zemat®
TECHNOLOGY
GROUP

AUTOMOTIVE INDUSTRY MACHINES

60 YEARS STRONG
1957-2017

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The quality of automobile is measured by the perfection of manufacturing – all the small details which build up the brand end effect the final look and functionality

At **Zemat Technology Group**, we are passionate about providing the best manufacturing solutions for the most demanding and innovative automotive companies.

We are a **leading global designer and manufacturer** of industrial machines and devices incorporating thermoplastics welding and bonding technologies, **integrated automation projects** and customized manufacturing solutions, including the Solid State RF welding technology.

In our development, design and production process we implement **over 60 years of expertise** in the Radio Frequency welding and sealing (also known as High Frequency, RF welding, Dielectric sealing), a technology that uses electromagnetic energy to form a permanent bond in polymers, as strong as the original thermoplastic material.


TECHNOLOGY WITH
HUMAN TOUCH

APPLIED EXPERTISE IN AUTOMOTIVE TECHNICAL TEXTILES BONDING, EMBOSSING & FORMING

We provide innovative technology solutions for demanding quality automotive interiors and exterior elements.
Superior **tooling design**, in-house R&D, global technical service support and highest safety protocols are our key trade marks.

Applying **highest quality standards** we design and build customized machines for large and small projects, incorporating the traditional HF heat welding as well as Solid State technologies for ultimate sealing and bonding process control.

MEGA

CUSTOM BUILD MACHINES
FOR LARGE AND SMALL PROJECTS

RF HEAT SEALING
TECHNOLOGY INNOVATION
FOR TECHNICAL TEXTILES

CUTOMIZED RF WELDING HEAT SEALING SOLUTIONS FOR AUTOMOTIVE INTERIOR/ EXTERIOR COMPONENTS & FINISHING

Many products require **highly specialized manufacturing techniques**, tools and automation, e.g. pneumatic lumbar support systems, no-burr sun visors.
Our ability to design and fabricate not only customized machines but also specialized tooling (electrodes, feeders, pick-and-place systems) enhances the manufacturing systems, **providing cost reducing solutions** by using scalable, simplified modular equipment design. We can integrate fully automatic or manual process machines.

DELIVERING MANUFACTURING SOLUTIONS **FOR THE HIGHEST STANDARDS** IN THE AUTOMOTIVE PRODUCTION PROCESS

SIGNA DUO

TARPA PRO

SIMPLE SOLUTIONS *FOR TRUCKS AND SHIPPING WITH* ***ADVANCED*** *LINEAR HF WELDING* ***TECHNOLOGY***

SIMPLA

Production of side curtains for trucks, dock shelters, RV awnings, berms demands the **optimum welding and sealing technology**. Our High Frequency welders feature robust open access design, **precision linear movement**, full PLC/HMI touch screen controls with memory settings.
We can weld multi-layer, reinforced PVC, TPU, PU, heavy duty fabrics in one cycle, providing cost and time saving solution in the manufacturing process.

AUTOPACK

ON-DEMAND SOLUTIONS
FOR AUTOMOTIVE PRODUCTION PROCESSES

High quality new automotive interiors require high quality, yet cost effective, protection. We design and make **custom designed machines** for car seat covers, floor and cargo bay protection.

Employing the IR heat, ultrasonic or impulse heat modules we can weld/seal any type of plastics and films. The machines provide **on-demand production** of various protective covers without the need of special order or stock.

Our design, **research and development engineers** create custom manufacturing solutions which take customers' ideas from the drawing board to prototype, to assembly and completion in simple, quick and cost efficient way.

Many jobs demand simple tools and simple machines where quick change-over is required.
In our machines we implement the traditional triode based radio frequency HF technology as well as the **NEW Solid State RF welding generator with unique Dynamic Matching System™** for high control and precision output power direction.

SUPRA MAX

BRINGING IDEAS
FROM CONCEPT TO REALIZATION

RF Welding Technology (High Frequency Welding Technology)

Radio Frequency (RF) welding, known as Dielectric welding or High Frequency (HF) welding, is the process of fusing materials together by applying radio frequency energy to the area to be joined. Electromagnetic waves are used to heat the material to a point where it begins to melt and form a bond. No external heat is applied. The electrical energy lost in the material is actually absorbed by it, causing its molecules to vibrate raising its kinetic energy or thermal energy. The weld is completed by applying pressure to the bonded area, ensuring a successful seal. The resulting weld can be as strong as the original materials.

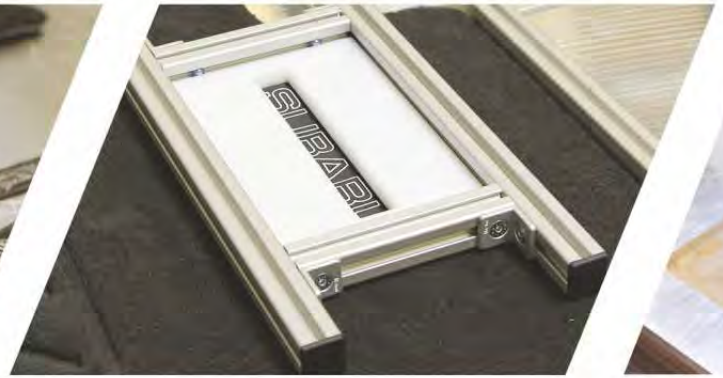
Our equipment is used for radio frequency, IF heat and impulse heat welding on various types of technical textiles, laminates, rigid plastics, carpets, eco leather, films and foams.

The automotive industry production processes demand the most advanced bonding solutions with long life span, accurateness, precision and uniformity. All this is achieved by precision control of the output power in our HF generators.

There are more and more advanced polymers, laminates and technical textiles available for the interior and exterior use in the automotive business. They require much more sophisticated solutions and tooling. We are implementing the traditional triode based radio frequency HF technology as well as the **NEW Solid State RF welding generator** with unique **Dynamic Matching System™** for high control and precision output power direction. This patented technology gives a high advantage in the production quality and reliability of the final product. Thanks to the transistor based Solid State HF technology with DMS™ we can control the small variances in the HF power output thus preventing over-heating and streamlining the production process time.

Setting the standard in customer support, we have several technical service teams on site providing telephone or video conference service and support to our customers. Our company has a global network of local distributors and agents. When necessary, our experienced service engineers are available to make service calls directly to our customers' locations, nationally and internationally.

We are using state-of-the-art testing equipment for electro-magnetic energy and our **EMI MobiLab Mobile Laboratory** to diagnose the problematic issues which allow to provide solutions immediately or suggest the plan of action.



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