

*blade*  **ff**

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**SAFETY TECHNOLOGY**



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 **scm**  
woodworking technology

SCM has designed the truly innovative solution: the **blade off** new safety system for circular saws.

**Blade off** responds to the clear requirement of minimising the intrinsic danger of using a circular saw, thanks to a new working concept: making tangible and never invasive the presence of the safety system, enhancing its perception as an integral part of working, maintaining high quality and productivity of the processing.

Safety is no longer considered as an obstacle, meeting the operator's demands who stays in control of machining.

The **blade off** system prevents any accidental contact with the blade thanks to an intelligent system that using smart sensors, can recognise the human body and trigger the system even before the operator gets too close to the blade, protecting the danger zone around it, at all times and in all environmental conditions.

The system automatically excludes the blade in a non-destructive way and stops the program running. It also activates with high cutting speeds, without slowing down machining.

Moreover, in the event of an intervention, the system can be rearmed without affecting the accuracy and performance of the machine.





**RAPIDITY AND EFFICIENCY**

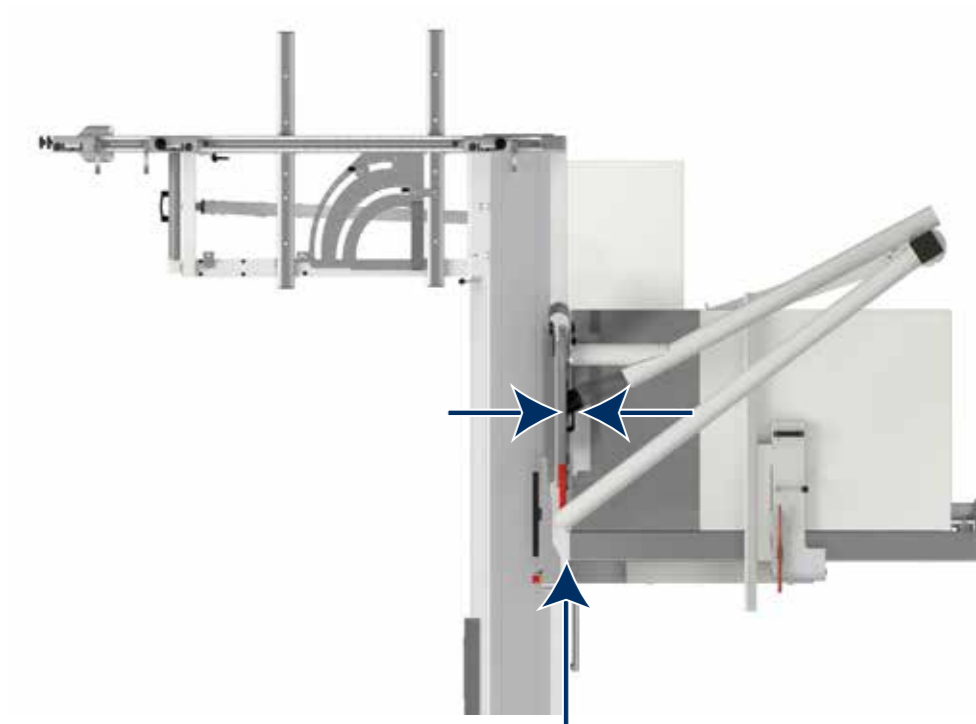
The system triggers in a few milliseconds, avoiding the contact between the blade cutting edge and the human body at high feed speeds, including up to **2 m/s**.

Thanks to its rapidity, **blade off** protects even in case of sudden and unexpected movements, as it happens in accidental situations.



**EXPANDED PROTECTION**

The protection is guaranteed on the 3 areas next to the blade (work-piece infeed and side areas) to prevent any possible contact even caused by inappropriate or accidental movements.



**REPEATABILITY AND RELIABILITY OVER TIME**

The system provides the possibility of quick reset without compromising the machine quality and stability over time.



**FLEXIBILITY**

The system operates despite of the personal protective equipment the operator wears; in fact, it also performs perfectly with any type of glove worn.



**SMART SOLUTION**

Due to the detection type, **blade off** activates regardless of the hand position and any other part of the human body inside the danger zone.

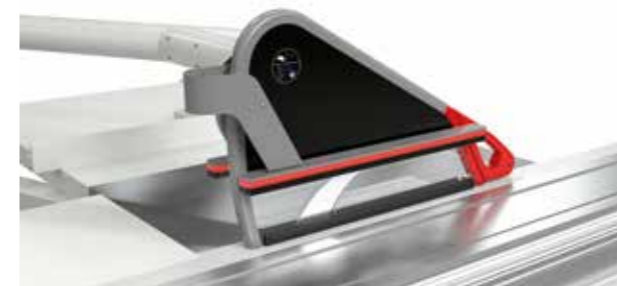


**ERGONOMIC**

The essential design ensures movement freedom related to overall dimensions and aesthetics impact.

**INTUITIVE SYSTEM**

**Blade off** communicates with the operator through a light system that facilitates a simple interpretation of the safety system status, and therefore the machine.



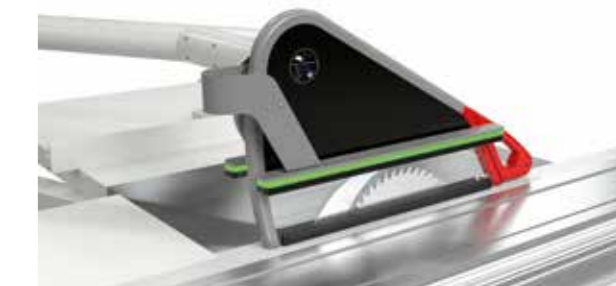
**Red light**

The machine is in stand-by after a safety intervention that excluded the blade.



**Light off**

The machine is carrying out a quick reset or the **blade off** system has been temporarily suspended by the operator.



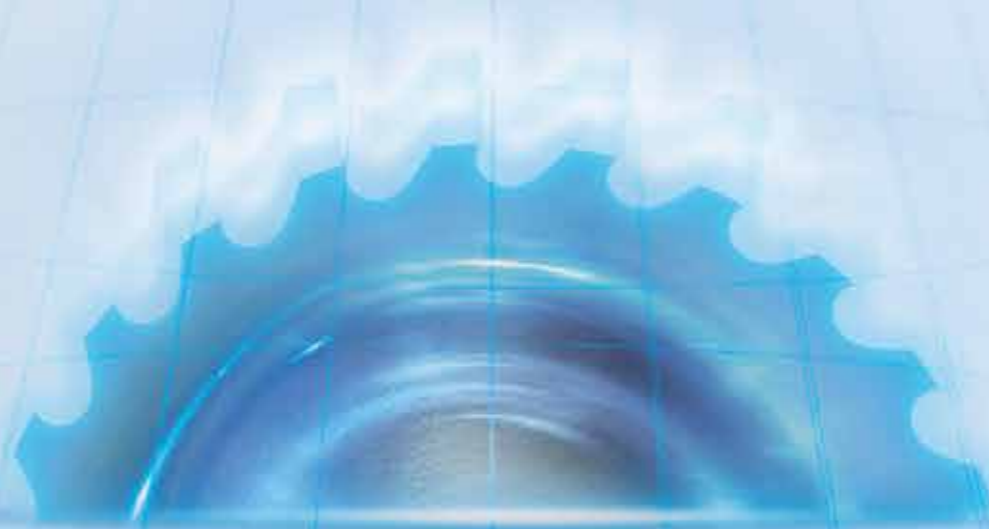
**Green light**

The **blade off** system is active and the machine can work in complete safety.

The **blade off** new system for circular saws is the innovative technological solution designed by SCM to work in total safety.

The system is able to operate in the most varied environmental situations where the machine is located, in terms of lighting, factory positioning and use conditions.

No dedicated tools are requested!  
The system performs with the blades normally used by circular saws.



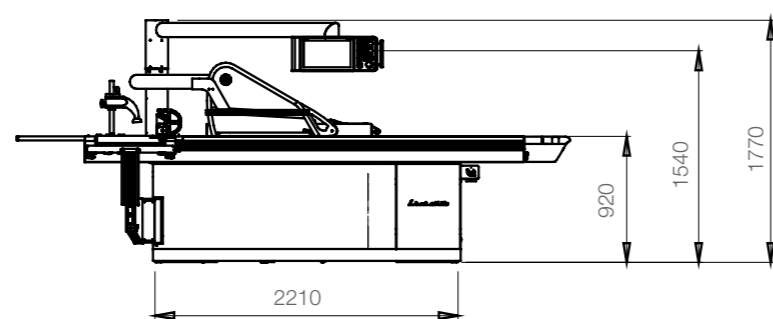
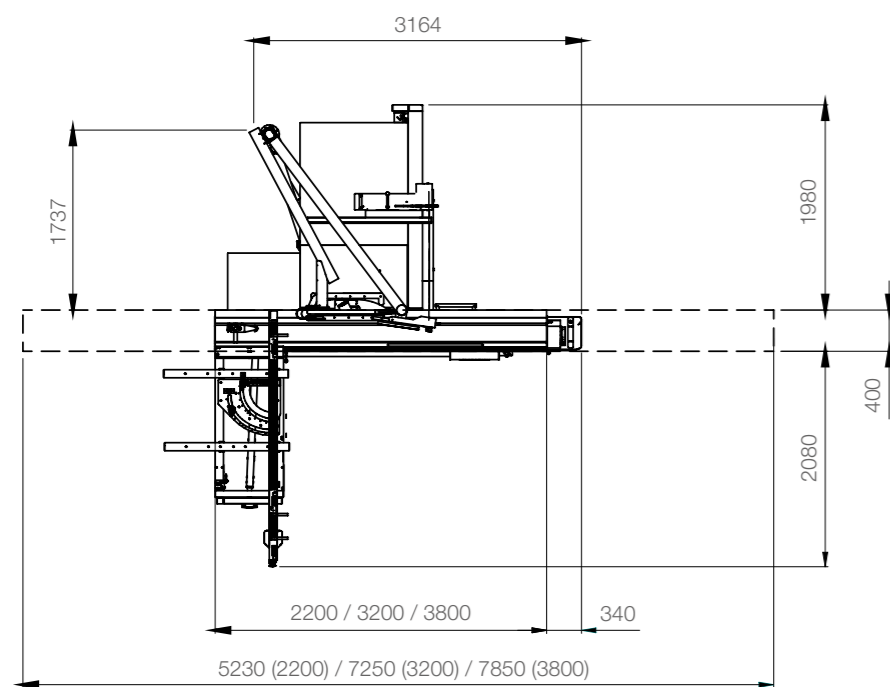
While the blade is not running, **blade off** is in stand-by, enabling to carry out the operations on the blade in complete freedom.

The system guarantees the correct machining for different material types: wood, plastic and composite (excluding the processing of metal materials).

For the execution of specific machining, the processing of metal or particularly humid materials, the system can be temporarily suspended within a set time, after that the system reactivates if it is not suspended again.

L'invincibile si 3 blade off

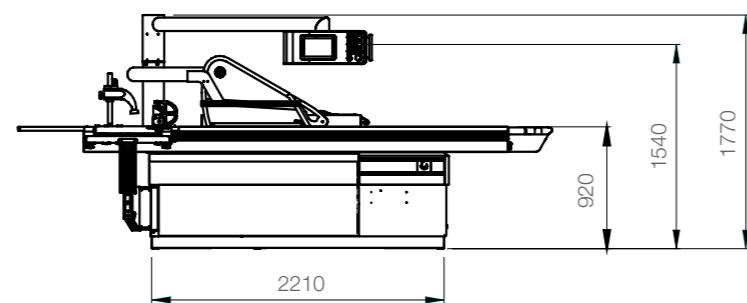
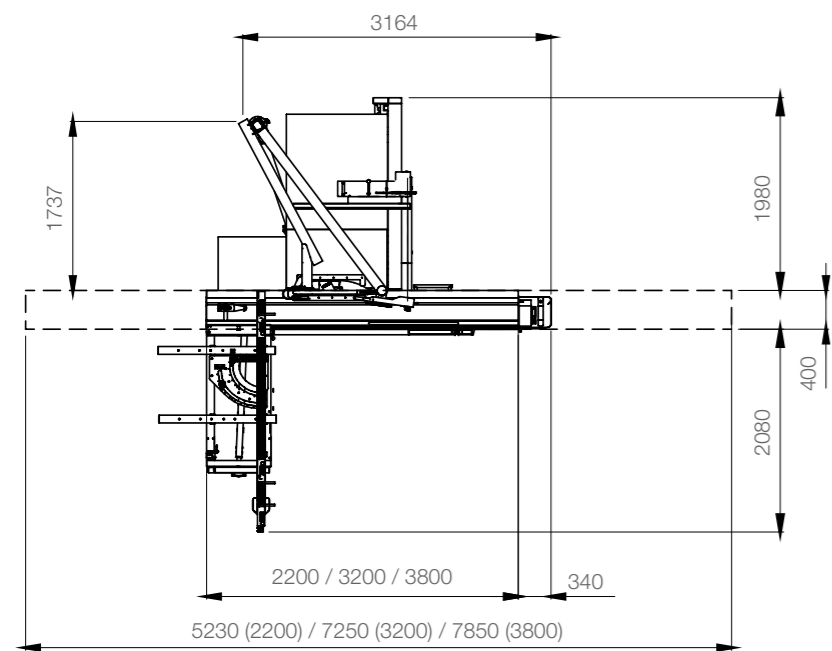
TECHNICAL DATA		
Squaring capacity with 2200 mm carriage	mm	2200 x 3200
Squaring capacity with 3200 mm carriage	mm	3200 x 3200
Squaring capacity with 3800 mm carriage	mm	3800 x 3200
Cutting width on the rip fence	mm	1500
Max. cutting height at 90°	mm	120
Max. cutting height at 45°	mm	89
Main blade rotating speed (with standard inverter)	rpm	3000 ÷ 5000
Scoring blade rotating speed	rpm	8500
Main blade motor power	kW	9
Scoring blade motor power	kW	1,3



class si 400ep blade off

TECHNICAL DATA

Squaring capacity with 2200 mm carriage	mm	2200 x 3200
Squaring capacity with 3200 mm carriage	mm	3200 x 3200
Squaring capacity with 3800 mm carriage	mm	3800 x 3200
Cutting width on the rip fence	mm	1500
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Max. cutting height at 45°	rpm	89
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Scoring blade rotating speed	kW	8500
Main blade motor power	kW	9
Scoring blade motor power	kW	1,3





## SAFETY TECHNOLOGY

### L'invincibile si 3 blade off

EQUIPMENT	
Electronic control with "eye-S" console 15" touch-screen	S
Mobile control panel	S
"SCM Thundercut" Optimizer/Sequencer App for tablet	S
Aluminium alloy carriage sliding on high precision "arch-formed" hardened steel guides, which are fixed on the carriage by means of mechanical bending system	S
Sliding carriage with 3200 mm length	S
Inverter for electronic speed change 3000 ÷ 5000 rpm	S
Independent powered scoring blade unit	S
Programmed rip fence with sliding on prismatic guides on recirculating balls	S
Telescopic swinging arm support of the squaring frame with sliding on prismatic linear guides on recirculating ball bearings	S
Squaring frame with "CompeX" device	S
Control push-buttons integrated in the sliding carriage	S
Eccentric clamp	S
Outfeed worktable extensions	S
2-axis scoring blade unit with automatic adjustment	S
Sliding carriage with 2200 mm length	O
Sliding carriage with 3800 mm length	O
"Full Support" mobile frame for angular cuttings including "Wireless" system	O
Support trolley for "Full Support"	O
Squaring frame with "Quick Lock" fence	O
Second support frame with sliding rail	O
Surface reinforcement treatment for sliding carriage and mobile crossbars of squaring frame	O
Squaring fence with 3 digital readouts for stops position	O
Fence for parallel cuttings on the sliding carriage	O
Fence for parallel cuttings on the sliding carriage with digital readouts	O
Pneumatic presser on entire carriage length	O
Panels support extension with roller conveyor on rip fence side	O
Reinforced worktable extensions	O
900 mm cutting width on the rip fence	O
1170 mm cutting width on the rip fence	O
Adjustable tablet holder positioned on the mobile control panel	O
Tablet holder on the sliding carriage	O
"Pro-Lock" system for the main blade rapid locking	O
Wireless barcode reader	O
Worktable lighting lamp	O
Additional eccentric clamp	O

**S** standard  
**O** option

### class si 400ep blade off

EQUIPMENT	
Electronic control with "eye-S" console 10" touch-screen	S
Mobile control panel	S
"SCM Thundercut" Optimizer/Sequencer App for tablet	S
Aluminium alloy carriage sliding on high precision "arch-formed" hardened steel guides, which are fixed on the carriage by means of mechanical bending system	S
Sliding carriage with 3200 mm length	S
Inverter for electronic speed change 3000-5000 rpm	S
Independent powered scoring blade unit	S
Programmed rip fence with sliding on prismatic guides on recirculating balls	S
Squaring frame	S
Control push-buttons integrated in the sliding carriage	S
Eccentric clamp	S
Outfeed worktable extensions	S
2-axis scoring blade unit with automatic adjustment	O
Sliding carriage with 2200 mm length	O
Sliding carriage with 3800 mm length	O
Squaring frame with "CompeX" device	O
Squaring frame with "Quick Lock" fence	O
Second support frame with sliding rail	O
Surface reinforcement treatment for sliding carriage and mobile crossbars of squaring frame	O
Squaring fence with 3 digital readouts for stops position	O
Fence for parallel cuttings on the sliding carriage	O
Fence for parallel cuttings on the sliding carriage with digital readouts	O
Pneumatic presser on entire carriage length	O
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**S** standard  
**O** option

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.





**scm** | service

# WE'LL GO THE EXTRA MILE FOR YOU



**SERVICE AND MAINTENANCE**



**TRAINING SERVICE**



**SPARE PARTS**



**DIGITAL SERVICES**

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**SERVICE AND MAINTENANCE**

- Remote support
- Scheduled maintenance contracts
- Warranty extension



**TRAINING SERVICE**

- 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