WARRANTY 5 YEARS

XPIDER

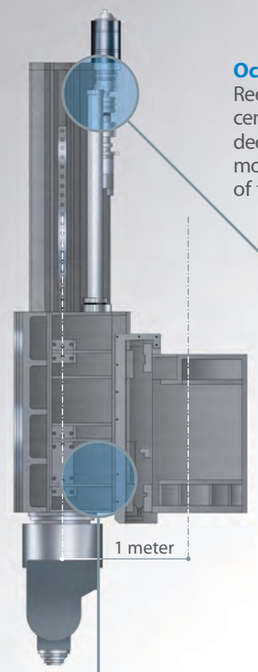
High Speed Top Gantry Milling Machine

correa

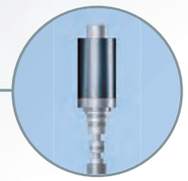
ENG

What makes the difference in the XPIDER?

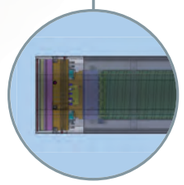
The XPIDER represents a concept of high-speed "top gantry" machine which incorporates unique structural elements and functions. Temperature stability and high speed combined in this new generation milling machine.



Octagonal ram section
Reduced distance between the ram centre and the crossbeam centre. By decreasing the force applied during the movements of the X axis, the precision of the surface finish is improved.



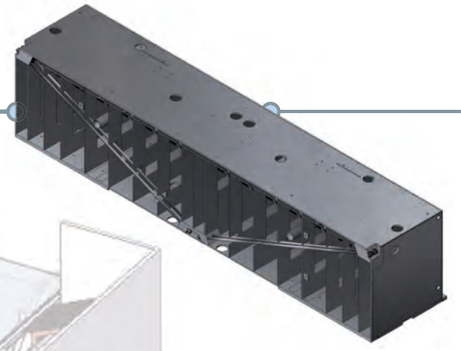
Direct transmission to the drive of the vertical axis, guaranteeing the maximum precision and rigidity.



Direct transmission of the spindle with a cylindrical water-cooled motor.

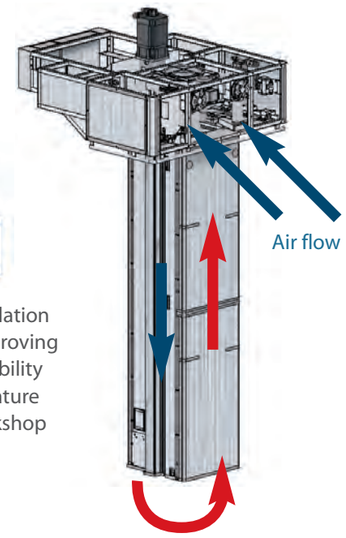
HIGH GEOMETRICAL PRECISION

Crossbeam isolation
The crossbeam is composed by three layers of steel-insulation-steel.This system minimises the crossbeam geometrical changes due to the temperature variations in the workshop.



Available in all models of VERSA, FOX and XPIDER

- Steel torsion bars in the crossbeam
- Minimising the deformation due to crossbeam flexion and torsion
- Enhancing the geometry of the machine
- Increasing the roughing capacity



VERTICAL AXIS TEMPERATURE CONTROL

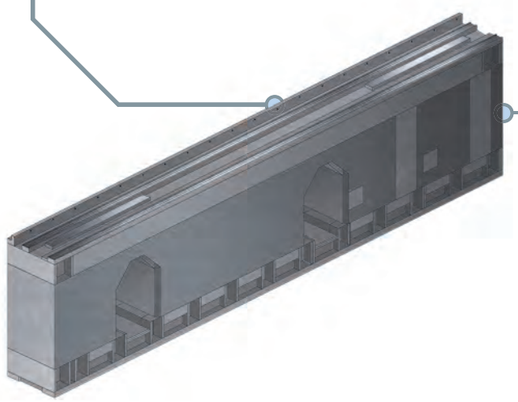
System of air recirculation through the ram. Improving the geometrical stability faced with temperature changes in the workshop

ECO
ECO-DESIGN

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

F
HIGH DYNAMIC CAPACITY

45 m/min in X, Y and Z axes, with optional 60 m/min in X and Y. Machine of large dimensions and high speed.



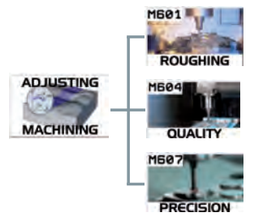
HIGH DAMPING CAPACITY

Mixed structure of "HDC" concrete and steel. The "HDC" concrete is a material of high density mixed with micro-fibres developed by **Nicolás Correa.**

What are the advantages of the "HDC"?
- High damping capacity
- High rigidity
- Thermal stability

F
HIGH CAPACITY OF MACHINING SHAPES

- Electro spindle specifically designed for finishing at high rpms
- Dynamic behaviour with parameter settings for:
  - Surface quality
  - Part geometrics
  - Machining time



Technical Features

		XPIDER	
TABLE			
Surface	mm	3.500 + 1 500N x 1.500 – 2.500	
Maximum load on the table	Kg/m²	10.000	
TRAVERSES			
Longitudinal	X mm	3.500 - 1.500N	
Cross	Y mm	2.000	3.000
Vertical	Z mm	1.000 - 1.500	
WORK CAPACITY			
Distance between columns	mm	3.000	4.000
FEEDS			
Maximum	X m/min	45 / 60	
	Y m/min	45 / 60	
	Z m/min	45 / 45	
SPINDLE SPECIFICATIONS			
Spindle nose		ISO-50 | HSK-63 | HSK-100	
Programmable speed	rpm	6.000 / 12.000 / 24.000	
Maximum power	kW	30 / 35* / 60*	

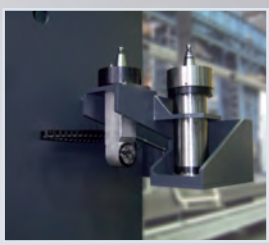
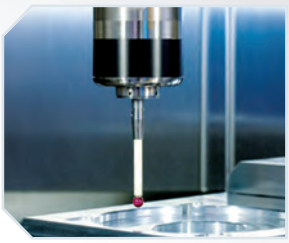
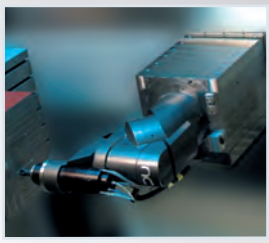
** Only with E5E milling head (Electrospindle).*

Standard Equipment

- Five-axes twist drill head equipped with electrospindle
- Numerical control Heidenhain or Siemens (Operate HMI)
- Portable handwheel
- Air-conditioned electrical cabinet
- Linear guides in the X, Y and Z axes
- Lamp in the working area
- Hydraulic and cooling group
- Linear scales in all axes
- External Coolant with adjustable nozzles
- Internal and external air flow
- Guarding
- Tele-service

Optional Equipment

- Other heads
- Automatic head-changer
- Tool and parts measurement probes
- Automatic changer for 30, 40, 60, 120 tools
- Pick up station for 6, 8, 12 tools
- Air/Coolant cleaning gun
- Self-cleaning filter
- Rotary tables
- Chip conveyors
- Perimeter fence
- Different enclosures according to user's needs (only in some models)
- Coolant through spindle 17, 36, 70 bar
- Zero Point Clamping System integrated in the machine

ESE Milling Head

FLEXIBILITY

Axis C rotation, from **-200º to +200º**
*Optional **-360º to +360º**

Axis B rotation, from **-110º to +110º**

3 configurable electrospindles on the same boring head

Cutting fluid and/or air through the spindle, which can be adjusted from **17 to 70 bar**

Cutting fluid and/or outside air with **integrated adjustable nozzles**

PRODUCTIVITY

C axis rotation speed: **45 rpm**

C axis acceleration: **10 rev / sec²**

B axis rotation speed: **25 rpm**

B axis acceleration: **10 rev / sec²**

ROBUSTNESS

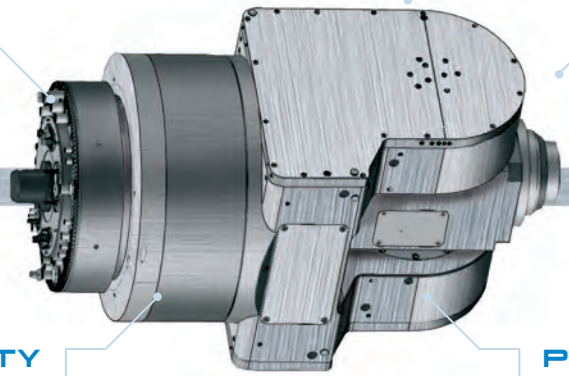
C axis working torque: **2200 Nm** (Motor-Torque)

C axis braking torque: **4000 Nm**

B axis working torque: **2026 Nm** (Motor + reduction + gears)

B axis braking torque: **4000 Nm**

Superior quality **Kessler or Fischer** electrospindle



100% ROBUST **100% RELIABLE**

RELIABILITY

Head designed and manufactured in Nicolás Correa

Head assembled in **white room** at 22ºC

Kessler / Fischer electrospindle

More demanding **cutting** tests

Automatic lubrication

PRECISION

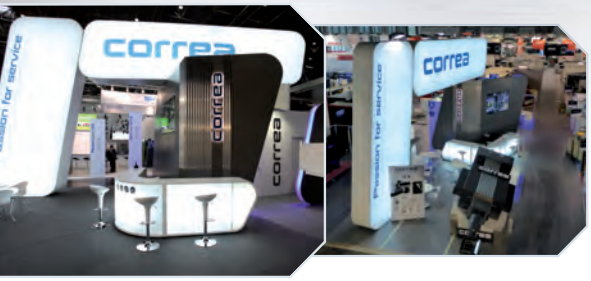
Temperature-based **pivoting distance** correction main axis bearings

Mean Ps error < 0,001º

Total P error < 0,002º

B axis encoder placed on last rotation axis

Completely symmetrical transmission in the B axis. **The heat generated** during the transmission in the B axis is **uniformly distributed** among the milling head



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