

Ultrasonic welding of wire harness applications in the automotive industry

PLASTIC WELDING

METAL WELDING

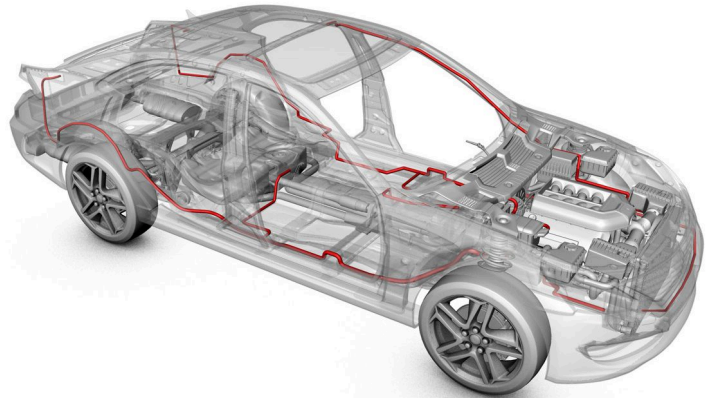
CUTTING

CLEANING

SIEVING

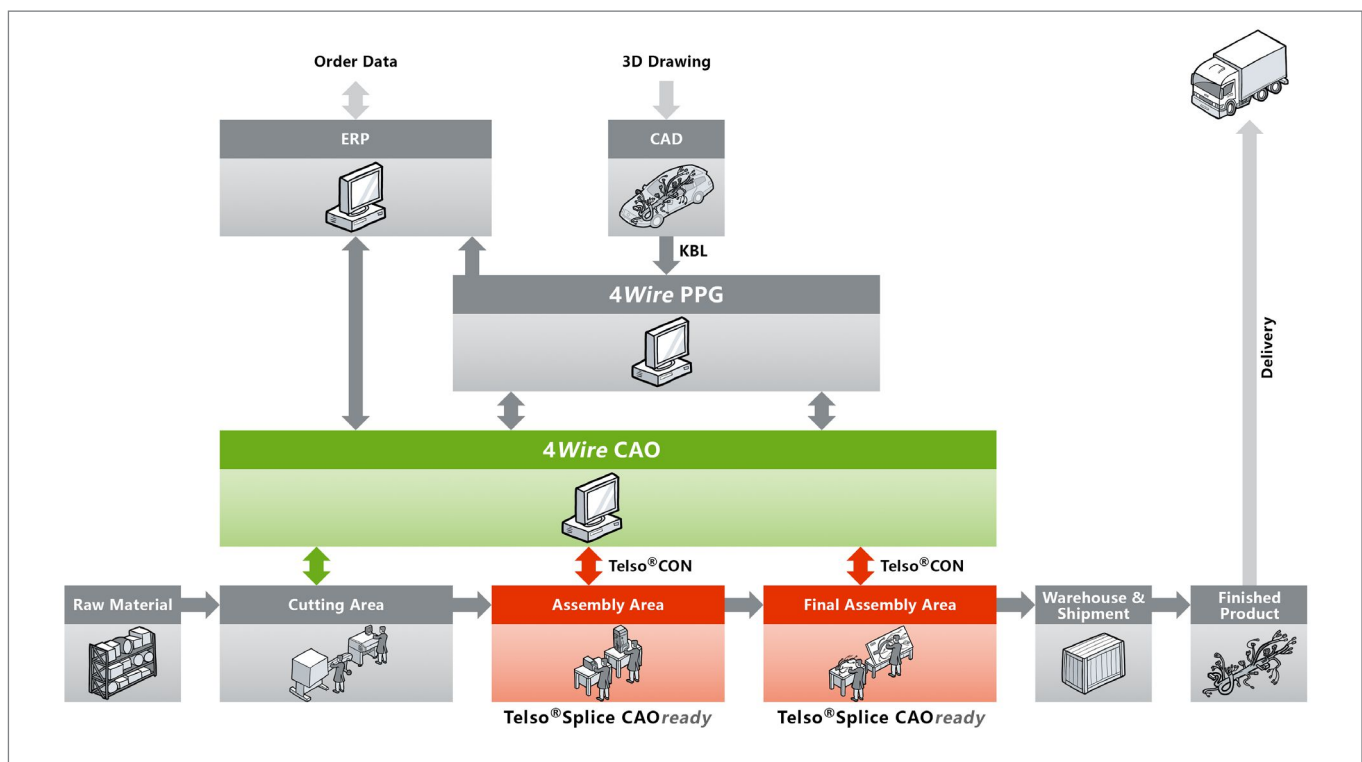
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The automotive industry is in constant motion, driven by innovation and progress. A key technology fueling this evolution is ultrasonic welding of wire harness applications. This method, combined with the trend towards automation and electrification, sets new standards in terms of efficiency and sustainability.



The advantages of ultrasonic welding:

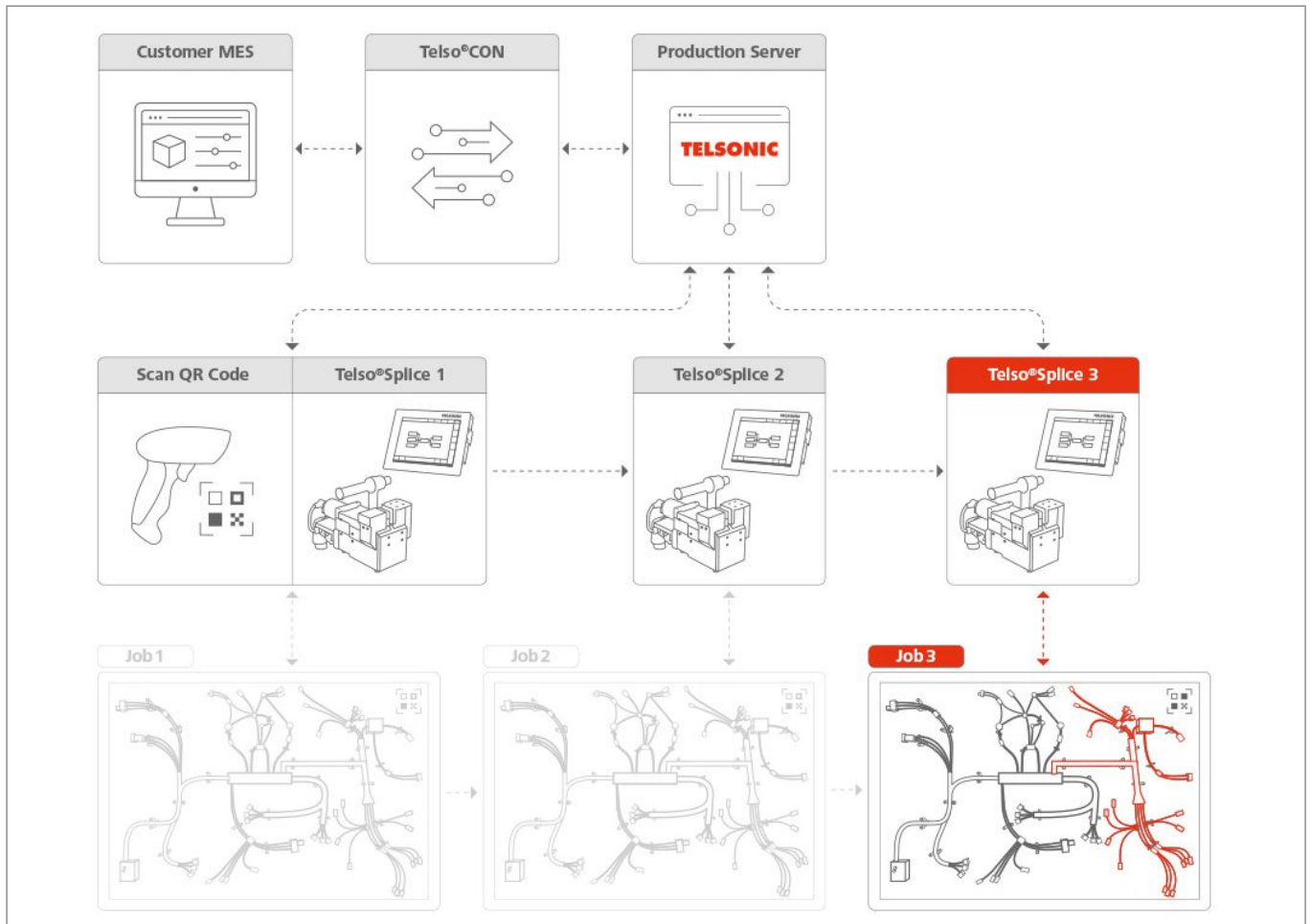
1. **Highest precision:** Ultrasonic welding creates joints of unsurpassed quality, ensuring durable, reliable contacts without heat generation.
2. **Material protection:** The process does not require flux or solder, minimizing the risk of corrosion or material fatigue.
3. **Cost efficiency:** Compared to traditional joining methods, ultrasonic welding requires fewer consumables and work steps, resulting in significant cost savings.
4. **Time efficiency:** Fast welding cycles mean less downtime and a higher production rate.
5. **Environmental friendliness:** The process does not produce smoke or other emissions and consumes less energy.



Automation and electrification: A look into the future

With advancing automation, production processes are not only becoming faster, but also more precise. Ultrasonic welding machines can be seamlessly integrated into automated production lines, further increasing production speed and quality.

In addition, the electrification of the automotive industry is unstoppable. Electric vehicles require complex wire harness systems to connect the numerous sensors, actuators, and energy storage devices. The ability to make these connections safely, quickly and reliably is critical to the performance and reliability of EVs.



Conclusion

Ultrasonic welding is more than just an innovative technology - it is paving the way for the next generation of vehicles. In the context of automation and electrification – it offers the automotive industry a robust, efficient, and future-proof solution that will take it into the future. It is time to take the plunge into this future and take advantage of the many benefits of ultrasonic welding.

By: Dirk Schnur, CMO at TELSONIC