

# morbidelli n200

numerical control machining centre

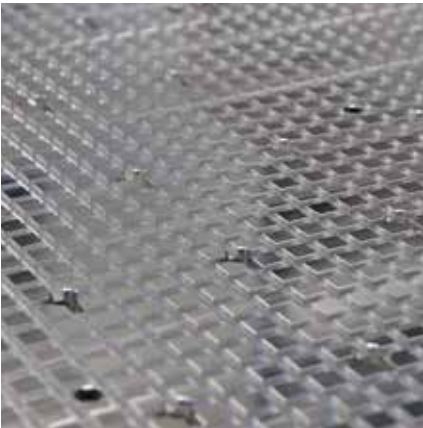


# MORBIDELLI N200



**MACHINING  
TIME REDUCTION**  
WITH MAXIMUM  
QUALITY

## EFFICIENCY



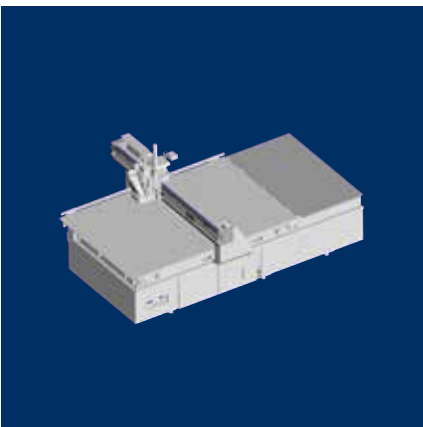
Sturdy, practical and resistant “H.E.” (High Efficiency) work table, due to its laminate aluminum structure. Easy and quick setting with the magnetic locking system of the vacuum: in a few seconds the vacuum is activated only in the positioning area of the piece to be machined.

## PRECISION



**RO.AX spindle** (Rotoaxial spindle technology), the most efficient spindle on the market with rotation speeds up to 8000 rpm. The sturdiness of drilling heads is proven by the reduced maintenance costs: five times less than that imposed by the majority of other machine manufacturers.

## TOP QUALITY



**Mobile gantry structure** that allows for high machining speeds whilst guaranteeing the best end products quality and total lack of vibrations.

## SOFTWARE



**Maestro Suite**, CAD/CAM programming software to design all the production processes. Developed in Windows® environment it ensures easy programming with an advanced, simple and intuitive sketching environment that features all the tools necessary to design the parts, their layout on the work table, tools management and the relative machining operations. All the procedures are contained in a perfectly integrated and high performance software.

# n2000



1

### **Extraction system**

No dust with the upper extraction system for the cleaning of outfeed workpieces.



2

### **Unloading pusher**

100% productivity with the pusher that moves the processed workpieces on the unloading belt and simultaneously cleans the work table while the new panel to be machined is loaded.



11

### **Unloading belt**

with photocell detection system.



10

### **"Free-form" guides**

to prevent accidental workpiece ejection during the passage from the work table to the unloading belt.



3

### **Routing unit**

*Optimal precision and flexibility, stable and reliable in all conditions of use with the 3 or 4-axis routing unit up to 15 kW power.*



4

### **Drilling unit**

*Efficiency, rigidity and highest working quality during the machining owing to the drilling heads with up to 18 independent spindles. Easy grooves machining on the sides of the furniture as a result of the integrated blade unit.*



5

### **Suction cups system**

*Precise and rapid panels positioning on the work table with a dedicated suction cups system.*



6

### **Panels alignment device**

*Perfect alignment of the loaded panels due to the aligning device for infeed workpieces.*



9

### **Rear tool changer**

*Maximum versatility thanks to the rear tool changer that greatly reduces the tool changing times.*

8

**Lifting table** for the management of panels stacks with height up to 700 mm.



7

### **Automatic label printer**

*Complete work cycle with the possibility to automatically apply the labels, in masked time, on the infeed panel before the machining.*



# MAESTRO SUITE THE SOFTWARE THAT SIMPLIFIES THE WORK



### MAESTRO APPS – Unique know-how

Maestro APPS is a library of programming functions that are always available and easy to use, developed by SCM for the production of parts for doors, windows, stairs, furniture and furnishings.



### MAESTRO CABINET – Unique in the creation of furniture

This application is designed for the home and office furniture sector to design furniture and program cabinet production step by step.



### MAESTRO NEST – Unique nesting process

The integrated module provides all the functions necessary to manage the “nesting” process: from a simple “rectangular” piece to the most varied and complex “free form” geometrical shapes.



### MAESTRO LABEL – Unique labeling process

Integrated module to manage label's models, which develops labels by inserting texts, images, parameters and the main barcode formats.



## THE USE OF POWER ONLY WHEN IT IS REQUIRED

**SavEnergy** allows making things operate only when they are really necessary. It means the machine automatically enters “stand-by” mode when there are no panels to be machined.



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

*Maximum noise levels measured according to the operating conditions established by EN 848-3:2012  
Acoustic pressure in process (routing) 81 dbA (measured according to EN ISO 11202:2010, uncertainty K = 4 dB)  
Acoustic power in process (routing) 98 dbA measured according to EN ISO 3746:2010, uncertainty K = 4 dB)*

*Even if there is a correlation between above mentioned “conventional” noise emission values and average levels of personal exposure over eight hours of operators, these last also depend on the real operating conditions, duration of exposure, acoustic conditions of the working environment and presence of further noise sources, this means the number of machines and other adjacent processes.*

## TOTAL FREEDOM AND HIGH PRODUCTIVITY:

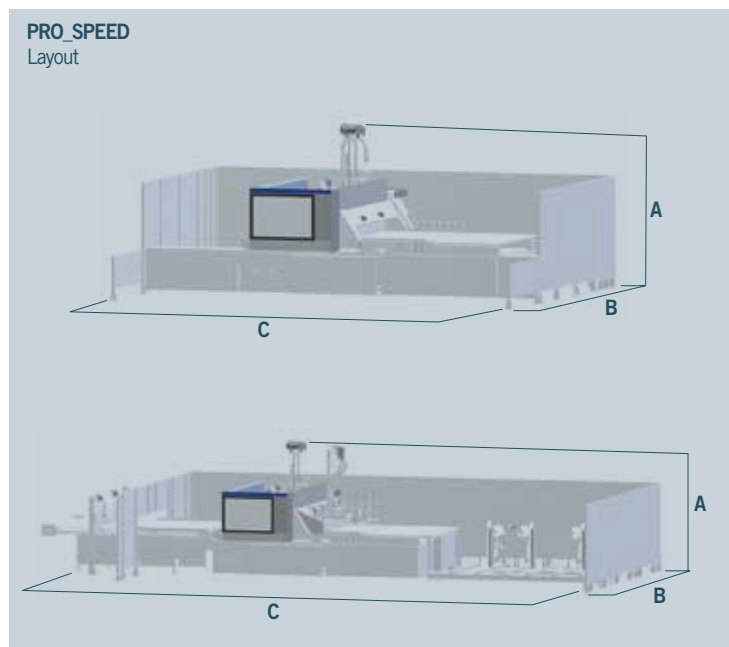
### PRO-SPEED PROTECTIONS

Protection system for the machine use to the maximum speed. In the stand-alone version, when the operator enters into the loading area, which is delimited by the front photocell barrier, the machine automatically reduces the speed to 25 m/min; when the operator leaves the loading area, the system restores the maximum working speed.

## OVERALL DIMENSIONS AND LAYOUT

		A	B	C
<b>morbidelli n200 STAND-ALONE</b>				
morbidelli n200 2412	mm	2740	4470	6170
morbidelli n200 3615	mm	2740	4770	7390
morbidelli n200 3618	mm	2740	5070	7390
morbidelli n200 3122	mm	2740	5600	6890
morbidelli n200 4322	mm	2740	5600	8090

		A	B	C
<b>morbidelli n200 LOADING/UNLOADING AUTOMATION</b>				
morbidelli n200 2412	mm	2740	4650	10790
morbidelli n200 3615	mm	2740	4720	14335
morbidelli n200 3618	mm	2740	5020	14335
morbidelli n200 3122	mm	2740	5570	12125
morbidelli n200 4322	mm	2740	5570	15610



## TECHNICAL DATA

morbidelli n200		2412	3615	3618	3122	4322
<b>AXES</b>						
Vectorial speed X-Y axes	m/min	92	106	106	103	103
Z axis stroke	mm	240	240	240	240	240
Z axis panel passage	mm	150	150	150	150	150
<b>ROUTING UNIT</b>						
Motor power (max.)	kW (hp)	15 (21)	15 (21)	15 (21)	15 (21)	15 (21)
Rotation speed (max.)	rpm	24000	24000	24000	24000	24000
Available tools on tool changer (max.)	places	32	32	32	32	32
<b>DRILLING UNIT</b>						
Independent vertical spindles (max.)	n.	18	18	18	18	18
Independent horizontal spindles (max.)	n.	8	8	8	8	8
Rotation speed (max.)	rpm	8000	8000	8000	8000	8000
Integrated blade in X, diameter	mm	125	125	125	125	125
Integrated blade in X, rotation speed (max.)	rpm	10000	10000	10000	10000	10000



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