

Process control specialist supports innovation

In 1965 Eurotherm, a small company specialising in temperature controllers, opened in the UK. Today, the company is recognised worldwide as a supplier of control and measurement instrumentation for glass manufacturers and many other industrial and process markets. Helen Bird met with Eurotherm's Technical Director, René Meuleman at Glasstec 2008 in Düsseldorf, where the supplier welcomed a record number of visitors to its stand.

Visiting Eurotherm's busy stand at Glasstec 2008, it is difficult to imagine this globally recognised supplier as the small manufacturer of temperature controllers it was when formed in 1965. Throughout its 43-year evolution a focus on process control has remained constant, as has a philosophy to be one step ahead of the competition through education and innovation.

Five years after its humble beginnings as Eurotherm Controls in Worthing, UK, the company set up a number of independent companies to develop and produce other advanced product lines. By 1978 the company was taken public and over the subsequent 20 years continued expanding with the establishment of separate specialist business units under the Eurotherm brand: Controls; recorders; process automation; drives; and gauging systems.

Becoming part of the global engineering group Invensys in 1999 marked another important milestone in the supplier's history, at which point it was renamed Invensys Eurotherm. By 2001 it integrated Barber Colman along with companies Action Instruments and Continental Industries, thus reinforcing its product lines further and becoming one of the worldwide leaders of automation, control and industrial instrumentation. Today, this status remains and with 1200 employees and offices in most conceivable industrial countries, Eurotherm serves six key industries: Product business; life sciences; heat treatment; water; plastics; and, of course, glass.

Customer to supplier

A relative newcomer to Eurotherm, René Meuleman was appointed as its Technical Director only a year ago, following 29 years of service with a Dutch container glass company. The company joined BSN of France approximately 15 years ago, which itself was purchased by Owens-Illinois (O-I) seven years ago. As René explains, his role involved being responsible for process control, forming electronics and drive systems for European operations. "At that time O-I had 39 plants in Europe," he adds.

When Eurotherm approached René at O-I, he admits finding it an attractive prospect. "It was an exciting idea to switch from customer to supplier, being on the other side..."

Another attraction that led René to Eurotherm was, as he explains, that the supplier is "small enough to be flexible but big enough to do big projects". Indeed, after a year with the company



René Meuleman, Technical Director of Eurotherm, at the company's stand at Glasstec 2008 in Düsseldorf. ▶

René strongly believes in the range of products, or “solutions” as he asserts, that it supplies to the glass industry.

Hot end solutions

Eurotherm specialises in providing engineered solutions for glass plant automation to maximise efficiency and productivity. A key selling point of these solutions, René claims, is the fact that they are scalable. Depending on the customer's needs, Eurotherm is able to provide everything from small standalone systems to information integration and plant-wide distribution control (DCS) systems. “You can easily grow from a very small application to a very big application,” he says.

Alongside this spectrum of process control systems is the Eurotherm thyristor business, incorporating the recently developed EPower controller. The controller is a pre-programmable thyristor unit based on a predictive power management strategy, enabling it to ‘flatten out’ total power consumption. While not disputing that the unit requires power, René claims that it uses the power in a “smarter way”. With both process control and thyristor solutions, he adds, it is possible to automate the full hot end of the glassmaking plant, from batch house to forming.

René confirms the largest market for Eurotherm lies within the float glass sector – due to the scale of the heating systems, followed closely by glass fibre, then container glass and specialty glass. Its worldwide customers include Saint-Gobain, Pilkington, AGC, Philips and Ardagh Glass.

Viscosity is key

While accepting that the high temperatures required for glass forming make it difficult to obtain true viscosity values, René emphasises the importance of reproducibility and accuracy. “We know there is a lot of drift in temperature sensors at very high temperatures and so customers are particularly looking for reproducible and precise measurements. Our equipment is specially designed to handle that, which separates us from our competition...”

Perhaps also separating Eurotherm from its competitors is its dedication to the knowledge and education of its staff. “We spend a lot of time each year educating our worldwide sales force so they are not only selling solutions but are able to discuss and come up with innovative ideas, giving added value to our solutions,” confirms René.

Eastern promise

With production plants and offices across the world, Eurotherm has the presence to serve many markets. It is René's belief that demand will continue to move into the East, where there are exciting business opportunities. Observing



that “China is looking for cheap and innovative solutions,” René explains that it is the Eurotherm intention to follow that trend, collaborating with its customers to develop new technologies. The company has even been approached by design institutes in China to share its knowledge by organising seminars.

In terms of research and development, the company understands that the issue at hand for glass manufacturers is to improve yield and glass quality while making energy savings. In a recent partnership with TNO Glass Group it has produced a new process control strategy called rigorous model-based predictive control (rMPC). This system allows 24/7 monitoring and control of the glass furnace, thus reducing the scope for manual operator errors. Alongside Eurotherm DCS and EurothermSuite systems, rMPC provides a further solution to address the complex furnace control tasks encountered by glass manufacturers today.

Another recent project is in co-operation with BASF in the area of controlling forehearth by optical temperature measurement, particularly for the container glass and glass fibre sectors. As René explains, with the advent of new forming techniques, the company will continue contributing to process control solutions and in the future energy savings of 50% could be achievable.

Growth and ambition

With an average annual growth rate of 25% for 2007, René confirms that Eurotherm is “optimistic about growth”. It aims to achieve double-digit growth going forward despite the current financial climate affecting the industry.

With events like Glasstec allowing the company to showcase its product portfolio and discuss recent developments with its global customer base, it is no doubt confident for the future. ■

Eurotherm, The Netherlands.
Website: www.eurotherm-glass.com

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