



FMax 800



FMax 1500



FMax 3000



FMax 4000/6000



Portable Multifunction facing lathe/milling machine – Radial Drill

## Facing lathe/milling machine Fmax

For general flange facing, milling, turning, boring, drilling (electronic dividing head for circular series ) operations, creating of circular pockets, tapping, grooving, plunging, preparation of chamfers, welding, oxygen cutting.



Portable Multifunction facing lathe/milling machine – Radial Drill

## Facing lathe/milling machine Fmax

### PORTABLE CHIP REMOVAL MACHINE TOOL

Designed to carry out multiple facing operations, on flat surfaces or on more levels, on big bodies of axial symmetry, having cylindrical cavities with big diameters.

**CREATED TO CARRY OUT “ON-SITE” MACHINING;** it makes up for the impossibility and/or the economic as well as the logistic difficulty, of moving these big bodies and the components connected to them from their location.

It is suitable, for how it has been created to carry out operations such as facing, internal and external bevelling, and with the proper tools, the creation of concentric and/or spiral cylindrical grooves, as well as the preparation of edges and chamfers for welding.

**It can also be used as a radial drill,** essential for precision drilling of flanges, in various diameter ranges.

The entire machining and movement system **is handled electronically through** the interactions with various transducers, that allow for a constant monitoring and setting of the cutting and feeding parameters.

**Horizontal as well as vertical assembly,** machining in every position and for any type of surface at various and multiple levels of finishing. The entire assembly/support system is modular; it can be composed according to the various diametrical needs.

### Carries out operations of:

- GENERAL FLANGE FACING
- MILLING
- TURNING
- BORING
- DRILLING (ELECTRONIC DIVIDING HEAD FOR CIRCULAR SERIES ) OPERATIONS
- CREATING OF CIRCULAR POCKETS
- TAPPING
- GROOVING
- PLUNGING
- PREPARATION OF CHAMFERS
- WELDING
- OXYGEN CUTTING



## FMax Control Panel

Designed to guarantee the maximum reliability and ergonomics, the Fmax Controller combines design and handiness in one solution. The control panel is adjustable in height and inclination according to the operator's needs, granting the maximum comfort for maneuverability and legibility.

There are 4 areas of control, one for each movement of the machine:

- [S] – milling rotation.
- [R] – machine rotation.
- [X] – radial feed.
- [Z] – axial feed.

For each movement, it is possible to set the direction and speed independently; All the speeds, those of translation [mm/min] as well as of rotation [rpm], are continuously monitored in an independent way. The translations are manageable through the "Fast Feed Switch", and for each one, there is a **STATUS** display for the diagnostics of the functioning status. Each control area, is supplied with a **S.T.P** led bar, thanks to which it is possible to verify the current working load. When the **S.T.P** led bar flashes, it warns the operator that the machine is overloaded, giving the possibility to modify the cutting parameters properly.

In the version with **the electronic divider/positioner** for circular series of holes, the controller is equipped with an additional alphanumeric **LCD display**, 3 more switches and a signal led tower. By indicating the number of holes and the diameter on which they need to be equally distributed, this optional accessory, positions the machine on the exact coordinates on which each hole will have to be placed; The alternate switching of the 3 colors, along with the acoustic signals, continuously guides and updates the operators, who are far away from the controller, on the working status in progress.



# F Max 800

Portable Multifunction facing lathe/milling machine – Radial Drill



## General Technical Characteristics

Single phase power		220 V - 50 Hz
<b>Diameter of facing</b>	mm	≅ 300 - ≅ 800
Centring axis diameter	mm	50
Tool holder arm	mm	600
Radial stroke	mm	180
Axial stroke		40
Rotation motor of the arm		DC/ CONFORM TO EC NORMS
Milling Tool Rotation Motor		DC/ CONFORM TO EC NORMS
Axial movement system		Manual
Radial movement system		DC / CONFORM TO EC NORMS
Max Torque on Rot. of Arm		4500 Nm (5 rpm)
Max Torque on Rot. of Milling Tool Ax		70 Nm (1500 rpm)
Max rotation speed	rpm	5

- **FACING LATHE /MILLING MACHINE**
- **3 AXIS**
- **MOVEMENT AROUND THE CENTRING AND SUPPORT AXIS**
- **ELECTRONIC CONTROL PANEL WITH DIAGNOSTIC DISPLAY**

### Machining Diameter

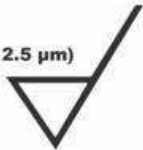
With standard equipment  
**From ø 300 mm  
 to over ø 800 mm**

### Prearrangement for

- **TURNING**
- **DRILLING**

### Surface Roughness

(3.2 / 12.5 µm)



### Certified Test

#### CERTIFIED TEST ON STEEL C45

Diameter	mm	Ø 400
Cutting Depth	mm	1 mm
Feed Speed	mm/min	400





## MAXIMUM HANDINESS

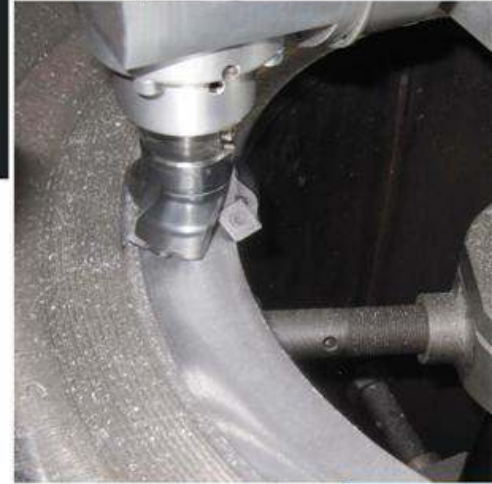


Surface facing finish on a flange coupling.



Countering job through candle milling machine

Creation of gasket housing ( MILLING MACHINE with inserts of 60mm)



MANAGEABILITY,  
MINIMUM ENCUMBRANCES.

# F Max 1500

Portable Multifunction facing lathe/milling machine - Radial Drill

## General Technical Characteristics

Single phase power		220 V - 50 Hz
<b>Diameter of facing</b>	mm	≅ 350 - ≅ 1500
Centring axis diameter	mm	100
Tool holder arm	mm	800
Radial stroke	mm	200
Axial stroke		70
Rotation motor of the arm		DC/ CONFORM TO EC NORMS
Milling Tool Rotation Motor		AC/ CONFORM TO EC NORMS
Axial movement system		DC/ CONFORM TO EC NORMS
Radial movement system		DC/ CONFORM TO EC NORMS
Max Torque on Rot. of Arm		15000 Nm (0.1 rpm)
Max Torque on Rot. of Milling Tool Ax		36 Nm (1000 rpm)
Max rotation speed	rpm	4

- FACING LATHE /MILLING MACHINE
- 3 AXIS.
- MOVEMENT AROUND THE CENTRING AND SUPPORT AXIS.
- ELECTRONIC CONTROL PANEL WITH DIAGNOSTIC DISPLAY.

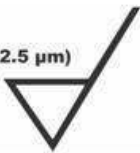


### Machining Diameter

With standard equipment  
**From ø 350 mm  
 to over ø 1500 mm**

### Surface Roughness

(3.2 / 12.5 µm)



### Certified Test

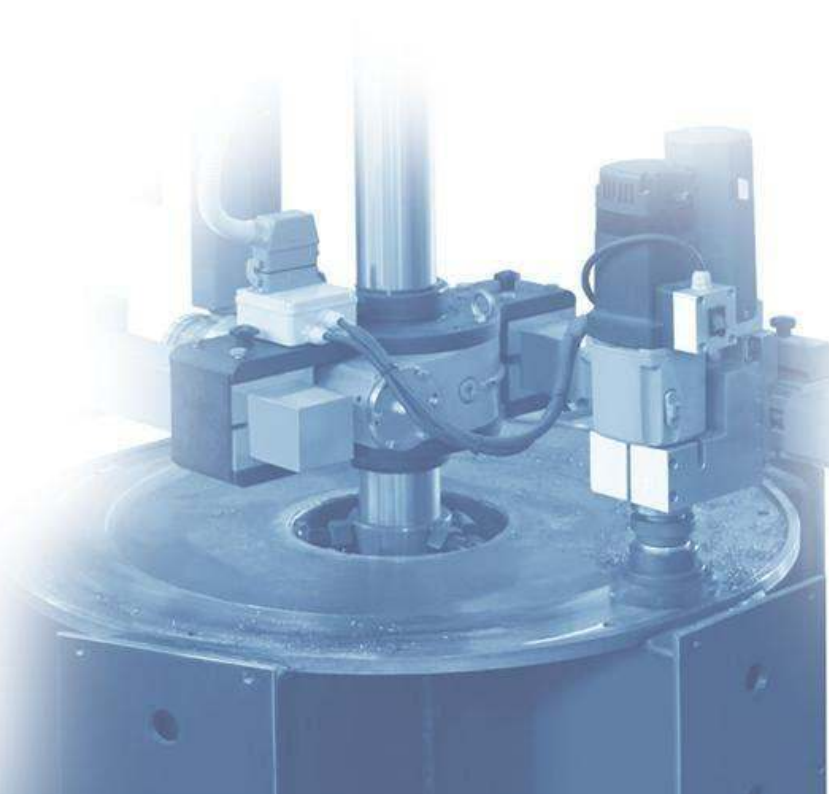


#### CERTIFIED TEST ON STEEL C45

Diameter	mm	1500
Cutting Depth	mm	1 mm
Feed Speed	mm/min	300

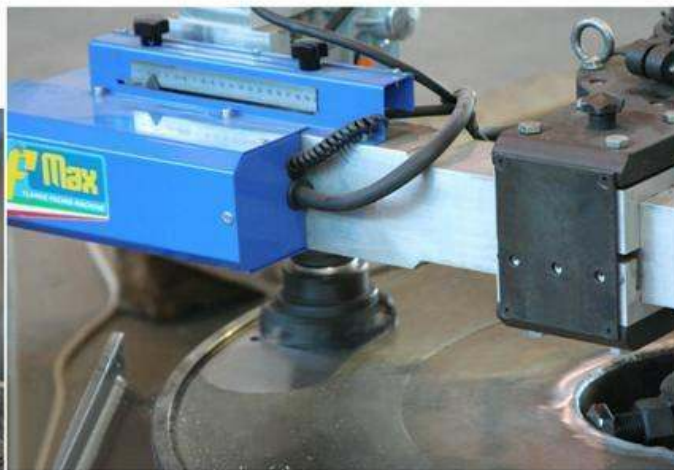
### Prearrangement for

- CALIBRATED DRILLING.
- CREATION OF "CIRCULAR POCKETS".
- CIRCULAR MIG WELDING.
- CIRCULAR OXYGEN CUTTING.





PROFESSIONAL



GUARANTEES THE BEST  
CHIP REMOVAL IN THE FASTEST WAY.



# F Max 3000

Portable Multifunction facing lathe/milling machine - Radial Drill



## General Technical Characteristics

Single phase power		220 V - 50 HZ
Diameter of facing	mm	≅ 800 - ≅ 3000
Mod. centring fasten & supp.	mm	800 - 3000
Tool holder arm	mm	Max 1500
Radial stroke	mm	250
Axial stroke	mm	80
Rotation motor of the arm		CA / Trifasico NORMA CE
Milling Tool Rotation Motor		CA / Trifasico NORMA CE
Axial movement system		CC Norma CE
Radial movement system		CC Norma CE
Max Torque on Rot. of Arm		3700 Nm (5.8 rpm) - 37000 Nm (0.58 rpm)
Max Torque on Rot. of Milling Tool Ax		30 Nm (700 rpm)
Max rotation speed	rpm	3.1

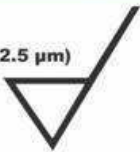
- FACING LATHE /MILLING MACHINE
- 3 AXIS.
- MOVEMENTS ON A ROTATION SLEWING BEARING
- DOVETAIL GUIDES IN GROUND STEEL WITH BRONZE INLAYS
- ELECTRONIC CONTROL PANEL WITH DIAGNOSTIC DISPLAY OF LATEST GENERATION WITH HARDWARE FOR ELECTRONIC INDEXING HEAD.

## Machining Diameter

With standard equipment  
**From ø 800 mm**  
**to over ø 3000 mm**

## Surface Roughness

(3.2 / 12.5 µm)



## Certified Test

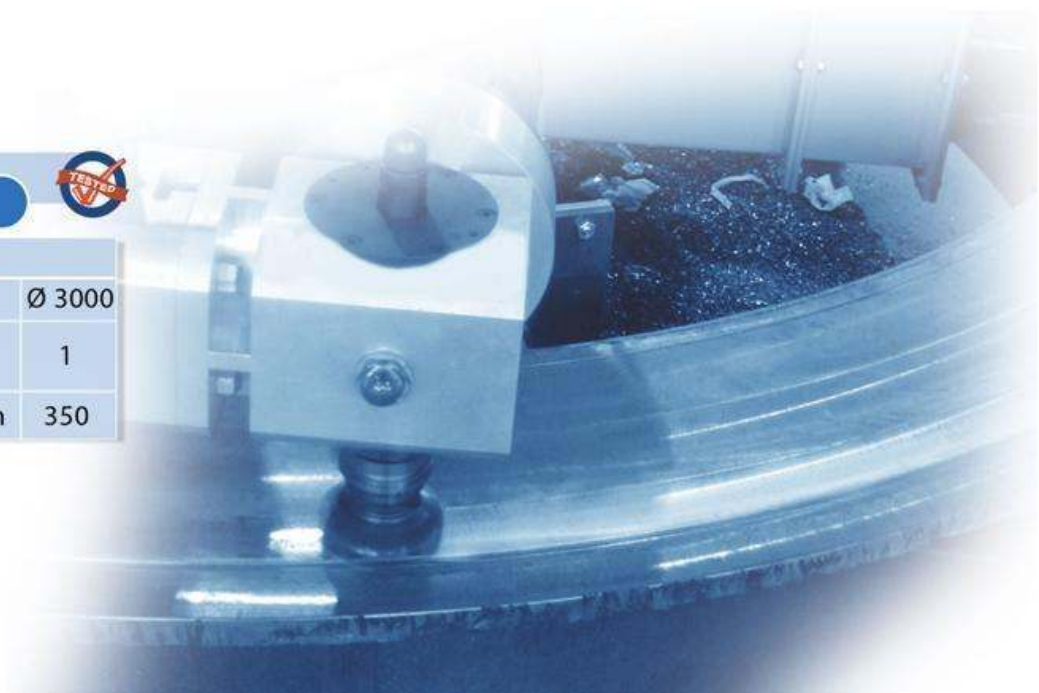


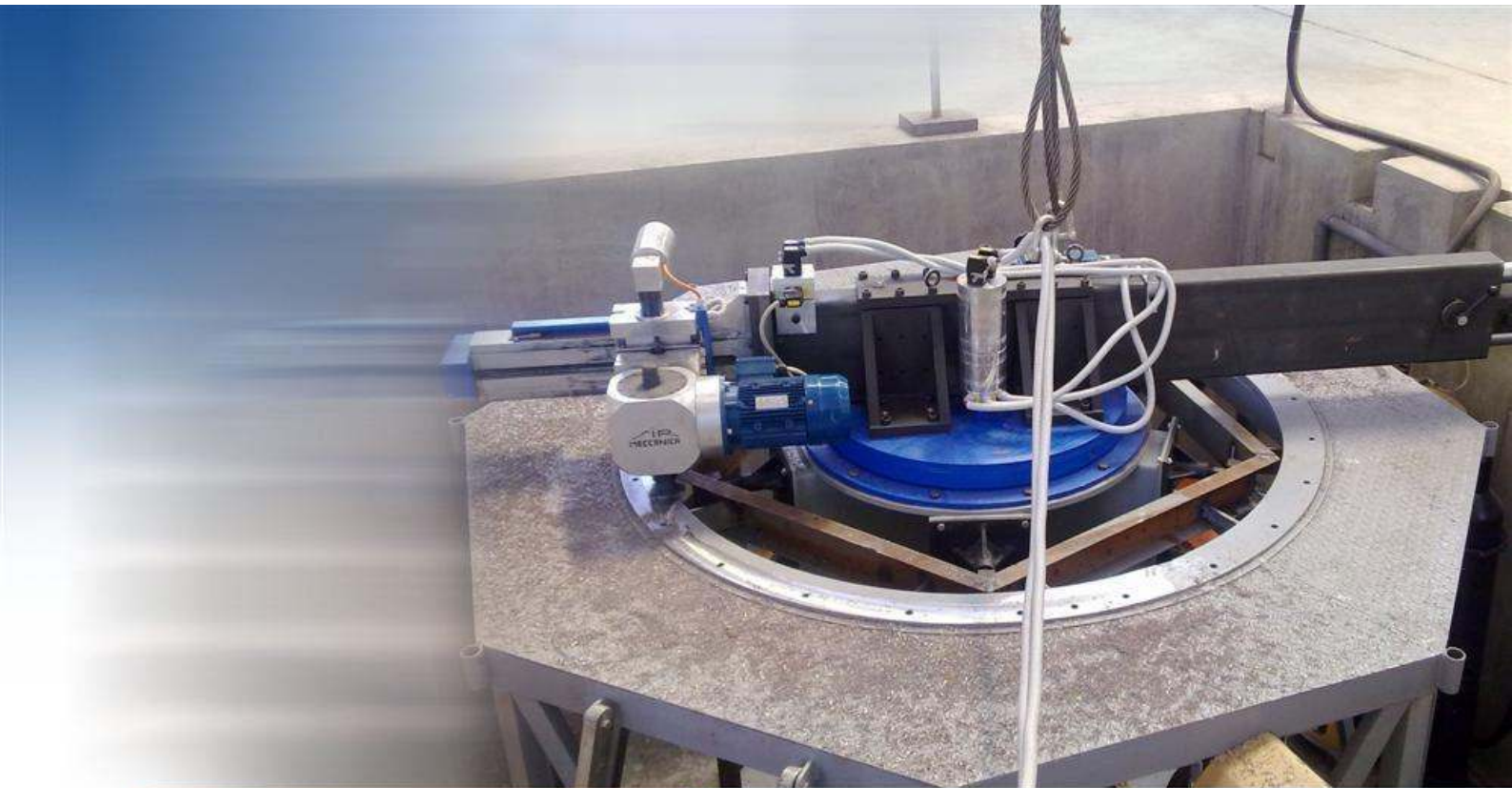
### CERTIFIED TEST ON STEEL C45

Diameter	mm	ø 3000
Cutting Depth	mm	1
Feed Speed	mm/min	350

## Prearrangement for

- TURNING OPERATIONS
- CALIBRATED DRILLING ON CIRCULAR SERIES
- TAPPING ON CIRCULAR SERIES
- CREATION OF "CIRCULAR POCKETS"
- CIRCULAR MIG WELDING
- CIRCULAR OXYGEN CUTTING





UNBEATABLE



Tapping Operation M36X3



NO FEAR  
FOR HARD JOBS

# F Max 4000/6000

Portable Multifunction facing lathe/milling machine – Radial Drill



## General Technical Characteristics

		FMAX 4000	FMAX 6000
Single phase power	mm	220 V - 50 HZ	220 V - 50 HZ
<b>Diameter of facing</b>		≅ 1500 - ≅ 4000	≅ 1500 - ≅ 6000
Mod. centring fasten & supp.	mm	1400 - 4000	1400 - 6000
Tool holder arm	mm	Max 2000	Max 3000
Radial stroke	mm	380	380
Axial stroke	mm	100	100
Rotation motor of the arm		AC/THREE-PHASE CONFORM TO EC NORMS	AC/THREE-PHASE CONFORM TO EC NORMS
Milling Tool Rotation Motor		AC/THREE-PHASE CONFORM TO EC NORMS	AC/THREE-PHASE CONFORM TO EC NORMS
Axial movement system		DC/ CONFORM TO EC NORMS	DC/ CONFORM TO EC NORMS
Radial movement system		DC/ CONFORM TO EC NORMS	DC/ CONFORM TO EC NORMS
Max Torque on Rot. of Arm		9000 Nm (2.4 rpm)	9000 Nm (2.4 rpm)
Max Torque on Rot. of Milling Tool Ax		30 Nm (700 rpm)	30 Nm (700 rpm)
Max rotation speed	rpm	2.4	2.4

- **FACING LATHE /MILLING MACHINE**
- **3 AXIS.**
- **MOVEMENTS ON A ROTATION SLEWING BEARING**
- **DOVETAIL GUIDES IN GROUND STEEL WITH BRONZE INLAYS**
- **ELECTRONIC CONTROL PANEL WITH DIAGNOSTIC DISPLAY OF LATEST GENERATION WITH HARDWARE FOR ELECTRONIC INDEXING HEAD.**

## Machining Diameter

### FMAX 4000

### FMAX 6000

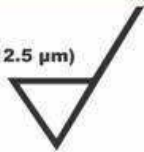
With standard equipment

from  $\varnothing$  1500 mm  
to over  $\varnothing$  4000 mm

from  $\varnothing$  1500 mm  
to over  $\varnothing$  6000 mm

## Surface Roughness

(3.2 / 12.5  $\mu$ m)



## Certified Test



### CERTIFIED TEST ON STEEL C45

	mm	$\varnothing$ 3000	$\varnothing$ 6000
Diameter	mm	$\varnothing$ 3000	$\varnothing$ 6000
Cutting Depth	mm	1	1
Feed Speed	mm/min	350	350

FMAX 4000 FMAX 6000

## Prearrangement for

- **TURNING OPERATIONS**
- **CALIBRATED DRILLING ON CIRCULAR SERIES**
- **TAPPING ON CIRCULAR SERIES**
- **CREATION OF "CIRCULAR POCKETS"**
- **CIRCULAR MIG WELDING**
- **CIRCULAR OXYGEN CUTTING**



## EXTRAORDINARILY PRECISE



Creation of "CIRCULAR POCKETS"

## RESPECT OF THE TOLERANCES