Robotics

Farame
Case study: Metal Fabrication

Flexible production to meet customer needs. Keeping ahead of the global competition in the metalworking industry means developing innovative products and lean manufacturing processes. ABB robot systems have helped Portuguese manufacturer Farame rise to both challenges.

Flexible in production.

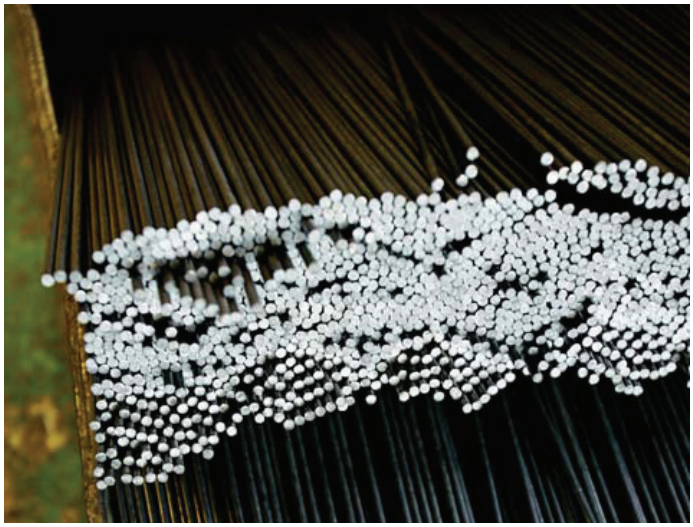
“The key competitive factor in our industry is product differentiation,” says Pedro Sousa Pires, general manager of Farame, a Portuguese producer of steel trolleys. “We need to be innovative in design and fl exible in production. abb robots are vital to our strategy for achieving both those goals.” Based near Lisbon, Farame has been in business since 1983.

Its main products include handling and storage trolleys for letters and parcels in post offi ce distribution centers and for components in automobile plants, as well as supermarket carts and related products. The company, which was acquired in 2000 by Caddie of France, the world’s second largest producer of supermarket trolleys, uses only abb robots, positioners and welding cells in its production line, which involves cutting, bending and welding steel wire, rods and tubes into products that are then zinc-coated and painted.

Farame, which has annual sales of about 15 million euros (usd 19.2 million), began using abb robot systems in 1992, when it purchased an irb 6000 m92 model spot welding station with two operator areas and a resistance press for welding supermarket trolleys. It has since purchased eight additional abb systems, including six irb 1400 robots. In January 2006, it installed an irb 1400 m2000 model with an irpb 250r positioner and an Arcitec arc welding machine. In November, the company took delivery of a FlexArc Cell, a new

Farame

approach by abb involving an irb 1600 m2004 model with an irbp250r positioner, a Fronius tps4000 arc welding machine and a complete safety system, all situated in a compact, transportable monobloc welding cell. All components are pre-tested, and the cell is ready to start work on delivery day.



Farame produces between 300 and 400 different products each year and at any one time is simultaneously manufacturing between 20 and 30 separate products. Letter and parcel handling trolleys for La Poste, the French Post Offi ce, are currently the company's leading product, and it has just won a contract for a similar product for the Swiss Post Offi ce. This wide range of different products made in small series – a big series for Farame is never more than 1,000 units – requires fl exible manufacturing processes and rapid adaptations in production lines that the company's abb robot systems greatly facilitate.

"We can quickly call up the program for a different product and in a very short time, after a few small adjustments, we're ready to begin producing an entirely different item," says Sousa Pires. "This helps maximize our fl exibility."
The adaptability of standard abb robot systems is another import asset for Farame. "We install standard abb systems because this gives us the advantage of common parts and common programs," says Sousa Pires. "It also means that all our programming and operating staff can use all our welding stations. At the same time, because standard abb systems are so fl exible, each robot can be quickly adapted to a new or different product." abb robots have also freed Farame from dependence on subcontractors and the vulnerability to poor quality and late delivery times that that entailed.

FACTS

Benefi ts for Farame with adaptable standards

- All programming and operating staff can use all the welding stations.
- Each robot can be quickly adapted to a new or different product.
- More available time and manpower for developing new products.

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