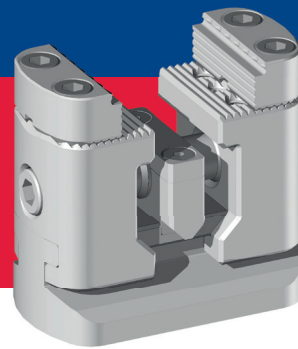


GREMOTOOL

PRÄZISIONSSPANNSYSTEME

SC-Series



swiss
made 



GREMOTOOL
Precision clamping systems

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Overview

SC-Series

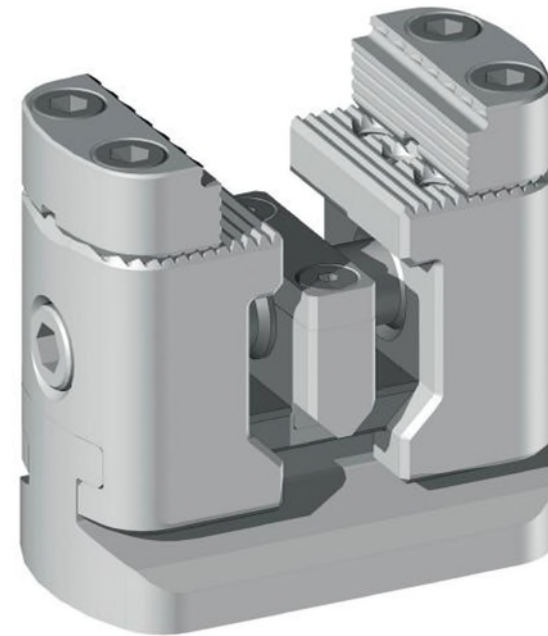
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Product presentation

SC-Series

With the SC series you enable your production to process workpieces from 5 sides without re-clamping. This means that additional tension can be eliminated, which significantly reduces setup times and increases the accuracy of the elements. The SC series is ideal for clamping in 5-axis machining centers, the advantages are obvious.



Benefit of SC-Series

Clamping force

The high clamping forces of the SC series can be adjusted by the applied torque to the spindle. This allows to clamp plastic workpieces without deformation and forged parts will not be damaging the clamp, as well the workpiece is safe for further processing.

Centring precision

The special spindle and construction of the SC series ensure the user precise centering of +/- 0.01 mm in the center of the clamp. This means that the workpiece is still on the same place, which does not change the zero point.

Accessibility

The height of the clamp makes it possible to finish the workpiece from 5 sides in one clamping, without colliding the spindle with the table. In addition is the rotationally symmetrical construction of the clamp ensured, that the direction of the clamp does't has no relevance concerning the processing.

Compact

The compact design of the SC series allows to be used on all machining Centres. The clamps are easy to handle, due to their low weight.

Low maintenance

Due to design chips don't remain into the clamp, therefore the device has a low maintenance.

Quick tooling

The SC series can be equipped with various connection options. The standard «foot» is suitable for grooved tables and pallet systems. In addition, solutions can as well be offered for perforated grid plates and clamping-handling.

Versatility

The SC series can be used as a fixed jaw clamp or as a centre clamp. This only requires a small modification.

Due to principle of the centre clamp, several clamps can be placed next to each other, to clamp securely long workpieces.

With a center jaw, the SC series can be converted into a two-workpiece clamp.

Large range of jaws

The entire Gremotool jaws can be used on the SC series. From gripping to soft jaws made of aluminium, no wishes remain unfulfilled for workpiece clamping requirements.

The jaws are equipped with the uniform Gremotool serration. This means you can change the jaws very fast.



Sizing guide

SC-Series



SC sizes		SC-34	SC-40	SC-50	SC-60	SC-74	SC-100	SC-120
Jaw width	[mm]	34	40	50	60	74	100	120
Clamping range	[mm]	0-36	0-86	0-106	0-128	0-156	0-228	0-270
Support height *	[mm]	62	62	71	105	105	130	130
Max. tightening torque	[Nm]	52	52	95	95	165	240	240
Max. clamping range	[kN]	15	15	25	25	45	65	65
Total lengths	[mm]	70	120	148	170	200	272	314
Total width**	[mm]	40	52	70	100	100	100	120
Total height**	[mm]	65	65	74	108	108	133	133
Key width	[mm]	6	6	8	8	10	12	12
Dimension	[kg]	0.8	1.7	3.7	7.3	9.5	18.4	26.5
Fix jaw possible		Nein	Nein	Nein	Ja	Ja	Ja	Ja

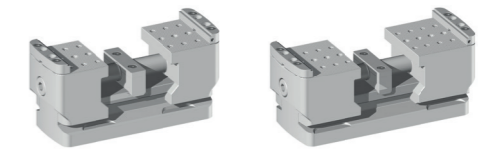
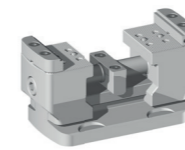
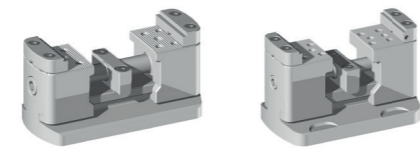
* with standard SC, gripper jaws

** without jaws



Clamping range

SC-Series

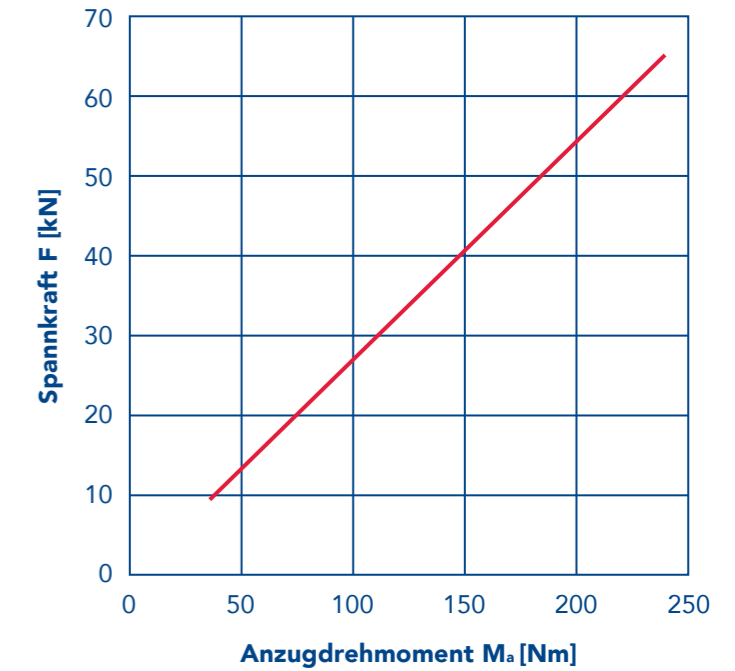
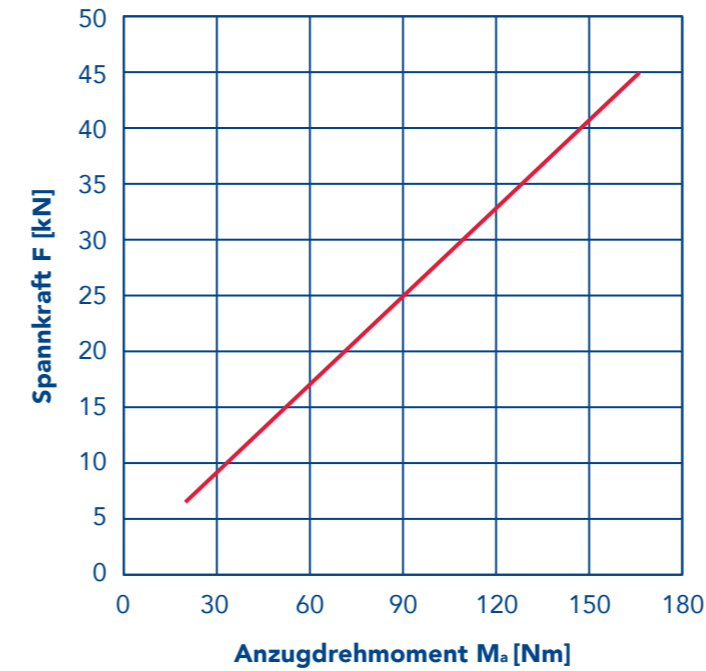
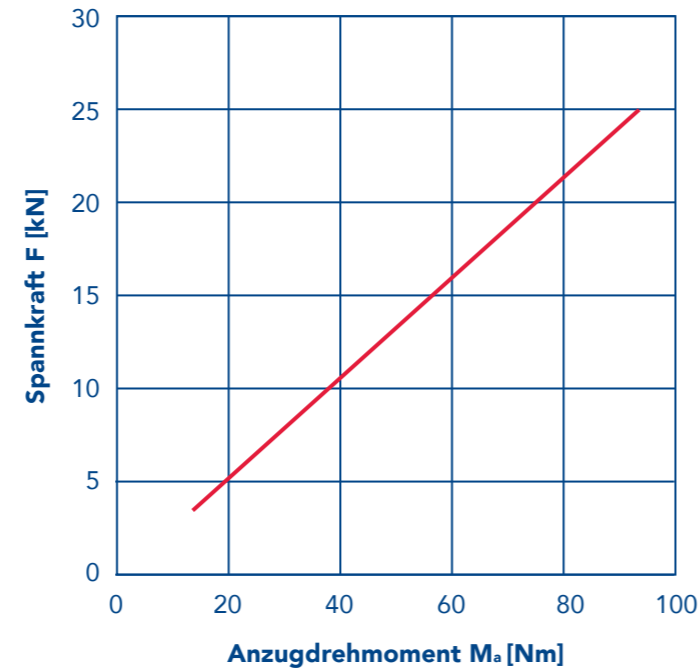
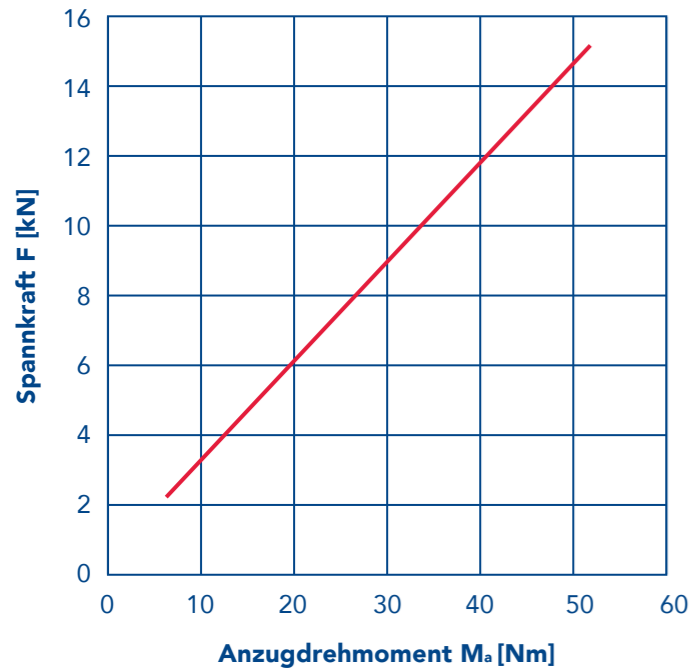


SC-34 / SC-40

SC-50 / SC-60

SC-74

SC-100 / SC-120



M_a max	52 Nm
M_a min	7.8 Nm
F max	15 kN
F min	2.25 kN

M_a max	95 Nm
M_a min	14.25 Nm
F max	25 kN
F min	3.75 kN

M_a max	165 Nm
M_a min	24.75 Nm
F max	45 kN
F min	6.75 kN

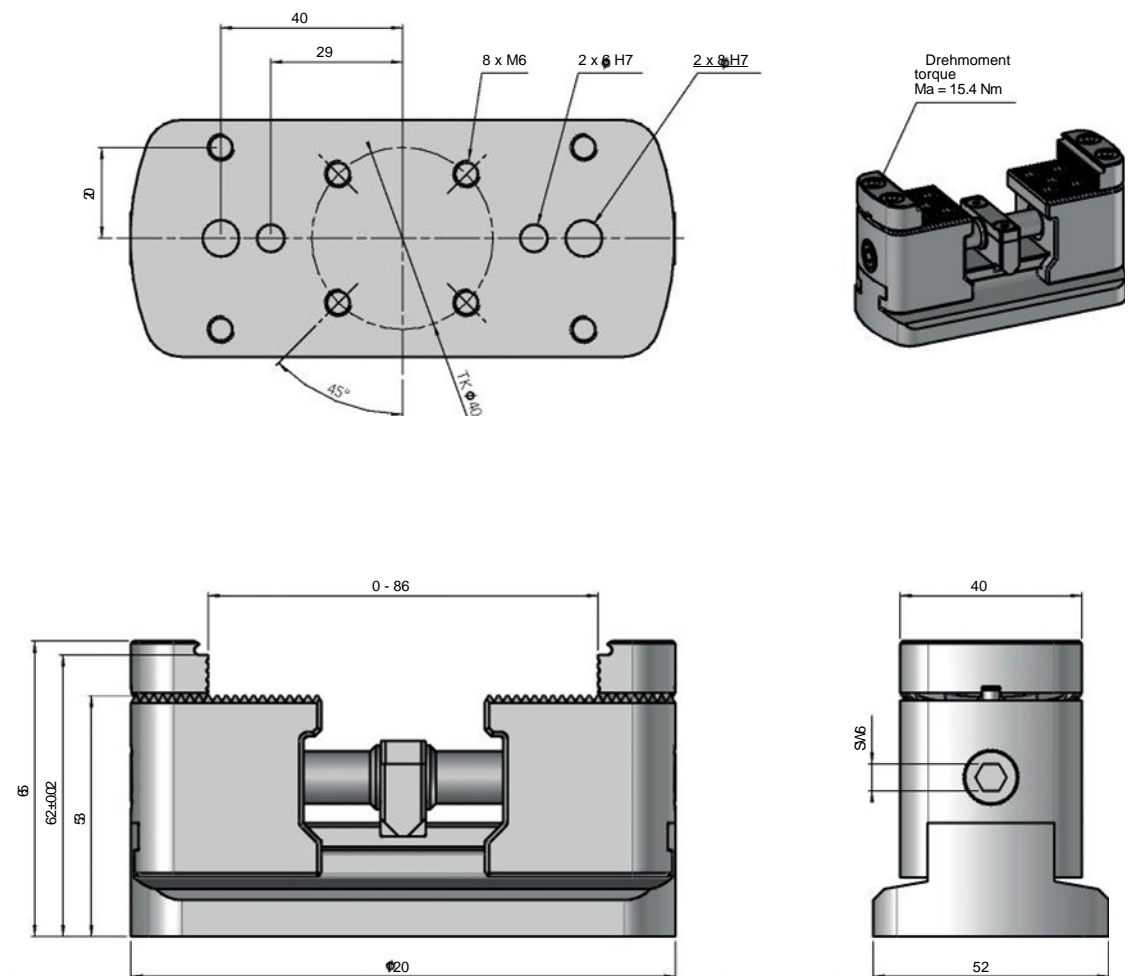
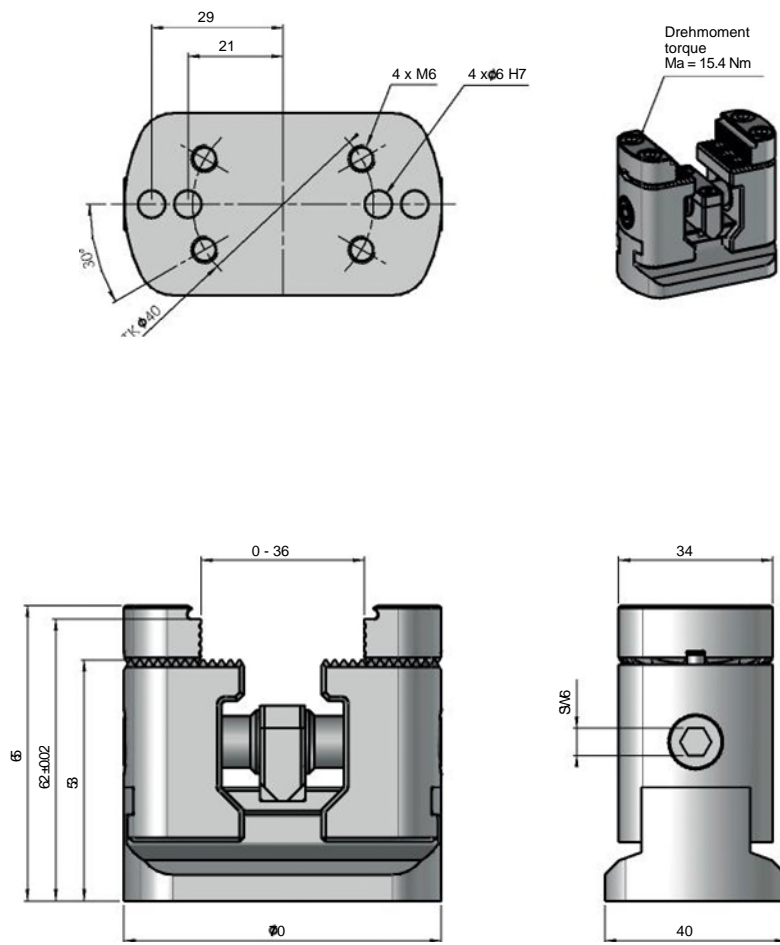
M_a max	240 Nm
M_a min	36 Nm
F max	65 kN
F min	9.75 kN



Dimensions

SC-34

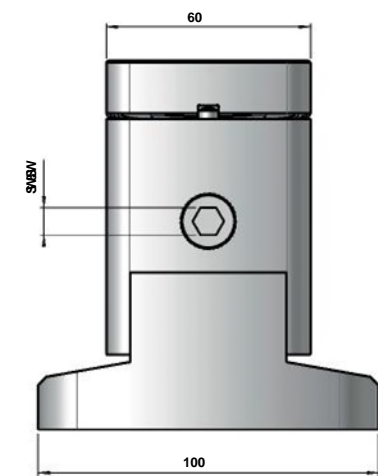
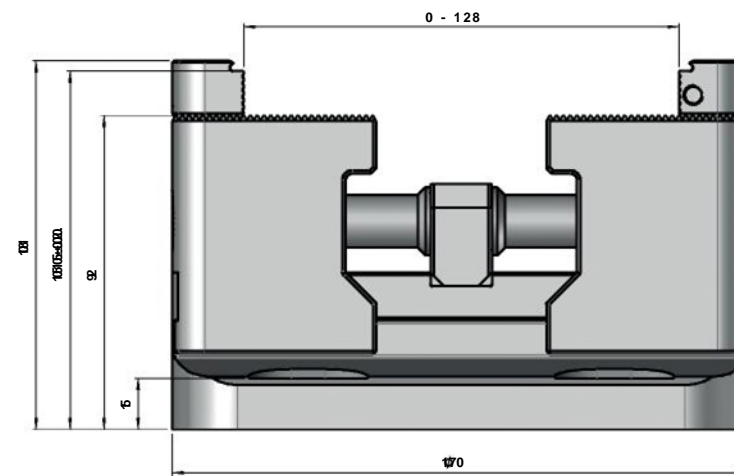
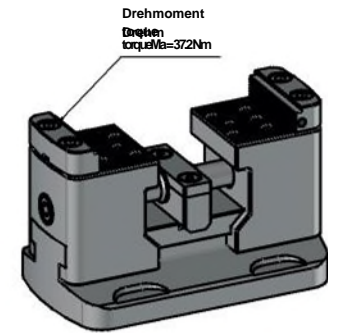
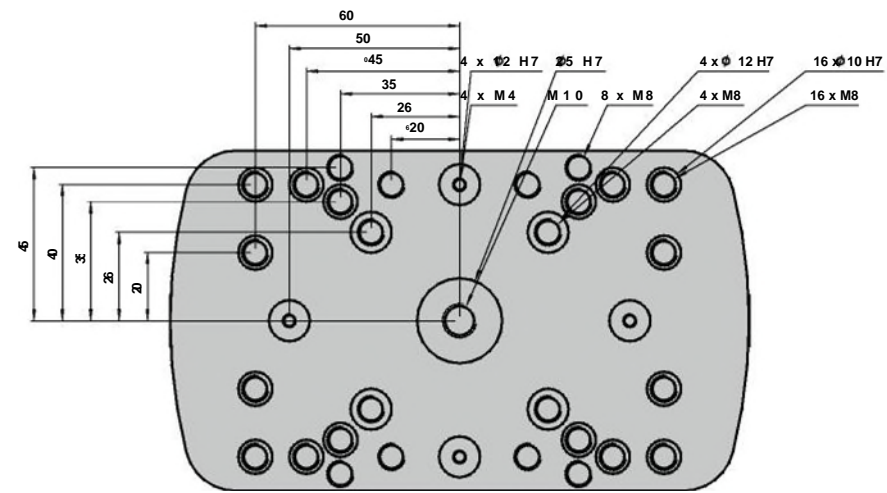
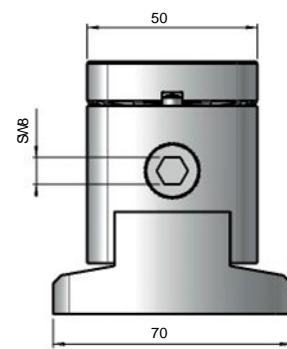
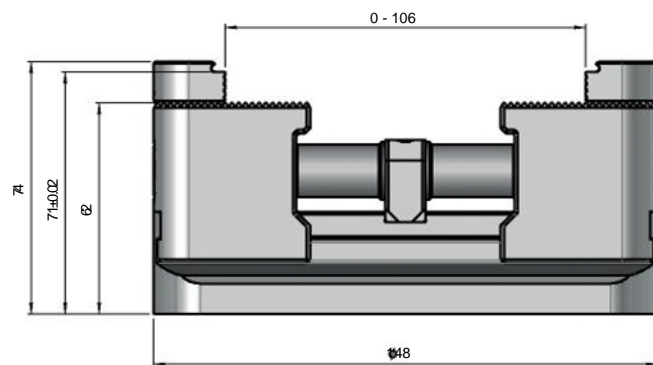
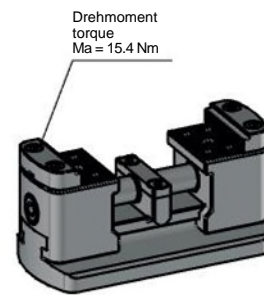
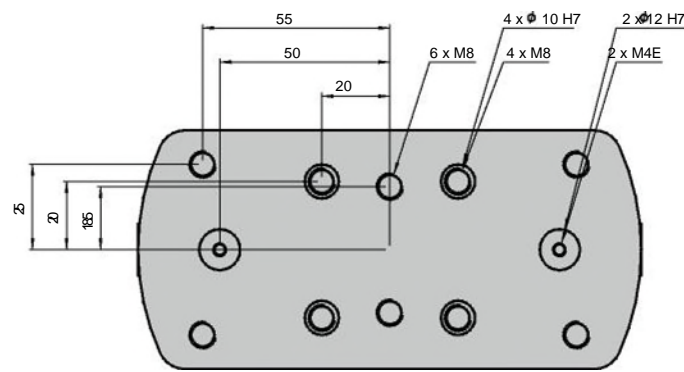
SC-40





SC-50

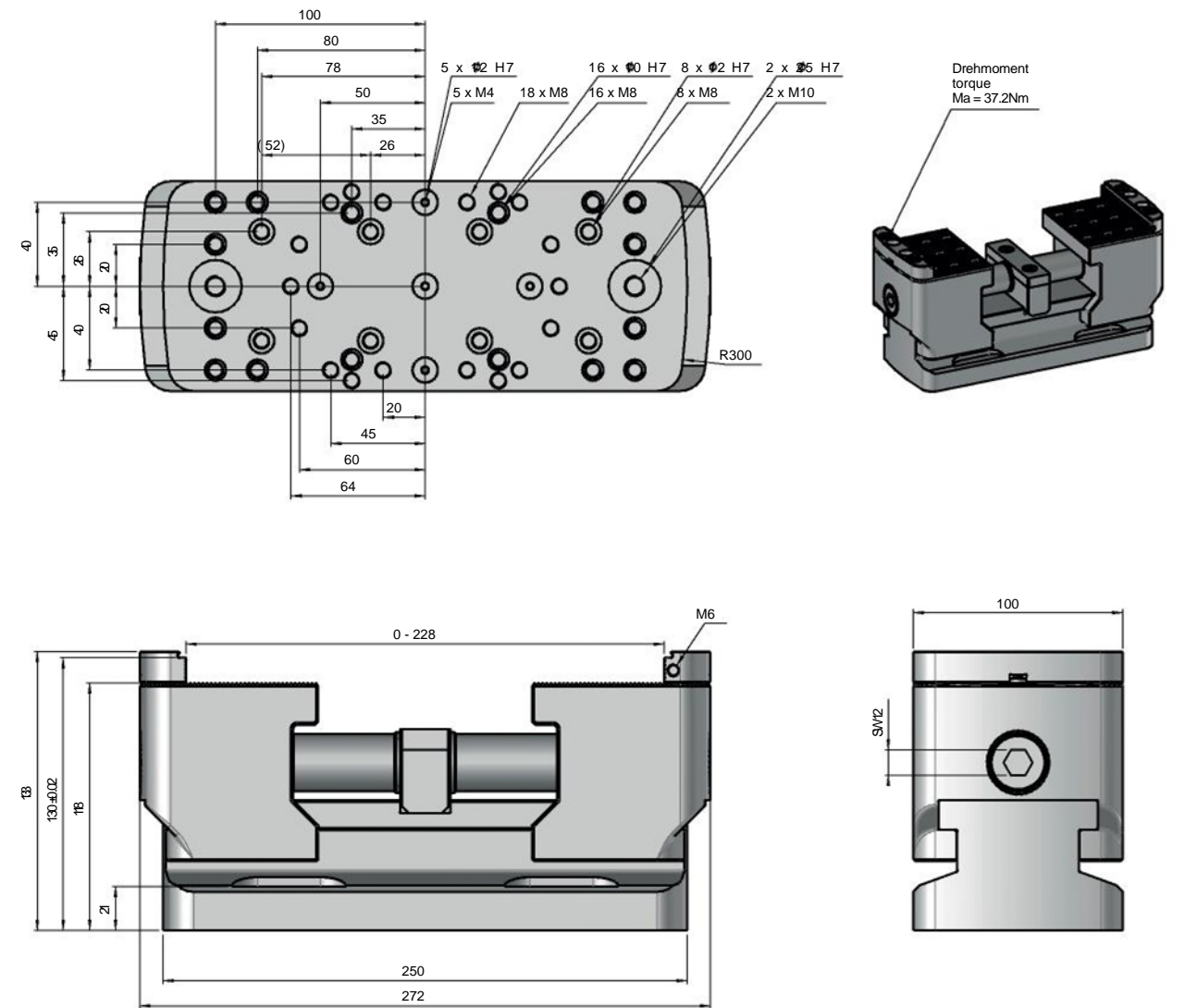
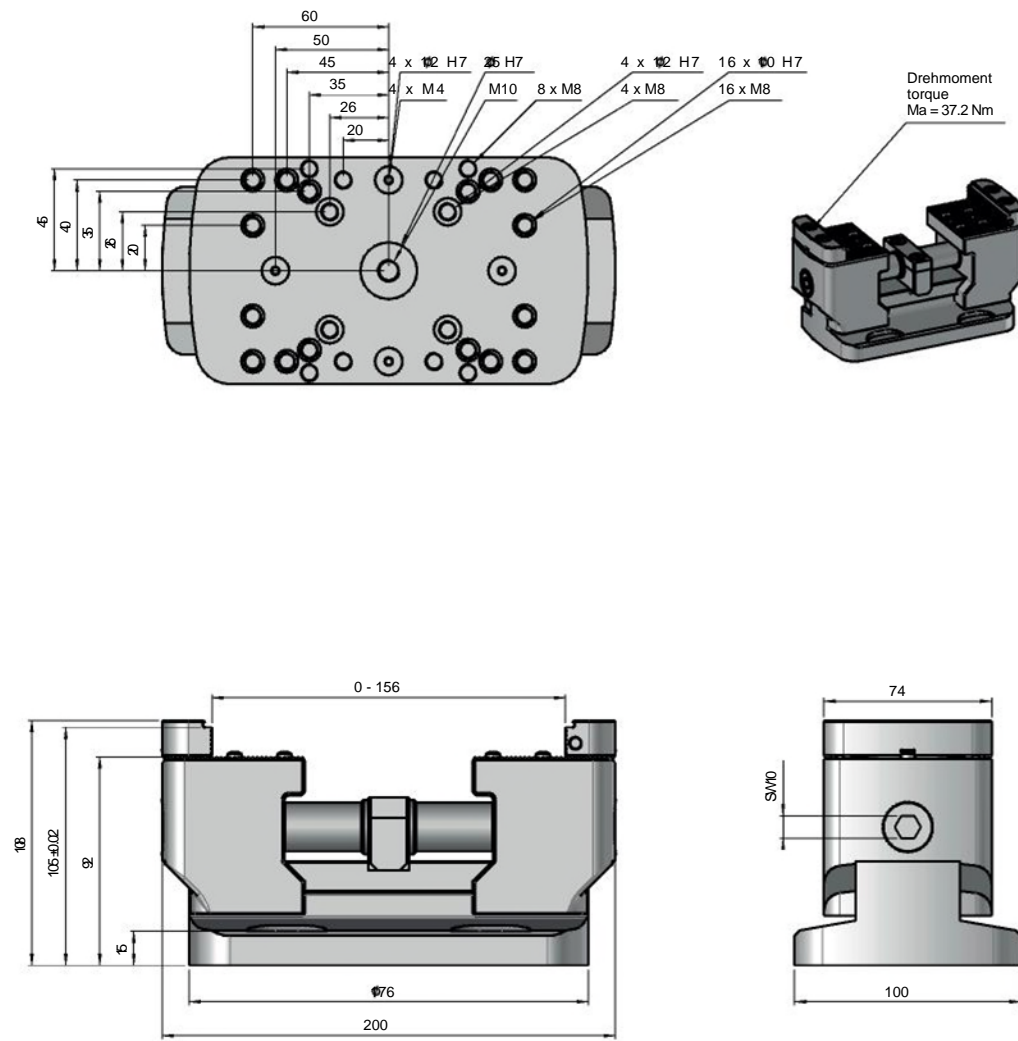
SC-60





SC-74

SC-100





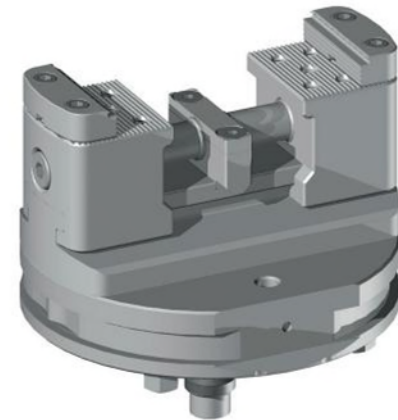
Applications

Pallet system

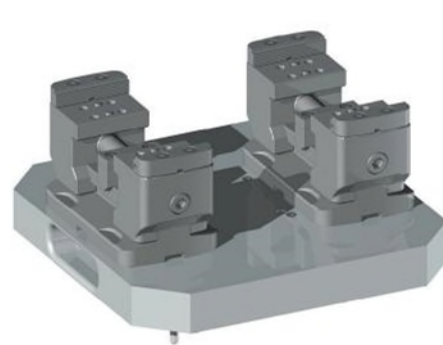
The basic bodies of the SC series make it possible to use many of the common pallet systems. For this purpose, only 2 fitting holes are required to align the SC correctly on the pallet.



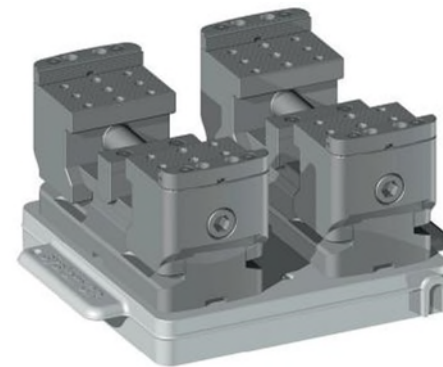
Center Device **1 x SC-40**
Zero-Point-Clamping-System **GPS-120**



Center Device **1 x SC-50**
Zero-Point-clamping-System **ITS-148**



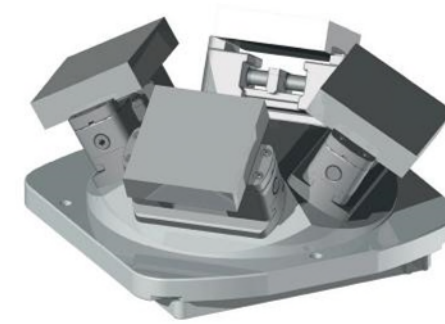
Center Device **2 x SC-74**
Zero-Point-Clamping-System **UPC-320**



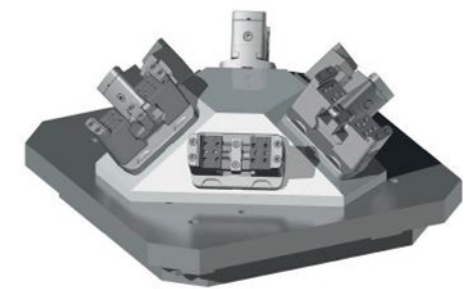
Center Device **2 x SC-100**
Zero-Point-Clamping-System **Dynafix**

Devices

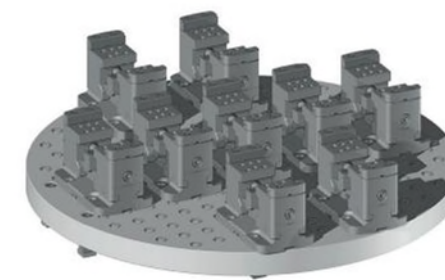
To achieve maximum flexibility and running time on the processing machines, you can use the SC series on pyramids, towers, or prisms. The elevated design and the large selection of jaws allows to maximise machine capacity.



Center Device **4 x SC-74**
Zero-Point-Clamping-System **Dynafix**



Center Device **6 x SC-60**
Fixture- **Machine manufacturer**
Pyramide



Center Device **9 x S**
C-60Fixture **LRP**



Center Device **24 x LC-50**
Fixture **Own Design**



Accessoires

Jaws

Pair of SC gripping jaws is included with delivery of Smart Clamp, so you can clamp raw parts at no additional costs.

Jaw width (mm)		34	40	50	60	74	100	120
SC-gripping jaw	Nr. 837150	X	X	X	X	X	X	X
Standard gripping jaw	Nr. 837250	X	X	X	X	X	X	X
High gripping jaw	Nr. 837300	X	X	X	X	X	X	X
Combi jaw	Nr. 837350	X	X	X	X	X	X	X
Step jaw	Nr. 837450	X	X	X	X	X	X	X
Prism jaw	Nr. 837500	X	X	X	X	X	X	X
Soft jaw aluminium	Nr. 837702	X	X	X	X	X	X	X
Soft jaw steel	Nr. 837703	X	X	X	X	X	X	X

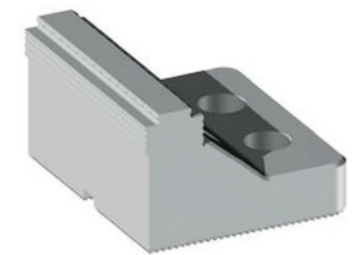
For the exact data of the jaws, please check the jaws catalog.



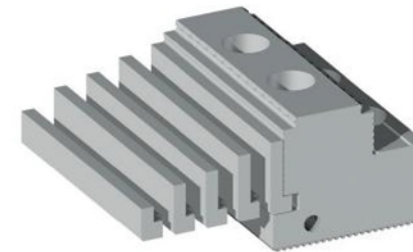
Nr. 837150



Nr. 837250



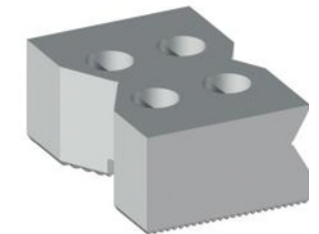
Nr. 837300



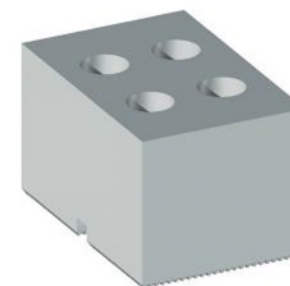
Nr. 837350



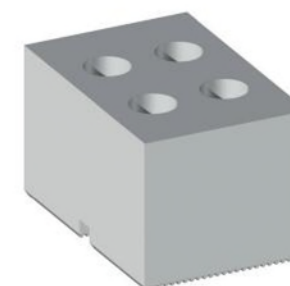
Nr. 837450



Nr. 837500



Nr. 837702



Nr. 837703



Automation Solutions

The SC series can be included in any automation solution. From workpiece handling to clamping device handling to pallet handling, you are best recommended with the SC series.

Pallets +GF+ / System 3R (Number of possible devices)

SC-Sizes	SC-34	SC-40	SC-50	SC-60	SC-74	SC-100	SC-120
GPS 70	1						
Macro	1	1					
Macro Magnum	1, 2, 3	1, 2					
GPS 120	1,2	1	1				
GPS 240			1	1,2	1,2		
Delphin 398				1,2,3,4,6	1,2,3,4,6	1,2,3	1,2,3
Delphin 448				1,2,3,4,6	1,2,3,4,6	1,2,3	1,2,3
Dynafix 280				1,2,3	1,2,3	1,2	1,2
Dynafix 350				1,2,3,4,6	1,2,3,4,6	1,2,3	1,2,3

Pallets +GF+ / System 3R (Number of possible devices)

SC-Sizes	SC-34	SC-40	SC-50	SC-60	SC-74	SC-100	SC-120
ITS-148	1	1	1				
VPC 52 / 96	1, 2	1, 2	1	1	1	1	1
UPC 320				1,2,3	1,2,3	1,2,3	1,2
MTS 400				1,2,3,4,6	1,2,3,4,6	1,2,3	1,2,3

Further manufacturers can be requested directly by Gremotool.

Device handling

The SC series can be changed directly on zero point Systems. For this purpose, the respective suitable drawing for the zero-point system will be integrated in the SC Serie. The clamping process can be carried out manually or by a suitable robot.

Direct clamping

The SC series can be equipped with straightening-elements for the table slot. This allows the user to fix the center clamp quick and correctly on the slot table.

If the milling table has a hole grid, the straightening elements can be selected on the base of this table. Thanks to the fits, the position is completely determined when fixing. These accessories can be requested and obtained from Gremotool.



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