

SQ / QX SUPPLIES

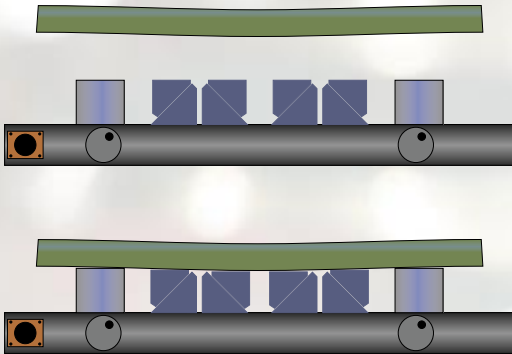
Suggestive accessories for electro-permanent magnetic clamping systems with square pole technique

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Mobile and fixed pole-extensions on your square pole magnetic system enable you to chuck rippled and draught metal pieces. The pole-extensions adjust to your workpiece and fix it safely, which helps to define all touch points between your magnetic chuck and workpiece individually.

Thereby you can drill and work on inner edges of magnetical fixed workpieces. Within shortest time you can add new pole-extensions or remove distracting ones – thus giving his own individual work-holding device to all of your workpieces. Machining on five sides can be done by lifting up your workpiece with pole-extensions. By using pole-plates, complex structures can be inserted in the active magnetic face of workpieces which are difficult to clamp. Our pole-extensions are made of high quality steel and do have best magnetic flux properties. They are durable and sophisticated.



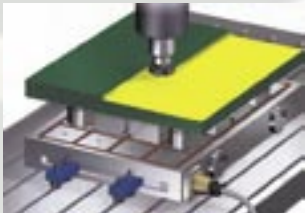
Automatic adjustment to the workpiece

Handling of metal sheets by machines with horizontal centerline

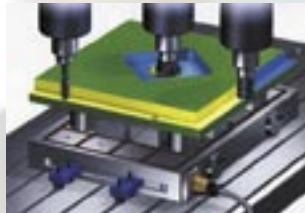


Parallel at cyberspeed

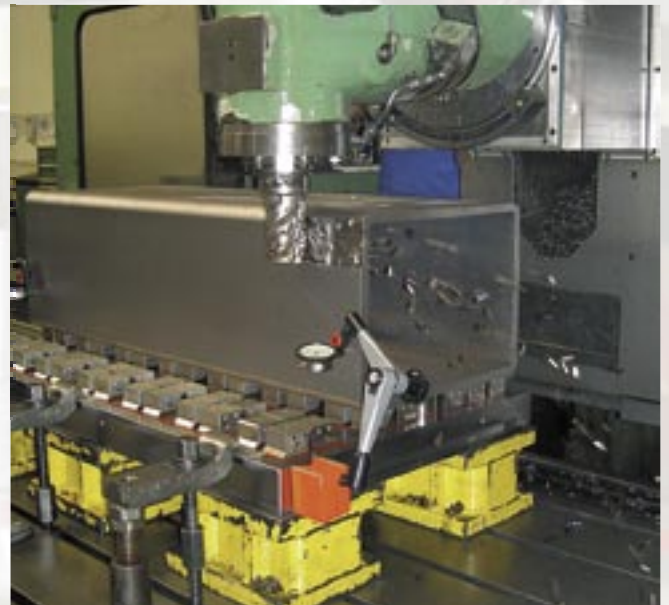
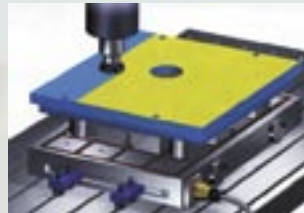
Scrubbing of 1st surface



Turning and scrubbing of 2nd surface



Turning and smoothing of 1st surface



Standard pole-extensions

Fixed pole-extensions are used to define a three-point-fixing of materials which tend to draft or to lift self-stiff and flat materials.



Round single-pole

Model	Article-No.	Sizes (mm)	
		Ø	H
PVR 50 H32	2410 15031	50	32 ±0,01
PVR 50 H15	2410 15031-15	50	15 ±0,01
PVR 70 H45	2410 17045	70	45 ±0,01

Fixing screws, M8 included



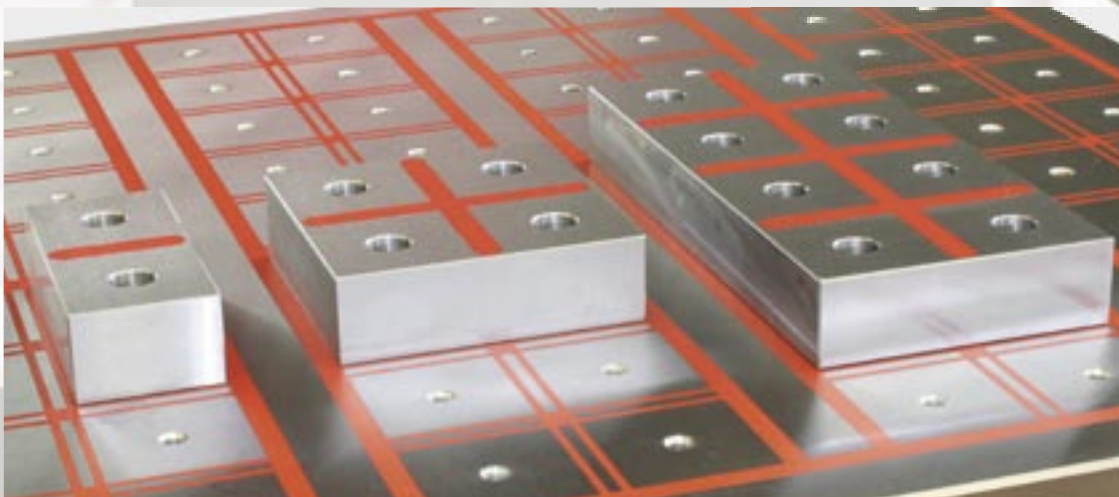
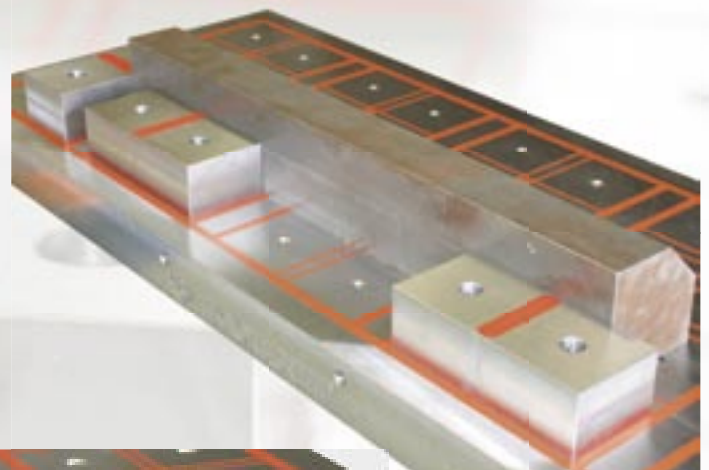
Square single-pole

Model	Article-No.	Sizes (mm)	
		L x B	H
PVQ 50 H32	2410 15032-1	50 x 50	32 ±0,01
PVQ 50 H15	2410 15032-15	50 x 50	15 ±0,01
PVQ 70 H45	2410 17045-1	70 x 70	45 ±0,01

Fixing screws, M8 included

Multiple pole plates

Multiple pole plates make it possible to create extensive magnetic areas for machining. This way you can insert structures and workpiece figures at maximum possible stiffness. Thus, complex steel or casted workpieces which are difficult to clamp, can be easily fixed in their mould. It is also possible to create a vertical magnetic flange to fix or stabilise workpieces. Pole plates and multiple poles are "soft jaws" for your magnetic clamping system.

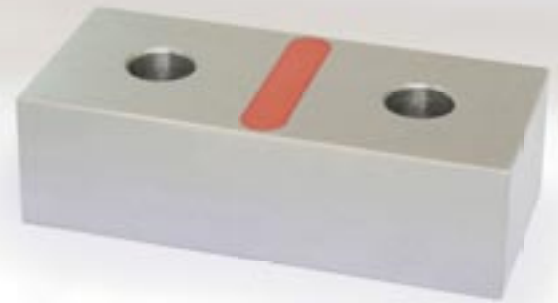
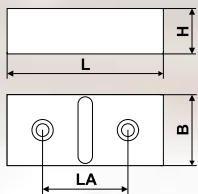


Multiple pole plates

Double pole plates

Model	Article-No.	For pole size	Sizes (mm)			
			L	B	H	LA
PP 50 H32-2	2410 15032-2	50x50mm	110,2	50	32 ±0,01	60,2
PP 50 H38-2	2410 15033-2	50x50mm	110,2	50	38 ±0,01	60,2
PP 70 H45-2	2410 17045-2	70x70mm	155,2	70	45 ±0,01	85,2
PP 70 H55-2	2410 17046-2	70x70mm	155,2	70	55 ±0,01	85,2

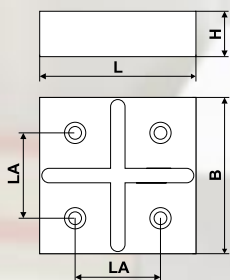
Fixing screws, M8 included



Quad pole plates

Modell	Article-No.	For pole size	Sizes (mm)			
			L	B	H	LA
PP 50 H32-4	2410 15032-4	50x50mm	110,2	110,2	32 ±0,01	60,2
PP 50 H38-4	2410 15033-4	50x50mm	110,2	110,2	38 ±0,01	60,2
PP 70 H45-4	2410 17045-4	70x70mm	155,2	155,2	45 ±0,01	85,2
PP 70 H55-4	2410 17046-4	70x70mm	155,2	155,2	55 ±0,01	85,2

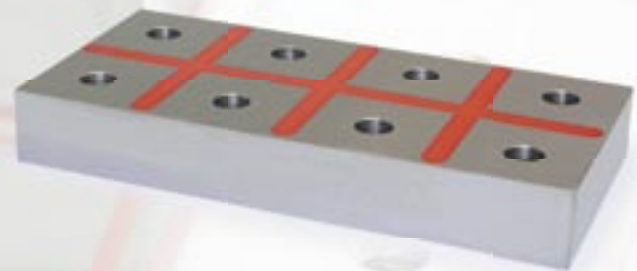
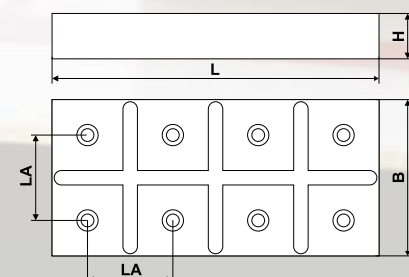
Fixing screws, M8 included



Eightfold pole plates

Modell	Article-No.	For pole size	Sizes (mm)			
			L	B	H	LA
PP 50 H32-8	2410 15032-8	50x50mm	230,6	110,2	32 ±0,01	60,2
PP 50 H38-8	2410 15033-8	50x50mm	230,6	110,2	38 ±0,01	60,2
PP 70 H45-8	2410 17045-8	70x70mm	325,6	155,2	45 ±0,01	85,2
PP 70 H55-8	2410 17046-8	70x70mm	325,6	155,2	55 ±0,01	85,2

Fixing screws, M8 included



We offer our multiple pole plates with grinded height to be used together with suitable mobile pole-extensions - or alternatively, oversized by 6 or 10mm, to insert your own structures, flanges or prisms. We also offer special pole plates according to your requests concerning the quantity of poles and special height. – Just contact us for more details!

Multiple pole plates with drill bushings

For an exact repeat of assembling on QX magnetic clamping systems we offer our pole plates with backward fits and drill bushings.

Then, from customer's side, the appropriate analogue fit (\varnothing 15mm/m6) has to be inserted into the magnetic chuck. This helps to chuck recurring workpieces in the prepared position.

Included accessories:

Requested standard pole plate + insertion + drill bushings + screws + drawing for inserting the counter fit into the magnetic chuck.

Model	Article-No.	Sizes (mm)	
		\varnothing x H	\varnothing drill
Drill bushing	2450 001	15m6 x 10	10

The requested standard pole plate has to be ordered together with the pole plates.



Multiple pole plates with stop angle

Pole plates with stop angle support a quick assembling and save workpieces, being difficult to clamp, from slipping off.

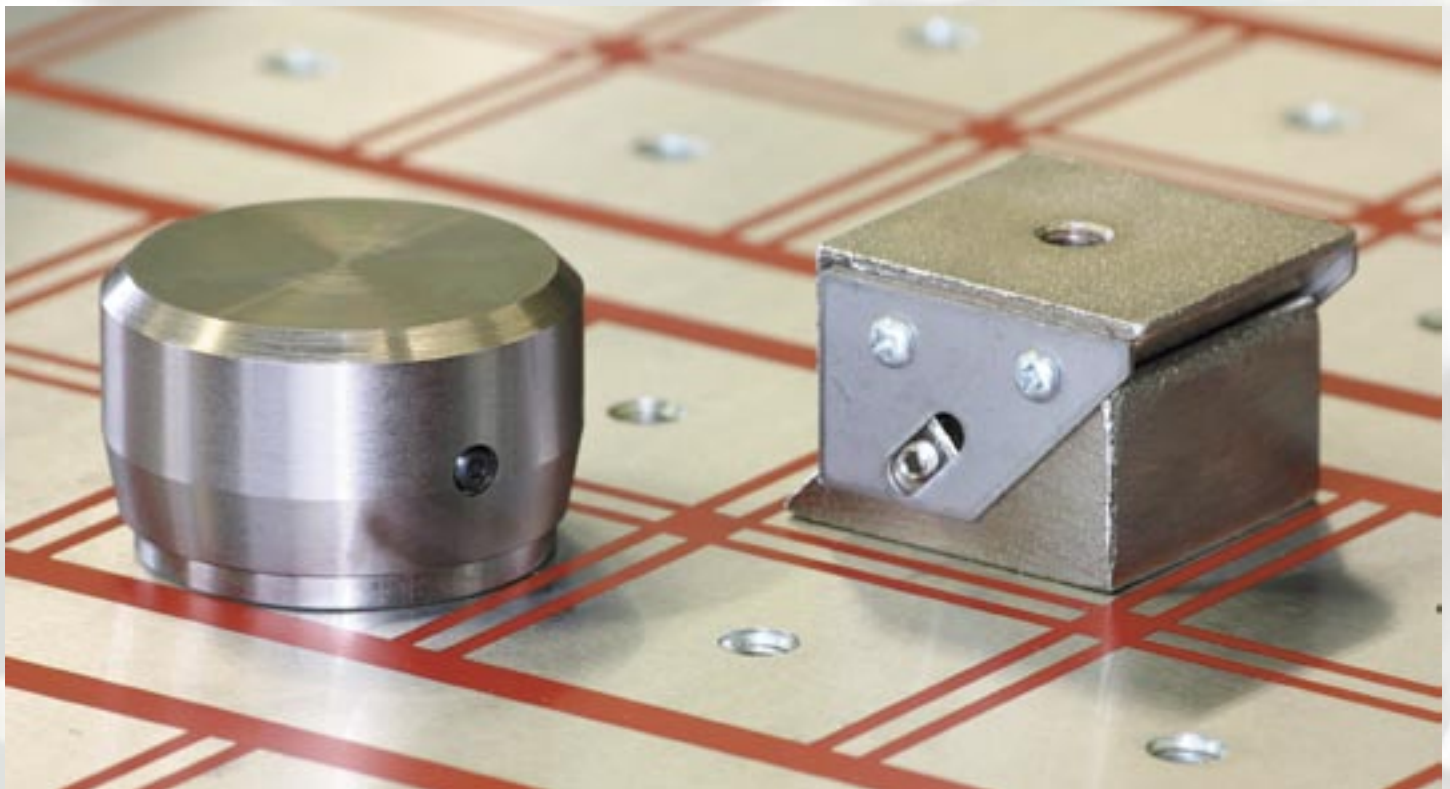
Model	Article-No.	Sizes (mm)	
		Area	H + stop angle
PP 50 H32+6-2	2410 15035-2	110,2 x 50	32+6
PP 50 H32+6-4	2410 15035-4	110,2 x 110,2	32+6
PP 70 H45+10-2	2410 17048-2	155,2 x 70	45+10
PP 70 H45+10-4	2410 17048-4	155,2 x 155,2	45+10

Fixing screws, M8 included



Mobile pole-extensions

Mobile pole-extensions are used to chuck workpieces holohedrally without drafting them. The upper part of our mobile pole-extensions is spring-mounted and fits to the workpiece as soon as the magnetic field is activated and stabilises the workpiece without pulling it down. Especially for working on extensive pieces, chucking on magnetic plates by using mobile pole-extensions has been widely accepted to be the best technique.

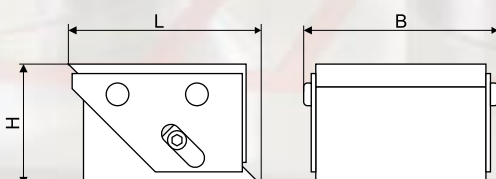


MP mobile standard pole-extensions

Mobile standard square pole-extensions are mounted to the magnetic chuck by using an allen key. Their surface are sandblasted and electrolytically nickel-plated. Standard mobile pole-extensions are used to clamp workpieces holohedrally and without drafting. By using the inclined plane, the upper part of the pole-extension fits to the level of the workpiece, stiffing it without draft.

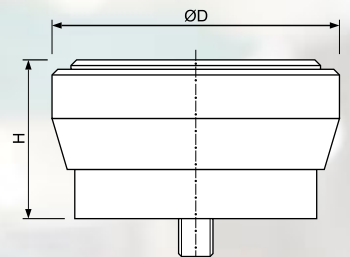
Model	Article-No.	Sizes (mm)		
		L	B	H
MP 50	2410 35032	50	50	32 +4/-2
MP 70/75	2410 37045	110,2	50	45 +5/-4

Intergrated fixing screw M8



RMP pole-extensions

Mobile pole-extensions of type RMP can be easily screwed by hand to the magnetic cuck with their turned threaded pin (M8x10mm). Their surface is fully machined and electrolytically nickel-plated. Their magnetical capacity is 20% higher, compared to the square pole-extensions, and the closed coverage type mostly avoids the permeation of dirt and chippings. The round design generates a pure vertical lift.



Model	Article-No.	Sizes (mm)		Weight (kg)
		ØD	H	
RMP 76	2420 076	76	45 ±3	1

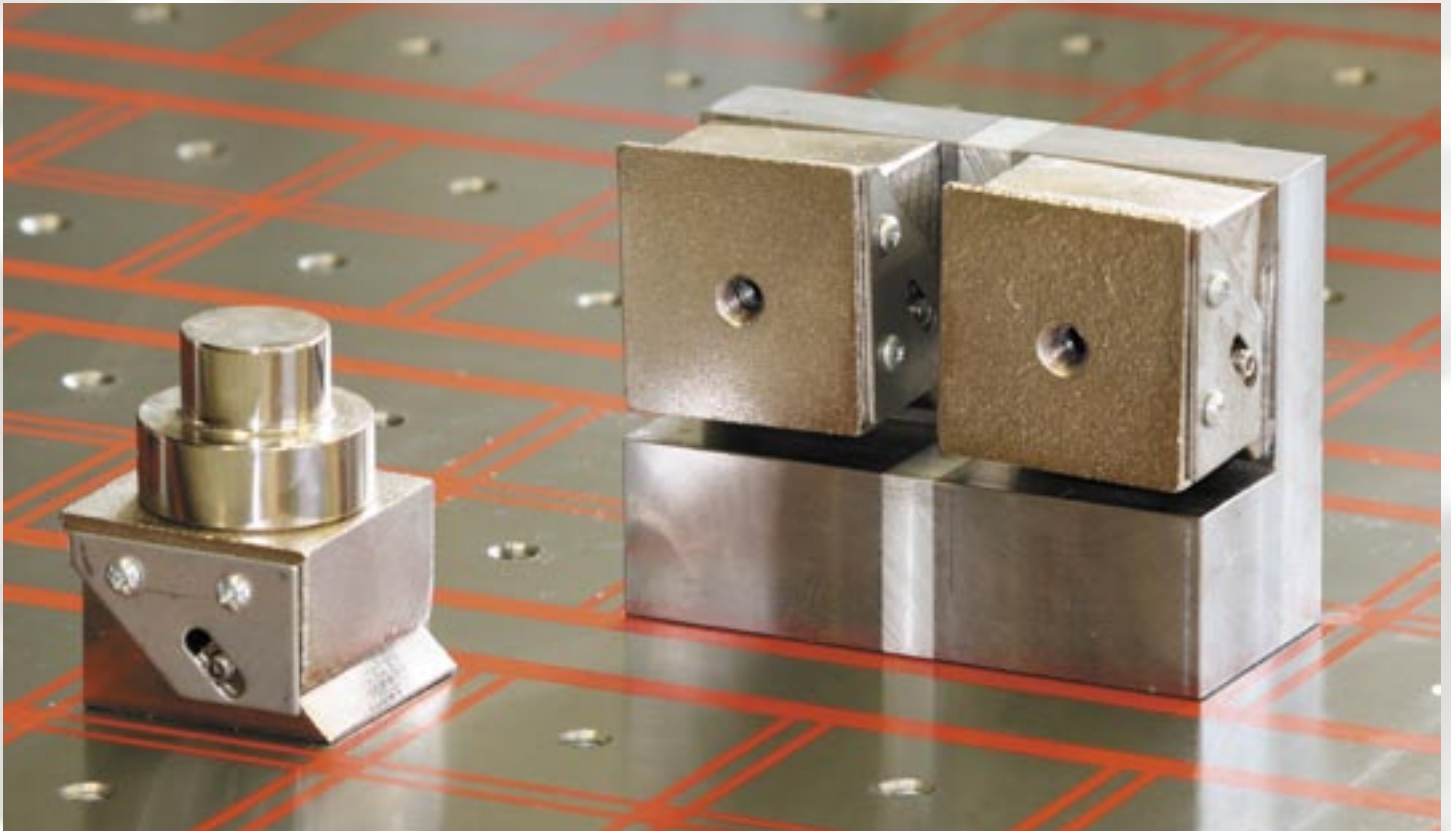
Suitable for pole pitch 70+75mm

Model	Article-No.	Sizes (mm)		Weight (kg)
		ØD	H	
RMP 57	2420 057	57	32 ±2,5	0,5

Suitable for pole pitch 50mm



Pole-extensions for customer's request



According to our customer's requests we produce pole-extensions in all technically feasible shapes. Just ask us!

MCU-FS *foot-operated safety switch*

Foot-operated safety switch with mechanical bi-operation. The foot-switch is ready to plug for connection to the TM MCU-Plus control unit.

It facilitates to apply the workpiece with both hands and activate or deactivate the magnetic clamping system by foot. Particularly with regard to the serial production and vertical chucking you are able to increase your efficiency and safety.

Model	Article-No.	Sizes (mm)	Weight (kg)
MCU-FS	2411 010	150 x 150 x 200	6

