# hypsos universal 5-axis machining centre





## **HYPSOS**



# THE IDEAL MACHINING CENTRE TO SHAPE YOUR CREATIVITY

#### **FLEXIBILITY**



#### LARGE MACHINING VOLUMES

The machine's architecture has been designed to perform routing operations on complex-shaped and large-sized work pieces. Through the front sliding doors, loading/ unloading operations on the worktable are very easy.

#### **ACCURACY**



#### HIGH ACCURACY THANKS TO THE RIGID STRUCTURE

The maximum accuracy on the whole volume is guaranteed by the robust monolithic structure, composed of a fixed base with integrated worktable and a high section movable bridge supporting the machining head unit. The high power electrospindle makes it possible to perform heavy duty operations on solid wood elements.

#### **CLEANLINESS**



#### EXTREME DUST AND NOISE REDUCTION IN THE ENVIRONMENT

The top machine roof, composed of sliding bellows, allows to contain dust and noise that are produced inside the work area, ensuring a clean environment.

#### **SAFETY**



#### WIDE VISIBILITY ON THE WORK AREA **AND TOTAL SAFETY**

The full protection enclosure, equipped with front sliding doors and large transparent windows, allows total safety for the operator in any work condition.

## **OVERVIEW OF TECHNICAL FEATURES**

TECHNOLOGICAL ADVANTAGES



Environmental cleanliness Different solutions are available to close completely the work area, for an extreme reduction of dust and noise.



Axis re-setting
With this device it is
possible to reset the
rotary axes automatically,
to always guarantee
maximum precision.





#### Architecture

Maximum machining quality, thanks to the integrated structure with machine base and worktable, plus the sturdy movable bridge with machining head unit.



#### Mobile worktables

The APC mobile
worktables solution
(Automatic Pallet
Change) allows
maximum accessibility
to the worktables, in
the case of large pieces
and/or in the presence
of external loading/
unloading systems.



Machining head unit The 90° geometry of the machining head unit allows to perform 3D shapes in total freedom. The powerful electrospindle is ideal for heavy duty operations on solid wood work pieces.





Tool stores Different automatic tool change solutions with tool stores both on-board and in remote position, to guarantee cycle time reduction and maximum capacity.





Operator interface Maestro active cnc allows the machine control in an easy and intuitive way. Programming can be performed with external CAD/CAMs which can be perfectly integrated with the machine software.





Worktable Available in phenolic multilayer or aluminium, it has an integrated vacuum system and grooves on the entire surface.





Locking systems It is possible to use clamps or suctions cups to lock work pieces of particular shapes and dimensions.



#### Maestro active cnc

# A REVOLUTIONARY APPROACH TO INTERACT WITH YOUR SCM MACHINE

#### **FULL MACHINE AWARENESS AND KNOWLEDGE MANAGEMENT SYSTEM**

Maestro active allows to record the times related to set-up, maintenance, training and other events, tracing all the activities in a database. The operator's *know-how* is also stored and made available to other people inside the organization thanks to the possibility to comment and document all events.

#### **ORGANIZE YOUR PRODUCTION**

Maestro active allows to create different users with different roles and authorizations (e.g.: operator, maintainer, administrator, ...). Any user can only execute the functions whose permissions have been assigned to him. It is also possible to define the work shifts on the machine and then detect activities, productivity and events that occurred in each shift.

#### TOTAL QUALITY OF THE FINISHED PRODUCT

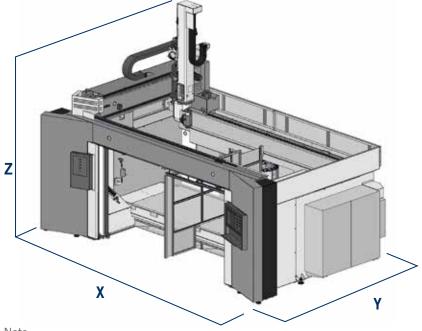
With Maestro active the quality of the finished piece is no longer put at risk by worn tools. The new Maestro active Tool Life Determination system sends notification messages as the tool reaches its end of life and recommends its replacement at the most appropriate time.

#### TOOLS? NO PROBLEM!

Maestro active guides the operator during the tool change phase.

### **TECHNICAL DATA**

		hypsos 3618	hypsos 3626	hypsos 4818	hypsos 4826	hypsos 6018	hypsos 6026
AXES							
X-axis stroke	mm	3600	3600	4800	4800	6000	6000
Y-axis stroke	mm	1800	2600	1800	2600	1800	2600
Z-axis stroke	mm	1200	1200	1200	1200	1200	1200
X-axis speed (max)	m/min	80	80	80	80	80	80
Y-axis speed (max)	m/min	80	80	80	80	80	80
Z-axis speed (max)	m/min	70	70	70	70	70	70
ROUTING UNIT							
Electrospindle power	kW	15-18-20	15-18-20	15-18-20	15-18-20	15-18-20	15-18-20
Rotation speed	rpm	24.000	24.000	24.000	24.000	24.000	24.000
TOOL STORES							
Tool store on-board	n. positions	8 + 8	8 + 8	8 + 8	8 + 8	8 + 8	8 + 8
Rear tool store	n. positions	16	16	16	16	16	16



	X	Υ*	Z
hypsos 3618	6400	3900	4450
hypsos 3626	6400	4800	4450
hypsos 4818	7800	3900	4450
hypsos 4826	7800	4800	4450
hypsos 6018	9600	3900	4450
hypsos 6026	9600	4800	4450

- \* 500 mm of free space on the rear side of the machine is compulsory.
- \* In the presence of rear tool store the Y dimension increases by 850 mm.

**COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL** = ISO 9001 =

The technical data can vary according to the requested machine composition. In this catalogue, machines are shownwith options. The company reserves the right to modifytechnical specifications without prior notice; the modifications do not influence the safety prescribed by CE Norms.

Maximum recorded noise levels based on functioning parameters established by ISO 3746/95, EN848-3E, UNI EN ISO 11202/97. Acoustic pressure while working 78,2 dbA (measured according to EN 848-1, K variance = 4dB).

Acoustic power while working 93,2 dbA (measured according to EN 848-1, K variance = 4 dB). Despite the existence of a correlation between "conventional" noise emission values mentioned above and average personal exposure of the operators during the 8 hours, these also depend on the specific functioning conditions, length of exposure, acoustics characteristics of the working environmentand by the presence of additional sources of noise, that is the number of machines and adjacent processes.





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