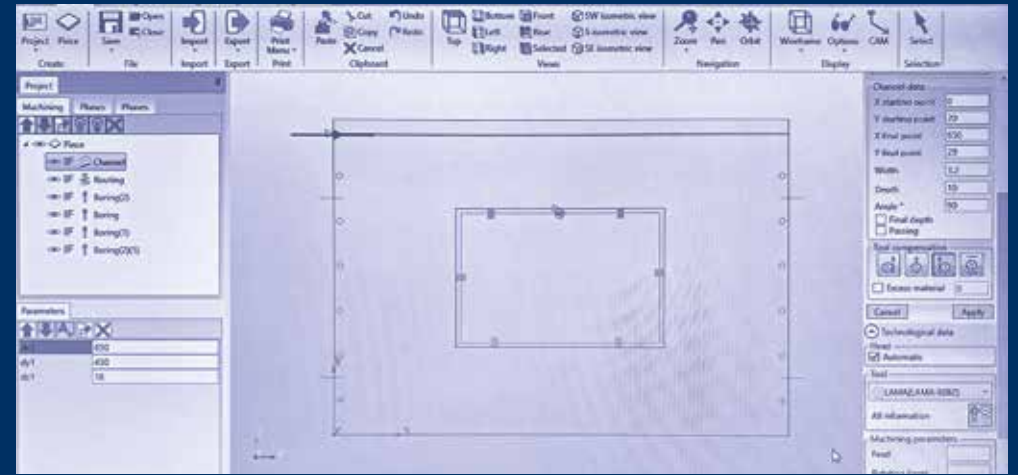
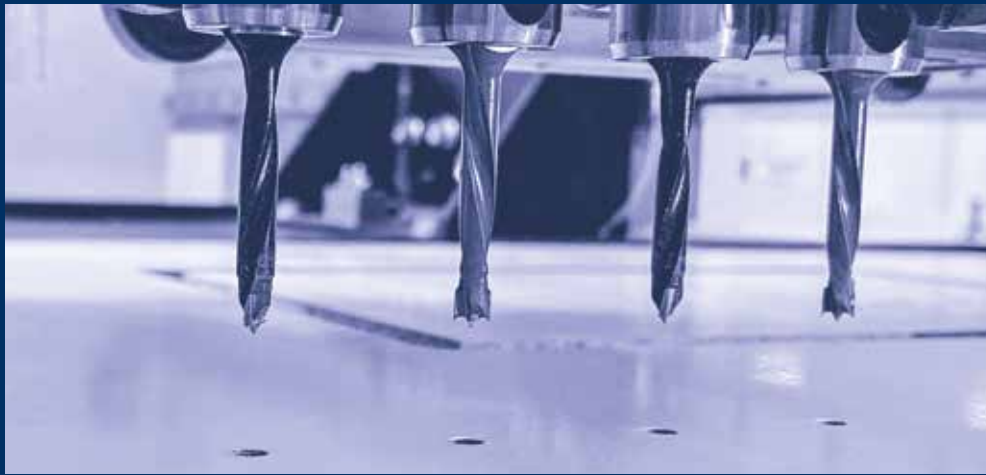


# startech *range*

drilling and routing machines for the advanced joinery



# All “Made in SCM Italy”

*From casting iron to finished product.*

Come see our production plants and touch the quality of SCM machines;  
you will be our guest.



## Drilling and routing machines for the advanced joinery.

SCM's objective is to guarantee customers high quality technologies which meet their requirements in such a way as to make SCM the partner for any needs.

# startech *range*

For all drilling and routing requirements.

automatic drilling-routing machines

**startech cn plus**  
page 4



drilling machines

automatic

**startech cn v**  
page 5



manual

**startech 27**  
page 10



**startech 21**  
page 11

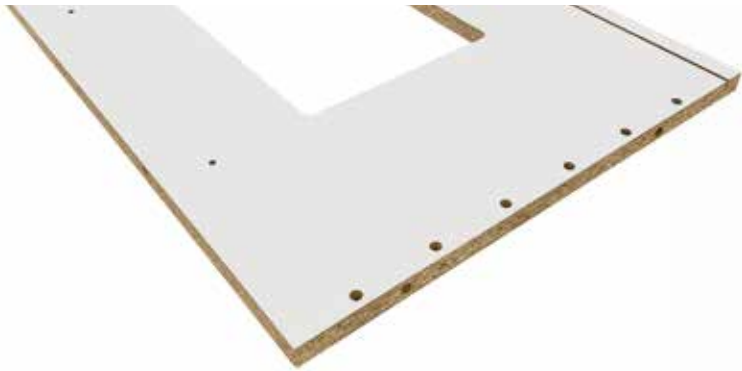


automatic routing machines

**startech cn k**  
page 16



# automatic drilling-rout- ing machine startech cn plus



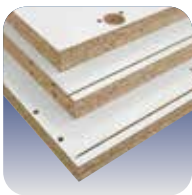
		startech cn plus	startech cn v
Max. panel dimensions X-Y-Z	mm	3050 x 900 x 60	3000 x 900 x 50
Min. panel dimensions X-Y-Z	mm	200 x 80 x 10	300 x 90 x 10
X-Y-Z axes max. speed	m/min	40/40/10	20
Vertical spindles	n.	8 (F14) - 13 (F23)	7 (F11) - 8 (F14)
Horizontal spindles	n.	6 (F14) - 10 (F23)	4 (F11) - 6 (F14)
Spindles rotation speed	rpm	4200	4460

*Find the complete technical specification at page 9*

# automatic drilling machine startech cn v



**Drilling from the Top**  
perfect finish



**Elements Production**  
versatility

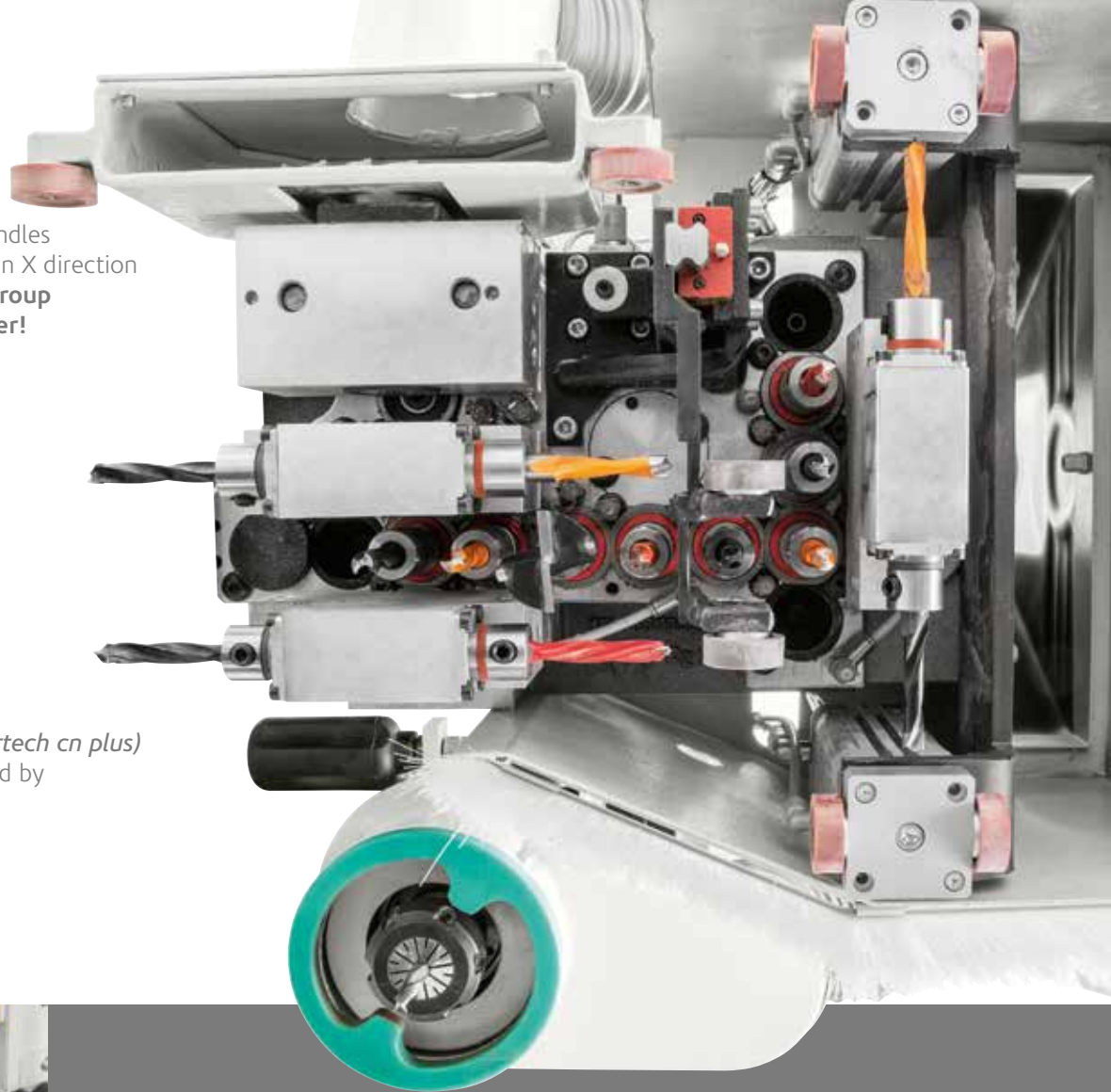


**Maestro Software**  
easy and intuitive

Compact and performing numerical control machines for woodworking shops and craftsmen.

# startech cn plus startech cn v operating groups

**effective Drilling head**  
With 14 independent spindles (8 vertical spindles and 6 horizontal spindles), integrated blade in X direction and possibility to add an **optional routing group (startech cn plus) with 5,5 kW motor power!**



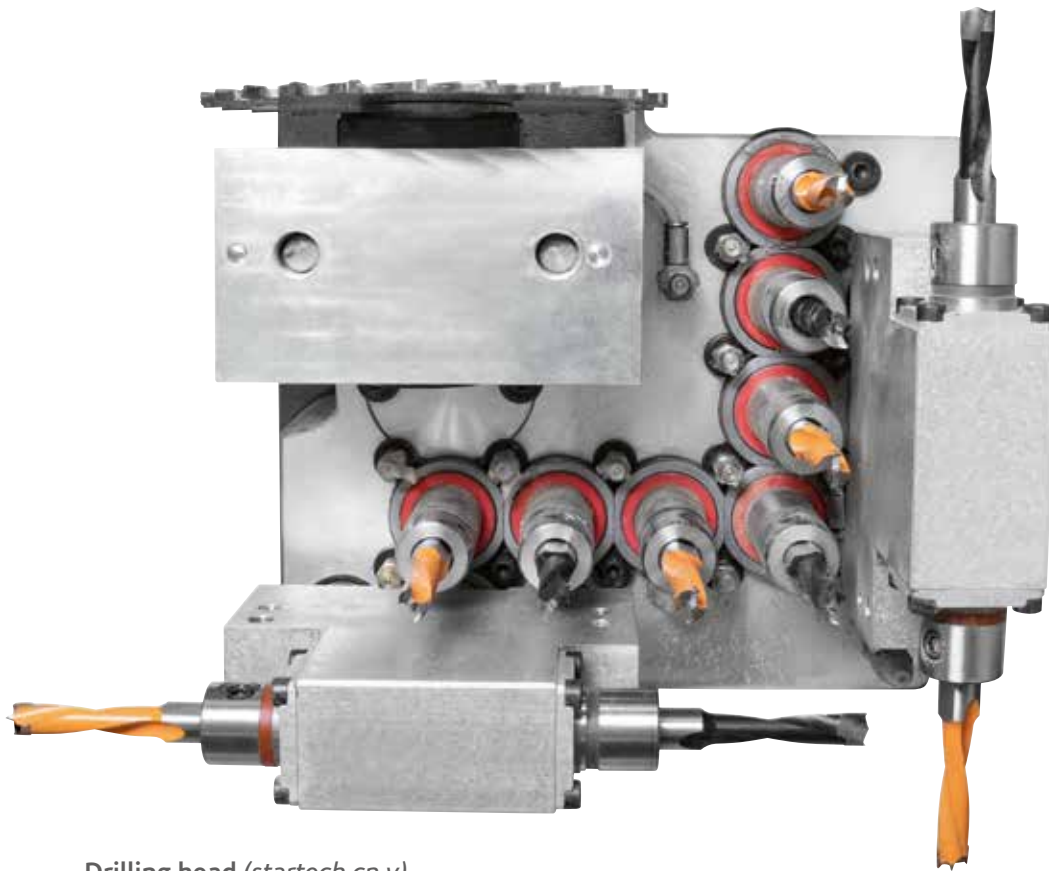
**easy panels movement Automatic side-alignment device (startech cn plus)** with pneumatic positioning and managed by the drilling-routing program.



**guaranteed reliability Mobile clamp with floating opening**  
Optimal piece stability and high working quality.

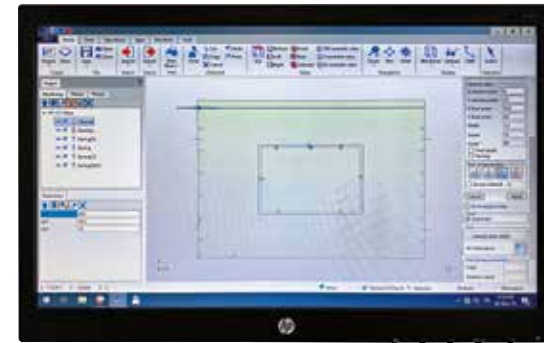


**Drilling from the Top**  
The drilling head positioned above the panel allows an accurate machining which can be verified in the cabinet assembly phase: the system uses the outside of the panel (in sight) as a reference and thus **any differences in thickness are always on the inside of the cabinet (non in sight)**. Furthermore, the positioning of the drilling head upper the working chips and dust grants a better cleaning and a reduced maintenance.

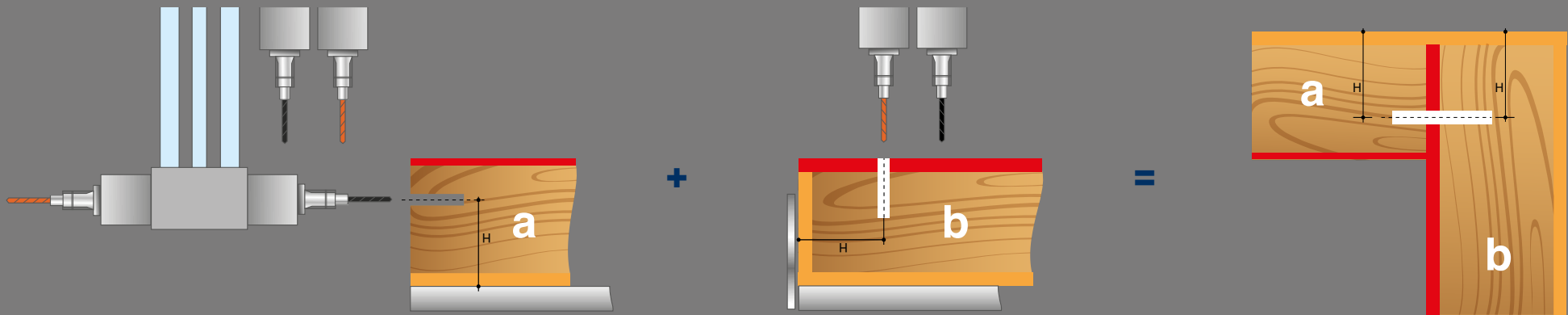


**Drilling head (startech cn v)**  
With 11 independent spindles and integrated blade in X direction.

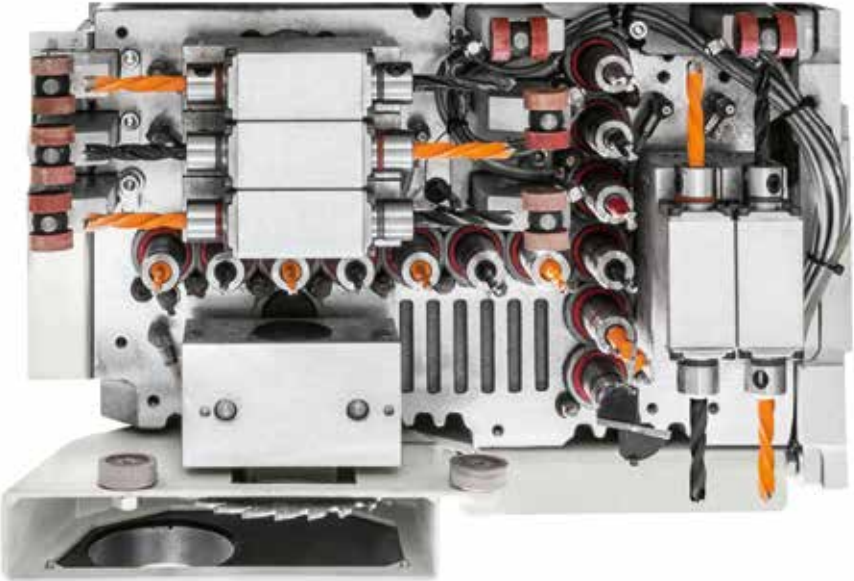
easy and intuitive  
PC with integrated software  
(startech cn plus)  
The SCM "Maestro cnc" software allows  
to create projects and geometrical  
drawings to be automatically  
converted in drilling-routing programs  
for the machine.



**Numerical control**  
(startech cn v)  
NC 10" colour touch-screen display  
and self-diagnosis and signalling  
system of errors or damages.  
Head tooling and machining cycle  
programming without using any  
mouse or keyboard and with  
automatic optimization.



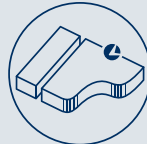
# startech cn plus startech cn v main optional devices



**F23 drilling head**  
High performance and rapid set-up thanks to the drilling unit with 23 independent spindles (13 vertical spindles and 10 horizontal spindles, 6X + 4Y) with integrated blade in X direction.  
The possibility to equip the head with several bits of different diameters, guarantees maximum flexibility of use and reduced maintenance.  
*(startech cn plus)*

## Maestro cnc

Expand your creativity



Possibility to import and export the drilling programs, even when created with a CAD/CAM software in the office, through USB key (post processor not included).  
*(standard on startech cn plus)*

**Removable side supports**  
to adjust and support long work-pieces.  
*(startech cn plus)*



**Automatic centralized lubrication**  
managed by the control.

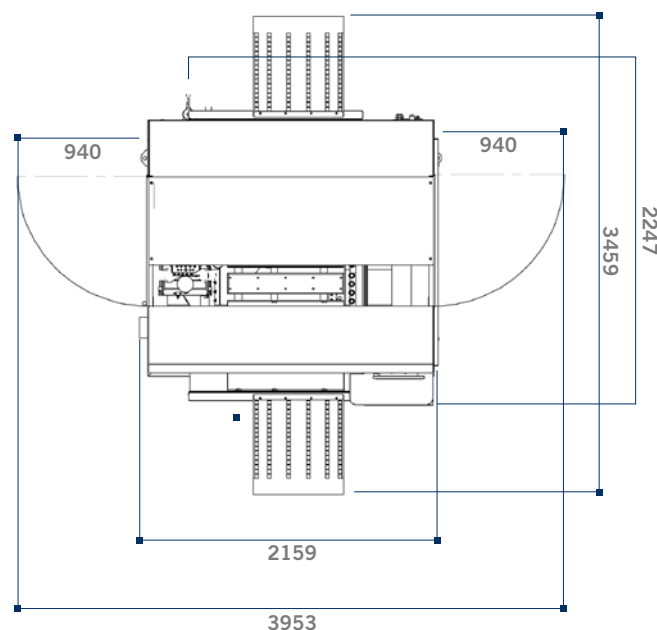
**Barcode reader**  
With a simple "click" of the barcode reader, it is very rapid and simple to recall drilling program, correctly stored in the machine control.



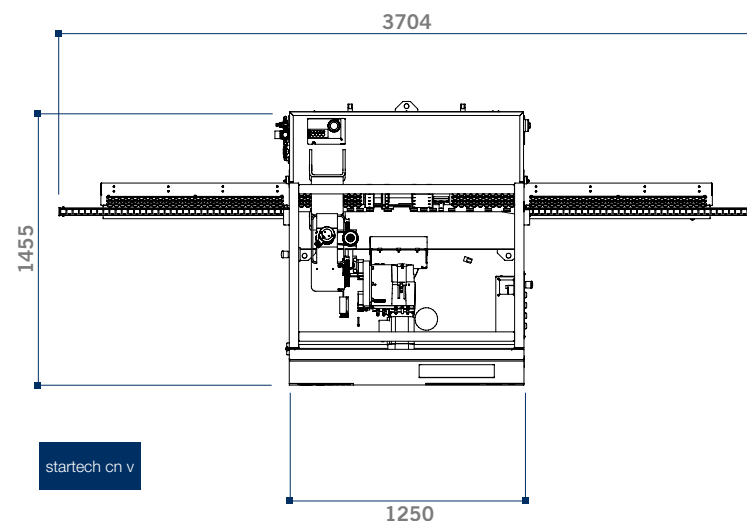


# startech cn plus startech cn v technical data

startech cn plus



startech cn v



## TECHNICAL DATA

		startech cn plus	startech cn v
Min. ÷ max. panel length	mm	200 ÷ 3050	300 ÷ 3000
Min. ÷ max. panel width	mm	80 ÷ 900	90 ÷ 900
Min. ÷ max. panel thickness	mm	10 ÷ 60	10 ÷ 50
Max. X-axis speed	m/min	40	20
Max. Y-axis speed	m/min	40	20
<b>drilling head</b>			
Vertical spindles	n.	8 (F14) - 13 (F23)	7 (F11) - 8 (F14)
Horizontal spindles	n.	6 (F14) - 10 (F23)	4 (F11) - 6 (F14)
Motor power	kW (hp)	2,2 (3)	2,2 (3)
Spindles rotation speed	rpm	4200	4460
Fixed integrated disc cutter	direction	X	X
Max. diameter disc cutter	mm	125	125
Disc cutter rotation speed	rpm	5500	5700
<b>electrospindle</b>			
Motor power	kW (hp)	5,5 (6)	-
Min. ÷ max. speed	rpm	1000 ÷ 18000	-
Tool changer		manual	-
Max. tool diameter	mm	20	-
<b>other technical features</b>			
Compressed air consumption	Nl/min	50	90
Extraction air consumption	m <sup>3</sup> /h	1900+540+1200 (+540 for R version)	820
Exhaust air speed	m/sec	30	20
Installed motor power (minimum)	KVA	15,2 (20,7 for R version)	4,5
Exhaust hood diameter	mm	150+120+80 (+80 for R version)	120

manual  
drilling  
machines  
startech 27  
startech 21



		startech 27	startech 21
Spindles	n.	27	21
Worktable dimensions	mm	1096 x 407	905 x 372
Max. panel width under the "beam" structure	mm	1025	833
Max. tool diameter	mm	40	40
Min. ÷ max. panel thickness	mm	10 ÷ 85	10 ÷ 85
Spindles rotation speed	rpm	2800	2800

*Find the complete technical specification at page 15*



**Drilling Head**  
perfect drilling



**Cleaning System**  
highly effective



**Hinges Units**  
high-tech accessories

Excellence in manual drilling.

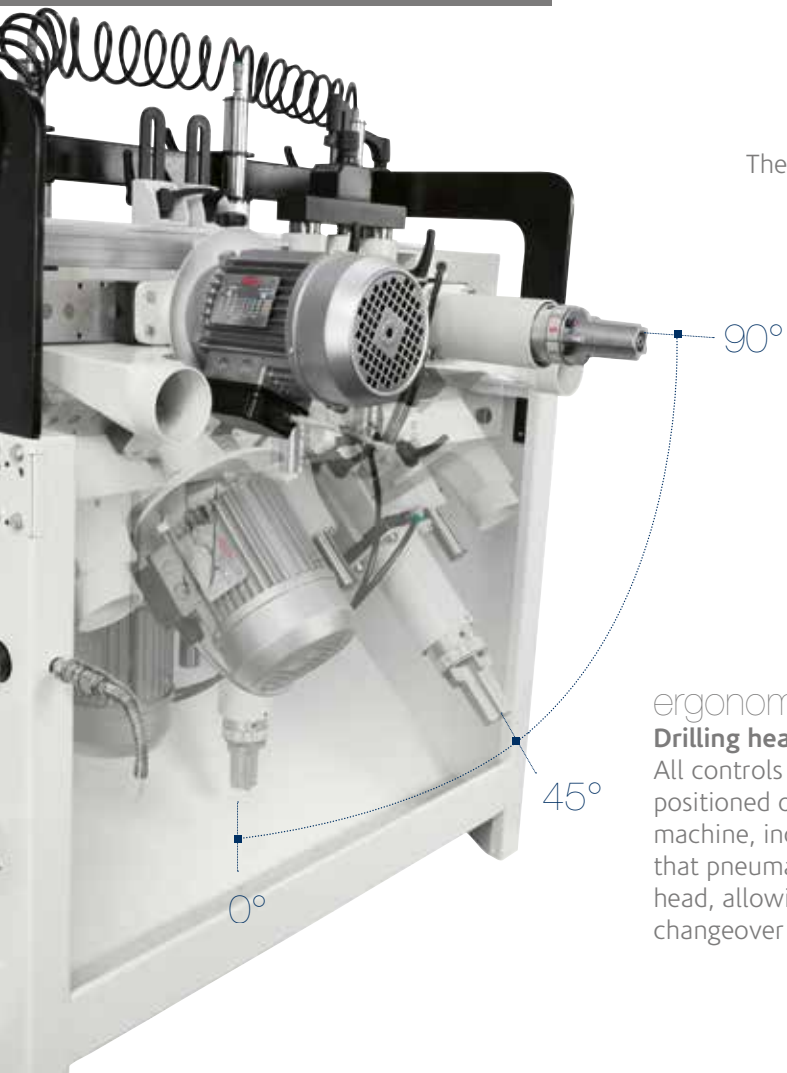
# manual drilling machines operating groups

## perfect drilling Drilling head

It is made from single-piece aluminium casting, to guarantee absence of vibrations. The drilling group runs on two rectified cylindrical guides which guarantee stability and accuracy. The dust extraction system is incredibly efficient.



The machine is equipped with a mechanical revolver with 5 different drilling depth adjustments.



**ergonomic  
Drilling head movement**  
All controls are ergonomically positioned on the front of the machine, including the switch that pneumatically tilt the drilling head, allowing an immediate changeover between operations.



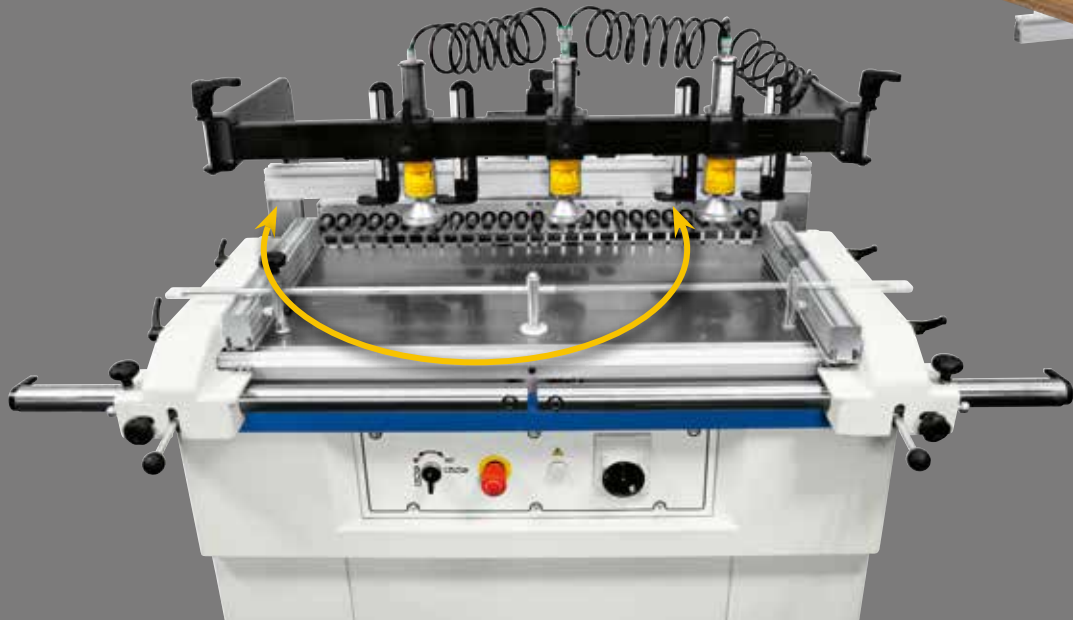
**rapid set-up  
Spindles with  
quick-release fittings**  
Bits replaced quickly and easily.



fast and precise positioning

### Mechanical gauge

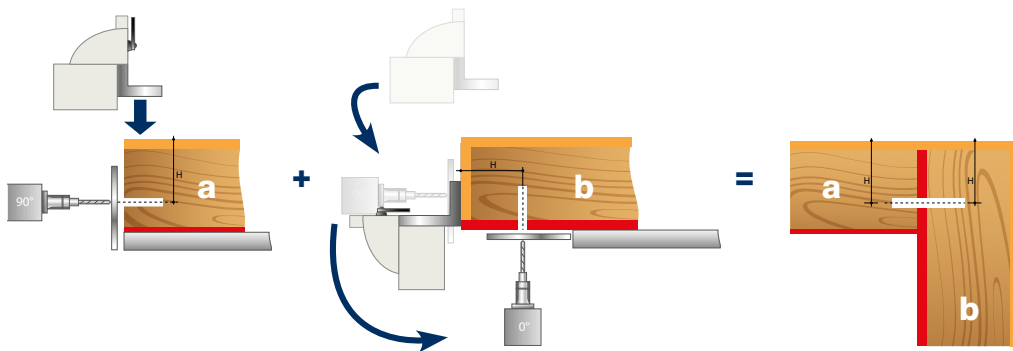
It guarantees fast and precise positioning of the lateral fences.



versatile, with many useful options, intelligent

### 3000 mm guide

For a perfect drilling even of large panels the machines are equipped with a 3000 mm length lateral guide, millimetered and with reversible stops, quickly installable/removed.



effective

### "Invisible" imperfections

The drilling concept of Startech machines allows to obtain an important advantage which can be verified in the cabinet assembly phase: the system uses the outside of the panel (in sight) as a reference and thus **any differences in thickness are always on the inside of the cabinet (non in sight).**

### Cast iron guides

with the nonius decimal scale and micrometric guides travel.

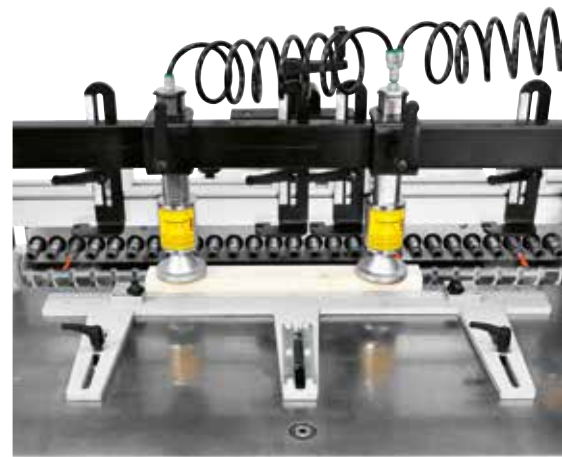


# manual drilling machines main optional devices



**Guide for horizontal drilling at 45°**  
Simple and effective.

**Device for working narrow work-pieces**  
Easy-to-use.



**Hinges units**  
For increased versatility, the quick change chucks can be fitted with various types of bits for different operations, like drilling hinges locations.

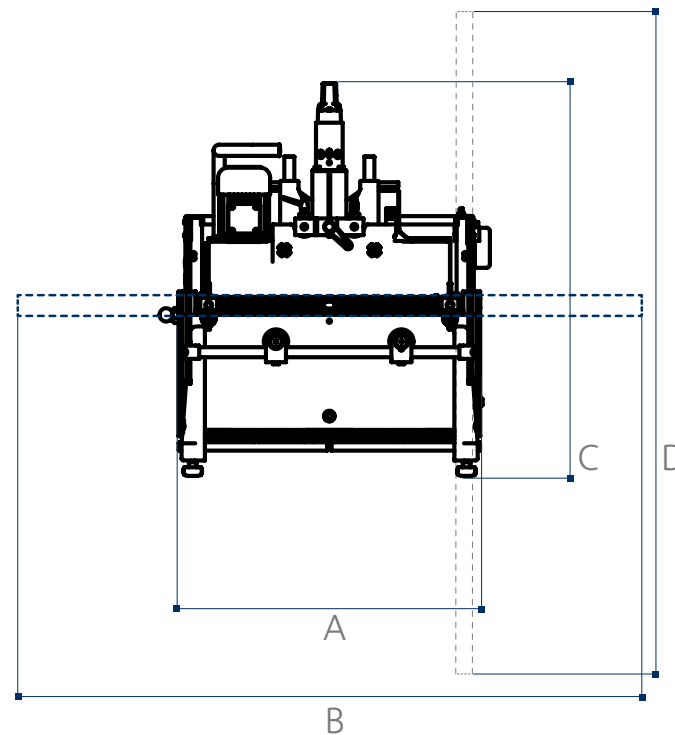


## MAIN OPTIONAL DEVICES

	startech 27	startech 21
Pneumatic movement of the drilling head	S	O
Servo-assisted drilling unit down stroke speed adjustment	O	O
Guide for horizontal drilling at 45°	O	O
Device for working narrow work-pieces	O	-
Groups for hinges	O	O

# manual drilling machines technical data

S Standard  
O Option



OVERALL DIMENSIONS		startech 27	startech 21
A	mm	1500	1000
B	mm	3000	3000
C	mm	1260	1150
D	mm	3000	3000

TECHNICAL DATA		startech 27	startech 21
Worktable dimensions	mm	1096 x 407	905 x 372
Worktable height	mm	900	900
Spindles	n.	27	21
Spindles rotation speed (at 50 Hz)	rpm	2800	2800
Distance between spindles	mm	32	32
Maximum drilling inter-axis	mm	832	640
Maximum drilling head stroke	mm	70	70
Maximum horizontal drilling height	mm	60	60
Max. panel width under the "beam" structure	mm	1025	833
Min. ÷ max. panel thickness	mm	10 ÷ 85	10 ÷ 85
Max. tool diameter	mm	40	40
<b>other technical features</b>			
Three-phase motors 1,8 kW (2,5 hp) 50 Hz - 2,2 kW (3 hp) 60 Hz		S	S
Pneumatic system operating pressure	bar	6	6
Compressed air consumption	NI/cycle	3,5	3,5
Exhaust hood diameter:			
- at the base	mm	120	80
- on the drilling head	mm	2 x 80	2 x 80

automatic  
routing  
machine  
startech cn k



		startech cn k
Worktable dimensions	mm	1170 x 760
X-Y-Z axes max. speed	m/min	5-5-2,5
Max. tool diameter	mm	60
Max. electrospindle speed	rpm	24000

*Find the complete technical specification at page 21*





**Integral Protection Cabin**  
maximum safety and cleanliness



**2,4 kW Electrospindle**  
unique in its category



**4th Interpolating Axis**  
no limit to creativity

Compact 3-axis machining centre ideal for all types of milling, decorations, engraving, signboard creation and 3D models prototyping.

startech cn k  
operating  
groups

unique in its category

**Routing unit**

The machine has a powerful 2,4 kW  
electrospindle with R25 tool-chuck generally  
used on higher-segment machines!

maximum safety and cleanliness

**Protection cabin**

The integral cabin, with internal LED lighting, ensures protection for the operator and  
keeps the surrounding environment clean.



NC movement with 3 interpolating axes.

It is possible to use tools with max. 60 mm diameter and max. 16 mm tool holder.

Aluminium worktable with dimensions: 1170x760 mm.  
"T" grooves dimensions: 13,5x7 mm  
opening 8,5 mm for M8 screw or nut passage.



easy programming

### Machine control

"Open" virtual human-machine interface capable of importing G-code from any type of CAD/CAM software  
(it is advisable to verify with the software supplier that the CAD/CAM provides a G-code that can be read from the interface).



# startech cn k optional devices

4th interpolating axis  
(lathe processing) on the worktable  
No limit to creativity.



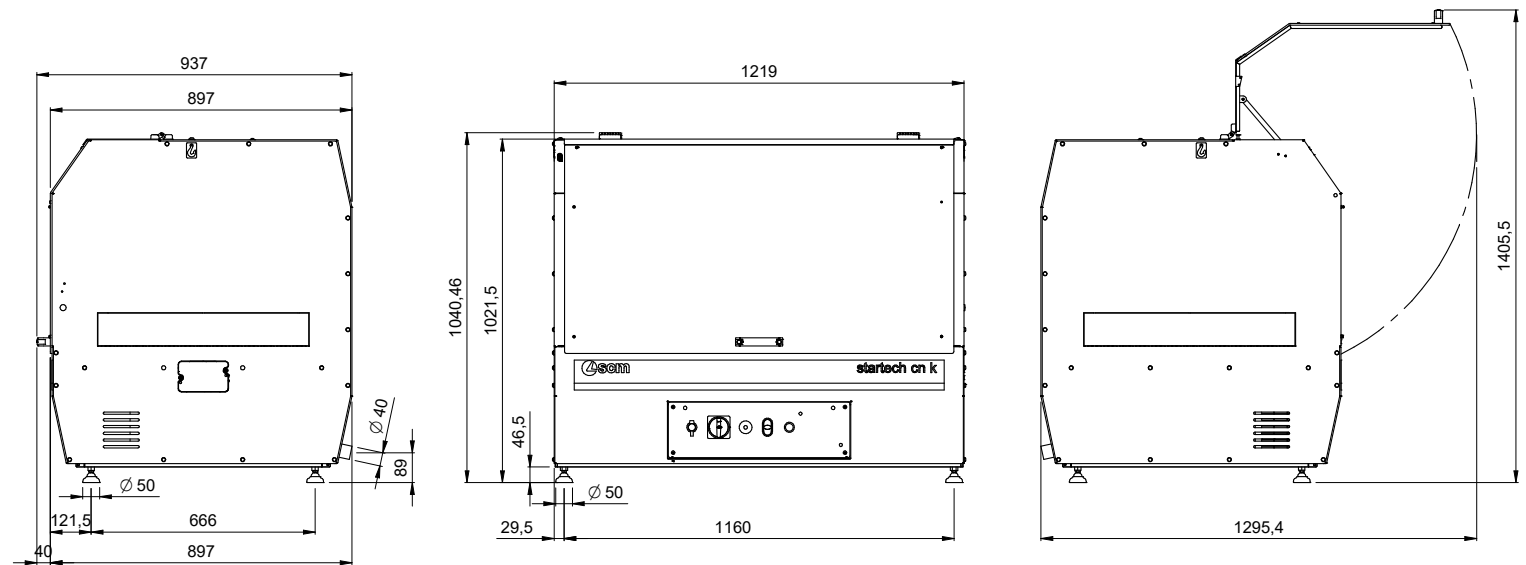
Tool height detection sensor  
Total reliability.



Kit of 5 pneumatic suction cups positionable  
on the worktable  
Ease-of-use and accuracy.

Support base with wheels and  
adjustable feet (500 mm height)  
Easy machine handling.





## TECHNICAL DATA

		startech cn k
Worktable dimensions	mm	1170 x 760
X-Y-Z stokes	mm	915-610-176
Z-axis work-piece clearance	mm	160
X-Y-Z axes max. speed	m/min	5-5-2,5
Max. tool diameter	mm	60
Max. tool-holder diameter	mm	16
Max. electrospindle speed	rpm	24000
Electrospindle motor power	kW	2,4 (S6)
<b>other technical features</b>		
Power supply	V (Hz)	230 (50/60) Single-phase
Rated current	A	16
Extraction air consumption	m <sup>3</sup> /h	115
Exhaust air speed	m/sec	20
Exhaust hood diameter	mm	40

# WE'LL GO THE EXTRA MILE FOR YOU



SERVICE AND MAINTENANCE



TRAINING SERVICE



SPARE PARTS



DIGITAL SERVICES

SCM OFFERS A FULL RANGE OF **HIGHLY SPECIALISED SERVICES** WITH A QUALITY AND RELIABILITY THAT STEM FROM 70 YEARS OF EXPERIENCE IN THE INDUSTRY.

From installation and production start-up to services and maintenance. From training to the supply of specific original spare parts: **we provide solutions designed around you!**

CONTACT

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tel. +39 0541 700100  
scmservice@scmgroup.com  
www.scmwood.com

**SCM SPAREPARTS**  
Via Emilia, 61 - 47921 - Rimini - Italy  
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spareparts@scmgroup.com  
www.scmwood.com

My Scm



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- Warranty extension



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- Courses for machine operators
- Software and programming courses
- Training in production start-up



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- Recommended spare parts list
- E-shop
- Interactive spare-parts catalogues
- Repairs on electronic parts, glue tanks and electro-spindles



DIGITAL SERVICES

- Maestro Connect - IoT platform to be constantly connected with your machines
- Smartech - assistance with augmented reality
- My Scm portal - opening of service ticket and single point of access to the apps and Services tools

# THE STRONGEST WOOD TECHNOLOGIES ARE IN OUR DNA

## SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND

70 years of success gives SCM the centre stage in woodworking technology. This heritage results from bringing together the best know-how in machining and systems for wood-based manufacturing. SCM is present all over the world, brought to you by the widest distribution network in the industry.

**70** years history

**3** main production sites in Italy

**300.000** square metres of production space

**20.000** machines manufactured per year

**90%** export

**20** foreign branches

**400** agents and dealers

**500** support technicians

**500** registered patents

In SCM's DNA also strength and solidity of a great Group. The SCM Group is a world leader, manufacturing industrial equipment and components for machining the widest range of materials.

## SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL MACHINES AND COMPONENTS

### INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services dedicated to processing a wide range of materials.



WOODWORKING TECHNOLOGIES



TECHNOLOGIES FOR PROCESSING  
COMPOSITE MATERIALS, ALUMINIUM,  
PLASTIC, GLASS, STONE, METAL

### INDUSTRIAL COMPONENTS

Technological components for the Group's machines and systems, for those of third-parties and the machinery industry.



SPINDLES AND  
TECHNOLOGICAL  
COMPONENTS



ELECTRIC PANELS



METALWORK



CAST IRON



is more



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