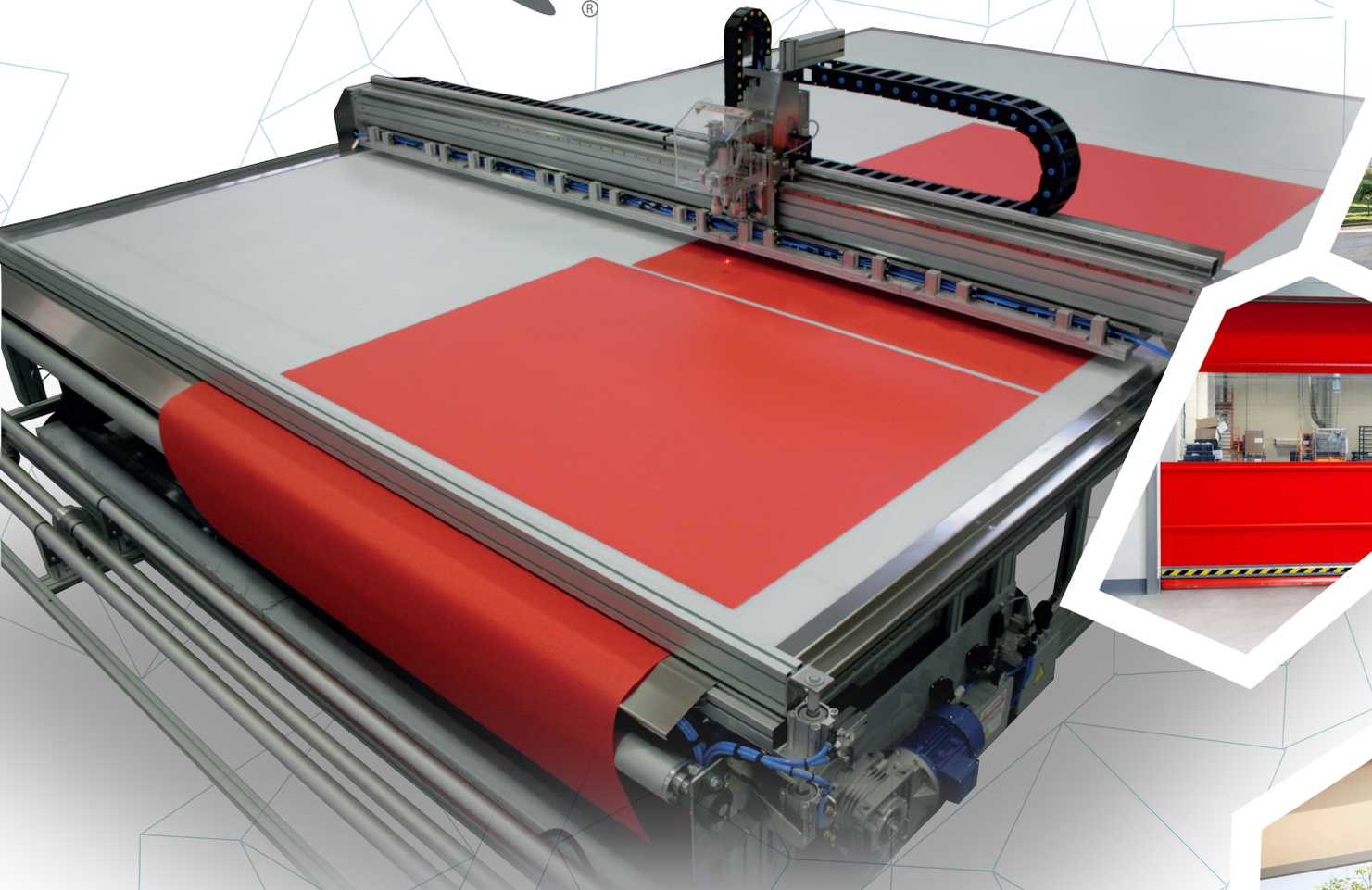
S.M.R.E. Engineering ®



SM-375-TA

Multiple tool digital cutting plotter

MULTIPLE CUTTING
TECHNOLOGIES

DESIGNED FOR
INDUSTRIAL PRODUCTION

EXRTEME
FLEXIBILITY

EXCELLENT
PRICE/PERFORMANCE RATIO

Many of today's industries are characterized by the **wide variety of fabrics** that are processed. A challenge to many manufacturers, since fabrics with different characteristics require **different cutting** technologies.

SM-375-TA is the solution to that challenge. With its **multitude** of installable tools and accessories this machine is able to cut an **infinite range of patterns** on a **wide variety of fabrics** and materials and deliver the versatility and manufacturing quality you are looking for.

A series of **specifically developed software programs** make this machine a highly efficient cutting solution that delivers precision work and exceptional productivity, one of the **flagship manufacturing solutions** in the SMRE product range.

APPLICATIONS

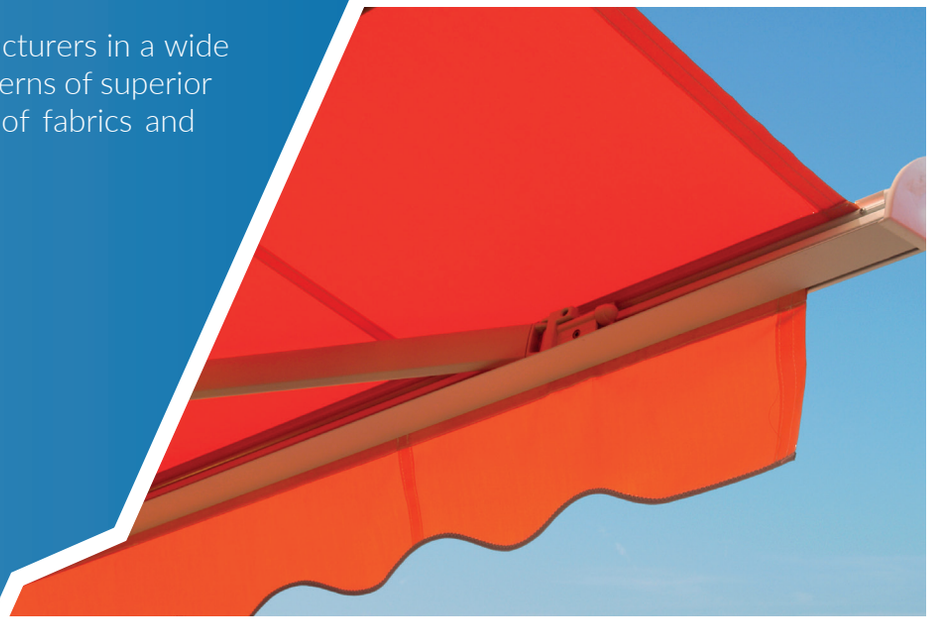
Uncompromising **quality** **Professional** products

SM-375-TA enables manufacturers in a wide range of industries to cut patterns of superior quality from an infinite range of fabrics and materials.

Whether you produce

- **Blinds**
- **Awnings**
- **Pergolas**
- **Banners and signs**
- **Shade sails**
- **Pool covers**
- **Tunnels**
- **Tents and shelters**
- **Tarpaulins**
- **Inflatable products**
- **Cinema screens**
- **Containments bladders**
- **Industrial doors**
- **Fire retardant curtains**
- **Wind breaker barriers**

SM-375-TA ensures **quality cuts**, **extreme precision** and an elevated **efficiency.**

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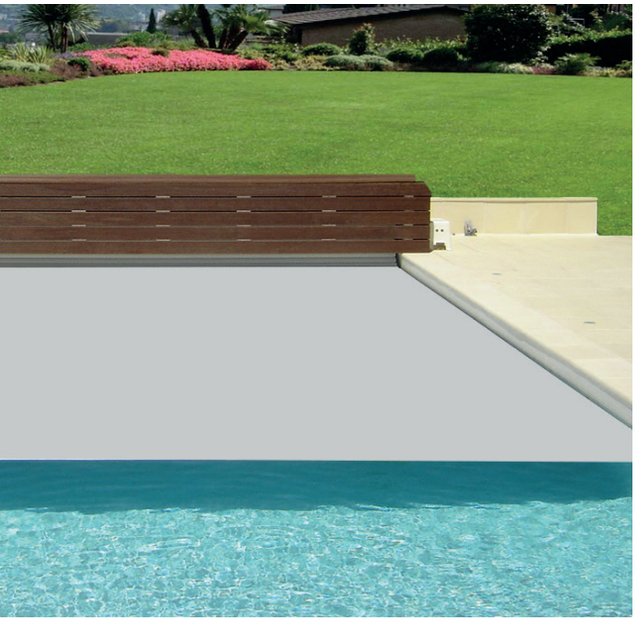
made with passion

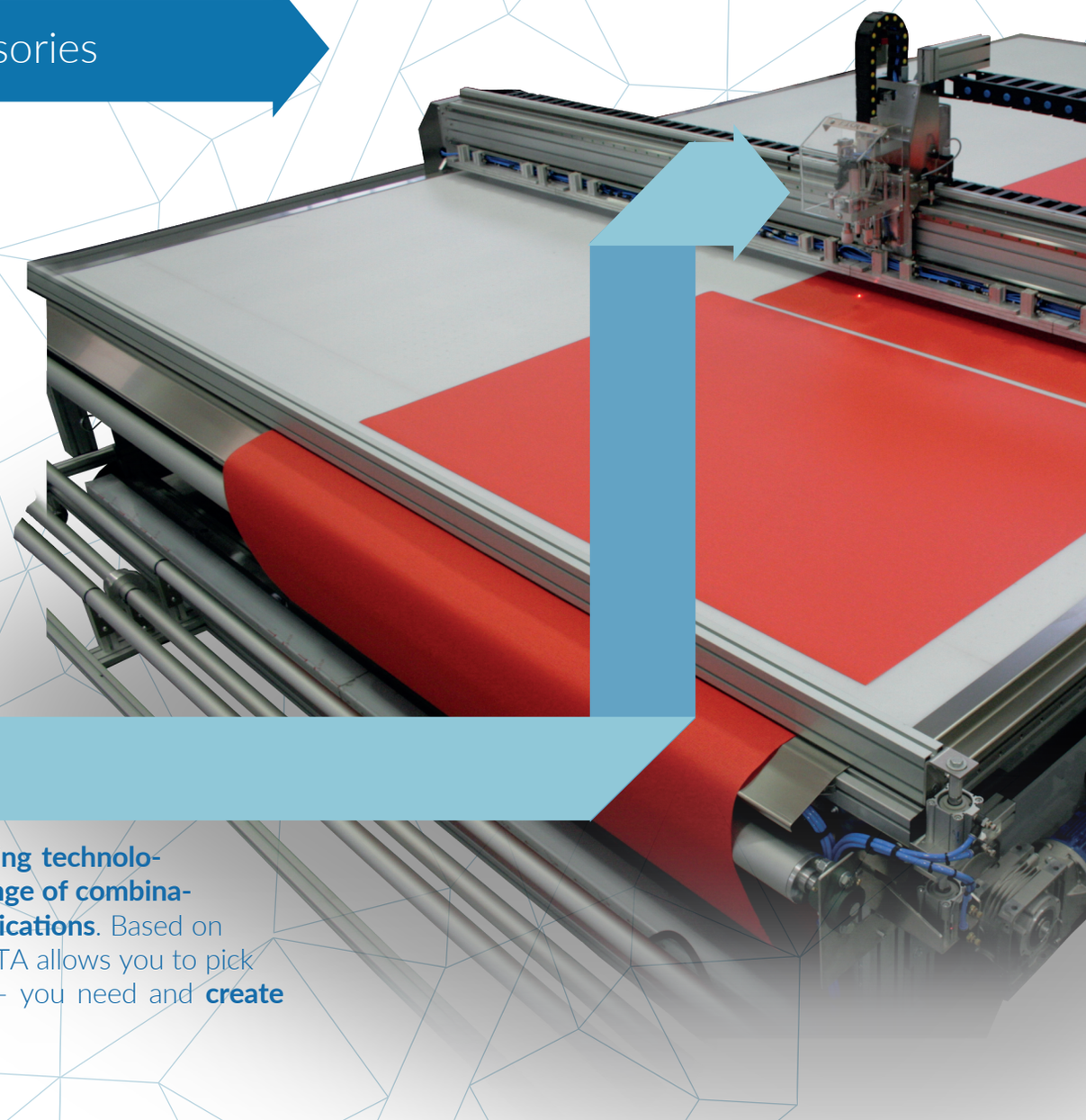


SM-375-TA

Multiple tool digital cutting plotter

A wide choice of precision tools and accessories

Besides the **customizable dimensions** of the cutting frame SM-375-TA installs a selection of **specifically designed accessories** in a **variety of combinations** allowing an **infinity of machine configurations**: a grip-and-pull system to spread the fabric on the work top and completely automate the cutting cycle; a set of pneumatic pressing bars to secure breathing fabrics to the work top and guarantee high precision cuts; a backlit illumination system to detect flaws in the fabric before it is spread on the work top; a fabric roll warehouse installed in the empty space underneath the machine with; a motorized unwinding system with electronic edge control and digitally controlled dancer for automatic fabric tension adjustment; a series of motorized rewinding systems placed on the side or at the back of the machine to roll up the cut panels.

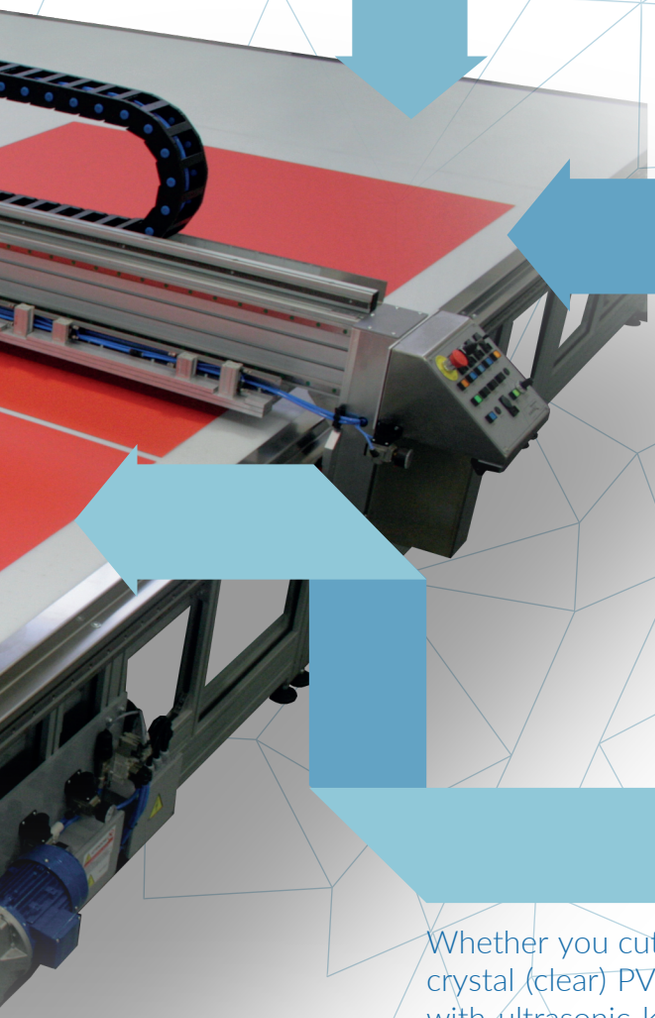


Multiple technologies

SM-375-TA installs a **variety of industrial cutting technologies**, individually or simultaneously, in a **wide range of combinations**, providing an **enormous versatility** of **applications**. Based on the fabrics you use in your production SM-375-TA allows you to pick just the technology – or combination thereof – you need and **create highly professional, quality products.**

Vacuum power for total fabric control

A **powerful vacuum turbine** and specially designed hole patterns of in the worktop ensure **optimal grip on the processed materials**. The (optional) sectioning of the work top in multiple zones enables the machine to concentrate the full vacuum power in those areas where the processed materials are placed. This option is particularly important when the pieces of material are much smaller than the cutting frame and ensures great precision of the cut.



Top quality parts

Only the best electronic and pneumatic components are installed on our machines. Parts are sourced from first class manufacturers such as Omron, Bosch, ABB, Schneider Electric, Delta, Emerson (Control Technique), SMC and Dell. Spares are available through SMRE but can be purchased locally in your market, against local market prices, so you do not depend on SMRE in case you need to substitute a component.

Enormous **versatility**

Whether you cut acrylic, polyester or Trevira with a gantry laser, PVC, Soltis and crystal (clear) PVC with a rotary blade or a drag knife, or panels in Screen fabric with ultrasonic knife for perfectly seared edges, its **incredible range of cutting technologies** allow SM-375-TA to cut and mark an **infinite variety of fabrics and materials** and deliver the **quality** and **efficiency** you are looking for.

INDUSTRIAL
PRECISION TOOLS

CO_2 cutting and marking laser. The processed materials are not physically touched during the cutting cycle, allowing even breathing materials to be cut with high speed and extreme precision. The heat generated by the laser beam sears the fabric, thus preventing it from fraying – another significant advantage of this technology. Laser is suitable for an infinite variety of patterns on a wide range of fabrics and materials: from straight lines to curves, from extremely complex patterns to holes with an extremely small diameter (0,5 mm).

Drag knife. Allows for high cutting speeds on a wide range of fabrics and materials. Suitable for straight cuts, curves, very complex shapes and holes with very small diameters.

Rotary blade. Diameters and extension of the blade and cutting pressure are adjusted according to the thickness of the cut material. Suitable for carbon and glass fiber.

Ultrasonic cutting head. The heat generated by the ultrasonic vibrations sears the fabric during the cut and prevents the edges from fraying. Ultrasonic cutting is typically used on acrylic, polyester, and PVC coated fiber glass (Screen).

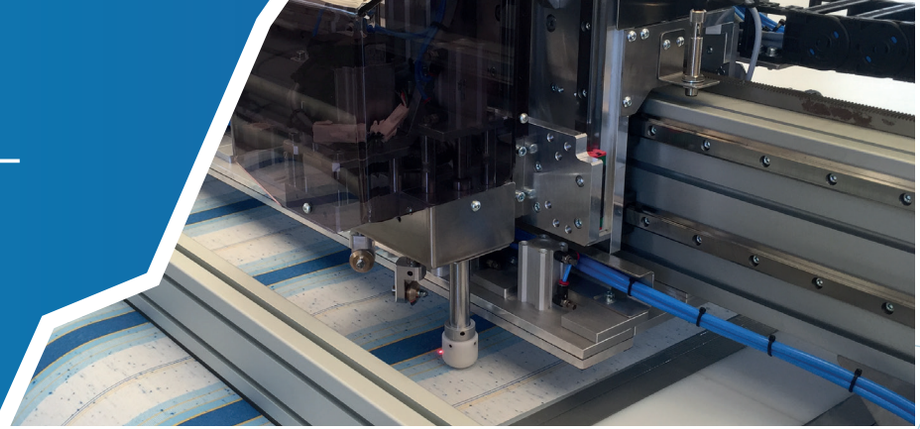
Motorized rotating punching tool. Can process heavy fabrics and materials such as industrial conveyor belts or heavy PVC.

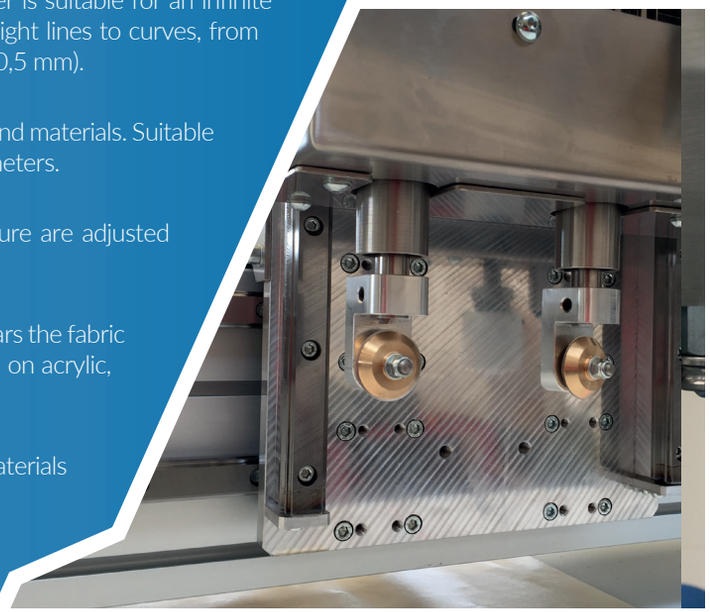
Creasing head. Makes a pre-fold or linear mark in the material or fabric by pressing into the surface without actually making a cut.

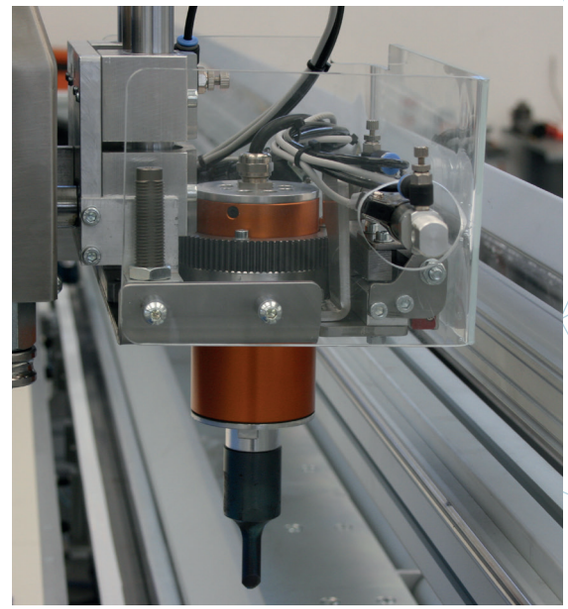
Marker pen. Holds a conventional ballpoint, a felt-tip pen, or any other type of marker. Will make reference marks, draw lines, curves, circles or even highly complex shapes, letters and numbers.

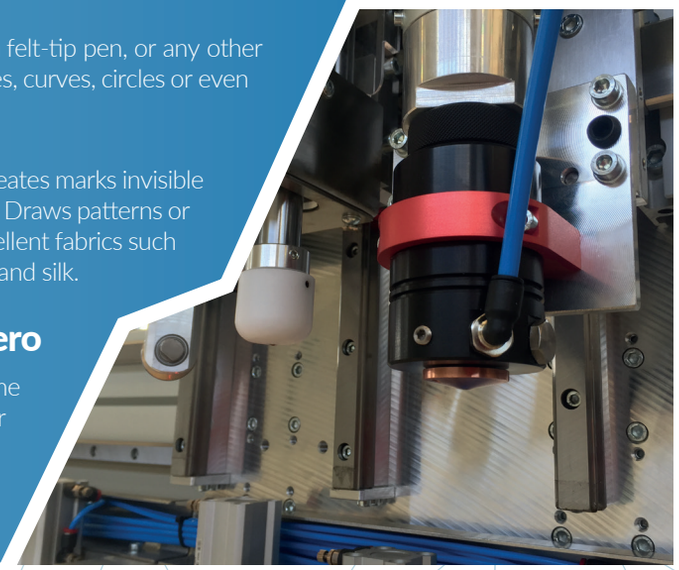
Jet marker with invisible UV ink. Creates marks invisible to the naked eye that become visible under UV light. Draws patterns or identification codes on all absorbent, non-water repellent fabrics such as polyester and acrylic, or natural fibers like cotton and silk.

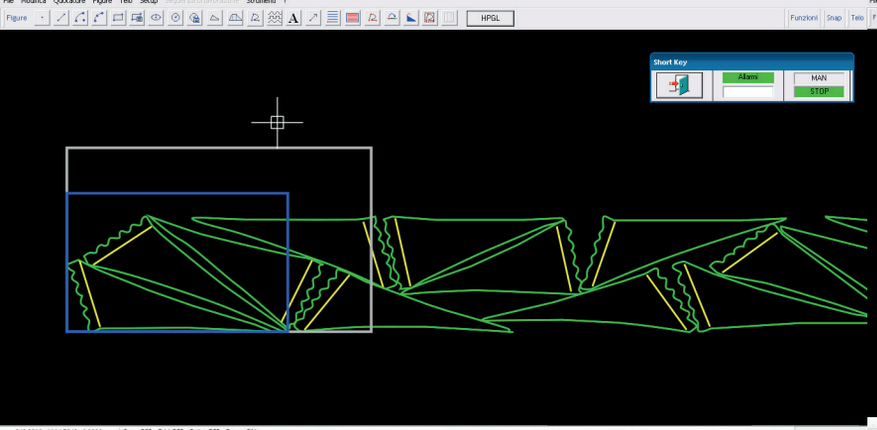
Laser pointer for the dynamic zero point. By moving a laser dot over the cutting frame with the joystick on the control panel the operator can choose a new ZERO point.

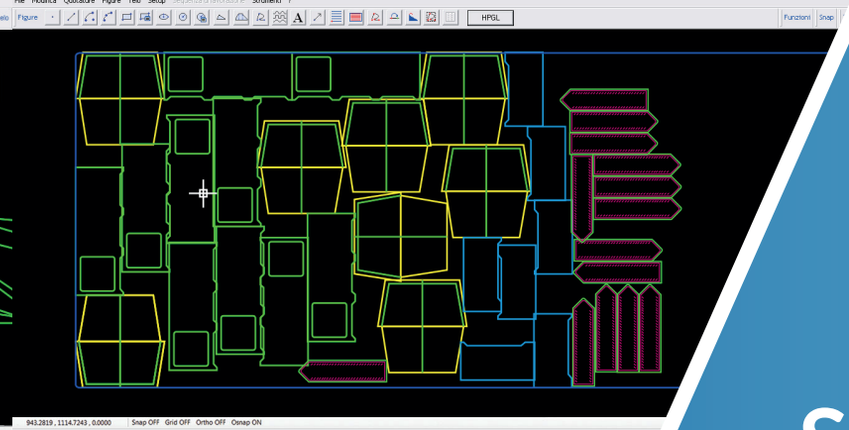


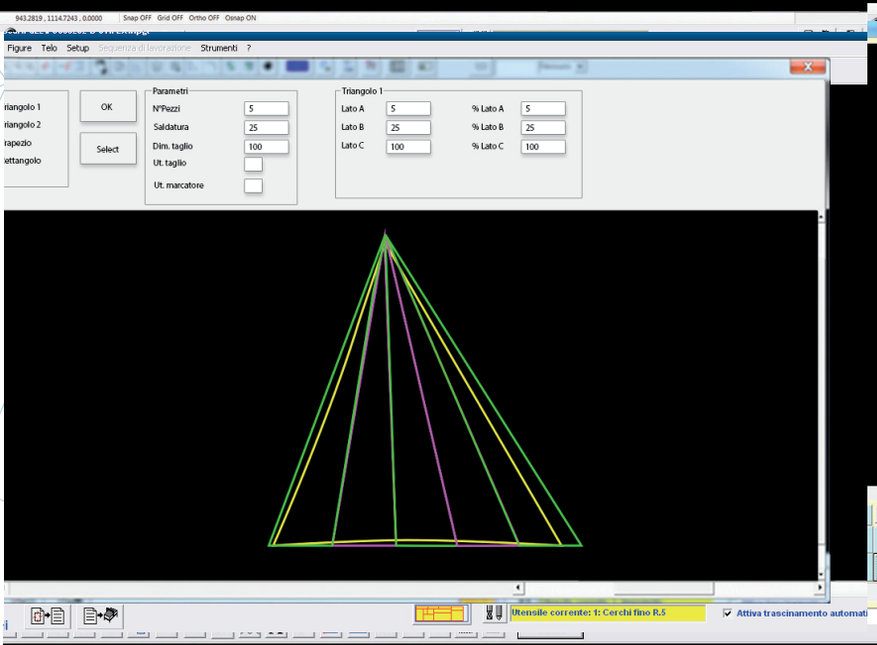


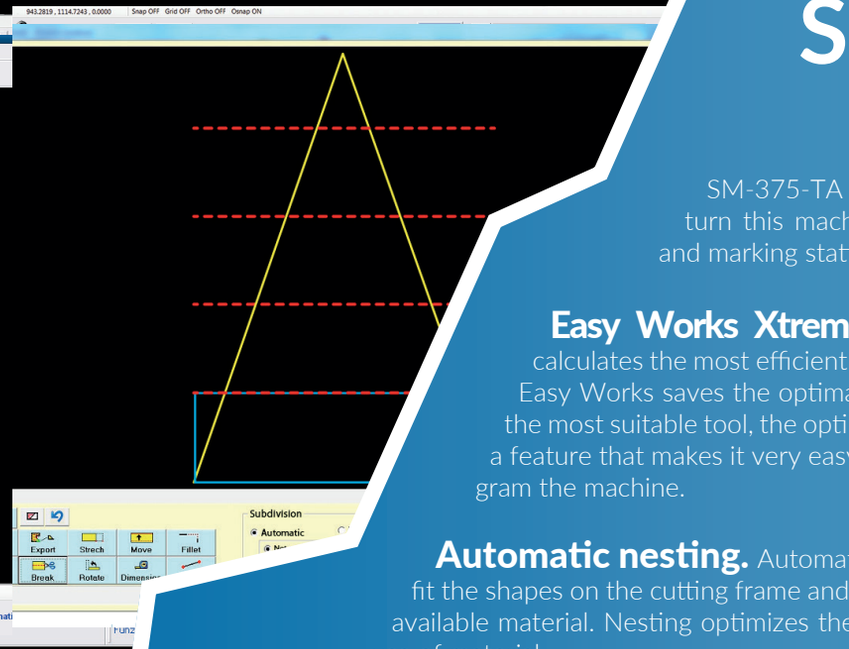


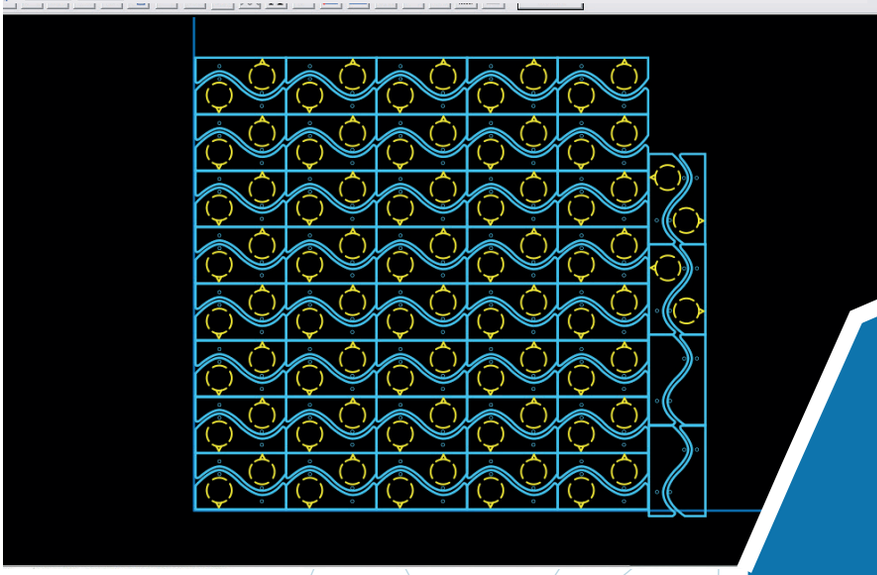












SOFTWARE

SM-375-TA installs a series of software modules that turn this machine into a highly efficient digital cutting and marking station.

Easy Works Xtreme CAD/CAM. Easy Works Xtreme calculates the most efficient way of cutting one pattern after the next. Easy Works saves the optimal settings for every cutting job, including the most suitable tool, the optimal acceleration and the maximum speed, a feature that makes it very easy to repeat a job without having to reprogram the machine.

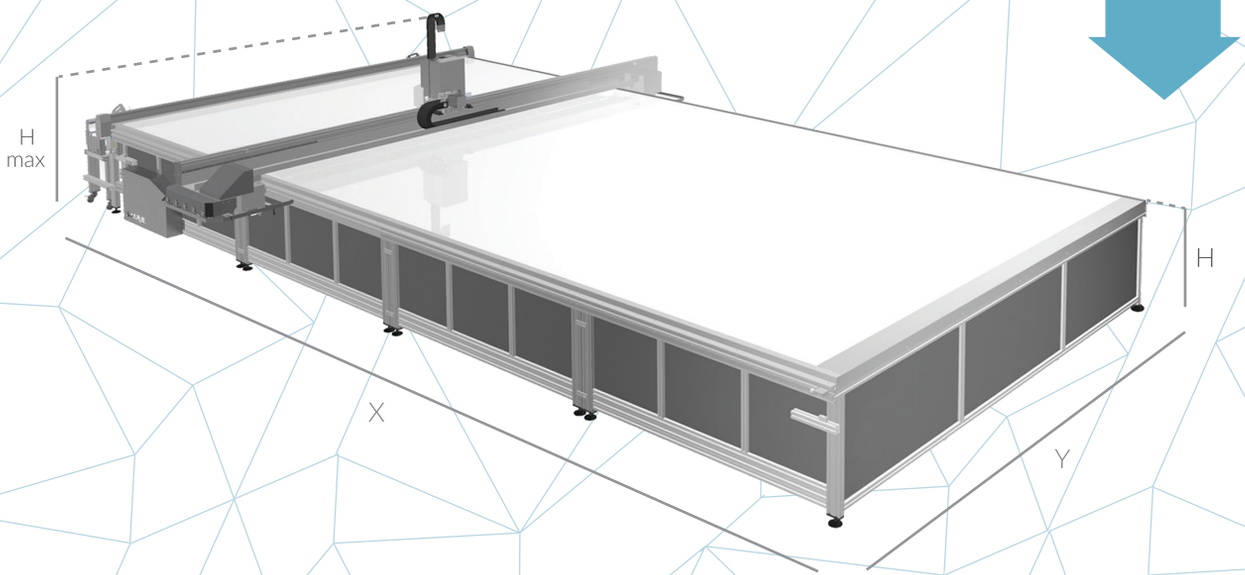
Automatic nesting. Automatically calculates the most efficient way to fit the shapes on the cutting frame and cut as many pieces as possible out of the available material. Nesting optimizes the production cycle in terms of speed and use of material.

Split Box. Designed to manage the creation of patterns that are larger than the cutting frame or wider than the roll. Very large products such as stadium covers and tension structures can be created on a machine with a cutting frame that is infinitely smaller.

Macros. The macro software packages enable the operator to program highly complex cutting jobs by entering a limited number of key parameters. Macro packages are often custom made according to your production requirements.

Tracking Power Control (TPC). Automatically synchronizes the laser power with the moving speed of the cutting head and ensures very high cutting quality even when complex patterns are cut on very difficult materials such as paper, cardboard, leather, or light colored specialty fabrics.

Available usable **widths**: 1,6/2,2/3,5/4,0/5,0 m



SM-375-TA

Multiple tool digital cutting plotter

Machine (3,5 x 7,0 m) w/under table warehouse	
Power (kW)	10
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)	350
Max. axes speed x/y/z (m/min)	35/35
Precision axes repeatibility (mm)	0,1
Certification:	2006/42/EC;2014/30/EU; EN ISO 12100

Footprint	Machine (3,5 x 7,0 m) w/under table warehouse
X (mm)	8855
Y (mm)	4940
H (mm)	898
H MAX (mm)	1576
Weight (KG)	5500

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 c**utting, 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

1 INDUSTRIAL GROUP

1 USA BRANCH

2 MANUFACTURING PLANTS

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5 PRODUCT LINES

65 HIGHLY SKILLED EMPLOYEES

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