

THE HIGHLIGHT FOR TRUE 5-AXIS MACHINING.

GARANT Xpent – modular and flexible 5-axis vice with an extended range of jaws and a new size 0.





Expand your scope and discover new dimensions.

THE NEW XPENT GARANT 5-AXIS VICE OFFERS YOU UNEXPECTED POSSIBILITIES.

Quick adjustment of the clamping range

- GARANT Xpent size 0: More than 80 mm travel without changeover. Ideal for components from 6 – 168 mm.
- GARANT Xpent sizes 1 and 2: More than 100 mm travel without changeover. Ideal for components from 6 –208 mm.

Spindle Quick Change (SQC) system

- The spindle can be taken out in seconds.
- Further details on page 14.

QR code to call up important information

- Instruction Manual
- Accessories/maintenance
- Very good accessibility.
- Perfectly symmetrical.
- All functional faces hardened and ground.
- Variable clamping and adjustment range.
- Quick to use and intuitive in operation.
- Optimum for 5-face machining.
- Made in Germany.

Workpiece programming from the centre

■ Interference contours identical on each side.

OF IN GERMAN

GARANT Xpent in action: <u>www.ho7.eu/xpent</u>



Intelligent jaw system

Extremely diverse range.

- Top jaws (from page 24) with attachment holes for front jaws, with a 2-step concept (from page 27).
- The front jaws are mounted from the outside, meaning it is quicker and easier to change the jaws.

Spindle

- Individual extensions available up to 1000 mm.
- The spindle does not project beyond the clamping modules in any clamping situation.

Quick release of the fixed clamping module

- Both clamping modules can be moved.
- Clamping via 2 screws exclusively on the fixed clamping module.

Scaling

111

 Navigation aid for central alignment of the clamping modules.

Optimum flow of chips

BE 1100

■ No rat's nests of chips.



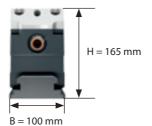
GARANT Xpent size 0

CLAMPING RANGE OVERVIEW WITH MODULES IN NORMAL POSITION AND IN THE REVERSED POSITION.

Modules in normal clamping position



Spindle without extension





Spindle + extension size 80

	Base rail 360		Base r	ail 440	Base rail 520		
	min	max	min	max	min	max	
Spindle	6	88	6	88	6	88	
Spindle + extension size 80	84	168	84	168	84	168	
Spindle + extension size 160	-	-	164	248	164	248	
Spindle + extension size 80 and 160	-	-	-	-	244	328	

Reversed modules



Spindle + extension size 80



Spindle + extension size 160

	Base rail 360		Base r	ail 440	Base rail 520		
	min	max	min	max	min	max	
Spindle	-	-	-	-	-	-	
Spindle + extension size 80	159	243	159	243	159	243	
Spindle + extension size 160	239	301	239	323	239	323	
Spindle + extension size 80 and 160	-	-	319	381	319	381	
Spindle + extension size 160 and 160	-	-	-	-	399	461	

Flexibility in clamping

THE CLAMPING MODULES CAN BE REVERSED THROUGH 180°, THEREBY OPENING UP A VERY WIDE RANGE OF FLEXIBILITY.

- Better accessibility.
- Extreme stiffness.
- GARANT Xpent size 0: Ideal for components from 159 301 mm.
- GARANT Xpent sizes 1 and 2: Ideal for components from 186 386 mm.

Spindle with spindle extension

- Spindle change with virtually no tools.
- Additional spanner flat for releasing the screw.
- Increases the clamping range.



Base rails

N Individual clamping ranges by exchanging the base rail or changing the clamping length.

Top jaws for reversed clamping modules

No. 361126 MADE IN GERMANY Litit in the sear out out of

With just a few movements of the hand you can modify the 5-axis vice to suit your machining strategy.

- Disengage the 4 locking pins ①.
- Remove the spindle ② (and its extension if fitted).
- Take out the **mobile** ③ clamping module.
- Slide the **fixed** 4 clamping module along the rail.
- Place the **mobile** ③ clamping module on the rail again.
- Insert the spindle 2.
- Engage the locking pins ①.
- Fit the top jaws ⁽⁶⁾ for the reversed clamping modules.

GARANT Xpent sizes 1 and 2

CLAMPING RANGE OVERVIEW WITH MODULES IN NORMAL POSITION AND IN THE REVERSED POSITION.

Modules in normal clamping position



Spindle without extension

H = _1 = 2 _2 = 2

B = 125 mm



Spindle + extension size 100

	Base	rail 450	Base	rail 550	Base r	ail 650	Base r	ail 850	Base ra	ail 1050
	min	max	min	max	min	max	min	max	min	max
Spindle	6	108	6	108	6	108	6	108	6	108
Spindle + extension size 100	104	208	104	208	104	208	104	208	104	208
Spindle + extension size 200	-	-	204	308	204	308	204	308	204	308
Spindle + extension size 100 and 200	-	-	-	-	304	408	304	408	304	408
Spindle + extension size 400	-	-	-	-	-	-	404	508	404	508
Spindle + extension size 100 and 400	-	-	-	-	-	-	504	608	504	608
Spindle + extension size 200 and 400	-	-	-	-	-	-	-	-	604	708
Spindle + extension size 100, 200 and 400	-	-	-	_	-	-	-	-	704	808

Reversed modules





Spindle + extension size 200

	Base r	ail 450	Base r	ail 550	Base r	ail 650	Base ra	ail 850	Base ra	il 1050
	min	max	min	max	min	max	min	max	min	max
Spindle	-	-	-	-	-	-	-	-	-	-
Spindle + extension size 100	186	290	186	290	186	290	186	290	186	290
Spindle + extension size 200	286	386	286	390	286	390	286	390	286	390
Spindle + extension size 100 and 200	-	-	386	486	386	490	386	490	386	490
Spindle + extension size 400	-	-	-	-	486	586	486	590	486	590
Spindle + extension size 100 and 400	-	-	-	-	-	-	586	690	586	690
Spindle + extension size 200 and 400	-	-	-	-	-	-	686	786	686	790
Spindle + extension size 100, 200 and 400	-	-	-	-	-	-	-	-	786	890
Spindle + extension size 400 and 400	-	-	-	-	-	-	-	-	886	986

Precision down to the last detail



- Coating for process reliability in machining.
- Hardened and ground.
- Very good repetition accuracy < 0.01 mm.



Spindle housing

- Clamping with a torque wrench.
- Xpent size 0: 32 kN at max. torque 65 Nm (linear clamping progression)*.
- Xpent sizes 1 and 2: 40 kN at max. torque 90 Nm (linear clamping progression)*.

Mobile clamping module

Clamp travel without changeover

- Xpent sizes 1 and 2: Up to 102 mm
- Xpent size 0: Up to 84 mm

Spindle with trapezoidal thread

- Optimum for quick adjustment of the clamping ranges.
- The spindle does not project beyond the clamping modules in any clamping situation.

Solid base rail

Case hardened (56–58 HRC) and ground.

Scaling

• For pre-positioning the clamping modules.

Transverse slots

• For aligning to the machine table.

GARANT ZeroClamp holes

- Standard up to size 550.
- For sizes from 650 on request.

INNOVATION



Xpent size 0 individual modular system





361142_63 + _80 + _100



361143_63 + _80 + _100





361144_63 + _80 + _100



361140_63 + _80 + _100











361129_100

361123_100

361124_63C+ _80C

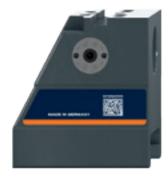
361141_63 + _80 + _100

361124_100

361127_100

361128_100

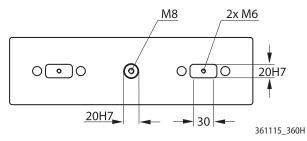




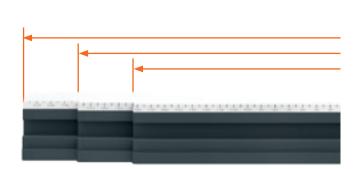
361110_0



361167_8



We have developed the base rail size 360H with four attachment holes specially for turntables with 320 mmØ and a transverse slot. The GARANT Xpent can now be clamped with steplessly adjustable clamps, or if required also via the holes directly on to the central transverse slot of the turntable.





361145_63 + _80 + _100



361146_63 + _80 + _100

361130_100





361147_63 + _80 + _100



361148_63 + _80 + _100





361149_63 + _80 + _100

361130_63

6

361131_100

361126_100

0

.

361133_100



361132_100



361119_TR14



361105_0



361115_360 - _520

Xpent size 1 individual modular system



361100_1







361142_80 + _100 + _125



361143_80 + _100 + _125





361144_80 + _100 + _125



361140_80 + _100 + _125

361123_125



361125_80C +

_100C





361125_125



361127_125

361128_125



361129_125



361110_1

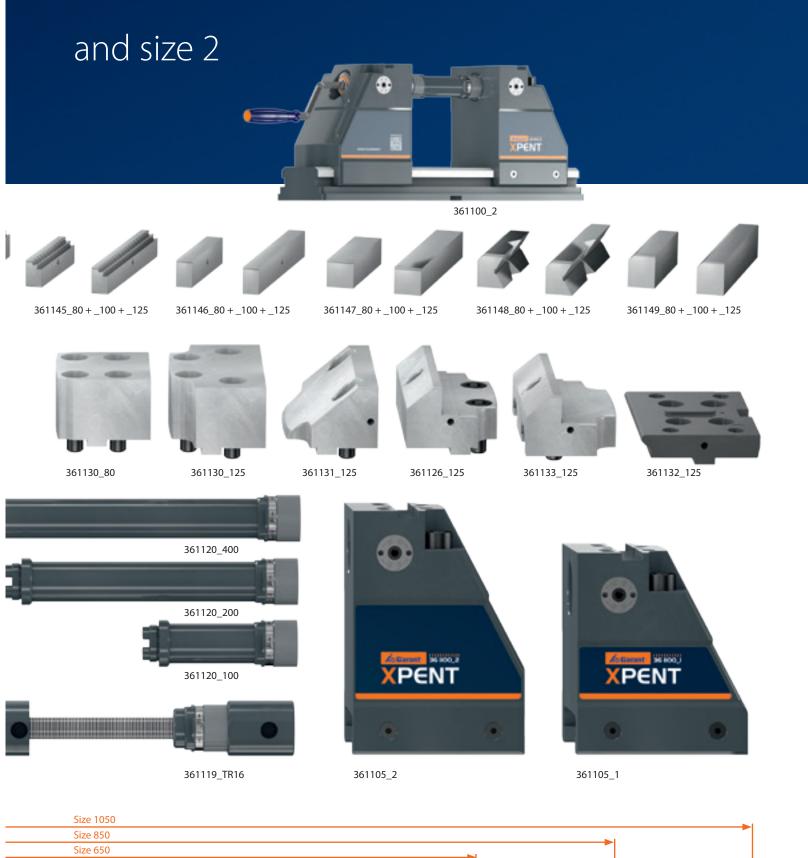


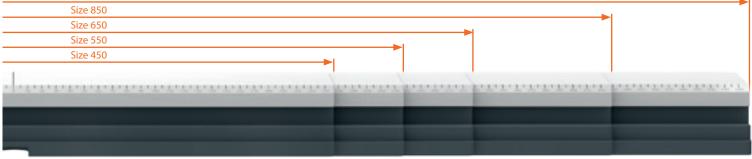
361110_2



361167_10

INNOVATION





361115_450 - _1050

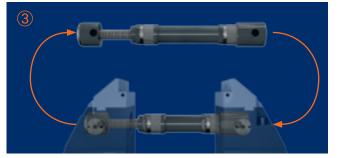
Spindle change within 40 seconds



Spindle Quick Change (SQC) system



Disengage 2 locking pins per clamping module.

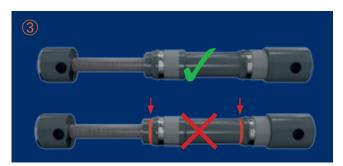


Insert the extension spindle.

Changing the spindle length



Release the union nut by hand. A spanner flat is provided in case a tool is needed to release the spindle.



Screw in the extension and make sure the red security ring is hidden.



Pull the spindle out.



Push the pins in against the spring pressure until they engage.



Turn the nut back to the stop, insert the spindle extension and screw it in.



Changing the clamping range within a very short time.

Jaw combination

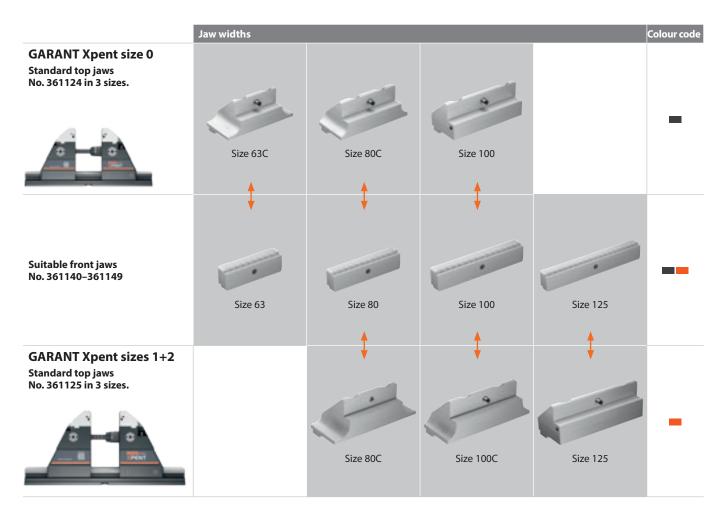
THE RIGHT COMBINATION FOR EVERY REQUIREMENT

The colour codes allow recognition of which top jaws can be used with which Xpent vice.

The front jaw range is the same for all the Xpent sizes.

These can be used both on the top jaws for the Xpent size 0 and also for sizes 1 and 2.

The diagram below shows the standard jaw widths and possible combinations.



Advantages:

- Huge selection of front jaws in combination with the respective top jaws.
- Flexible use for every requirement (on both the machine side and the workpiece side).
- Identical operation of all vices.

Colour code: 🛛 🖬 Xpent0

Xpent1-2

The 5th dimension – developed in 5 quarters.

OUR OBJECTIVE FOR THE DEVELOPMENT PROJECT: TO ENABLE GENUINE 5-AXIS MACHINING, WITH MODULAR DESIGN USING INNOVATIVE TECHNOLOGY, QUICK TO USE AND INTUITIVE IN OPERATION.



Expertise resulting from the experience of our product managers and application technicians, inspiration from customer requests and the spur of technological opportunities are the drivers of valuable developments. Thus from a committee made up of Hoffmann Group customers and employees arose the clamping technology innovation of the year 2016 – the unique GARANT Xpent 5-axis vice.



Tests, quality inspections and several weeks of field tests made the product ready for the market.



Quarter 2/16

Quarter 3/16

The success story continues...

Development of the final design.



Exhibited at the AMB – successful placement with many customers.



Further development of the GARANT Xpent family.

ILI

Producers of machined components are impressed.

GARANT XPENT IN A HARDNESS TEST



Mr Erik Faude, Hermle Machine Operator / Industrial Engineer:

"Workpieces can be reliably clamped with optimum accessibility. Therefore we use the vice every day for a wide variety of machining applications in our Technology Demonstration and Training Centre."





The **GARANT Xpent** offers flexible options for use on zero-point clamping systems. For the best possible stability, Hermle mount the vice on an adapter plate clamped to four clamping pots.



C32 U with pivoting turntable Ø650×420 mm.

At Hermle everything revolves around milling. The innovative machine tool builder from Gosheim serves key sectors from medical technology through to motor racing. At the prestigious Hermle in-house trade fair, the GARANT Xpent impressed the visitors due to its perfect symmetry, ease of operation and optimum results. More information can be found at: www.hermle.de

DMG MORI

Mr Thomas Lochbihler, Engineering and Applications Engineer at DECKEL MAHO Pfronten GmbH: "Congratulations on this new product! The ease of operation, extremely variable clamping range and high reliability have impressed us."



DMU65 monoBlock with ØØØØØØ 500 mm turntable and PH150/8 pallet handling machine.



630×630 machine table.





The 5-axis vice in conjunction with a 362 mm long base rail is very well designed for use on small turntables and pallet clamping systems.



In order to clamp this demanding component two **GARANT Xpent** were used. The clamping modules were reversed in order to extend the clamping range.



The DMG MORI group is one of the leading manufacturers of metal removal machine tools in the world. During the DMG MORI in-house exhibition in Pfronten the GARANT Xpent was used on two machines and attracted the enthusiasm of the machine operators and customers in equal measure. More information can be found at: www.dmgmori.com

ALZMETALL

Mr Hans Jürgen Bozner, Alzmetall, Technology Centre Manager:

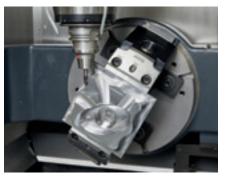
"Optimum accessibility, flexibility in clamping, ease of operation and extreme stiffness – all this was an instant hit with us. At present it is the best 5-axis vice on the market."



GS600/5-T with Ø320mm turntable.



GS1200/5-FDT with ØØ 800 mm turntable.



The **GARANT Xpent size 0** can be used on all Ø 320 mm turntables. The attachment is performed using stepless adjustable clamps or directly to the turntable using holes in the base rail.



By means of spindle extensions the clamping range can be extended quickly and easily and optimally matched to the component.



With more than 70 years experience, ALZMETALL is synonymous with modern milling and turning. After just one presentation, the precision machine tool manufacturer, with activities throughout the world, was enthusiastic about the advantages of the GARANT Xpent. More information can be found at: www.alzmetall.de

The Xpent can be used on many other types of machine tool, from many other manufacturers.

Convince yourself of the advantages of the GARANT Xpent:

- Very easy to use.
- Wide range of clamping spans.
- Movement into the centre.
- Accessibility.
- Symmetry.
- Range of accessories.



Innovative. Modular. Flexible

BERGER MASCHINENBAU: "THE GARANT XPENT 5-AXIS VICE ALLOWS US TO SATISFY ALL OUR REQUIREMENTS!"

The company Berger Maschinenbau was founded on 1st August 2016. Within this very short time the company has developed into a modern start-up manufacturing company whose core business is sub-contract machining for machine tool building and automotive.

The team of skilled workers around Franz Berger, the founder of the business, have great experience in the fields of CAD-CAM programming and application technology. Thus the company has grown to provide a broad spectrum of future-oriented applications.

Its core competence lies on the one hand in CNC milling (3-axis, 5-axis and 5-axis simultaneous) and on the other hand in assembling modules and machines to customers' requirements, which require production of the components and procurement of purchased parts.

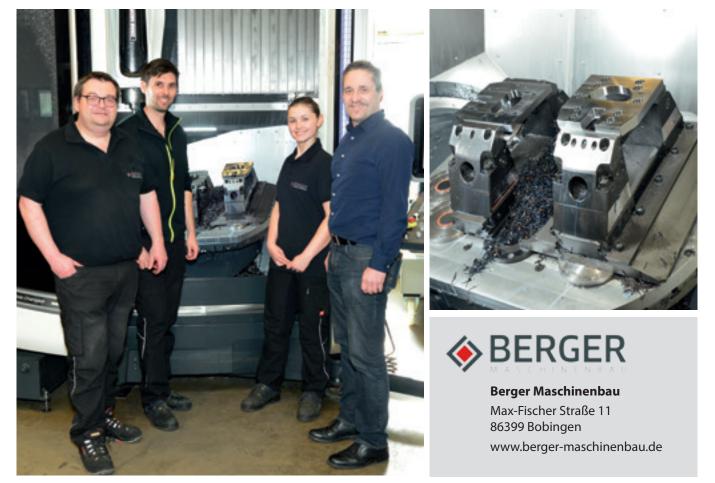
Franz Berger reported that he had been looking for a vice that would offer as many clamping ranges as possible, so as to be able to respond flexibly to customers' requirements. The GARANT Xpent has satisfied or even surpassed all those expectations. The 5-axis machining centres at DMG are already equipped with five GARANT Xpent vices, which are in daily use. The stock of machines is thus very well equipped for both long series and short series manufacturing. The material ranges from copper and aluminium right through to stainless steel 1.4301 / 1.4404 with tensile strengths up to 1400 N/mm².

The company is thoroughly convinced of the benefits of the GARANT Xpent:

"The quick changeover of the clamping ranges, the wide choice of jaws and the optimum clamping force mean we can now achieve with one GARANT Xpent a range of jobs that used to require three other vices. The modular concept is really effective!"

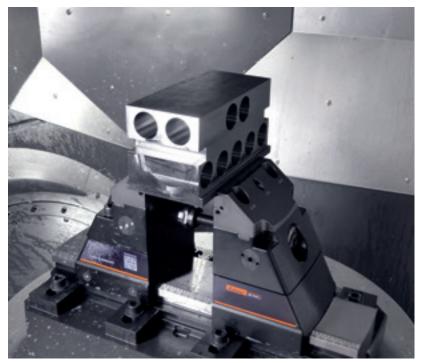
Innovation and optimum advice from the Hoffmann external sales led the company Berger to becoming a fan of the GARANT Xpent. The final question as to whether they would recommend the 5-axis vice to others can be answered very quickly:

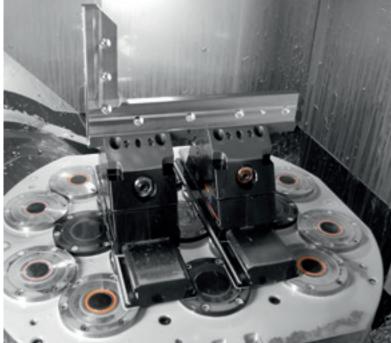
"The GARANT Xpent leaves nothing to be desired and we are already planning further acquisitions."

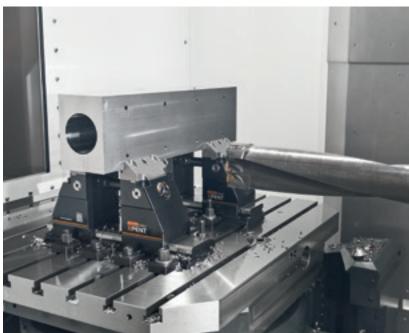


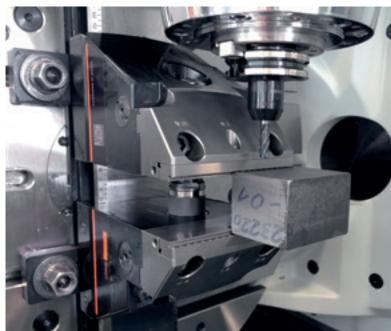
from the left: Franz Berger (Owner), Tobias Müller and Theresa Mihatsch (Milling Operators), Robert Riesinger (Application Engineer at the Hoffmann Group)

INNOVATION

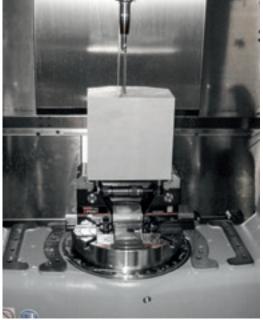














GARANT Xpent



5-axis vice











 $\label{eq:large} Large \ capacity \ range \ S1-S4 \ with \ the \ same \ Xpent + the \ respective \ accessories \ programme.$

		0	1	2
≈ 36 1100 Xpent 5-axis vice		XXX	XXX	XXX
S1	mm	6 - 88	6 - 108	6 - 108
S2	mm	84 - 168	104 - 208	104 - 208
\$3	mm	159 - 243	186 - 290	186 - 290
S4	mm	239 - 301	286 - 386	286 - 386
L	mm	362	454	454
C	mm	125	165.5	195.5
C,	mm	85	117.5	117.5
B	mm	100	125	125
n H7	mm		20	
h	mm	40	45	45
Clamping force up to maximum	kN	32	40	40
maximum torque	Nm	65	90	90
Weight	kg	19	36	41
Width across flats	mm	5 and 8	5 and 10	5 and 10
Colour code for suitable accessories				
Colour code: Xpent0	Xpent1-2			

io Garant[®] XPENT modular system - make up your individual 5-axis vice

Note:

for type

Н

Weight

≋ 361105

<u>≅ 36111</u>0

The 5-axis vice has a modular design. The key components are the clamping modules No. 361105 – 361110, base rails No. 361115, spindle No. 361119, spindle extensions No. 361120 and the top jaws No. 361123 – 361133.

Clamping modules

	All functional faces hardened and ground.						
Suitable for: Base rails No. 361115, spindle No. 361119 and top jaws No. 361123 – 361133.							
	Note:	You will need a 5 AF screwdriver bit for spindle locking.					
	36 1105 -	- You will need a hexagon screwdriver bit (type $0 = 8$ AF, type $1+2 = 10$ AF) for the attachment screws.					

0

ХХХ

ХХХ

100

100

108

85

4.5

mm mm

mm

mm

kg

ХХХ

XXX

126

125

144.5

117.5

9

ХХХ

ХХХ

126

125

174.5

147.5

11





6 d ۲

Base rails

Suitable for colour code

Fully hardened and ground. Laser engraved scale for pre-positioning the clamping modules. Side groove for steplessly adjustable clamps and transverse slots for alignment on the machine table. Size 360; 440; 450; 520; 550 - GARANT ZeroClamp holes drilled as standard.

Pitch 200 mm. Suitable for:

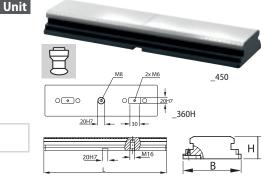
Fixed clamping module

Mobile clamping module

Clamping modules No. 361105 – 361110.

Size 360H – \varnothing 320 mm turntables. Attachment via stepless adjustable clamps and T-slot. Optional accessories: Steplessly adjustable clamps No. 361165, adapter plate for GARANT ZeroClamp No. 361170, clamping studs No. 360025 size 18M16 and size 18M16/138.

Note:	See No. 375365 for suitable Tee-nuts.
	GARANT ZeroClamp holes available on request from size 650.



Туре	360	360H	440	520	450	550	650	850	1050
≋ 36 1115 Base rail	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
L mm	362	362	442	522	454	554	654	854	1054
B mm	100	100	100	100	125	125	125	125	125
H mm	40	40	40	40	48	48	48	48	48
Weight kg	8.5	8.5	10.5	12.5	17	21	25	32	40
Number of ZC holes	2	-	5	3	5	3	on request	on request	on request
Suitable for colour code									
Spindles					Unit				

Spindles

Trapezoidal spindle for optimal force transfer.

Suitable for: Clamping modules No. 361105 – 361110.

Optional accessories: Spindle extensions No. 361120, torque wrench No. 656050 120, hexagon screwdriver bit No. 643330 10.

Туре		TR14	TR16
≈ 36 1119 Spindle		XXX	XXX
ØØØD	mm	34	40
SW, SW,		8	10
SW,		27	30
L	mm	201.1	229.6
Suitable for colour code			



Spindle extensions

Suitable for: Spindle No. 361119.

Length	80	160	100	200	400
Spindle extension Spindle extension	XXX	XXX	XXX	XXX	XXX
Ø D mm	30	30	34	34	34
SW,	27	27	30	30	30
L mm	90.4	170.4	111.9	211.9	411.9
Suitable for colour code					
Colour code: Xpent0 Xpent1-2					

Unit

Carant Top jaws

Suitable for:5-axis vice set No. 361100 and clamping module No. 361105 – 361110.Supplied with:2 fastening screws.

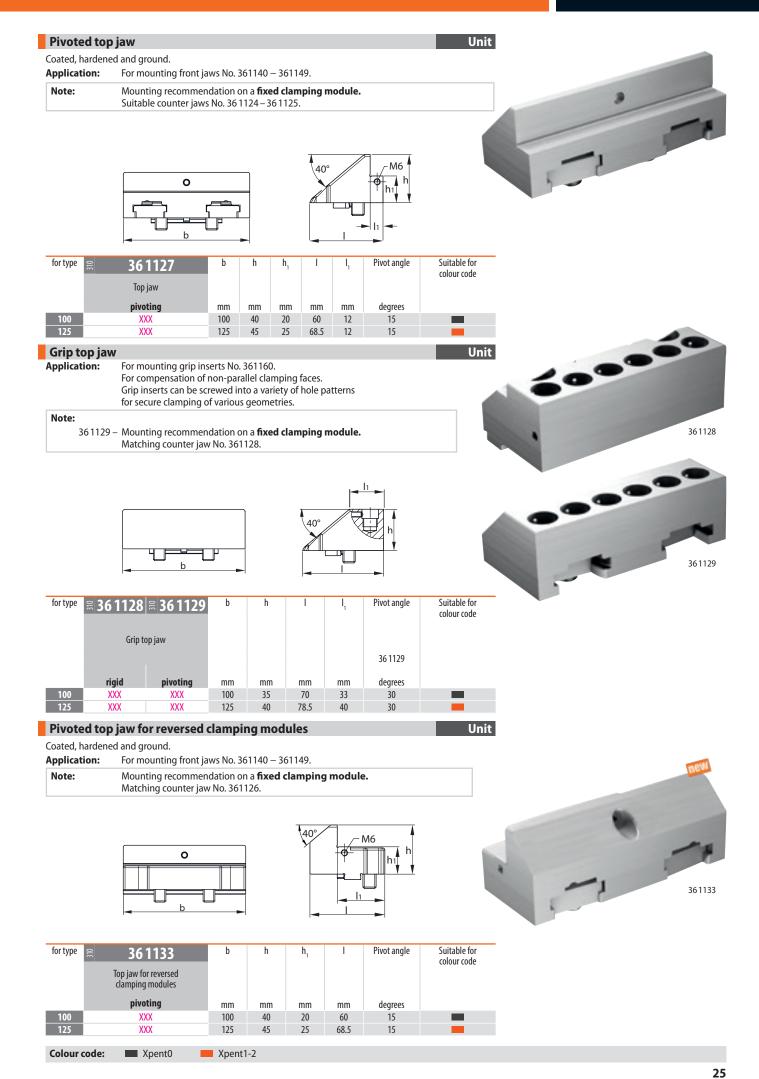


Single-piece 5 mm grip top jaw Unit Clamping step with a height of 5 mm and 3 mm contact area. Application: Ideal for rough machining. 40 h 0 M6-1 for type Suitable for 361123 b h h₁ I, colour code Single-piece grip top jaw mm mm mm mm mm 100 125 XXX 100 40 35 60 3 XXX 125 45 40 68.5 3 Standard top jaw Unit Coated, hardened and ground. Application: For mounting front jaws No. 361140 – 361149. 361125_80C 40° M6 0 ቆ h 36 1125_125 for type Suitable for **≋ 36 1124 ≋ 36 1125** b h h₁ T ١, colour code Standard top jaw 36 1124 36 1125 36 1124 36 1125 36 1124 36 1125 36 1124 36 1125 mm mm mm mm mm mm mm mm 20 ХХХ 63 40 60 12 63C XXX _ _ 100 ХХХ ХХХ 100 40 20 60 12 _ _ 45 25 68.5 80C ХХХ ХХХ 80 40 20 60 12 ХХХ ХХХ 100 45 25 68.5 12 _ _ _ 125 ХХХ ХХХ 125 45 25 68.5 12 Top jaw for reversed clamping modules Unit Coated, hardened and ground. **Application:** For mounting front jaws No. 361140 – 361149. Note: Essential for clamping modules which have been reversed 180°. 6 40° M6 0 ¢ hı Suitable for colour code for type 361126 b h h, ١, Top jaw for reversed clamping modules mm mm mm mm mm 100 125 100 40 20 XXX 60 43.5 ХХХ 125 45 25 68.5 43.5

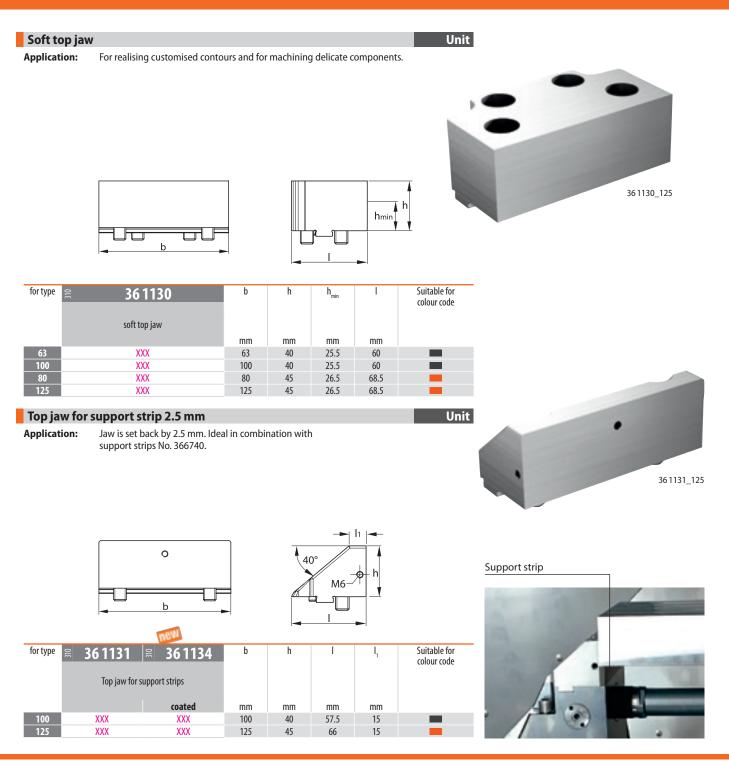
Colour code: 🔲 Xpent0 📕 Xpent1-2



INNOVATION



GARANT Xpent



A Garant Jaw quick-change system

Hardened base jaws (nitrided) (45 HRC).

Suitable for: 5-axis vice sets No. 361100 and clamping modules No. 361105 – 361110. **Optional accessories:** Top jaws No. 362644 – 362646.

Base jaw





for type	100	125
≋ 36 1132 Base jaw	XXX	XXX
Suitable for colour code		

Xpent1-2

Colour code: 🛛 🖿 Xpent0



INNOVATION



Carant[®] Front jaws

Suitable for: Top jaws No. 361124 – 361127 and No. 361133.

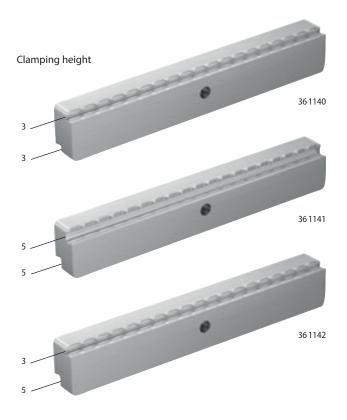
Dual front jaw 3 mm contact face.

36 1140 - 2 clamping steps with a height of 3 mm.

- 36 1141 2 clamping steps with a height of 5 mm.
- 36 1142–1144 First clamping step with a height of 3 mm. Second clamping step with a height of 5 mm.

361144 – Coated. Advantage:

36 1140–1144 – Turning the jaw provides a second clamping step.





Unit

	h↓
b b	

for type		63	80	100	125		
≅ 361140	Grip 3/3 front jaw	XXX	XXX	XXX	XXX		
≋ 361141	Grip 5/5 front jaw	XXX	XXX	XXX	XXX		
≅ 36 1142	Grip 3/5 front jaw	XXX	XXX	XXX	XXX		
≋ 361143	Smooth front jaw 3/5	XXX	XXX	XXX	XXX		
≅ 361144	Smooth front jaw 3/5 coated	XXX	XXX	XXX	XXX		
≅ 361145	Grip/smooth combination front jaw 3/3	XXX	XXX	XXX	XXX		
b		mm 63	80	100	125		
h mm		mm	20				
l mm		mm	12				
Suitable for colour co	ode						
Colour code: Xpent0 Xpent1-2							

GARANT Xpent

Soft front jaw

Application: For realising customised contours and for machining delicate components.

> 0 36 1146 36 1 1 4 7

Unit

Unit

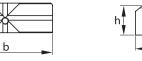
for type		63	80	100	125
		XXX	XXX	XXX	XXX
≅ 36 1147 20/20 front jaw		XXX	XXX	XXX	XXX
b	mm	63	80	100	125
h	mm		2	0	
l (36 1146)	mm		1	2	
l (36 1147)	mm		2	0	
Suitable for colour code					

Vee front jaw

Suitable for:

361149 – Vee front jaw No. 361148.

Dmax 361148 Dmin



¥. Dmin

4



for type		63	80	100	125
≅ 361148	Vee front jaw	XXX	XXX	XXX	XXX
≋ 36 1149	Smooth front jaw for Vee jaw	XXX	XXX	XXX	XXX
b	m	m 63	80	100	125
h	m	n	2	5	
l (36 1148)	m	n	19	9.8	
l (36 1149)	m	n	2	0	
D _{min} (36 1148)	m	n	1	3	
D (36 1148)	m	n	4	7	
D _{max} (36 1148) Suitable for colour co	de				

Colour code: Xpent0 Xpent1-2



INNOVATION

Accessories

Grip inserts

Suitable for: Grip top jaw No. 361128 – 361129.

Application:

Size 1–3 – For clamping unfinished parts.

- Size 4 For highly tempered materials and flame-cut blanks.
- Size 5 Coated for clamping pre-machined workpieces.
- Size 6 For drilling close to edges and for additional clearance under the workpiece.
- Size 7 For castings with a large radius up to 8 mm.



Unit

Туре	1	2	3	4	5	6	7
≸ 36 1160 Grip insert	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Version	2 points	2 points	4 points	Carbide	smooth	round	round
Height mn	3 - 4.5	4.5 - 6	4.5 - 6	4.2 - 5.7	7	4	8

A Garant Jaw quick-change system

Top jaw		Unit
Top jaws in a vari	iety of widths of medium-strength anodised aluminium or case-hardened steel.	
Suitable for:	Base jaw No. 36 1132.	
Function:	Quick and easy to click the top jaws on to the base jaws. No need to spend time tediously bolting the jaws on to the vice.	
Advantage:	 Use of jaws irrespective of the manufacturer. Exchangeable top jaws from Allmatic to Garant, to Röhm, to Gressel etc. 	
	 Change over in a very short time – quick exchange of top jaws. Minimises set-up times, increases machine running times. Extremely flexible range of application. 	
Application:	Base jaws for fitting to the appropriate vice in conjunction with the appropriate quick-change top jaws.	
Supplied with:	1 top jaw.	

Jaw width	mm	80	125	160	200	250
≋ 36 2644	Top jaw for jaw width 125 mm, aluminium	XXX	XXX	XXX	XXX	XXX
≋ 36 2646	Top jaw for jaw width 125 mm, steel	XXX	XXX	XXX	XXX	XXX
Jaw width b	mm	80	125	160	200	250
Jaw height h	mm			45		

Removal lever tool

Easy-grip handle made of aluminium, tip made of steel.
Application: For quick and easy disassembly of top jaw from base jaw.





⇒ 36 2651 Removal lever tool



GARANT Xpent

Version

Suitable for:

Application:

₩ 36 6740

Number of strips

Length

Width

Height

Length

Clamp

Туре

L

В

Н

Suitable for:

≈ 36 1165

Suitable for:

່ ≌ 361167

Suitable for:

Application:

Note:

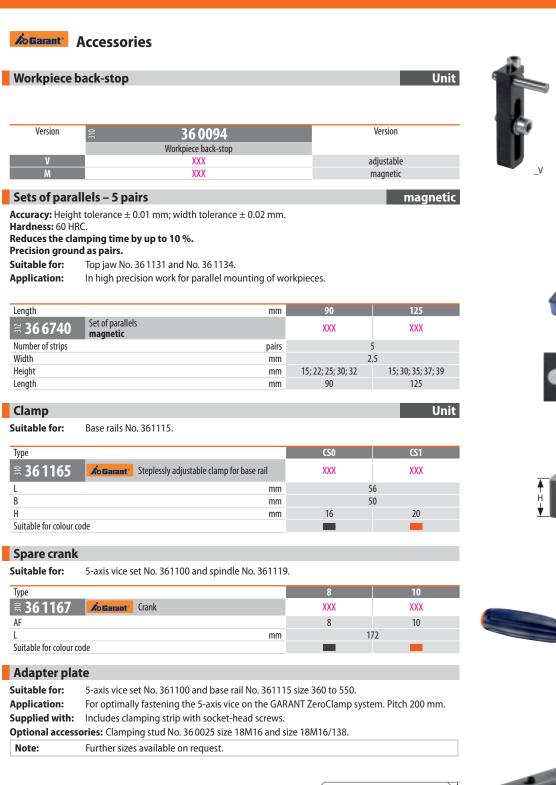
Туре

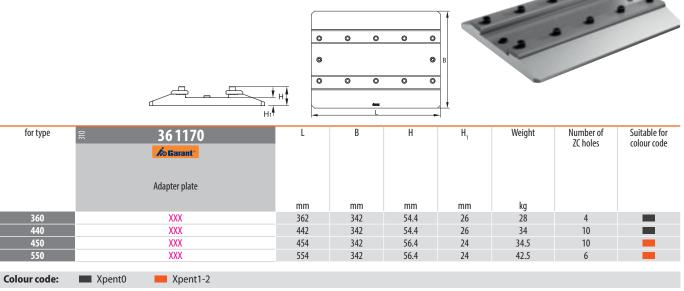
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36 1 1 6 5

361167





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A Garant Torque wrenches with setting scale – automatic triggering

Acoustic and perceptible "click effect" ensures particularly easy use and accurate setting of the desired torque.

With built-in reversible ratchet with ejector – for left-hand and right-hand tightening.

Accuracy: Percentage of the displayed value only for right-hand tightening: ± 3 %.

Application: For controlled tightening of screws to a pre-set torque.



maximum torque		Nm	120
ឌ 65 6050	Torque wrench with reversible ratchet		XXX
Overall length		mm	410
Torque range		N∙m	20 - 120
Scale graduation, 1 graduation =		N∙m	1
Weight		Kg	1
Drive square		inch	1/2

Ao Garant °		
Standard:		
Material:		

Hexagon bits for socket head screws

DIN 7422 Chromium alloy steel, chrome-plated (non-flaking). Mandrel made of hard tough material, bright finish.

	Hexagon		mm	8	10	
۲	[€] 64 3230	Hexagon screwdriver bit, 1/2″		XXX	XXX	64 3 2 3 0
۲	ੴ 64 3330	Hexagon screwdriver bit, 1/2", extra long		XXX	XXX	
	Ø drive end		mm	22	2.7	
	Length		mm	60	140	64 3330

A Garant Hexagon screwdrivers with T-handle

Ergonomically shaped T-handle with easy-grip Santoprene® surface and an impact-resistant plastic core. Blade made of chrome vanadium special steel, chrome-plated, with ball point. Surface nickel-plated and chrome-plated. With side drive.

	Hexagon	mm	5
۲	ਫ਼ 62 7424	Hexagon screwdriver with T-handle and ball point	XXX
	Blade length	mm	125



Agnetic board to show information

GARANT Xpent bottle opener

Overview of the clamping force curve and further relevant information can be called up via the QR code.

 Note:
 A magnetic board is included in the Xpent set No. 361100 and also with the clamping rail No. 361115.

Туре			1
≋ 361173	Magnetic board		XXX
Length Width		mm	210
Width		mm	150



ÊO

WM0218 Key fob/ bottle opener GARANT Xpent

Demagnetisation brought to a new level.

GARANT POWER DEMAGNETISATION DEVICE DM1

- 50% greater penetration depth.
- Very good demagnetising efficiency.
- Absolute minimum residual magnetism in the workpiece.
- Suitable for 115 Volt and 230 Volt.
- High-quality silicon steel surface.
- Integral handle for optimum transport.
- Sturdy die-cast aluminium casing.



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