

Bouyant Automotive Sector Drives Success And Product Development For Telsonic



Poole, Dorset, UK, 1st October 2017

The latest figures from the SMMT (Society of Motor Manufacturers & Traders) confirm that UK car production soared to a 17-year high in 2016, with 1.73 million cars produced by 15 manufacturers. This was an increase of just over 8 % on 2015 car production. Ten brand new car models entered production in the UK last year, nine of them from premium brands. This helped make the UK the second biggest producer of premium cars after Germany and the third biggest car producer overall in Europe.

The continued growth within this sector in recent years, combined with the increase in the use of plastics, and the drive to increase levels of automation wherever possible, have all made positive contributions to the success of Telsonic UK. As our cars have become lighter, quieter and incorporate more technology, there has been parallel growth in the number of welding and joining operations on plastic components and sub assemblies.

The increasing use of NVH sound deadening materials in more areas of the vehicle is just one growth area where ultrasonic welding is being used to securely attach these materials. Other automotive applications where Telsonic has seen an increase in the use of their modules and systems include, welding components for parking sensors and reversing cameras, securing decorative door cap components to the main door substrate and "trim wrapping" applications. The increasing use of lightweight plastics in under-bonnet or other non-visible areas of the vehicle is also driving an increase in demand for ultrasonic technology.

Telsonic's ultrasonic welding technology has been at the heart of automotive plastic welding applications for many years, and the company has developed modules which are targeted specifically at automotive applications, including the IPA and IPM range.

The IPA unit brings together an actuator, generator and converter in one compact unit, with no need for expensive cabling for high-frequency applications and communication. As a result, the IPA3505 can be quickly and easily integrated into







- **01** Production of automotive Binnacle sub assemblies
- 02 Ultrasonic generator MAG, 1,2 kW
- 03 Multiple IPM3505 power modules
- **04** Actuator AC450



special-purpose systems. The IPM3505 integrated power module is particularly suited to multi-point welding applications. Comprising of a compact and robust generator / converter unit, multiple IPM3505 power modules can be mounted to a common axis which can then simultaneously position the units to the part or parts to be welded.

Automotive Drives Development & Innovation

The rise in automotive applications has also been instrumental in the development and enhancement of Telsonic's AC Actuator range which includes the AC350, AC450, AC750 and AC1900, all designed to provide a flexible approach to special purpose welding applications. The AC350 and AC450 have 350 N and 450 N force capability respectively. The AC750 is available with 750 N force, and the larger AC1900 actuator is available with 1,900 N force capability, a frequency of 20 kHz and an output of either 1,200 W, 2,400 W or 3,600 W

The power behind Telsonic's latest range of ultrasonic modules and actuators is the MAG ultrasonic generator family. Offering remote control for amplitude and power input, together with the capability to adjust starting conditions for critical sonotrodes, Telsonic's MAG generators set new standards in ultrasonic welding, and have been used in many of the company's latest automotive applications.

With a number of new models from different manufacturers already in the pipeline and an optimistic outlook for vehicle production within the UK in the coming years, Telsonic's growth within this key sector looks set to continue.

Telsonic UK offer a comprehensive range of ultrasonic modules and systems for a variety of metal and plastic welding, sealing, food cutting, textile cutting and cleaning applications.

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