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.

fMax 800

Portable Multifunction facing lathe/milling machine – Radial Drill

General Technical Characteristics

Single phase power		220 V - 50 Hz
Diameter of facing	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**

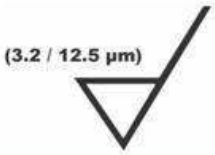
Machining Diameter

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

Prearrangement for

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

Surface Roughness



Certified Test

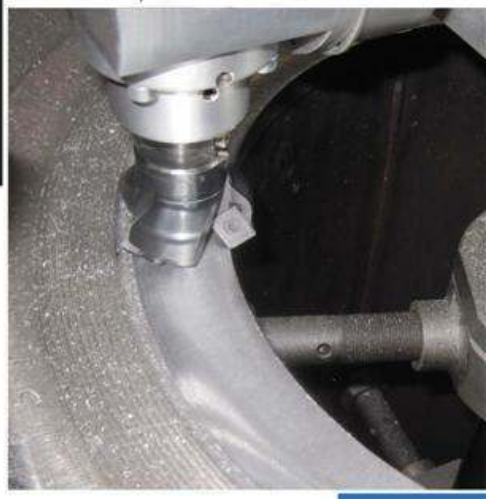
CERTIFIED TEST ON STEEL C45		
Diameter	mm	Ø 400
Cutting Depth	mm	1 mm
Feed Speed	mm/min	400

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.

fMax 1500

Portable Multifunction facing lathe/milling machine – Radial Drill

General Technical Characteristics

Single phase power		**220 V - 50 Hz**
Diameter of facing	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.**

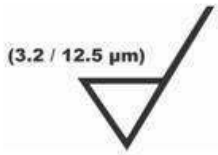
Machining Diameter

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

Prearrangement for

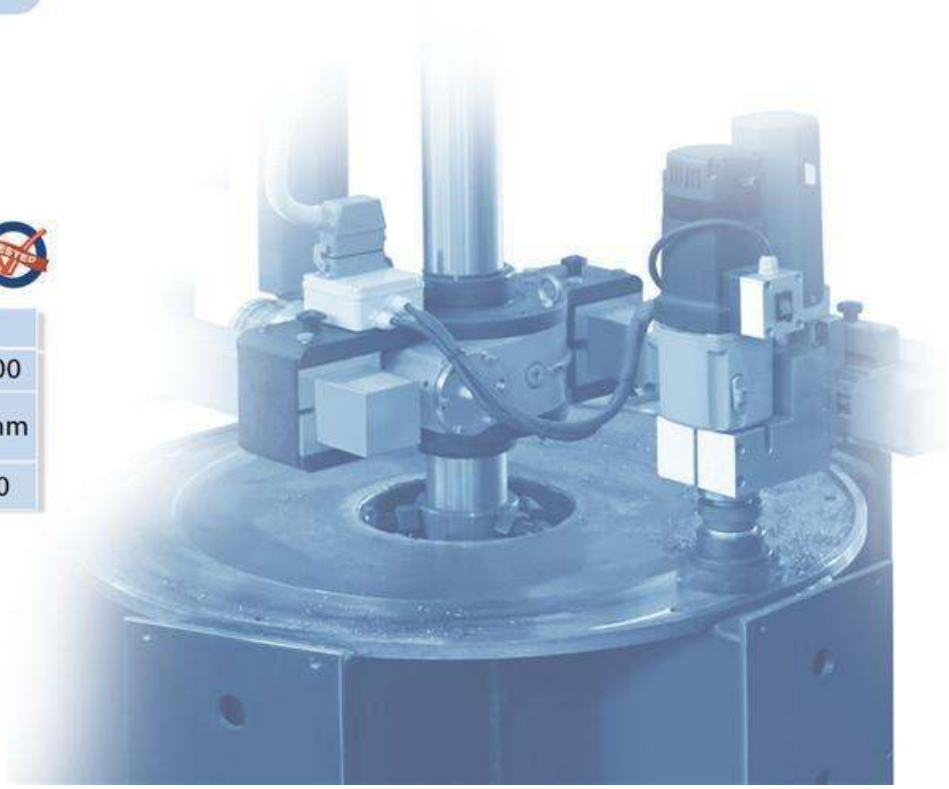
- **CALIBRATED DRILLING.**
- **CREATION OF "CIRCULAR POCKETS".**
- **CIRCULAR MIG WELDING.**
- **CIRCULAR OXYGEN CUTTING.**

Surface Roughness

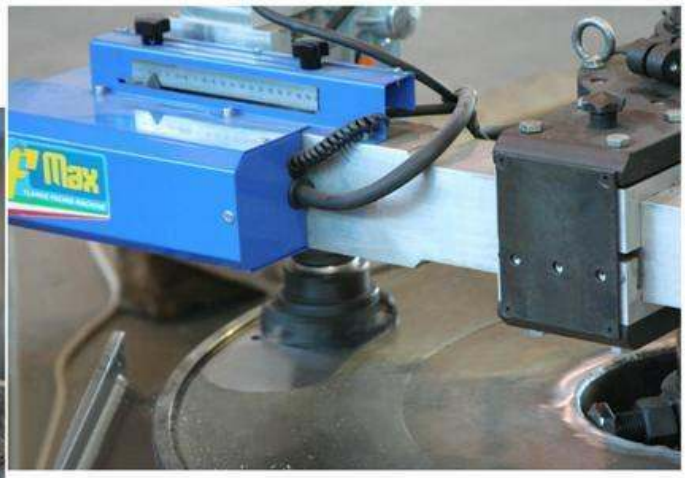


Certified Test

CERTIFIED TEST ON STEEL C45		
Diameter	mm	1500
Cutting Depth	mm	1 mm
Feed Speed	mm/min	300



PROFESSIONAL



GUARANTEES THE BEST
CHIP REMOVAL IN THE FASTEST WAY.

fMax 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.**

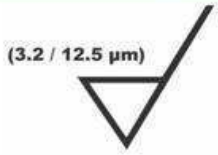
Machining Diameter

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

Prearrangement for

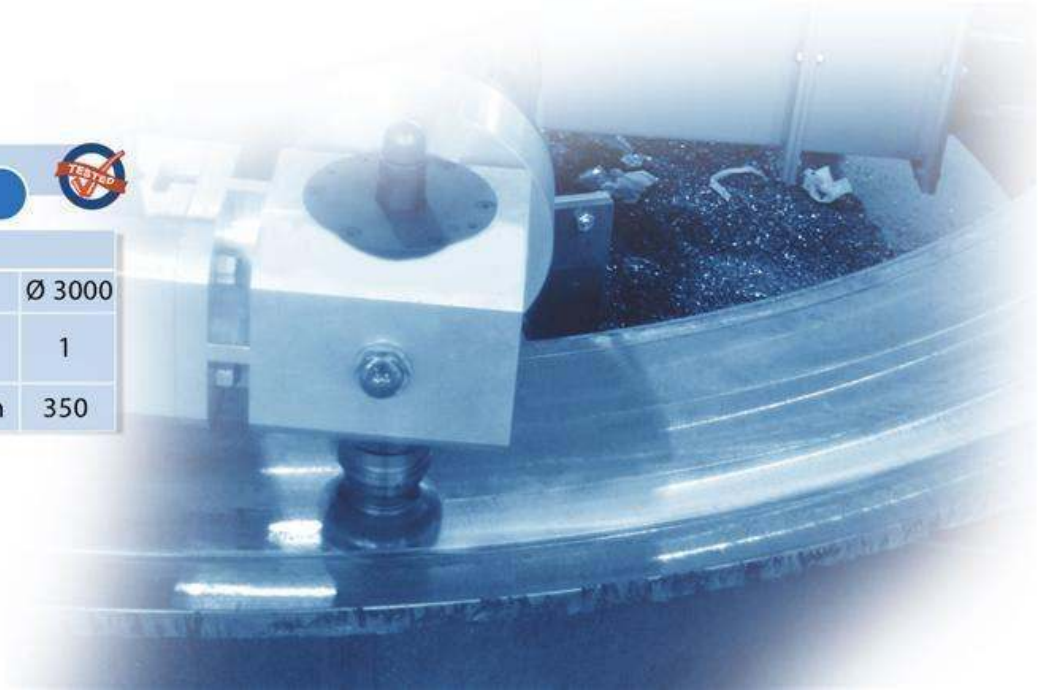
- **TURNING OPERATIONS**
- **CALIBRATED DRILLING ON CIRCULAR SERIES**
- **TAPPING ON CIRCULAR SERIES**
- **CREATION OF "CIRCULAR POCKETS"**
- **CIRCULAR MIG WELDING**
- **CIRCULAR OXYGEN CUTTING**

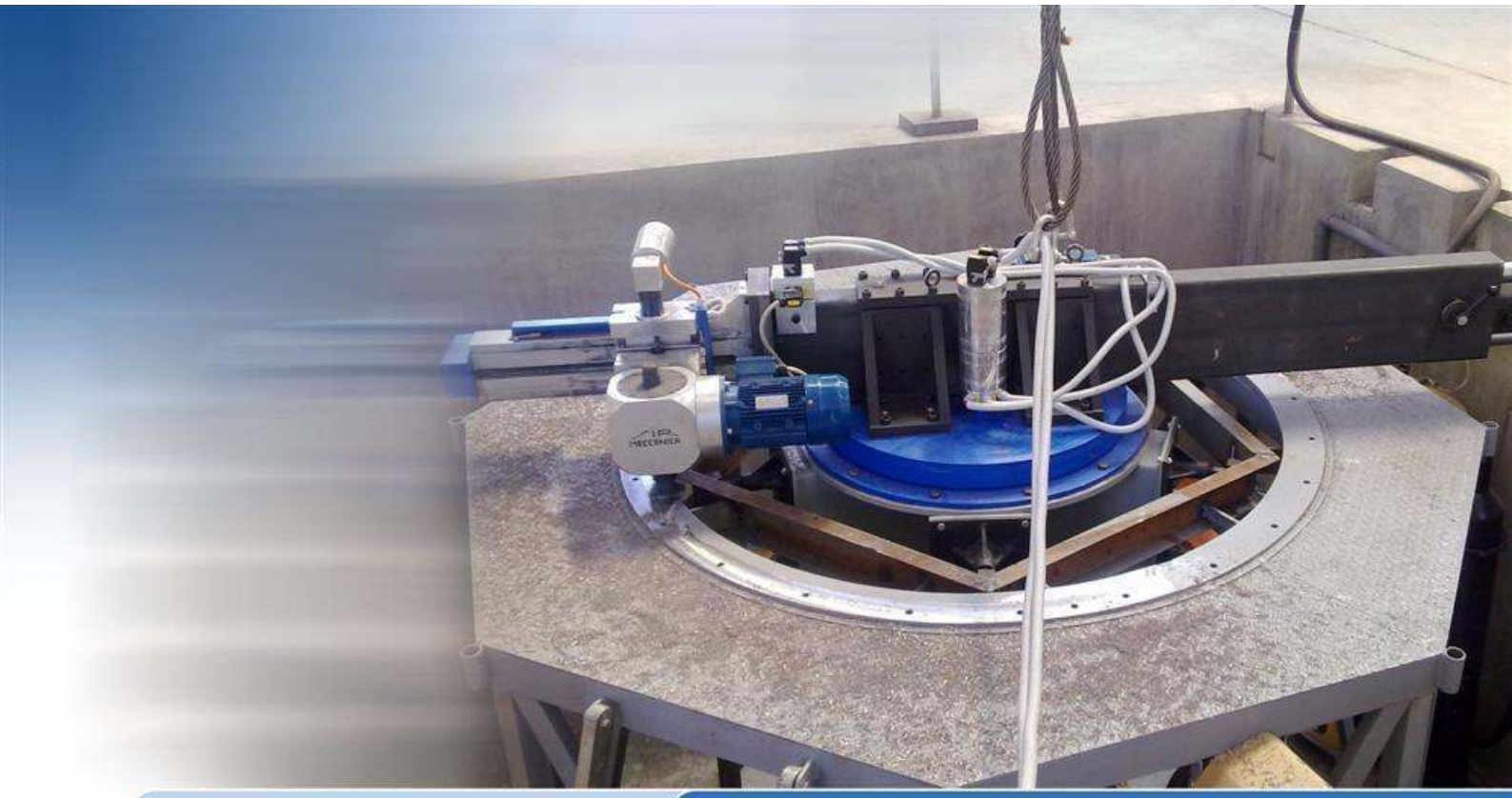
Surface Roughness



Certified Test

CERTIFIED TEST ON STEEL C45		
Diameter	mm	Ø 3000
Cutting Depth	mm	1
Feed Speed	mm/min	350





UNBEATABLE

Tapping Operation M36X3

NO FEAR
FOR HARD JOBS

fMax 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**
Diameter of facing		**≅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.**

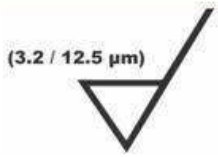
Machining Diameter

FMAX 4000	FMAX 6000
With standard equipment	
from ø 1500 mm to over ø 4000 mm	**from ø 1500 mm to over ø 6000 mm**

Prearrangement for

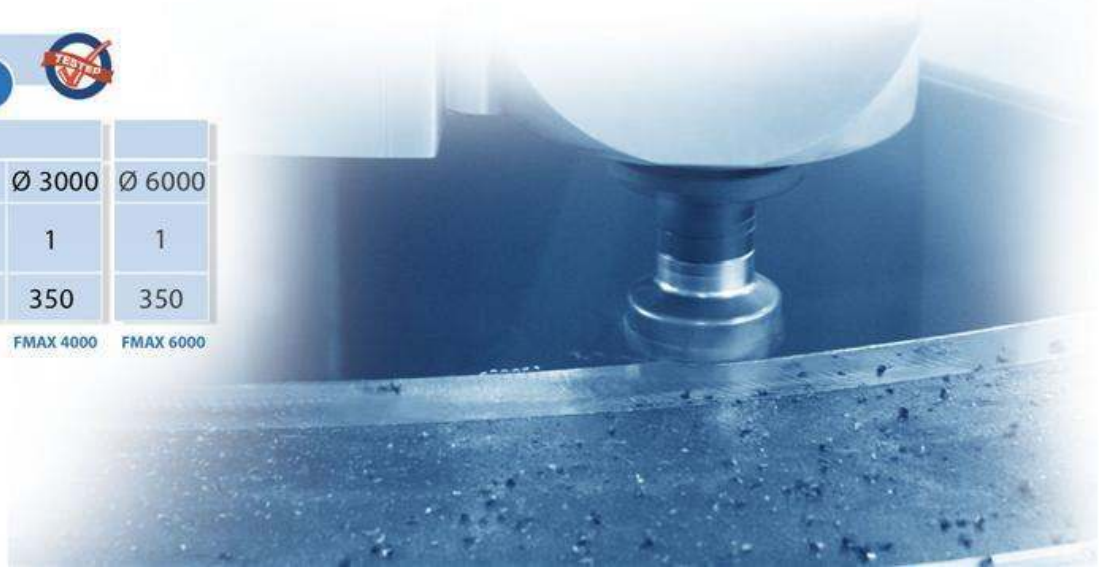
- **TURNING OPERATIONS**
- **CALIBRATED DRILLING ON CIRCULAR SERIES**
- **TAPPING ON CIRCULAR SERIES**
- **CREATION OF "CIRCULAR POCKETS"**
- **CIRCULAR MIG WELDING**
- **CIRCULAR OXYGEN CUTTING**

Surface Roughness



Certified Test

CERTIFIED TEST ON STEEL C45			
Diameter	mm	Ø 3000	Ø 6000
Cutting Depth	mm	1	1
Feed Speed	mm/min	350	350
		FMAX 4000	FMAX 6000



EXTRAORDINARLY PRECISE

Creation of "CIRCULAR POCKETS"

RESPECT OF THE TOLERANCES