

# A WINNING TECHNOLOGY

Medical infusion solution containers used to be made solely of glass, but now plastic, particularly Pharma Grade polypropylene (PP), is increasingly being used as a substitute. Marco Serventi, commercial director of GF SpA, talks to Barbara Rossi about his company and its PP division.



Established in the Parma area in 1979, GF began its activities with the design and manufacture of quality control machines for the food and beverage sector, later expanding into the design and manufacture of machines for the pharmaceutical industry. Later on, GF decided to expand its pharmaceutical business by designing and manufacturing filling machines alongside its quality control products. Nowadays the company produces 99 per cent of its products for the pharmaceutical sector and one per cent for the old valued customers in beverage industry.

GF currently designs and manufactures both primary and secondary packaging machines, offering both complete lines and stand-alone equipment. Its range also includes ancillary machines such as washers and sterilisation tunnels, as well as tray-filling and tray-emptying devices. All its products can be customised to meet clients' needs.

With 100 employees, GF carries out 90 per cent of its production processes in-house, has been ISO certified since 2001 and since 2002 has also been registered as a qualified research lab with MIUR (Italian Ministry of

Instruction, University and Research). The company works closely with the client throughout the product development phase and also offers after-sales assistance when necessary, including service and maintenance.

## The polypropylene division

GF has recently introduced a new line of PP products, including injection stretch blow moulding (ISBM) filling lines. The company is able to produce and supply complete processing lines for PP IV bottles and bags, applying its ISBM technology, which has been used in the food sector for 40 years, to hospital products. GF has modified this technology to use PP, instead of PET, which is much more suitable for medical use. These ISBM filling lines are relatively new to the market, but it has already supplied about 15 and expects good growth as, although switching to a new type of production line may require a certain initial investment, due to their efficiency companies can recoup this cost in a relatively short time (about a year). This ISBM technology is exclusive to GF at European level and has also >



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been approved by the American FDA (Food and Drugs Administration), which means they can be exported to Japan and the US.

A GF ISBM filling line offers several advantages, such as the fact that the cost of an ISBM system is lower than that of a BFS system (the older system employed for the manufacture of this type of product, based on plastic extrusion). Furthermore, in terms of raw material consumption the cost of producing a 500ml bottle with the GF ISBM system is 35 per cent lower than the cost of producing it with the BFS system whilst the waste raw material coming from the production of the former is zero. The ISBM system products also offer an advantage in terms of optical inspection, thanks to their high level of transparency. This system also has a very simple interface and is easy to manage, so there is no need for supervision from a highly qualified operator. Thanks to its flexibility, a wide range of filling volumes and container shapes can be obtained, with the added benefit that different types of caps which can be applied on the final bottle.

From a safety perspective, the PP bottles and bags manufactured using the GF ISBM system can be sterilised at high temperatures, up to 121°C – a significantly higher level than other plastic materials, such as PET and PE, could sustain. This means the PP bottles and containers produced by GF are a viable and more economic alternative to similar products made from extruded plastic or glass.

### **Growth and expansion**

Today GF distributes its products throughout the world, exporting about 80 per cent of its production to markets including Europe (Germany in particular), Central America, South America, China and Japan. It also plans to enter the US market by opening a direct representative office in the country. Because of the sophisticated know-how needed to produce its ISBM products, growth at the company will be of an organic nature. In terms of existing markets, growth is expected particularly in Germany and Iran.

GF has plans to expand its production site with the addition of a 3000m<sup>2</sup> warehouse to build several ISBM lines, as it intends to increase its activity in this area without reducing the resources dedicated to its traditional filling and inspection lines. The work on the new warehouse should be completed in mid-2012 and once this is ready GF plans to hold an open-house event to showcase one of its ISBM lines in operation. □

*To know more about GF ISBM lines, you can visit the dedicated website [www.isbm.it](http://www.isbm.it)*

