



NEW

SM-400-TA



Dual axes cutting and marking machine





HIGH SPEED
PANEL CUTTING



DESIGNED FOR
INDUSTRIAL PRODUCTION



GREAT VERSATILITY



EXCELLENT PRICE
PERFORMANCE RATIO



**BRIDGE MOVING
SPEED UP TO**

60
meters/minute

SM-400-TA DUAL AXIS CUTTING AND MARKING MACHINE

**ALL-ROUND PANEL CUTTING
QUALITY CUTS ON SPECIALTY FABRICS**

Originally designed to cut specialty fabrics typically used in the awning and sun protection industry, it's solid industrial structure, high speed brushless motors, and quality cutting tools make this machine the ideal cutting solution for manufacturers in many other industries as well.

To solve the problem of shrinking crystal (clear) PVC we developed a system for the just-in-time heat treatment with infrared light. After the treatment the crystal PVC will remain perfectly stable and can be integrated in products such as industrial doors, tents or terrace covers without the danger of shrinkage, even when exposed to sunlight or cold.

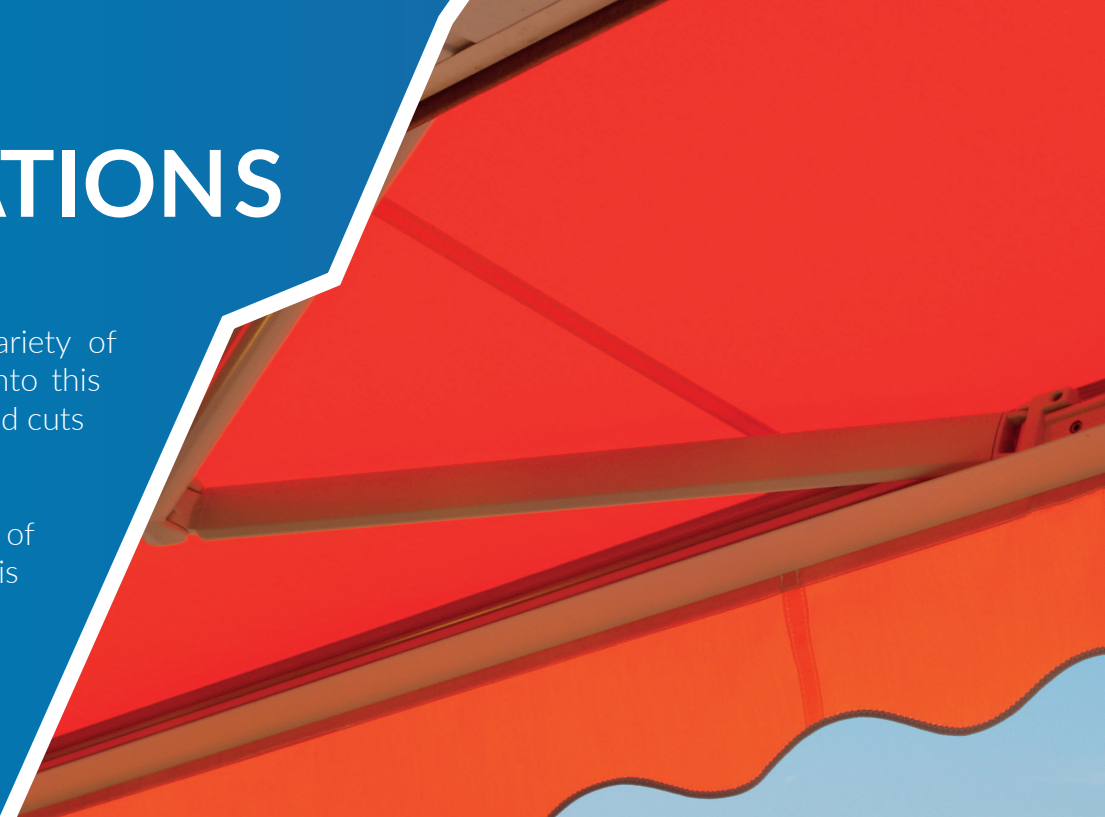


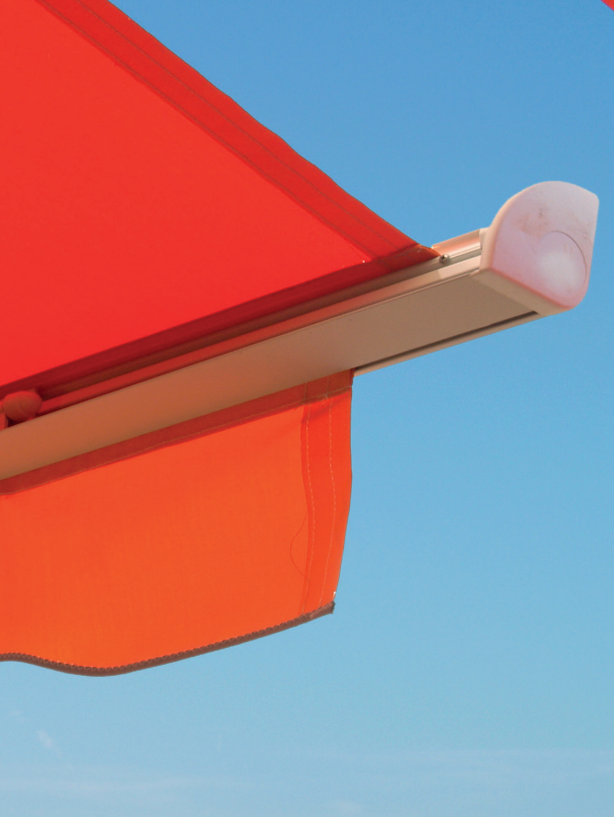
APPLICATIONS

First introduced in 1999, a wide variety of innovative solutions were integrated into this machine to ensure absolute **reliability** and cuts of the **highest quality**.

Originally designed for the production of **awnings** in acrylic and polyester, SM-400-TA is widely used to cut panels of other technical fabrics, such as flexible PVC.

If you're looking for **fast** and **very efficient** production cycles and high quality cut panels made with an **easy-to-use** machine, SM-400-TA is the solution for you.





NEW

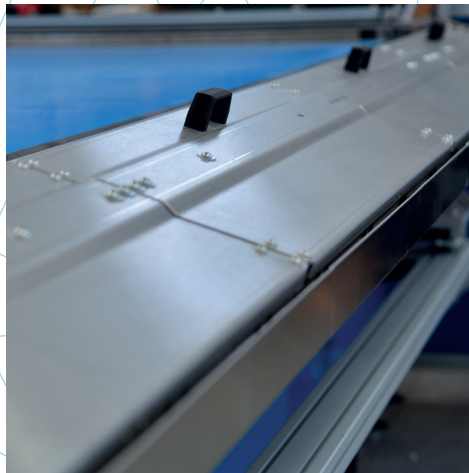
SM-400-TA



Dual axes cutting and marking machine

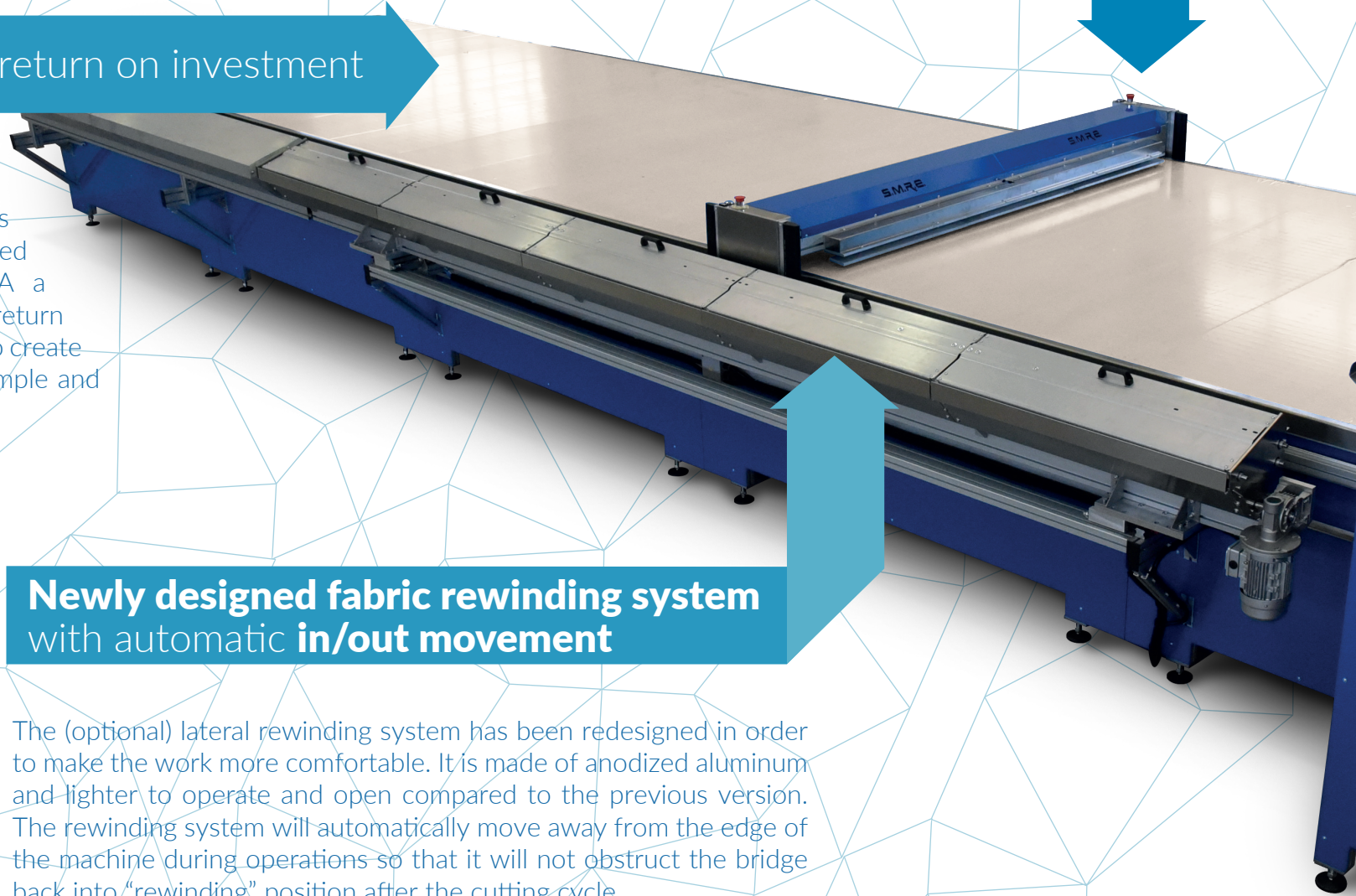
High efficiency. Quick return on investment

Tools, accessories and software were designed to deliver an unparalleled operational efficiency. Its very fast motion and the high speed tool positioning make SM-400-TA a solution that will guarantee a quick return on your investment and allow you to create awnings of the highest quality – simple and with great efficiency.



Newly designed fabric rewinding system with automatic in/out movement

The (optional) lateral rewinding system has been redesigned in order to make the work more comfortable. It is made of anodized aluminum and lighter to operate and open compared to the previous version. The rewinding system will automatically move away from the edge of the machine during operations so that it will not obstruct the bridge back into “rewinding” position after the cutting cycle.



Very fast axes movements

SM-400-TA works with brushless motors and reaches a top moving speed of the grip-and-pull system of 60 m/m so that the return movement after the cut is ultrafast and the non-productive time of the machine is reduced to a few seconds.

Ergonomic open work area Easy fabric feeding

The machine has a very open work area in the front (near the roll) and allows the operator a comfortable and safe access to the fabric and the tools. The open work area makes the initial feeding of the fabric off of the roll and into the machine very simple.



Superior ultrasonic cutting quality

SM-400-TA is used by a multitude of market leaders in the sun-protection industry and guarantees clean, sealed cuts of acrylic and polyester fabrics. The ultrasonic cutting tool for length cuts will turn 90° to perform the cross cut, so that the fabric is sealed on all four sides.



INDUSTRIAL PRECISION TOOLS

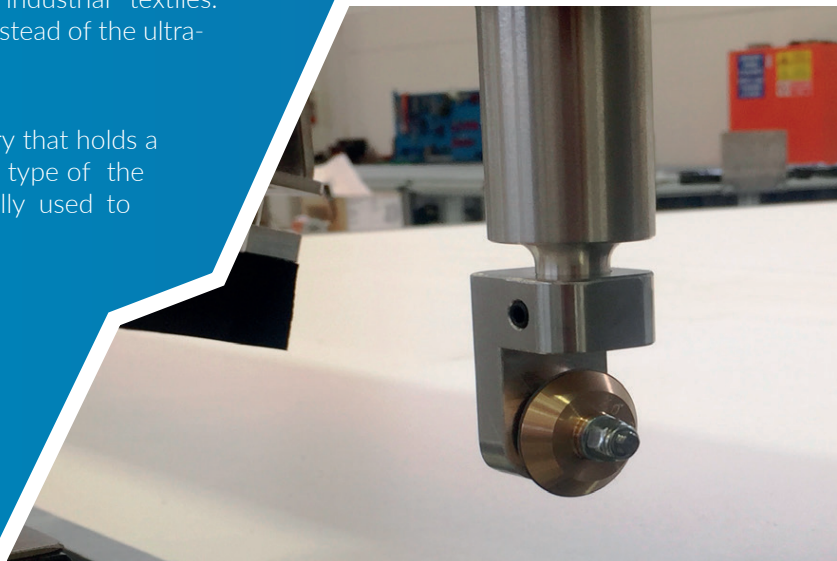
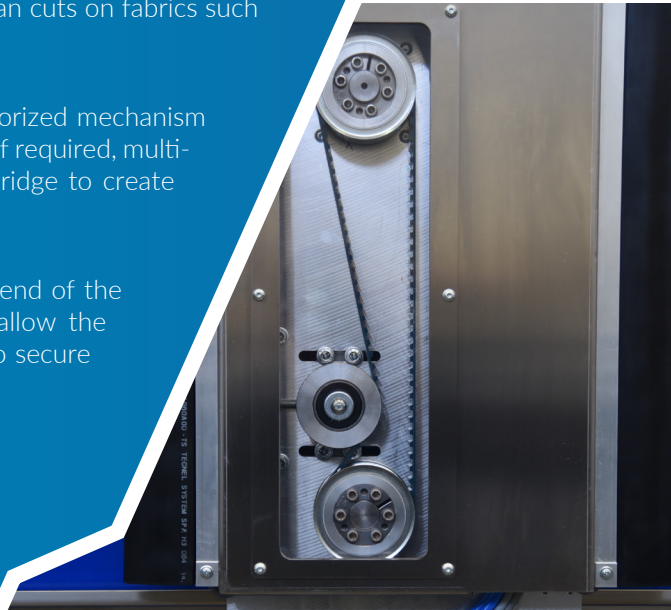
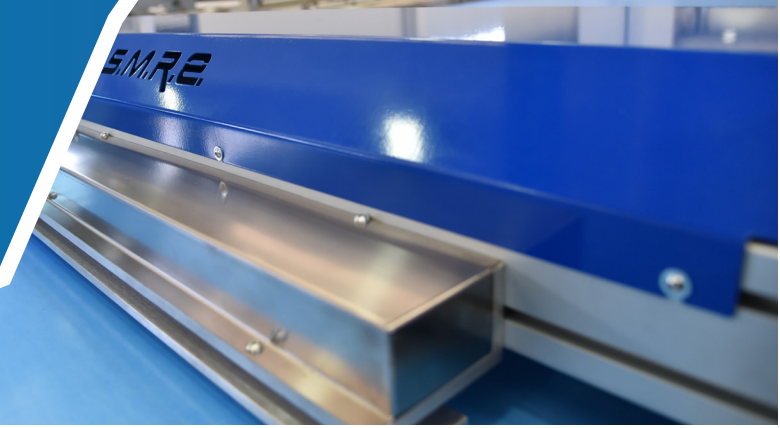
Ultrasonic cutting head. Makes length cuts while the fabric is being pulled off the roll. The heat generated by the ultrasonic vibrations sears the fabric during the cut and prevents the edges from fraying. Makes particularly clean cuts on fabrics such as acrylic, polyester and Screen (PVC coated fiber glass).

Ultrasonic cutting head for the cross cut. A motorized mechanism allows the ultrasonic cutting head to turn 90° and make the cross cut. If required, multiple ultrasonic cutting heads can simultaneously be installed on the bridge to create multiple length cuts in a single pull.

Motorized rotary knife. Cross cuts the fabric off of the roll at the end of the production cycle. A razor sharp pentagonal blade and high rotating speed allow the cutting of a wide variety of materials and fabrics. Works with a pressing bar to secure the fabric in place and make a very precise cut.

Rotary blade for the length cut. A non-motorized, freely moving blade that allows for high cutting speeds on a variety of specialty fabrics. Available in various diameters according to the fabric that is processed. Extension of the blade and cutting pressure are adjusted according to the thickness of the cut material. A highly efficient, cost-effective tool for single-ply cutting of industrial textiles. Typically installed to make length cuts on PVC instead of the ultrasonic tool.

Marker pen. A very cost effective accessory that holds a conventional ballpoint, felt-tip pen, or any other type of the marker. On SM-400-TA the marker is typically used to indicate the off-cut used to create the valance.



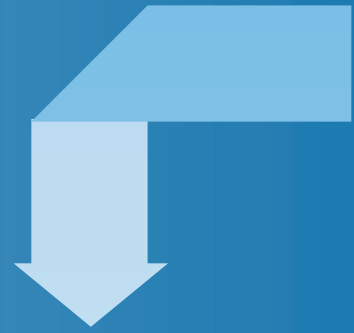
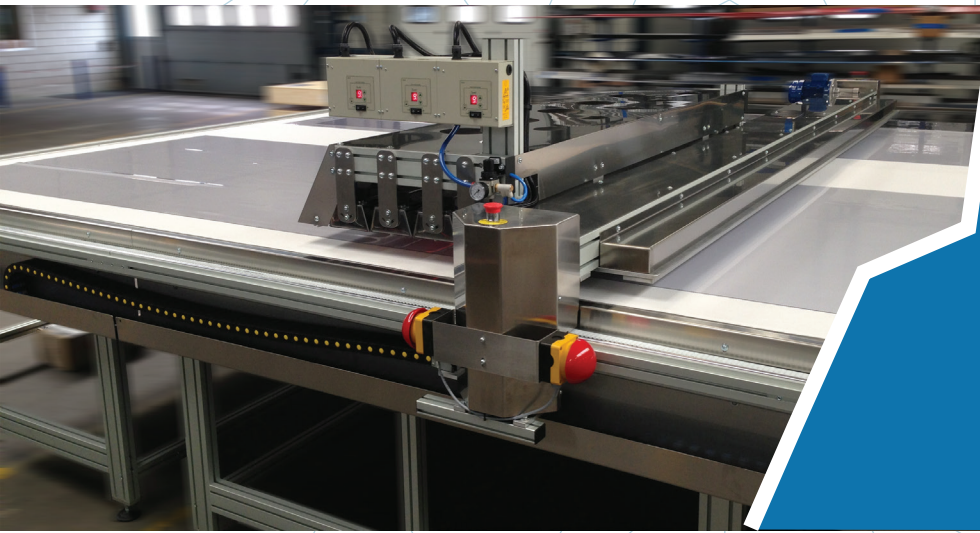
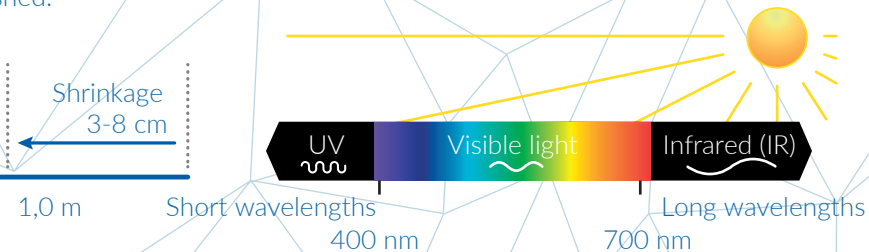
STABILIZATION OF CRYSTAL PVC

To solve the problem of shrinking crystal (clear) PVC, SMRE developed a system for the just-in-time heat treatment of single sheets. The stabilizing tool consists of multiple infrared lamps that bring the fabric to a preset temperature combined with an ingenious air cooling system.

Depending on the quality and characteristics of the fabric the sheet will shrink between 3 and 8% during the treatment with the SMRE stabilization system. After the treatment the crystal PVC is perfectly stable and can be welded or sewn into a finished product - like a pergola, a shade sails, a tensile structure, a marquee, or a veranda cover - and will not shrink anymore, even when exposed to heat or cold.

Whereas other heat treatment systems cause the crystal PVC to age, stiffen, and often give it a yellowish color, the treatment with the SMRE system will leave the fabric perfectly transparent, clear, and flexible - and completely stable.

A series of sensors can be installed on the machine to automatically read the width of the processed roll, or to keep track of the fabric that is fed into the machine and pause the cycle when the roll finished.



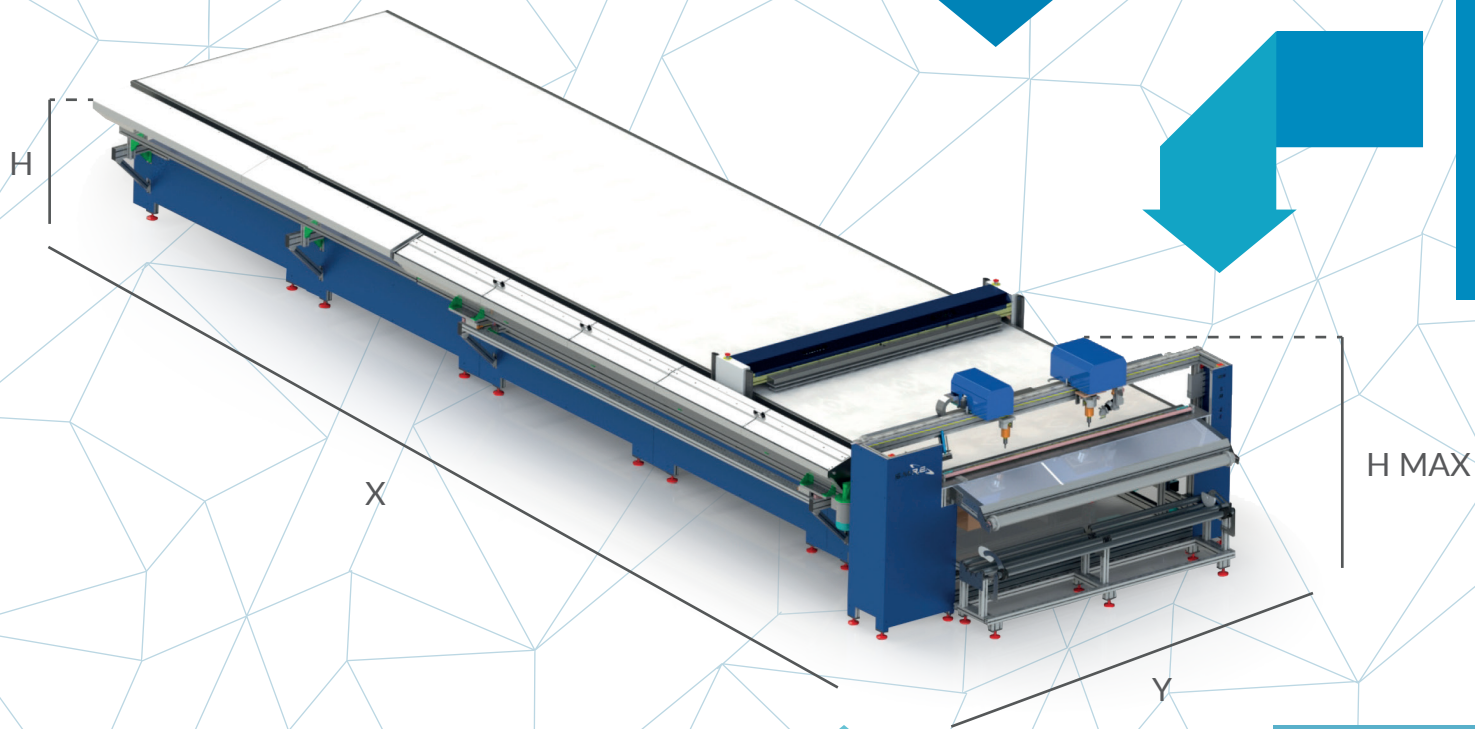
SOFTWARE

Easy awning maker.

The highly specific production software makes the creation of awning panels extremely simple. A series of preset awning patterns to choose from ensure significant time saving when programming production cycles. Desired overlaps and lateral hems are calculated automatically, taking into account the width of the roll and the desired width of the final product. The user interface is an easy-to-use touch screen. All the operator has to do is insert the parameters.

SM-400-TA can be connected with an optional bar code reading software to further reduce the need for human intervention. The bar code reader will automatically pick the order at hand from the company order data base and set the vital parameters for the upcoming production cycle. The operator pushes the START button and the machine will automatically do its job, creating as many panels as needed.

Available usable **widths:** 1,25/1,65/1,82/2,55/3,25 m



Machine 1,65 x 6,0 w/rewinder

Power (kW)	2,5
Voltage (V)	400 (3 phases + N + E)
Circuit breaker (mA)	300
Air (Quality Class 1.4.2.; ISO 8573) (bar)	6
Air consumption (nl/min)	-
Max. bridge speed (m/min)	60
Certification	2006/42/EC; 2014/30/EU; EN ISO 12100



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Footprint Machine 1,65 x 6,0 w/rewinder

X (mm)	7855
Y (mm)	2615
H (mm)	1000
H MAX (mm)	1567
Weight (KG)	1750

Images and technical features in this catalogue may differ from the actual product. Some of the images may show machines equipped with optional components, tools and/or accessories. SMRE SpA reserves the right to change or modify the product without any prior notice



SMRE THE GLOBAL MANUFACTURING SOLUTION

Founded in 1999 by Samuele Mazzini, SMRE S.p.a. is a **globally operating** company based in **Italy** specialized in the **design and construction** of industrial manufacturing solutions.

SMRE builds **cutting, welding, and sewing machines**, and **special, custom-made solutions** that **streamline** our customers' manufacturing processes, **optimize** their **efficiency**, and increase the **quality** and **output** of their production.

More than **1000 manufacturing** solutions provided to customers in **40 nations** and **6 continents** secure our positions as **leading supplier of industrial machines**.

SMRE is quoted in **AIM Italia** since April 2016



CUTTING
MACHINES



WELDING
MACHINES



SEWING
MACHINES



SPECIAL
MACHINES



SOFTWARE
SOLUTIONS

INDUSTRIAL GROUP

1

USA BRANCH

1

MANUFACTURING
PLANTS

2

CUSTOMERS IN 40 NATIONS
ON 6 CONTINENTS

40
6

SPECIALIZED
BUSINESS UNITS

3

INTERNATIONAL
PARTNERS

13

PRODUCT LINES

5

HIGHLY SKILLED
EMPLOYEES

65



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