The GYS factory in France employs over 800 staff and continues significant investment in R&D year on year.

LEGISLATION CHANGING WELDING REQUIREMENTS

Neil Pulsford, UK Managing Director of GYS talks to Auto Body Professional about how both technology and new environmental legislation are driving improvements in bodyshop equipment and changing welding requirements.

GYS is a French R&D led electronics company manufacturing welding machines, bodyshop repair equipment and battery charging equipment that is exported around the world. The family-owned company, based in Laval, about 200 km southwest of Paris, employs over 800 staff and is continuing to grow through significant investment in R&D year on year. Founded in 1964, GYS works closely with major car manufacturers and customers around the world which contribute to influencing improvements in bodyshop equipment.

GYS continues to grow globally and in the UK. Despite the pandemic, the UK subsidiary in Rugby has achieved more than 50% growth in the last two years. Plans are now well underway to extend the warehouse by 70% in 2022 and build a Robotics/Automation facility for new automated welding products now being introduced.

"Due to the scale of GYS in the body repair equipment space with 80 R&D engineers we are able to harness expertise in many areas – electronics, mechanics, software and welding," said Neil Pulsford, UK Managing Director, GYS. "The advances in all these technologies happen from many sources, often outside our industry but GYS exposure to the wider technology world enables us to capture developments in many areas and channel that to create equipment that raises efficiency and quality for bodyshops and the repair process."

The legislation being drawn up has been delayed until 2023 but this is going to affect MIG/MAG welding in bodyshops in the next two years.

A clear example of this can be seen in the development of GYSPress Connected which combines electronics and advanced software in riveting for the first time. "Historically riveting means a rather blunt instrument, you set the pressure, press go and several tonnes of pressure places the rivet," added Neil. "Providing it is set correctly, positioned correctly and there are no other interferences then the result should be right."

Neil continued: "Now with GYS connected technology the process is improved in two areas. Firstly, it records the pressure actually achieved to prove if the rivet was made successfully and therefore provides traceability. The data can be exported for record keeping. Similar to spot welding when traceability came in around 2008, we now have the same security for riveting. Secondly, improvements relate to the accuracy of setting. The GYSPress Connected has a manufacturer mode which is preset for a specific rivet. When the technician selects this the GYSPress will automatically identify and set the correct pressure for the rivet operation. This offers increased accuracy, time saving and a reduction in potential errors. The combination of these improvements deliver a step change in safety for the riveting processes."

Another major step forward is the new GYS Pti Genius spot welder. "Spot welding is a product that has seen little change since the introduction of automatic settings around 2013," said Neil. "Eight years in the world of electronics is a long time with no

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developments. The new Pti Genius has revised electronic processing to be faster. Spot welding is one of the products with many mechanical parts, and though we tend to get wrapped up in all things electronic, the mechanical engineering has also progressed massively."

Among the features of Pti Genius Spot Welder is an innovative arm connection. By removing the need to disconnect the coolant supply during the arm change speeds up the process. "The critical electrical connection has been reinvented to eliminate the need for copper grease removing from the operators task, and preventing problems that may occur should this task be forgotten," explained Neil. "The arm change can now be a Formula 1 type pit stop, literally accomplished in a few seconds; one off one on. The tilt function also provides fast and improved access to awkward areas. There is a motorised overhead boom enabling safe extended reach for yet further improved access. The improved functionality, speed and long-term reliability is precisely the goal of GYS R&D investment."

As well as GYS technology driving improvement, upcoming environmental legislation is also influencing change, particularly in the area of sustainability and carbon reduction. "The harsh reality is that welding is a highly energy consuming process," said Neil. "Under the heading of 'Eco-design' a number of rules are being introduced across many products be it a TV, washing machine or welder, etc, to demand better energy efficiency in their standby and operating mode.

The GYSPress Connected riveter will automatically identify and set the correct pressure for the rivet operation.

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"The majority of MIG welders used in bodyshops run on transformer-based generators, this is old technology that unfortunately is not the most efficient solution. The new regulation will mean that these machines will not meet the new efficiency levels and instead the industry will need to switch to inverter-based generators. Fortunately, this is established technology, bodyshops already see this in a modern spot welder, and for a company such as GYS manufacturing hundreds of thousands of industrial inverter welding machines per year this is 'normal'. This change coincides with another technology trend in MIG welding in body repair. Increasingly, car makers are now specifying Pulse MIG as their repair process as this offers several advantages. Due to the demands of pulse welding this is only possible from inverter technology so we have two influences pushing against transformer welding. The result – more energy efficiency and higher quality results."

The GYS factory in France is working towards the environmental standard ISO 14001 and in the UK the site is investing in solar energy, running EV/hybrids in its fleet where possible and recycling cardboard for packaging needs. The company now employs 38 people in sales, marketing, customer support and technical. "We generally add about four new employees a year, not so many last year, but we have grown by about six this year and will have a couple more join our team before the end of the year as well," said Neil. "We have been in the body repair market in the UK for seven years and have enjoyed natural growth, seeing growth at around 25% year on year. We didn't really slow down operations during Covid but now the bodyshop market feels pretty normal and it is good for us that we have got interesting products to talk about."

WHAT THE CUSTOMERS SAY

"There is a reason why Apollo choose GYS – it's reliable, looks good, works well and is easy to use. The support and technical back-up is second-to-none.

"When choosing equipment we always make sure that our technicians are happy with what they're using. We continuously test and compare different major brands for the group side by side and the end result on every occasion was the GYS brand which also fits with our manufacturer approvals."

Mike Fuller, Group Technical Manager, Apollo Motor Group

"To expand your business, you have to re-invest and keep up with technology. GYS are always looking forward and that's why we choose their products.

"At the end of the day, you're only as good as your back-up service and GYS are certainly good at that. It doesn't happen often but on the couple of instances something has come up, GYS react quickly and get it sorted."

George Boyes, Director, Vehicle Bodycare Group