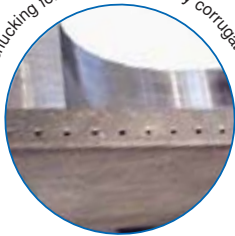




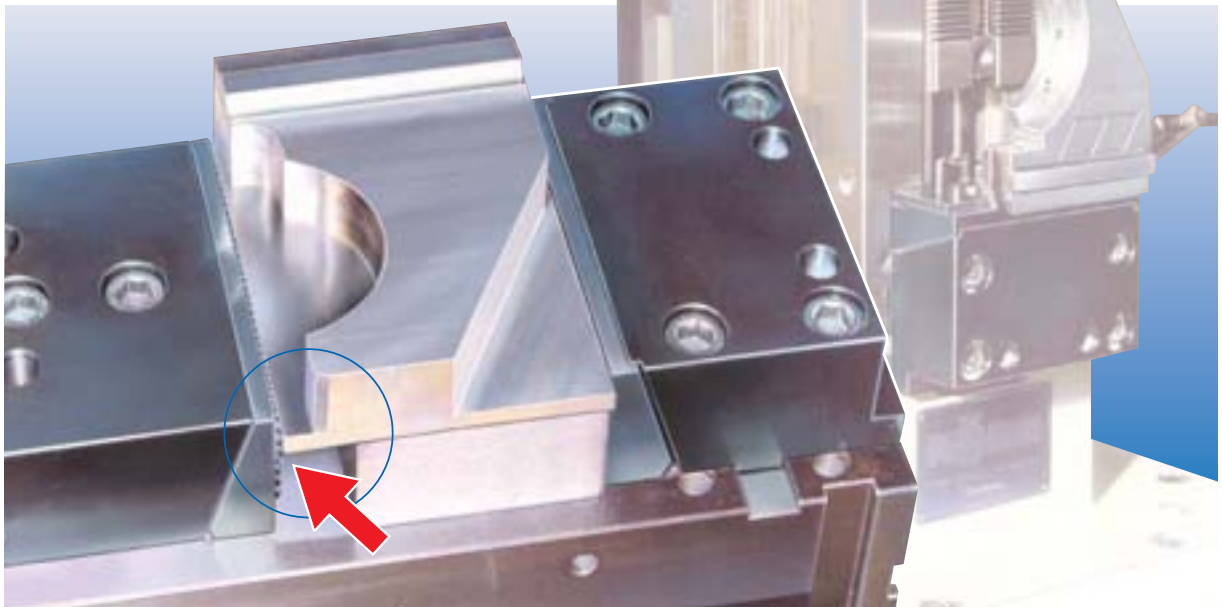
► Clamping Gear



High chucking force thanks to finely corrugated jaws.

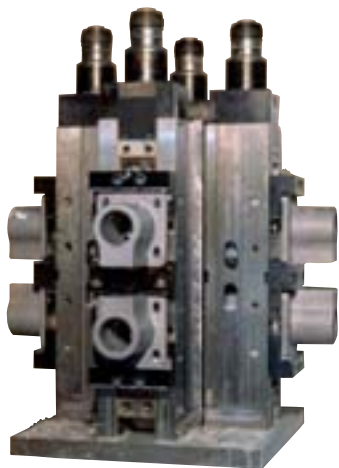


**Precise Clamping**



**Flexibility with Röhms Jaws**

For NC compact vices and machine vices



**QUATRO Clamping Tower**  
With four NC compact vices RKD aligned starlike



**5-side machining:**  
Multi-clamping (unfinished parts) in RKD 125 with hold-down pronged inserts



Jaws with 4 corrugated compensating supports; compensation  $\pm 9^\circ$ , movable jaw floating, without hold-down for clamping forgings

27654

### Three-Jaw Lathe Chucks

**RÖHM**

Type

Mounted on **base plate**. With one set of boring jaws stepped down towards rim and one set of turning jaws stepped down towards centre and wrench.

Application

Functions as vertical clamping fixture for large diameters. Mainly suitable for milling and boring machines.



27654

Chuck Ø mm	Borehole mm	Base plate L x W x H mm	Slot width mm	Weight kg	27654 ...
160	42	238 x 215 x 27	14	12,7	101
200	55	278 x 255 x 27	14	20,6	102
250	76	335 x 300 x 31	18	35,5	103

27655

### NC Compact Spanners Type RKE-L

**RÖHM**

Type

Without power intensification, anti-friction bearings, manually operated, **horizontal, vertical or lateral clamping**. **Steel basic body** all sides **hardened and ground**. With reversible stepped jaws. Long clamping slide with transverse slot, **working surfaces ground**. Clamping areas for clamping claw. Stable chip guard prevents metal chips from entering the inner area of the body.

27655 201

Clamping system mechanical/hydraulic

27655 201

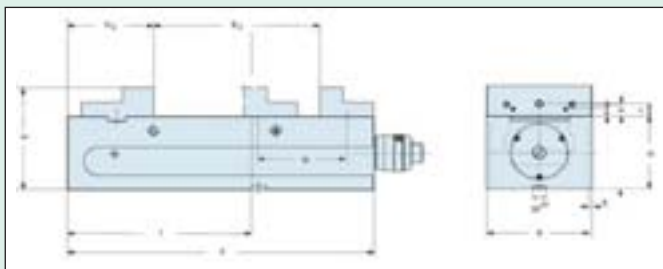
27655 202-204

Clamping system mechanical/mechanical



Note:

Accessories see cat.-no. 27657 - 27663 and 27682 - 27684.



27655 202

Jaw width mm	B mm	E mm	F mm	G mm	H mm	K mm	W mm	Clamping force kN	Weight approx. kg	27655 ...
92	0 - 138	112	276	80	80,0	94	68,0	25	15	202
125	0 - 216	140	400	100	112,5	126	1 x 108,0	40	41	201
160	0 - 320	165	530	115	130,0	162	2 x 102,5	60	79	203
200	0 - 315	175	530	115	135,0	162	2 x 102,5	60	85	204

27656

### NC Compact Spanners Type RKE

**RÖHM**

Type

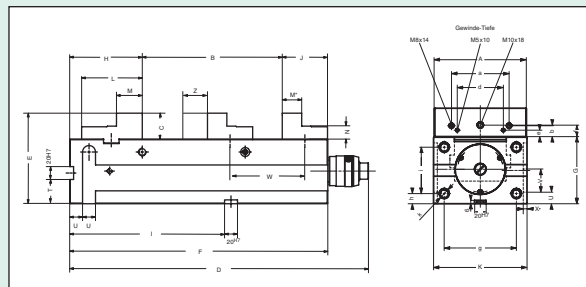
With mechanical intensification, **horizontal, vertical or lateral clamping**. **Steel basic body** all sides **hardened and ground**. Stepped jaws **fixed**, reversible, **stepped jaws movable**, reversible. Long clamping slide with transverse slot. Drive spindle with clamping force preset. Mounting thread M for workpiece stops. Clamping areas for clamping claws, stable chip guard prevents metal chips from entering the inner area of the body.

27656

Note:

Accessories see cat.-no. 27657 - 27663 and 27682 - 27684.

Standard top jaws available on request. Clamping width for reversible stepped jaws: jaw width 125 = 97-312 mm, 160 = 131-451 mm.



Jaw width mm	B mm	E mm	F mm	G mm	H mm	K mm	W mm	Clamping force kN	Weight approx. kg	27656 ...
125	0 - 216	140	400	100	112,5	126	1 x 108,0	40	41	201
160	0 - 320	165	530	115	130,0	162	2 x 102,5	60	79	202

## • NC Compact Spanners

27649

### NC compact spanners Type MM-G 125/160

# ATORN®

#### Type

Basic version, clamping on base. Clamping system **mechanical/mechanical**. **Basic body made of GGG. Stepped jaws reversible, hardened and ground.** Long clamping slide with transverse slot, drive spindle with clamping force presetting. Mounting thread M 12 for workpiece stops. Driving face for clamping claws. Stable chip guard prevents metal chips from entering the inner area of the body.

#### Note:

Accessories see cat.-no. 27657 - 27663 and 27682 - 27684.



27649 101

Jaw width mm	Offset range jaws mm	Feed travel slide mm	Overall length mm	Overall height mm	Jaw height mm	Chucking capacity high side mm	Chucking capacity step face mm	Clamping force kN	Weight kg	27649 ...
125	1 x 108,0	109	463	140	40	0 - 216	97 - 312	40	41	101
160	2 x 102,5	117	618	165	50	0 - 320	131 - 451	60	79	102

NEW

27670 - 27671

### NC Compact Spanners Type RKE LV (5-Axes-Clamp)

# RÖHM

27670 201

NC compact spanners RKE LV

#### Type

Collision-free **5-side machining** in one clamping. **Short, compact design** with carrier jaws and swivellable pronged insert. **Clamping system mechanical/mechanical with power intensification and clamping force preset.** With pull clamping, zero point of the workpiece on the user's side. Large chucking capacity, no shifting of the movable top jaws. **Steel-basic body** and all **guides hardened and ground.** Sturdy chip guard.

27670 202

Base plate for NC compact spanners RKE LV see cat.-no. 27670 201.

27671 101

Set of carrier jaws for pronged inserts see cat.-no. 27671 102.

27671 102

Pronged inserts for NC compact spanner REK LV see cat.-no. 27670 201.

#### Note:

Further accessories see cat.-no. 27657 - 27663.



27670 201+202



Type	Jaw width mm	Clamping force kN	Length mm	Weight kg	27670 ...	27671 ...
RKE LV	125	40	372	29	201	
Base plate	-	-	-	-	202	
Set of carrier jaws	-	-	-	-		101
Pronged inserts	-	-	-	-		102

27657 - 27663

### Accessories for NC Compact Spanners Type RKE

# RÖHM

27657

Set of stepped jaws

27658

Set of carrier jaws

27659

Pronged insert, single, with fastening screws suitable for carrier jaws.

27660

Set of base jaws

27661

Standard insert, in pairs.

27662

Claw insert, in pairs.

27663

V-drive 90°

Application

Ideal for side-mounted clamping jaws or for large machine tables.

27663 101

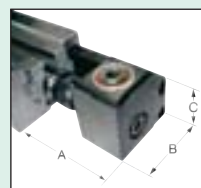
Dimensions: L = 133 mm, B = 106 mm, C = 98 mm.

27663 102

Dimensions: L = 166 mm, B = 111 mm, C = 98 mm.

27663 101

27663 102



27657

27658



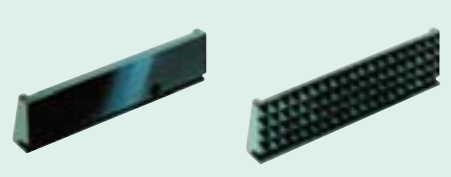
27659

27660



27661

27662



for jaw width mm	27657 ...	27658 ...	27659 ...	27660 ...	27661 ...	27662 ...	27663 ...
125	101	101	201	101	101	101	101
160	102	102	201	102	102	102	102



# Performance requires quality.

Multiple clamps by ATORN:

- high-strength materials
- quick and exact clamping of multiple workpieces
- highest clamping force

This is but one example of **ATORN's high-quality clamping tools.**

**ATORN<sup>®</sup>**

# Clamping Systems 5AX

27669

**ATORN®**

## Application

For unfinished parts, already machined parts, round and uneven parts. Form-true clamping without preembossing. Can be mounted on T-slot plates and tables, on perforated panels and on other fixtures.

27669 101

**5AX100**

## Type

- High clamping force (up to 42 kN), right where it's needed.
- Drawing spindle directly under the workpiece rest.
- No expansion of the jaws under load.
- No deformation of the machine table.
- Allows for high cutting forces thanks to the extreme stiffness.
- The low clamping depth of 8 mm allows for a **machining from 5 sides without projecting.**
- User-defined, large clamping width, only limited by the size of the machine table.

27669 100

**3AX100**

## Type

- Low construction height 100 mm.
- High clamping force (up to 22 kN), right where it's needed.
- The low clamping depth of 8 mm allows for a **machining from 3 sides without projecting.**
- Other properties similar to clamping system 5AX100.

## Application

Can also be used on 3-axes machines, thanks to its low construction height of only 100 mm.

27669 101



Perfect clamping of workpiece in spite of low height thanks to the new generation of joints.

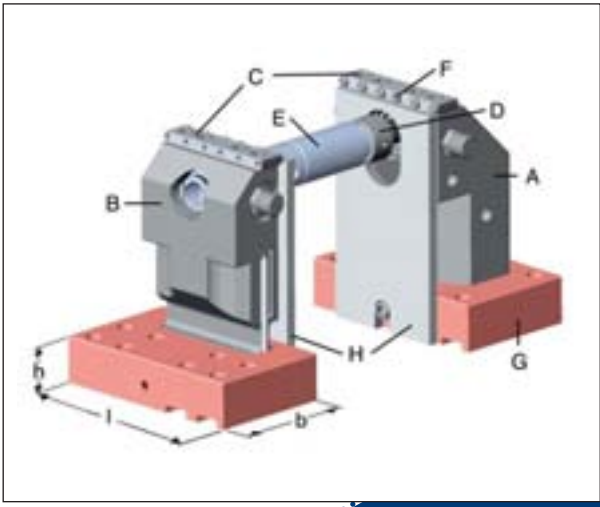
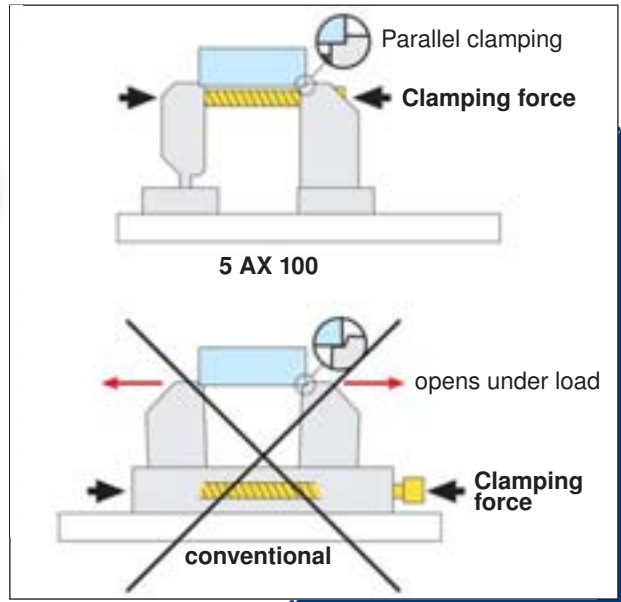
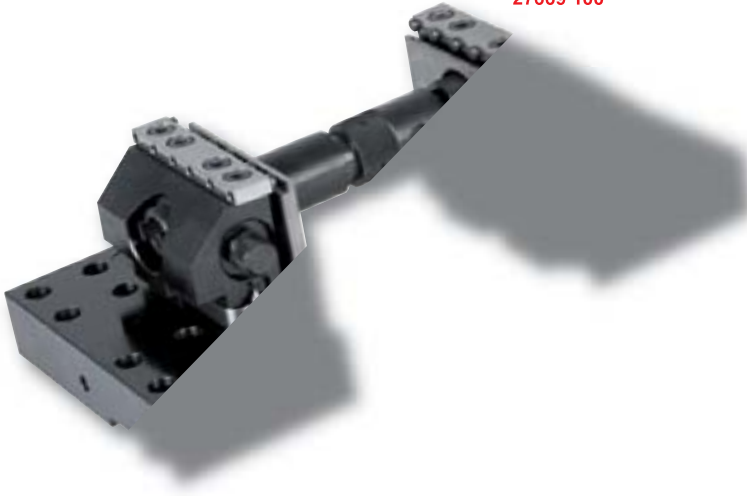
Type	Pack =	Dimensions mm	27669	...	Type	Pack =	Dimensions mm	27669	...
5AX100 Clamping set without base plates	-	-	101		Bearing rods for 5AX100	pair	H 175	116	
3AX100 Clamping set without base plates	-	-	100	NEW	Bearing rods for 5AX100 for raise 25 mm	pair	H 200	133	NEW
Base plates without borehole neutral	pair	98 x 158 x 36 (W x L x H)	102		Bearing rods for 5AX100 for raise 50 mm	pair	H 225	134	NEW
Base plate for T-slots, distance 63/80/100 mm	pair	98 x 158 x 36 (W x L x H)	103		Jaws standard	each	-	117	
Base plate for grid 40 x 40 x M12	pair	98 x 148 x 36 (W x L x H)	106		Jaws unfinished	each	-	118	
Base plate for grid 50 x 50 x M12	pair	98 x 138 x 36 (W x L x H)	107		Round clamping head, 4 pcs.	Set	-	119	
Base plate for grid 50 x 50 x M16	pair	98 x 134 x 36 (W x L x H)	108		Pin 0,00 mm, flat	each	-	120	
Raise 25 mm for base plate	pair	H 25	130	NEW	Pin 0,25 mm, pointed	each	-	121	
Raise 50 mm for base plate	pair	H 50	131	NEW	Pin 0,50 mm, pointed	each	-	122	
Stop set	Set	-	109		Pin 0,00 mm, ring cutter	each	-	135	NEW
Fixing set, slot width 14 mm, M12	Set	-	110		Extension shaft with union nut	each	L 60	123	
Fixing set, slot width 18 mm, M12	Set	-	111		Extension shaft with union nut	each	L 120	124	
Clamping claw for grid 40 mm M12	each	-	112		Extension shaft with union nut	each	L 240	125	
Clamping claw for grid 50 mm M12	each	-	113		Screw spindle with housing	each	M18 x 1,5	126	
Clamping claw for grid 50 mm M16	each	-	114		Thimble	each.	M18 x 1,5	127	
Medium claw grid 40 mm M12	each	-	115		Adjustment screw M12 x 67/33	each	-	128	
Bearing rods for 3AX100	pair	H 100	132	NEW	Adjustment screw M16 x 72/30	each	-	129	

# 100 and 3AX100



2

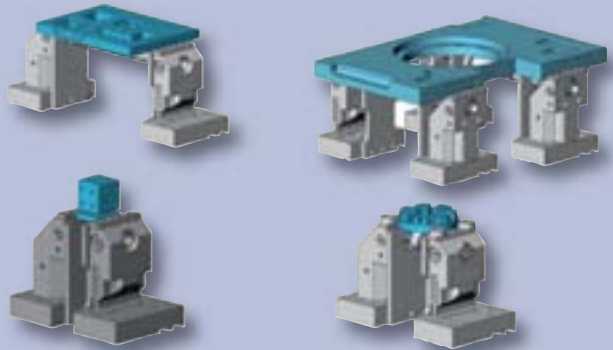
27669 100



Model	5AX100	3AX100
Cat.-no.	27669 101	27669 100
▶ Height above machine table mm:	175	100
▶ Jaw width mm:	100	100
▶ Clamping force kN:	5-42	5-22
▶ Clamping width with standard set mm:	22-236	22-236
▶ Clamping depth mm:	8	8
<b>Clamping set 5AX100 / 3AX100 consists of:</b>		
▶ A fixed jaws:	1 ea.	
▶ B movable jaws:	1 ea.	
▶ C Jaws for pins	2 pcs.	
▶ D Screw spindle with housing	1 ea.	
▶ E Extension shaft 60 and 120 mm	1 ea.	
▶ F Ring cutter 0,5 mm	12 pcs.	
<b>other accessories, dependant on the application:</b>		
▶ G base plate (cat.-no. 27669 102-108)		
▶ H bearing rods (cat.-no. 27669 116+132-134)		

## Practical Example of the ATORN 5-Axis Clamp.

Trouble-free 5-side machining in one clamping.



27664

NC Compact Centring Vice Type RKZ



Type

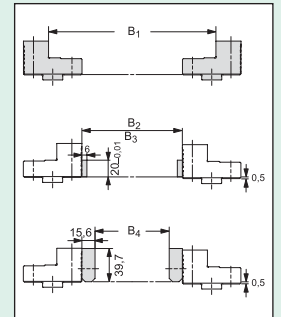
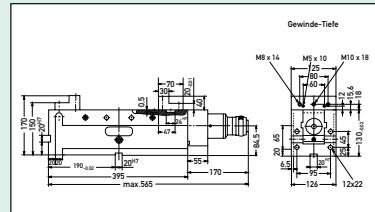
**Self-centring** with 2 movable jaws. 3-side clamping: **on base, on face, on the side** large stroke, 50 mm per jaws. The solid body is hardened and ground on all sides. With stepped jaws. Fastening of the vice by means of clamping claws only. **Clamping accuracy at the centre +/- 0,01 mm. Clamping repeating accuracy +/- 0,01 mm.**

Thread for fastening V-drive.  
Clamping range:  
B<sub>1</sub> = 112-298 mm,  
B<sub>2</sub>/B<sub>3</sub> = 32-218 mm,  
B<sub>4</sub> = 0-186 mm.

**Note:**  
Accessories see cat.-no. 27682-27684. Prism jaws available on request.



27664



Jaw width mm	Offset range of the jaws	Feed travel of the slide	Clamping force kN	Weight approx. kg	27664 ...
125	1 x 46	50	40	50,5	101

27667

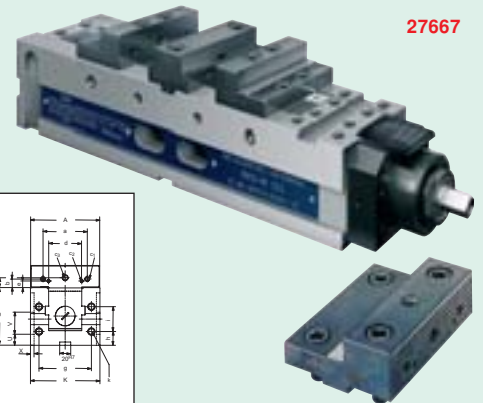
NC Compact Twin Vices Type RKD-M



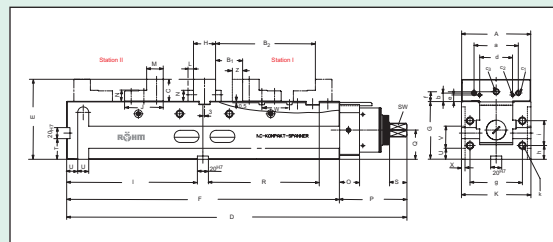
Type

One-sided drive spindle. Clamping system: **mechanical** without power intensification. **Three clamping functions. Double clamping, centring clamping and single clamping.** Steel basic body **all sides hardened and ground. Clamping repeating accuracy +/- 0,01 mm.** 3-side clamping: **on base, on face, on the side.** The clamping thread of the spindle is protected from dirt and chips irrespective of the position of the base jaws. With stepped exchangeable jaws and centre jaw with work support. Fastening of the vice by means of clamping claws only.

**Note:**  
Accessories see cat.-no. 27682-27684.



27667



**Clamping ranges for double clamping**

Jaw width	92	125
▶ Nut 1	0 - 48	0 - 48
▶ Slot 2	48 - 96	46 - 94
▶ Slot 3	-	92 - 140
▶ Slot 1	42 - 79	51 - 88
▶ Slot 2	79 - 127	86 - 134
▶ Slot 3	-	132 - 180

**Clamping ranges for centring clamping**

Jaw width	92	125
▶ Slot 1	30 - 132	40 - 142
▶ Slot 2	126 - 228	132 - 235
▶ Slot 3	-	224 - 327
▶ Slot 1	92 - 195	120 - 222
▶ Slot 2	188 - 290	212 - 315
▶ Slot 3	-	304 - 407

**Clamping ranges for single clamping**

Jaw width	92	125
▶ Slot 1	126 - 177	171 - 222
▶ Slot 2	174 - 225	217 - 268
▶ Slot 3	-	263 - 314
▶ Slot 1	196 - 247	267 - 318
▶ Slot 2	244 - 295	313 - 364
▶ Slot 3	-	360 - 410

Jaw width mm	B mm	E mm	F mm	G mm	H mm	K mm	W mm	Clamping force kN	Weight approx. kg	27667 ...
92	480 + 3	117	366	85	30	94	1 x 48	25	24	101
125	617 + 3	145	495	105	40	126	2 x 46	40	52	102

27701

Load cell manometers for machine vices

Application

For controlling the clamping force.

**Note:**

Further load cell manometers see cat.-no. 38801.



27701

for jaw width mm	Head graduation kN	27701 ...
100/125/160	0 - 60	101

27680

### Set of Claw Jaws SKB

**RÖHM**

Type

**Form-true clamping** thanks to the penetration of the hardened claw tips. **Chucking force 3 - 5 times higher** than with standard jaws. **5-side machining** in one chucking, low loss of material, shorter machining times, reduced production and unit costs.

**Application**

For use with vices. Easy mounting to RÖHM NC compact vices. Easy and secure clamping of parallel unfinished and saw parts. Hydraulic and manual clamping are possible.

27680 101-103

Type

**With fine adjustment** for clamping depths of up to 2 mm.

27680 201-203

Type

**Without fine adjustment** for clamping depths of more than 2 mm.

27680 101-103



27680 201-203



Fine adjustment	Clamping depth	A	B	C	a	b	Øc	27680	...
		mm	mm	mm	mm	mm	mm		
x	< 2 mm	92	14	32	63	13,6	7 (M 6)	101	
x	< 2 mm	125	16	40	80	15,6	9 (M 8)	102	
x	< 2 mm	160	18	50	100	19,6	9 (M 8)	103	
-	> 2 mm	92	14	32	63	13,6	7 (M 6)	201	
-	> 2 mm	125	16	40	80	15,6	9 (M 8)	202	
-	> 2 mm	160	18	50	100	19,6	9 (M 8)	203	

27682

### Single Clamping Claws For NC Compact Vices

**RÖHM**

Type

Assembly, for mounting vices on end and on the base. **Single.**

**Application**

For cat.-no. 27655, 27656, 27664 and 27667.

**Note:**

For professional clamping you need to have four single clamping claws.

27682



suitable for T-slot	27682	...
12	201	
14	202	

suitable for T-slot	27682	...
16	203	
18	204	

27683

### Double Clamping Claw For NC Compact Vices

**RÖHM**

Type

Assembly, for mutual support when clamped on face and in pairs. **Single.**

**Application**

For cat.-no. 27655, 27656, 27664 and 27667.

27683



	27683	...
	201	

27684

### Workpiece Locator for NC Compact Vices

**RÖHM**

Type

Connecting thread M 12, universally adjustable.

**Application**

For cat.-no. 27655, 27656, 27664, 27667 and 27710.

27684



	27684	...
	101	

### ► Power Grip Modular Pallet System

**RÖHM**

**Zero-point clamping system with a guaranteed repeatability of ± 0,002 mm**

Non-productive downtimes are reduced to a minimum. Thanks to the resulting longer operation time, productivity and efficiency are increased.



## • Multiple Sliding Rails

27750

### Multiple Sliding Rails (Sets)

**ATORN®**

**Type**

Multiple clamping system according to the wedge-type spanner principle. Simple, yet precise design. Extension of the clamps is possible, therefore maximum utilisation of the machine table. Extraordinary cost/performance ratio.

**Application**

Quick and precise clamp for all machine tools.

**Advantage:**

- all components of the system are compatible with each other.
- also suitable for ATORN Zero-Point clamping system.
- greatest flexibility.

- easy-to-mount system of stops.
- solve all clamping challenges with only one clamping system.
- replaces any bench vice.

**Note:**

The wedge-type spanners allow for very high clamping forces. Workpieces which require low clamping forces, can also be clamped. The clamping elements are mounted on the rod. Other combinations are also available. See cat.-no. 27751 - 27754.

27750 208



Sliding rail L x W x H mm	Jaws L x W x H mm	fixed jaw (pcs.)	Wedge-type spanner (pcs.)	27750	...
200 x 50 x 80	50 x 42 x 22	2	1		201
200 x 80 x 80	72 x 42 x 29	2	1		202
300 x 50 x 80	50 x 42 x 22	3	2		203
300 x 80 x 80	72 x 42 x 29	3	2		204
400 x 50 x 80	50 x 42 x 22	3	2		205
400 x 80 x 80	72 x 42 x 29	3	2		206
500 x 50 x 80	50 x 42 x 22	3	2		207
500 x 80 x 80	72 x 42 x 29	3	2		208

27751

### Multiple Sliding Rails (Single)

**ATORN®**

**Type**

Without jaws (see cat.-no. 27752) and wedge-type spanner (see cat.-no. 27753).

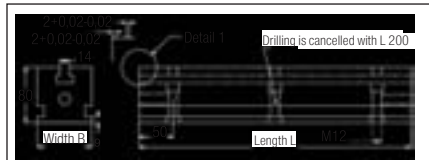
**Note:**

Further accessories see cat.-no. 27754.

27751



Length mm	Width mm	Height mm	27751	...
200	50	80		101
200	80	80		102
300	50	80		103
300	80	80		104
400	50	80		105
400	80	80		106
500	50	80		107
500	80	80		108



27752

### Fixed Jaws (Single)

**ATORN®**

**Type**

Incl. of tenons and screw.

27752 201-209

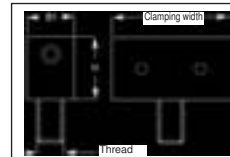
**Type**

With corrugated clamping surface.

**Note:**

Cat.-no. 27752 101-103, 27752 201-203 and 27752 301-303 require T-slot nut with M 8 thread.

27752 201-209



27752 101-109

**Type**

With smooth clamping surface.

27752 301-309

**Type**

With claws.

Clamping width B mm	B1 mm	H mm	Screw DIN 912	smooth		corrugated		with claws	
				27752	...	27752	...	27752	...
22	22	15	M 8		101		201		301
32	22	15	M 8		102		202		302
42	22	15	M 8		103		203		303
30	42	22	M 12		104		204		304
40	42	22	M 12		105		205		305
50	42	22	M 12		106		206		306
42	42	29	M 12		107		207		307
57	42	29	M 12		108		208		308
72	42	29	M 12		109		209		309

### 27753

### Wedge-type Spanners (Single)

# ATORN®

Type  
Incl. of tenons and screw.

27753 101-109

Type  
With smooth clamping surface (standard).

27753 201-209

Type  
With corrugated clamping surface (for unfinished parts).

27753 301-309

With allowance.

27753 401-409

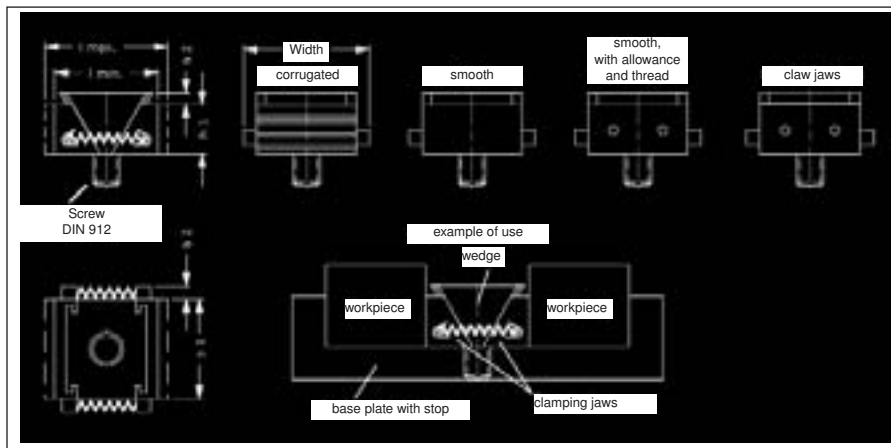
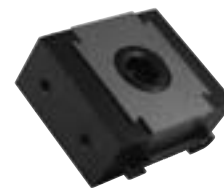
With claws.

Note:

Cat.-no. 27753 101-103, 27753 201-203, 27753 301-303 and 27753 401-403 require T-slot nut with M 8 thread.

**NEW**

27753 101-109



Width mm	Clamping force kN	L min. mm	L max. mm	h1 mm	b1 mm	b2 mm	h2 mm	Screw DIN 912	smooth		corrugated		with allowance		with claws	
									27753	...	27753	...	27753	...	27753	...
30	15	27	31	15	22	4	4	M 8	101	...	201	...	301	...	401	...
40	15	27	31	15	32	4	4	M 8	102	...	202	...	302	...	402	...
50	15	27	31	15	42	4	4	M 8	103	...	203	...	303	...	403	...
40	30	39	45	22	30	5	7	M 12	104	...	204	...	304	...	404	...
50	30	39	45	22	40	5	7	M 12	105	...	205	...	305	...	405	...
60	30	39	45	22	50	5	7	M 12	106	...	206	...	306	...	406	...
54	50	52	62	29	42	6	11	M 16	107	...	207	...	307	...	407	...
69	50	52	62	29	57	6	11	M 16	108	...	208	...	308	...	408	...
84	50	52	62	29	72	6	11	M 16	109	...	209	...	309	...	409	...

### 27754

### Accessories

# ATORN®

Application

Accessories for ATORN multiple sliding rails see cat.-no. 27750 - 27751.

Note:

\* The length of the adapter is 72 mm. The adapter connects two sliding rails with each other without gap. Other lengths in dependence of the desired distance between the sliding rails available on request.

**NEW**

27754 101



27754 102-103



27754 104-107



27754 109-110



27754 111



Description	pcs.	27754	...
Set of adapters*	1	101	...
Stop adjustable	2	102	...
Stop fixed	2	103	...
Tenon short M 8	5	104	...
Tenon short M 12	5	105	...
Tenon long M 12	5	107	...
Screw bushing	5	108	...
Positioning bushing 20x14	5	109	...
Positioning bushing 20x18	5	110	...
Clamping claws	4	111	...

## ► Single, Double and Multiple-Clamping Devices



### MULTI 2000 \* multi-use, economical, compact \*

A smart further development of the standard constructions of double and single clamping devices.

- multi-functional use possible
- optional: mechanical or fully hydraulic action,
- retooling for different workpiece sizes within seconds,
- high clamping and repeatability accuracy
- constant clamping pressure on both clamping locations
- basic body made of case-hardened steel, guides inductively hardened,
- two independent spindles (only one operation side)
- machining of large workpieces of different sizes ,

- Workpieces of different sizes can be clamped lateral slots at lower clamping section transport chips and coolant
- small construction sizes
- perfect for vertical machining centres.

Please contact us!



27708

## High-Pressure Machine Vices

**ATORN®**

27708 101-102

Type

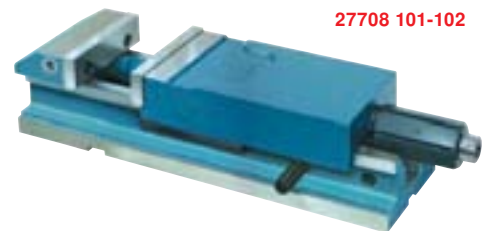
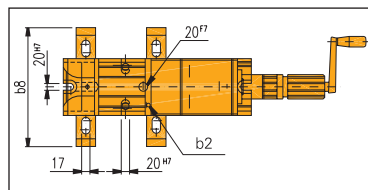
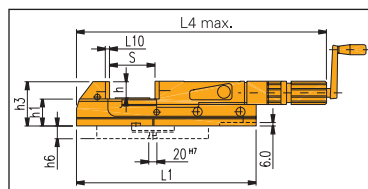
**Mechanical-hydraulic.** Body made of **steel**, **guideways hardened** and **ground**. Aligning on the machine table: longitudinal and across by means of slots and tenons. Rough adjustment of clamping area via bolts. Clamping repeating accuracy at same clamping force **0,01 mm**. Clamping force preset, high repeatability. Preloading for elastic parts, packet clamping, compensation jaws.

**Scope of supply:**

1 set of smooth jaws, 4 clamping claws and hand crank.

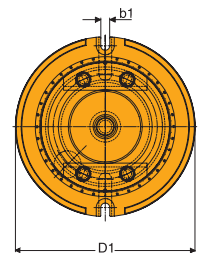
27708 201-202

Swivel base for high-pressure machine vices  
cat.-no. 27708 101-102.



27708 101-102

27708 201-202



Type	Front height b2 mm	Chucking capacity S mm	Jaw height h mm	Jaw thickness L10 mm	h3 x h1 x b8 mm	L1 x L4 max. mm	Clamping force kN	Slot width b1 mm	D x h6 mm	b5 x L8 x h6 mm	27708	...
Bench vice	90	0 - 150	39,6	15,6	99 x 53 x 230	370 x 553	25	-	-	-		101
Bench vice	125	0 - 220	39,6	15,6	112 x 70 x 265	470 x 681	40	-	-	-		102
Swivel base (90)	-	-	-	-	-	-	-	14	242 x 30	230 x 220 x 25		201
Swivel base (125)	-	-	-	-	-	-	-	16	280 x 30	270 x 264 x 28		202

27710

## High-Pressure Machine Vices RB

**RÖHM**

Type

**Mechanical-hydraulic**, with mechanical pre-clamping by means of hand crank. Preset of clamping force via stop. Aligning on the machine table via longitudinal keyway. Rough adjustment of clamping area via bolts. **Clamping repeating accuracy** at same clamping force **0,01 mm**. Delivery with 1 set of standard jaws (1 side smooth, 1 side grooved) and hand crank.

**Application**

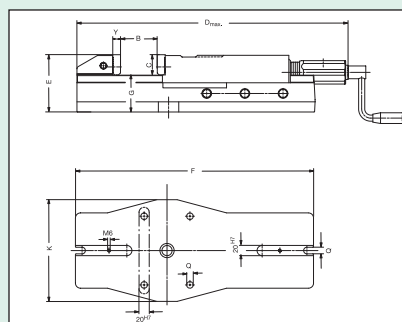
For unit and serial production with drilling and milling machines.

**Quality**

Body made of steel, forged (jaw width 200 mm, made of spheroidal graphite iron). Guideways hardened and ground.

**Note:**

Workpiece stops see cat.-no. 27684. Bench vices with jaw width 250 and 315 mm and additional angle drive available on request.



27710

Jaw width mm	Clamping width B mm	Jaw height C mm	Length D mm	Height E mm	Length F mm	Height G +/- 0,2 mm	Width K mm	Slot width Q mm	Jaw thickness Y mm	Clamping force max. kN	Weight kg	27710	...
113	170	31,6	583	97	390	65,5	160	13	12	30	24		101
135	220	39,6	681	112	468	72,5	200	13	16	40	39		102
160	310	49,6	817	133	574	83,5	240	17	16	50	60		103
200	350	66,6	1.022	171	685	104,5	280	21	20	100	112		104

27711

### Swivel Bases for Machine Vice Type RB

**RÖHM**

Type

With ground bearing edge for supporting the bench vice, degree graduation, fastening screws and T-slot nuts for mounting the bench vice to the swivel base.

Application

For high-pressure machine vices cat.-no. 27710.

27711 101-103

27711 104



for jaw width mm	27711	...
113	101	
135	102	
160	103	
200	104	

27712 - 27715

### Jaws for Machine Vices Type RB

**RÖHM**

Note:

Prism jaws see cat.-no. 27678.

27712

Roller hold-down jaws

Type

Hardened and ground, in pairs.

Application

Hanging type. For workpieces with/without angle deviation.

27713

Mechanical Compensating Jaws

Type

Hardened and ground, in pairs.

Application

Hanging type. For workpieces with/without angle and parallelism deviations.

27715

Prism and standard jaw

Type

With workpiece rest. Soft and burnished, in pairs.

Application

Screw-on.

27712

27713



27715



for jaw width mm	27712	...	27713	...	27715	...
113	101		101		101	
135	102		102		102	
160	103		103		103	
200	104		104			

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## Performance requires quality.

Short chucks by ATORN:

- high-strength materials
- perfect concentricity accuracy
- large clamping range
- high clamping force

This is but one example of ATORN's high-quality clamping tools.

**ATORN®**

27695

Hydro Machine Vices EuroLine

 HILMA

Type

**Mechanical-hydraulic.** Thanks to the revised power intensification, only a minimum of cranking force is necessary. An angle drive (see cat.-no. 27703) facilitates the usage e.g. for lateral clamping on a machine table. The optional clamping force preset (see cat.-no. 27705) allows for a limitation of the maximum force in 6 increments.

**Application:**

Quick advance of moving jaw to workpiece by means of crank handle with coarse-pitch hollow screw spindle. After the work piece is aligned: automatic unlatching of the inner pressure spindle. Further tightening with the hand crank: increase of the clamping force up to the maximum. Releasing clamping pressure by turning the crank into reverse direction.

**Scope of supply:**

Standard reversible jaws smooth/corrugated, hand crank, operation manual.

**Application**

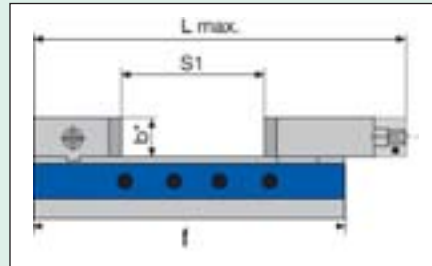
For tool- and mould making, fixture construction and production.

**Note:**

Not suitable for the use with a swivel base. Clamping claw sets see cat.-no. 27805.



27695 302



Type	Jaw width mm	Clamping width S1 mm	Clamping force approx. kN	Jaw height b mm	Overall length L max. mm	Lower section f mm	Crank force N	Crank radius mm	Weight approx. kg	27695 ...
EL 100	100	205	25	34	464	380	50	80	18,5	301
EL 125	125	225	40	45	526	430	75	100	31,5	302
EL 160	160	309	50	54	684	550	95	125	58,5	303
EL 160 L	160	509	50	54	884	750	95	125	75,0	304

27800

Hydro Machine Vices Type NC-M

 HILMA

Type

**Mechanical-hydraulic.** Manual clamping by hydraulic force transmission. Exact aligning on machine table by longitudinal and transverse slots. Increased chucking capacity with clamp-on stepped jaws or customised jaws over flutes and threaded holes on slides and fixed jaw. Threaded holes for mounting oversized jaws is standard.

**Application:**

Quick advance of moving jaw to workpiece by means of crank handle with coarse-pitch hollow screw spindle. After the work piece is aligned: automatic unlatching of the inner pressure spindle. Further tightening with the hand crank: increase of the clamping force up to the maximum. Releasing clamping pressure by turning the crank into reverse direction.

**Application**

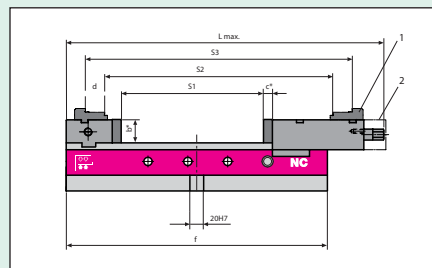
For tool and mould construction, fixture construction and production.

**Note:**

1 = Option clamp-on stepped jaws  
2 = Option angle drive  
Clamping claw sets see cat.-no. 27805.  
Hydraulic type available on request.



27800 102



Type	Jaw width mm	Clamping width S1 / S2 / S3 max.mm	Clamping force kN	Jaw height b mm	Overall length L max. mm	Lower section f mm	Crank force N	Crank radius mm	Weight approx. kg	27800 ...
NC 100 M	100	205 / 330 / 386	25	34	464	380	50	80	18,5	101
NC 125 M	125	225 / 363 / 431	40	45	526	430	75	100	31,5	102
NC 160 M	160	309 / 503 / 573	50	54	684	550	95	125	58,5	103

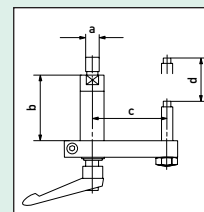
27702

Workpiece Stops for Type EL, NC

**Application**

Coordinate workpiece stops, for self-assembling on all HILMA machine vices, can be turned away for three side machining.

Type	for jaw width mm	a mm	b mm	c mm	d mm	27702 ...
9.3291.0201	100/125	M 12	61	95	46	101
9.3291.0401	160	M 20	81	124	66	102



27702

### 27703

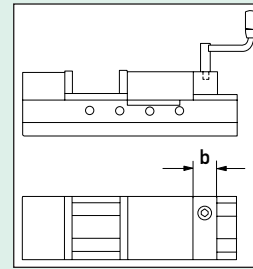
### Angle Drives for Type EL, NC-M

#### Type

Quick mounting with only 2 screws (length L max of the machine vice is not altered). **Hand crank not included.**

#### Application

Important accessories for lateral clamping on the machine table or when the standard crank action is difficult.



Type	for jaw width mm	b mm	27703 ...
9.3294.0605	125	43	102
9.3294.0705	160	46	103

### 27705

### Clamping Force Preselection in 6 increments

#### HILMA

#### Type

The preselection of the clamping force limits the feed of the spindle and therefore the clamping power can be set infinitely variable. The highest clamping force is reached with step 6.

#### Safety advice:

The set clamping force must be high enough, so that the machining forces will not move the workpiece.

#### Scope of supply:

Clamping force preselection in 6 increments, fastening screw and two washers for tolerance variations included.

#### Application

The clamping force preselection in 6 increments thin-walled workpieces, delicate materials and workpieces for fine machining can be clamped with the correct clamping force. For mechanical-hydraulic machine vices Type EL, NC-M.

Type	for jaw width mm	Thread of pressure spindle	Distance X mm	27705 ...
9.3762.0100	100	M 6 x 12	0,7 - 1,0	101
9.3762.0125	125	M 8 x 14	1,0 - 1,5	102
9.3762.0160	160	M 8 x 14	1,0 - 1,5	103



### 27729

### Standard Clamping Jaws

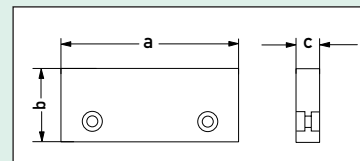
#### Type

Usable on both sides

- side corrugated.
- side smooth.

#### Application

For hydro machine vices Type EL, NC.



Type	a mm	b mm	c mm	pcs. 27729 ...
5.2058.1003	100	34	13	101
5.2058.1004	125	45	15	102
5.2058.1005	160	54	18	103

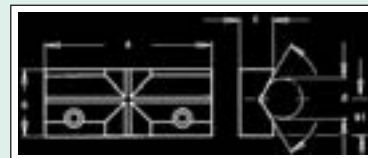
### 27734

### Prism Jaws

#### Application

For clamping round workpieces, horizontal and vertical.

For hydro machine vices Type EL, NC.



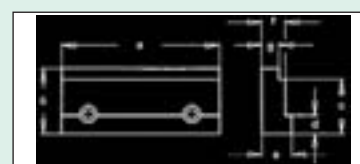
Type	a mm	b mm	b1 mm	c mm	d mm	pcs. 27734 ...
5.3030.0002	100	34	19	17	8-35	101
5.3030.0003	125	45	27	19	10-50	102
5.3030.0004	160	54	32	21	12-60	103

### 27738

### Precision-Type Stepped Jaws

#### Application

Used in pairs. For clamping rectangular workpieces without parallels. For drilling near edges. For hydro machine vices Type EL, NC.



Type	a mm	b mm	c mm	d mm	e mm	f mm	g mm	pcs. 27738 ...
5.2082.0001	100	34	29	10	19	15	11	201
5.2082.0002	125	45	39	13	25	20	16	202
5.2082.0003	160	54	45	15	25	20	16	203

## • Jaws • Clamping Claws

27739

### Mechanical Compensating Jaws

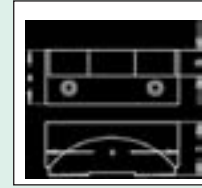
#### Application

For clamping workpieces with unparallel clamping surfaces or 2 workpieces with different tolerances.

For hydro machine vices Type EL, NC.

27739

Type	a mm	b mm	c mm	d mm	pcs.	
					27739	...
8.3711.0208	100	34	35	16		101
8.3711.0308	125	45	50	22		102
8.3711.0408	160	54	55	26		103



27741

### Clamping Jaws, Extra Wide

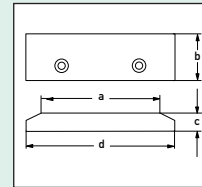
#### Application

For secure clamping of workpieces, which are wider than normal jaw width. Used in pairs.

For hydro machine vices Type EL, NC.

27741

Type	a mm	b mm	c mm	d mm	pcs.	
					27741	...
5.2058.1025	100	34	13	125		201
5.2058.1026	125	45	15	160		202
5.2058.1027	160	54	18	200		203



27803 - 27804

### Stepped Top Jaws

#### Type

For achieving very large clamping width. Includes fastening screws.

#### 27804

For slides.

#### Application

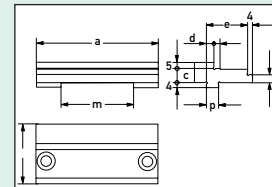
For machine vices cat.-no. 27800.

#### Note:

Dimension m only for cat.-no. 27804.

#### 27803

For fixed jaws.



27803



Type	a mm	c mm	d mm	e mm	h mm	m mm	p mm	27803		27804	
								...	...	...	...
9.3284.0201	100	11,5	6	34	6,5	60	10h6		101		
9.3284.0301	125	14,0	6	40	9,0	58	12h6		102		
9.3284.0401	160	17,0	8	43	12,0	64	16h6		103		
9.3284.1201	100	11,5	6	34	6,5	60	10h6				201
9.3284.1301	125	14,0	6	40	9,0	58	12h6				202
9.3284.1401	160	17,0	8	43	12,0	64	16h6				203

27805

### Clamping Claw Sets for Type EL/NC/DS

#### HILMA

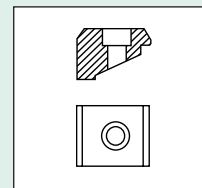
4-part, with screws.

#### Application

For machine vices cat.-no. 27695, 27800 and 27807.

27805

Type	for Clamping rim		Slot mm	Cheese head screw	27805	...
	Type	mm				
9.3777.2011	EL/NC 100, DS 100	24	14	M 12		101
9.3777.3011	EL/NC 125/160, DS 125	27	14	M 12		102
9.3777.3021	EL/NC 125/160, DS 125	27	18	M 16		103



## ► Double-Clamping System DS

The perfect component for efficient multi-clamping. Single-ended spindle action and third-hand feature for easier exchange of same-size or different-size workpieces in the clamping sections. The spindle area is completely encapsulated, this provides effective protection from metal chips and coolant. Free from float linear guiding for high precision. Preselection of clamping force by means of torque wrench.

Please send us your enquiry!



27810 - 27817

### Q.I.S Quick-Change Jaws with Hold-Down Effect

#### HILMA

##### Type

Changing jaws in seconds. Due to push-down effect and zero-point positioning at clamped workpiece.

Constant reference points, therefore high workpiece accuracy. The base jaws are mounted on fixed jaw and slide. The exchangeable jaws, held by 2 permanent magnets, can be inserted and exchanged with a single hand movement. **Jaws are delivered separately.**

##### Application

For machine vices type EL, NC.

##### 27810

Base jaw, with permanent magnet.

##### 27811

Exchangeable jaw, smooth.

##### 27812

Exchangeable jaw, corrugated.

##### 27814

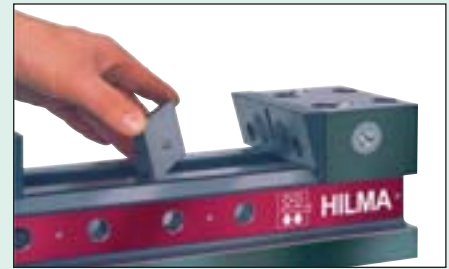
Exchangeable jaw, with steps.

##### 27815

Exchangeable jaw, with prisms.

##### 27817

Exchangeable jaw, soft.



for front height mm	27810	...	27811	...	27812	...	27814	...	27815	...	27817	...
100	101		101		101		101		101		101	
125	102		102		102		102		102		102	
160	103		103		103		103		103		103	

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## Performance requires quality.

Short chucks by ATORN:

- high-strength materials
- perfect concentricity accuracy
- large clamping range
- high clamping force

This is but one example of **ATORN's high-quality clamping tools.**

# ATORN®

## Your advantages at a glance!

10 important characteristics give you invaluable advantages. The sum of all these advantages results in a new product series, which will satisfy all your requirements. Over 25 years of experience in zero-point clamping included.

### Positive locking!



The balls are enclosed perfectly from three sides.

### Large ball diameter!



The surface of the ball is 784% greater than that of standard systems.

### Large opening for moving in!

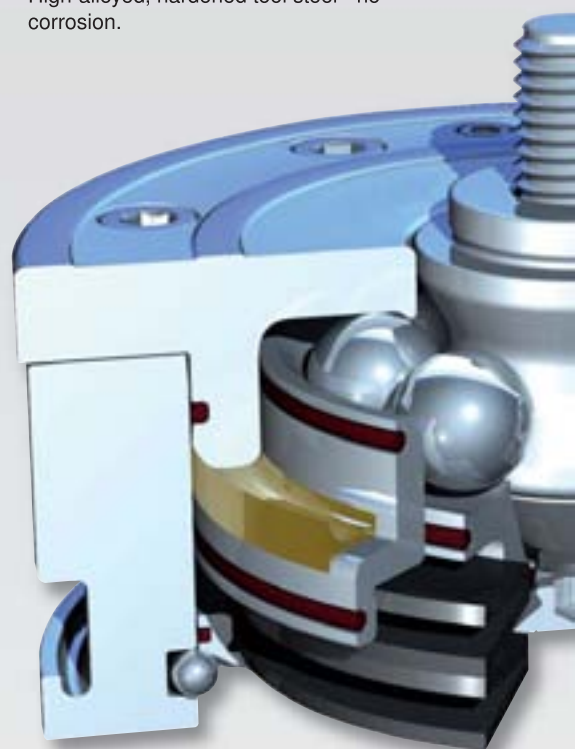


Prepositioning of 12 mm is sufficient.

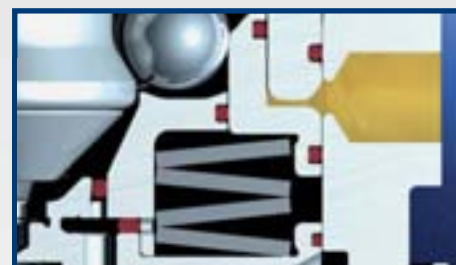
### Stainless steel!



High-alloyed, hardened tool steel - no corrosion.



### Safety system!



Reliability - The clamping module can be opened at all times.

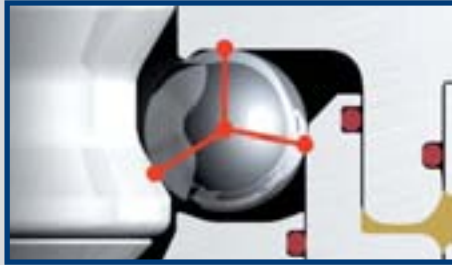
- **Secure the future** through an optimisation of the quality of your products (repeatability up to 2 µm)
- **Increase the efficiency** of your processes in order to remain competitive.
- **Increase productivity through a minimisation of** set-up costs, increase of product quality, and conservation of your machinery

- **Optimise manufacturing through variability and** flexibility provided by the market-leading system
- **Exact and user-friendly clamping** of highest precision for a wide-range application

# Zero-Point Clamping System



## 3-stepped mechanism!



Force transmission by means of 3-stepped closing mechanism. Thanks to the ideal force distribution, no shear stress will occur.

## No ball bearing cage!

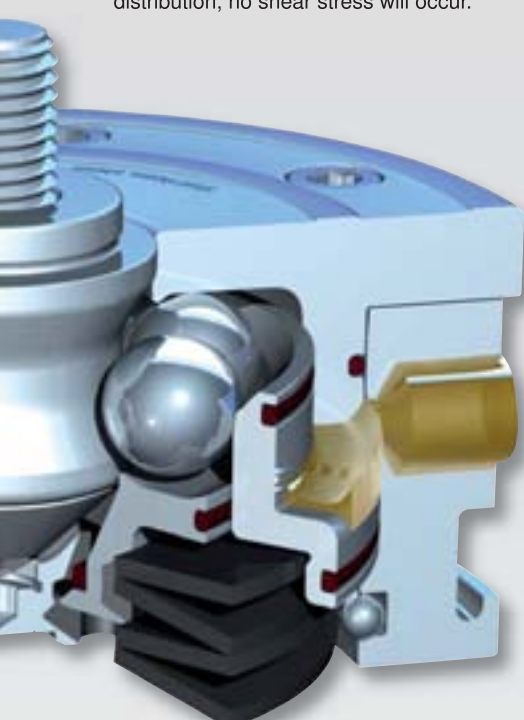


The balls float freely in the channel. Due to this, the balls can always reposition themselves.

## High holding force, pull-down force, and clamping force!



Size	chucking force [kN]	Pull-down force/clamping force up to [kN]	
		hydr.	pneum.
K 5	13	5	1,5
K 10	25	10	8
K 20	55	20	17
K 40	105	40	30



## Jam-free!



Jam-free moving in and out over the included support edge.

## Media supply!



Low installation depth, less supply drillings.

- **Perfect safety**  
even under extreme conditions, for the demanding operator.
- **Easy customisation**  
according to the respective tasks in order to fulfil the market's multifaceted requirements.
- **Sustainability and long service life**  
through phenomenal quality and precision for a long-term company success.
- **Transfer of technology thanks to perfect guidance**  
during difficult tasks, especially when it comes to 6-side machining.

## Precision Step Blocks • Clamps • Parallels

27850 - 27852

### Precision Step Blocks

#### Type

**Accuracy:** nominal size  $\pm 0,01$  mm, parallelism 0,005 mm, ground in pairs.

#### Application

The first base ever which stays in place by itself! The step blocks (3 mm and/or 4 mm wide) stay in their preadjusted position during machining and opening of the machine vice (also during blowing off). Vertical use possible without any problems. Through holes near the edges are easily drilled thanks to the narrow design without stepped jaws.

#### Quality

Hardened tool steel HRC 60.

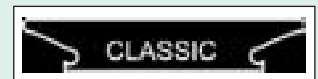
#### 27850

For jaw width 125 mm. Thickness 3 mm.

#### 27852

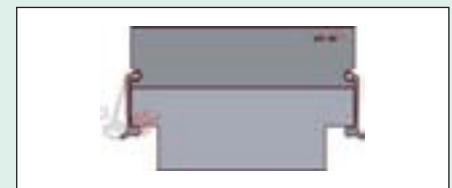
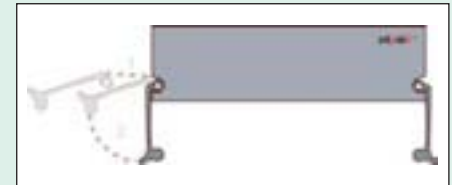
For jaw width 160 mm. Thickness 4 mm.

27850



For jaw width mm	Number of pairs	Heights mm	size increments mm	Type	27850	...
125	5	15 - 35	5	Premium		101
125	17	10 - 39	10 - 20 = 5 22 - 30 = 2 30 - 39 = 1	Premium		102
125	32	8 - 39	1	Premium		103
125	5	15 - 35	5	Classic		105
125	17	10 - 39	10 - 20 = 5 22 - 30 = 2 30 - 39 = 1	Classic		106
125	32	8 - 39	1	Classic		107

For jaw width mm	number of pairs	heights mm	size increments mm	type	27852	...
160	5	25 - 45	5	Premium		101
160	19	10 - 49	20 - 30 = 5 33 - 39 = 2 40 - 49 = 1	Premium		103
160	5	30 - 50	5	Classic		106
160	19	15 - 53	15 - 35 = 5 36 - 44 = 2 46 - 53 = 1	Classic		108



27855 - 27856

### Clamps

#### Note:

Choose your machine vice and note the type. Then, order the suitable clamps. For clamping of 1 pair of bases, 4 clamps are required.

#### 27855

#### Application

For bench vices with a jaw width 125 mm.

#### 27856

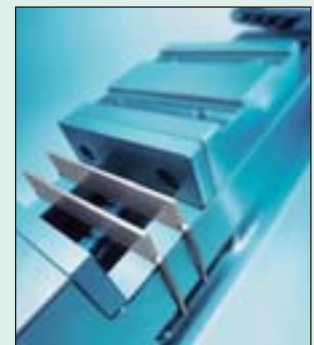
#### Application

For bench vices with a jaw width 160 mm.

for jaw width mm	suitable for	for type	Web width mm	27855	...
125	Allmatic-NC Version LC / TC / Duo	Premium	38,6		101
125	Allmatic-NC up to Bj. 1990	Premium	21,0		102
125	Allmatic-NC Centring vice	Premium	50,0		103
125	Allmatic-basic	Classic	8,0		104
125	Allmatic-HD	Classic	15,0		105
125	Atorn-CNC High-pressure vice	Premium	47,3		106
125	Fribosa control and grinding vice	Premium	17,0		107
125	Hilma Römheld SM / NC / UNC	Classic	13,0		108
125	Hilma Römheld ES	Premium	43,0		109
125	Kesel-KNC / Arno / NC	Classic	12,0		110
125	Kesel-CNC / Bull	Premium	27,0		111
125	Röhm RKK / RKH	Premium	35,0		112
125	Röhm RKE	Premium	40,0		113
125	Röhm RKD / RKZ	Premium	45,0		114

for jaw width mm	suitable for	for type	Web width mm	27856	...
160	Allmatic-NC Version LC / TC	Premium	39,8		101
160	Allmatic-basic	Classic	8,0		102
160	Allmatic-HD	Classic	18,0		103
160	Atorn-CNC High-pressure vice	Premium	47,3		104
160	Hilma Römheld SM / NC	Classic	15,0		105
160	Kesel KNC / NC	Classic	13,0		106
160	Kesel Arno	Classic	15,0		107
160	Kesel Bull	Premium	27,0		108
160	Röhm RKE	Premium	55,0		109

27855



36600

### Set of Precision Parallels



Type

In pairs, plane-parallel, finely ground. Dimensions on face. The sets result in a large range with 1 mm increments. Case-hardened. **Paired tolerance IT 5, nominal size tolerance +/- 0,01 mm. Other dimensions in compliance with DIN ISO 2768 m.** In wooden stand.

**Application**

For clamping and positioning of different sized workpieces, e.g. for grinding, milling, eroding, measuring and scribing. Can be used in conjunction with clamping tools and for parallel positioning workpieces in toolmaker's vices and on test plates.

**Note:**

Sets made of acid- and corrosion-resistant steel available on request. Types with special dimensions (e.g. in compliance with DIN) with higher accuracy or as single pairs available on request.

36600 101

Type

Length 100 mm.

Contents of box one pair each of:

2 x 5 / 2 x 10 / 2 x 15 / 2 x 20 / 3 x 6 / 3 x 11 / 3 x 16 / 3 x 21 / 4 x 7 / 4 x 12 / 4 x 17 / 4 x 22 / 5 x 8 / 5 x 13 / 5 x 18 / 5 x 23 / 6 x 9 / 6 x 14 / 6 x 19 / 6 x 24 mm.

36600 103

Type

Length 125 mm.

Contents of box one pair each of:

8 x 11 / 8 x 16 / 8 x 21 / 8 x 26 / 8 x 31 / 8 x 36 / 10 x 13 / 10 x 18 / 10 x 23 / 10 x 28 / 10 x 33 / 10 x 38 / 12 x 15 / 12 x 20 / 12 x 25 / 12 x 30 / 12 x 35 / 12 x 40 / 14 x 17 / 14 x 22 / 14 x 27 / 14 x 32 / 14 x 37 / 14 x 42 mm.

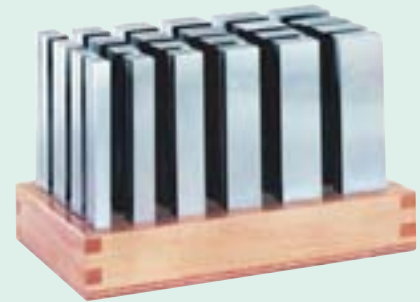
36600 102

Type

Length 150 mm.

Contents: 1 ea pair of:

8 x 11 / 8 x 16 / 8 x 21 / 8 x 26 / 8 x 31 / 8 x 36 / 10 x 13 / 10 x 18 / 10 x 23 / 10 x 28 / 10 x 33 / 10 x 38 / 12 x 15 / 12 x 20 / 12 x 25 / 12 x 30 / 12 x 35 / 12 x 40 / 14 x 17 / 14 x 22 / 14 x 27 / 14 x 32 / 14 x 37 / 14 x 42 mm.



36600

Length mm	36600	...
100	101	
125	103	NEW
150	102	

36602

### Set of Parallels



Type

Case-hardened and ground. Resting faces finely ground. Paired tolerance in height 0,010 mm.

**Nominal sizes** in compliance with ISO 2768 m.

Nominal size tolerance up to height 30 mm = +/- 0,2 mm, starting at height 35 mm = +/- 0,3 mm.

Contents:

1 ea. pair (=14 pairs). Parallels 150 mm long, 10 mm wide. Height of contact surfaces mm: 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 / 32 / 35 / 40 / 45 / 50.

In wooden case with removable swing cover.



36602

Contents	36602	...
14 pair	101	

36604

### Sets of Parallels DIN 6346



Type

Case-hardened and ground, accuracy grade 1 in compliance with DIN 876, Section 2.2.1, Tab. 3, in pairs, tolerance IT 5. Nominal sizes in compliance with ISO 2768 m. In wooden box with removable swing cover.

**Application**

Can be used as supports, stops or spacers on machine tools. A must for parallel positioning workpieces in toolmaker's vices. Thanks to ideal stepping and high accuracy grade suitable as well for scribing. High accuracy allows stacking of parallels with two different sizes.

36604 101

Set contents 9 pairs:

8 x 2,5 x 63 / 10 x 3,2 x 63 / 12 x 4 x 63 / 16 x 5 x 63 / 20 x 6,3 x 63 / 12 x 4 x 100 / 16 x 5 x 100 / 20 x 6,3 x 100 / 25 x 8 x 100 mm.

36604 102

Set contents 7 pairs:

12 x 4 x 100 / 16 x 5 x 100 / 20 x 6,3 x 100 / 25 x 8 x 100 / 25 x 8 x 160 / 32 x 10 x 160 / 40 x 12 x 160 mm.

36604 103

Set contents 5 pairs:

25 x 8 x 100 / 32 x 10 x 100 / 40 x 12 x 100 / 50 x 16 x 160 / 63 x 20 x 160 mm.



36604

Set size	Set contents pairs	36604	...
2,5 - 25	9	101	
4,0 - 40	7	102	
8,0 - 63	5	103	

## • Parallels • Permanent-Magnetic Clamping Plates

36605

### Parallels DIN 6346



Type

Case-hardened and ground, **accuracy grade 1 in compliance with DIN 876**, Section 2.2.1, Tab. 3, **in pairs, tolerance IT 5 in height and width.** Nominal sizes in compliance with **ISO 2768 m**.

#### Application

Can be used as supports, stops or spacers on machine tools. A must for parallel positioning workpieces in toolmaker's vices. Thanks to ideal stepping and high accuracy grade suitable as well for scribing. High accuracy allows stacking of parallels with two different sizes.

36605



H x W mm	Length mm	Width tolerance mm	Height tolerance mm	36605 ...
8 x 2,5	63	0,004	0,006	102
10 x 3,2	63	0,005	0,006	104
12 x 4,0	100	0,005	0,008	106
16 x 5,0	100	0,005	0,008	108
20 x 6,3	100	0,006	0,009	110
25 x 8,0	100	0,006	0,009	111

H x W mm	Length mm	Width tolerance mm	Height tolerance mm	36605 ...
25 x 8,0	160	0,006	0,009	112
32 x 10,0	100	0,006	0,011	113
32 x 10,0	160	0,006	0,011	114
40 x 12,0	100	0,008	0,011	115
40 x 12,0	160	0,008	0,011	116
50 x 16,0	160	0,008	0,011	117

36615

### Set of Parallels



Type

Hardened and ground, resting surfaces precision-ground. Paired tolerance in height 0,004 mm. Nominal size tolerance in height = +/- 0,004 mm. Nominal sizes length and width in compliance with **ISO 2768 m**. 150 mm long, 10 mm wide, In wooden box with removable swing cover.

**Set contents 14 pairs:** height of contact surfaces 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 / 32 / 35 / 40 / 45 / 50 mm.

#### Application

Suitable as workpiece supports for various machining applications. Thanks to constant width, the parallels can be stacked in height. The swing cover is removable so that the box can be open stored in a tool cabinet.

36615



Contents	36615 ...
14 pairs	101

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## Performance requires quality.

Multiple clamps by ATORN:

- high-strength materials
- quick and exact clamping of multiple workpieces
- highest clamping force

This is but one example of **ATORN's high-quality clamping tools.**

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