correa

GNC
Nicolás Correa

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Applus ISO 14001

ECO designed

CE

Septiembre 2015

WARRANTY 5 YEARS

NORMA·L

Travelling Column Milling Machine

correa

ENG

ROBUSTNESS

"Today´s investment, **tomorrow´s saving**"

Generously sized and properly ribbed structural parts, strong milling heads, machines in perfect geometry… have always been the distinctive features of **NICOLÁS CORREA** since its foundation in 1947.

We are convinced Robustness is a good bet for our customers, a sensible investment that will result in the following benefits/values:

RELIABILITY

In **NICOLÁS CORREA,** we extend the concept of robustness to the whole production process of the machine, always choosing technical solutions of the highest quality. For this reason, we offer as standard 5 year warranty on our milling machines.

PRECISION

The milling machine is stable and maintains geometry values longer.

DURABILITY

Our machines are designed and assembled to last for decades. Tireless workers that maintain their chip removal capacity in good condition for years.

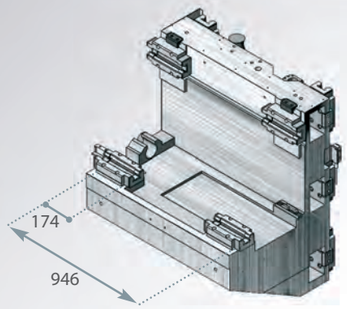
MILLING HEADS

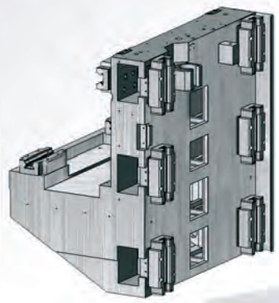
Unique robust milling head technology with superb repeatability, flexible to perform roughing and finishing operations.

What makes the difference in the NORMA·L?

The NORMA·L represents a new concept in mobile column machine with lateral ram. Very sturdy thanks to the L-shaped ram guide and triple X-axis guide. Precision thanks to the mechanical ram droop correction system. A flexible machine suitable for machining and finishing operations

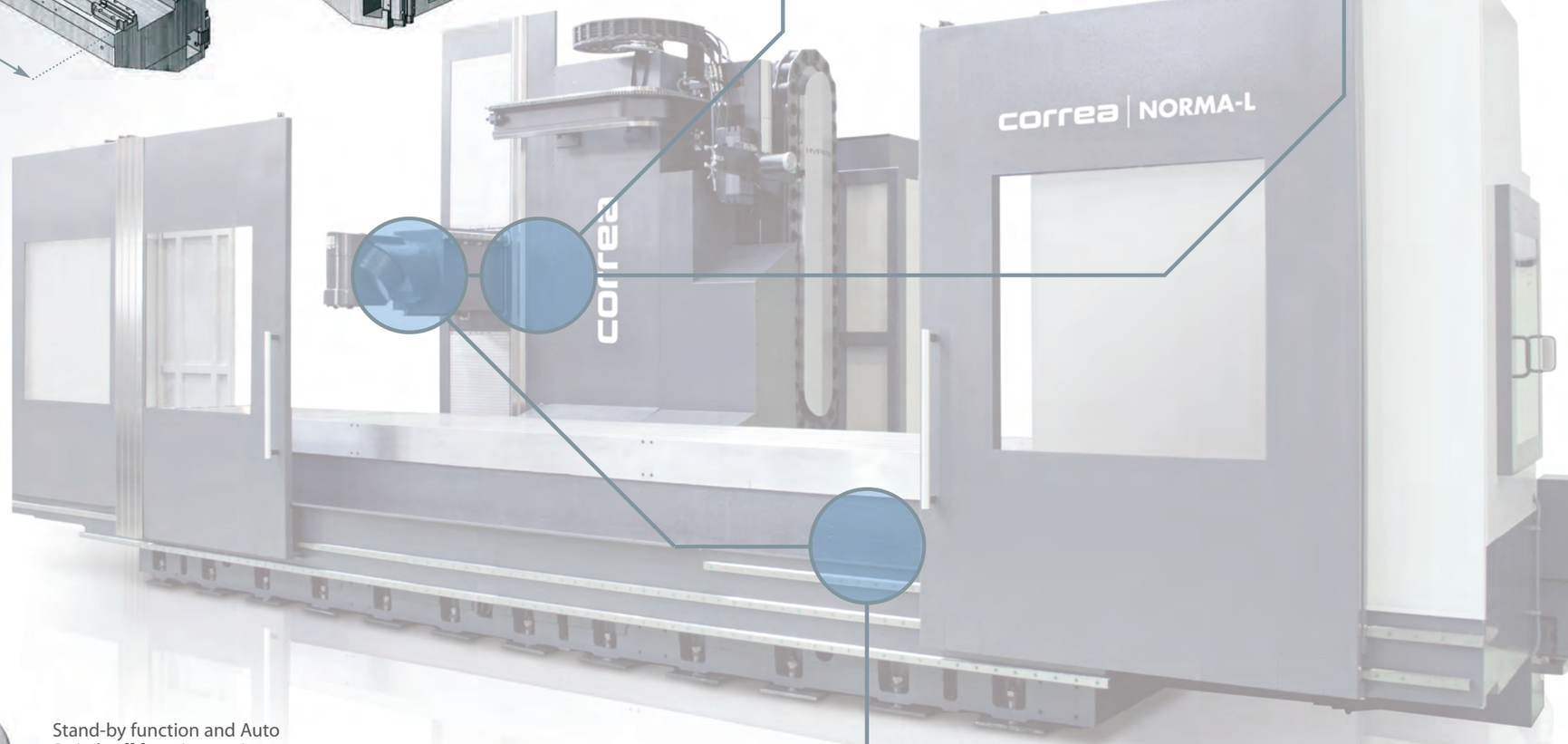
L-shaped guide system:
- Greater rigidity and stability during machining.
- Greater geometrical precision.
- Less ram droop effect.





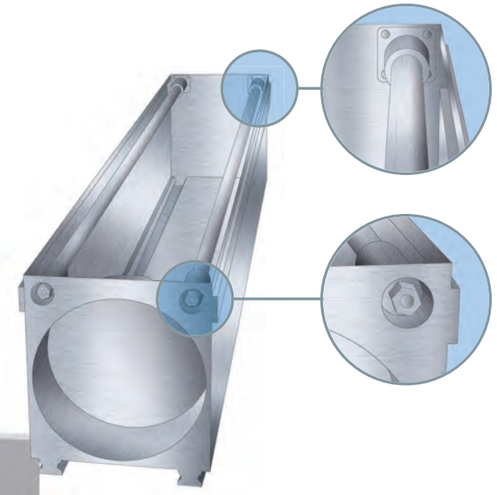
6 vertical movement sliders ensuring good machine behaviour

L GUIDE-WAY SYSTEM CONFIGURATION

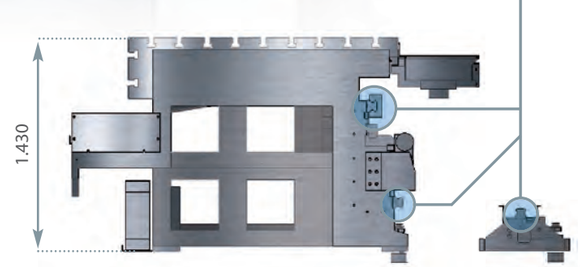


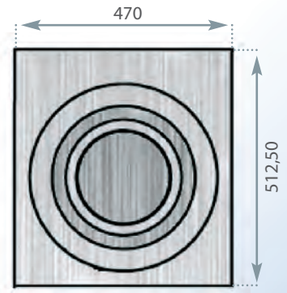
MECHANICAL COMPENSATION SYSTEM

Traction bars to eliminate the angular error of the ram droop effect



3 moving X-axis guides to ensure stability and good geometrical precision





ECO-DESIGN

Stand-by function and Auto Switch off function, saving 20% of the total energy machine consumption

HIGH DYNAMIC CAPACITY

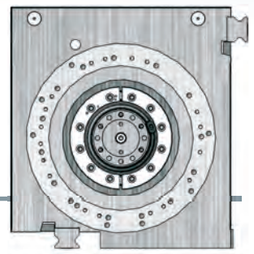
25 m/min in X, Y and Z axes, thanks to its V-Shaped linear guide-ways in all axes

OVERSIZED STRUCTURAL ELEMENTS

The largest cross-sections on the market

HIGH GEOMETRICAL PRECISION

High machining capacity + geometrical stability over time



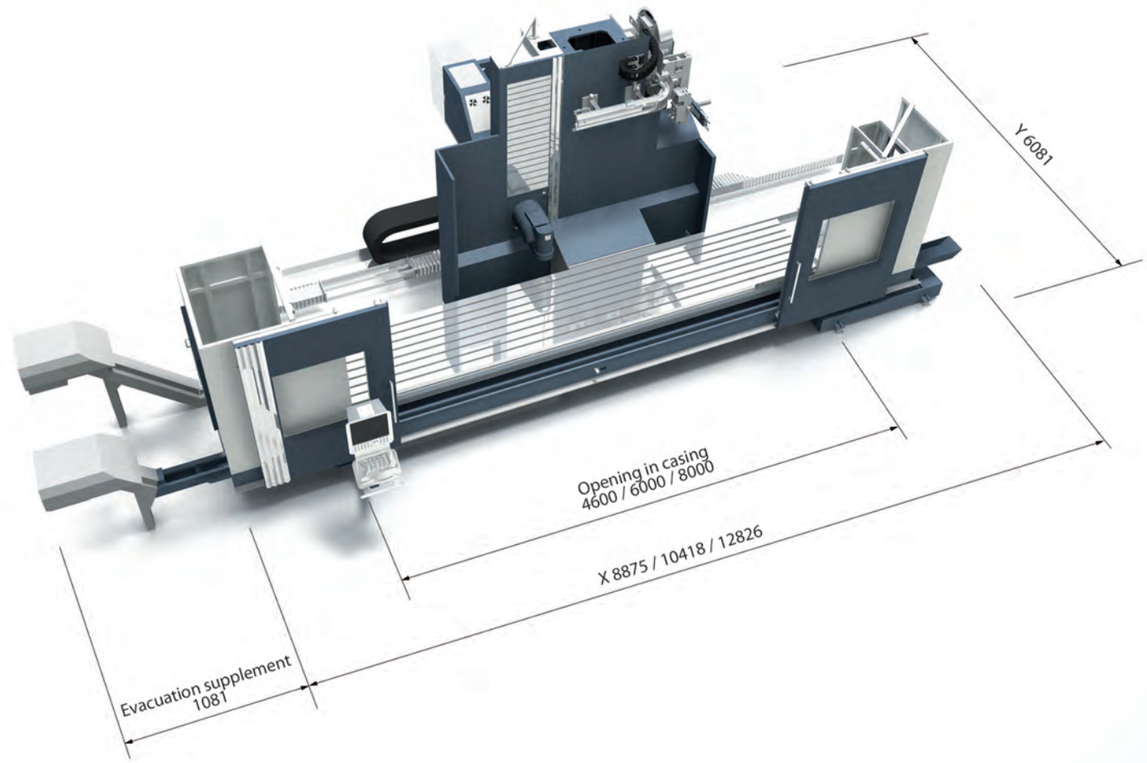
Technical Features

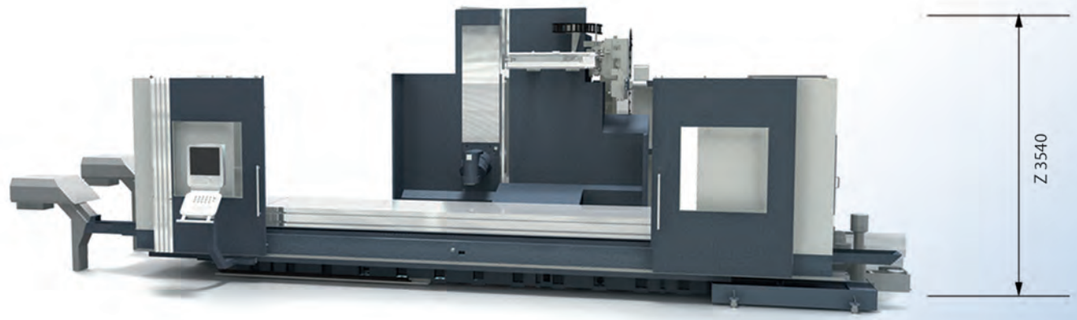
NORMA·L		NORMA·L|45	NORMA·L|60	NORMA·L|80
TABLE				
Surface	mm	5.500 x 1.200	7.000 x 1.200	9.000 x 1.200
Maximum load on the table	Tn/m²	6		
TRAVERSES				
Longitudinal	X mm	4.500 / 6.000 / 8.000		
Cross	Y mm	1.250		
Vertical	Z mm	1.500		
FEEDS				
Maximum	X m/min	25		
	Y m/min	25		
	Z m/min	25		
SPINDLE SPECIFICATIONS				
Spindle nose		ISO-50		
Programmable speed	rpm	3.000 / 6.000		
Maximum power	kW	24 - 33		
Maximum torque	Nm	840 - 990		

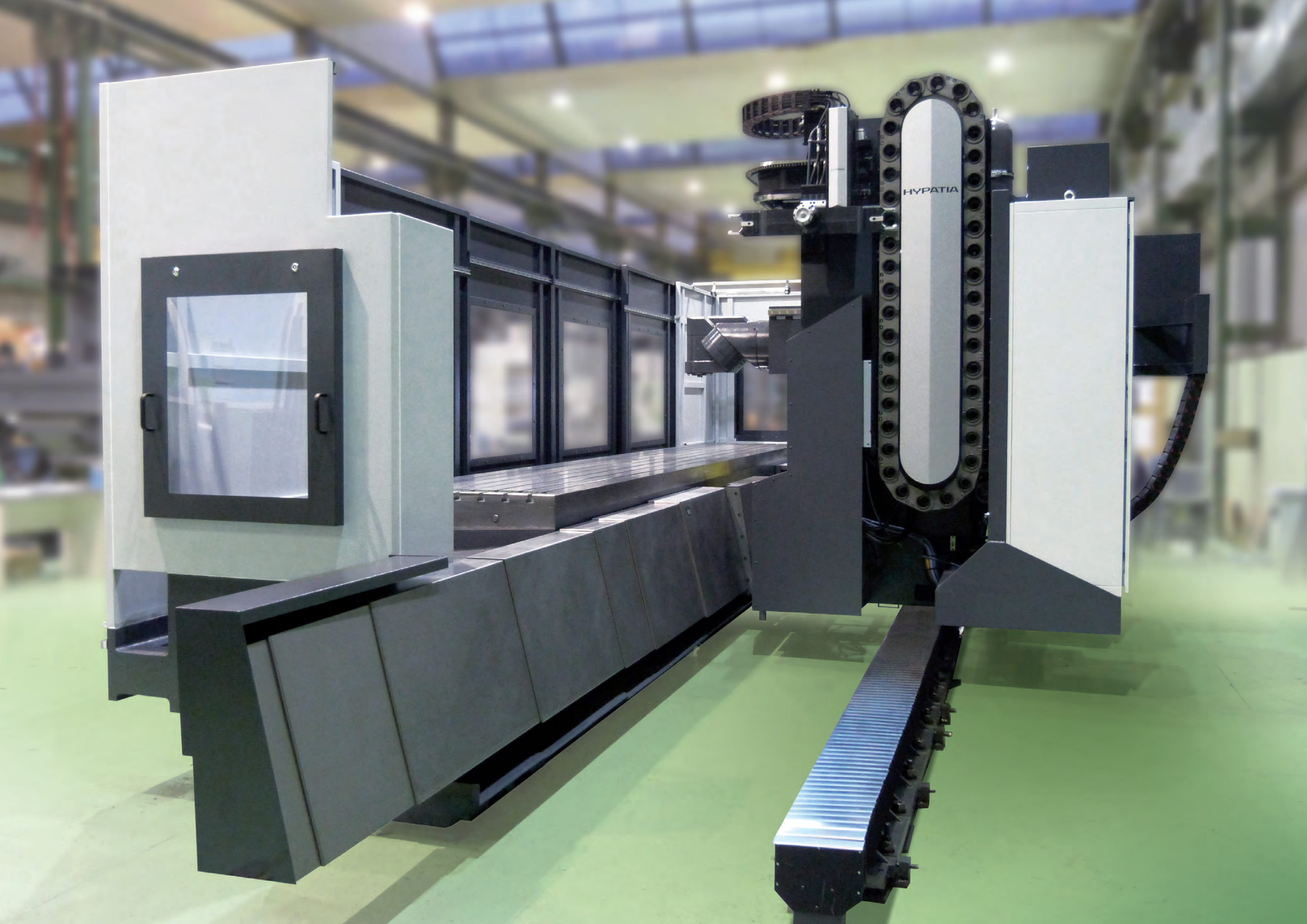
Standard Equipment

- Automatic Universal Head UDG (2,5º - 2,5º)
- Numerical control Heidenhain i530 HSCI
- Portable handwheel
- Air-conditioned electrical cabinet
- Linear guides in the X, Y and Z axes
- Lamp in the working area
- Gearbox
- Hydraulic group
- Linear scales in all axes
- External Coolant with adjustable nozzles in the head
- Internal and external air flow
- Perimeter fence
- Direct Tele-service

External Dimensions






HYPATIA

Unique Indexing Milling Head Technology

Patented worldwide

FLEXIBILITY

Rotation/indexation every **0,02º** thanks to the double Hirth coupling patented worldwide

6.000 rpm with no limitations

Adjustable coolant through spindle **17 - 70 bar**

ROBUSTNESS

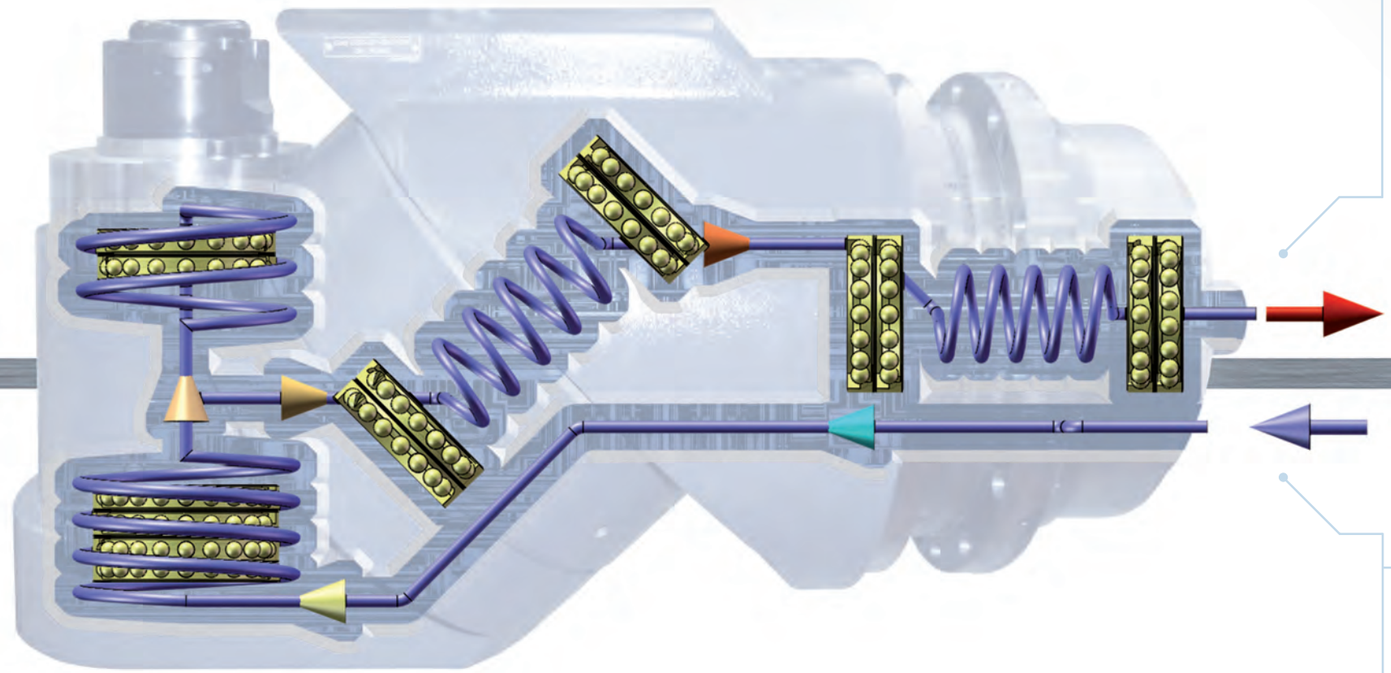
4+2 Bearings in the main spindle

Tool clamping force = **2.500 kg**

Hirth coupling's locking force = **22.000 kg**

The milling head's design allows **52 kW – 1.375 Nm** in S1

Milling head body made of **casted steel GGG-50**



100% ROBUST

100% RELIABLE

RELIABILITY

Design and fabrication entirely by NCSA. The whole assembly process is monitored by NCSA

Head assembly in a **cleanroom** with constant temperature 22ºC

Milling head run in the **test bench for 60 hours** performing body & spindle rotations

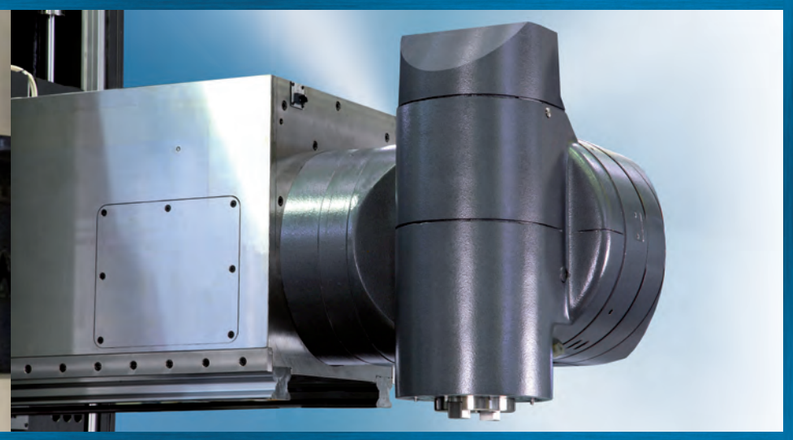
PRECISION

Maximum coupling repeatability error + - 3"

The bearing's cages of the main spindle & the external spacers of the secondary axes' bearings, **are cooled with water**

24H

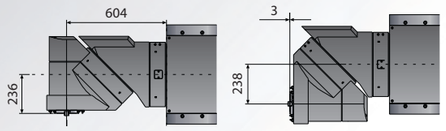
MILLING HEAD PATENTED TECHNOLOGY



Milling Head

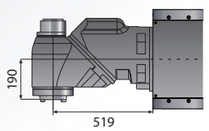
24 kW | 840 Nm | 6.000 rpm
33 kW | 990 Nm | 6.000 rpm

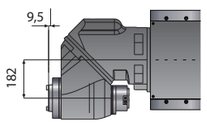
Universal Auto-Indexing Differential Head — UAD 0.02° x 0.02°



24 kW | 840 Nm | 4.000 rpm
33 kW | 990 Nm | 4.000 rpm

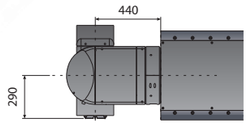
Universal Manual Head — U·22 2.5° x 2.5°

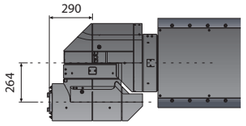




24 kW | 840 Nm | 6.000 rpm
33 kW | 990 Nm | 6.000 rpm

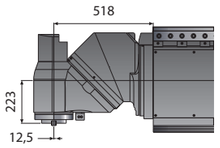
Orthogonal Auto-Indexing Differential Head — OAD 0.02° x 0.02°

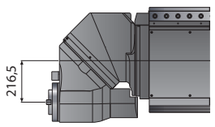




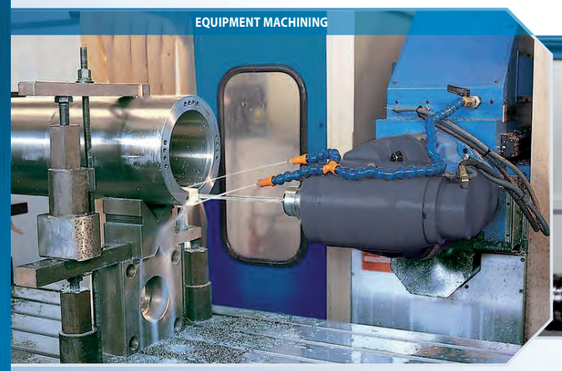
24 kW | 840 Nm | 3.000 rpm
33 kW | 990 Nm | 3.000 rpm

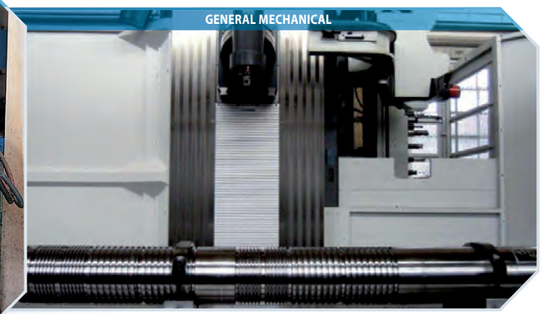
Universal Automatic Head — UDC 2.5° x 2.5°





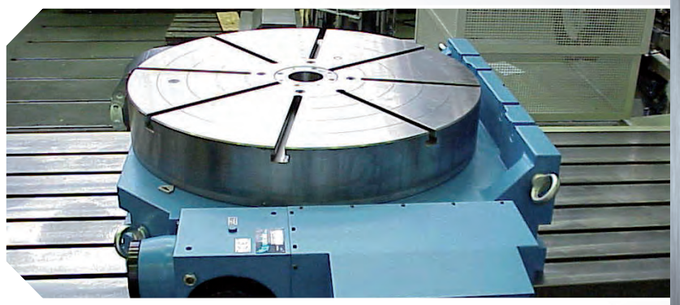
Applications

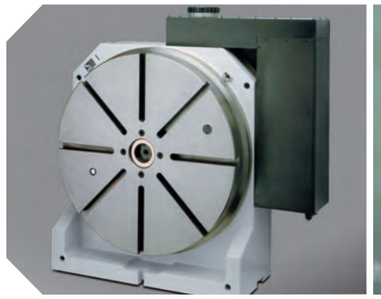


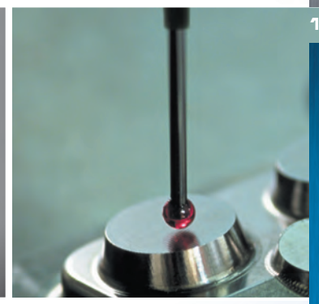


Optional Equipment

- Other heads
- Probes of measurement, tools and parts
- Automatic charger for 30, 40 and 60 tools
- Pick up station for 8 tools
- Air or oil cleaning gun with motor pump
- Centrifugal filter in cutting fluid tank
- Rotary tables
- Integrated rotary tables
- Chip conveyors
- Integral guarding
- Coolant through spindle to high and medium pressure
- Operator cabinet
- Pendular working system







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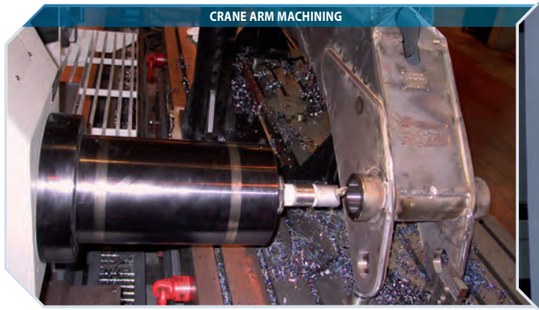
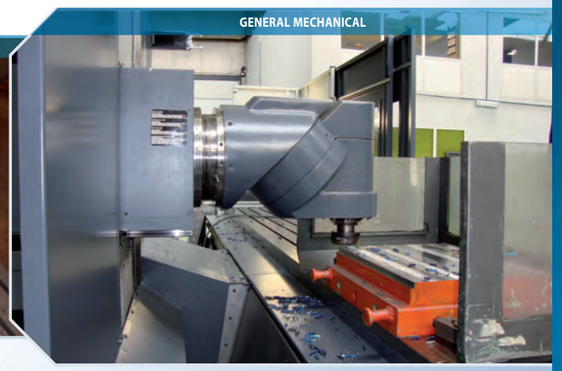




Nicolás Correa Group

NICOLÁS CORREA, S.A.
Founded in 1947 and dedicated to the design and fabrication of medium and large size milling machines, is the headquarters of the Group **NICOLÁS CORREA** also formed by 4 other industrial affiliates:

GNC HYPATIA
Design and fabrication of **CORREA** milling machines of small size, as well as accessories for the tool machine industry such as ATCs and milling heads.

GNC KUNMING
Fabrication and distribution of milling machines for the local chinese market.

GNC ELECTRÓNICA
Design and fabrication of electrical assemblies.

GNC CALDERERÍA
Welded structures, sheet parts, and machine guarding systems.

Some critical components are supplied inside the group to assure quality and fulfill the flexibility requirements of our customers.

In 2006 **NICOLÁS CORREA** and **INDUSTRIAS ANAYAK** merged, what gave us the chance to offer one of the widest milling machine ranges on the market including: bed type (Also T-Configuration), Travelling column (Also T-Configuration), Portal milling machines. The design and manufacture are entirely made in Europe.

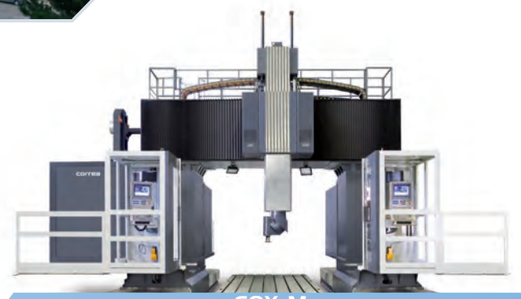
It quotes in the Madrid Stock Exchange since 1989.

In order to guarantee service and personal assistance to our customers, we have a wide sales and service network all over the world, being present through subsidiaries or agents in most of the countries.

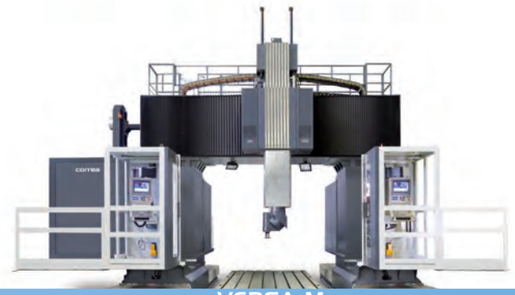
Range of Equipment

HVM-LANZA

VH-PLUS LANZA



FOX-M



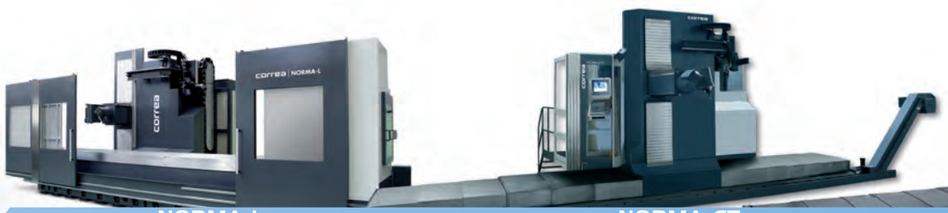
VERSA-M

VERSA-MW

FOX

VERSA

VERSA-W



NORMA-L

NORMA-FT

HVM

AXIA

MAGNA

XPERTA

PERFORMER-MG

NORMA

VH-PLUS-MG