



## WHAT'S NEW IN GLASS



### Glasstech Announces Partnership with Vesuvius

The newly created partnership between Glasstech, Inc. and Vesuvius has set new standards in the area of customer service for businesses in the glass industry.

The agreement, announced October 29 at the glasstec 2002 trade show in Dusseldorf, Germany, allows Vesuvius to serve as the exclusive supplier of ceramic rollers to Glasstech customers.

Glasstech, which previously manufactured its own ceramic rollers, aligned with Vesuvius because Vesuvius adheres to the same high quality standards as Glasstech, according to Glasstech President Mark Christman.

"Vesuvius meets the quality requirements that Glasstech adheres to, and that is why we have joined forces," Christman said. "In addition, our customers now have worldwide access to Glasstech quality rollers through the Vesuvius network."

"The partnership allows Glasstech to devote more of its time to innovation and research and development," Christman added. "In return, Glasstech customers can enjoy faster turnaround for ceramic roller orders from Vesuvius' worldwide sales and service network."

"For years, Glasstech processed its own rollers to our own

## Reorganization Plan Opens Door for Stronger Glasstech

As promised, a much stronger and more viable Glasstech has emerged since the Perrysburg, Ohio-based company's financial reorganization plan was approved by the United States District Court in July.

Glasstech, the global leader in the manufacturing of glass bending and tempering equipment, received approval of its negotiated settlement in just six months. Its petition to reorganize was filed in late January.

"When we filed earlier this year, we said the company would emerge quickly and strongly; and that's what has happened," said Mark D. Christman, Glasstech's President and CEO.

The financial reorganization converts all \$70 million of the Company's debt into equity, which provides further relief to the Company through elimination of an annual interest expense of approximately \$9 million, Christman said.

"This conversion of debt to equity dramatically improves our balance sheet and greatly improves our cash flow. We are positioned to serve the need of our customers well into the future," Christman added.

Nancy Colyer, President of J&S Industrial Machine Products, Toledo, Ohio, a long-time Glasstech supplier, commented: "I am absolutely satisfied with the reorganization and have complete confidence that a stronger Glasstech has emerged. They've taken the necessary steps to make Glasstech a forerunner in the industry."

According to John Baxter, Glasstech's Senior Vice President, Marketing and Sales: "For more than 30 years, Glasstech has produced leading-edge glass bending and tempering systems and has supplied them to glass processors worldwide. Many of our systems have become standards in the industry."

"Glasstech has developed some excellent new products and, with our financial situation now resolved, I expect our sales to be even stronger."

Founded in 1971, Glasstech has installed more than 400 glass bending and tempering systems in 45 countries on six continents.

## Glasstech's ERH Systems Provide High Efficiency and Cost Effectiveness



More than ever before, glass producers are demanding systems that address two critical areas — cost and effectiveness.

Glasstech, Inc. meets that request for high quality and efficiency with the ERH2 (Electric Radiation Heating) and ERH-Plus systems.

With superior tempering technology, these machines are recognized as two of the world's leading systems for the efficient processing of all types of flat glass products.

"The ERH2 will help improve production quality, ensure glass surface quality and improve your bottom line," said Jay Molter, director of marketing and sales.

A patented clamshell quench with side-feed air supply is one of the most efficient available and reduces operating costs. The high efficiency quench directs airflow evenly, and through computer designed modules, provides quenching with minimal energy consumption. It also allows for easy cullet removal in the event of broken glass.

Modular construction ensures fast, efficient, lower cost installation. The specially cast insulating roof panels with built-in heating elements create a thermally stable environment and provide optimal temperature uniformity with minimal sensing requirements.

The ERH-Plus system adds a convection option designed to process Low-E glass at a faster rate than the traditional electric radiation system. This option improves the productivity of Glasstech's traditional ERH process, particularly for glass having performance coatings.

stringent quality requirements," Christman said. "But what we found in Vesuvius is a company that works to the same quality specifications and has an excellent reputation in this industry."

Vesuvius, with globally positioned manufacturing plants, is world-renowned for high-quality rollers. With sales and technical support personnel located in every major market, Vesuvius can service Glasstech customers with the ability to work in the local language, currency and customs.

"Vesuvius provides a ready supply of standard rollers in stock for quick response and consistent supply, so customers will always be serviced promptly with premium rollers," said Vesuvius Glass Group President Gary Novak. "We're proud and excited to partner with Glasstech, and we're certain Vesuvius will enhance the service to Glasstech's customers."

In addition, Novak said that Glasstech customers may take advantage of Vesuvius' technical seminars, training programs, and specialized laboratory services at no charge.

Vesuvius will also serve as Glasstech's exclusive refractory resource for all major refractory components.

More and more companies are demanding systems that can efficiently process Low-E glass, and the ERH-Plus is a system that meets those requirements. "In addition, the ERH-Plus is priced reasonably and can retrofit to existing machines," Molter said.

The new architectural system also has the ability to process Low-E glass approximately 25 percent faster than the original ERH system, according to Molter.

"Both of these systems bring all the benefits of Glasstech's many years of experience," he said. "Every feature to these systems is designed to help our customers save time, save money and meet our customers requirements."

## Glasstech Implements Control System Upgrades

Glasstech, the world leader in the manufacturing of glass bending and tempering equipment, has implemented a control system upgrade program for automotive and architectural systems that will provide increased control performance and improve overall productivity.

According to Glasstech's Steve Connell, system retrofits have become necessary as some system replacement parts have become outdated and obsolete. To meet the increasing productivity needs of its customers, Glasstech has incorporated newer, more efficient technology into the retrofits for these systems.

These new systems will be easily upgraded and expanded as customers needs' change and new technology becomes available, said Connell, Glasstech's manager of system engineering.

The new control system, a commercial PLC, is user-friendly and works with both the architectural and automotive glass processing systems. Customers have the option of choosing between the Allen Bradley and ABB processors for their upgrades, Connell said.

According to Connell, the upgraded control systems will provide customers with such benefits as reduced training times, shortened down times, and better diagnostics. The front-end support is also multilingual, he said.

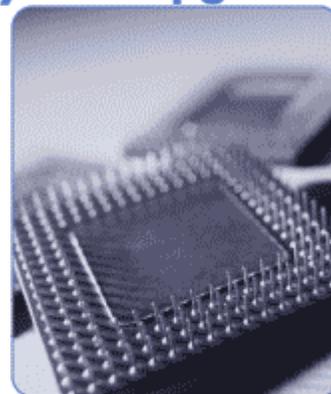
With the architectural systems, users will find improved controls that provide a better understanding of the machine. The heat controls are now time-based instead of position based, Connell said. The automotive systems have commercial motion controllers that offer improved accuracy and repeatability.

All systems have an easy-to-use remote diagnostic capability so all devices can be monitored from a central operator interface. This speeds up the troubleshooting process and helps the operator to correct potential production issues, Connell said.

The new control systems can be connected to a company's network, according to Connell, allowing personnel to check on the status of production runs.

The downtime required for installation is limited due to the design of the retrofit. Since the 6809 I/O is not distributed, only a single panel may need to be modified. To help keep downtime at a minimum, the start/stop and safety devices will not be modified. The retrofit to convert an automotive 6809 system to the Glasstech-PLC solution is expected to take three weeks or less and the architectural retrofit can be accomplished in two or three days.

System efficiency benchmarking will be set up during the installation process so that the customer can compare system performance from before and after the retrofit.



"We're retrofitting the 6809 microprocessors because the chips are obsolete and replacing them with new and improved, high-speed control systems," said Connell, Glasstech's manager of systems engineering.

## glasstec 2002 Trade Show



Glasstech, Inc. is pleased to announce its participation in the glasstec 2002 trade show in Dusseldorf, Germany. The 17th International trade fair is expected to draw more than 1,000 exhibitors and 55,000 trade show visitors. **Glasstech will be located at Hall 13, Stand E07.**