Tremco: the warm edge company

Marketing a range of high-performance sealants for the glazing industry, Tremco is a leader in “warm edge” technology. The company supplies IG manufacturers worldwide with Swiggle Strip, a sealant system designed for versatile and simple use. The most notable characteristic of Swiggle Strip, however, is that it delivers thermal efficiency, passing on energy savings to the consumer.
The global challenge to save energy in light of depleting natural resources has meant that glazing systems must be thermally efficient. Windows no longer serve merely to keep out the elements and let in natural light, but to conserve energy as well. The implication for the IG industry has meant that it must supply products which meet such demands. In the European Union (EU), for instance, environmental awareness has been kept in the spotlight. EU norms governing glazing production and performance are being amended to become more stringent.

Sealant manufacturer Tremco has responded by offering Europe’s IG sector a range of products designed to meet changing glazing performance requirements. The company is recognised as a leader in its field and is proud of its reputation for innovative, high quality products on which glazing producers can rely.

**Company background**

Established in 1928 in the Unites States as a paint and coatings company, Tremco has been supplying the glazing industry with quality sealants for many years. The Cleveland, Ohio-based organisation has 16 production plants and 50 offices around the world. It employs a total of 1,700 people and generates annual revenues of nearly US$ 350 million.

Until recently Tremco was a fully-owned subsidiary of US-based chemical and aerospace giant, BF Goodrich. In October of last year, BF Goodrich entered into an agreement to sell the sealant firm to another US company, RPM, Inc., an industrial coatings and sealant company. At the time of BF Goodrich’s announcement of the sale, it did not disclose the purchase price, but it said that the transaction was expected to be finalised within the first quarter of this year.

Being a part of the BF Goodrich Group has given Tremco in the past the financial backing to conduct research into new products. It has substantial technical development expertise based on work conducted at its own research and development facilities. One of the company’s major achievements occurred in the late 1970s, when it brought about an important

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**SWIGGLE STRIP CERTIFICATIONS**

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**TREMCO WORLDWIDE**

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- Bulgaria
- Canada
- Czech Republic
- Finland
- France
- Germany
- Greece
- Hong Kong
- Hungary
- Israel
- Italy
- Malaysia
- Mexico
- Morocco
- Netherlands
- Poland
- Portugal
- Romania
- Singapore
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom
- United States
change in IG production: in 1979 it launched a new sealant system called Swiggle Strip, which set a precedent for warm edge technology, a modern means of reducing energy consumption.

Global operations

The largest markets for Tremco are in the United States and in Canada. But, although North American markets represent the majority of the company’s sales, it has also established its presence in Europe, the Middle East, Asia and Australia.

For example, in the Asia-Pacific region Tremco has sales representatives and offices in Singapore, Hong-Kong, Malaysia and Australia, while in Europe it does business in all EU and most non-EU member states.

The success of the company, which also produces construction caulking sealants and adhesives as well as glazing sealants, is reflected by the fact its products have been used in some of the world’s most impressive buildings. These constructions include:
• the World Trade Centre (New York, US)
• the Sears Tower (Chicago, US)
• the Louvre Pyramid (Paris, France)
• the Sydney Opera House (Australia)
• the Petronas Twin Towers (Kuala Lampur, Malaysia).

Acquisitions and growth

In spite of increasing competitiveness in the marketplace, Tremco has maintained a position in its field. The company has faced the challenge by implementing a plan for growth through, amongst others, acquisitions. In early 1995, Tremco bought Finnish sealant producer Oy Europox, then a family-run business. Since the acquisition, this company has been renamed Oy Tremco Limited Finland.

According to Tremco, Finland is a good position from which it can expand into the Baltic states and into Russia. Tremco’s strategy is to obtain new markets in Eastern Europe where it sees new business opportunities. Last year, it made another acquisition in Finland: it purchased Secoseal IGS from Fosroc Expandite Ltd. Currently, Secoseal IGS and JS442 are Tremco’s leading two-part polyurethane IG sealants.

Vice-President and Managing Director - Europe, John B. Newens says that on the continent “Tremco has moved from being a group of nationally focused businesses to become an integrated pan-European organisation.” He says the organisation has made a commitment to delivering high-level customer service in Europe and recognises that local requirements differ across the continent. “[We] are committed to meeting these as we continue to grow”, adds Mr. Newens.

As for Asia, Tremco has also recognised the possibilities for growth in the region. This year it will open a new office in China (Beijing), currently the world’s fastest growing economy.

Customer focus

Keeping pace with industry trends and a keen awareness of its customers’ needs, says Tremco, makes it a “customer focused company”. Its entire business activities are conducted in the local languages of the countries in which its operations are based.

This means that all of its sales literature, packaging and labelling are prepared and distributed in the language of its customers. As part of its dedication to its customers, Tremco’s sales representatives pay regular visits to customers to ensure that products are being utilised properly, as well as to provide problem-solving assistance. They also perform staff training on site,
and provide consultation on selecting products and installing them in the customer's manufacturing facilities.

Moreover, meeting local standards and approvals, ongoing quality control and expertise are all given full attention at Tremco. It utilises consistent processes and standards to make products which conform to local manufacturing and quality requirements. In countries where standards for insulated glazing are undergoing changes, the manufacturer keeps itself informed on any proposed amendments.

Furthermore, Tremco helps its customers to achieve official endorsement of their finished products to maintain their competitiveness. It encourages them to seek quality certifications and to stay up-to-date on legislation or rules which may affect their business. As an example, in the United Kingdom Tremco plays an active role in helping its customers achieve the nation's most important quality certification, BSI Kitemark. Counted among the company’s clientele are some of Europe’s largest glasswork groups. These include business units of France’s St. Gobain, the UK group Pilkington, as well as the Glaverbel Group of Belgium.

For some time now, Tremco has had an agreement with Glaverbel, under which it has been supplying all companies in the Belgian group with IG sealants. This agreement, says Thim Petersson, Tremco Scandinavia’s Sales and Market Manager, is not unique in the industry, but nevertheless holds importance at the company.

**Swiggle® Strip**

Patented in 1979, **Swiggle® Strip** is Tremco’s main product for IG production. It was designed as a single complete system and fulfils the function of:

- sealant;
- spacer bar;
- desiccant (molecular sieve);
- corner keys.

By combining the above four products into one, IG unit production becomes uncomplicated because there are fewer components. The aluminium spacer bar in
Swiggle Strip has a butyl-based covering. By enclosing the spacer bar, the metal is prevented from coming into contact with the glass, thereby reducing the amount of heat loss through the IG unit. (Fig. 4-5) The flexible nature of Swiggle Strip allows it to be used in edges and corners, areas which are vulnerable to heat loss. The result is greater thermal efficiency and, hence, reduced energy consumption. Lower consumption, says Tremco, means that financial savings are passed on to the consumer.

The company had independent testing done on Swiggle Strip’s performance. The tests were carried out at the University of California’s Lawrence Berkeley Laboratory, where winter was simulated, with the outside glass pane subjected to a temperature of -20°C, while the inner pane was kept at a room temperature of 19°C. Internal point temperatures were calculated with a thermal imaging camera, and the external temperature with thermocouples and digital readers.

Test results revealed that compared to ordinary double glazing using a metal spacer bar, IG units sealed with the Swiggle Strip outperformed them. The inside glass was found to be 6°C warmer than that of ordinary double glazing with a metal spacer bar. (Fig. 7)
these units do their part to preserve the environment because there is less waste during fabrication and, more importantly, they help to keep homes and offices warmer.

Thus, with the effort to conserve energy, IG manufacturers who are opting for “warm edge” technology to satisfy their customers can look to Tremco for the right sealant.