



equipment fitted with ACT (automotive cold transfer) can weld as low as 32amps, which is perfect for these thin steels.

SPOT WELDING

With so many different types of steel on a modern car it is essential for the repairer to have a good spot welder to ensure perfect results every time. It should have a full automatic programme, to make it easy and fast for the operative, and also be water cooled to avoid overheating.

In addition, it should have a transformer gun fitted with the 'C' gun design, to both avoid the dangerous electro-magnetic fields associated with cable welders and also to ensure the correct clamping force required.

Neil Pulsford, UK commercial director, GYS

Bodyshops face continual challenge to keep on top of changing welding repair processes and as well as the continual evolution of steel type used, vehicle manufacturers are taking an increasing interest in repair processes and the equipment employed to carry out the repair.

As an equipment manufacturer GYS has to invest in research and development resource to ensure that the equipment meets new specifications as they are set. Two recent examples where GYS was heavily involved in the process were with the latest Ford spot welding and Mercedes MIG welding specifications.

Equipment that may have met manufacturer standards yesterday may not do so today. The result of this is that equipment is continually evolving and it follows that bodyshops have to ensure they buy the latest equipment to keep ahead.

NEW DEVELOPMENTS

As our technical sales engineers demonstrate equipment around the country it is normal that bodyshops are often seeing new developments for the first time. An example of this is the fact that spot welders are now fully automatic, completely negating the need for the operator to enter any welding parameters. Still today the majority of bodyshops have never seen this functionality.

Even on less complex equipment such as dent pulling which has been on the market for years, we are surprised by the number of repairers who are not aware of the latest functionality and thus they are getting by with very limited equipment which is reducing their efficiency. The fact that heat induction can be used to remove certain dent types is also not widely known.

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PROCESSES

We see many different repair processes and many of the premium car manufacturers are now using rivet and bond to attach dissimilar metals such as aluminium to steel in order to eradicate contamination/corrosion.

With this there is a necessity to provide equipment to carry out the reverse process in the removal of panels joined with this process. Rivet removal and heat induction equipment is thus ideal.

Some manufacturers, for example GM, use a mixture of spot welding and weld through panel bond, this requires a glue setting (pre-burn) from the spot welder. Panel joining by brazing requires specialised equipment capable of operating smoothly at low amperage, sometimes as low as (15A).

Welding aluminium requires good temperature and the expanded use of aluminium in vehicles is now driving a requirement for pulse MIG welders in bodyshops.