

Telsonic Deliver Sound Solution

Ultrasonic welding of safety components

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



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Telsonic's ultrasonic technology is fast becoming the process of choice for a growing number of automotive component manufacturers. The precise control, and resultant consistency in the process, makes it the ideal solution for joining and welding a wide range of polymer types and component variants.

The latest automotive components to benefit from Telsonic's ultrasonic welding process include a seatbelt bezel and "B" pillar sub-assembly, for Jaguar Land Rover's latest Evoque model, manufactured from PC/ABS. The machine delivered by Telsonic UK also incorporates additional assembly operations and sensing for different colour variants.

The stand-alone system incorporates a sliding worktable, complete with CAD profiled LH and RH component fixtures and light-guards, allowing a combination of both manual and automated assembly operations.

Once the operator has placed the parts to the fixtures and exited the light-guard area, sensing is used to verify their presence and clamps automatically activate to secure the parts. The operator then uses a hand held screwdriver to assemble a coat hook to the components before placing four metal clips to a clip assembly station. Once cycle start is initiated, the clips are automatically assembled to the parts, with this operation also being verified by sensors.

With these operations completed, the table indexes into the welding position and eight tubular plastic pins, four per component, are welded using four Telsonic



- 01 Jaguar Land Rover Evoque
- 02 Ultrasonic "Mother - Daughter" Sonotrodes
- 03 Ultrasonic welding systems

Twin Titanium mother-daughter sonotrode arrangements. These are powered by four Telsonic MAG3512E / SE3512 systems, complete with Telsonic AC450 Actuators and integrated cooling.

Telsonic's reputation for delivering robust and reliable ultrasonic welding and joining systems to the Automotive sector, together with the company's pro-active approach throughout the product development programme and their expertise in plastics joining, were key factors in Telsonic being awarded the business.

Telsonic UK offer a comprehensive range of ultrasonic modules and systems for a variety of plastic and metal welding, cutting, sealing, cut'n'seal, food cutting and cleaning applications within a wide range of industries.

by Martin Frost, Telsonic UK Limited