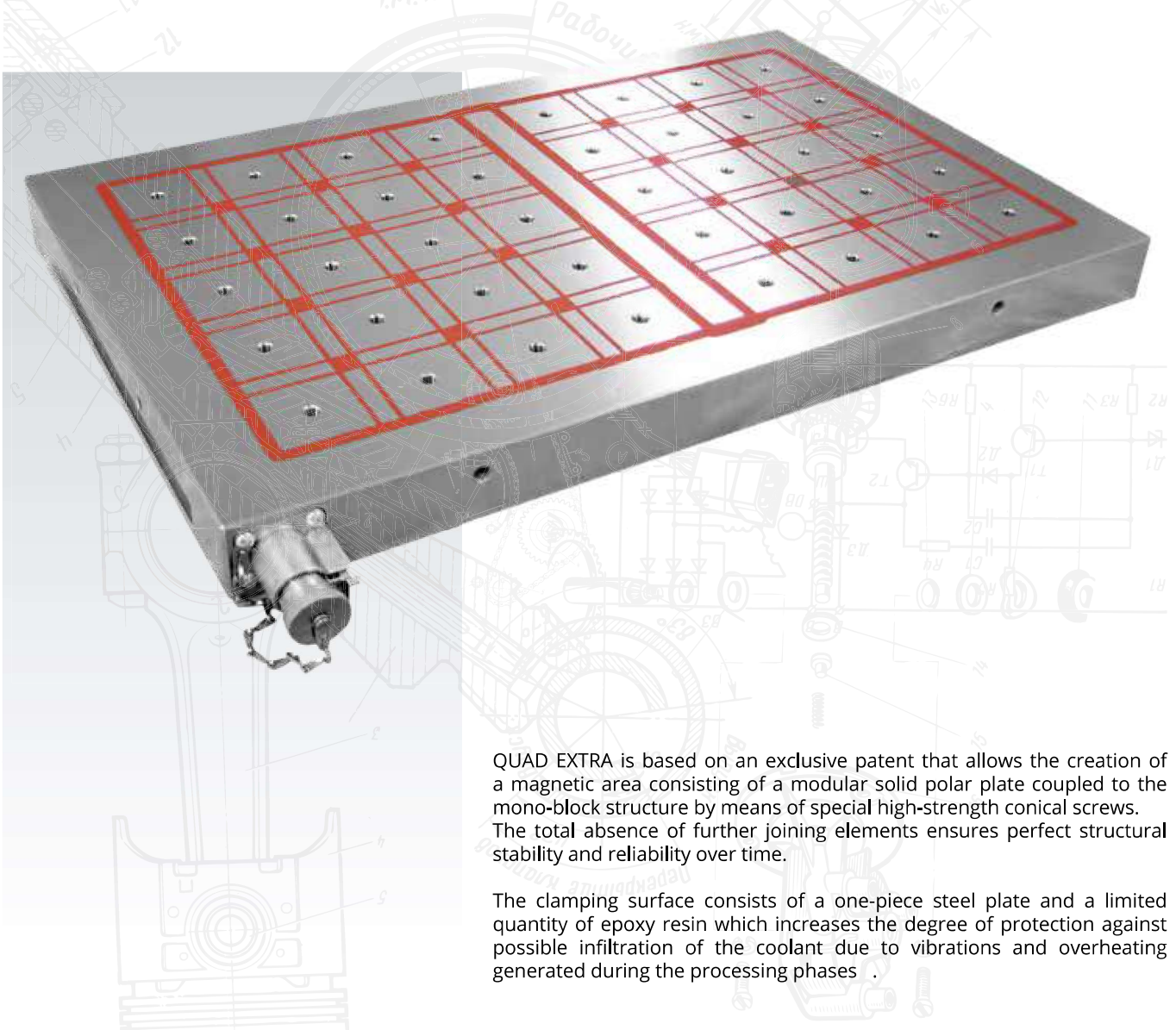


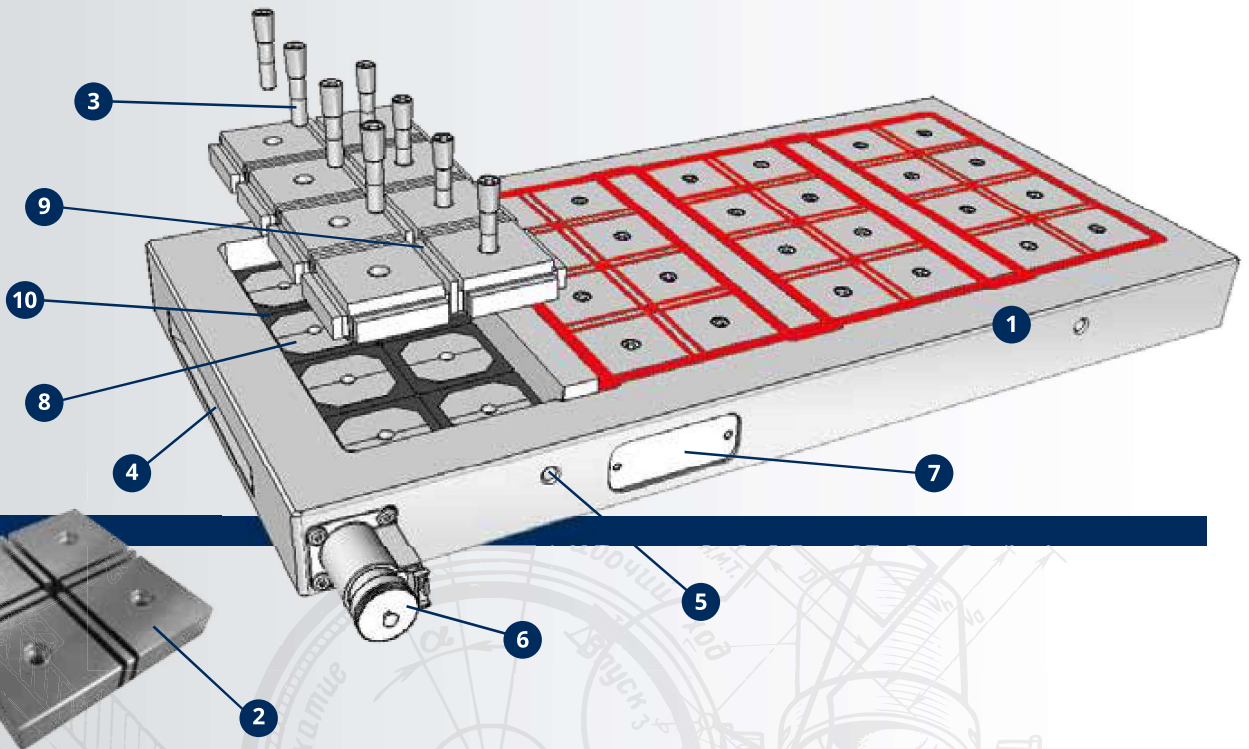
# QUAD EXTRA

## Milling series



QUAD EXTRA is based on an exclusive patent that allows the creation of a magnetic area consisting of a modular solid polar plate coupled to the mono-block structure by means of special high-strength conical screws. The total absence of further joining elements ensures perfect structural stability and reliability over time.

The clamping surface consists of a one-piece steel plate and a limited quantity of epoxy resin which increases the degree of protection against possible infiltration of the coolant due to vibrations and overheating generated during the processing phases .



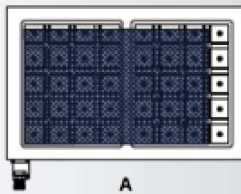
- 1 Monolithic steel frame**  
Excellent stability to ensure high clamping force and reliability over time.
- 2 One-piece solid polar plate**  
The polar surface consists of a single metal plate for greater uniformity and working stability. The steel space between the square poles is an integral part of the plate and can be used for inserting precision pins.
- 3 Double action hard steel conical screws**  
For the stable and uniform holding of the polar plate to the frame and for the use of fixed and mobile pole extensions or for the special accessories tailored to the application (M8).
- 4 Lateral slot**  
On the short side of the magnetic chuck for quick and easy installation on the machine tool table.
- 5 M10 threaded holes**  
To use mechanical stops for reference.
- 6 Quick fit connector**  
Precise, safe and watertight for quick connection with the control unit.
- 7 Performance plate with technical data**  
Data on voltage, current absorption, serial number
- 8 Reversible permanent magnet AlNiCo**
- 9 Static permanent magnet Neodymium**
- 10 Electric coil**

# QUAD EXTRA

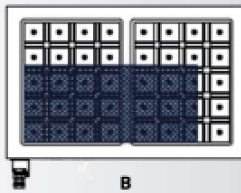
## Milling series

### Example of machining with magnetic plate QX 406 HE50.

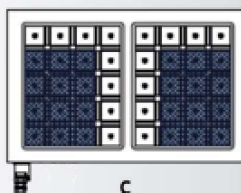
High Efficiency (size 400 x 620 x 51 mm).  
Workpiece in FE 275 JR, average air-gap 0.2 mm,  
positioned on mobile and fixed polar extensions.  
Cutting speed: 340 m/min..



A



B



C

	Size piece (mm)	Max stock removal (cm <sup>3</sup> /mm)	
		face milling	contouring
A	400x300x50	720	144
B	450x200x50	400	80
C	250x180x50	300	60

With workpiece in cast iron or alloyed steel, the Max stock removal values could be reduced respectively up to 20% and 50%.  
Side stops are recommended whenever cutting parameters must be increased.

QUAD EXTRA polar geometry with “double grid” square pole to obtain a greater number of magnetic “stitches” and less epoxy resin than the previous QUADSYSTEM version.

### Version HE

Magnetic configuration High Efficiency

### Version HD

Magnetic configuration High Density

### Version HP

Magnetic configuration High Power

# QUAD ~~EXTRA~~

## Application examples



5 axis machining centers



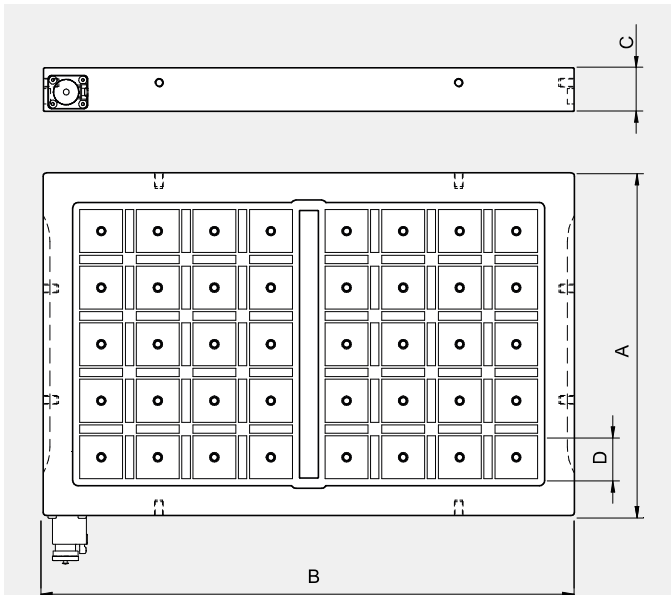
Pallet FMS



Modular systems

## QUAD-EXTRA HE50 T51

Permanent-electro magnetic plates High Efficiency Thickness 51 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector ERGON 5 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension **Cod. PFR50/32** (pag. 42)
- Moving extension **Cod. PMQ50/32** (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HE50 T51	200	400	51	50	10	39	30
QX 205 HE50 T51	200	490	51	50	12	47	35
QX 206 HE50 T51	200	620	51	50	16	63	45
QX 208 HE50 T51	200	780	51	50	20	78	60
QX 209 HE50 T51	200	910	51	50	24	94	65
QX 210 HE50 T51	200	1040	51	50	28	110	75
QX 305 HE50 T51	270	490	51	50	18	71	50
QX 306 HE50 T51	270	620	51	50	24	94	60
QX 308 HE50 T51	270	780	51	50	30	118	75
QX 309 HE50 T51	270	910	51	50	36	141	90
QX 310 HE50 T51	270	1040	51	50	42	165	100
QX 403 HE50 T51	400	330	51	50	20	78	50
QX 405 HE50 T51	400	490	51	50	30	118	70
QX 406 HE50 T51	400	620	51	50	40	157	90
QX 408 HE50 T51	400	780	51	50	50	196	110
QX 409 HE50 T51	400	910	51	50	60	235	130
QX 410 HE50 T51	400	1040	51	50	70	274	145
QX 505 HE50 T51	470	490	51	50	36	141	85
QX 506 HE50 T51	470	620	51	50	48	188	105
QX 508 HE50 T51	470	780	51	50	60	235	130
QX 509 HE50 T51	470	910	51	50	72	282	150
QX 510 HE50 T51	470	1040	51	50	84	329	170
QX 605 HE50 T51	600	490	51	50	48	188	105
QX 606 HE50 T51	600	620	51	50	64	251	130
QX 608 HE50 T51	600	780	51	50	80	314	165
QX 609 HE50 T51	600	910	51	50	96	376	190
QX 610 HE50 T51	600	1040	51	50	112	439	220

\* ± 0,5 mm

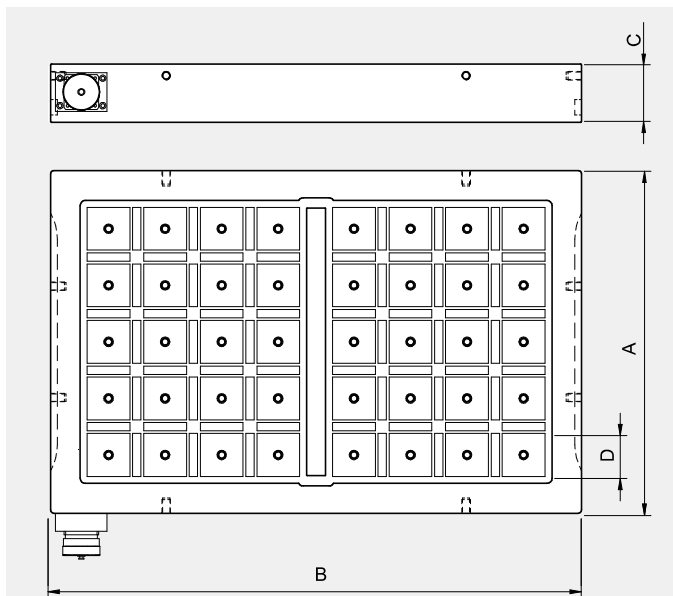
Minimum size of work-piece: 120 x 120 mm

Minimum thickness of work-piece: 12 mm

Suitable control unit **Cod. ST200FA** (pag. 45)

## QUAD-EXTRA HE50 T68

Permanent-electro magnetic plates High Efficiency Thickness 68 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector FEME 4 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity

### Recommended accessories

- Fix extension Cod. PFR50/32 (pag. 42)
- Moving extension Cod. PMQ50/32 (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HE50 T68	200	400	68	50	10	37	40
QX 205 HE50 T68	200	490	68	50	12	47	50
QX 206 HE50 T68	200	620	68	50	16	63	60
QX 208 HE50 T68	200	780	68	50	20	78	80
QX 209 HE50 T68	200	910	68	50	24	94	90
QX 210 HE50 T68	200	1040	68	50	28	110	105
QX 305 HE50 T68	270	490	68	50	18	71	65
QX 306 HE50 T68	270	620	68	50	24	94	80
QX 308 HE50 T68	270	780	68	50	30	118	105
QX 309 HE50 T68	270	910	68	50	36	141	125
QX 310 HE50 T68	270	1040	68	50	42	165	135
QX 403 HE50 T68	400	330	68	50	20	78	70
QX 405 HE50 T68	400	490	68	50	30	118	95
QX 406 HE50 T68	400	620	68	50	40	157	120
QX 408 HE50 T68	400	780	68	50	50	196	150
QX 409 HE50 T68	400	910	68	50	60	235	180
QX 410 HE50 T68	400	1040	68	50	70	274	200
QX 505 HE50 T68	470	490	68	50	36	141	115
QX 506 HE50 T68	470	620	68	50	48	188	145
QX 508 HE50 T68	470	780	68	50	60	235	180
QX 509 HE50 T68	470	910	68	50	72	282	205
QX 510 HE50 T68	470	1040	68	50	84	329	235
QX 605 HE50 T68	600	490	68	50	48	188	145
QX 606 HE50 T68	600	620	68	50	64	251	180
QX 608 HE50 T68	600	780	68	50	80	314	225
QX 609 HE50 T68	600	910	68	50	96	376	260
QX 610 HE50 T68	600	1040	68	50	112	439	300

\* ± 0,5 mm

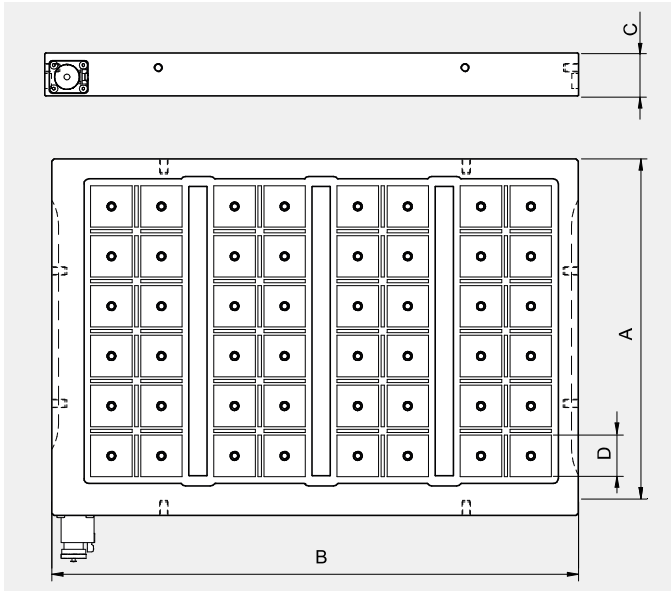
Minimum size of work-piece: 120 x 120 mm

Minimum thickness of work-piece: 12 mm

Suitable control unit Cod. ST200FA (pag. 45)

## QUAD-EXTRA HD50 T51

Permanent-electro magnetic plates High Density Thickness 51 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector ERGON 5 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension **Cod. PFR50/32** (pag. 42)
- Moving extension **Cod. PMQ50/32** (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 203 HD50 T51	250	340	51	50	12	47	35
QX 205 HD50 T51	250	490	51	50	18	71	45
QX 206 HD50 T51	250	635	51	50	24	94	60
QX 208 HD50 T51	250	785	51	50	30	118	75
QX 209 HD50 T51	250	935	51	50	36	141	85
QX 210 HD50 T51	250	1085	51	50	42	165	100
QX 303 HD50 T51	310	340	51	50	16	63	40
QX 305 HD50 T51	310	490	51	50	24	94	55
QX 306 HD50 T51	310	635	51	50	32	125	75
QX 308 HD50 T51	310	785	51	50	40	157	90
QX 309 HD50 T51	310	935	51	50	48	188	105
QX 310 HD50 T51	310	1085	51	50	56	220	125
QX 403 HD50 T51	430	340	51	50	24	94	55
QX 405 HD50 T51	430	490	51	50	36	141	80
QX 406 HD50 T51	430	635	51	50	48	188	100
QX 408 HD50 T51	430	785	51	50	60	235	125
QX 409 HD50 T51	430	935	51	50	72	282	145
QX 410 HD50 T51	430	1085	51	50	84	329	170
QX 503 HD50 T51	490	340	51	50	28	110	60
QX 505 HD50 T51	490	490	51	50	42	165	90
QX 506 HD50 T51	490	635	51	50	56	220	115
QX 508 HD50 T51	490	785	51	50	70	274	140
QX 509 HD50 T51	490	935	51	50	84	329	165
QX 510 HD50 T51	490	1085	51	50	98	384	190
QX 603 HD50 T51	610	340	51	50	36	141	75
QX 605 HD50 T51	610	490	51	50	54	212	105
QX 606 HD50 T51	610	635	51	50	72	282	140
QX 608 HD50 T51	610	785	51	50	90	353	170
QX 609 HD50 T51	610	935	51	50	108	423	205

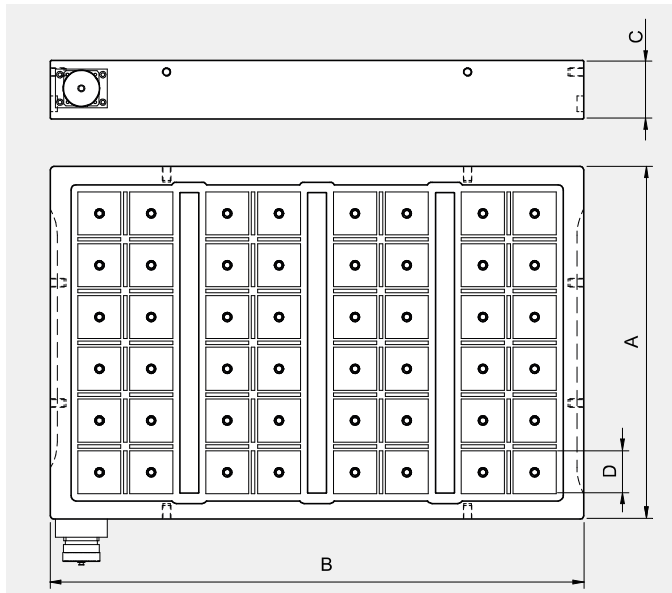
\* ± 0,5 mm

Minimum size of work-piece: 110 x 110 mm

Minimum thickness of work-piece: 12 mm  
Suitable control unit **Cod. ST200FA** (pag. 45)

## QUAD-EXTRA HD50 T68

Permanent-electro magnetic plates High Density Thickness 68 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector FEME 4pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension Cod. PFR50/32 (pag. 42)
- Moving extension Cod. PMQ50/32 (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 203 HD50 T68	230	320	68	50	12	47	45
QX 205 HD50 T68	230	480	68	50	18	71	60
QX 206 HD50 T68	230	620	68	50	24	94	80
QX 208 HD50 T68	230	770	68	50	30	118	100
QX 209 HD50 T68	230	920	68	50	36	141	115
QX 210 HD50 T68	230	1060	68	50	42	165	135
QX 303 HD50 T68	300	320	68	50	16	63	55
QX 305 HD50 T68	300	480	68	50	24	94	75
QX 306 HD50 T68	300	620	68	50	32	125	100
QX 308 HD50 T68	300	770	68	50	40	157	125
QX 309 HD50 T68	300	920	68	50	48	188	145
QX 310 HD50 T68	300	1060	68	50	56	220	170
QX 403 HD50 T68	410	320	68	50	24	94	75
QX 405 HD50 T68	410	480	68	50	36	141	110
QX 406 HD50 T68	410	620	68	50	48	188	135
QX 408 HD50 T68	410	770	68	50	60	235	170
QX 409 HD50 T68	410	920	68	50	72	282	200
QX 410 HD50 T68	410	1060	68	50	84	329	230
QX 503 HD50 T68	490	320	68	50	28	110	85
QX 505 HD50 T68	490	480	68	50	42	165	120
QX 506 HD50 T68	490	620	68	50	56	220	155
QX 508 HD50 T68	490	770	68	50	70	274	190
QX 509 HD50 T68	490	920	68	50	84	329	225
QX 510 HD50 T68	490	1060	68	50	98	384	260
QX 603 HD50 T68	600	320	68	50	36	141	105
QX 605 HD50 T68	600	480	68	50	54	212	145
QX 606 HD50 T68	600	620	68	50	72	282	190
QX 608 HD50 T68	600	770	68	50	90	353	235
QX 609 HD50 T68	600	920	68	50	108	423	280
QX 610 HD50 T68	600	1060	68	50	126	494	325

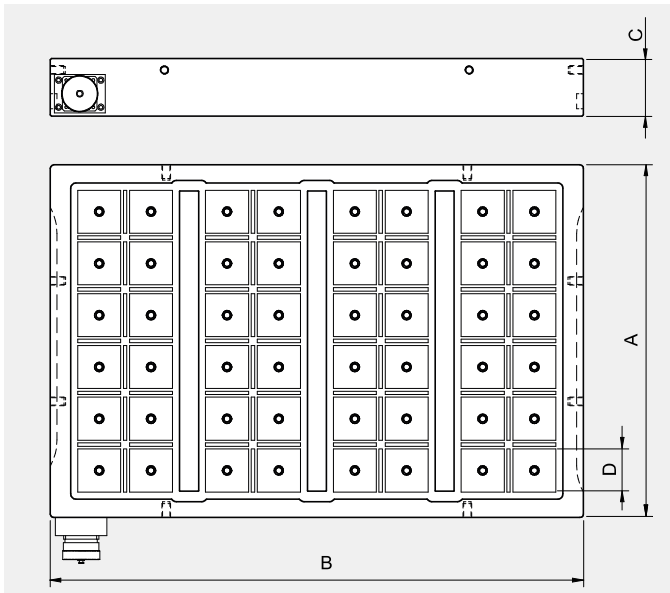
\* ± 0,5 mm

Minimum size of work-piece: 110 x 110

Minimum thickness of work-piece: 12 mm  
Suitable control unit Cod. ST200FA (pag. 45)

## QUAD-EXTRA HP50 T70

Permanent-electro magnetic plates High Power Thickness 70 mm for raw pieces or cast iron



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector FEME 4pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension Cod. PFR50/32 (pag. 42)
- Moving extension Cod. PMQ50/32 (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HP50 T70	200	400	70	50	10	37	40
QX 205 HP50 T70	200	490	70	50	12	47	50
QX 206 HP50 T70	200	620	70	50	16	63	60
QX 208 HP50 T70	200	780	70	50	20	78	80
QX 209 HP50 T70	200	910	70	50	24	94	90
QX 210 HP50 T70	200	1040	70	50	28	110	105
QX 305 HP50 T70	270	490	70	50	18	71	65
QX 306 HP50 T70	270	620	70	50	24	94	80
QX 308 HP50 T70	270	780	70	50	30	118	105
QX 309 HP50 T70	270	910	70	50	36	141	125
QX 310 HP50 T70	270	1040	70	50	42	165	135
QX 403 HP50 T70	400	330	70	50	20	78	70
QX 405 HP50 T70	400	490	70	50	30	118	95
QX 406 HP50 T70	400	620	70	50	40	157	120
QX 408 HP50 T70	400	780	70	50	50	196	150
QX 409 HP50 T70	400	910	70	50	60	235	180
QX 410 HP50 T70	400	1040	70	50	70	274	200
QX 505 HP50 T70	470	490	70	50	36	141	115
QX 506 HP50 T70	470	620	70	50	48	188	145
QX 508 HP50 T70	470	780	70	50	60	235	180
QX 509 HP50 T70	470	910	70	50	72	282	205
QX 510 HP50 T70	470	1040	70	50	84	329	235
QX 605 HP50 T70	600	490	70	50	48	188	145
QX 606 HP50 T70	600	620	70	50	64	251	180
QX 608 HP50 T70	600	780	70	50	80	314	225
QX 609 HP50 T70	600	910	70	50	96	376	260
QX 610 HP50 T70	600	1040	70	50	112	439	300

\* ± 0,5 mm

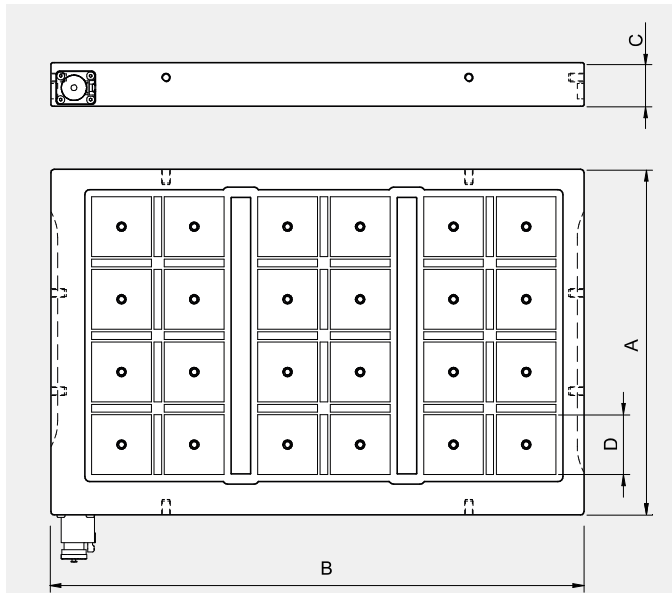
Minimum size of work-piece: 120 x 120 mm

Minimum thickness of work-piece: 12 mm

Suitable control unit Cod. ST200FA (pag. 45)

## QUAD-EXTRA HD70 T51

Permanent-electro magnetic plates High Density Thickness 51 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector ERGON 5 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension Cod. PFR70/45 (pag. 42)
- Moving extension Cod. RMP70/45 (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C *	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HD70 T51	235	430	51	70	8	91	40
QX 206 HD70 T51	235	625	51	70	12	92	55
QX 208 HD70 T51	235	820	51	70	16	122	75
QX 210 HD70 T51	235	1015	51	70	20	153	90
QX 304 HD70 T51	320	430	51	70	12	92	55
QX 306 HD70 T51	320	625	51	70	18	138	75
QX 308 HD70 T51	320	820	51	70	24	184	100
QX 310 HD70 T51	320	1015	51	70	30	230	125
QX 402 HD70 T51	405	235	51	70	8	61	40
QX 404 HD70 T51	405	430	51	70	16	122	65
QX 406 HD70 T51	405	625	51	70	24	184	95
QX 408 HD70 T51	405	820	51	70	32	245	125
QX 410 HD70 T51	405	1015	51	70	40	306	155
QX 502 HD70 T51	490	235	51	70	10	76	45
QX 504 HD70 T51	490	430	51	70	20	153	80
QX 506 HD70 T51	490	625	51	70	30	230	115
QX 508 HD70 T51	490	820	51	70	40	306	150
QX 510 HD70 T51	490	1015	51	70	50	383	185
QX 602 HD70 T51	580	235	51	70	12	92	55
QX 604 HD70 T51	580	430	51	70	24	184	95
QX 606 HD70 T51	580	625	51	70	36	275	135
QX 608 HD70 T51	580	820	51	70	48	367	180
QX 610 HD70 T51	580	1015	51	70	60	495	220

\* ± 0,5 mm

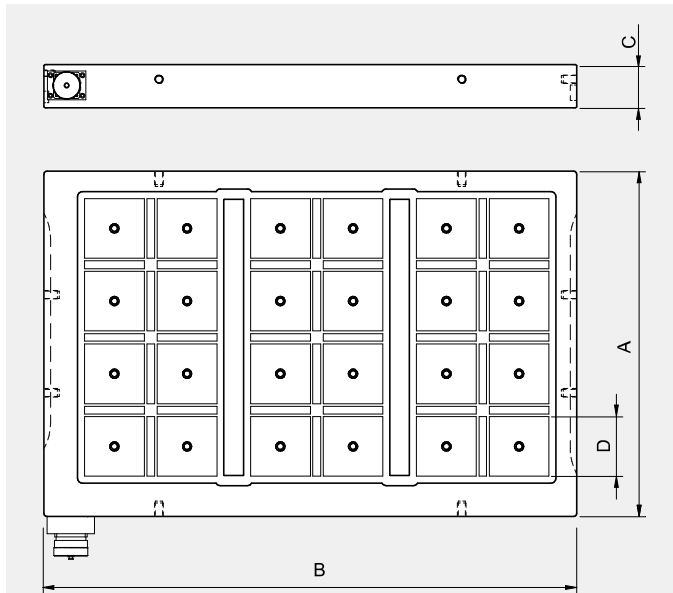
Minimum size of work-piece: 150 x 150 mm

Minimum thickness of work-piece: 18 mm

Suitable control unit Cod. ST200FA (pag. 45)

## QUAD-EXTRA HD70 T68

Permanent-electro magnetic plates High Density Thickness 68 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector FEME 4 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension Cod. PFR70/45 (pag. 42)
- Moving extension Cod. RMP70/45 (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HD70 T68	235	420	68	70	8	61	55
QX 206 HD70 T68	235	610	68	70	12	92	75
QX 208 HD70 T68	235	810	68	70	16	122	100
QX 210 HD70 T68	235	1000	68	70	20	153	120
QX 304 HD70 T68	300	420	68	70	12	92	75
QX 306 HD70 T68	300	610	68	70	18	138	100
QX 308 HD70 T68	300	810	68	70	24	184	135
QX 310 HD70 T68	300	1000	68	70	30	230	170
QX 402 HD70 T68	390	230	68	70	8	61	55
QX 404 HD70 T68	390	420	68	70	16	122	90
QX 406 HD70 T68	390	610	68	70	24	184	130
QX 408 HD70 T68	390	810	68	70	32	245	170
QX 410 HD70 T68	390	1000	68	70	40	306	210
QX 502 HD70 T68	480	230	68	70	10	76	60
QX 504 HD70 T68	480	420	68	70	20	153	110
QX 506 HD70 T68	480	610	68	70	30	230	155
QX 508 HD70 T68	480	810	68	70	40	306	205
QX 510 HD70 T68	480	1000	68	70	50	383	250
QX 602 HD70 T68	580	230	68	70	12	92	75
QX 604 HD70 T68	580	420	68	70	24	184	130
QX 606 HD70 T68	580	610	68	70	36	275	185
QX 608 HD70 T68	580	810	68	70	48	367	245
QX 610 HD70 T68	580	1000	68	70	60	459	300

\* ± 0,5 mm

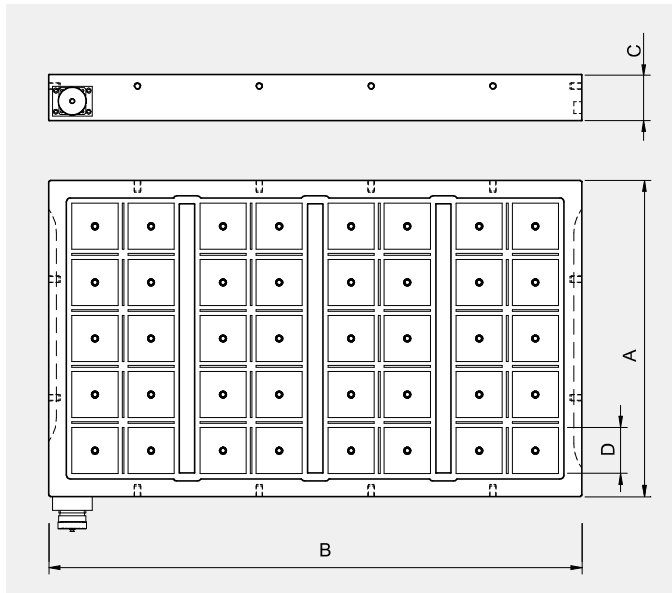
Minimum size of work-piece: 150 x 150 mm

Minimum thickness of work-piece: 18 mm

Suitable control unit Cod. ST200FA (pag. 45)

## QUAD-EXTRA HP70 T70

Permanent-electro magnetic plates High Power Thickness 70 mm for raw pieces or cast iron



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector FEME 4 pin
- n. 2 side slots for easy installation on machine table
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension **Cod. PFR70/45** (pag. 42)
- Moving extension **Cod. RMP70/45** (pag. 42)

Model	Size				Poles	Clamping force	Weight
	A	B	C	D			
	mm	mm	mm	□ mm	n.	kN	Kg
QX 204 HP70 T70	220	420	70	70	8	61	95
QX 206 HP70 T70	220	610	70	70	12	92	120
QX 208 HP70 T70	220	810	70	70	16	122	135
QX 210 HP70 T70	220	1000	70	70	20	153	165
QX 304 HP70 T70	300	420	70	70	12	92	105
QX 306 HP70 T70	300	610	70	70	18	138	150
QX 308 HP70 T70	300	810	70	70	24	187	175
QX 310 HP70 T70	300	1000	70	70	30	230	205
QX 402 HP70 T70	390	220	70	70	8	61	95
QX 404 HP70 T70	390	420	70	70	16	122	135
QX 406 HP70 T70	390	610	70	70	24	184	175
QX 408 HP70 T70	390	810	70	70	32	245	205
QX 410 HP70 T70	390	1000	70	70	40	306	245
QX 502 HP70 T70	480	220	70	70	10	76	105
QX 504 HP70 T70	480	420	70	70	20	153	150
QX 506 HP70 T70	480	610	70	70	30	230	190
QX 508 HP70 T70	480	810	70	70	40	306	245
QX 510 HP70 T70	480	1000	70	70	50	383	290
QX 602 HP70 T70	580	220	70	70	12	92	105
QX 604 HP70 T70	580	420	70	70	24	184	165
QX 606 HP70 T70	580	610	70	70	36	275	220
QX 608 HP70 T70	580	810	70	70	48	307	275
QX 610 HP70 T70	580	1000	70	70	60	459	345

\* ± 0,5 mm

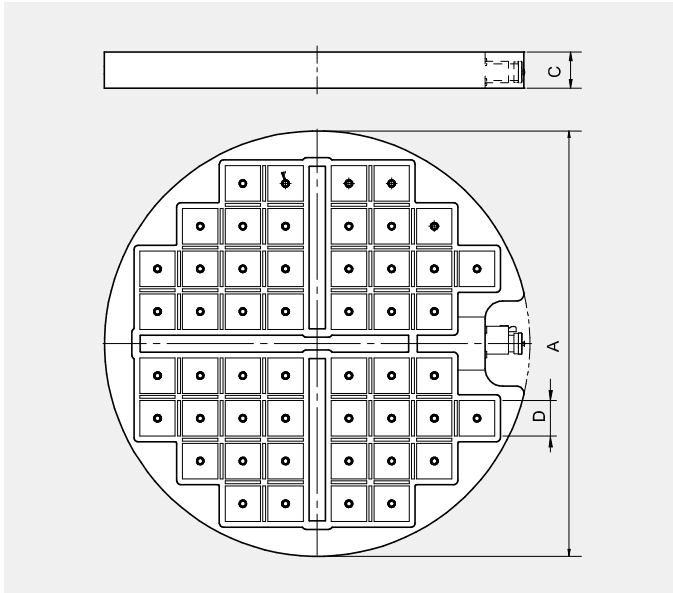
Minimum size of work-piece: 160 x 160 mm

Minimum thickness of work-piece: 18 mm

Suitable control unit **Cod. ST200FA** (pag. 45)

## QUAD-EXTRA ROUND HD50 RQ

Permanent-electro magnetic plates High Density Thickness 51 mm



### Standard supply

- Permanent-electro magnetic chuck with mono-block polar plate and quick waterproof connector ERGON 5 pin
- Drawing of machinable areas to drill through holes for installation based on the size of the magnetic plate
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Fix extension PFR50/32 (pag. 42)
- Moving extension Cod. PMQ50/32 (pag. 42)

Model	Size			Poles	Clamping Force	Weight
	A	C *	D			
	Ø mm	mm	□ mm	n.	kN	Kg
RQ 400 HD50	410	51	50	16	63	55
RQ 500 HD50	500	51	50	32	125	80
RQ 600 HD50	600	51	50	48	188	115
RQ 700 HD50	700	51	50	68	268	150
RQ 800 HD50	800	51	50	80	314	200
RQ 900 HD50	900	51	50	96	376	250
RQ 1000 HD50	1000	51	50	112	439	280

\* ± 0,5 mm

Minimum size of work-piece: 110 x 110 mm

Minimum thickness of work-piece: 12 mm

Suitable control unit Cod. ST200FA (pag. 45)