## How to Manufacture in Europe Successfully The GYS Way



In the last few years we have all got used to reading about closing factories and poor industrial performance, particularly in Britain. So, it is very refreshing to learn about a success story. I refer of course to the French company GYS, based in Laval in the Pays de Loire region of France. GYS is now a major supplier of welding and related tools to the tool distribution industry both in the UK and in Europe, but is a bit of a well-kept secret. ToolBusiness and Hire paid a visit to this vibrant and expanding company that gave us an insight into some of the ways in which a model of modern European manufacturing could work very successfully.

In my opinion, if there were a few more factories operating on the GYS model, we would be a lot more optimistic about our economic performance. Not to mention that we wouldn't be exporting jobs to the Far East and looking quite as glum as the tabloids like to portray.

Briefly, GYS is the brainchild of Bruno Bouygues and his father Nicolas, who bought the company in 1997. GYS had an established track record of producing transformers, welders and battery chargers since 1964. Bruno and Nicolas' big idea was that the company had to be radically modernized in all aspects – from the products to the premises, employees to R and D. A look at these figures will provide some idea of the level of transformation:-

In 1997 GYS employed 40 people in a small factory, it now employs 400 in four different countries in purpose-built and expanding facilities. In 2008 over a quarter of a million machines were produced by GYS, and Bruno reminded us often that the target was to produce over a thousand machines a day in Laval by the end of 2012.

Clearly we need to look more closely at some of the reasons why GYS is successful.

I have always been fascinated by the concept and principles of leadership and the notion of charisma. To meet Bruno Bouygues, now in his thirties, and Nicolas, his father, is to be charmed and inspired in equal measures. They are almost bouncing with enthusiasm and goodwill and a desire to show off their creation, GYS. But this is not merely a shallow charm offensive – their confidence and enthusiasm are solidly based on real achievements already posted, and with ambitious plans for the future. This confidence and openness is catching and is inspirational not only to visitors but also to the shopfloor and every employee. It obviously helps that people in GYS' orbit enjoy the feel-good factor that a confident and open management style helps create.

Bruno is well qualified to run an enterprise like GYS. He is an engineer, has management training and further education from institutions like MIT in the USA, and has also done a six-month stint helping to establish the People's Bank in post-apartheid South Africa. His conversation and knowledge is wide-ranging, and like

many Europeans, he shames we Brits by the number of languages in which he is able to think and converse. So why is this important? To me it indicates a company leadership that not only acts locally, but thinks globally about its products and its markets and all the other modern things like the "Green Agenda" that are part of modern business. An example of Bruno's thinking is his observation that manufacturing at GYS is like the development of mobile phone technology. Technical breakthroughs lead to bigger volumes and lower prices. It seems evident to me that when Bruno says that GYS can supply a European-quality welding machine with many advanced features at a price that a Chinese factory would wince at, he is stating an obvious truth. But to do this you have to be very smart indeed.

Since it is key to the organization of most modern businesses I asked Bruno about the company IT system. It transpires that this system is designed in-house and offers almost minute-by-minute interrogation of the tiniest detail of manufacturing, machines and financial matters.

In an act of open management style that would frighten many company executives, Bruno gave ToolBusiness and Hire a tour of the GYS IT system, simply looking at some of the most common applications that have been built in.

For example, there is a highly detailed and individualized spreadsheet of what orders have been placed and by whom and their cash value. This information can be accessed by the people who need to know,- maybe a manager wanting to assess how a salesperson is performing and what the sales of a particular machine are, in case they have an implication for shopfloor manufacturing.

A detailed record of all machines that have been made with their serial numbers and their end-of-manufacture test results is kept on the system so that if any are returned, individual faults can be identified. In this way R and D engineers can slowly "engineer out" weak components and design features with the eventual aim of producing machines that are as close to 100% reliable as they can be.

Clearly, the management at GYS is not only open and enthusiastic, but extremely well informed and organized. With the level and detail of knowledge available via the IT system, intelligent decisions can be made by managers and executives. It is also one of my observations about inspirational management is that they know what they are talking about. Bruno and Nicolas have excellent knowledge literally at their fingertips.

Commitment to excellence is vital in management, but excellent R and D is also a requirement for a modern manufacturing company. Many much larger companies would envy the 35+R and D engineers employed at GYS. In their purpose built and soon-to-be-extended, laboratories and workshops I watched as these engineers went unhurriedly about their jobs. It was evident that the





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engineers worked collaboratively on all aspects of the range of GYS products. Benches had prototypes, in-production machines and components on them, while computer systems were used to monitor performance and results. Many of the engineers were "local lads" employed by GYS soon after leaving school and given many opportunities to develop their skills within the company as well as being able to "go for promotion".

The efforts of the R and D engineers were translated into real products on the factory floor by the 200 production staff. Again I was struck by the unhurried pace of production where individuals take responsibility for a series of tasks. GYS tries to encourage flexible working practices where people are trained to do as wide a range of tasks as possible. This means that people can be moved to where they are needed most with the confidence that they will be able to do the job they are assigned to, to the highest quality standards.

In 1997 GYS made the decision to have an integrated manufacturing system as a cornerstone business philosophy. This means that GYS produces all the metal and electronic components in-house. In this way they have absolute control over quality and fitness for purpose. GYS also has a rigorous testing regime at component level, thus avoiding the problem of machines being built with faulty bought-in components.

I was actually amazed that within a relatively compact manufacturing space there were computer-controlled machines that punched metal sheet body parts, made mechanical components, painted and labeled the body parts, made cabling, connectors and wound transformers. The humans supervised the machines, checked quality controls and collected the completed parts to take them to the manufacturing stations.

It seems as though the only components that GYS don't make for themselves are plastic parts.

Bruno was also keen to stress that GYS is a company that listens to its customers. Managers and field staff regularly confer with buyers and users who make suggestions about what GYs could make to suit their particular needs. As a result of this consultation process, three new machines particular to the UK market have already been introduced.

Indeed, while I was visiting the factory, senior engineers from a major French car makers were at GYS to consult on the range of GYS motor body repair welding rigs. Increasingly complicated car body designs and the need for repairs that meet insurance standards require machines that can do a range of tasks and record the repairs too. GYS has a few of these if you need one!

Looking at the numbers, GYS is in an enviable position. Turnover has been steadily rising year-on-year from 7 million Euros in 1997 to an estimated 60 million

Euros in 2012. Most of GYS' machines are exported to Europe, but with growing percentages going to Asia, Africa and Australasia.

GYS now has sales subsidiaries in Germany and the UK, and a manufacturing facility in Shanghai making low technology and non-professional products.

The product range is also expanding. An increasing number of models of welding rigs make up 65% of the GYS range. Car body repair is currently a strong focus with 20% of the range, while the rest is made up of a range of increasingly high tech battery chargers, from hobby to professional.

After seeing all this welding and charging technology being made, my fingers were twitching. In a surprise move by Bruno, I was whisked up to the spacious product training area and let loose on a few welders. I was given the opportunity to try out MMA/ Stick , MIG and TIG welders under the guidance of one of GYS' trained demonstrators.

I was very impressed with the GYS range of welders as they make full use of advances in electronics and software to improve the welding process by removing some of the guesswork. For example, high-tech software prevents the electrode sticking and initiating an initial welding arc is made much easier by "hot-start" technology. There are some that may argue that this is a "de-skilling" of welding, but in fact it is much more like an enabling process, since welding technology is opened up to a much wider range of people and their specific welding needs.

Even in MIG welding, which is regarded as a very highly developed skill, the GYS SMARTmig entry level welder has a control panel enabling the user to set wire speed and power to the correct levels without costly trial and error methods.

We don't miss typewriters compared to word processors, nor cathode ray TVs compared to LCD TVs, so it seems only sensible to decide in favour of "smart" welders too.

GYS are very proud of the fact that their range of welders and other products covers a full spectrum from occasional users to professionals with all price points covered. What became clear to me as I toured the factory was that each and every product no matter how simple or complex, was rigorously tested – one of the pluses of the integrated manufacturing philosophy. Each GYS machine will be tested comprehensively after manufacture to ensure that it starts its working life properly. Other more sensitive parts like PCBs are actually tested twice before assembly and then as part of the whole machine.

Users may only pay around £120 for a basic GYS welder, but can rest assured that it has had the same quality control as GYS machines costing a great deal more.

And perhaps that brings me round in a circle to the point where I started – the fact that GYS is a manufacturing success story is not an accident. Excellent products will always find a market, particularly if they come at the right price.



