

# A new challenger in European welding markets

*GYS, a growing French industrial company, has conquered in less than ten years a premium position in European welding equipment markets, through product expansion, factory integration and focus on R&D. Once a supplier primarily servicing craftsmen, SMEs and maintenance segment, the company is now focusing its R&D efforts on the industrial equipment segment where it wants to be recognized as a solid partner in the next two years.*



**W**ith a modern and integrated plant factory of 12,500 m<sup>2</sup> in Saint-Berthevin (France), dedicated to the production of arc welding machines, resistance welding equipments and battery chargers, GYS has positioned itself within the key players of this industry. According to general management, with the latest expansions, GYS has now one of the lar-

gest welding manufacturing sites in Europe. Enlarged by 5,000 m<sup>2</sup> in February 2007, the company is now in the process of adding a new extension in 2008 of 4,200 m<sup>2</sup> to house a R&D centre, an additional warehouse and additional places for more functional services. GYS, with its two subsidiaries in Germany and China, has generated €42 million of sales in 2007, which represented an



**GYS' headquarters and manufacturing facilities located in Saint-Berthevin (Mayenne). More than 12,500m<sup>2</sup> dedicated to welding machines and battery chargers manufacture.**



**GYS's research and development laboratory. This department will be relocated to the new site, which can accommodate up to 40 people from today's team of 22.**

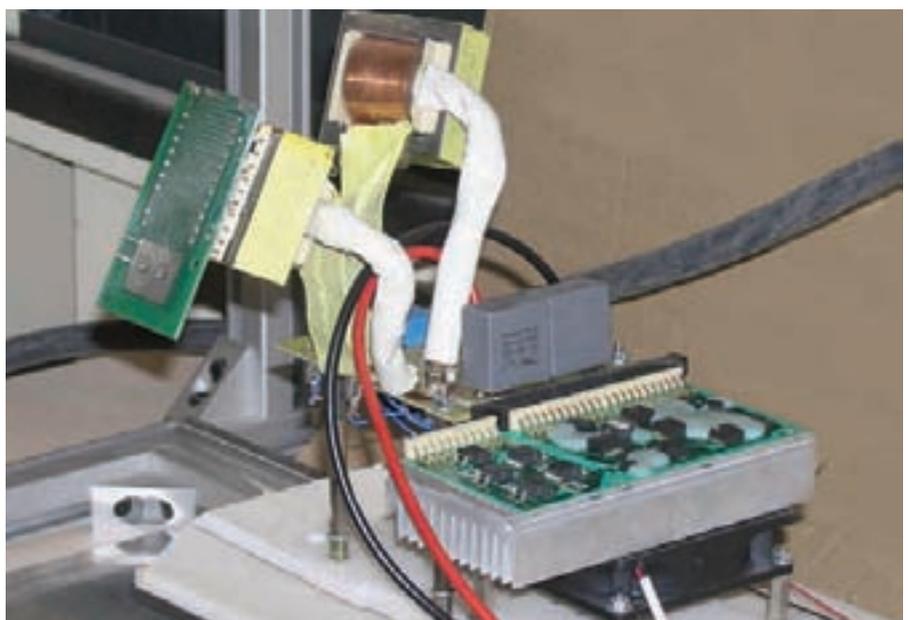
increase of 22% compared to 2006 and a tripling of 2002 sales.

## Inverters at low prices

Typical of the French industrial environment, the Company has completely transformed itself over the last 10 years. Historically the French leader in manufacture of professional battery chargers and welding machines, the Company decided early to concentrate on inverter technology to obtain a competitive price advantage in the market. GYS chose to invest in the process SMI-Substrate Insulated Metal-which allows an optimization of heat fluxes and an improvement of the products' solidity and quality. Thanks to this technology, GYS is democratizing the inverter welding products through extremely competitive prices and complete automatization of the production process. Thereby, GYS opened the MMA welding machine market to and rendered this equipment accessible even to tradesmen and for use in small maintenance workshops. Gradually, this range of inverters has been enriched with TIG (2004) and plasma cutters (2005). GYS expect to launch the first MIG inverters by the end of ➔



**Since June 2007, GYS has integrated a mechanics workshop, which for example produces the grips of the welding machines.**



**Example of in-house tools designed and manufactured by GYS. This apparatus tests the thermal signature of an SMI card to check the quality of the welding.**



→ 2008.

This strategy of marrying high technology with low prices has proven itself effective, since GYS has increased its production considerably; in 2007, the Company has produced over 120,000 welding inverters, with approximately half of them being exported. At the same time, the technology has become more accessible, and as the Head of Sales for GYS states, « it is now rare for tradesmen not to own an inverter ».

*Several stages of production, including the electronics components of the SMI card, the serigraphy, the assembly and the functional testing (here illustrated a "Batium" charger).*



## All purpose inverter

As mentioned above, GYS began by manufacturing welding equipments with electrode MMA components, essential materials for tradesmen and for use in maintenance shops. It was critical for the company to successfully supply its existing base of customers before expanding to other users. GYS achieves its goal, since the Company is today the number one manufacturer of MMA inverters in France. At the end of 2004, GYS began developing inver-



ters for plasma cutters and TIGs. In this category of more technical products, GYS has profited from enormous success. GYS sells more high-tech products abroad than in France, because those products are primari-

ly distributed by welding specialist importers. With more than 10% of the French market, the MIG range will experienced strong sales growth in 2008 and 2009 with the introduction of inverter technology.

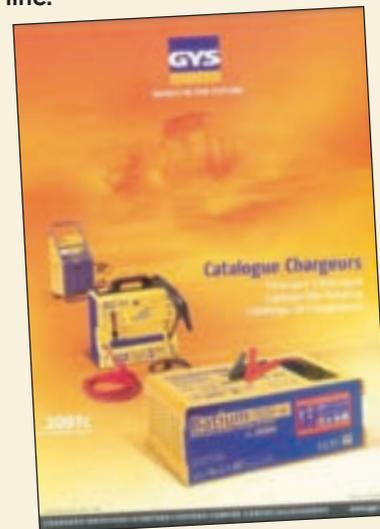
# Website and catalogues

GYS offers 3 different catalogues dedicated to each of its product segmentation. These catalogues provide information on the Company and describe in detail its product range in 8 different languages with product photos. They are published several times a year to illustrate the latest technologies and prices. The catalogues are not intended to be technical documents (which can be downloaded off of the Company website) but serves as a quick tool to feature with maximum technical characteristics the available offerings. On the Company's website: [www.gys.fr](http://www.gys.fr), users can

find all products, complementary products and best seller products. The information on the website is available in 8 languages: English, French, German, Spanish, Russian, Finnish, Arab, and Chinese. One can also download the products' visuals and characteristics in high and low definition. Through a protected link, distributors can also access different functions and images through IMAGYS for training, through SYNERGIS PDF-files to print directly special promotions. By 2009, the site should also be able to integrate each distributor's orders on-line.



Promotion example through SYNERGIS on GYS's website



GYS's three catalogues for welding, spot welding and battery chargers ranges.

In parallel, GYS has built up its product range of consumables, accessories and welding protection equipment in order to provide a one-stop shop around MMA, TIG and MIG products. In particular, GYS provides a very wide range of crystal liquid electro-optical helmets, with a sale volume of more than 30,000 pieces in 2007.

## Strong R&D team

The success of GYS is linked to its technology choices, its organisation, and also its dynamic R&D team that enables the Company to evolve its products at breakneck speed; the Company's catalogue is updated several times per year. GYS's R&D team is composed of 22 engineers and is expected to expand once the

R&D centre is built. This team is critical for technological advancement in GYS' products and for process improvements in production. Latest developments include: incorporation of microcontrollers on order charts, LCD screens on resistance welding machines, SD memory chips for storage of information, and use of LEDs on the TIG dashboards.

## Ambitious launch of new 2008 welding products

GYS's laboratory works on the conception of new products and enables the Company to launch regularly innovative products. The Company will introduce Spring 2008 the first ever MIG with synergistic conversion. This synergy feature

allows parameter adjustments based on the material and the wire diameter, providing a better quality of welding. The automatic adjustments can also be manipulated manually. Concretely, the MIG 200A and 250A's conversion will decline in the synergy version. At the end of 2008, the two products will be complemented by a MIG inverter, completing an industrial range by 2009. Moreover, GYS will by this time finalise the development of a three-phased TIG 250A of industrial standards. This laboratory will also focus on mechanical developments.

## Saint-Berthevin Factory

The main factory facility in St. →

## FRENCH LEADER IN SPOT WELDING

For seven years, GYS has developed the unique know-how in spot welding. Carriage manufacturers have had to renew their point and bronze welding equipment due to increasingly light and resistant steels in the market. Thanks to this market renewal, GYS has responded quickly to the technological challenges through its technology inverters and have been favoured by the automotive industry. There are 11 demonstrators on the road, equipped with truck workshops, available for distributors and end-users.



**GYS manufactures its transformers and designed a machine to wind copper sheets for a transformer delivering more than 12.000 amps.**



**GYS's salespeople (10 in welding and battery chargers, 11 for spot welding) receive training 2 days a quarter in production and welding techniques to perfect their technical appreciation, so that they can better inform their clients.**

→ Berthevin has been automatized to a large degree, with the exception of small manual tasks such as the manufacturing of transformers, assembly and final testing of equipment; GYS generates more than 50 types of transformers, making it cost

prohibitive to automatise this. What is automatized, however, touches the heart of the process; including the electronic cards accommodating the substrate aluminium and the substrate silicon. Four robots supply two lines of production and can

deposit on the plates up to 10,000 electronic components per hour.

On each line of CMS production, the test systems incorporating 12 cameras checking various values (presence and identity of the components, positioning, brazing aspects) in order to classify the cards as: "conform", "correction" and "failure". These data are stored in a central server and are analyzed by the teams for permanently improving quality of the products. At this stage, GYS projects to reach at the end of 2008 95% of qualified cards applying the CMS process. The largest remaining components (transformer, and condensers, for example) are then deposited and are welded automatically. Once this process is finished, the cards pass a second test, before leaving on the assembly lines.

The production is extremely integrated and optimised to process straight through punching machines and folding machines with numerical control for the sheet-iron works, a chain of automatic painting associated with a workshop of semi-automatic serigraphy and a robot of wiredrawing mill which strips, crimps and galvanizes the entire internal wiredrawing mill. At the end of the chain, all the elements are assembled on the dedicated assembly lines. Each assembled product is the subject of a third and last test and then is identified by a single number to guarantee its traceability.

In addition, GYS opened last June a precision mechanical workshop that fabricates all the specific mechanical pieces, including for example the welding machine grips and dentpulling tools. GYS is actively trying to better understand and have competency in plasturgy. This sort of integration ensures greater reactivity and price optimization.

### Wins in international markets

GYS can afford to play an aggressive commercial policy in correspondence with its global vision. As indicated by Philippe Thebaud, "one must take our Asian competitors seriously and our pricing policy

## GYS'S TWO SUBSIDIARIES

In May 2006, GYS created its German subsidiary in Aachen, and today employs 16 people. The company is linked to the parent company by an ERP system and has a sizable stock and after-sales service. Moreover, in China, GYS has a 42 person subsidiary which fabricates mass battery chargers. The Chinese subsidiary also works as an affiliate to source GYS raw material components in Asia and manage quality control directly locally; components coming from other parts of the world are directly delivered to St. Berthevin.



*In the purpose of GYS Academy's formation programs, the society proposes 2 cars on which welding operations can be made.*

must be competitive against the Chinese". This is the reason why GYS has an aggressive tariff scheme. With the automation of the factory plant in Saint-Berthevin and the increasing of sales volumes, GYS has regularly transfer the price benefits to its customers; except in 2007 when there was a spectacular rise in price of copper. Again in January 2008, GYS effected an average 5% reduction of its inverter prices. More than 45% of the Company's revenues

come from 80 countries across the globe.

## 2009 product range

According to Bruno Bouygues, GYS has a robust development platform for the future; "the Company has the infrastructure and sales volumes to build a wide industrial range." What was originally targeted for tradesmen and plant maintenance uses, the GYS range now extends



*A page of the website www.gys.fr. Visuals, technical characteristics and instructions can be downloaded in several languages.*

*Eventual corresponding additional products are indicated on the side.*

to all industrial usages.

Nonetheless, to penetrate the industrial welding segment, it is necessary to convince not only the end-users but also the distribution specialists. In order to reassure them, GYS has received ISO 9001 version 2000 certification by German TÜV on safety and reliability standards. In the beginning of 2007, the Company also initiated the 5S process which is centered on cleanliness and functionality for all personnel. The focus being for personnel to better manage their own working environment and seek organizational competencies.

It is important for GYS to be recognized by European organizations and that the Company's products are validated to reach all operating requirements and high level of end-user safety standards. Hence, 3 types of MMA inverters have been certified by the German TÜV and one welding machine had been certified by the French Emitech.

As summarized by Bruno Bouygues, GYS has ambitions to quickly become a major player in the welding market with a product range meeting the needs of tradesmen as well as the most demanding industrial segments. The Company faces ahead an ambitious but realistic challenge, thanks to a state-of-the-art French production site, a strong research department, and the Company's ability to price products extremely competitively.

## REVENUE GROWTH



GYS's revenue in 2007 was composed of: 63% in welding products, 18% in spot welding, and 19% in battery chargers. Over the last year, the welding and spot welding markets progressed at a constant rate while the battery chargers experienced growth in the neighbourhood of 8%.