

Edgetech doubles size of Research & Development lab

Brian Kress, Director of Quality for Edgetech I.G. Inc., shared his perspective with *Warm Edge Digest* on a major expansion of the leading Warm Edge spacer manufacturer's Research and Development Laboratory. The new 2,260 sq. ft. R&D facility, located in the 470,000 sq. ft. main plant where Edgetech manufactures Super Spacer®, nearly doubles the size of the lab it replaces.



"The purposes of the laboratory expansion mirror Edgetech's own growth as an international player, and are in keeping with our company's ongoing commitment to meeting the needs of Super Spacer customers, worldwide," explains Kress.

These include:

- Pure research, to help keep Edgetech at the forefront of industry innovation
- Quality control, to assure that we maintain consistently high quality production
- Test to the world's most stringent protocols to help assure universal acceptance of Super Spacer, wherever it is marketed
- Position Edgetech to better share the research resources of our parent company, Lauren International
- Work more effectively with independent testing laboratories
- Provide a "science capabilities showcase" to complement plant tours conducted for Edgetech customers—and for their customers

Explains Kress, "We relocated the new R&D lab within our manufacturing facility so we could comfortably double its size as well as add new equipment to further expand our capabilities. A fully functional scientific laboratory, at the same time, it serves as an impressive showcase for visiting customers and for their customers.

Meeting worldwide test standards

"Global companies," says Kress, "can find it challenging to maintain a consistent quality reputation worldwide. What may be an acceptable level of quality in one country may not be in another. That's why Edgetech has a core philosophy we apply worldwide, which is to make our customers' lives easier by ensuring optimum quality regardless of location. Lots of companies pay lip service to providing quality, but when quality is inherent to an entire company, it means customers benefit from a quality product, service and support - consistently. To achieve this, we need to constantly invest and develop, which of course is the motivation behind our new research and development laboratory.

"Many worldwide tests have adopted principles from the Canadian testing criteria because the Canadian standard is one of the most stringent globally. So Edgetech's R&D lab uses this as one of its standard testing procedures. Our theory is if our product can pass the toughest tests around, we are confident that the rest won't be a problem.

Edgetech's lab performs three standard IG unit tests, according to customer requirement:

- 1) Constant high humidity
- 2) Volatile fog
- 3) P1 chamber.

(In the P1 chamber, units are subjected to 60°C, 95% relative humidity, and full UV exposure.)



New dynamic test chamber

The full spectrum of tests goes from IG units to individual components and even raw materials. "Materials that pass through our R&D lab," says Kress, "are subject to conditions way beyond what the material should ever see. If units can pass at that level, they can pass the less stringent standards that are currently compulsory.

"The latest addition to this already comprehensive lab is a new test chamber to allow cyclical temperature testing, rather than static temperature testing. This is in addition to three new pieces of equipment introduced purely for research purposes to ensure we stay at the forefront of Warm Edge technology product innovation.

"A year ago we started talking to one of the most important innovators in the European glass processing industry. They were using a particularly tough test, which we wanted to adopt for our own use because it was so stringent. They provided the drawings and we made our



Modified P-1 chambers and high-humidity chamber

own equivalent of the test which incorporated five boxes, each with a different temperature, the highest temperature is well above what the units will be subjected to in standard industry testing. We don't only subject our units to these harsh conditions; we also subject the separate components to the same harsh conditions. We use the boxes on a daily basis for testing our next generation spacers.

The process of quality

"Edgetech's R&D lab works hard on process advancement as well as product enhancement, and helping customers at each step of the way. This includes things like providing customers desiccant test kits, so they can test desiccant activity at their own premises. This test currently takes about an hour to complete, but we've been working on improving this process and are confident when we have finished developing it we can get it down to 15 minutes.

"At Edgetech, it's all about making the customers' lives easier, whether it's with product, processes or the number of



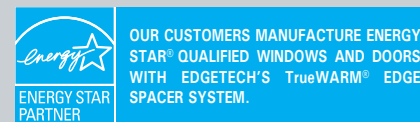
equipment options we give them. At last year's GlassBuild show in Atlanta, Edgetech was the only spacer supplier with several machinery suppliers featuring its product on their booths. The easier we can make it for our customers to access the appropriate equipment and products, the better they will do. And the better our customers do, the better we'll do - so it's win-win.



Analytical capabilities include gas chromatography and other specialized equipment

"We hope to see many of our valued customers testing products in our new expanded laboratory in the months to come."

TrueWARM®
s p a c e r s



Small Super Spacer IG fabricator not afraid of growth

"They say fear is the greatest motivator. Well, about two years ago, I personally experienced that good things can happen when you confront the fear of losing one of your best customers," recalls Mike Browne, President of Cincy Glass, Inc., a Southwestern Ohio Super Spacer® IG fabricator, founded in 1994. CG sells to a network of 17 vinyl window manufacturers and small glass shops in Ohio, Indiana and Kentucky.

"We had been making only IG with aluminum box spacer, when one of our valued Amish window manufacturers told me he was planning to leave us because he needed 'the best warm edge spacer' in the windows he made," explains Browne. "For us, it was a wake-up call that motivated Cincy Glass to transform our busi-

ness with the help of Edgetech, a fortuitous decision that has since put us on a fast track for significant growth in 2006."

Browne called Edgetech and soon Cincy Glass had not only saved a customer, it had secured its entire dealer customer base by introducing them to Super Spacer. Within four months of setting up a Super Spacer IG production line, CG moved to 100% warm edge unit production. "Not only was the customer saved, but all of our other window fabricators were excited about Super Spacer," says Browne. "Soon customers were pleased with the excellent thermal performance and condensation resistance that NO-Metal Super Spacer offers, because it's so much less conductive than aluminum. Indeed, since switching to Super Spacer, reported seal failures have dropped to virtually nothing." Other attributes favored by the dealers include the improved visual appearance, compared with box spacer. "It looks cleaner and has better eye appeal," says Browne, "and more and more, we hear they like the fact they don't have to worry about mold problems."

At the same time, Cincy Glass soon found that establishing a Super Spacer

production line actually improved its window production rate by 30%. "The Edgetech product is extremely easy to apply, right after the washer. We've eliminated a step by not having to add desiccant, as we did with traditional box spacer. And by using Spadix sealing equipment, it's a very efficient horizontal line," says Browne. "We are currently able to produce more than 400 IG units per day for anticipated sales growth."

Much of Cincy Glass' volume growth in 2006 is expected to come from increased business from an existing customer, Home Guard Industries Inc., located in Grabbill, IN.

"We are currently ramping up to assume the bulk of Home Guard's substantial IG business for their upscale light commercial Regency and residential Home

Star vinyl window lines," says Browne. Home Guard is also a leading manufacturer of security storm and entry doors.

Home Guard began using Super Spacer in 1991 as an optional upgrade for a dealer network that today numbers more than 600 across the Midwest and East into New York, Pennsylvania, New Jersey, Baltimore, DC and Northern Virginia. "We and our dealers have been 100% committed to Super Spacer for many years, and we're excited to be moving our relationship with Cincy Glass into high gear this year," says Brian Barbieri, Home Guard VP Sales and Marketing. "We appreciate CG's experience, dedication and capability to make high quality Super Spacer IG for our upscale customer base. And, it goes without saying, we feel that Edgetech and Cincy Glass are both critical to Home Guard's long term success.

"After all," adds Barbieri, "Our customers' customers like to ask this question, 'Why settle for just warm edge when you can have the world's only TrueWARM® edge in your windows.'"



Brian Barbieri (left), Home Guard Industries and Mike Browne, Cincy Glass