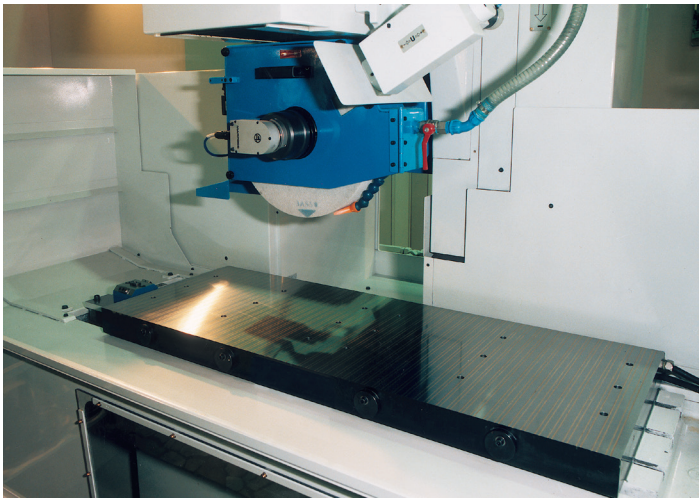


# GRINDTec

## Grinding Series



### MONOBLOC STRUCTURE

All permanent-electro magnetic plates GRINDTEC grinding series have a mono-block frame of reduced thickness in order to lighten the load on the machine to improve performance and reduce wear.

The total rigidity of the system and the absence of deformations over time are the main characteristics associated with magnetic configurations of different polar pitch for different applications and machines' features.

Throughout the processing phase the power supply is excluded without any electric current circulating inside it.

The resulting advantages are immediate:

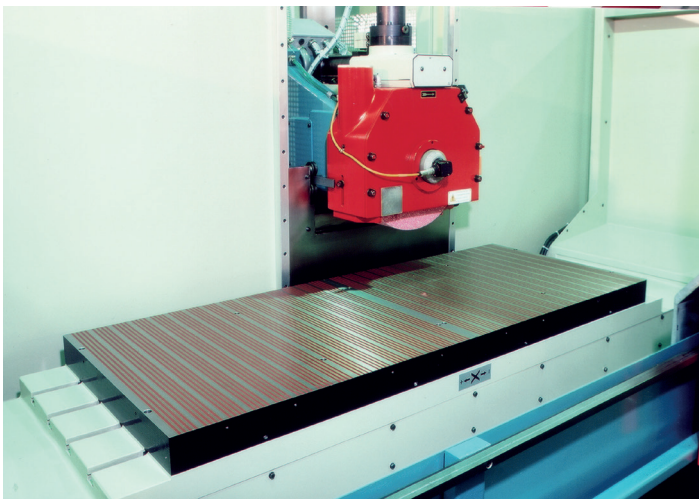
- highest level of safety
- energy saving
- no overheating
- no deformation

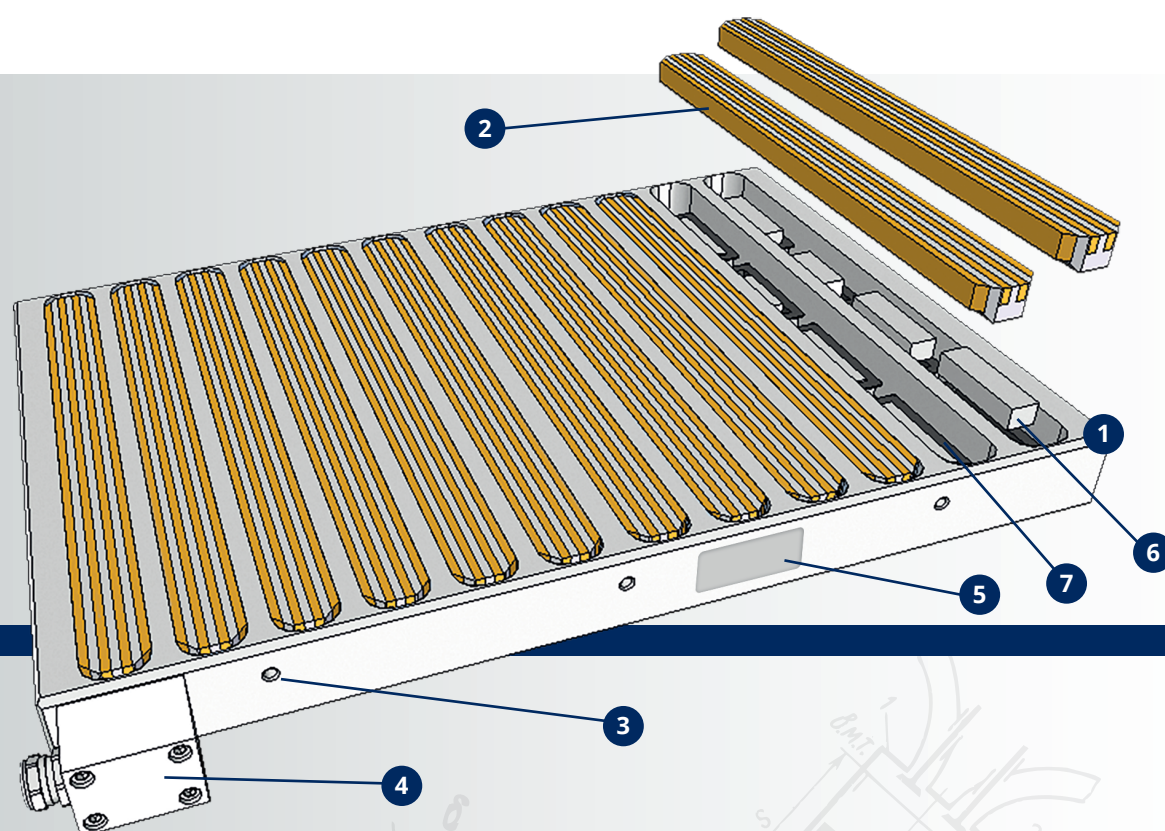
### UNIFORM WORK-HOLDING

A series of through holes based on the size and position of T-slots allow easy installation. Multiple modules can be placed side by side to form magnetic tables of various sizes.

### EXCLUSIVE NUFLUX SYSTEM

The control units are equipped as standard with the patented demagnetization system, "NUFLUX" which allows to completely eliminate any possible magnetic residue from the surface of the piece even of alloyed material or after heat treatment.

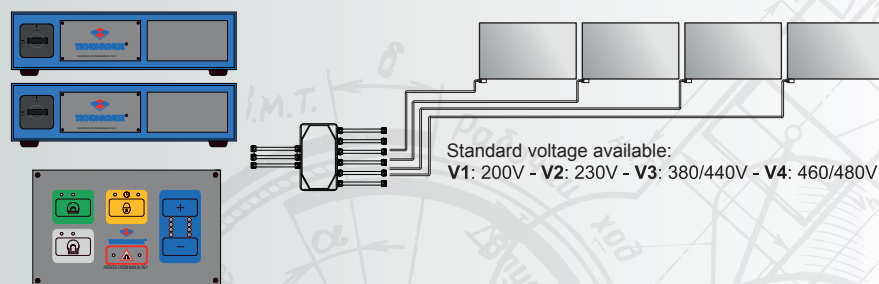




- 1 Monolithic steel frame**  
Excellent stability to ensure perfect flatness. Work surface that can be rectified over time. Through holes for installation according to the position of the T-slots of the machine.
- 2 Lamellar poles**  
Highly accurate surface steel/brass (TFP1, TPF) or steel/epoxy resin TFP0 for precise magnetic flux transmission.
- 3 Threaded holes M10**  
To use reference mechanical stops.
- 4 Junction box**  
Compact and watertight.
- 5 Performance plate with technical data**  
Data on voltage, current absorption, serial number.
- 6 Reversible permanent magnet AlNiCo**
- 7 Electric coils**  
For polar inversion of the permanent magnet AlNiCo and for NUFLUX function.

# GRINDTec

## Typical installation



The permanent-electro magnetic circuit allows you to activate and deactivate the magnetic clamping force in a fraction of second with the simple press of a button or from the PLC of the machine.

### MODULAR CONTROL UNIT

The ST200 control units can be serialized for the activation of multiple plates.

#### Main technical features:

- NUFLUX system for perfect demagnetization
- UCS Saturation Control Unit
- Safety connector for machine interface
- TC remote control for MAG/DEMAG cycles
- Power adjustment on 8 levels
- Hard wired watertight cable connection

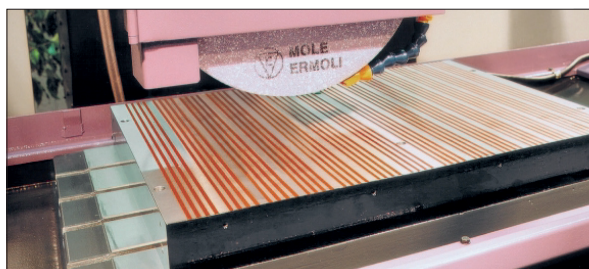




**GRINDTEC GT circular polarity.** *The solution for medium/large pieces.*

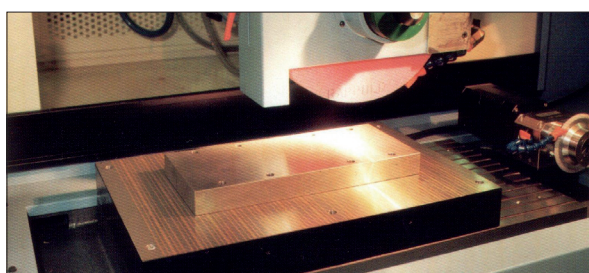
The innovative TEC monolithic construction technique makes the "Full Metal" magnetic working surface totally independent from the lower part of the frame housing the permanent reversible magnets AX, the electric coils and all electrical connections. It behaves as a mechanical shield.

GrindTec GT is therefore impenetrable from coolants and processing residues ensuring high reliability over time without specific maintenance.



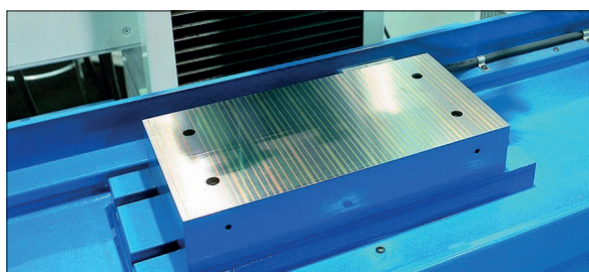
**TFP0 transversal polarity.** *The most convenient solution.*

Permanent-electro plates of the new TFP0 series are characterized by a steel/resin surface. They are a "universal" plate since they adapt perfectly to the needs of most applications. They guarantee the perfect clamping of various types of pieces with maximum versatility.



**TFP1 transversal polarity.** *The solution "Full Metal" steel and brass.*

The particular arrangement of the poles creates a dense mesh of magnetic seams, with a reduced section of short-circuiting flow (5 mm). The dense polar pitch, transversal to the working axis, allows you to securely clamp even small pieces of limited thickness. Its particular construction characteristics guarantee high wear resistance.



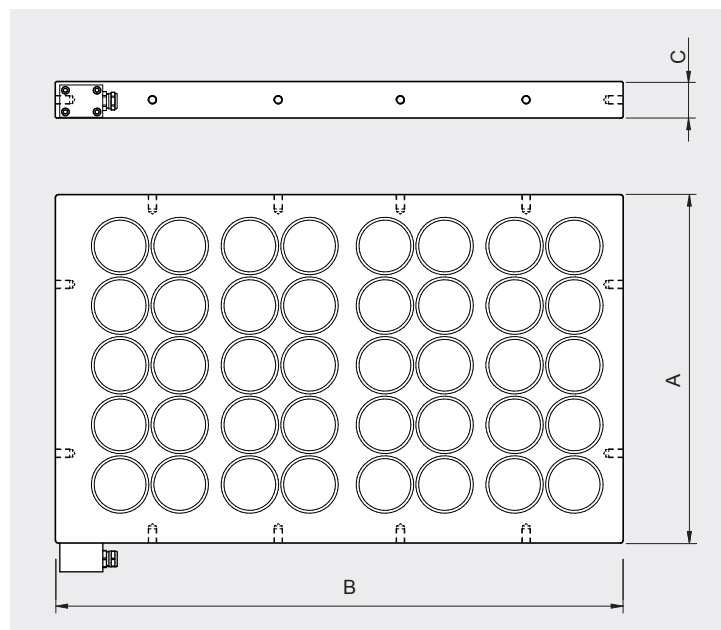
**TPF ultra fine transversal polarity.** *The ultra-fine "Full Metal" solution steel and brass.*

Ultra fine polar pitch suitable for pieces of limited size and very small thicknesses.

A series of multiple close-up "magnetic seams" with short-circuit section of the magnetic flux within 2 mm thickness.

## GRINDTEC GT HD

Permanent-electro magnetic plates with round polarity for grinding medium/big size pieces

**Standard supply**

- Permanent-electro magnetic plates mono-block frame
- Nuflux circuit
- Hard wired water tight junction box
- Discharge cable PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

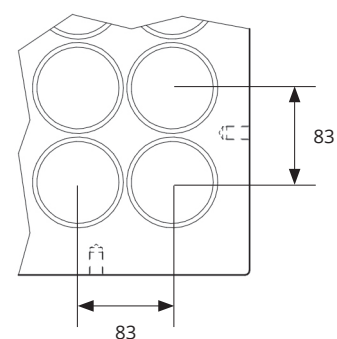
**Recommended accessories**

- Set of through holes according to the machine T-slots

Model	Size			Poles	Clamping force	Weight
	A	B	C *			
	mm	mm	mm	n.	kN	Kg
GT 406 HD	405	600	51	24	35	95
GT 408 HD	405	790	51	32	47	120
GT 410 HD	405	975	51	40	59	150
GT 506 HD	485	600	51	30	44	110
GT 508 HD	485	790	51	40	59	145
GT 510 HD	485	975	51	50	74	180
GT 606 HD	570	600	51	36	53	130
GT 608 HD	570	790	51	48	71	170
GT 610 HD	570	975	51	60	88	210

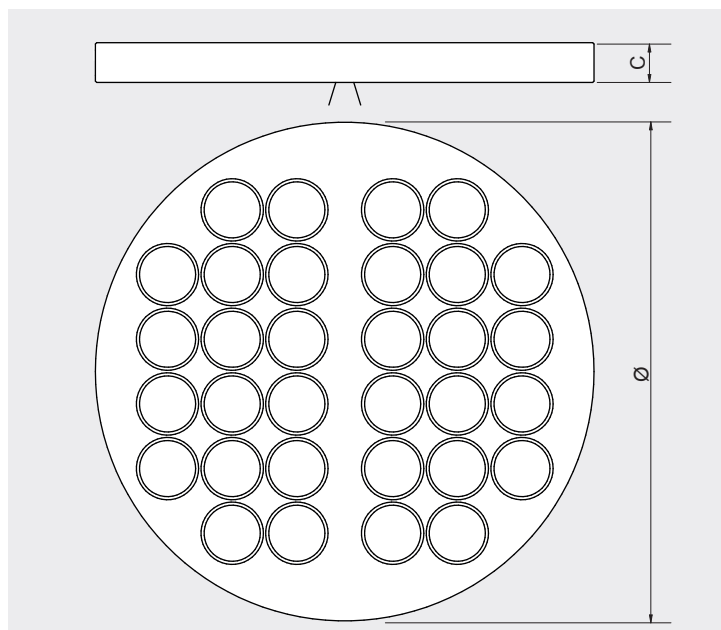
\*  $\pm 0,5$  mm

Suitable control unit **Cod. ST200RB** (pag. 45)



## GRINDTEC GT R

Permanent-electro magnetic plates with round polarity for grinding medium/big size pieces



### Standard supply

- Permanent-electro magnetic plates mono-block frame
- Nuflux circuit
- Cable outlet in the center-bottom side PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

### Recommended accessories

- Set of through holes according to the machine T-slots

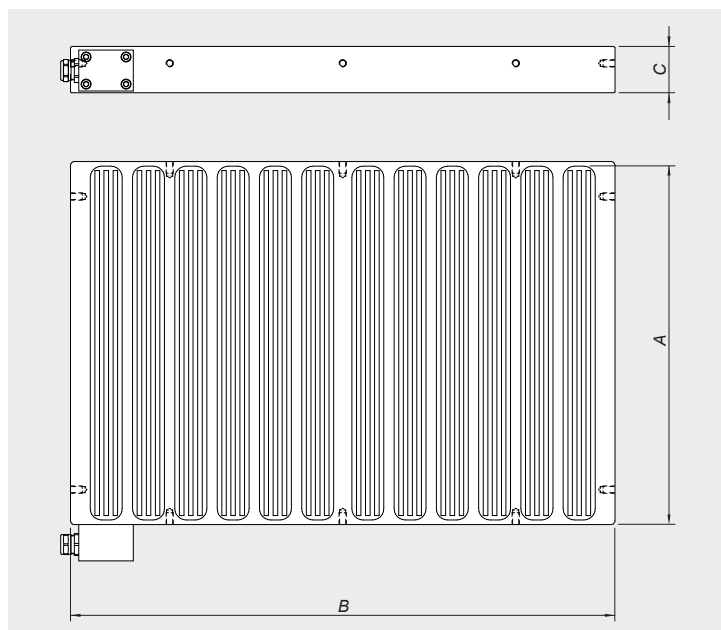
Model	Size		Poles	Clamping force	Weight
	Ø	C *			
	mm	mm	n.	kN	Kg
GT/R 0400	400	51	12	18	60
GT/R 0500	500	51	16	24	90
GT/R 0600	640	51	32	47	130
GT/R 0700	740	51	36	53	180
GT/R 0800	800	51	52	76	230
GT/R 0900	900	51	64	94	300
GT/R 1000	1020	51	70	103	370

\* ± 0,5 mm

Suitable control unit **Cod. ST200RB** (pag. 45)

## GRINDTEC TFP0

Permanent-electro magnetic plates with steel/resin surface for grinding machines

**Standard supply**

- Permanent-electro magnetic plates mono-block frame
- Max magnetic force up to 75 N/cm<sup>2</sup>
- Nuflux circuit
- Hard wired water tight junction box
- Discharge cable PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

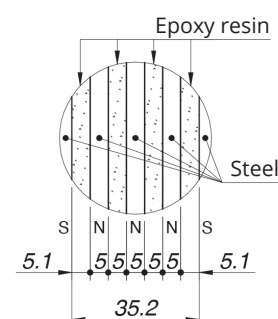
**Recommended accessories**

- Set of through holes according to the machine T-slots

Model	Size			Weight
	A	B	C *	
	mm	mm	mm	Kg
TFP0 305	300	500	51	50
TFP0 306	300	600	51	60
TFP0 307	300	700	51	70
TFP0 309	300	900	51	90
TFP0 310	300	1000	51	115
TFP0 312	300	1200	51	125
TFP0 405	400	500	51	65
TFP0 406	400	600	51	80
TFP0 407	400	700	51	120
TFP0 408	400	800	51	110
TFP0 410	400	1000	51	130
TFP0 505	500	500	51	110
TFP0 506	500	600	51	130
TFP0 507	500	700	51	150
TFP0 508	500	800	51	175
TFP0 510	500	1000	51	205
TFP0 605	600	500	51	130
TFP0 606	600	600	51	150
TFP0 607	600	700	51	170
TFP0 608	600	800	51	205
TFP0 610	600	1000	51	245

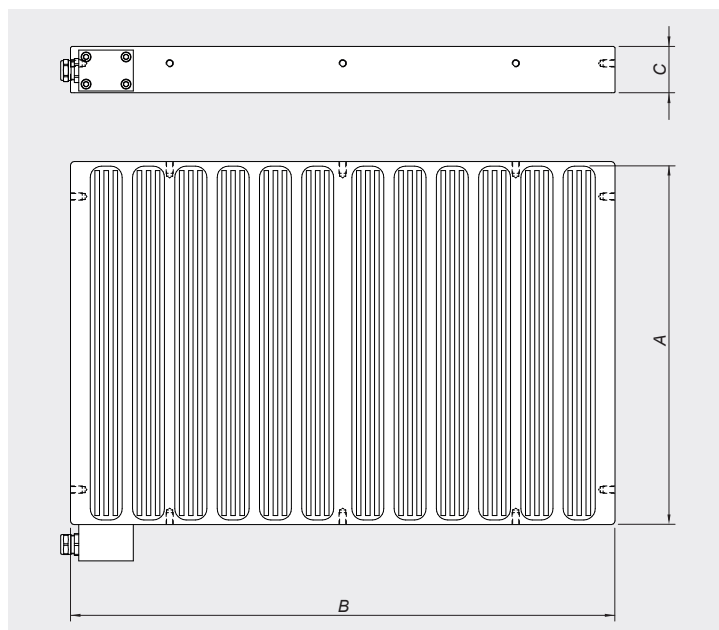
\* ± 0,5 mm

Suitable control unit **Cod. ST200RB** (pag. 45)



## GRINDTEC TFP1

Permanent-electro magnetic plates with steel/brass surface for grinding machines



### Standard supply

- Permanent-electro magnetic plates mono-block frame
- Max magnetic force up to 75 N/cm<sup>2</sup>
- Nuflux circuit
- Hard wired water tight junction box
- Discharge cable PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

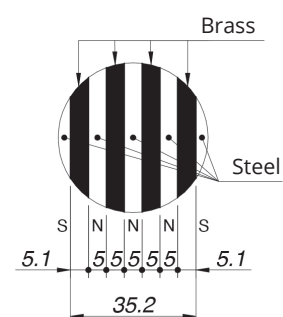
### Recommended accessories

- Set of through holes according to the machine T-slots

Model	Size			Weight
	A	B	C *	
	mm	mm	mm	Kg
TFP1 305	300	500	51	80
TFP1 306	300	600	51	90
TFP1 307	300	700	51	100
TFP1 309	300	900	51	120
TFP1 310	300	1000	51	130
TFP1 312	300	1200	51	150
TFP1 405	400	500	51	100
TFP1 406	400	600	51	110
TFP1 407	400	700	51	120
TFP1 408	400	800	51	140
TFP1 410	400	1000	51	175
TFP1 505	500	500	51	110
TFP1 506	500	600	51	130
TFP1 507	500	700	51	150
TFP1 508	500	800	51	175
TFP1 510	500	1000	51	205
TFP1 605	600	500	51	130
TFP1 606	600	600	51	150
TFP1 607	600	700	51	170
TFP1 608	600	800	51	205
TFP1 610	600	1000	51	245

\* ± 0,5 mm

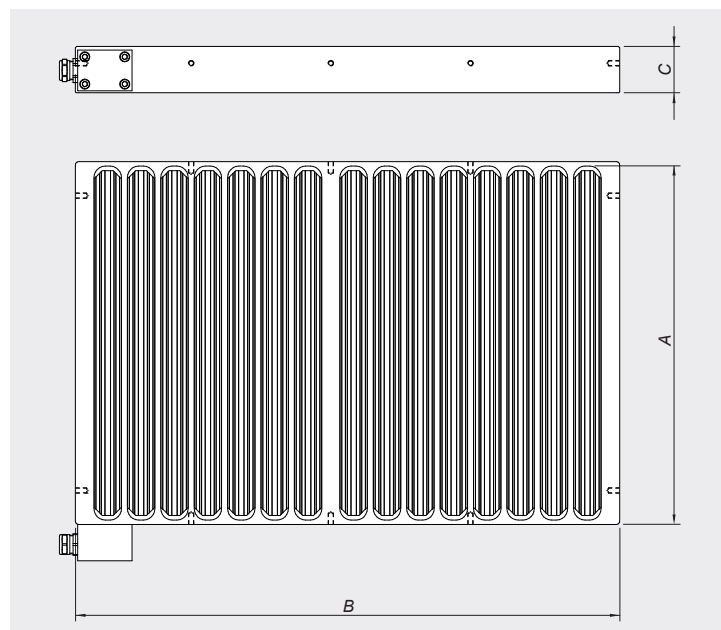
Suitable control unit Cod. ST200RB (pag. 45)





## GRINDTEC TPF

Permanent-electro magnetic plates "Full Metal Ultra Fine" with steel/brass surface for grinding machines  
Minimum thickness pieces 2 mm

**Standard supply**

- Permanent-electro magnetic plates mono-block frame
- Max magnetic force up to 75 N/cm<sup>2</sup>
- Nuflux circuit
- Hard wired water tight junction box
- Discharge cable PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

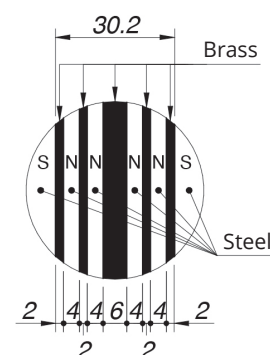
**Recommended accessories**

- Set of through holes according to the machine T-slots

Model	Size			Weight
	A	B	C *	
	mm	mm	mm	Kg
TPF 1545	150	450	51	50
TPF 2040	200	400	51	50
TPF 2045	200	450	51	60
TPF 2050	200	500	51	60
TPF 2060	200	600	51	70
TPF 2075	200	750	51	80
TPF 2550	250	500	51	70
TPF 2560	250	600	51	80
TPF 3050	300	500	51	80
TPF 3060	300	600	51	90
TPF 3080	300	800	51	110
TPF 3010	300	1000	51	130
TPF 4060	400	600	51	110
TPF 4080	400	800	51	140
TPF 4010	400	1000	51	170

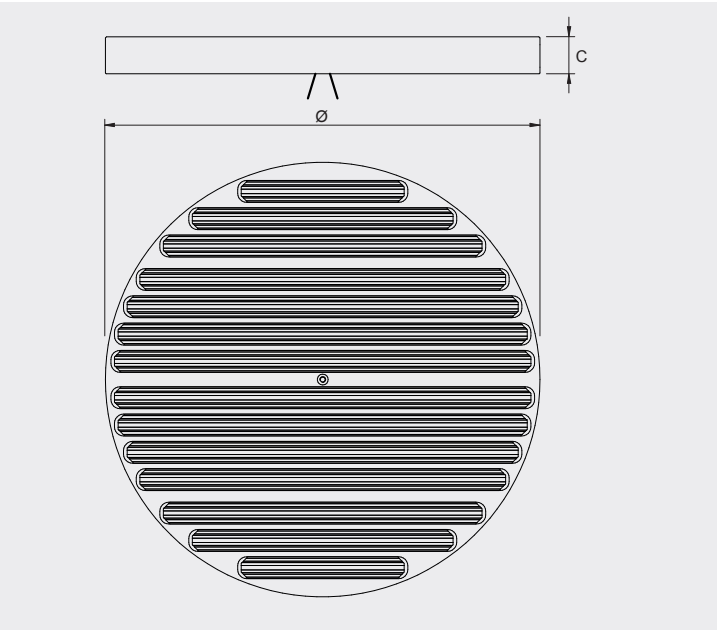
\* ± 0,5 mm

Suitable control unit **Cod. ST200RB** (pag. 45)



GRINDTEC TPF

Permanent-electro magnetic plates “Full Metal Ultra Fine” with steel/brass surface for grinding machines  
Minimum thickness pieces 2 mm



Standard supply

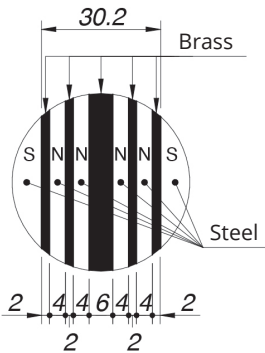
- Permanent-electro magnetic plates mono-block frame
- Max magnetic force up to 75 N/cm2
- Nuflux circuit
- Hard wired water tight junction box
- Discharge cable PVC fire-retardant (6m)
- CE declaration of conformity
- Instruction manual on digital support

Recommended accessories

- Set of through holes according to the machine T-slots

Model	Size	Weight
	Ø	C *
	mm	mm
TPF /C 0300	300	51
TPF /C 0400	400	51
TPF /C 0500	500	51
TPF /C 0600	600	51
TPF /C 0750	750	51
TPF /C 1000	1000	51

\* ± 0,5 mm  
Suitable control unit Cod. ST200RB (pag. 45)





Technical characteristics and dimensions are not obliged.  
MAG AUTOBLOK TECNOMAGNETE Spa may give in every time some modifications



**MAG-AUTOBLOK TECNOMAGNETE SpA**  
**Headquarter**

Via Nerviano 31 - 20045 Lainate (MI) - ITALY  
Tel: +39 02 937591  
info@tecnomagnete.com  
www.mag-tecnomagnete.com

**TECNOMAGNETE GmbH**  
*Germany - Austria*

Ohmstrasse 4 - 63225 Langen - GERMANY  
Tel.: +49 6103 750730 - Fax: +49 6103 7507311  
Email kontakt@tecnomagnete.com

**TECNOMAGNETE Inc.**  
*U.S.A. - Canada - Mexico*

6655 Allar Drive - Sterling Hts, MI 48312 - USA  
Tel.: +1 586 276 6001 - Fax: +1 586 276 6003  
Email infousa@tecnomagnete.com

**TECNOMAGNETE SARL**  
*France*

Batiment C - 01200 VALSERHONNE - FRANCE  
Tel.: +33 (0)4 50 56 06 00 - Fax: +33 (0)4 50 56 06 10  
Email contact@tecnomagnete.com