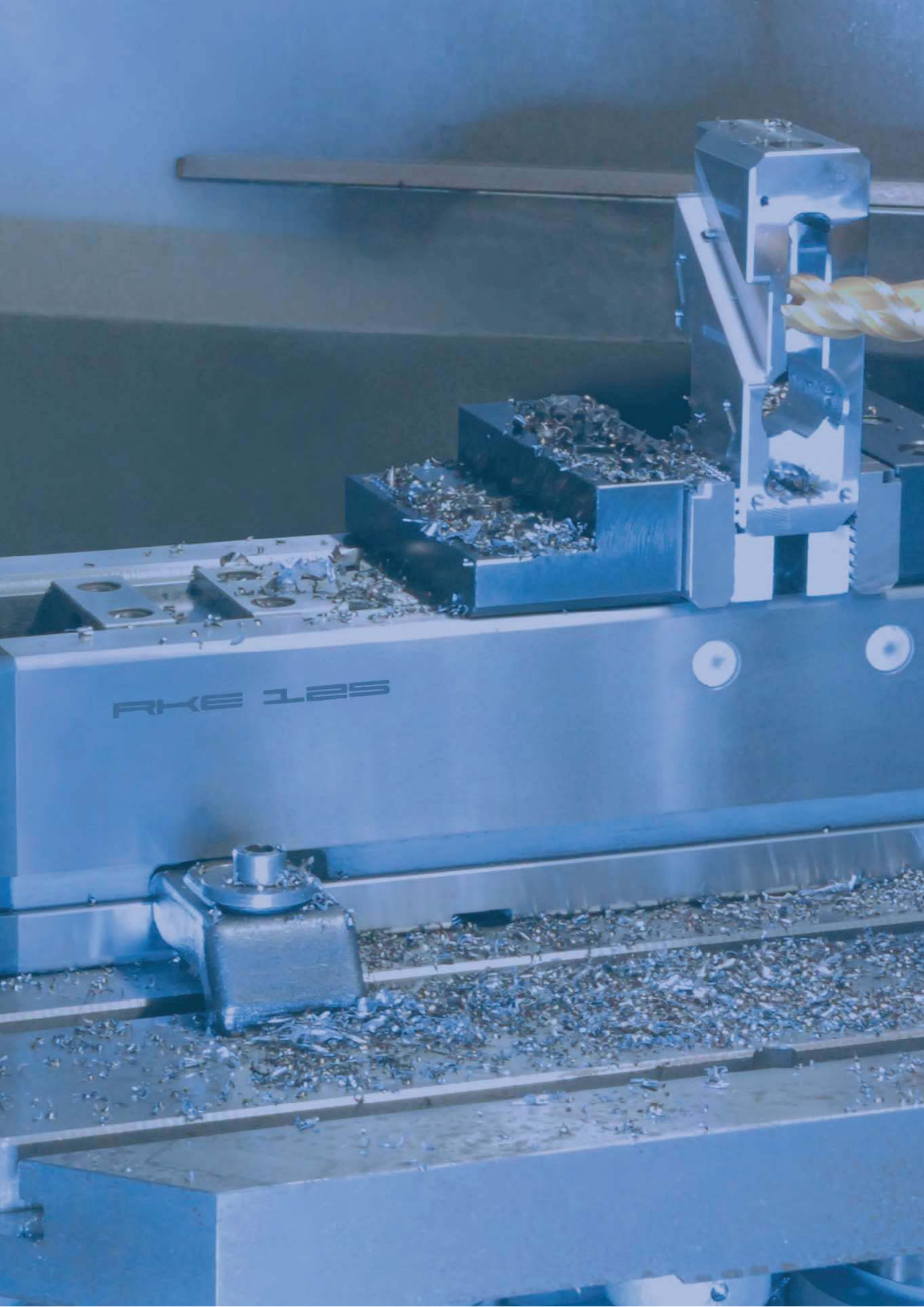




VICES

EDITION 8.1

**RÖHM**  
driven by technology







## IDEAL FOR 5-AXIS MACHINING



Without additional foundations or special jaws, the RZM centric vice holds the workpiece securely – and does this with a minimal interference contour. The clamping spindle is located very close to the workpiece, creating an effective force flow and providing an extremely rigid clamping. The patented guide system of the jaws makes a very large clamping range possible.



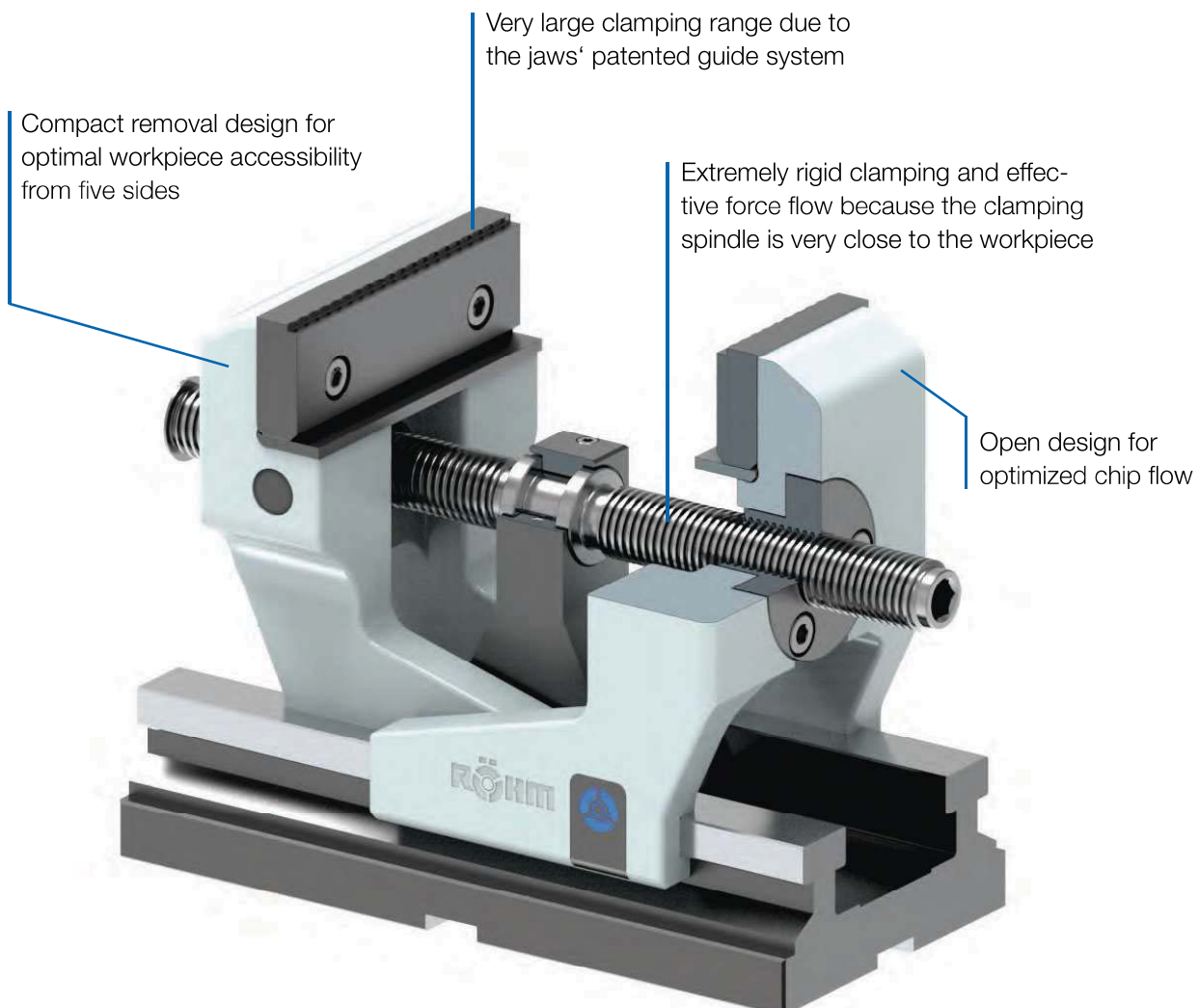
Video RZM

# NC-COMPACT SELF CENTERING VICES

Thanks to its compact and robust design, the NC-compact self centering vices from RÖHM have a minimal interference contour, enabling optimal workpiece accessibility in 5-axis machining. Two movable clamping jaws ensure a constant clamping force, high repeatability and large clamping stroke.

## ADVANTAGES AT A GLANCE

- ⊕ Ideal for 5-axis machining due to its minimal collision contour
- ⊕ Hardened and ground on all sides for long service life
- ⊕ Constant clamping force and high repeatability



# RZM - central, without power transmitter



## APPLICATION

Optimized for 5-axis machining.

## TYPE

**Clamping system mechanical without power transmitter, manually operated.**

Centric clamping with two moving jaws.

## CUSTOMER BENEFITS

- Ideal guidance characteristics of the jaws thanks to patented guidance system
- Very large clamping stroke
- Open design for optimized chip flow, which permits easy cleaning, even after heavy duty machining
- Constant clamping force for every clamping operation and high clamping repeatability when a torque wrench is used
- Optimally suitable for use of SKB clawed jaws. These top jaws can securely clamp raw and sawed parts with a max. strength of up to 900 N/mm<sup>2</sup> to a cutting depth of 2.5 mm

## TECHNICAL FEATURES

- Steel basic body hardened and ground
- Highly positioned clamping jaw
- Top spindle lying near the clamping jaws for optimal force transfer
- Long jaw guide and compact design
- Including SKB clawed jaws
- Clamping repeatability 0.02 mm

**RZM** = RÖHM, central, manual

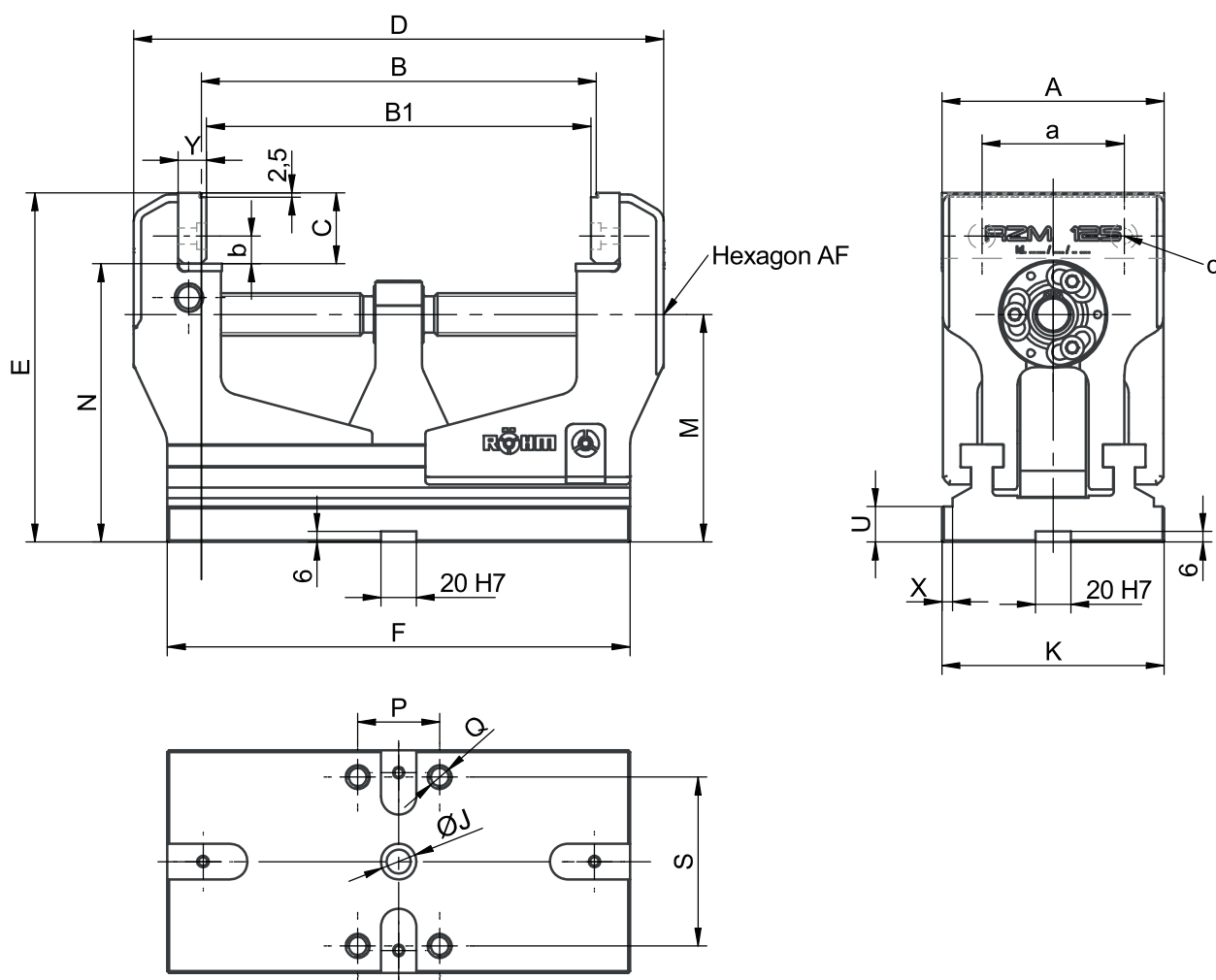
A32  
RZM, with SKB clawed jaws

Item no.	182230	182231	178910	178911
Jaw width A mm	92	92	125	125
Design	long design	short design	long design	short design
B min.	24	24	23	23
B max.	160	100	222	142
B1 mm	18-154	18-94	17-216	17-136
C mm	32	32	40	40
D mm	230	170	298	218
E mm	174	174	196,5	196,5
F mm	200	200	260	180
Ø J x depth mm	Ø20 <sup>+H7</sup> /6	Ø20 <sup>+H7</sup> /6	Ø20 <sup>+H7</sup> /6	Ø20 <sup>+H7</sup> /6
K mm	94	94	125	125
M mm	120	120	128	128
N mm	142	142	156,5	156,5
U mm	20	20	20	20
X mm	6	6	6	6
Hexagon AF	10	10	12	12
Clamping force kN	20	20	25	25
Tightening torque Nm			150	150
Weight kg	11,7	11,5	20,3	17,4

# RZM - central, without power transmitter



NC-Centric clamping  
vices RZM





# Accessories RZM

A37

**Claw jaws SKB without step**, universal for clamping depth > 2.5 mm



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm
166661 ▲	set	92	92	32	14
166667	set	125	125	40	16

Including fixing screws

A37

**Claw jaws SKB with fine step**, 2.5 mm clamping depth



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm
166514	set	92	92	32	14
166520	set	125	125	40	16

Including fixing screws

A37

**Normal jaw SGN**, one side smooth, one side grooved, both sides ground



Item no.	Contents of delivery	Size	Width mm	Height mm
162363	set	92	92	31,6
158897	set	125	125	39,7

Including fixing screws

A37

**Normal jaw finely checkered SGNf**, reversible, to increase the specific contact pressure (higher holding forces), one side finely checkered, one side longitudinally grooved



Item no.	Contents of delivery	Size	Width mm	Height mm
163223	set	92	92	32
163225	set	125	125	39,7

Including fixing screws

A37

**V-jaw PB**, horizontal and vertical



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm	Height prism mm	Chuck capacity mm	
							horizontal	vertical
162365 ▲	set	92	92	32	16	19,5	12-36	12-36
158641	set	125	125	40	20	24	15-40	18-60

# Accessories RZM

A37

**Normal jaw SGNA**, with movable workpiece stop, hardened and ground

Item no.	Contents of delivery	Size	Width mm	Height mm
150739 ▲	piece	92	113	31,6
150740 ▲	piece	125	135	39,6

Including fixing screws



A37

**V-jaw and standard jaw SBO**, unhardened and burnished, with workpiece support

Item no.	Contents of delivery	Size	Width mm	Height mm	Chuck capacity mm	
					Horizontal	Vertical
317259	set	92	110	31,8	3-12	5-32
317260	set	125	135	39,8	3-13	6-40

Including fixing screws



A37

**Spindle**, for shortening the clamping range of the long RZM version

Item no.	Contents of delivery	Size	Length mm	Diameter mm
178958	piece	125	218	24
182233	piece	92	168	24



A37

**Single clamp SPE**, for mounting vices on end and on the base

Item no.	Contents of delivery	T-slot	Thread
149121	piece	12	M10x50
149122	piece	14	M12x55
149123	piece	16	M12x60
149124	piece	18	M16x60
155722	piece	20	M16x65
151507	piece	22	M16x65



A37

**Fixed slot nuts NTS**, hardened and ground, with fixing screw

Item no.	Contents of delivery	Size	Length mm
014823	set	20x12	22
014825	set	20x14	25
014827	set	20x16	25
014829	set	20x18	25
014831	set	20x20	22
014833	set	20x22	32



A26

**Torque wrench**

Item no.	Torque Nm	Length mm	Output	Working accuracy
10004116	20-120	435	12,7=1/2"	3%
10004117	60-320	659	12,7=1/2"	3%



A99

**Screwdriver bit for torque wrench**

Item no.	Size	Key-width SW	Output
1339728	92	10	1/2"
1339729	125	12	1/2"





# RKZ-M - central, without power transmitter



## APPLICATION

Optimized for 5-axis machining.

## TYPE

**Clamping system mechanical without power transmitter, manually operated.**

Centric clamping with two moving jaws.

## CUSTOMER BENEFITS

- ② Short, compact design
- ② Large clamping stroke
- ② Constant clamping force for every clamping operation and high clamping repeatability when a torque wrench is used
- ② Clamping accuracy at the centre:  $\pm 0.02$  - clamping repeatability: 0.01

## TECHNICAL FEATURES

- Steel basic body as well as all guides hardened and ground on all sides
- Standard-equipped with stepped top jaws

**RKZ-M** = RÖHM, compact, central, manual

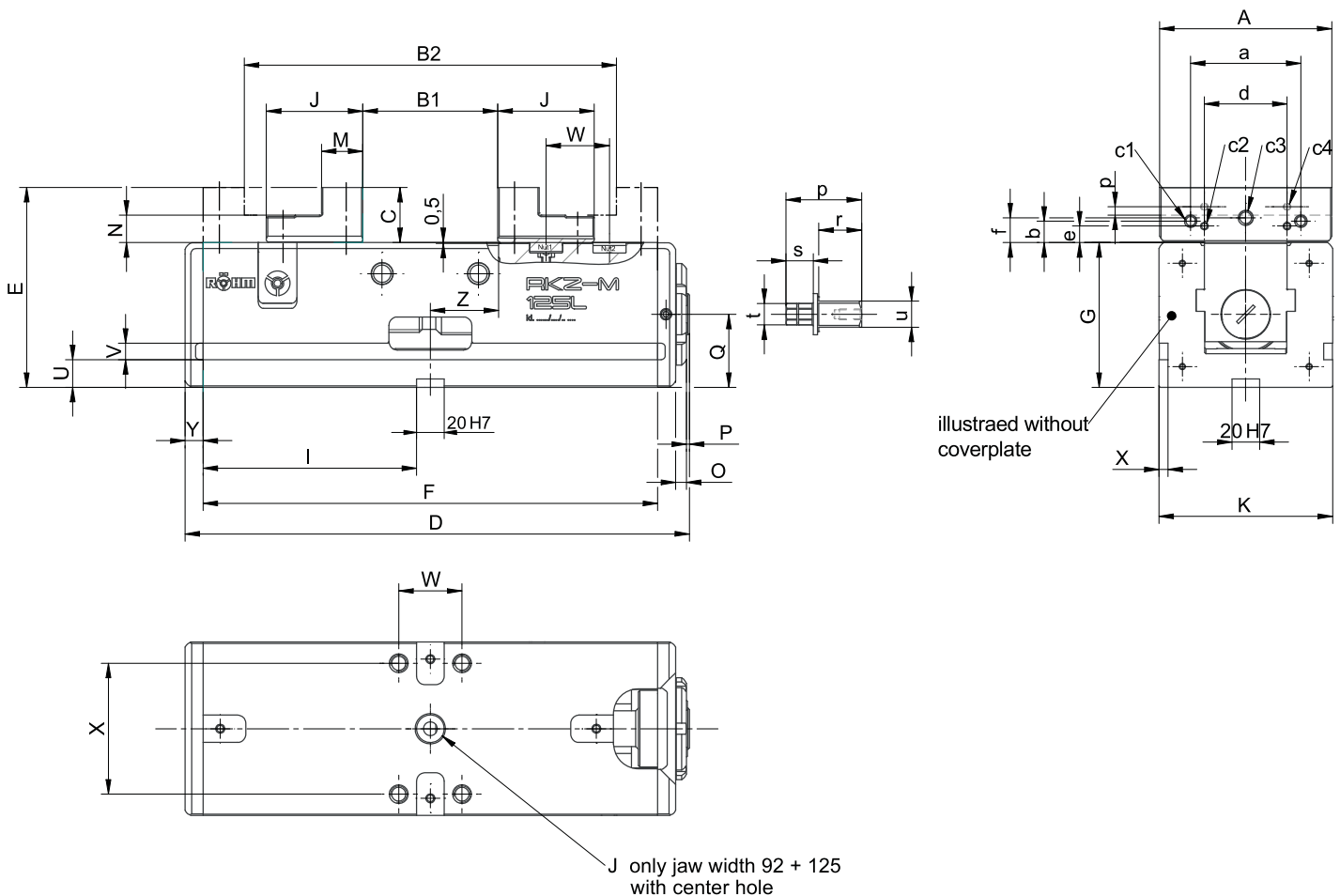
A32

**RKZ-M, with stepped jaws**

Item no.	180190 ▲	180191 ▲	180192 ▲	180193 <sup>1)</sup> ▲
Jaw width A mm	50	70	92	125
B1 slot 1 mm	0-39	0 - 58	0 - 76	0 - 97
B1 slot 2 mm	36-75	48-106	70-146	92-189
B2 slot 1 mm	37-75	48-105	78-138	81-177
B2 slot 2 mm	72-111	95-153	132-208	172-269
C mm	20	25	32	40
Dmax mm	167	219	295	366
E mm	75	95	117	145
F mm	140	190	260	330
G <sub>-0,02</sub> mm	55	70	85	105
J mm	32	41	56	70
K mm	52	72	94	126
M mm	14	17,5	25	30
N <sub>-0,01</sub> mm	10	12	16	20
O mm	10	10	13	13
P mm	1	1	2	2
Q mm	31	40	41,5	53
U mm	15	20	20	20
V mm	12	12	12	12
W mm	18	24	35	46
Y mm	10	10	12	13
Z mm	20,5	30	39	49,5
a mm	-	-	63	80
b mm	-	-	13,6	15,6
c1	-	-	M6x10	M8x14
c2	M 4 x 8	M 5 x 8	M5x8	M5x8
c3	-	-	M10x16	M10x18
c4	M3x6	M4x8	M5x8	M5x8
d mm	26	37	48	60
e mm	5	6	8	12
f mm	-	-	14	18
l mm	60	85	120	155
p mm	3,5	4,5	6	6
q mm	38	52	55	55
r mm	20	30	32	32
s mm	15	19	20	20
t mm	6 kt-SW 8	6 kt-SW 10	6 kt-SW 14	6 kt-SW 14
u mm	4 kt-SW 12	4 kt-SW 14	4 kt-SW 19	4 kt-SW 19
Ø J x depth mm	-	-	Ø20H <sup>7</sup> /8	Ø20H <sup>7</sup> /8
Clamping force kN	10	15	20	25
Weight kg	3,5	7	18	32,5

<sup>1)</sup> With enlarged stepped-jaws

# RKZ-M - central, without power transmitter



# Accessories RKZ-M

A37

**Stepped jaws SB**, reversible, with fixing screws

Item no.	Contents of delivery	Size	Width mm	Height mm
164864 ▲	set	50	50	20
164844 ▲	set	70	70	25
161831 ▲	set	92	92	32
162631	set	125	125	40



A37

**Raised stepped jaws ESB**

Item no.	Contents of delivery	Size	Width mm	Height mm
164399 ▲	set	125	125	60



A37

**Double V-jaw**, reversible, with fine step, for jaw dimensions of the double V-jaws please see page 4070!

Item no.	Contents of delivery	Size	Width mm	Height mm	Length mm	Height prism mm	Size prism mm	Clamping dia. D1 mm		Clamping dia. D2 mm	
								slot 1	slot 2	slot 1	slot 2
169754 ▲	set	92	92	64,5	67	39	41,3	12-36	-	30-75*	-
169756 ▲	set	125	125	84,5	86	54	56	15-40	-	30-92**	89-105



A37

**Standard jaws SGN**, one side smooth, one side grooved, hardened and ground

Item no.	Contents of delivery	Size	Width mm	Height mm
165161 ▲	set	50	50	19,6
165163	set	70	70	24,6
162363	set	92	92	32
158897	set	125	125	39,7



A37

**Standard jaws finely checkered SGNf**, one side finely checkered, one side grooved, hardened and ground

Item no.	Contents of delivery	Size	Width mm	Height mm
165165 ▲	set	50	50	19,6
165167	set	70	70	24,6
163223	set	92	92	32
163225	set	125	125	39,7



# Accessories RKZ-M

A37

V-jaw PB, horizontal and vertical



Item no.	Contents of delivery	Size	Width mm	Height mm	Thickness mm	Height prism mm	Chuckling capacity mm	
							horizontal	vertical
165169	set	50	50	20	10	12	6-16	6-16
165171	set	70	70	25	12	14	8-24	8-24
162365 ▲	set	92	92	32	16	19,5	12-36	12-36
158641	set	125	125	40	20	24	15-40	18-60

A37

Claw jaws SKB with fine step, 2.5 mm clamping depth



Item no.	Contents of delivery	Width mm	Height mm	Thickness mm
166514	set	92	32	14
166520	set	125	40	16

Including fixing screws

A37

Claw jaws SKB without step, universal for clamping depth &gt; 2.5 mm



Item no.	Contents of delivery	Width mm	Height mm	Thickness mm
166661 ▲	set	92	32	14
166667	set	125	40	16

Including fixing screws

C15

Hand crank HKU, with octagon socket



Item no.	Contents of delivery	Size	Octagon	Key-width SW	L
009150	piece	50	12	Octagon	80
009152	piece	70	14	Octagon	125
382112 <sup>1)</sup>	piece	92	19	Square	160
009154	piece	125	19	Octagon	200

A37

Drive adapter ATA



Item no.	Contents of delivery	Size	Square	Hexagon
164971 ▲	piece	50	12	8
164842 ▲	piece	70	14	10
164625	piece	92/125	19	14



# Accessories RKZ-M

A37

**Single clamp SPE**, for mounting vices on end and on the base


Item no.	Contents of delivery	T-slot	Thread
149121	piece	12	M10x50
149122	piece	14	M12x55
149123	piece	16	M12x60
149124	piece	18	M16x60
155722	piece	20	M16x65
151507	piece	22	M16x65

A37

**Fixed slot nuts NTS**, hardened and ground, with fixing screw


Item no.	Contents of delivery	Size	Length mm
014823	set	20x12	22
014825	set	20x14	25
014827	set	20x16	25
014829	set	20x18	25
014831	set	20x20	22
014833	set	20x22	32

A26

**Torque wrench**


Item no.	Torque Nm	Length mm	Output	Working accuracy
10004116	20-120	435	12,7=1/2"	3%
10004117	60-320	659	12,7=1/2"	3%

A37

**Drive adapter ATA**


Item no.	Contents of delivery	Size	Square
168721	piece	92	12-1/2"
161103	piece	125	14-1/2"
161730	piece	125	19-1/2"

A99

**Screwdriver bit for torque wrench**


Item no.	Size	Key-width SW	Output
1339727	50	8	1/2"
1339728	70	10	1/2"
1339730	92 / 125	14	1/2"



# General accessories - Cliparc



Fixed during machining and when released!

The precision support rails with the Cliparc-System remain in their original position during the machining and releasing process. No more time intensive repositioning necessary. Insert the Cliparc clamps into the rails and snap them into the vice. No tools necessary.

## Technical features:

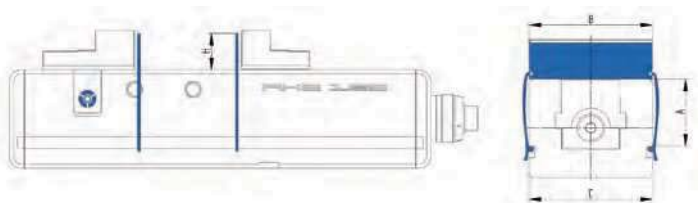
- Different height steppings
- Width only 3 mm (from size 160: 4 mm width)
- Rim near through holes can be machined without step jaws or problems due the slim precision support rails.
- Precision and quality parallelism better than 0.005 mm
- Quick cleaning

**Contents of delivery:** Set with 10 different pair of rails and 4 clamps in wooden box

## Support rails Cliparc

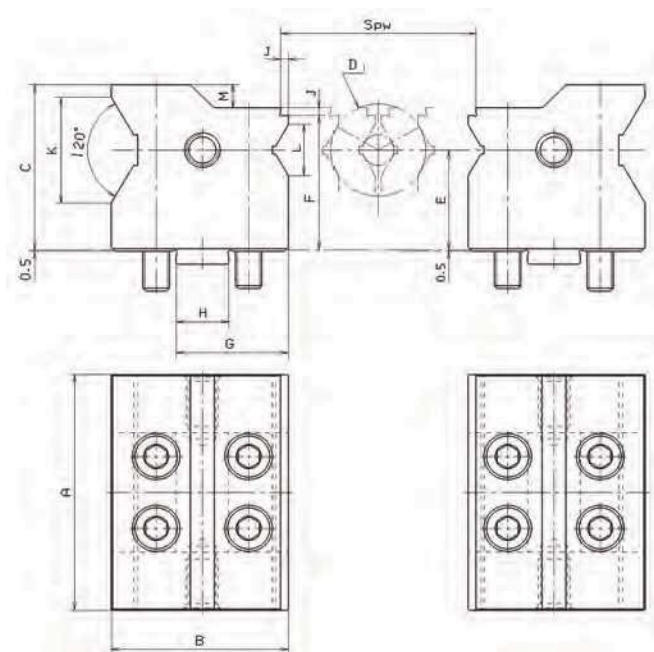


Item no.	1269621	1269622	1269623	1295913	1295914
For	RKE 92 / RKE-M 92	RKE 125 / RKE-M 125 / RKE-LV 125	RKE 160/200 / RKE-M 160/200	RKD-M, RKZ-M 92	RKD-M, RKZ-M 125
Web height	A 48	68	83	53	73
Jaw width	B 92	125	160	92	125
Rail height	H 10/16/18/20/23/25/26/27/28/29	10/15/20/25/28/30/33/35/36/37	10/15/20/25/30/35/40/43/45/47	10/16/18/20/23/25/26/27/28/29	10/15/20/25/28/30/33/35/36/37
Guidance width	C 94	126	162	94	126
Spare clamp (Set = 4 pieces)	1269624	1269625	1269626	1295916	1295917



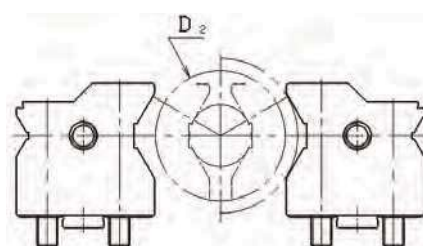
## Jaw dimensions

Double V-jaw, reversible, with fine step



Item no.	169754	169756
Content of delivery	set	set
Size A	92	125
B	67	86
C	64,5	84,5
D1	Nut 1 12-36	15-40
	Nut 2 -	-
D2	Nut 1 30-75*	30-92**
	Nut 2 -	89-105
E	39	54
F	52,5	69,5
G	42,5	51,5
H	20	24
J	3	3
K	41,3	56
L	20	22,6
M	9	12
Clamping range <sup>1)</sup>	7-143	7-186

\* Ø 63-75 side loading only \*\* Ø 72-92 side loading only <sup>1)</sup> Clamping range example RKZ-M



# General accessories

A37

**Dual clamp DSP** for mutual support in the case of front-sided set-up, in pairs


Item no.	Contents of delivery
149125 ▲	piece

A37

**Single clamp SPE**, for mounting vices on end and on the base


Item no.	Contents of delivery	T-slot	Thread
149121	piece	12	M10x50
149122	piece	14	M12x55
149123	piece	16	M12x60
149124	piece	18	M16x60
155722	piece	20	M16x65
151507	piece	22	M16x65

A37

**Fixed slot nuts NTS**, hardened and ground, with fixing screw


Item no.	Contents of delivery	Size	Length mm
014823	set	20x12	22
014825	set	20x14	25
014827	set	20x16	25
014829	set	20x18	25
014831	set	20x20	22
014833	set	20x22	32

A37

**Work locator WSA**, universally adjustable, for screwing onto the NC-compact vice or machine vice, connecting thread M12


Item no.	Contents of delivery
320400	piece

A37

**Work locator WSA**, universally adjustable, for fastening to the machine table (size 14 T-slot) or for screwing onto the NC-compact vice / machine vice (M12)


Item no.	Contents of delivery
320401	piece

A37

**Precision vice locator PSA**, universally adjustable, for screwing onto the NC-compact vice or machine vice, connecting thread M12


Item no.	Contents of delivery
681192 ▲	piece



# Clamping jaws

## Clamping jaws to screw onto stepped jaws and standard top jaw

Clamping jaws compatible with NC-compact vices, NC-power vices and machine vices with the same jaw width

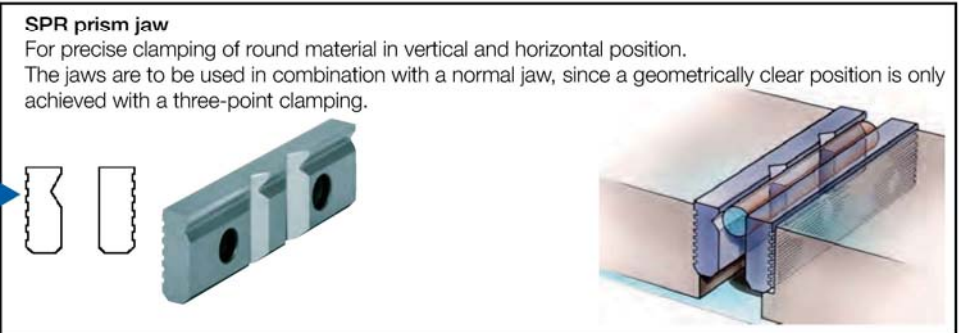
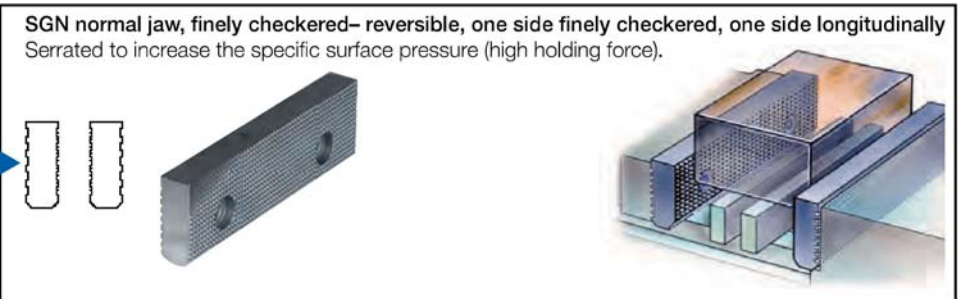
### APPLICATION

Depending on the application and the workpiece to be machined, the clamping jaws shown on the right can be screwed onto the stepped jaw and standard top jaw.

With stepped jaws<sup>1)</sup>



Standard top jaws<sup>1)</sup>



<sup>1)</sup> not suitable for RZM

# Quick change clamping inserts

## Draw-down base jaws with permanent magnet and quick changeable clamping inserts

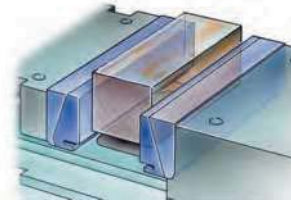
Clamping jaw comparable to the NC-compact vice and machine vices with the same jaw width



**RNG base jaw with permanent magnet**  
for taking up of quick changeable draw-down clamping inserts.  
For screwing on at the fixed and movable jaws.

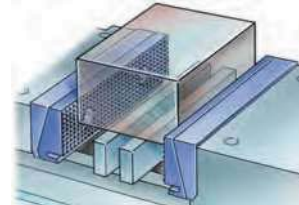
### RNS standard insert

For machined workpieces without angle error.



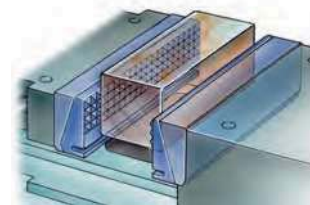
### RNS standard insert, finely checkered

To increase the specific surface pressure (higher holding force).



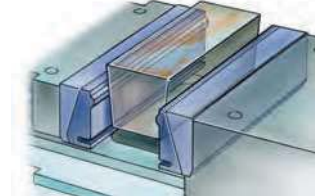
### RNK claw insert

To increase the specific surface pressure (higher holding force).



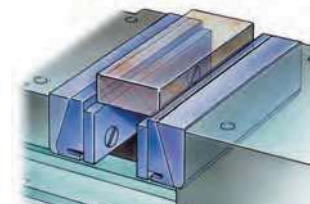
### Insert with round RNR clamping base – line-shaped clamping base

For machined workpieces with and without angle error.



### RWA workpiece support

For fastening to the standard inserts. For raising the height of the workpieces during the clamping process.



Other sizes and versions available upon request.