Welding Has Changed – So it is Time for the UK Market to Embrace It

In Europe, "ordinary" DIYers and small trades think nothing of reaching for a welder when they need one. But in the UK we shy away from welding. Perhaps there remains a subliminal collective view that welding is for experts or that it is dangerous and that the equipment is too expensive.

But, we are also a nation of enthusiasts whether they are car restorers, boat buffs farmers or even metal sculptors. Many of these groups could safely and effectively use welding in their trades and hobbies.

Let's be clear, we are not talking about skilled specialist welding in aerospace or nuclear submarines here – simply repairs or small fabrication work, where only simple welders and basic welding skills are needed.

Technology does the thinking for you

The big message that needs to be communicated is that welding has changed – and for the same reasons that many other things have changed – namely the technology.

In the not too distant past, small welding machines were heavy. The transformer inside provided the weight and the sometimes fearsome and off-putting buzz associated with welding machines. And then there were the sparks, the sticking welding rods and the safety concerns, not to mention the cost of a machine that had limited performance.

With advanced electronically controlled welding technologies the machines do our thinking for us. A modern machine can analyse welds in milliseconds as we are working, and the machine's electronics package adjusts currents and other parameters to make a successful weld. Truly, these new welders effectively "de-skill" the whole welding process, making it possible for complete novices to make competent welds after only ten or fifteen minutes practice.

Also gone are the days of a welding machine, perhaps mounted on wheels because of its weight, taking up a lot of space in the workshop. Modern electronic welders are light and compact. An effective hobby or light trade welder is smaller than a shoebox and can be carried in one hand.

For example the French made GYSmi 80P has a typical retail price of around £149. Being only 10cm wide, 23cm long and 14cm high and weighing, all-in, just 2.5Kgs, it is actually substantially smaller than a shoebox, so it won't take up a lot of space in a van or workshop, but it is an effective welding machine since it can use electrodes from 1.6 to 2.5mm – easily within the scope of most hobby and light trade welding jobs.

But that is not the only choice – GYS has a small range of 5 or 6 machines in this welding category that offer more features. For example, those needing more oomph and bigger electrodes, the GYSmi 200P with 200Amps of power can use electrodes up to 5mm in diameter and is on the internet at around £275. And weighing in at about 5Kgs, it is perfectly portable.

What about MIG Welding?

MIG, or Metal Inert Gas welding is the one most viewers will see on Scrapheap Challenge or Grand Designs and here too GYS has managed to electronically "tame the beast". Its SMARTmig range is designed for the semi-professional or professional user. The main problem for MIG welding is the set up – namely getting the right amount of wire speed and power to the welding tip so that it welds the materials together. It is all too easy to burn or fail to get enough heat to the welding point, so in the past, many MIG welds have begun with a period of trial and error as the operator determines the machine settings. The GYS SMARTmig range has an easily readable table on the settings panel so that the user can select wire speed and power being used and then dial in the appropriate welder settings.

MIG welding is increasingly popular

Visits GYS UK

–maybe because it is now easier to get a good result and the GYS SMARTmig range is one of the bestselling MIG ranges worldwide and in the UK.

Welding has a Market in the UK – Next Moves?

There is no real reason why UK consumers need not use welders as much as our continental cousins, but we do have some historical barriers to overcome. The biggest problem could be that welders are often seen as specialist items and are only found in specialist shops, whereas on the continent, big DIY chains like Castorama in France stock and display ranges of welders. Clearly, buying a welder is not a big deal in France or Germany.

In the UK with the internet, many independent tool sellers and the big "sheds" too, there is no real reason why welding products shouldn't sell in greater quantities. With an estimated annual value of around £10,000,000 in the UK alone it is often the unbranded, discounted and usually inferior welders that are being sold. These simply reinforce the notion that welding is "difficult" because they are not the most modern and easy to use machines.

Sellers too, can be sceptical because often their staff has no experience or knowledge of welding and so cannot answer queries or provide advice to potential buyers. It may be that some basic training and knowledge for even one member of staff who could be designated as a "welding specialist" could make the difference in store.

But what sellers are also missing out on is that welding uses a lot of consumables like welding rods, gloves, helmets, aprons etc etc and it is these items that will see customers returning again and again. You never know, as welding confidence grows, they may even buy bigger and better machines!

To help put their money where their mouth is, GYS UK's spacious Headquarters in Rugby has all the necessary facilities and expert staff to provide training in welding and product knowledge that would help retailers to start informed selling of welders and welding products. GYS has also put together a basic retail stand with all the most popular items on it to help take the guesswork out of what to stock in a retail environment.

Retailers should be able to buy with confidence because GYS is the biggest European manufacturer of electronic inverter welding machines, a world leader in car body repairs and a major manufacturer of battery chargers and maintenance equipment. Retailers could also do a nice little sideline in domestic and semi-professional car battery chargers, because not all car batteries are created equal these days. A charger that suits one car may not suit another, and it is only too easy to burn out a car's electronics by using the wrong charger.

The Challenge

So retailers – time to rise to the challenge and promote welding as a skill that can be relatively easily acquired along with affordable and easy-to-use welding kit. GYS UK would be a sensible first call.

Report by Peter Brett

I Get my Hands Dirty Proving the Point

Working with wood is my key skill, but I have done some fairly regular "maintenance and repair" welding. My visit to GYS UK in Rugby was a chance to experience the best of modern electronically controlled welding to see if I could improve my welding skills. My tutor in this experiment was the charming and knowledgeable Amaury from France who informed me that he could make a difference to my welding skills in about twenty or thirty minutes. It is a tribute to his patience and skill that I managed a run of competent looking welds in about twenty minutes and I came away more confident knowing what I could do in future to make stronger and neater welds.

I started with the GYSmi 80P – the cheapest and smallest of the GYS MMA Inverter range of welders. I think this was just to prove that being the smallest in the range doesn't mean that it is inferior. Amaury showed me how to set the dial on the 80P to suit the size of the electrode – there is only one control so this is simplicity itself. Making the necessary connections and setting up the cables is easy too – they are all provided in the box. The only extras needed are electrodes and PPE before I was ready to go. Amaury suggested that I test the welder's ability to avoid the electrode "sticking" at the start of the weld and after a few attempts I was able to start smoothly because instead of having to pull the electrode sharply away when it stuck, the welder's electronics simply cut the power and made the "stick" easy to release.

Amaury's demo weld showed a curved herring bone pattern that I did my best to emulate, and after ten minutes, when I had got used to the fairly rapid feed rate needed on the electrode, I managed a slightly wobbly weld that met his approval. Apparently all I need to work on is my coordination between the hand and electrode to ensure that the weld remains even and strong.

The second welder I tried was the GYS SMARTMIG 162 aimed at the professional or semi-professional user. I have never done MIG welding before but I had seen it on the telly and it looks like fun – a good reason, in my view, to give it a go.

Again, Amaury explained the very simple set up of the machine using the SMART control panel to set wire speed and power, all I had to do was select what I knew about what I wanted to weld, the wire diameter and thickness of the metal. This set up gives workable parameters, but experienced welders will know when to adjust the dial a fraction here and there because local conditions like ambient temperature can make a difference.

Amaury also explained to me that the hand position in MIG welding was different to MMA because the feed is forward and the left hand needs to support the torch to get a smooth movement and therefore a smooth, neat weld. I must admit that it took at least six attempts before I got a weld that I actually liked and that matched the demo weld somewhat, but I think that MIG welding could be for me – it feels smoother and slightly easier for me to do. According to Amaury, from now on, it is just practice that will develop my welding skills. I am willing to believe him, but the point is that in a short time I learned a lot more about MIG welding than I thought I could.