

REV. N. 03 - 02.2023 - MFC STUDIO



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00L0590733A



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

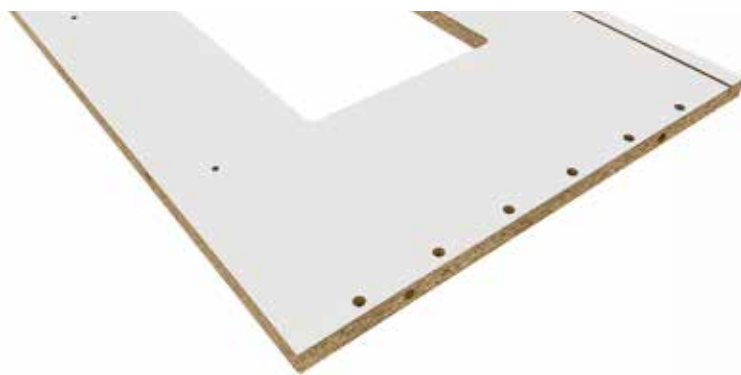
startech cn k
page 16



The motors powers in this catalogue are expressed in S6, except where otherwise specified.
In this catalogue, machines are shown in CE configuration and with options.

We reserve the right to modify technical specifications without prior notice, provided that such modifications do not affect safety as per CE norms.

automatic
drilling-routing
machine
startech cn plus



automatic
drilling
machine
startech cn v

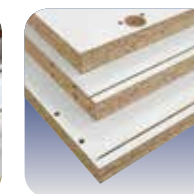


Max. panel dimensions X-Y-Z	mm	startech cn plus 3050 x 900 x 60	startech cn v 3000 x 900 x 50
Min. panel dimensions X-Y-Z	mm	200 x 80 x 10	300 x 90 x 10
X-Y-Z axes max. speed	m/min	40/40/10	20
Vertical spindles	n.	8 (F14) - 13 (F23)	7 (F11) - 8 (F14)
Horizontal spindles	n.	6 (F14) - 10 (F23)	4 (F11)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

Find the complete technical specification at page 9



Drilling from
the top
perfect finish



Elements Production
versatility



Maestro Software
easy and intuitive

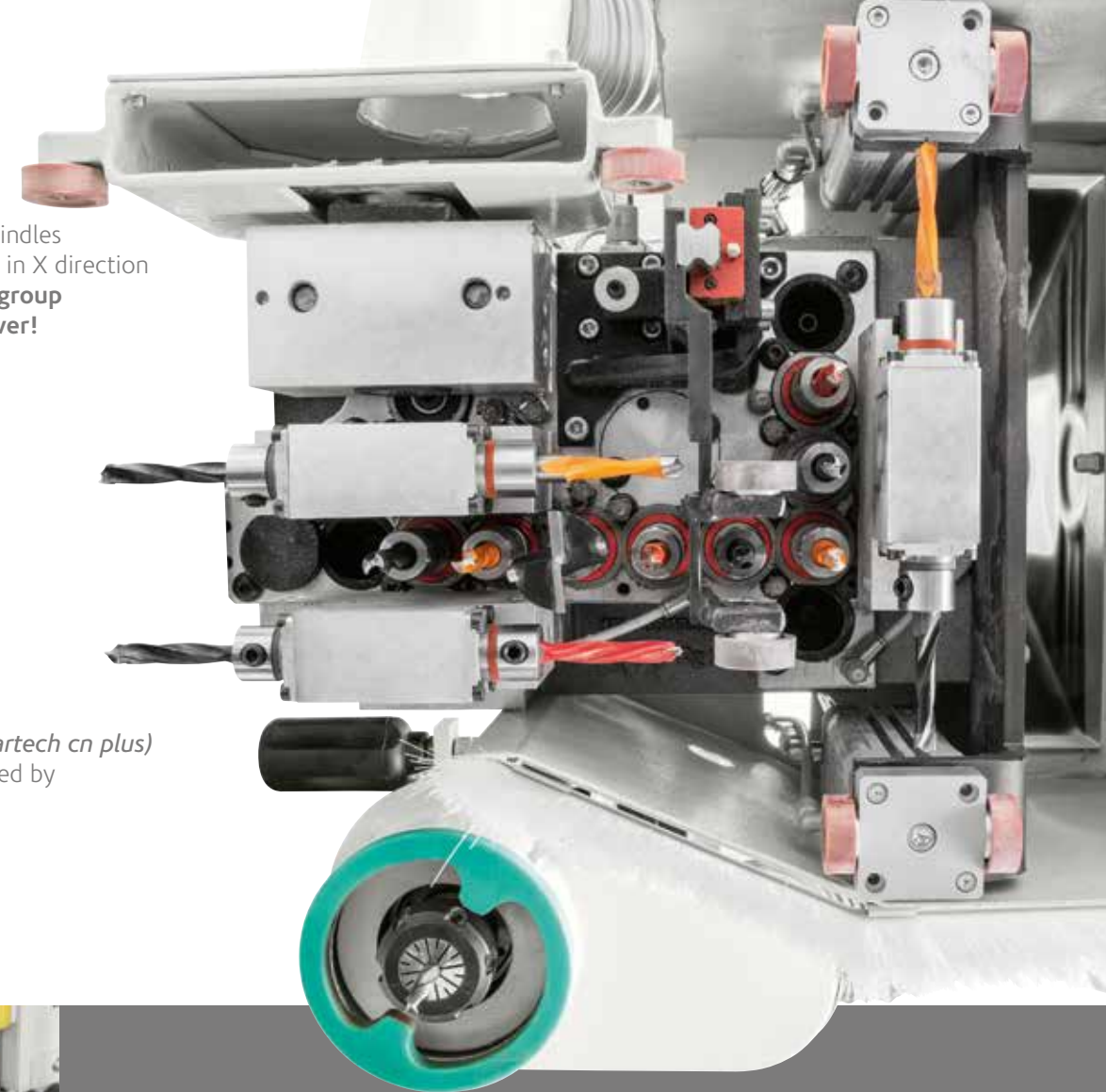
Compact and performing numerical control machines for woodworking shops and craftsmen.

startech cn plus startech cn v operating groups

effective

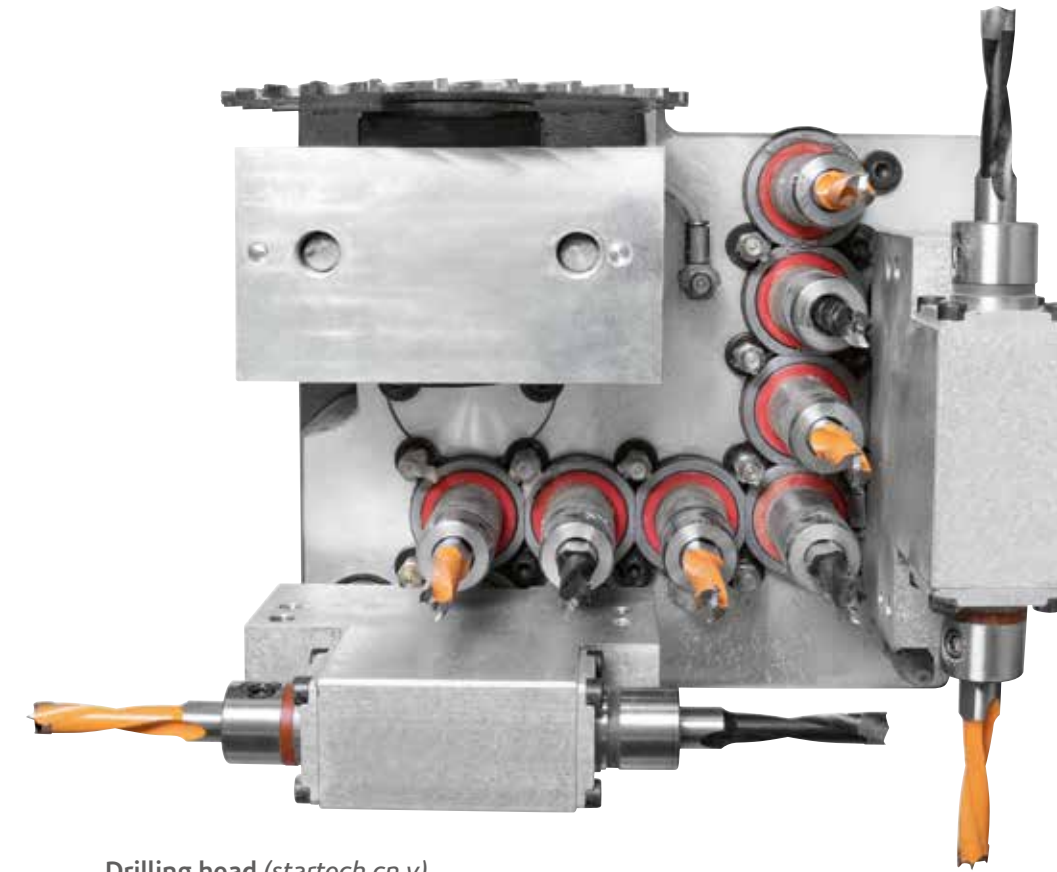
Drilling head

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.



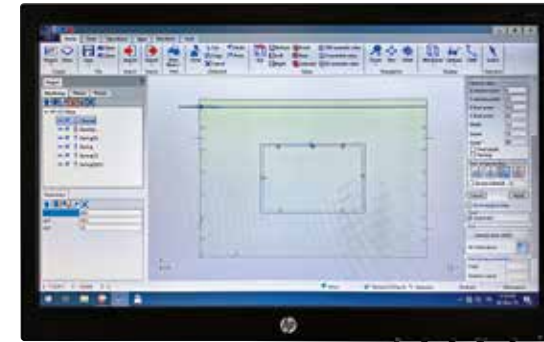
Drilling head (startech cn v)

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)

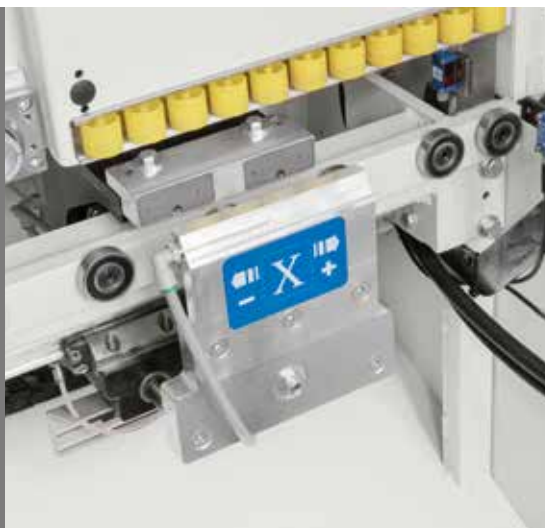
NC 10" colour touch-screen display and self-diagnosis and signalling system of errors or damages. Head tooling and machining cycle programming without using any mouse or keyboard and with automatic optimization.



guaranteed reliability

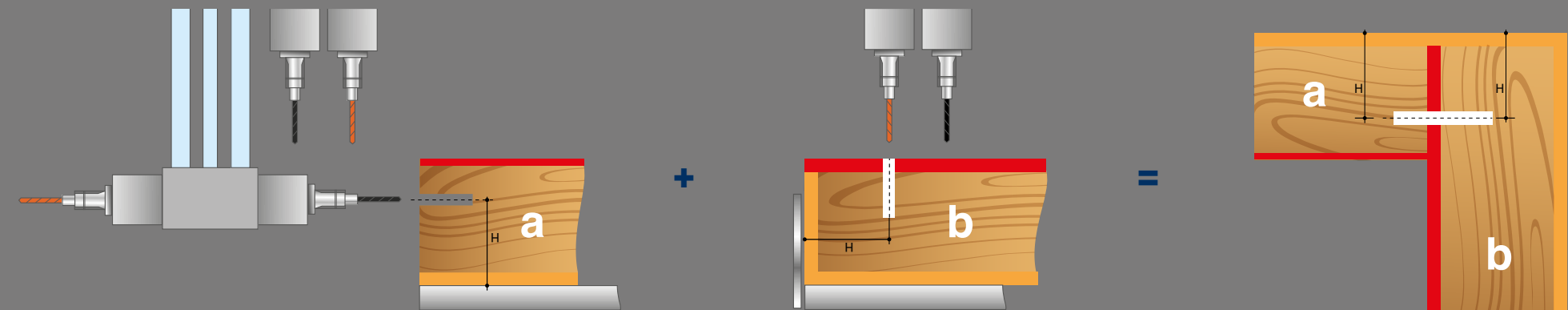
Mobile clamp with floating opening

Optimal piece stability and high working quality.

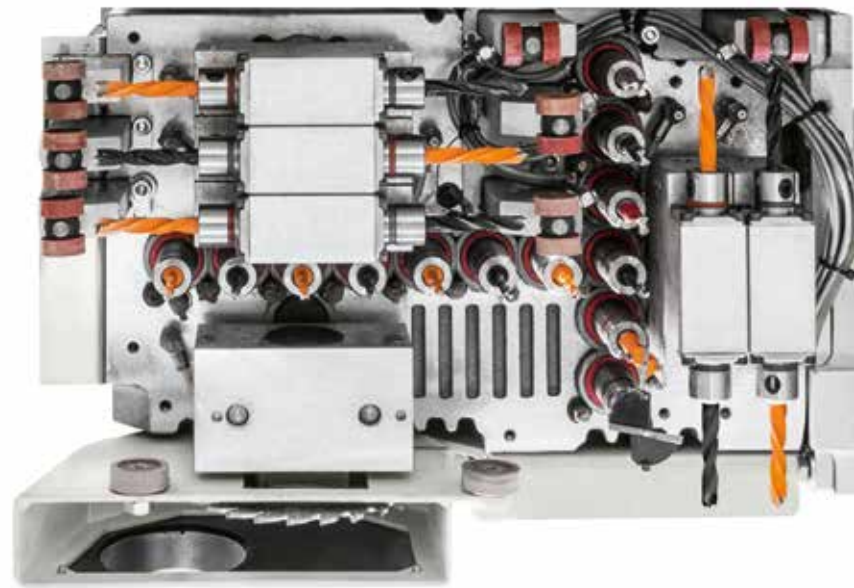


Drilling from the Top

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.



startech cn plus startech cn v main optional devices

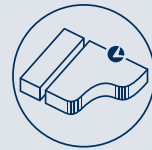


F23 drilling head

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)



Automatic centralized lubrication
managed by the control.

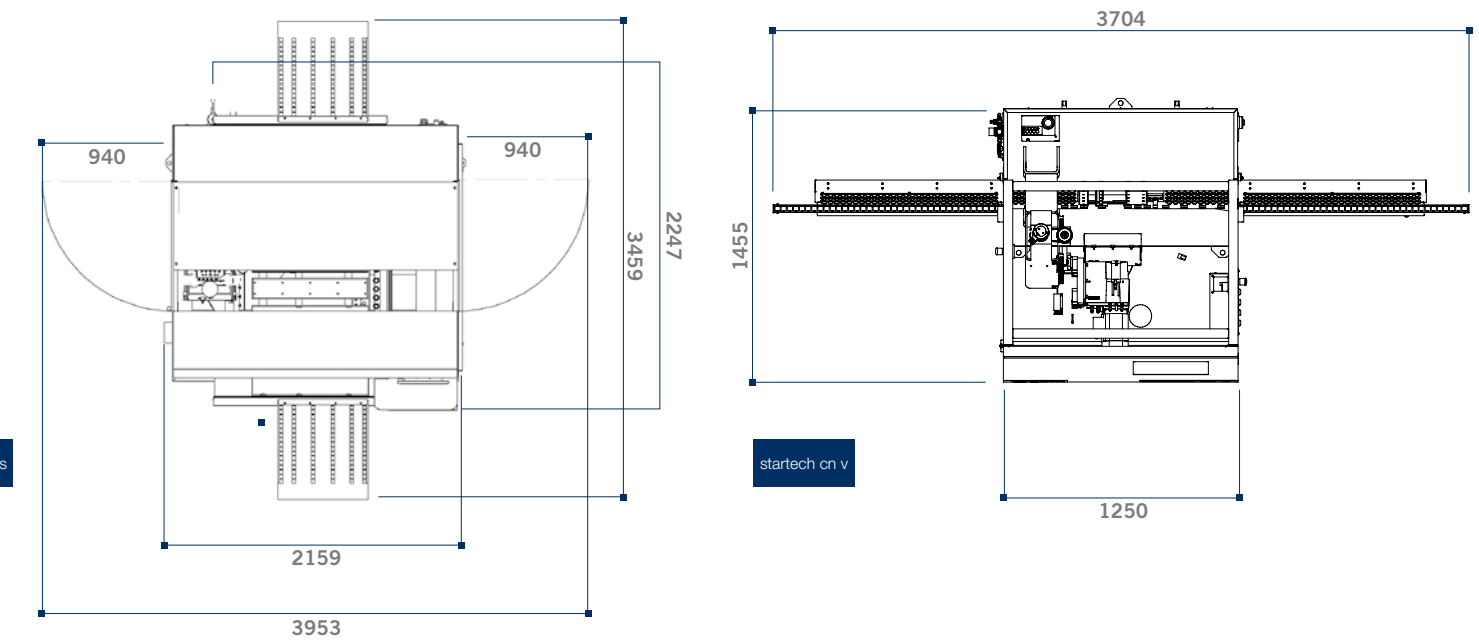
Removable side supports
to adjust and support long work-pieces.
(startech cn plus)



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



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
drilling head			
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
electrospindle			
Motor power	kW (hp)	5,5 (6)	-
Min. ÷ max. speed	rpm	1000 ÷ 18000	-
Tool changer		manual	-
Max. tool diameter	mm	20	-
other technical features			
Compressed air consumption	NI/min	50	90
Extraction air consumption	m ³ /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.

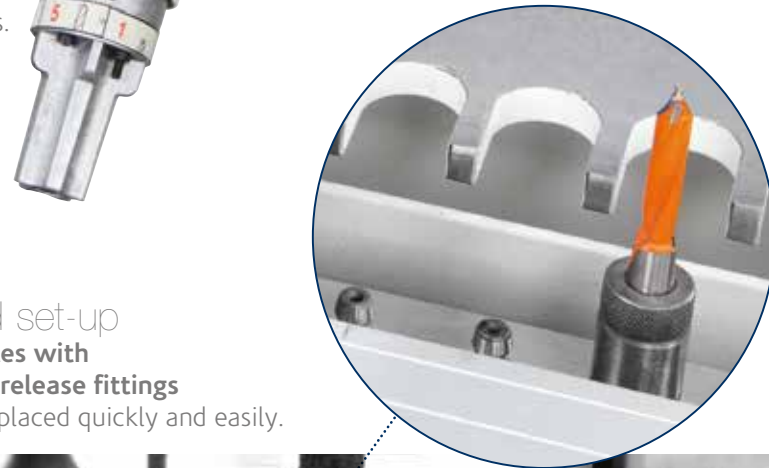
manual drilling machines operating groups

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.



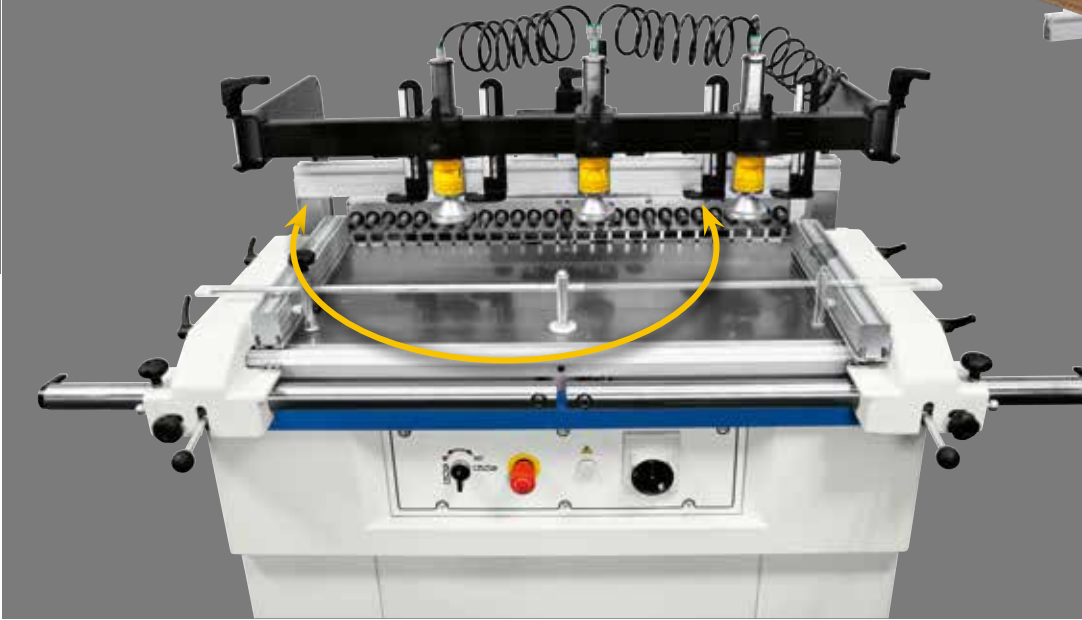
The machine is equipped with a mechanical revolver with 5 different drilling depth adjustments.



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.



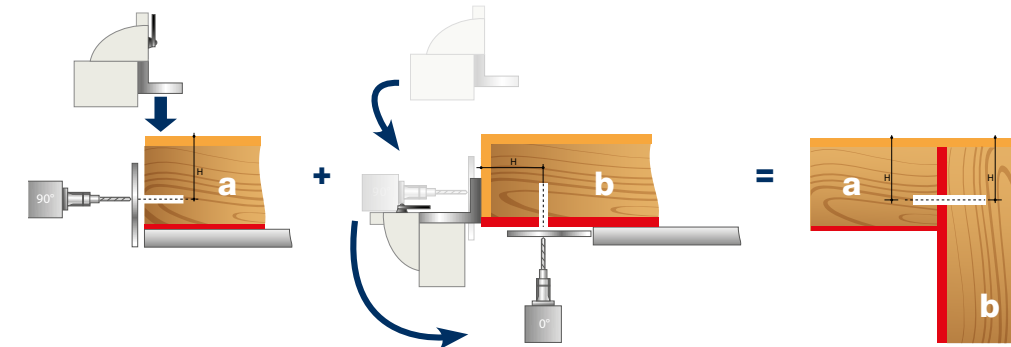
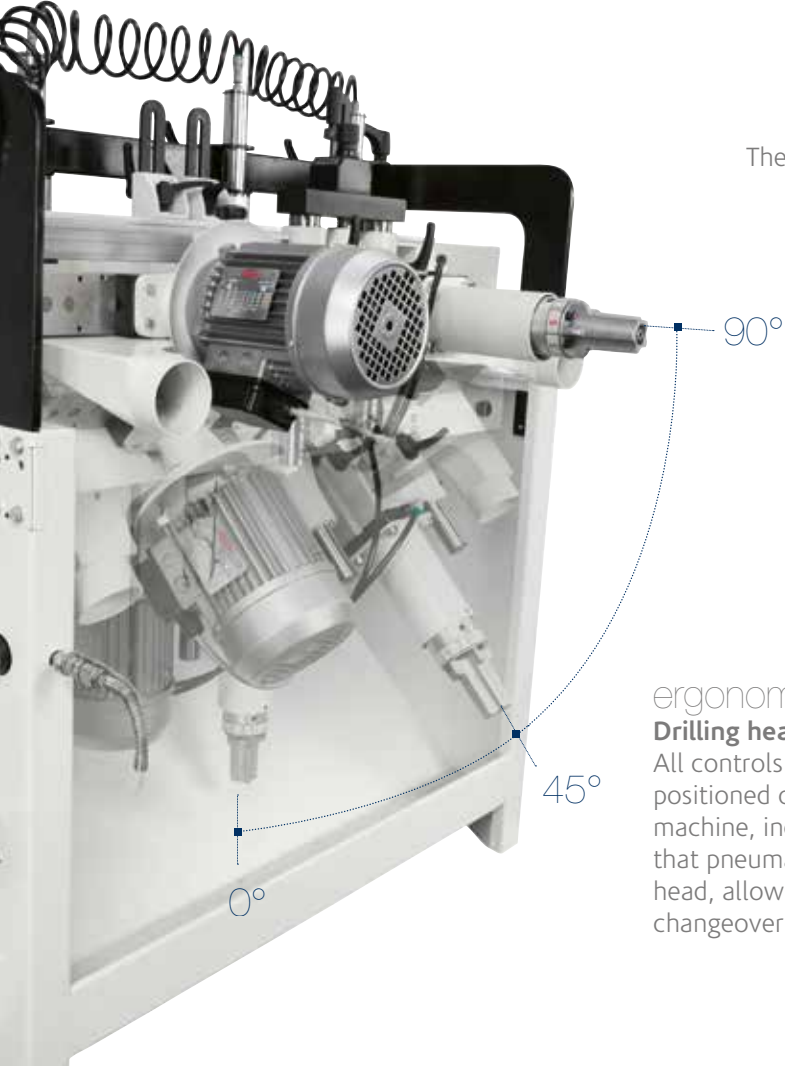
versatile, with many
useful options, intelligent
3000 mm guide

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.



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.



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.

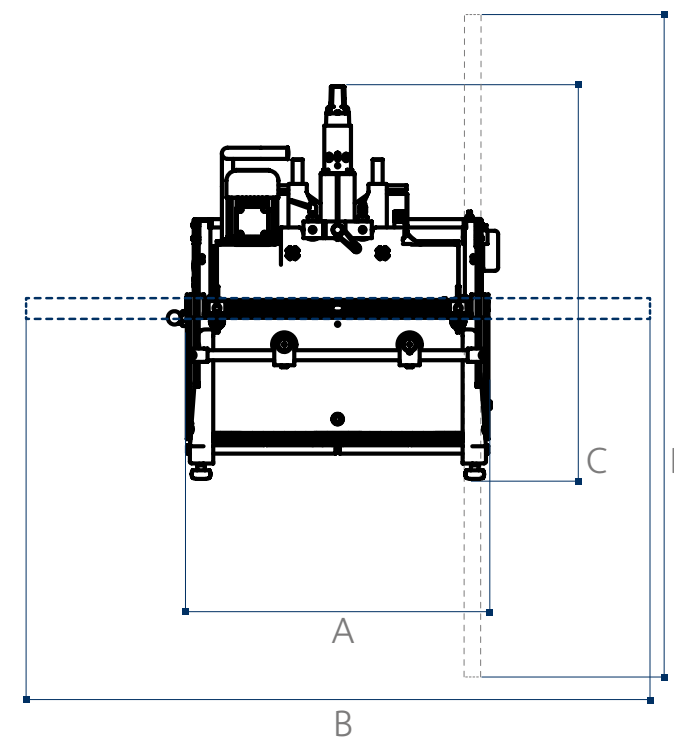
Device for working narrow work-pieces
Easy-to-use.



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

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
other technical features			
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

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

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!



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



maximum safety and cleanliness

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



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).



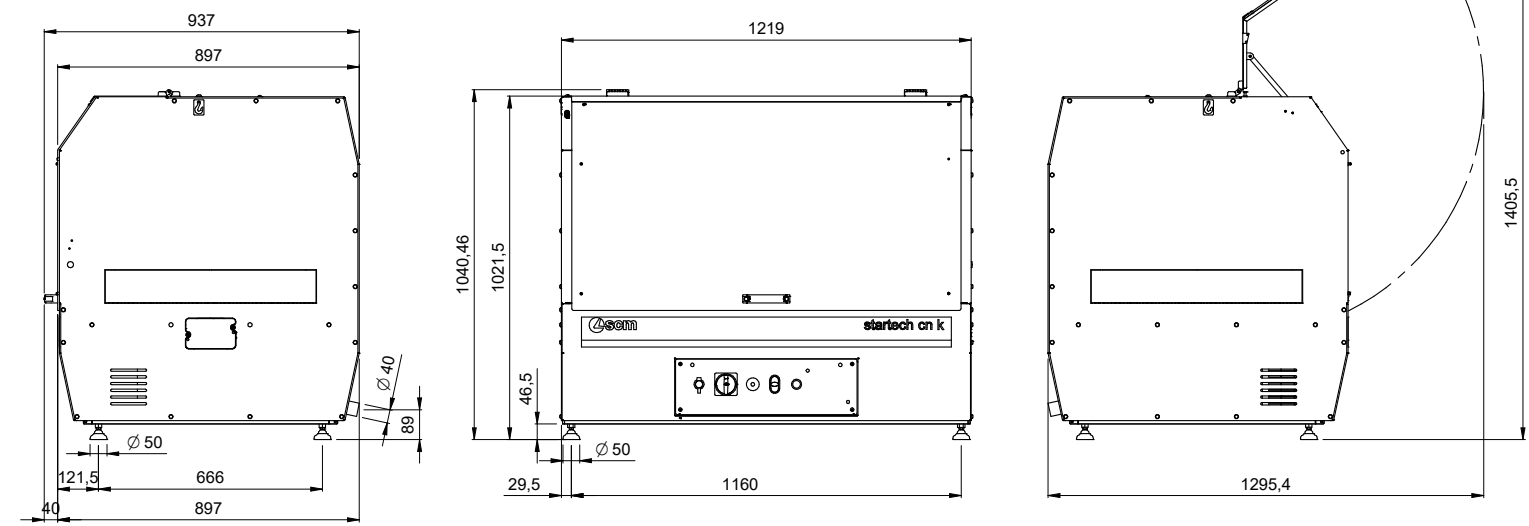
NC movement with 3 interpolating axes.
It is possible to use tools with max. 60 mm diameter and max. 16 mm tool holder.

startech cn k optional devices

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



startech cn k technical data



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

Worktable dimensions	mm	1170 x 760	startech cn k
X-Y-Z strokes	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)	
other technical features			
Power supply	V (Hz)	230 (50/60) Single-phase	
Rated current	A	16	
Extraction air consumption	m ³ /h	115	
Exhaust air speed	m/sec	20	
Exhaust hood diameter	mm	40	



scm | service

WE'LL GO THE EXTRA MILE FOR YOU

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!**





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My Scm

 <p>SERVICE AND MAINTENANCE</p> <ul style="list-style-type: none"> • Remote support • Scheduled maintenance contracts • Warranty extension 	 <p>TRAINING SERVICE</p> <ul style="list-style-type: none"> • Courses for machine operators • Software and programming courses • Training in production start-up
 <p>SPARE PARTS</p> <ul style="list-style-type: none"> • Recommended spare parts list • E-shop • Interactive spare-parts catalogues • Repairs on electronic parts, glue tanks and electro-spindles 	 <p>DIGITAL SERVICES</p> <ul style="list-style-type: none"> • 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

scm | is more
woodworking technology