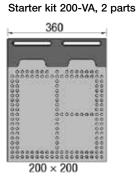


Туре	Description	Order no.	Price [Euro/Piece]	
100-VA	Starter kit 100-V + workholding kit VA	SYSM4_DK100V01	1225,00 1.041	,25
200-VA	Starter kit 200-V + workholding kit VA	SYSM4_DK200V01	1680,00 1.428	3,00
360-VA	Starter kit 360-V + workholding kit VA	SYSM4_DK360V01	2641,00 2.24 4	ا,85

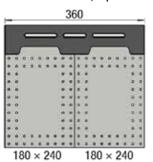
For further sizes and types see product catalog.

Starter kit 100-VA, 2 parts





Starter kit 360-VA, 2 parts











ALUMESS.easyloc Mini-Vise™

Small clamping and fixing device for inspecting tiniest, light and sensitive parts.

- Ultra-Compact at just 4.8 mm wide, one of the smallest inspection vises on the market
- Flexible for optical measurement as well as CMM inspections
- Adjustable holding force from 0 to approximately 1.4 kg
- Durable made from black anodized aluminum and stainless steel







ALUMESS.easyloc Spider-Clamp™

Unique clamping element to hold delicate parts without distortion and allow maximum back lighting for vision inspection.

Clamping width 58 mm (use of 1 clamping arm) Clamping width unlimited (use of 2 clamping arms)

SC 152 Clamping diameter 30 – 152 mm

- + For CMM and optical measuring device
- Adjustable clamping pins with O-rings and holding magnet







Small parts clamp

Туре	Description	Order no.	For mounting thread	Price [Euro/Piece]	
SC 76	Version with 1 leg (Set) (Set with 2 legs)	SC-06-01M	M6	495,00	420,75
SC 152	Version with 3 legs	SC-06-03M	M6	790,00	671,50

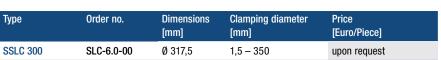
ALUMESS.easyloc spring-load chuck

Universal chuck with maximum clamping range for fixing rings or rounds on CMM or Vision Systems.

- + Spring-load design, clamping force adjustable 7 65 N
- + For external and internal clamping
- Clamping jaws and clamping pins, made of stainless steel, universal mounting options to extend the clamping range













ALUMESS.easyloc hold-down clamp sets

Each hold-down clamp has been designed to ensure versatility and reliability in your measuring and inspection processes or during laser machining. From the non-marring force of the Trigger-Finger™ to the power and stability of the aluminum Lever-Clamp style.



Application video

Plastic hold down clamp Trigger-Finger™ with shaft M6

- + Up to 3 kg gentle downward force
- + Made of non-marring plastic
- + Self-locking on the mounting bolt

Туре	Scope of delivery	Order no.	Price [Euro/Piece]
TRFN-20M	4 Hold down clamp 84 4 Shaft M6	TRFN-20M	119,00 101,1





Aluminium hold down clamp with shaft M6

- + Downward force up to 18kg
- + Controlled with a thumb screw
- + Effective holding force

Туре	Scope of delivery	Order no.	Price [Euro/Piece]	
LC-SET-4-1.50-M	4 Hold down clamp 384 Shaft M6	LC-SET-4-1.50-M	190,00	161,50
LC-SET-4-2.50-M	4 Hold down clamp 63,54 Shaft M6	LC-SET-4-2.50-M	249,00	211,65
LC-SET-4-3.50-M	4 Hold down clamp 89 4 Shaft M6	LC-SET-4-3.50-M	356,00	302,60

For further sizes and types see product catalog.



Aluminium hold down clamp Trigger-Point™ with shaft M6

- + Narrowed tip for more concentrated force
- + Enhanced access to the workpiece

Туре	Scope of delivery	Order no.	Price [Euro/Piece]	
LC-SET-4-1.50-TP-M	4 Hold down clamp 384 Shaft M6	LC-SET-4-1.50-TP-M	293,00	249,05
LC-SET-4-2.50-TP-M	4 Hold down clamp 63,5 4 Shaft M6	LC-SET-4-2.50-TP-M	304,00	258,40
LC-SET-4-3.50-TP-M	4 Hold down clamp 89 4 Shaft M6	LC-SET-4-3.50-TP-M	394,00	334,90





Fixing - marking

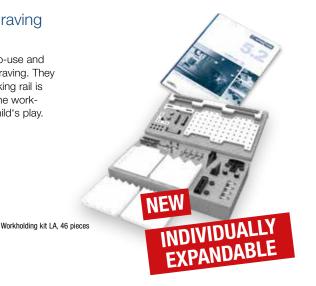
ALUMESS.easyloc Starter kit Laser marking | Laser engraving

Our ALUMESS.easyloc kits for laser marking systems are the only universal, easy-to-use and ready-made quick-swap fixture system for laser marking applications and laser engraving. They can be configured easily, individually and machine-specifically. The appropriate docking rail is mounted on the laser system. The magnetic, interlocking quick-swap pallets hold the work-pieces using universal fixing elements. In the future, equipping the system will be child's play.

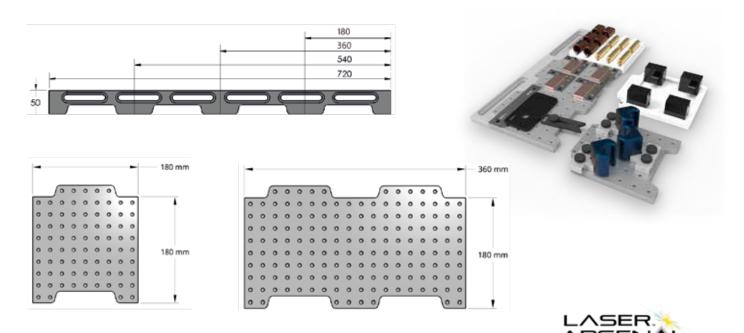
- + Ready-to-use
- + Easy to install
- + Modular combinable, quickly interchangeable
- + Speeds up the marking process

... more information

Application video



Туре	Description	iption Order no.		ı
180-LA	Starter kit 180-LA, 46 pieces	SYS60_DKM180LA02	2625,00	2.231,25
360-LA	Starter kit 360-LA, 46 pieces	SYS60_DKM360LA02	2645,00	2.248,25
540-LA	Starter kit 540-LA, 46 pieces	SYS60_DKM540LA02	2725,00	2.316,25
720-LA	Starter kit 720-LA, 46 pieces	SYS60_DKM720LA02	2810,00	2.388,50







Concentricity gages RPG mini

Concentricity gages type RPG mini are suitable for the measuring of small workpieces under the measuring optics.

- Robust design with preloaded precision bearings
- Simple handling, quick measurement
- Suitable for transmitted light
- riven by toothed belt

... more information

Application video







Туре	Order no.	Workpiece Ø [mm]	Roller Ø [mm]	Type of rol- lers	Concentricity [mm]	Drive	Dimension L×B [mm]	Price [Euro/Piece]
RPG 330 mini	B701200006	3 – 30	30	cylindric rollers	< 0,002 preloaded precision bearings	manually operated	120×120	1573,00	1.415,70

For further sizes and types see product catalog.

Concentricity gages RPG AL

The concentricity gages RPG AL are mainly used for the measuring of single parts. The articulated arm with head piece for the dial test indicator or the depth measurement gauge serves as an universal holder for gauging instruments.

- Robust design with preloaded precision bearings
- Simple handling, quick measurement
- For individual testings with articulated arm



Application video





Туре	Order no.	Workpiece Ø [mm]	Roller Ø [mm]	Type of rollers	Concentricity [mm]	Drive	Dimension L×B [mm]	Price [Euro/Piece	l
RPG 0825 AL	B701000001	0,8 – 25	62	cut-in rollers interlocking	< 0,002 preloaded precision bearings	manually operated	160×125	2277,00	1.935,45
RPG 450 AL	B701000004	4 – 50	50	cylindric rollers	_			1799,50	1.583,56

For further sizes and types see product catalog.

Concentricity gages RPG

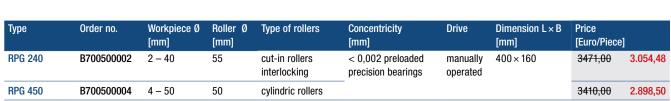
The concentricity gages type RPG are especially designed for measuring tasks in the batch production. Two swivelling gauge holders are used for the external gauging, one gauge slide is used for the internal gauging of rotating parts.

- Robust design with preloaded precision bearings
- Simple handling, quick measurement
- For inspections in batch production by swivelling gauge holder and measuring slide









Concentricity gages RPGP with V-blocks

The concentricity gage RPGP can be used for measuring the concentricity of round workpieces with a diameter up to 26 mm.

- Two movable V-blocks with clamp lever and carbide workpiece support each
- Universal stop can be mounted flat and perpendicular in relation to the V-blocks
- Movable pressing or drive unit
- Articulated arm with gauge holder



Application video



Туре	Order no.	Max. Workpiece Ø [mm]	Width of the T-slots [mm]	Scope of delivery:	Drive	Dimension L×B [mm]	Price [Euro/Piece]
RPGP 350	B703000004	1 – 40	10 H7	2 V-blocks fixed 108°	manually operated	350×160	2380,00	2.023,00

For further sizes and types see product catalog.

Concentricity gages RPGR with roller wheels

The concentricity gage RPGR can be used for measuring the concentricity of round workpieces with a diameter up to 240 mm.

- Two movable roller wheels with clamp lever.
- One support can be adjusted in height to compensate a diameter difference of the workpiece up to 60 mm.



Application video





Туре	Order no.	Max. Workpiece Ø [mm]	Width of the T-slots [mm]	Concentricity [mm]	Drive	Dimension L×B [mm]	Price [Euro/Piece]
RPGR 600	B703000002	240	10 H7	< 0,002 preloaded precision bearings	manually operated	600×200	3706,00	3.150,10

For further sizes and types see product catalog.

Contactless measuring with optical micrometer

Depending on the customer's requirements, our different concentricity gages and precision rotary units can be supplied with optical or laser micrometers from different manufacturers.

- + High-precision measurement
- Contactless measuring
- Automated measuring tasks
- Direct connection to the SPC-software

... more information



Application video



Upon request.

Available for:

RPG Mini, RPG AL, RPG, RPGP, RPGR, RPGS, PDE micro, PDE



Concentricity gages RPGS with tailstocks

The concentricity gages with tailstocks are used for radial and axial run-out measurements between centers. Positional and form errors on shafts can be detected very quickly and easily right next to the

- Two moveable center supports, version P additionally with prism
- Movable measuring arm with dial gauge holder
- Cast iron measuring bench, accuracy according to DIN 876/1







Туре	Order no.	Centre height [mm]	Centre width [mm]	Accuracy	Dimension L×B [mm]	Price [Euro/Pieco	e]
RPGS 75-350 P	B702000007	75	350	1	500×110	966,00	917,70
RPGS 100-450	B702000003	100	450	1	720×180	2238,00	2.126,10

For further sizes and types see product catalog.

Concentricity gages RPGS 200 with tailstocks

The RPGS 200 concentricity gage with tailstocks is used for radial and axial run-out measurements on large, heavy shafts. Positional and form errors on shafts can be detected very quickly and easily right next to the machine.

- + Two adjustable tailstocks, robust design
- + Movable measuring arm with dial gauge holder
- Granite measuring bench, accuracy according to DIN 876/0





Application video



Туре	Order no.	Centre height [mm]	Centre width [mm]	Accuracy	Dimension L×B [mm]	Price [Euro/Piec	Price [Euro/Piece]	
RPGS 200-650	B702000001	200	650	0	1100×180	4666,00	4.432,70	
RPGS 200-1000	B702000008	200	1050	0	1500×180	6804,00	6.463,80	











Precision rotary unit PDE with clamping chuck

With the use of the precision rotary unit cylindrical workpieces with a diameter up to 144 mm can be rotated with high accuracy. The mounting can be done in horizontal or vertical position on the base plate.

- + Horizontal and vertical mountable
- + Including manual chuck, rust-resistant
- + Highest concentricity through fine adjustment

... more Information



Accessories on request

- · Digital position indicator
- · Electric drive with control unit
- · Articulated arm with holder for gauging instrument



Туре	Order no.	Workpiece Ø [mm]	Concentricity [mm]	Scope of delivery	Dimension L×B [mm]	Price [Euro/Piece]	
PDE 34 DBF	B705000009	1 – 32 external clamping 11 – 23 internal clamping	< 0,002*	including base-plate and three-jaw chuck DBF 34 VA	65 × 85	3927,00	3.337,95
PDE 100 DBF	B705000019	1 – 100 external clamping 20 – 100 internal clamping	< 0,002*	including base-plate and three-jaw chuck DBF 100 VA	150×200	3912,00	3.325,20
PDE 140 DBF	B705000020	1 – 144 external clamping 24 – 128 internal clamping	< 0,002*	including base-plate and three-jaw chuck DBF 140 VA	150×200	4900,00	4.165,00

^{*} Adjustable, depending on the clamping diameter For further sizes and types see product catalog..







Precision rotary unit PDE 34 DBF with high precision clamping chuck SF $\rm HQ$

Precision rotary unit PDE 34 DBF with electric drive

Lifting

Permanent lifting magnets SPLN

For lifting ferromagnetic material. With patented test position for safer lifting.

- + Minimum of 3× safety factor
- High load capacity with compact dimensions
- Suitable for flat and round material
- Maintenance free design
- On and off switch with one-hand operation







Туре	Order no.	L×B×H	Safe working load Flat material	Safe working load Round material	Weight	Price	Price	
		[mm]	[kg]	Ø [kg]	[kg]	[Euro/Piece]		
SPLN 150	B900501830	132×90×90 (143)	150	60 (Ø 6 – 150 mm)	8	341,00	170,50	
SPLN 300	B900501831	262×90×90 (160)	300	120 (Ø 10 – 180 mm)	13	511,00	459,90	
SPLN 600	B900501832	270 × 136 × 136 (231)	600	240 (Ø 15 – 250 mm)	36	794,00	714,60	
SPLN 1000	B900501833	447 × 175 × 175 (270)	1000	400 (Ø 25 – 280 mm)	70	1218,00	1.096,20	

For further sizes and types see product catalog.



Special offers - Demonstration goods



Demonstration goods, show pieces, samples - Special offers

Time after time we can offer demonstration goods, overproduced articles etc. to very attractive

... our current offers













SPREITZER – a name that stands for precision



Quality and reliability since 1983.

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Spreitzer GmbH & Co. KG

Clamping | Testing | Automation

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