

New colour system for tempered glass

With demand for tempered glass on the rise, particularly in the architectural and domestic appliance markets, glass processors are looking for different colour systems that will withstand the tempering process.

The Fenzi group, specialized in chemical products for flat glass, has set out to satisfy this requirement with the launch of its new Tempver range of enamels for tempered glass.

Fiona Tupper-Carey



The name Fenzi is principally known for its anti-corrosive paints for mirrors, for which it holds a world market share of around 50 per cent, and for its sealants for insulating glass. Now the Italian producer of speciality chemicals for glass processing is moving into a new and growing market: enamels for tempered glass.

Glass-Technology International went to Fenzi's headquarters in Tribiano, near Milan, Italy, to see the group's new plant, where production of the enamels started on 1st September. We asked Alessandro Fenzi, member of the management team and son of the group's president Dino Fenzi, how this latest project fits in with the company's general plans.

GROUP PROFILE

A family-owned company founded in Milan in 1941, Fenzi Spa began life as a producer of mirror-backing paints. Today this product, known the world over under the brand name *Duralux*, still represents almost half of the group's production in terms of turnover, which came to over US\$ 60 million in 1998.

The other half of its production mostly consists of its range of sealants for insulating glass (polysulphide, butyl and hot-melt), which Fenzi says have been very successful on the European market, particularly its polysulphide sealant *Thiover*.

However, the group also engages in a number of other, secondary activities for the Italian market that reinforce its link with the flat glass industry. One of these is the production of lead profiles for stained glass windows and mirrors.

The other of Fenzi's secondary activities is its trading division, which supplies a wide range of equipment and accessories for glass-makers, from diamond tools to abrasives. Through the company *Alupro*, based in Salzano, near Venice, Italy, in which Fenzi has an important stake, the group also supplies aluminium spacers for insulating glass.

Apart from the main premises in Tribiano, Fenzi has a subsidiary in the United States, which serves the entire North American market, as well as Mexico and Canada.

There is also a subsidiary in Argentina, a sales office in China and two factories for the



Detail of the new furnace, showing casting of liquid glass for frit production

Frit production inside the new plant at Fenzi



production of resins for paints in the UK. Foreign markets are very important to the group, Alessandro Fenzi pointed out, as exports make up around 75 per cent of its turnover.

BRANCHING OUT

With a well-established position on the home and international markets, Fenzi now intends to exploit its consolidated client base in the flat glass industry to launch its newest product.

"The new enamels, called *Tempver*, are part of our company's strategy to specialize within the flat glass sector. We were looking for a product that is used by our clients and we found it: enamels for tempered glass," explained Alessandro Fenzi.

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Filtering of the frit

“It is a high-tech, specialist chemical product, whose market we believe is growing in leaps and bounds,” he continued.

That is why the group has invested in a new factory building at the Tribiano premises to house the equipment it has purchased to produce the enamels. New staff have also been taken on, all of them, according to Alessandro Fenzi, with experience.

“I believe we can start supplying extremely high-quality products with an efficient cost structure straight away, and that we will be competitive.” The company also believes it will be able to offer fast delivery times and a particularly high standard of customer service and assistance, due to the concentration of its resources in the glass sector.

Alessandro Fenzi stressed that, in order to

serve its customers better, the group will only be producing enamels for glass and has no intention of supplying the ceramics or metal industries.

THE NEW PRODUCT: TEMPVER

Tempver enamels will be produced initially in four different product ranges, according to the desired finished effect on the glass, which may be transparent, opaque, metallic or satinized. A wide range of colours will also be available.

The advantage of these enamels is that, when applied on the glass sheet before it enters the tempering furnace, they fuse onto the glass creat-

Detail of the fritter conveying machine





Frit exiting
the machine

ing a permanent layer that is impossible to remove. The enamels are obtained from glass frit, which Fenzi has chosen to produce itself, so as to have greater control over the whole production process.

The properties of the frit can change if any variation occurs in the temperature of the furnace or the length of time it is heated and this, in turn, can influence the chemical composition of the final product. For customers who need to be able to reproduce exactly the same colour and finishing on large quantities of glass sheets, it is vital to provide consistency in terms of the exact composition of the enamels.

Fenzi has therefore invested in furnaces and fritting equipment which currently produce large amounts of kilos of frit per day.

MARKET PROSPECTS

Alessandro Fenzi feels very optimistic about the future of the market for the new product.

“For some people in this company, the situation recalls that of the insulating glass market twenty years ago, when we first started producing sealants. Then it was a tiny market which suddenly exploded. The market for enamels for tempered glass should also expand greatly, not just in Italy but all over the world.”

The indicators he pointed to were the widespread demand for tempered glass in the domestic appliance market and trends in the building industry, such as the increasing use of continuous façades and tighter safety regulations, which are already swelling the market for tempered glass in the architectural sector.

It is, in fact, at these two sectors of the market that Fenzi is aiming. Despite the potential in other fields, such as automotive glass and particularly hollow glass, Fenzi says that, for the moment, it does not want to risk dispersing its resources.

These resources consist of almost sixty years' experience of serving the flat glass industry, of achieving recognized high standards of quality in its products, (the mirror-backing paints and sealants have ISO 9001 certification) and a philosophy of family-run management, which Fenzi says provides continuity and clarity in its dealings with customers.

The Tempver range of enamels will be launched at Vitrum '99. Fenzi believes it will be the start of a new success story, which will add to the group's consistent growth pattern in turnover over the last years and, perhaps in time, to the opening up of further new markets.