

# Ultrasonic Technology: Revolution in Metal and Plastic Welding for Electromobility

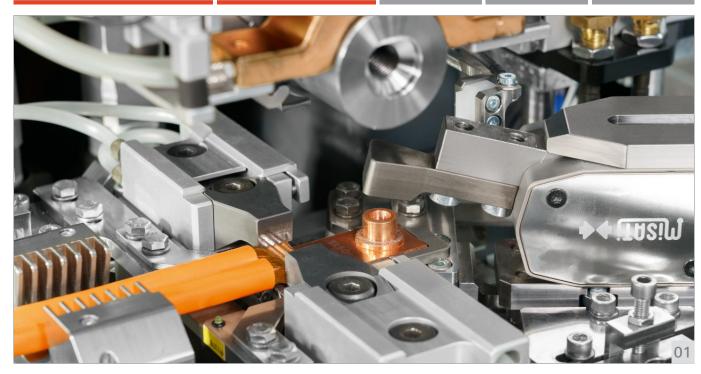
PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

**SIFVING** 



01 TelsoTerminal\_TT7

Bronschhofen (CH), 02/2024

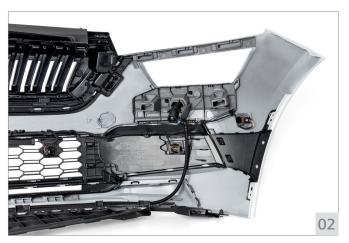
In the rapidly evolving world of electromobility, connection technology plays a crucial role in ensuring the performance, safety, and sustainability of electric vehicles. Telsonic AG, a leading provider in ultrasonic technology, is at the forefront of this revolution by offering innovative solutions for metal and plastic welding that not only enhance quality and reliability but also contribute to reducing the overall costs and weight of vehicles.

# High-Performance Connection Technology for Electromobility

Electromobility imposes specific demands on connection technology, especially when it comes to the secure connection of high-voltage conductors, battery foils, and high-performance electronics. Telsonic has risen to this challenge and provides a reliable solution for the bonded connection of copper, aluminum, and their combinations through its ultrasonic welding process. This technology is particularly relevant for the production of high-voltage connections in vehicles, such as charging cables with connectors that enable fast charging even under challenging conditions.

# Resource-Efficient Joining Technology for Lightweight Construction

In automotive lightweight construction, where every gram matters, Telsonic's ultrasonic technology plays a key role. By using the patented SONIQTWIST® process, for example, the wall thicknesses of vehicle bumpers can be significantly reduced without leaving visible marks on painted surfaces. This technology allows the use of thinner materials and directly contributes to reducing the vehicle's weight, thus improving the efficiency and range of electric cars.





### **Efficiency Enhancement in Battery Production**

Another crucial area where Telsonic is driving innovations is battery manufacturing. The use of ultrasonic technology in the sieving process can significantly reduce friction and energy consumption during the separation of battery raw materials. This leads to a more homogeneous powder consistency, which in turn enhances the quality and performance of batteries.

## Partnerships for the highest quality standards

Telsonic collaborates closely with renowned suppliers and OEMs to ensure the highest quality standards in the electromobility industry. These partnerships enable Telsonic to continuously develop its technologies and tailor them to the specific needs of the industry, thus maximizing the safety, reliability, and performance of vehicles.

#### Conclusion

Telsonic's ultrasonic technology offers innovative solutions to the challenges in electromobility, from connection technology to lightweight construction and battery production. By combining high quality, efficiency, and sustainability, Telsonic significantly contributes to the advancement of electromobility and supports the automotive industry in shaping the vehicles of the future.



03 Application\_Screening



#### Become Part of the Mobility Revolution

Do you want to enhance the performance, efficiency, and sustainability of your products while contributing to the revolution of electro-mobility? Telsonic AG is ready to collaborate with you and develop customized ultrasonic solutions for your specific requirements. Whether it's metal and plastic welding, lightweight construction, battery manufacturing, or other innovative applications, our team of experts brings extensive experience and a commitment to excellence to every project.

Contact us today to discover how Telsonic can transform your production. Visit our website, download our application sheets, or schedule a personal conversation with our specialists. Let's shape the future of electromobility together.

#### **Contact Us Now**

Telsonic AG - Your partner for innovative ultrasonic solutions in electromobility.

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www.telsonic.com