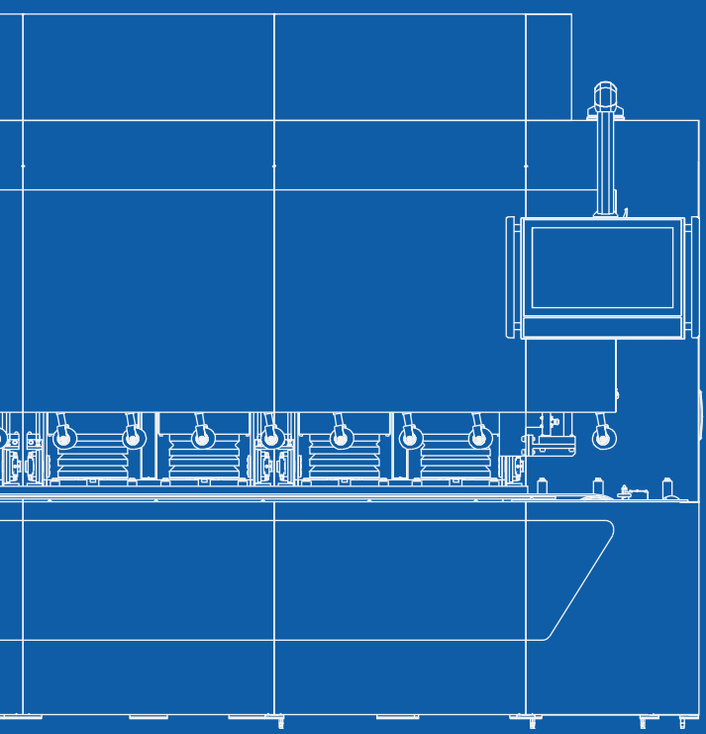
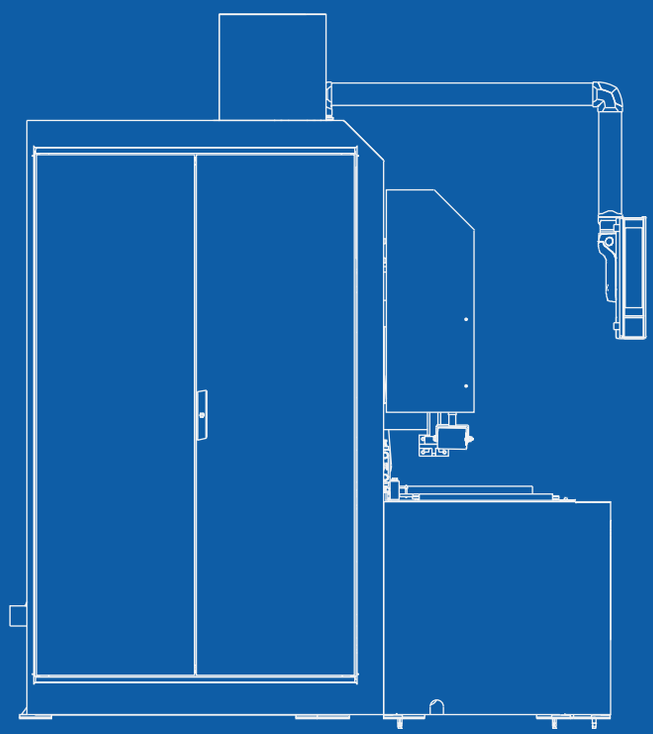
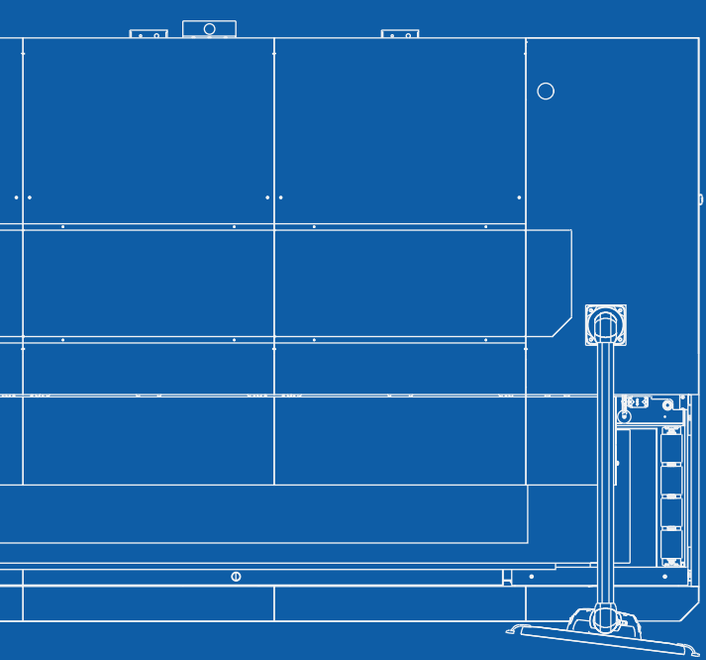
DIVISION MACHINES

CATALOG 2024

MARMO TRONIC HYBRID LINE $^{8+8}$







marmo elettromeccanica

marmoelettromeccanica

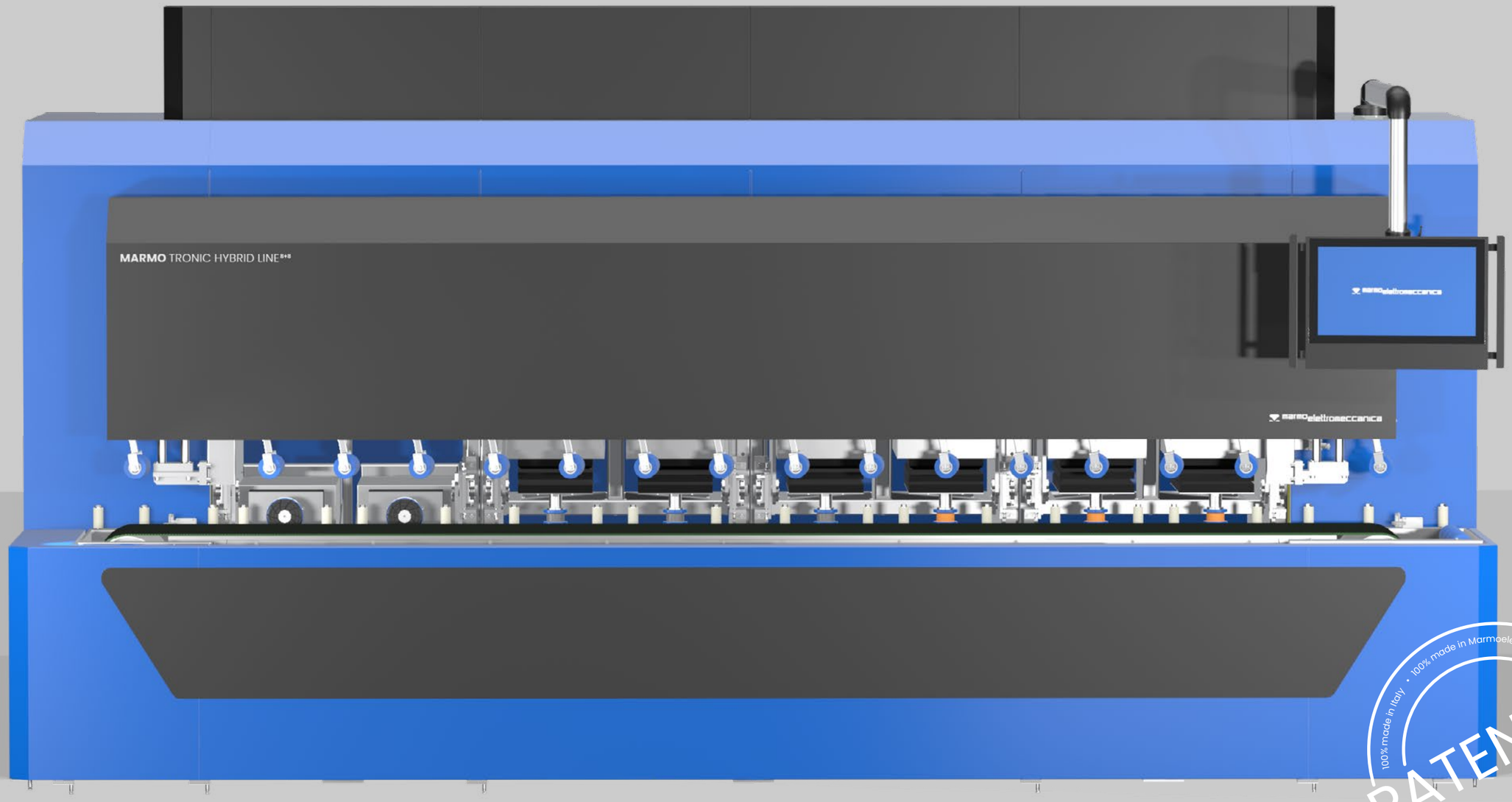
We proudly represent one of the leading Italian companies in the metal-mechanical sector, specializing in manufacturing diamond tools, machines and plants for processing ceramic, natural and synthetic stone.

Internationally acclaimed, we boast the highest number of patents, utility models, and industrial designs in the stone industry, filed, extended, and confirmed on a global scale.

MARMO TRONIC HYBRID LINE^{8+8}

Innovation and Tradition in Stone Processing

Our new CNC edge polishing machine is a cutting-edge hybrid solution for edge processing, integrating profile milling and flat polishing functions into a single system.



PATENTED
100% made in Marmoelettromeccanica • 100% made in Italy • 100% made in Marmoelettromeccanica • 100% made in Italy •

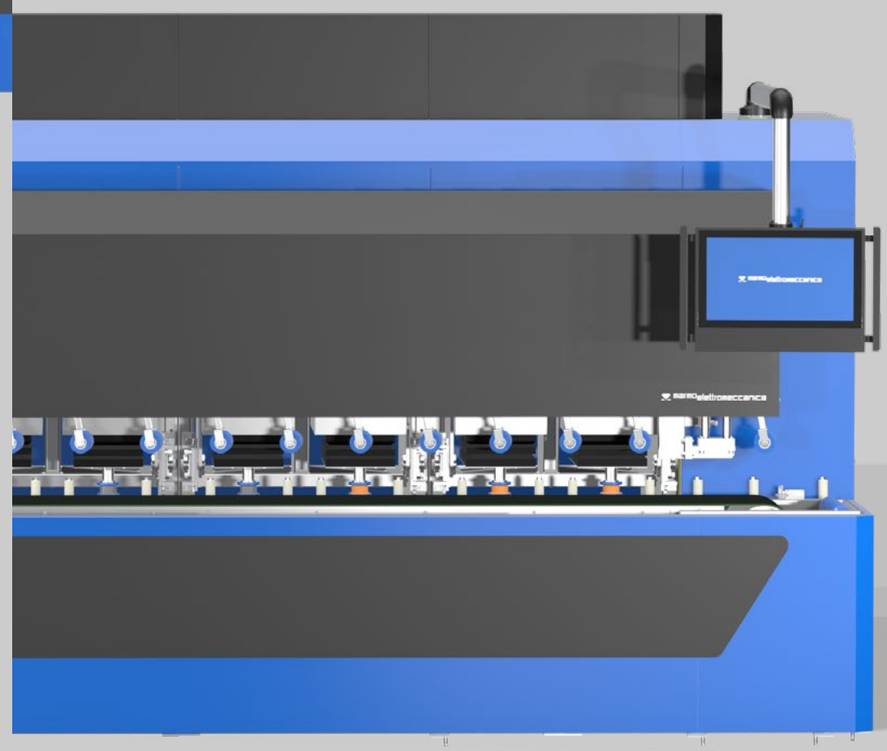
1

CNC EDGE POLISHING MACHINE

The new frontier of polishing.

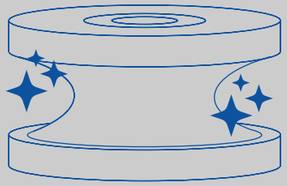
Edge Polishing

Faster than any traditional edge polishing machine.



CNC

As powerful as 8 traditional CNC machines.



8

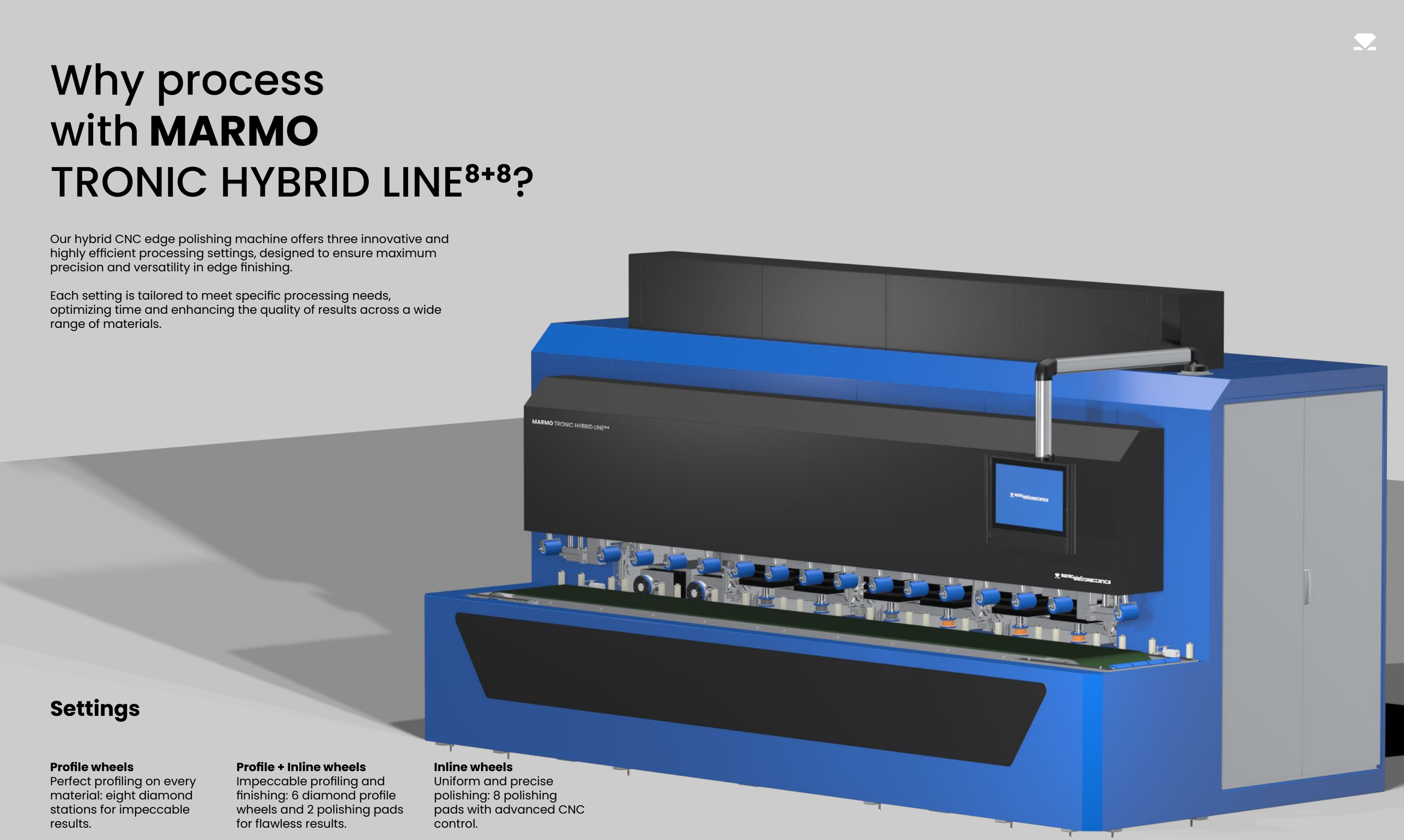
CNC MACHINES

Achieve exceptional results with the power of 8 machines in one.

Why process with **MARMO** TRONIC HYBRID LINE^{8+8}?

Our hybrid CNC edge polishing machine offers three innovative and highly efficient processing settings, designed to ensure maximum precision and versatility in edge finishing.

Each setting is tailored to meet specific processing needs, optimizing time and enhancing the quality of results across a wide range of materials.



Settings

Profile wheels
Perfect profiling on every material: eight diamond stations for impeccable results.

Profile + Inline wheels
Impeccable profiling and finishing: 6 diamond profile wheels and 2 polishing pads for flawless results.

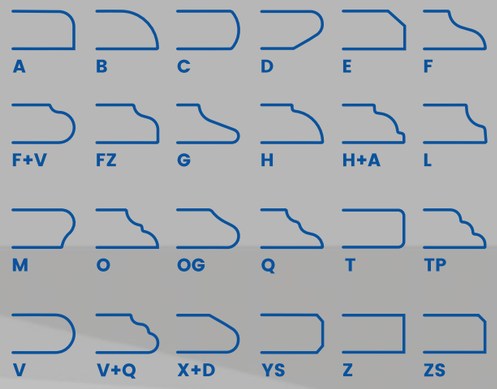
Inline wheels
Uniform and precise polishing: 8 polishing pads with advanced CNC control.

Profile wheels setting

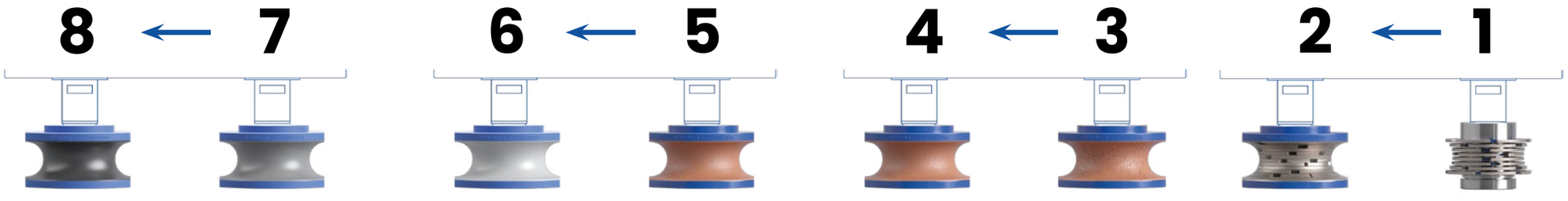
In this setting, the machine uses diamond tools positioned on eight stations to create any type of profile, from the most common to the most complex, covering roughing to final polishing.

Ideal for working with various thicknesses and materials, it ensures an impeccable finish and maximum precision on any type of edge.

Profiles Overview



Profile wheels setting.

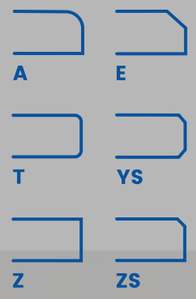


Profile + Inline wheels setting

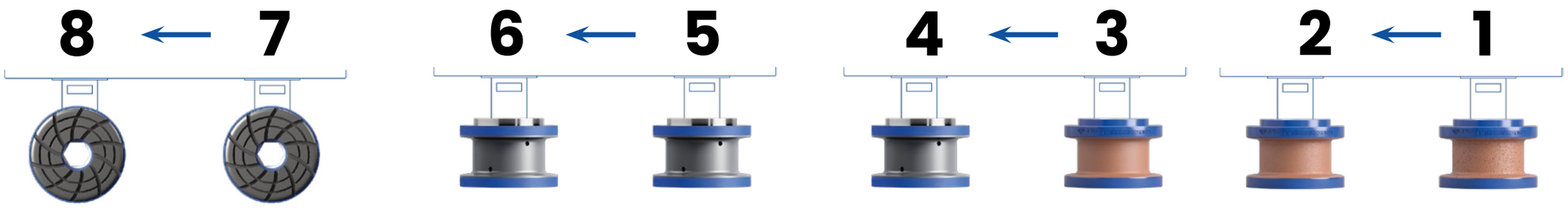
This setting optimizes polishing on profiles with a straight section.

The first six diamond profile wheels shape the profile, while the last two polishing pads completely eliminate any micro-imperfections, ensuring a smooth and uniform surface.

Profiles Overview



Profile + Inline wheels setting.

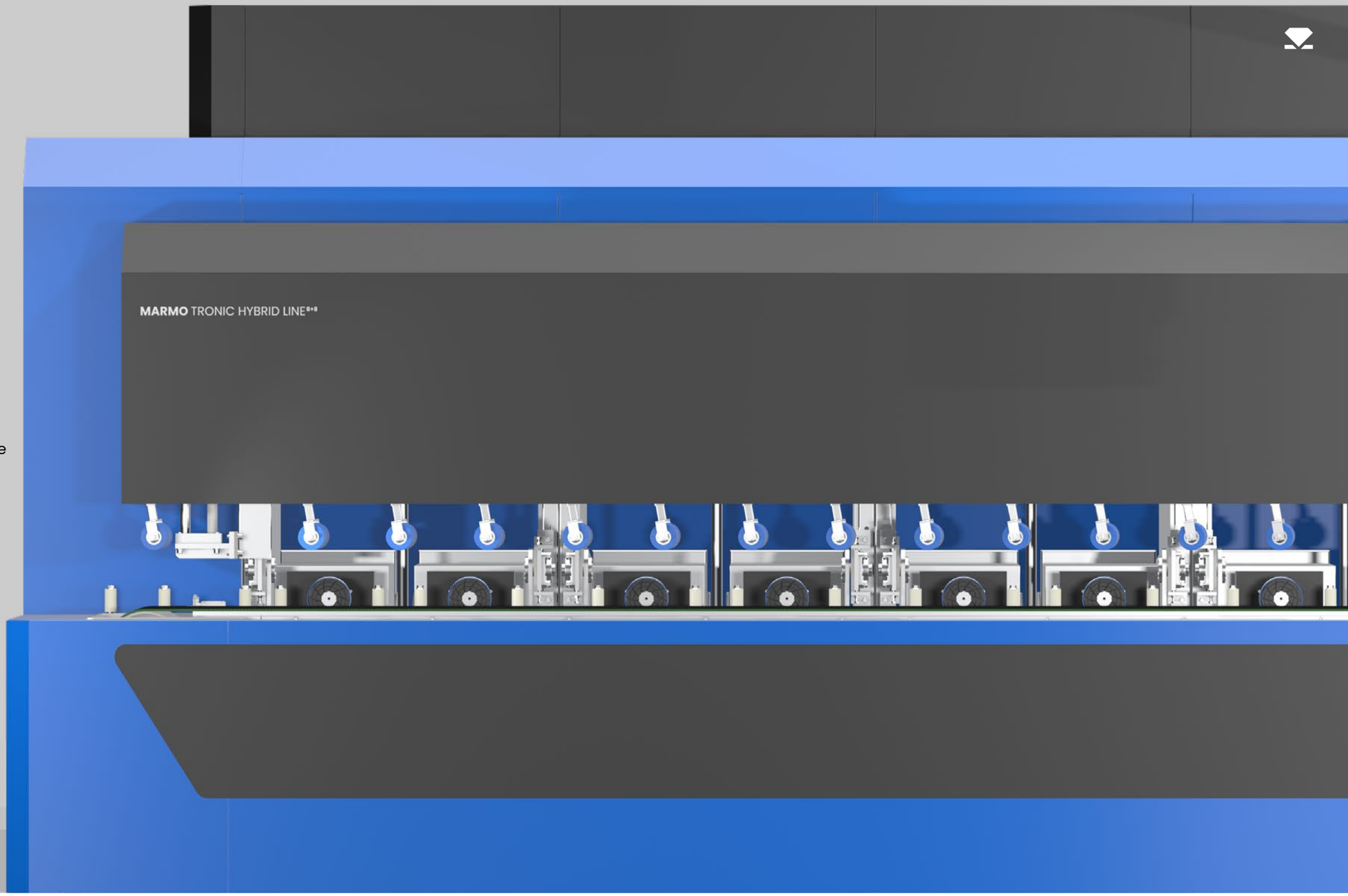


Inline wheels setting

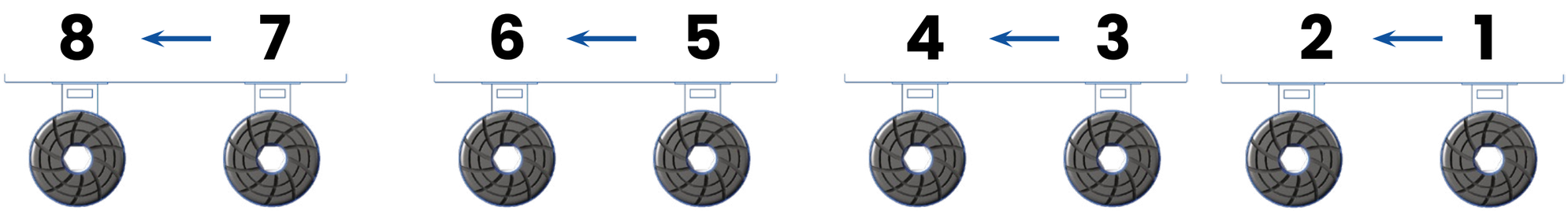
In edge polishing setting, the machine operates exclusively with the polishing inline wheels.

In this case, instead of the traditional approach using grinding wheels, polishing is carried out through controlled pressure, similar to a conventional edge polishing machine.

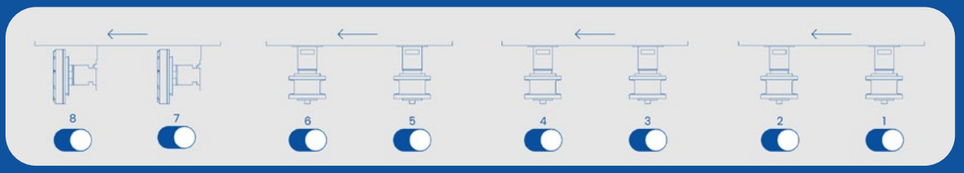
However, with advanced CNC control, it ensures uniform and consistent pressure across the entire surface being worked, enhancing tool longevity and improving the final quality of the work.



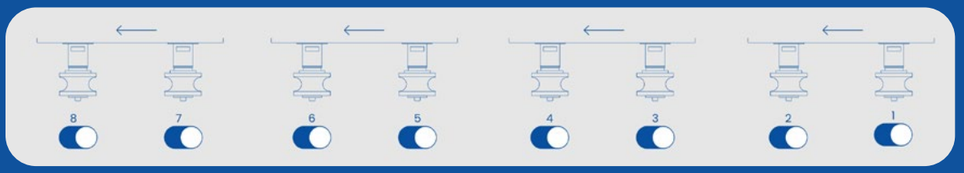
Inline wheels setting.



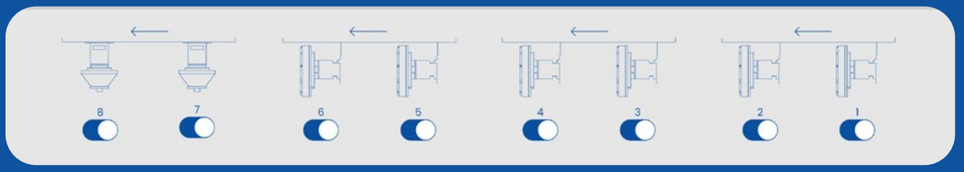
Profile wheels



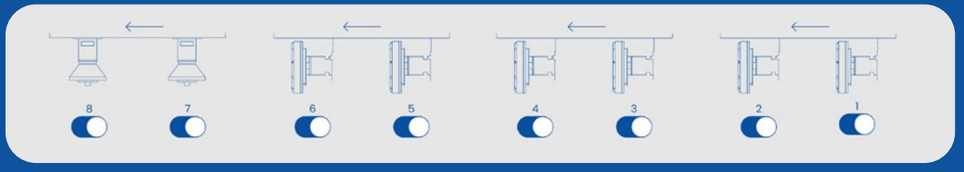
Profile wheels



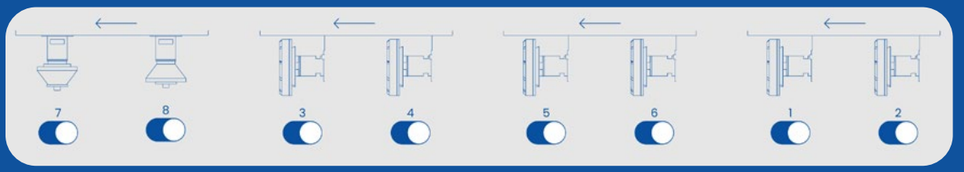
Inline wheels



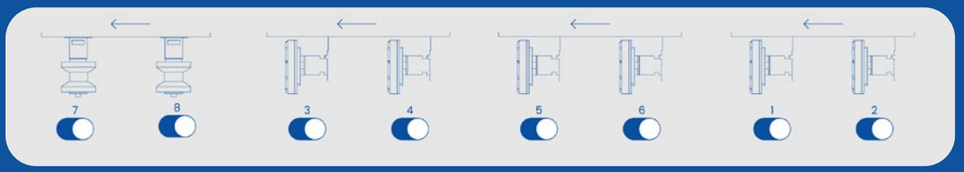
Inline wheels



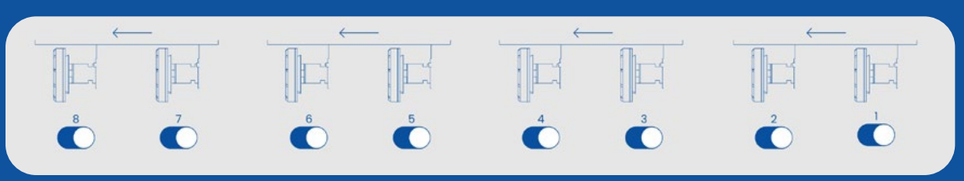
Inline wheels



Inline wheels



Inline wheels



45° mitre

Features

21
CNC Axes

Individually controlled and fully electronic, providing an unparalleled level of automation.

5000
mm/min

Operating at this speed, our model can replace up to 7 traditional CNC machines.

8
Independent Spindles

Control of movement and rotation for each spindle to precisely adapt to different materials and thicknesses.

4
Pistons

A system of 4 pistons with precise and reliable mechanics for controlling the head units.

4
Head Units

Perpendicular or parallel positioning to the slab for maximum flexibility and versatility in processing.

Panel PC

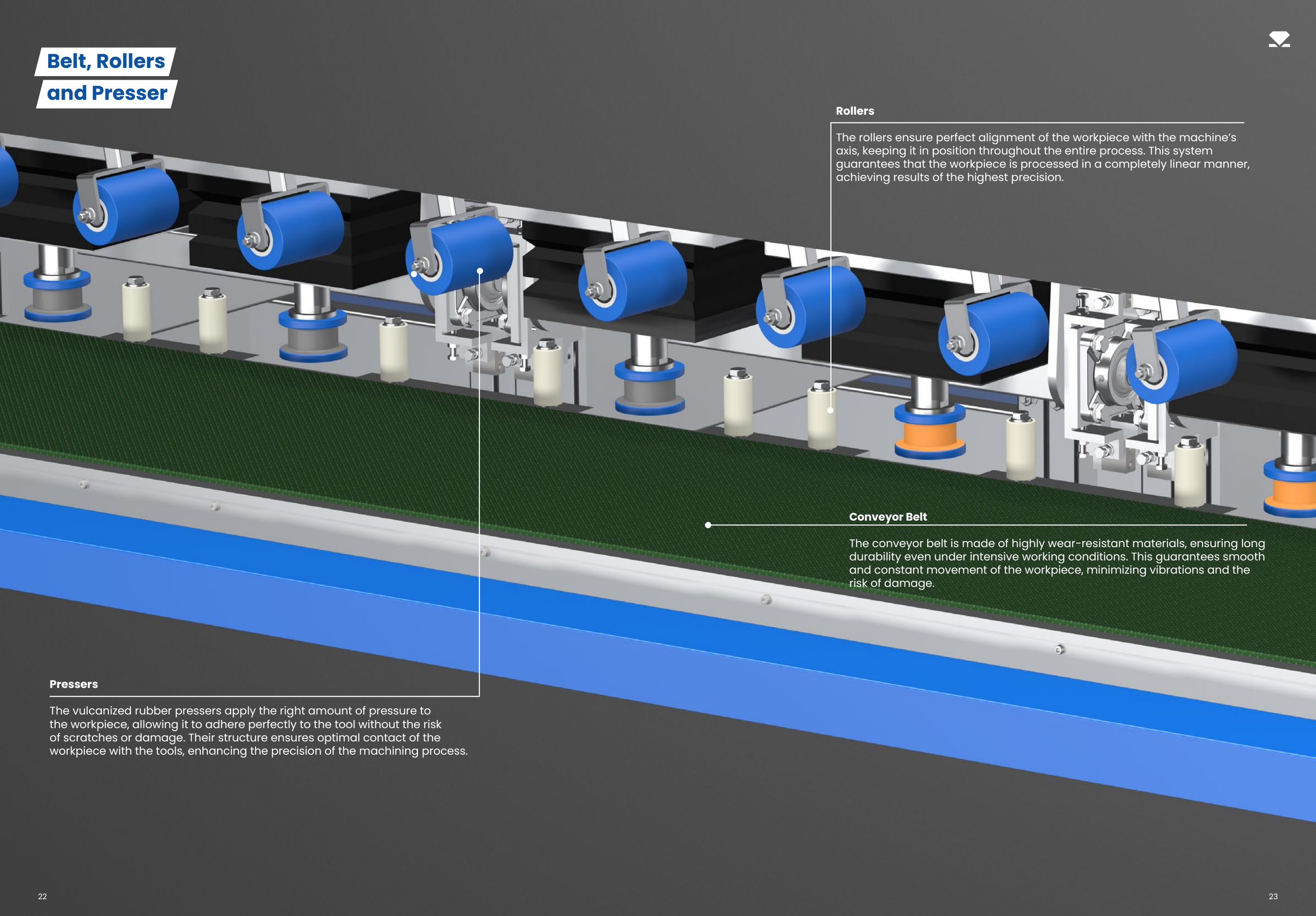
For total and intuitive control of the machine from a single large screen.

Touch Function
Touch screen for simple and immediate control.

FULL HD
Full HD resolution for optimal viewing of controls and settings.

Technology
User-friendly Interface with intuitive controls to optimize the production process and reduce setup times.

Belt, Rollers and Presser



Rollers

The rollers ensure perfect alignment of the workpiece with the machine's axis, keeping it in position throughout the entire process. This system guarantees that the workpiece is processed in a completely linear manner, achieving results of the highest precision.

Conveyor Belt

The conveyor belt is made of highly wear-resistant materials, ensuring long durability even under intensive working conditions. This guarantees smooth and constant movement of the workpiece, minimizing vibrations and the risk of damage.

Pressers

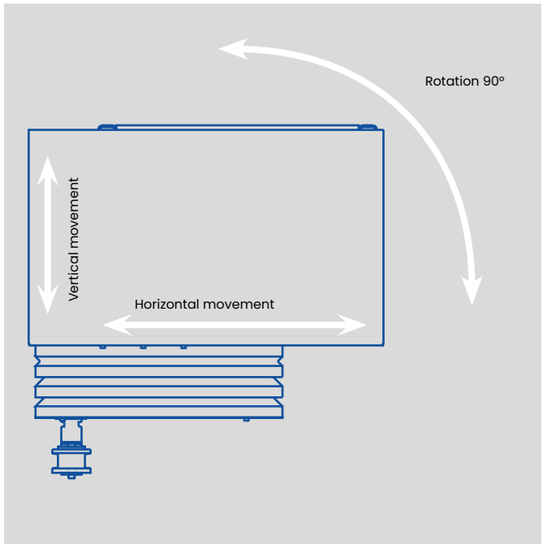
The vulcanized rubber pressers apply the right amount of pressure to the workpiece, allowing it to adhere perfectly to the tool without the risk of scratches or damage. Their structure ensures optimal contact of the workpiece with the tools, enhancing the precision of the machining process.

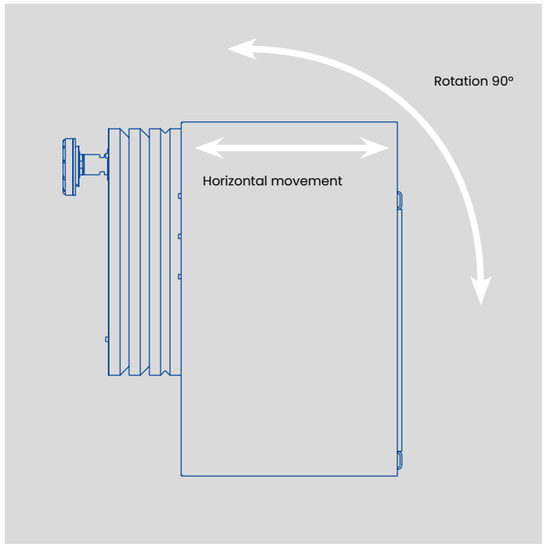
Heads Movements

Our CNC edge polisher is designed to ensure precise and smooth movements thanks to the advanced management of the head units.

Each head unit consists of two spindles and offers rotation from 0° to 90°, along with independent vertical and horizontal movements for greater flexibility and precision during processing.

Thanks to the head rotation, it is possible to switch between the two working modes quickly and easily, optimizing production times.





Rotation
Rotation 0°-90° to easily alternate between the use of profile wheels and polishing pads.

Vertical movement
Precise vertical movement for millimetric control of the machining depth.

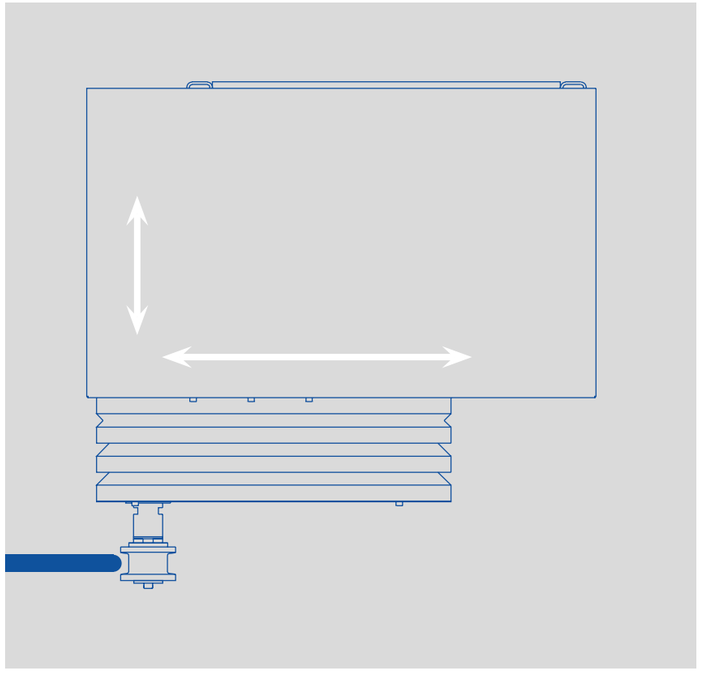
Horizontal movement
Horizontal movement for perfect adaptation and hundredth-millimeter tolerances in every operation.

Vertical and Horizontal Movement CNC Profile Wheels

The machine precisely controls movements along the Z and X axes, allowing for extremely accurate adjustment of the tool's approach to the workpiece.

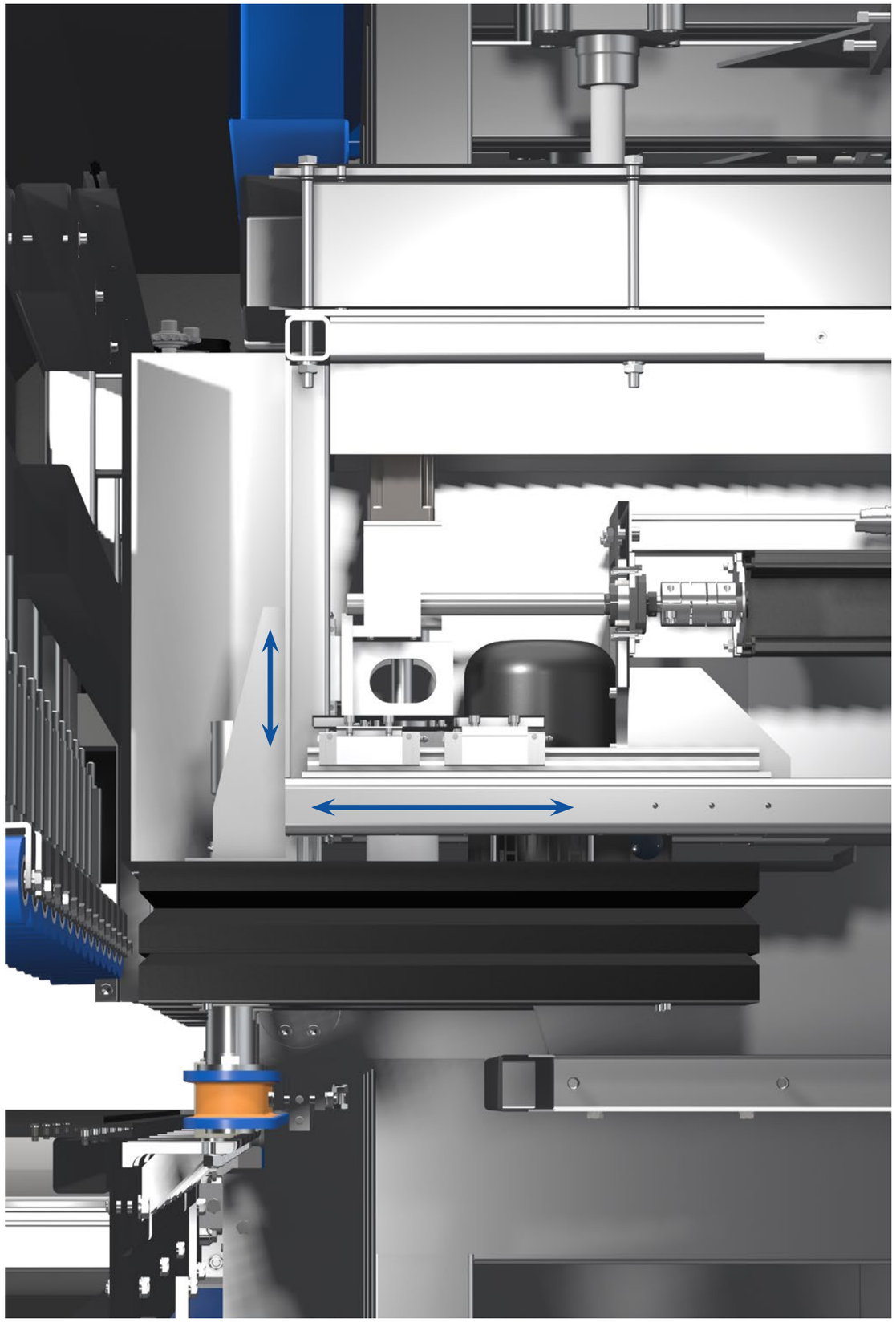
When working with profile wheels, the vertical movement manages the tool's advancement, adjusting the machining depth with millimetric precision.

The horizontal movement, on the other hand, allows for the management of the tool's approach and increment relative to the workpiece profile, ensuring perfect adaptation even in the most delicate operations.



Z Axis
Movement on the Z-axis to manage the tool's advancement.

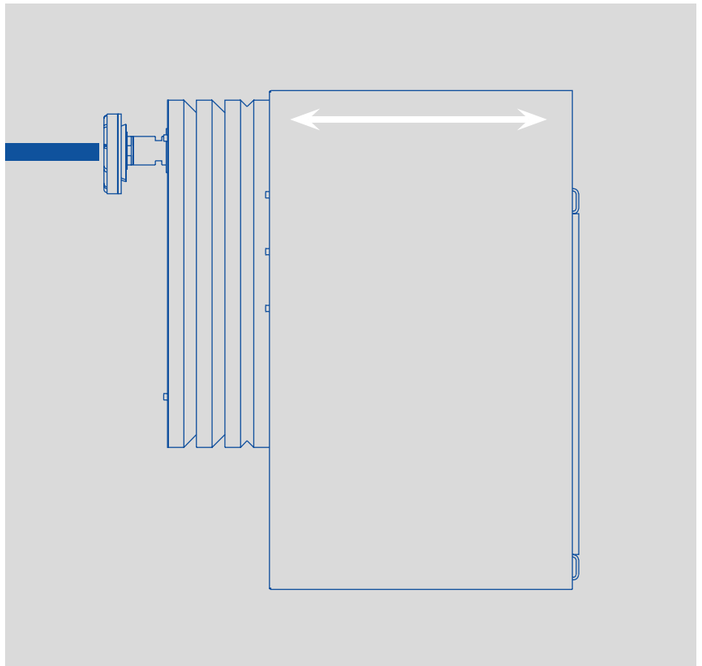
Stock Removal
Movement to increase material removal.



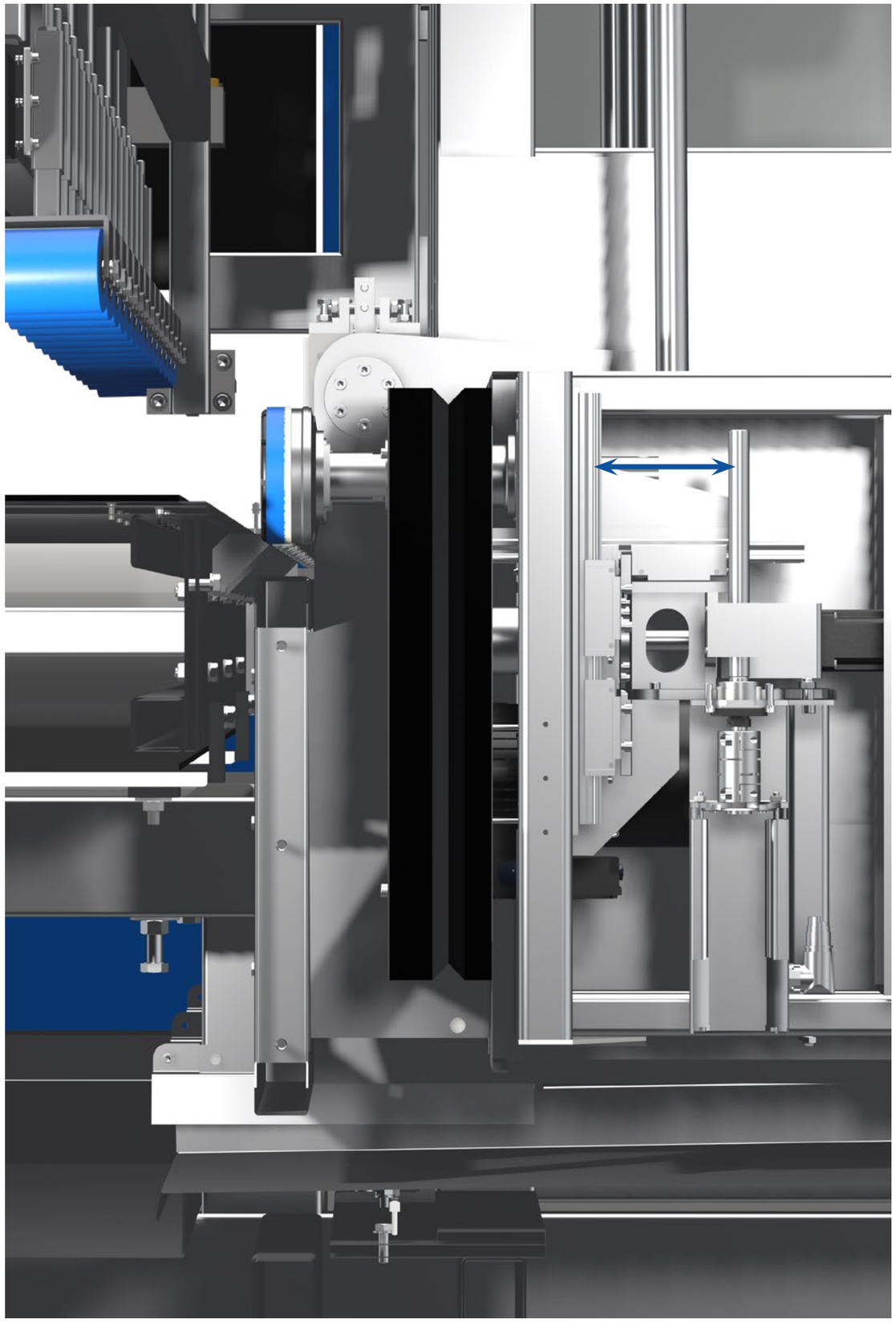
Horizontal Movement Inline Profile Wheels

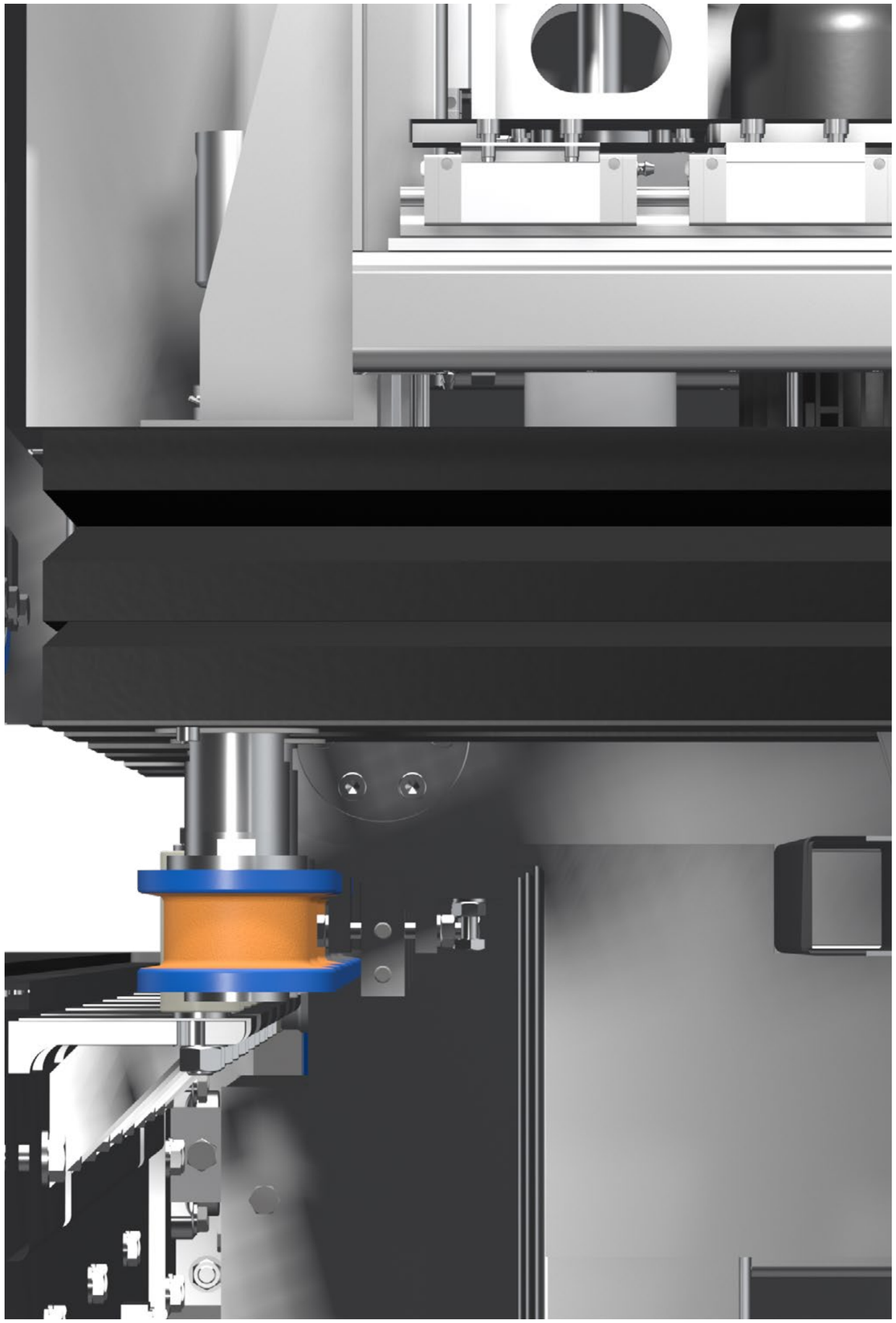
During processing with polishing discs, the machine operates under controlled pressure, simulating the movement of a traditional edge polisher.

This ensures an even distribution of pressure on the slab, guaranteeing a flawless polish without compromising the material's quality.



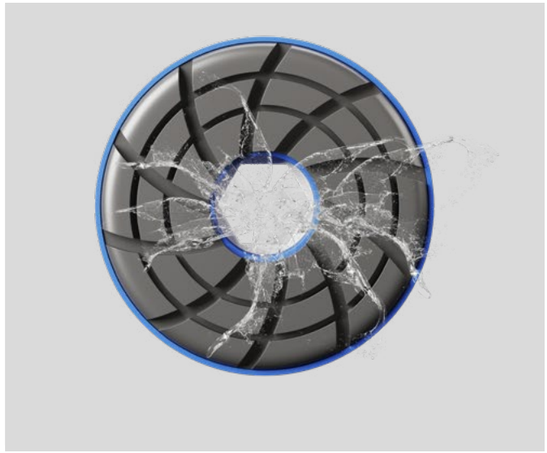
Controlled Pressure
Horizontal movement for accurate and consistent pressure control during processing.

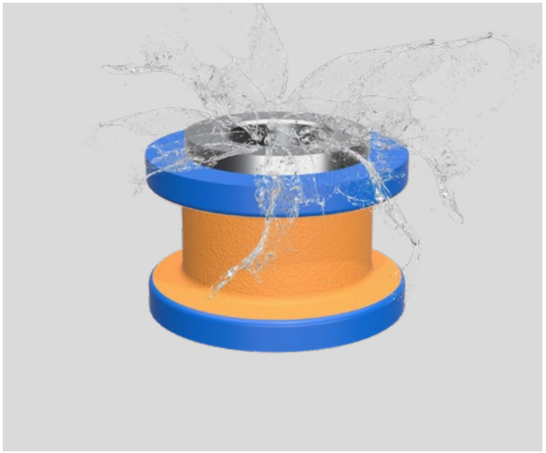




Water Flow System

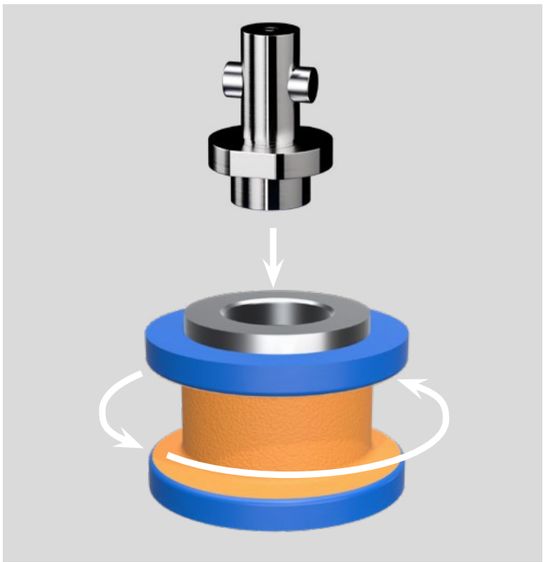
Thanks to our system, water is distributed internally to both the profile wheels and the polishing discs through a dual circuit that ensures constant and uniform cooling during processing. This system not only preserves the quality of the work but also improves the lifespan of the tools, preventing overheating and premature wear.





Quick Connect

To facilitate and speed up tool change operations, all tools are equipped with a quick coupling system. Both CNC tools and profile wheels feature quick coupling designed to simplify machine handling and reduce downtime. CNC tools use a specific mini-cone to ensure precision and fast mounting, while for profile wheels, an SNAILOC system with a screw attachment is available, allowing for quick and secure changes.

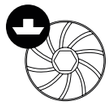


Advanced Software for Automatic Management

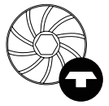
The heart of the CNC edge polisher is its dedicated software, developed to ensure maximum efficiency and ease of use. The entire machine is controlled by an advanced CNC system that manages all operations and offers a wide range of preset programs for different types of processing.

Profile wheels Straight line

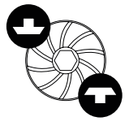
Profile wheels Shaped line



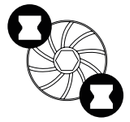
Inline wheels Shaped line



Inline wheels Shaped line



Inline wheels Shaped line



Inline wheels Shaped line

Inline wheels Straight line

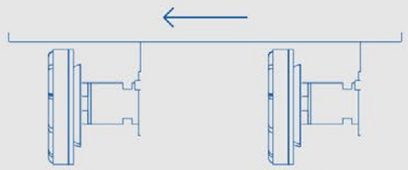
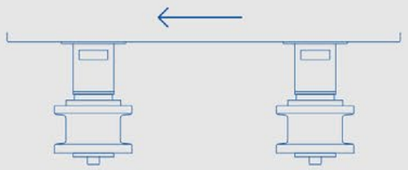
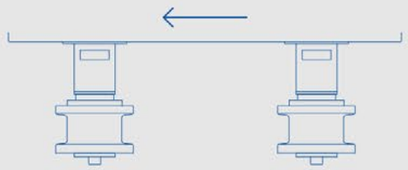
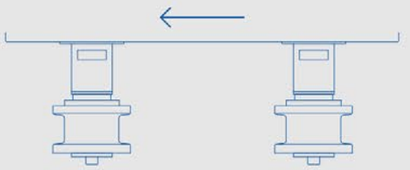
45° mitre

Manual Programming

PRESET RECIPES
The software provides ready-to-use configurations for each type of processing, optimized for profile and material, allowing production to start without lengthy setups.

FAST AND SAFE PROCESSING
The preset recipes allow production to start in just a few minutes, ensuring precision, zero errors, safety, and maximum productivity.

EASE OF USE
Thanks to its user-friendly interface, the software is extremely intuitive. Even less experienced operators can achieve high-quality results.

		8	7	6	5	4	3	2	1
Heads Group									
Head		8	7	6	5	4	3	2	1
Code tool		SC61088-01	SC61088-01	SC61088-01	SC61088-01	SC61088-01	SC61088-01	SC61088-01	SC61088-01
Position				6	5	4	3	2	1
Grits		5000	3000						
Z Axis	[mm]			− 50.03 +	− 50.03 +	− +	− +	− +	− +
Fondo Gola	[mm]			60.03	60.03				
Accostamento	[mm]			− 0.037 +	− 0.036 +	− +	− +	− +	− +
Giri mandrino	[RPM]	− 2000 +	− 3000 +	− 2000 +	− 3000 +	− +	− +	− +	− +
Pressione	[Nm]	− 2.333 +	− 2.333 +						

Velocità nastro

− 2000 + [mm/min]

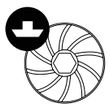
Spessore lastra

20.00 [mm]

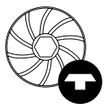
Start Stop Reset

Profile wheels

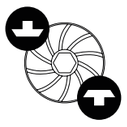
Profile wheels



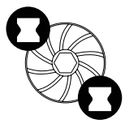
Inline wheels



Inline wheels



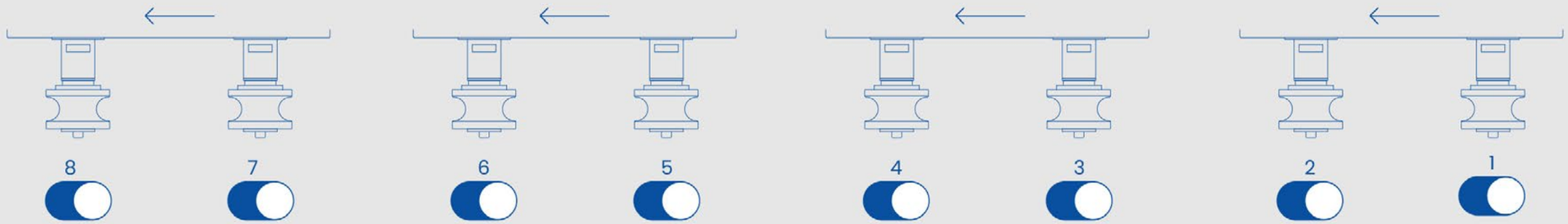
Inline wheels



Inline wheels

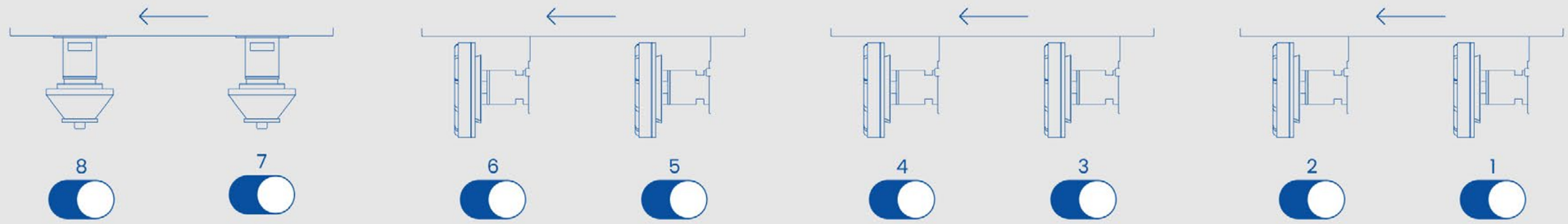
Inline wheels

45° mitre


Heads Group
Head
8
7
6
5
4
3
2
1
Position
Grits
Z Axis
[mm]
Min. Diameter
[mm]
Stock Removal
[mm]
Spindle rotation
[RPM]
Pressure
[bar]

Velocità nastro
[mm/min]
Spessore lastra
[mm]
Start
Stop
Reset

Profile wheels
Profile wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
45° mitre

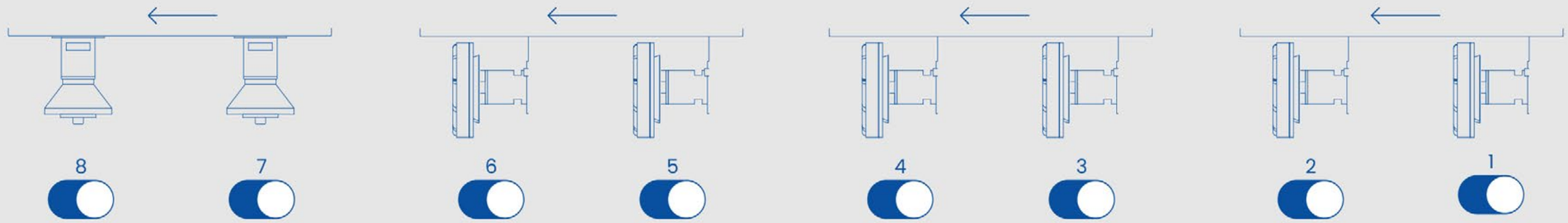


		8	7	6	5	4	3	2	1
Position									
Grits									
Z Axis	[mm]	– +	– +						
Fondo Gola	[mm]								
Accostamento	[mm]	– +	– +						
Giri mandrino	[RPM]								
Pressione	[bar]			– +	– +	– +	– +	– +	– +

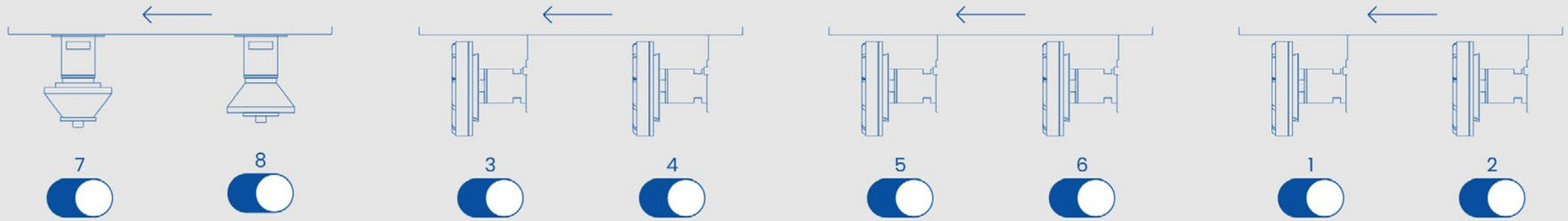
Velocità nastro [mm/min]

Spessore lastra [mm]

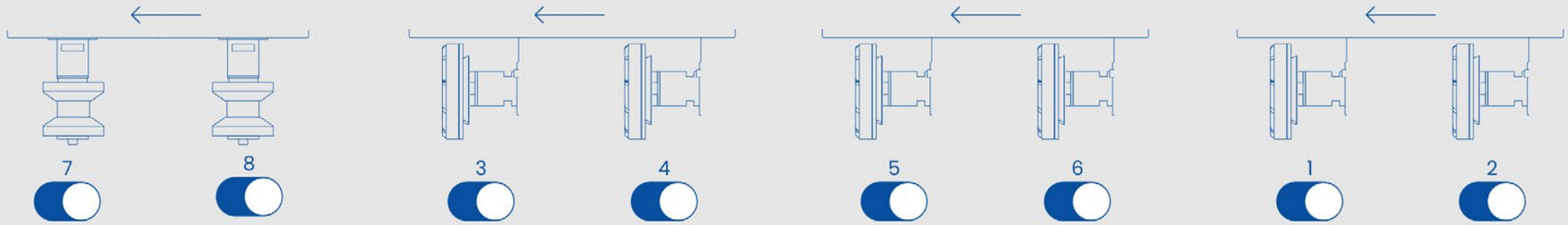
Start Stop Reset


Heads Group
Head
8
7
6
5
4
3
2
1
Position
Grits
Z Axis
[mm]
Fondo Gola
[mm]
Accostamento
[mm]
Giri mandrino
[RPM]
Pressione
[bar]
Velocità nastro
[mm/min]
Spessore lastra
[mm]
Start
Stop
Reset

Profile wheels
Profile wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
45° mitre



Profile wheels | **Profile wheels** | **Inline wheels** | **Inline wheels** | **Inline wheels** | **Inline wheels** | **Inline wheels** | **45° mitre**


Heads Group
Head
7
8
3
4
5
6
1
2
Position
Grits
Z Axis
[mm]
Fondo Gola
[mm]
Accostamento
[mm]
Giri mandrino
[RPM]
Pressione
[bar]
Velocità nastro
[mm/min]
Spessore lastra
[mm]
Start
Stop
Reset

Profile wheels
Profile wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
Inline wheels
45° mitre

		8	7	6	5	4	3	2	1
Heads Group									
Head									
Position									
Grits									
Z Axis	[mm]								
Fondo Gola	[mm]								
Accostamento	[mm]								
Giri mandrino	[RPM]								
Pressione	[bar]	− +	− +	− +	− +	− +	− +	− +	− +

Velocità nastro [mm/min]

Spessore lastra [mm]

Start Stop Reset

Profile wheels

Profile wheels

Inline wheels

Inline wheels

Inline wheels

Inline wheels

Inline wheels

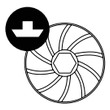
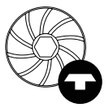
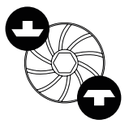
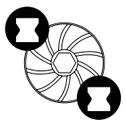
45° mitre

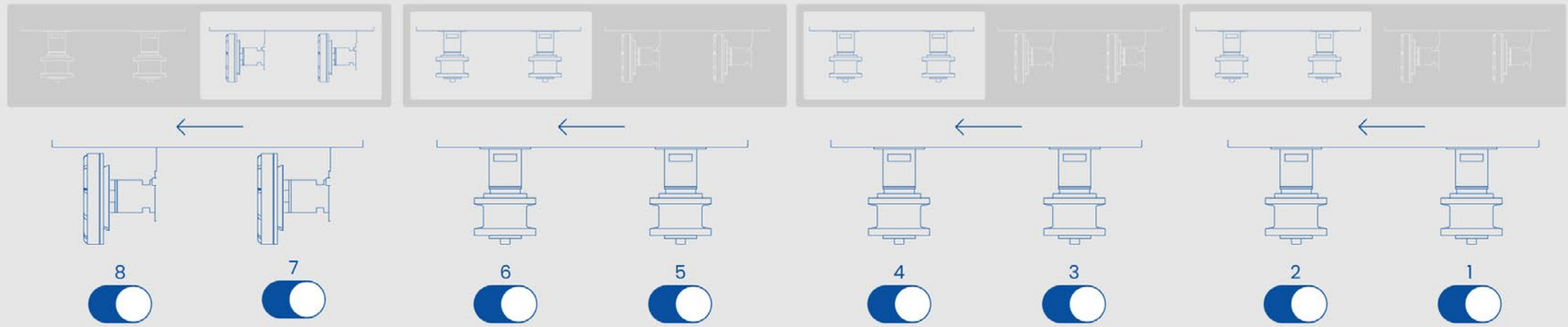
		8	7	6	5	4	3	2	1
Heads Group									
Head									
Position									
Grits									
Z Axis	[mm]								
Fondo Gola	[mm]								
Accostamento	[mm]								
Giri mandrino	[RPM]								
Pressione	[bar]								

Velocità nastro [mm/min]

Spessore lastra [mm]

Start Stop Reset

Profile wheels	Profile wheels	Inline wheels	Inline wheels	Inline wheels	Inline wheels	Inline wheels	45° mitre
							



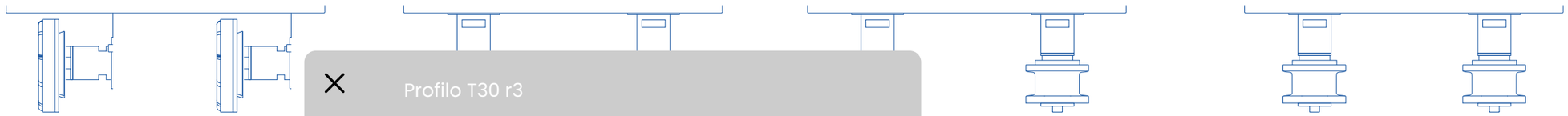
Manual programming

Recipes Management

My Library

Profilo T30 r3

Data di ultimo utilizzo **01.01.2024**



	8	7				3	2	1
Head								
Code tool	SC61088-01	SC61088-0				SC61088-01	SC61088-01	SC61088-01
Position	15 mm	15 mm				15 mm	-	-
Grits	-	-				-	#3000	#5000
Z Axis	18 mm	18 mm				18 mm	-	-
Fondo Gola	36 mm	36 mm	36 mm	36 mm	36 mm	36 mm	-	-
Accostamento	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm	-	-
Giri mandrino	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm
Pressione	-	-	-	-	-	-	1,5 bar	1,5 bar
Velocità Nastro	150 mm/min							

Profilo T30 r3

Total covered distance	**959.184 m**
Total using duration	17.2 h
Tool price	-
Theoretical tool life distance	1.000 m

Reset

Recalls

Copy & Edit

Profilo T30 r5

Profilo T20 r3

Profilo T20 r5

Profilo V30 r3

Profilo T30 r5

Profilo T20 r3

Profilo T20 r5

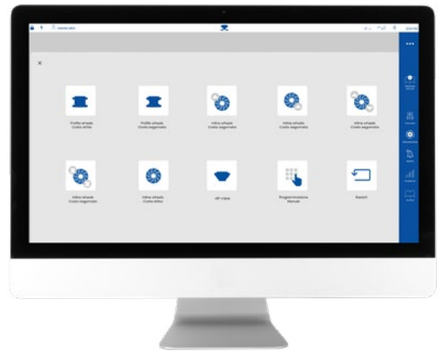
Profilo V30 r3

Smartphone Access

With remote access via smartphone, users can monitor the machine’s activity and performance in real time, easily overseeing its operation and functionality from their mobile device.

PC Access

Our edge polisher is designed to be connected to external PCs for the implementation of additional functions, such as database management or remote assistance.



Remote Support

Online Support

Experience superior online support for our products. Our experts provide real-time assistance, personalized recommendations, and innovative solutions for precision processing, ensuring optimal performance and maximum productivity in every operation.

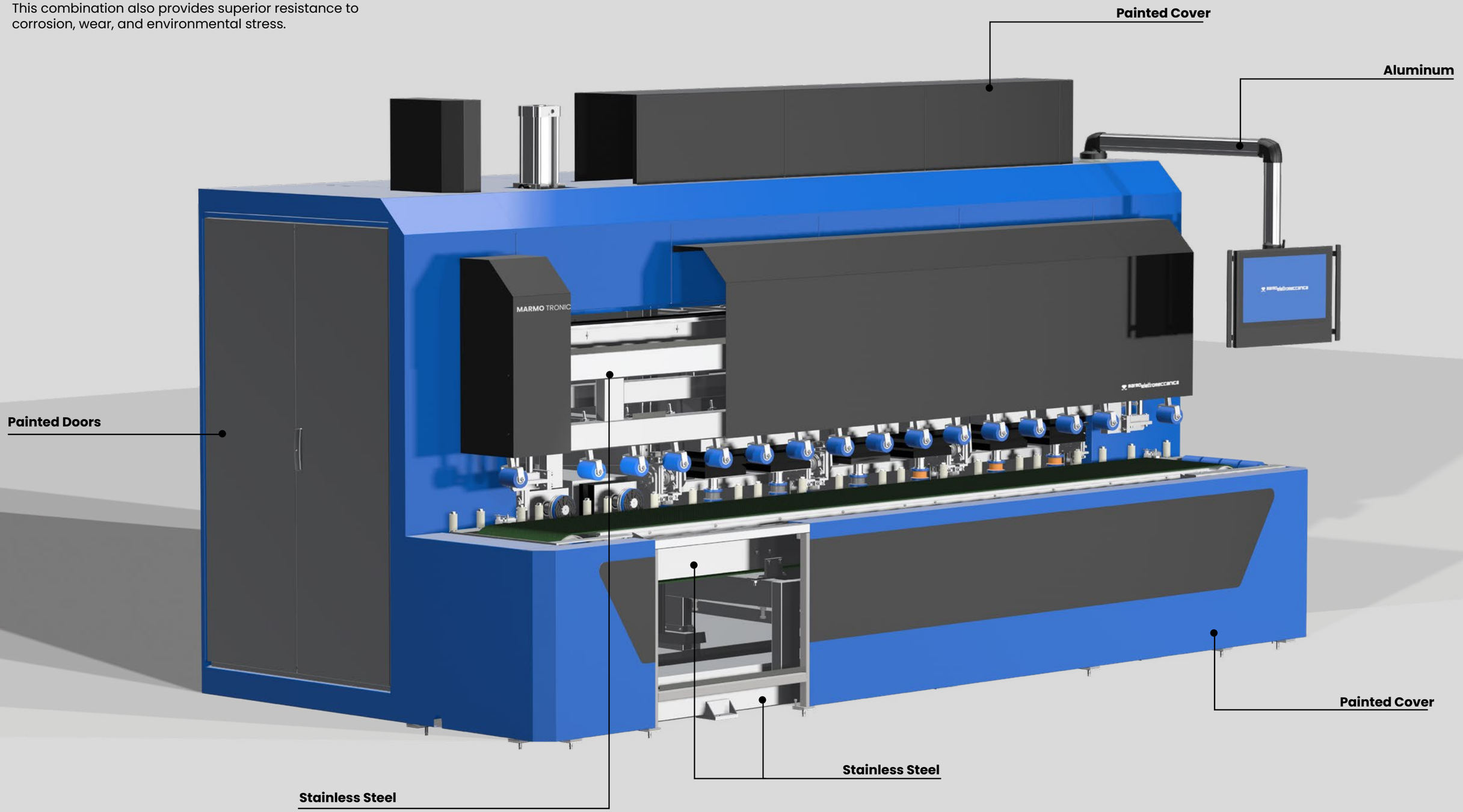
Onsite Support

Enhance your work with our onsite support for our products. Our experts provide personalized recommendations, real-time assistance, and innovative solutions directly at your location, ensuring optimal precision and maximum productivity in every operation.

MARMO TRONIC HYBRID LINE^{8+8}
Built to Last

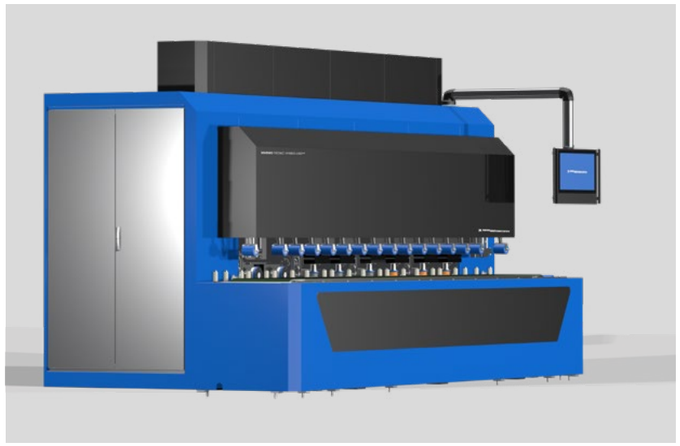
The MARMO TRONIC HYBRID LINE is entirely constructed from stainless steel and aluminum, materials chosen to ensure maximum durability and long-term resistance.

This combination also provides superior resistance to corrosion, wear, and environmental stress.



Electrical Panels

The CNC edge polisher is equipped with two separate electrical panels, designed to ensure efficient and safe management of both the machine's power and control systems.



POWER MANAGEMENT PANEL

This panel is dedicated to managing the different motor power levels, ensuring reliable and stable control during the most demanding operations. The layout of the components is designed to facilitate access and maintenance. Pneumatic components are also housed within this panel.

CNC PANEL

Separate from the power panel, the CNC panel is exclusively dedicated to numerical control management, ensuring precision and stability. This separation helps to avoid potential interference, thereby guaranteeing maximum operational efficiency.

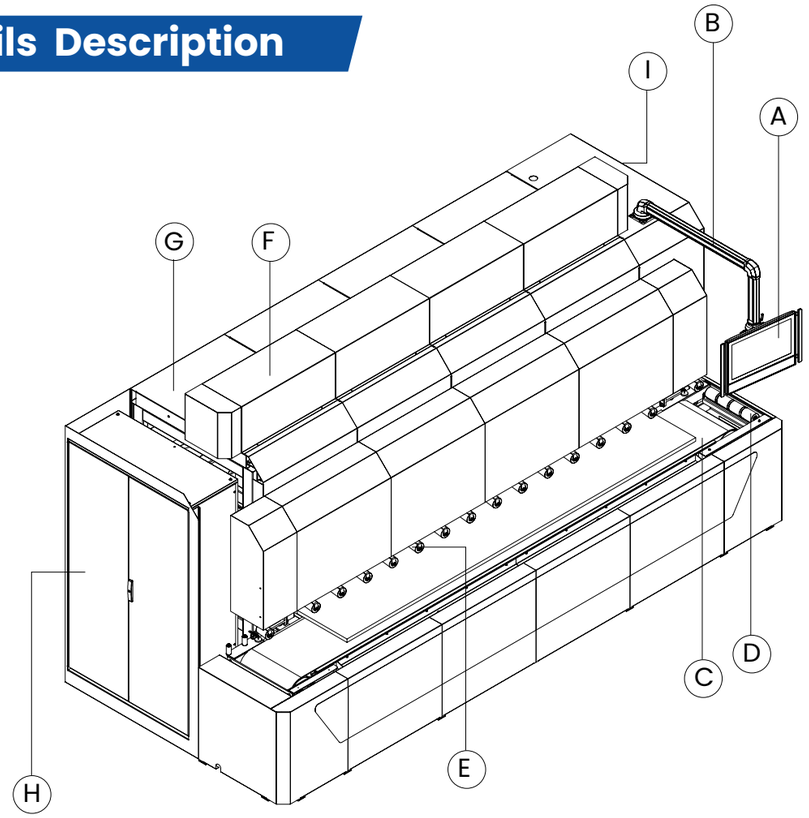
Perfect Wiring

The panels are wired and numbered with precision, making each component easily identifiable. This ensures that maintenance operations are quicker and more intuitive, reducing machine downtime and increasing productivity.

Thermoventilation

The panels are equipped with a thermoventilation system that ensures the maintenance of an optimal internal temperature, preventing overheating and ensuring high performance without interruptions.

Details Description



A - 24" Panel PC. Large 24" screen with Full HD resolution and multi-touch functionality.

B - Panel PC Arm. Mobile support for the 24" Panel PC.

C - Conveyor Belt. Made with durable materials, the belt ensures smooth and safe transport of the workpiece, reducing vibrations and damage even under intensive working conditions.

D - Guide Rollers. The rollers ensure precise alignment of the workpiece along the machine's axis, providing linear processing and high-precision results.

E - Presser. Made of vulcanized rubber, they apply the right amount of pressure to the stone, allowing it to adhere perfectly to the tools without the risk of scratches or damage.

F- Piston Cover. Cover made of painted steel.

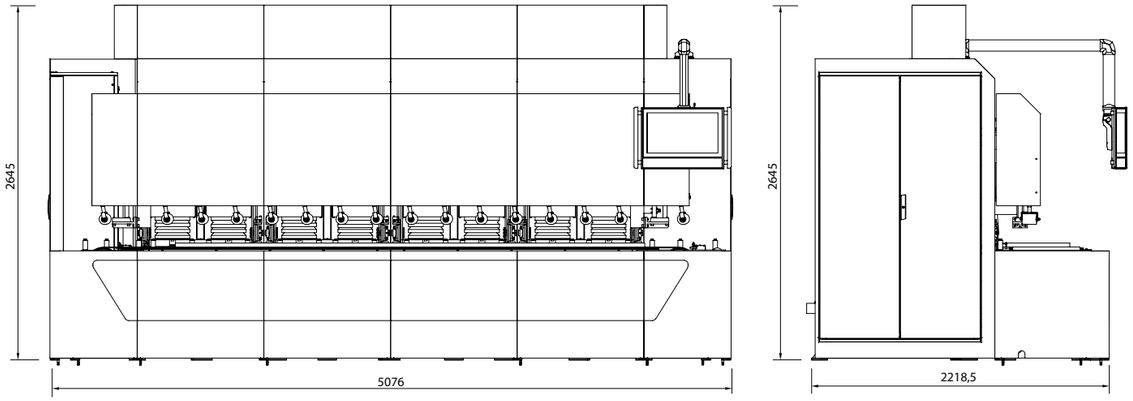
G- Head Unit Cover. Cover made of painted steel.

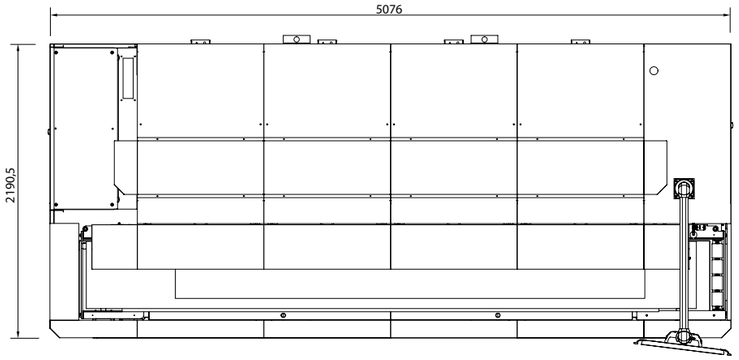
H - Left Electrical Panel. Panel housing the pneumatic components and motor power management.

I - Right Electrical Panel. Panel for the management of numerical control.

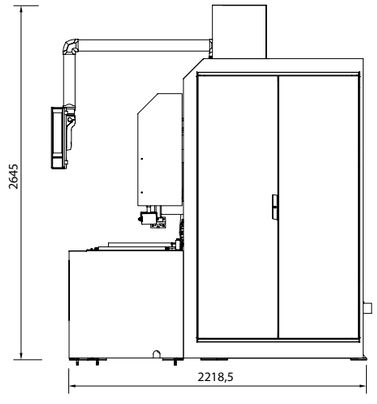
Techinical Drawing

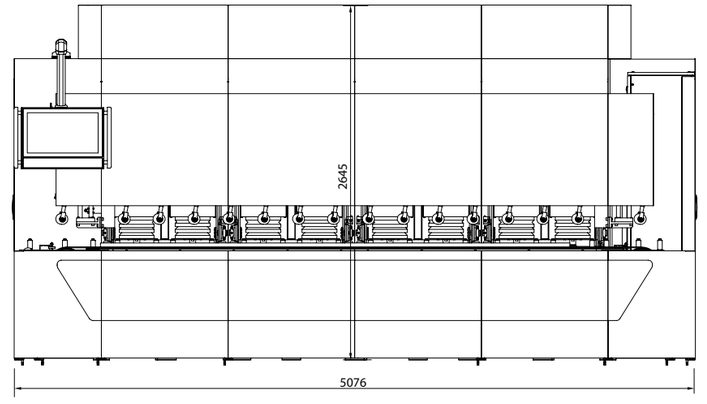
Right to Left version machine

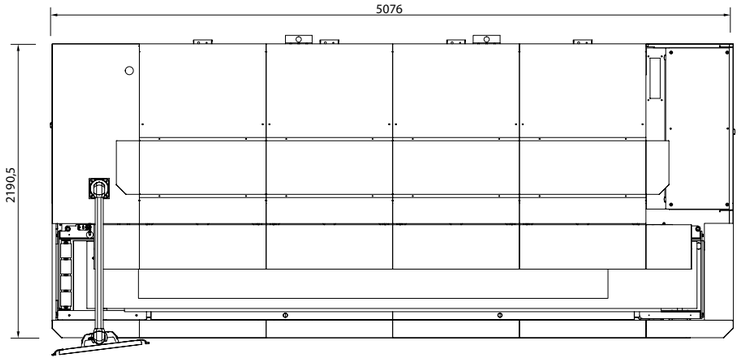




Left to Right version machine







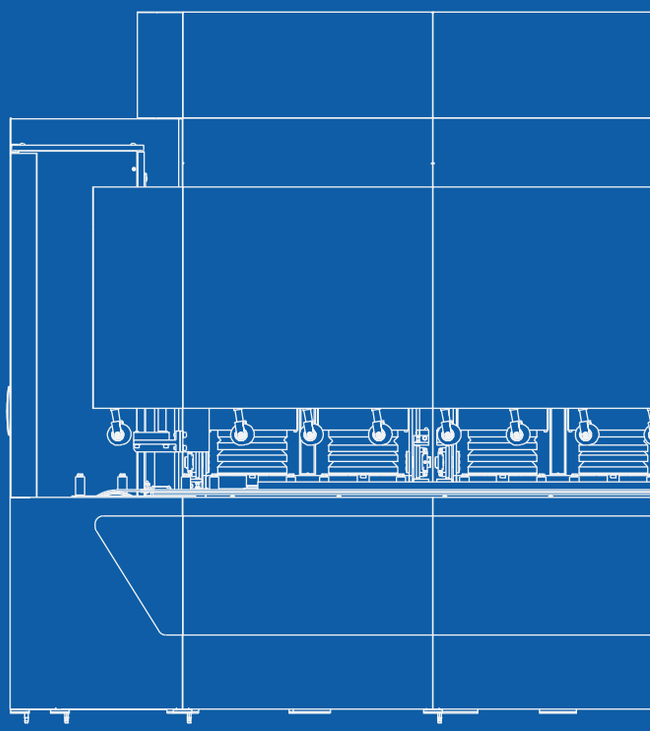
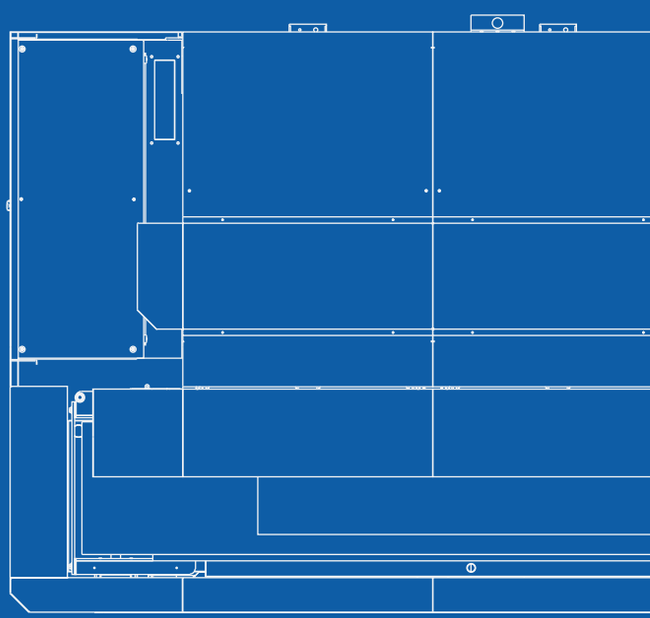
Techinical Data

MARMO TRONIC HYBRID LINE 8+8

TOTAL WEIGHT	5500 Kg
WORKING HEIGHT	840 mm
MINIMUM/MAXIMUM WORK LENGTH	300 mm/∞
MIN/MAX WORKING WIDTH	160 mm/∞
MIN/MAX WORKING THICKNESS	10/80 mm
CONVEYOR BELT SPEED	500 - 5000 mm/min
TOTAL INSTALLED POWER	24 Kw
WATER CONSUMPTION	200 lt/min
AIR CONSUMPTION	10 lt/min
PAD DIAMETER	125 mm
CNC WHEEL DIAMETER	Standard CNC profile wheels
OVERALL DIMENSION	5100x2200xh2645

Marmoelettromeccanica

Via Flaminia km 41,400
Rignano Flaminio, RM
00068 | Italy
T +39 0761 5051

2400 Main Street
Sayreville, NJ 08872 | US
T +1 833 636 8665

marmoelettro.com