

### scmspindle moulders

The widest range of spindle moulders offering the market the latest and most advanced technological solutions urgently required for different types of production .



#### L'invincibile

the exclusive choice for your success.

electronic spindle moulder with tilting spindle ti 2600

#### class

the best solution for every production requirement.

electronic spindle moulders with tilting spindle ti 155 ep - ti 120 e electronic spindle moulders with fixed spindle tf 135 ep - tf 130 e manual spindle moulders with tilting spindle ti 155 - ti 120 manual spindle moulder with fixed spindle tf 130

#### nova

guaranteed quality at your fingertips.

manual spindle moulder with tilting spindle ti 105 manual spindle moulders with fixed spindle tf 110 - tf 100

















# **spindle moulders** with +/- 45.50° tilting spindle

More quality, more performance, more reliability.



SPINDLE MOULDERS		L'INVINCIBILE	CLASS
		TI 2600	TI 155
machine version		electronic	electronic/manual
work table dimensions	mm	2500 x 750	1200 x 780
spindle height Ø 30-35 (Ø 40-50)	mm	140 (140)	140 (160) M-E version 140 (140) H-E version
spindle base projection from table	mm	54	50
max. tool diameter retractable under work table	mm	300 x 75	300 x 80
spindle speed	rpm	900 - 12000	900 - 12000
electrospindle motor power (S6 -40%)	kW	7,5	7,5
external diameter of suction outlet on the spindle moulder hood	mm	120	120
dsuction outlet diameter on base	mm	1 x 150 - 1 x 100	3 x 100
extractor system - air speed - air consumption	m/s m³/h	20 2600	20 2500
operating air pressure	bar	6	6
basic machine weight	kg	1100	940

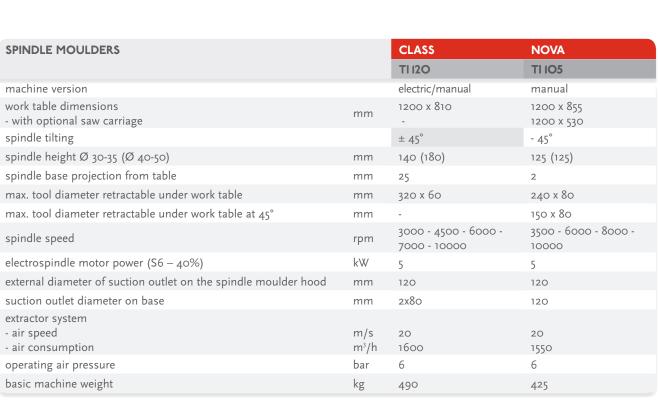




# spindle moulders with tilting spindle

Investment in performance.







## spindle moulder with vertical electrospindle

Precision and reliability in unbeatable time.





# spindle moulders with fixed vertical spindle

Essential and professional.

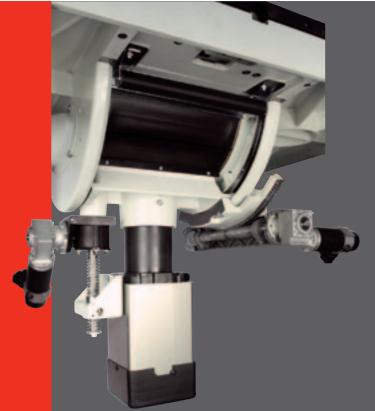


SPINDLE MOULDERS		CLASS	NOVA	
		TF 13O	TFIIO	TF 100
machine version		electric/manual	manual	manual
work table dimensions	mm	1200 x 730	1200 x 730	1080 x 855
spindle height Ø 30-35 (Ø 40-50)	mm	140 (180)	125 (125)	125 (125)
spindle base projection from table	mm	52	5	2
max. tool diameter retractable under work table	mm	320 x 85	320 x 85	240 x 80
spindle speed	rpm	3000 - 4500 - 6000 - 7000 - 10000	3000 - 4500 - 6000 - 7000 - 10000	3500 - 6000 - 8000 - 10000
electrospindle motor power (S6 - 40%)	kW	7	5	5
external diameter of suction outlet on the spindle moulder hood	mm	120	120	120
suction outlet diameter on base	mm	120	120	120
extractor system - air speed - air consumption	m/s m³/h	20 1650	20 1650	20 1650
basic machine weight	kg	465	405	330



# electronically programmable **spindle moulders**

Exclusive features.



### toptech

## ELECTROSPINDLE: MACHINING CENTRE TECHNOLOGY FOR THE WOODWORKER.

**Absolute machining precision** and **absence of vibration** due to the perfectly balanced structure of the electrospindle. Top performance and finishing quality due to the electronic speed control from 900 to 12.000 rpm, with maximum available motor power from 3.400 rpm.

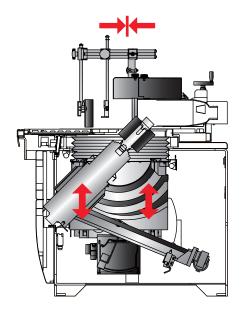
**Optimal machine cleaning and healthy environment** due to an efficient exhaust system with two side outlets.





### No maintenance required.

The electrospindle's direct drive eliminates any maintenance procedures that are common with conventional belt driven systems.



#### toptech

### LESS MOVEMENT FOR A FASTER SET-UP.

**Speed of setting-up** due to the unique moving mechanism of the spindle **(Scm patent)**, which allows the operator to independently position the height of the tool with the tilted spindle and the moulder fence.



**Top level performance** using the latest technology of the screw with recirculating ball-bearings and linear guides which guarantees the total absence of vibration and wear, therefore reducing maintenance (centralised lubrication).







### RAPID TOOL CHANGEOVER: FAST, FLEXIBLE AND SAFE.

- It cuts setting-up times by 75% compared with traditional systems
- Using the same tools as cnc machining centres allows the spindle moulder to accept the same type of tooling
- Maximum coupling precision with the double air jet system that keeps contact surfaces clean

# electronically programmable spindle moulders

Electronic controls.



### **INVINCIBILE:**

### THE ADVANTAGE FROM DAY ONE THAT GUIDES YOU EVERYWHERE.

The satisfaction of **fast and easy-to-use control of all machine functions** with the 12" large flat touch-screen colour display. The system guides the operator every step of the way offering suggestions that **avoids** the operator making **any mistakes.** Information windows instruct the operator as to what to do on the next operation ensuring the operator works in **complete safety.** 

L'invincibile



### EASY:

### THE OPERATING ADVANTAGE FOR EASY ASSISTANCE.

Maximum reliability due to the function push buttons and easy-to-use with the electronic control of up to 8 axes with the 7" LCD display, 16:9 format. Integrated and fast control of all dedicated functions. These features translate into immediate improvements in productivity and guarantees the capability and the full potential of the machine.

class







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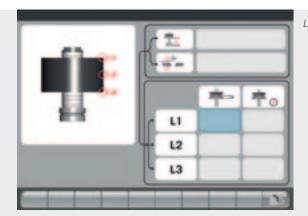
### TOOL DETECTION SYSTEM: SETTING UP SPEEDILY AND SAFELY.

This system eliminates any manual operation for setting up the required work allowing the operator to automatically input all the work data.

**Higher operator safety:** the possibility to select only the programs associated with the tool installed, eliminates any possible dangerous situations.

Less input data, fewer errors, immediately ready for work. class, L'invincibile

http://goo.gl/ncuCm





L'invincibile



### **OPERATOR ASSISTANCE:**

WORKING BECOMES EASIER AND MORE PRECISE. For every tool, the machine can be positioned without the necessity of calculation or to create programs due to the possibility of defining the origin point on three different positions of the tool profile.

For the most recurring machining jobs it is possible to set the dimensions of the required profile and select the tool to be used. The controls will create the dedicated program to carry out the required machining operations.

class

# electronically programmable and manual spindle moulders

Devices and options.



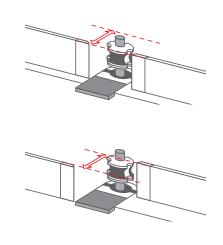
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### "FLEX" SPINDLE MOULDER FENCE: IMMEDIATELY IN THE CORRECT POSITION.

A single, simple movement to retract and re-position instantly and accurately the position of the fence on the worktable with such precision that **no other control is necessary (Scm** patent).

## "FLEX" SPINDLE MOULDER FENCE WITH AUTOMATIC ADJUSTMENT: PERFORMANCE WITHOUT COMPARISON.

The 250 mm exclusive fence stroke on linear guides with recirculating ball bearings allows the best flexibility for all machining types (machining with +/-45,50° tilting and "head" machining).



Electronic positioning of the entire fence according to the minimum tool diameter

Electronic positioning of the infeed fence according to the requested material removal



### MACHINING WITH TOOLS ON THE SPINDLE HEAD CARRIED OUT WITH THE "FLEX" FENCE.

The spindle moulder fence can be located behind the tool allowing the performance of "head" routing using small diameter tools, typical of a router or portable electric tools; all this in compliance with CE safety regulations.



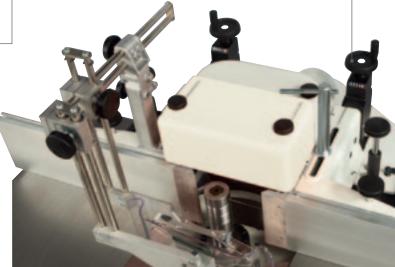
engraving, grooving, mortising

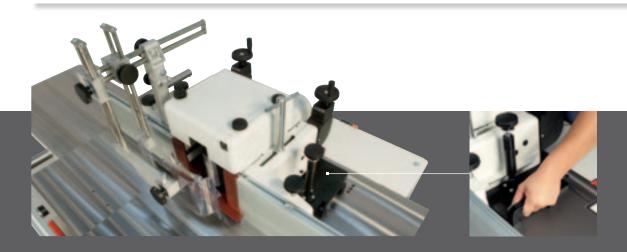




precision in a much reduced time due to the mechanical digital readouts. The set-up by means of handwheels always

provides the correct position.



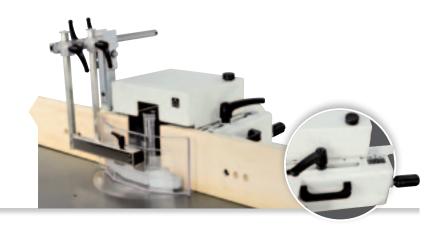


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**SPINDLE MOULDER FENCE WITH MECHANICAL PROGRAMMING: MAXIMUM SET-UP SPEED AND EASE-OF-USE. No more test runs** due to digital readouts that ensure accuracy to a tenth of a millimetre in positioning the two worktables. The side handles make it easy to remove and reposition the fence from the work table.

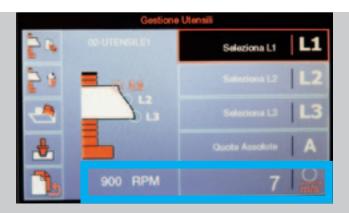
### ADJUSTABLE SPINDLE MOULDER FENCE.

A handle provides the setting-up of the infeed table, which effects the removal and it is verified by an index on a metric scale.



# electronically programmable and manual spindle moulders

Devices and options.





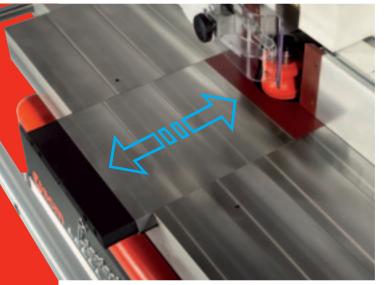
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### **ELECTRONIC TOOL SPEED CONTROL:**

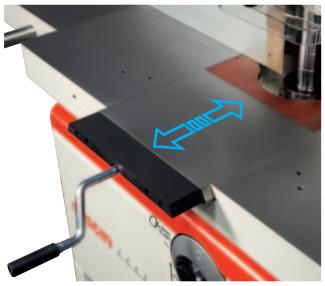
### HIGH QUALITY AND SAFETY ARE GUARANTEED.

- The awkward traditional drive belt operations are eliminated.
- The correct speed for the very best finish on all materials. The **possibility to lower the speed down to 900 rpm** allows polishing, raising the grain, and brushing operations.
- · Automatic tool braking even when the power supply is cut off. Maintenance and free of wear.





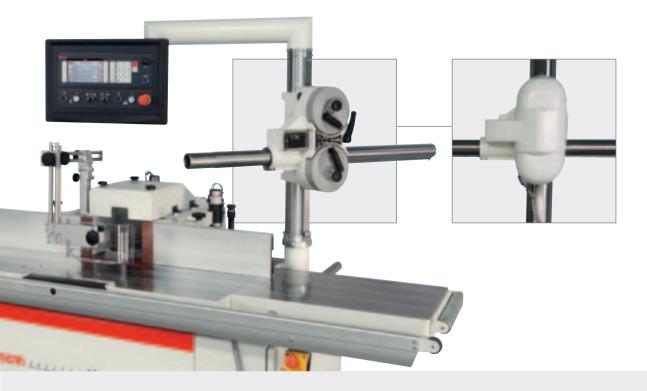
manual version



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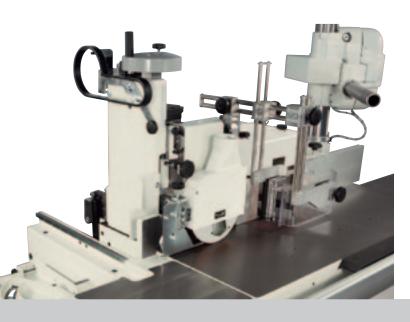
### "FAST" SECTIONAL WORKTABLE: THE BEST SUPPORT FOR THE WORKTABLE.

Provides support for the work piece being machined close to the tool, allowing the adjustment with mounted tools and the **very best quality finish** when machining narrow pieces. The extremes in machinable material eliminate the disadvantages of a possible collision with the tool.



### FEEDER SUPPORT: THE WORK BECOMES SIMPLER.

**High usable flexibility and no use of worktable space,** due to the cross device on the column support of the overhead control panel. The **positions are made extremely simple** by the control automatic mode or alternatively using manual movements.





### **GLAZING BEAD UNIT: TWO MACHININGS WITHIN A SINGLE OPERATION.**

Designed specifically for window manufacturing applications. It allows the **simultaneous glazing bead cut and profile machining** with the blade unit. This exclusive system allows its total removal from the work table whenever you want to return to standard working such as moulding, rebating and profiling.

# electronically programmable and manual spindle moulders

Versions for tenoning and moulding.

### "TL" PRO-10 VERSION



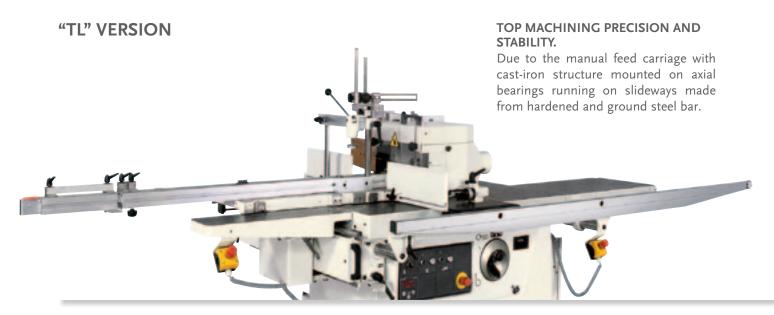
### SPECIALISATION AND PROFESSIONALISM WITHOUT COMPROMISE.

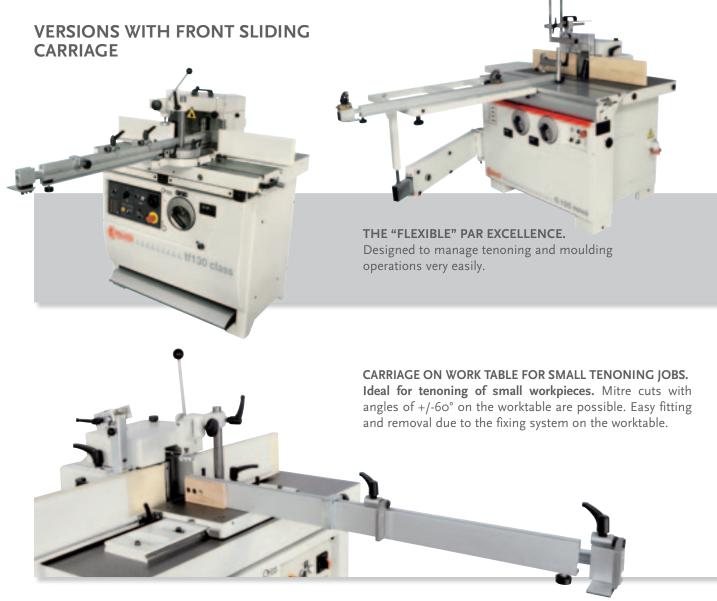
The manual feed carriage is a cast iron structure running on THK prismatic slideways with recirculating ballscrews, guaranteeing maximum machining precision and stability.



### TOTAL EXCLUSION FOR ABSOLUTE FLEXIBILITY.

The "PRO-10" tenoning table can be retracted easily and within a few seconds to leave the machine ready for the following moulding and contouring operations.





### "LL" VERSION WITH WORK TABLE SIDE EXTENSIONS.

Ideal when machining very long workpieces due to worktable extensions up to 2500 mm in length. The mobile front bar makes it easy to move large dimensioned workpieces on the worktable, particularly for edge moulding.



## spindle moulders

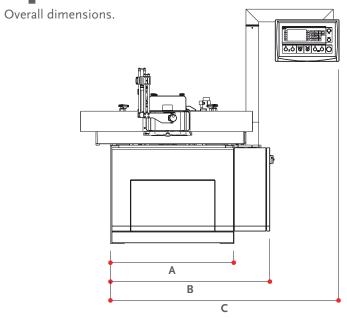
Equipment sheet.

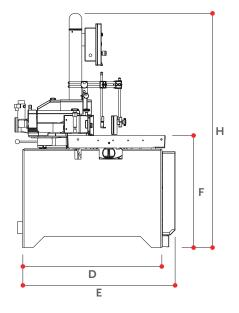
	NOVA		CLASS			
SPINDLE MOULDER WITH FIXED SPINDLE	TF 100	TF IIO	TF 13O	TF 130 E	TF 13O PS	TF 135 EP
Machine type	M	M	М	E	М	Р
"LL" version with 2 profiling extensions	0	0	0	0	-	0
Version with front sliding carriage	-	-	-	-	S	-
Carriage on the table for small tenoning operations	0	0	0	0	-	0
"TL" version for tenoning and profiling	-	0	0	0	-	0
"TL" PRO-10 version for tenoning and profiling	-	-	0	0	-	0
Glazing bead unit	-	-	-	-	-	0
Upper mobile control panel		-	0	0	-	S
MK interchangeable spindle		0	0	0	0	0
HSK rapid tool changeover		-	-	-	-	0
Inverter for speed change	-	-	0	0	-	0
Reverse spindle rotation	S	S	S	S	S	S
Manual feeder support	-	-	0	0	-	0
2 axes feeder support controlled from NC	-	-	-	-	-	0
"Fast" sectional table with manual movement	-	-	0	S	-	S
"Fast" sectional table controlled from NC	-	-	-	-	-	0
Adjustable manual spindle moulder fence (CE-USA-Canada)	S	S	S	-	S	-
Spindle moulder fence with mechanical programming		0	0	S	0	-
"Flex" spindle moulder fence with mechanical programming		-	0	0	0	-
Electronic programming for "Flex" fence from NC	-	-	-	-	-	S
Spindle moulder fence with aluminium tables	0	0	0	0	0	S

	NOVA	CLASS				L'INVINCIBILE
SPINDLE MOULDER WITH TILTING SPINDLE	TI 105	TI 12O	TI 120 E	TI 155	TI 155 EP	TI 2600
Machine type	M	М	E	М	Р	Р
"LL" version with 2 profiling extensions	0	0	0	0	0	S
Version with front sliding carriage	0	-	-	-	-	-
Carriage on the table for small tenoning operations	0	0	0	0	0	0
"TL" version for tenoning and profiling		0	0	0	0	-
"TL" PRO-10 version for tenoning and profiling	-	-	-	0	0	0
Glazing bead unit		-	-	-	0	0
Upper mobile control panel		-	-	0	S	S
MK interchangeable spindle		0	0	S	S	-
HSK rapid tool changeover		-	-	-	0	S
Inverter for speed change	-	-	-	S	S	S
Reverse spindle rotation	S	S	S	S	S	S
Manual feeder support	-	-	-	0	0	0
2 axes feeder support controlled from NC	-	-	-	-	0	S
"Fast" sectional table with manual movement	-	-	-	S	S	-
"Fast" sectional table controlled from NC	-	-	-	-	0	S
Adjustable manual spindle moulder fence (CE-USA-Canada)	S	S	-	S	-	-
Spindle moulder fence with mechanical programming	0	0	S	0	S	-
"Flex" spindle moulder fence with mechanical programming	-	-	-	0	0	-
Electronic programming for "Flex" fence from NC	-	-	-	-	0	S
Spindle moulder fence with aluminium tables	0	0	0	0	0	S

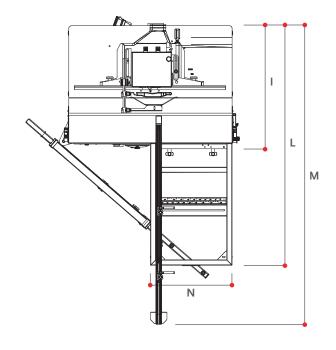


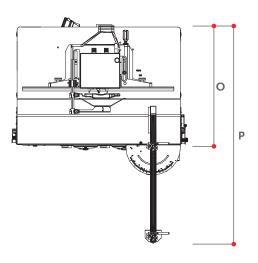
### spindle moulder



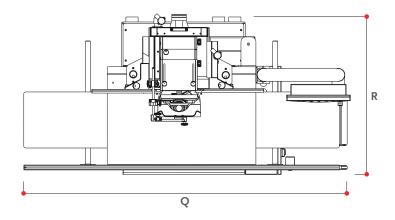


SPINDLE MO	OULDER	L'INVINCIBILE	CLASS				NOVA		
		TI 2600	TI 155	TI 120	TF 135	TF 13O	TI 105	TF 110	TF 100
Α	mm	990	990	1030	990	990	1130	990	830
В	mm	1280	1280	-	1280	1255	-	-	-
С	mm	1850	1850	-	1850	1850	-		-
D	mm	990	1120	940	577	577	855	577	616
E	mm	1315	1435	1280	680	680	-	680	-
F	mm	900	900	923	900	900	900	900	900
Н	mm	1885	1885	-	1885	1885	-	-	-

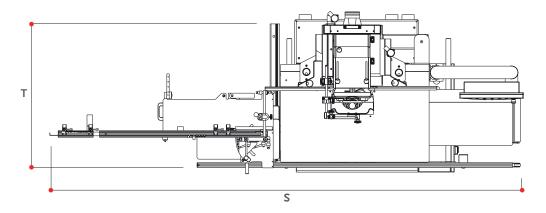




SPINDLE MO	ULDER	CLASS	NOVA
		TF 13O	TI 105
I	mm	-	863
L	mm	-	1756
М	mm	-	2190
N	mm	-	600
0	mm	760	865
P	mm	1720	1530



SPINDLE MO	OULDER	L'INVINCIBILE	CLASS				NOVA			
		TI 2600	TI 155	TI 120	TF 135	TF 130	TI 105	TF 110	TF 100	
Q	mm	2600	2600	2600	2600	2600	2600	2600	2576	
R min	mm	790	1400	1290	790	790	920	790	720	
R max	mm	1200	1795	1705	1200	1200	1480	1200	1220	



SPINDLE	MOULDER	L'INVINCIBILE	CLASS NOVA						
		TI 2600	TI 155	TI 12O	TF 135	TF 13O	TI 105	TF 110	TF 100
S	mm	3500	3500	3500	3500	3500	-	3500	-
Т	mm	1685	1685	1685	1685	1685	-	1685	-





