

correa

VERXA M | MW

Gantry type milling machine

WARRANTY



75 YEARS
ANNIVERSARY
1947 · 2022

Nicolás Correa, founded in Spain in 1947, is one of world's leading companies in the manufacturing of large milling machines. With over 900 bridge type machines, 1000 floor type machines and 3500 bed type machines installed all over the world, offers milling solutions designed for the most demanding production environments, such as the power generation, automotive, aerospace and railway industries.

Nicolás Correa is the parent company of **Correa Group** composed of five industrial subsidiaries linked to the machine tool sector: Hypatia, Steelworks, Electrónica, Service and Kunming. The Group has commercial subsidiaries in China, Germany, United States and India with the aim to offer the best service in all countries. Belonging to the group provides **Nicolás Correa** with access to top quality critical supplies and offers tailored solutions especially designed for each customer's needs.



Thousands of customers around the world place their trust in **correa** range of milling machines. **Correa Group** currently exports around 90% of its production to over 30 different countries. To guarantee a high-quality service to our customers, we have an extensive international commercial and technical service network in most of the world's countries. **Correa Group** offers the widest range of milling solutions on the market, including bed type machines, gantry, floor type machines, bridge type machines, it also has a several options of multi-tasking machines. The entire range is designed and manufactured in Spain. **Nicolás Correa, S.A.** has been listed on the Madrid Stock Exchange since 1989.

The **VERXA M** represents the concept of a high performance Gantry machine. Its structural design and thermal symmetry permit the machining of large parts while maintaining high dynamics and chip removal.

In all families
VERXA,
FOX and
ORIX

- 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 .

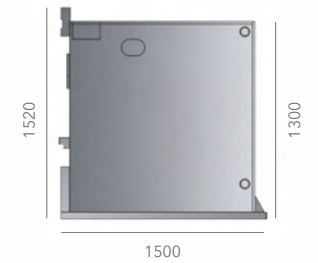
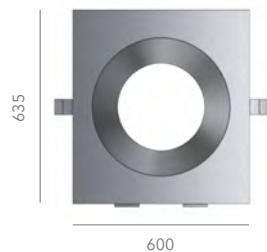
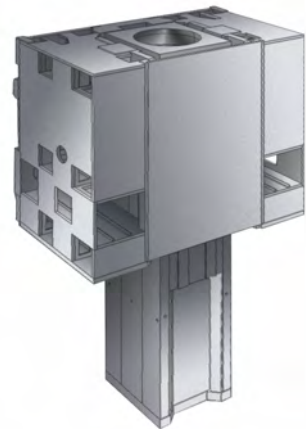


Double mechanical pull stud system. It avoids the use of electronic corrections and allows a fine mechanical adjustment that minimises angular errors at the tool tip.



THERMO SYMMETRICAL DESIGN

- Symmetrically guided ram.
- Ram symmetrically centred over chassis.
- Improved geometric performance faced with temperature variations in the workshop.

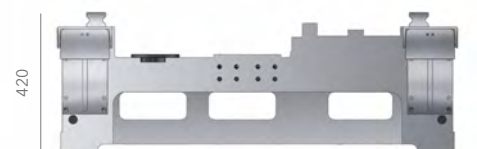


OVERSIZED STRUCTURAL ELEMENTS



HIGH GEOMETRICAL PRECISION

Great cross sections.
Great roughing capacity.
Geometric stability in time.



MORE ABOUT THE VERXA M



Dynamic performance parametrizable in accordance with:

- ROUGHING OPERATION
- FINISHING OPERATION



MACHINE DYNAMIC ADJUSTMENT



MACHINING SETTINGS



ROUGHING

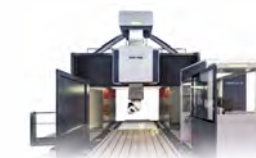


FINISHING

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



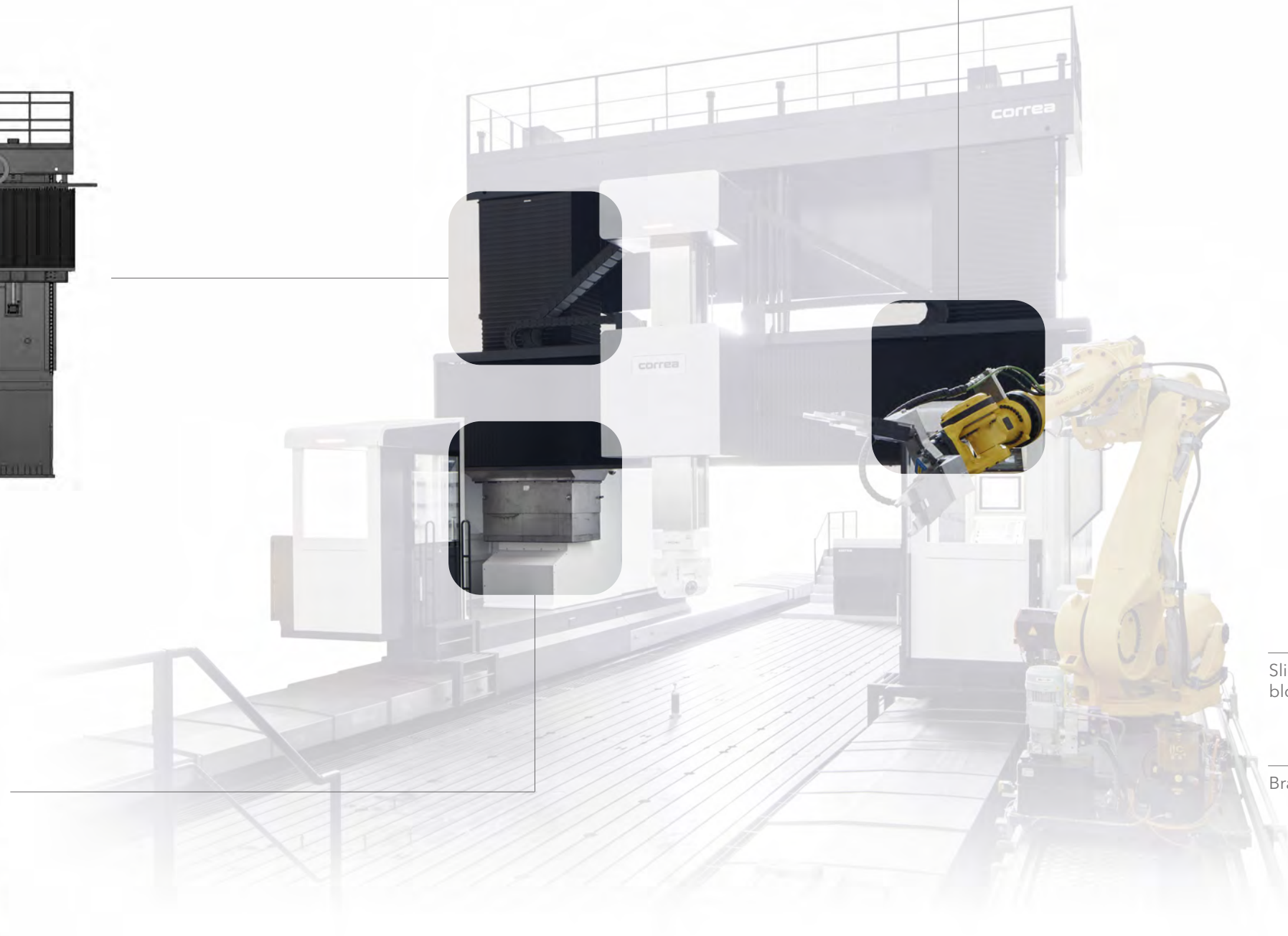
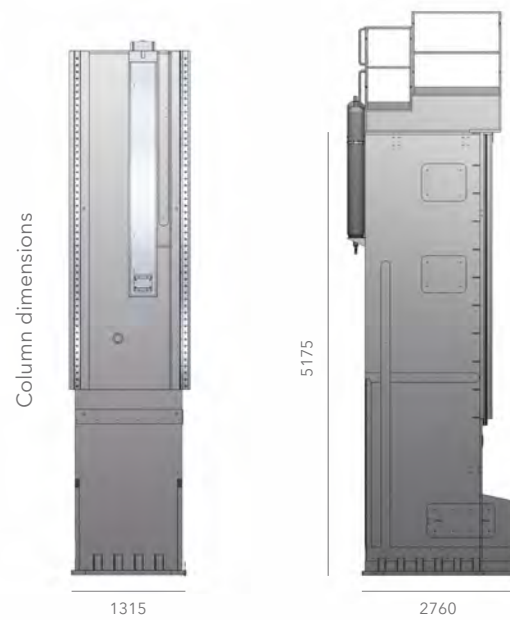
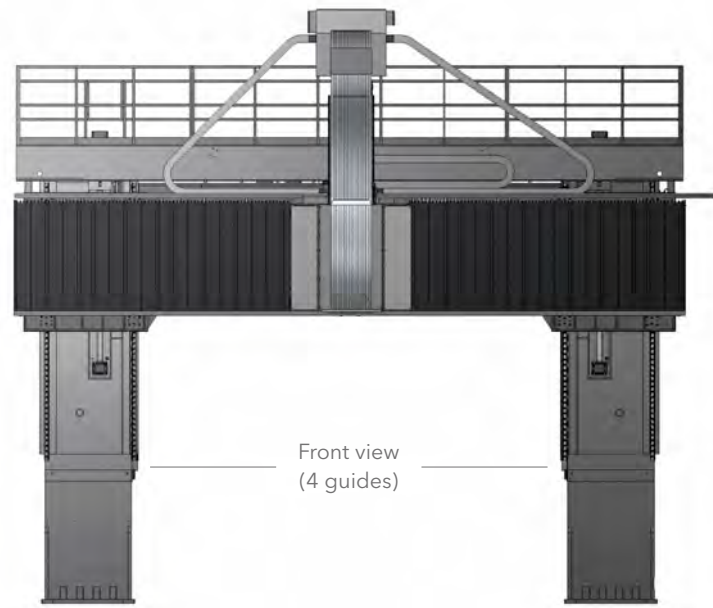
HIGH FEED RATES



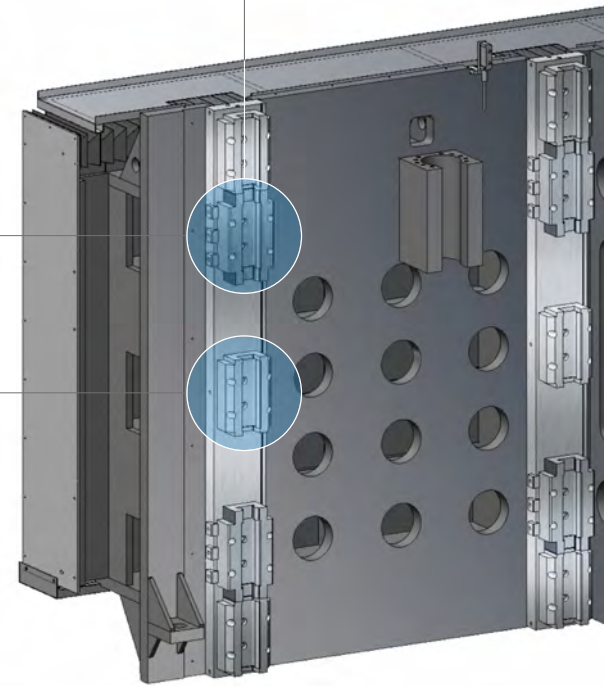
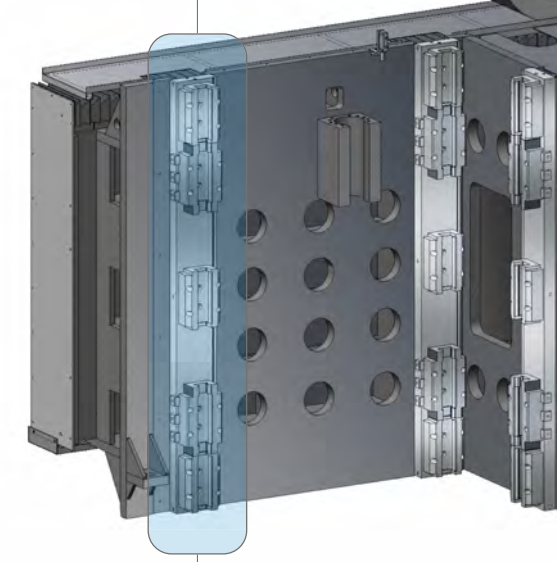
ECO DESIGN

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

The **VERXA MW** represents the concept of a high-performance Gantry **W** machine. Its structural design and thermal symmetry combined with a W axis, unique in the market, make this machine the ideal solution for machining high volumes, keeping a high level of dynamics and chip removal.



Close-up of **W** guide (6 guides)



MORE ABOUT THE
VERXA MW



W is a live axis!!
Great roughing capacity and geometric precision

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



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

Technical Features

VERXA M

TABLE

Surface 10000 / 30000 x 2500 / 3000 / 3500 / 4000 / 4500 / 5000 / 5500 mm

Maximum load on the table 10 / 15 t/m²

TRAVERSES

Longitudinal [X] 9500 / 30500 mm

Cross [Y] 4250 / 5250 / 6250 / 7250 mm

Vertical [Z] 1500 / 2000 / 2500 mm

WORK CAPACITY

Distance between columns 3750 / 4750 / 5750 / 6750 mm

Distance between head nose (UAD) and table top 1390 / 1640 / 2140 mm

FEEDS

Maximum [X] 30 m/min

Maximum [Y] 30 m/min

Maximum [Z] 30 m/min

SPINDLE SPECIFICATIONS

Spindle nose ISO-50 Big Plus / HSK-100

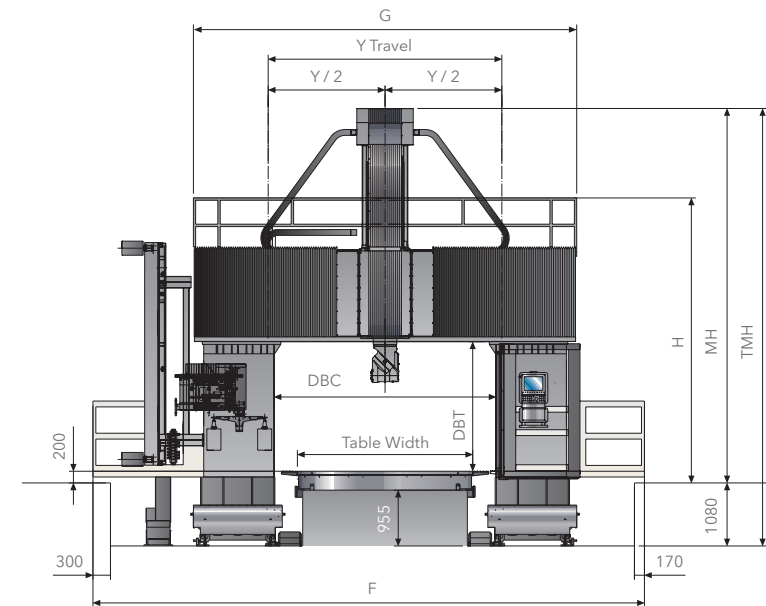
Programmable speed 10000 / 6000 / 6000 rpm

Maximum power 42 / 52 / 70 kW

Maximum torque 620 / 1375 / 1550 Nm

External Dimensions

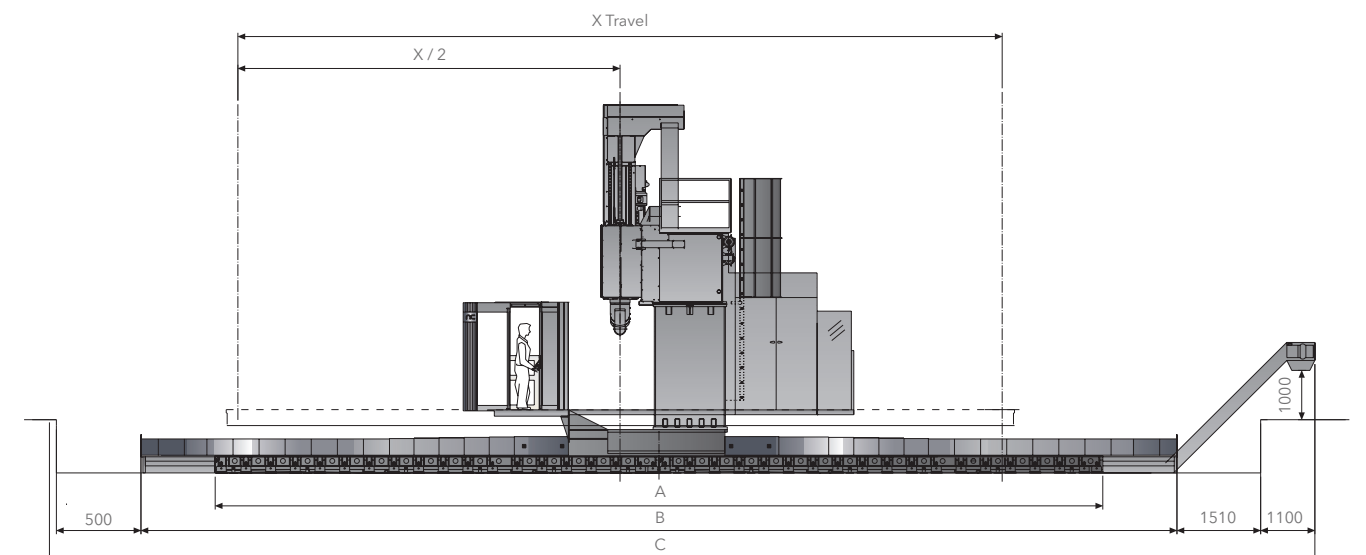
VERXA M



Y Travel	DBC	F	G	Table Width	Max. Table Width
4250	3750	9430	7004	2500	3000
5250	4750	10430	8104	3000	3500
6250	5750	11430	9204	4000	4500
7250	6750	12430	10304	5000	5500

Z Travel	Vert. capacity	DBT	H	MH	TMH
1000	A	2205	4900	6150	7300
1250	A	2205	4900	6400	7550
1500	A	2205	4900	6650	7800
	B	2705	5400	7150	8300
2000	B	2705	5400	7650	8800

X Travel	A	B	C
9500	12000	15420	19970
12500	15000	18720	23270
15500	18000	22550	27100
18500	21000	26860	31410
21500	24000	30600	35150
24500	27000	33900	38450
27500	30000	37620	42170
30500	33000	41360	45910



Technical Features

VERXA MW

TABLE

Surface 10000 / 30000 x 2500 / 3500 / 4500 / 5500 mm

Maximum load on the table 10 / 15 t/m²

TRAVERSES

Longitudinal [X] 8500 / 29500 mm

Cross [Y] 4600 / 5600 / 6600 / 7600 mm

Vertical [Z-W] Z: 1500 / 2000 / 2500 W: 2500 / 3500 mm

WORK CAPACITY

Distance between columns 3400 / 4400 / 5400 / 6400 mm

Distance between head nose (UAD) and table top 3675 / 4675 mm

FEEDS

Maximum [X] 30 m/min

Maximum [Y] 30 m/min

Maximum [Z] 30 m/min

SPINDLE SPECIFICATIONS

Spindle nose ISO-50 Big Plus / HSK-100

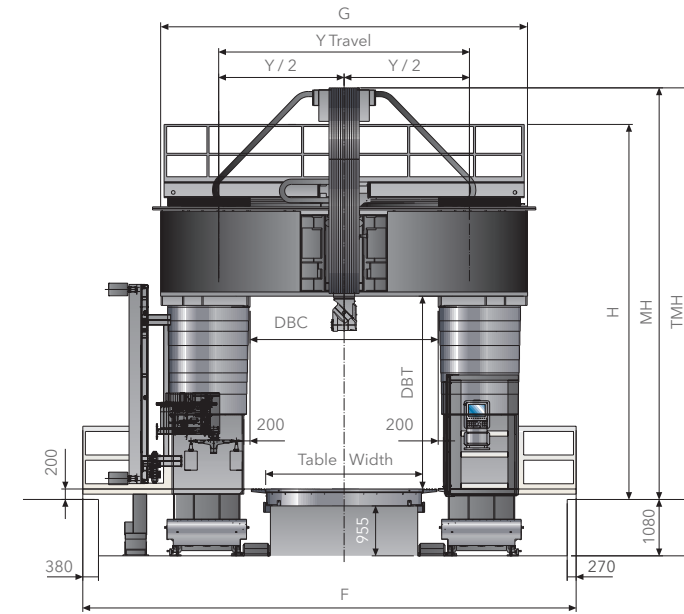
Programmable speed 10000 / 6000 / 6000 rpm

Maximum power 42 / 52 / 70 kW

Maximum torque 620 / 1375 / 1550 Nm

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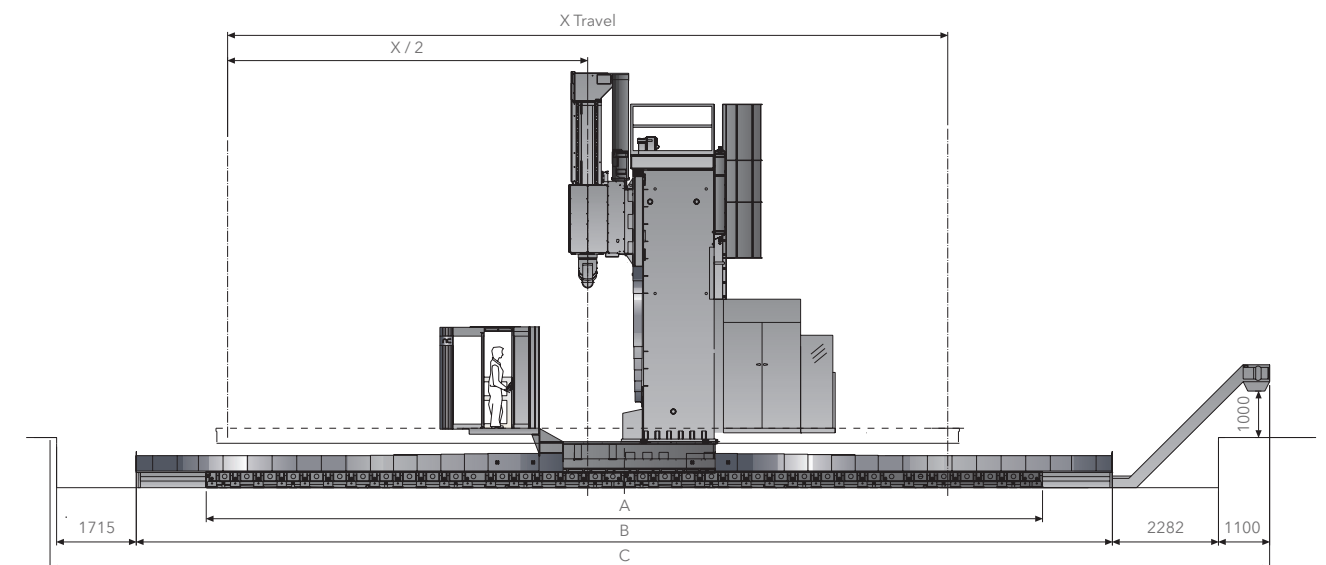
VERXA MW



Y Travel	DBC	F	G	Table Width	Max. Table Width
4600	3400	9578	7700	2500	3000
5600	4400	10578	8700	3500	4000
6600	5400	11578	9700	4500	5000
7600	6400	12578	10800	5500	6000

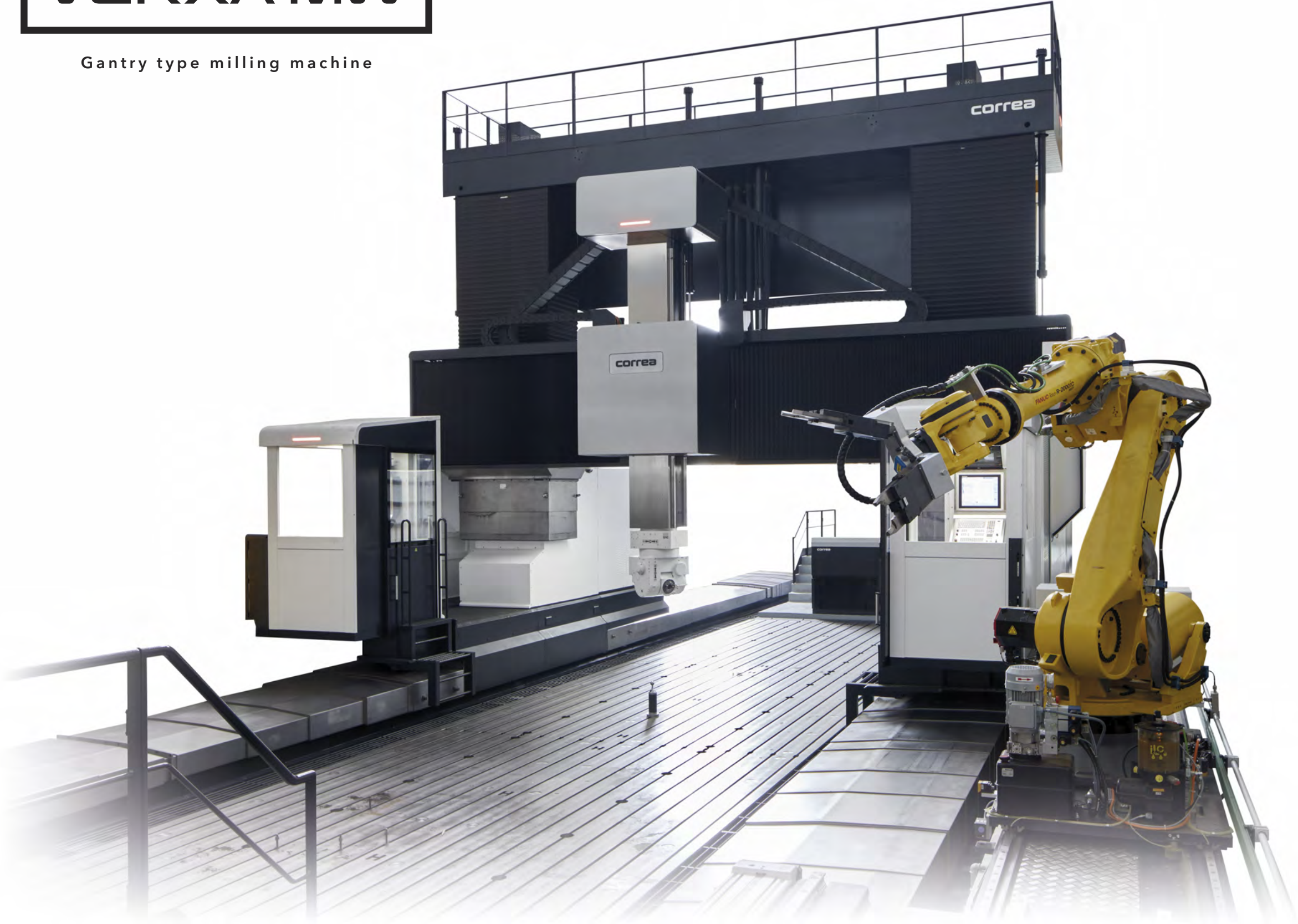
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20500	24000	30600	35150
23500	27000	33900	38450
26500	30000	37620	42170
29500	33000	41360	45910

W Travel	Z Travel	AVT	Vert. capacity	DBT_M	DBT_m	H	MH	TMH
2500	1500	3000	A	3675	1175	7400	8300	9450
	2000					7900	8800	9950
3500	1500	4000	B	4675	1175	9300	9400	10550
	2000					9300	9900	11050



VERXA MW

Gantry type milling machine



Milling Heads

UAD 0.02° x 0.02°

3+2 INDEXING TECHNOLOGY



Universal auto-indexing
differential head
52 kW | 1375 Nm | 6000 rpm

OAD 0.02° x 0.02°

3+2 INDEXING TECHNOLOGY



Orthogonal auto-indexing
differential head
52 kW | 1375 Nm | 6000 rpm

Milling Heads

UDX 0.02° x 0.02°

3+2 INDEXING TECHNOLOGY



Universal auto-indexing head
42 kW | 620 Nm | 10000 rpm

UCE Universal

5-AXIS TECHNOLOGY



2-Axis continuous
milling head
24000 rpm

Milling Heads

FCT



High torque front spindle
52 kW | 2005 Nm | 4000 rpm



FC-30 | 60 | 80

Front spindle
15 • 52 kW | 1375 Nm | 4000 • 6000 rpm



FD-30 | 60 | 80

3+2 INDEXING TECHNOLOGY
Non-centered front spindle
15 • 52 kW | 1375 Nm | 4000 • 6000 rpm

AL-600 2.5°

3+2 INDEXING TECHNOLOGY



Reach-out angle milling head
25 kW | 800 Nm | 1500 rpm

Milling Heads

ESE Continuous

5-AXIS TECHNOLOGY



2-Axis continuous milling head
35 • 60 kW | 12000 • 24000 rpm



UT-500 | 630

MULTITASKING TECHNOLOGY
D'Andrea head
52 kW | 8000 Nm | 315 • 250 rpm



TU 2.5°

MULTITASKING TECHNOLOGY
Turning and shaping head

CSE

5-AXIS TECHNOLOGY



2-Axis continuous milling head
37 kW | 371 • 707 Nm | 4000 rpm

Milling Head Changer



Standard Equipment

- Automatic Universal Head • Hydraulic and cooling group
- Numerical control Heidenhain or Siemens [operate HMI] • Linear scales in all axes
- Portable handwheel • External Coolant with adjustable nozzles
- Air-conditioned electrical cabinet • Internal and external air flow
- Linear guides in the X, Y and Z axes • Guarding
- Lamp in the working area • Tele-service

Optional Equipment

- Other heads • Vixion 4.0
- Automatic head-changer • Self cleaning filter
- Pick up station for 6, 8, 12 tools • Air/Coolant cleaning gun
- Automatic charger for 30, 40, 60, 120 tools • Chip conveyors
- Probes of measurement, tools and parts • Perimeter fence
- Rotary tables • Different enclosures according to user's needs [only in some models]
- Zero Point Clamping System integrated in the machine • Coolant through spindle 17, 36, 70 bar



MULTITASKING

correa multitasking machines combine several cutting processes on one machine. These machines offer the manufacturing capabilities of milling and turning machines into one integrated unit to use the functionality of both simultaneously.

UAD T

The universal head **UAD T** incorporates a spindle internal brake to lock the spindle axis. This solution allows to rotate the turning tool to any position and lock the spindle accordingly. This is a mechanical transmission head providing a perfect integration between milling and turning.



General Specifications

Tool holder HSK-100 for both milling and turning tools. In case of turning tools HSK-100T is required.

Milling mode: 6000 rpm and rotation every 0.02° in both bodies.

Turning mode: Rotation every 0.02° in both bodies.

TU

Orthogonal turning head **TU** rotates every 2.5° thanks to the crown hirth coupling allows to position the tools. We can use neutral tools for turning providing the angel with the head position, reducing the number of tools needed.



General Specifications

Tool holder Capto C8.

Rotation every 2.5° to reduce the number of turning tools to be used.

Automatic tool changing.

TU 25

Turning head **TU 25** incorporates two tapers to 90°. The two tapers offer flexibility to perform several facing and turning operations on a workpiece.



General Specifications

Tool holder Capto C8.

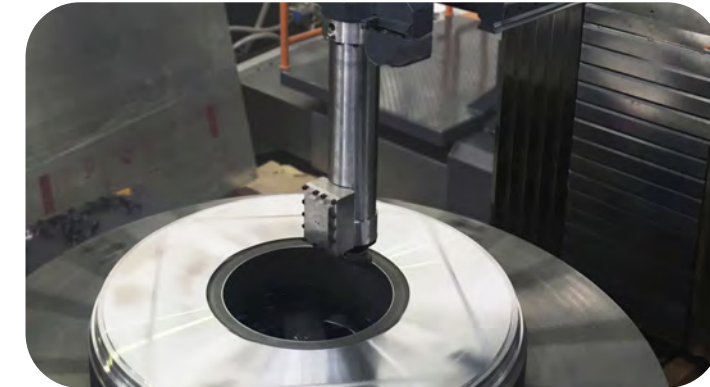
Double two tapers to 90°.

Manual tool change.

	Material	Ø (mm)	Ap (mm)	Vc (m/min)	F (mm/min)	Q (cm ³ /min)
Medium Duty Roughing	Ck-45 (60 kg/mm ²)	1090	4.5	210	0.5	471
Heavy Duty Roughing	Ck-45 (60 kg/mm ²)	1200	10	210	0.7	1450

TUB

For internal turning operations in deep parts, Nicolás Correa has specifically designed a manual extension which includes a tuned mass absorber (TMA) internally for a better cutting performance.



TURNING ROTARY TABLE

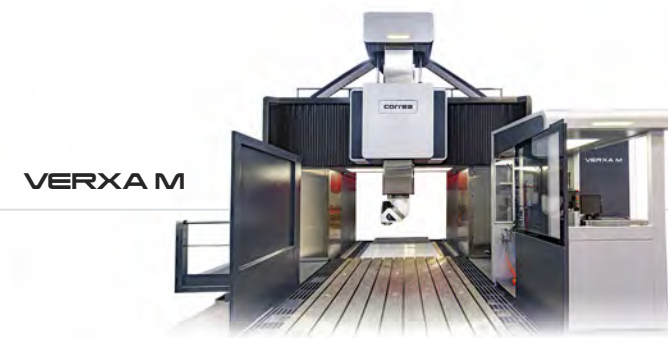
	Ø 2000 mm	Ø 2500 mm	Ø 3000 mm	Ø 4000 mm	Ø 5000 mm	
Maximum load milling/turning	5 - 20	10 - 30	10 - 60	100	150	t
Speed	250 - 150	250 - 150 - 120	250 - 150 - 100	70	70	rpm



Range of Equipment



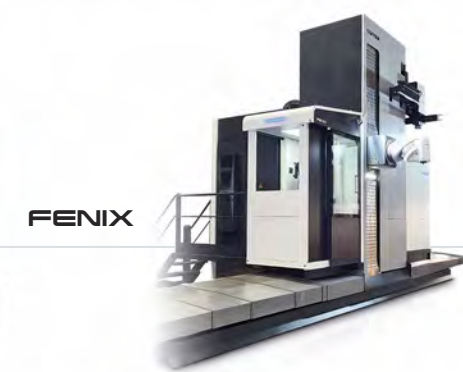
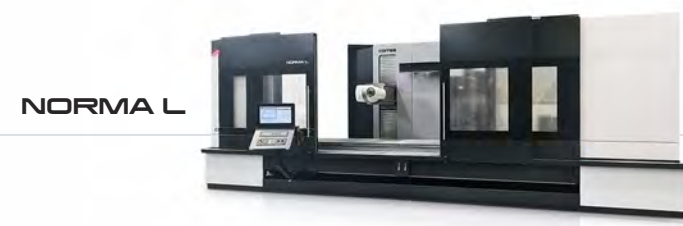
TOP GANTRY TYPE



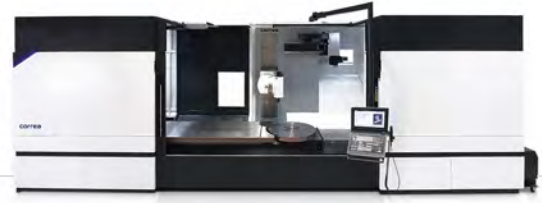
GANTRY



BRIDGE TYPE



TRAVELLING COLUMN



BED TYPE

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