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CRB-S

More on Glasstech's solar energy systems which produce superior glass parts for concentrated solar power, high concentration photovoltaic, and thin film and silicon wafer photovoltaic applications.

EPB-L

Glasstech will deliver its new generation windshield system, ideal for frameless wiper systems and heads-up displays, by the end of the year.

Aftermarket

New motor drives for Glasstech automotive systems promise additional diagnostics, leading to more uptime.



Stock Photo

Demand Strong for Solar Systems

Demand is strong for Glasstech, Inc.'s recently introduced line of systems specially modified to meet the demands of the fast-growing solar power industry.

"We already have a Solar CRB-S™ system operating in Europe and providing shaped and strengthened glass substrates for the concentrated solar power (CSP) industry segment; and Solar ERH-S™ and Solar FCH-S™ systems in North America are producing the extremely flat glass substrates demanded for photovoltaic solar power modules," said Michael Ondrus, Glasstech Director of Solar Energy Systems.

Ondrus said the Solar CRB-S located in Europe is changing the CSP industry segment and generating additional interest and excitement worldwide.

Glasstech has received significant inquiries concerning its wide-ranging line of solar systems. Ondrus described the inquiring clients as representing a broad spectrum with interest in both shaped and flat glass processing systems.

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Demand Strong for Solar Systems

Story continued from Page 1.

According to Ondrus, Glasstech's family of solar systems includes machines for the production of bent glass substrates used by the concentrated solar power and the high concentration photovoltaic (HCPV) markets to act as the base for reflective coatings. The finished parts are used for trough, tower and dish technologies:

- Solar CRB-S – Cylindrical Radius Bender, Solar Parabolic Shapes: Does not require tooling to form parabolic and cylindrical shapes for parabolic troughs
- Solar EPB-S™ – External Press Bender System: Produces up to 900 precisely bent and curved glass parabolic or spherical shapes per hour, depending on size and thickness
- Solar DB 4-S™ – Deep Bend Advanced Bending and Tempering System: Ideal for production of smaller, high volume spherical and parabolic shapes demanded by the HCPV market

To meet the solar power industry's demand for extremely flat, repeatable substrates for thin film photovoltaic (TFPV) active plates as well as back and cover plates for TFPV and silicon wafer based

photovoltaic (PV) panels, Glasstech offers the following systems:

- Solar ERH-S – Electric Radiant Heater Flat Glass Tempering System: Continuous processing system ideal for heat treating active (coated) glass, high light-transmission (low-iron) smooth or textured cover plates, rigid back panels and clear glass for PV panels
- Solar FCH-S – Forced Convection Heater Flat Glass Tempering System: One of the world's most efficient, reliable and cost-effective continuous tempering systems, it is ideal for producing flat panels for solar uses

"Solar energy versions of Glasstech systems are ideal for use in the expanding sustainable energy market," Ondrus said. When considering systems, Ondrus stressed that processors should remember that Glasstech Solar Glass Systems ...

- Are based on rugged, production-proven systems that have been in operation for years
- Deliver extremely tight surface and edge tolerances and the repeatability required to produce the large volume of glass parts demanded by the solar power industry

"Solar energy versions of Glasstech systems are ideal for use in the expanding sustainable energy market."

- Produce glass in varying degrees of surface strength – low-stress panels for lamination as well as heat strengthened or fully tempered glass for single-thickness uses
- Are made by a global company that understands glass bending and tempering and has been the leading innovator of glass processing systems for more than 35 years
- Are designed and serviced by Glasstech personnel, who have the depth of glass processing knowledge clients need and the worldwide resources to maximize processing time

For more information on

Glasstech's broad spectrum of shaped and flat glass processing systems, contact your Glasstech sales representative or Mike Ondrus at mondrus@glasstech.com.

See related story on Michael Ondrus, Page 4.

Glasstech Solar Energy Systems deliver extremely tight surface and edge tolerances and repeatability.

The EPB-L is ideal for frameless wiper systems and heads-up display systems.

EPB-L Systems to Ship

Very accurate surfaces, tighter tolerances, better control, less energy usage – all are requirements for automotive windshields, not in the future, but today.

Glasstech will deliver a system that meets these and other stringent requirements for windshields and current and future laminated auto glass parts by the end of the year.

The EPB-L process is very energy efficient, since only glass and one tool are heated.

The system is the Automotive EPB-L™ External Press Bending System, introduced recently. Windshields produced from EPB-L parts meet Audi/Volkswagen standards for original equipment windshields as well as the standards for two features found on today's upscale autos.

Specifically, the very accurate surface of an EPB-L windshield makes it ideal for frameless wiper systems, such as the Bosch ICON™, and the tighter tolerances required for heads-up display systems.

Many of these new windshield tolerance requirements are measured in as many as 50 discrete locations, according to Jim Schnabel, Glasstech's Vice President of Development.

The EPB-L's single tool set is price competitive to the multiple forming tools the gravity sag process requires, and the EPB-L's tooling requires much less maintenance and storage area in the factory. In addition, the EPB-L process is very energy efficient, since only glass and one tool are heated. With the gravity sag process, the multiple forming tools are heated and cooled for each windshield, consuming much more energy than the EPB-L process.

The most productive EPB-L system will produce as many as 225 windshields per hour and job changes will take less than 90 minutes.



Automotive EPB-L
External Press Bending System

The new drives can be retrofitted to existing Glasstech automotive systems.

Ondrus Named Director



Michael Ondrus brings a wealth of glass manufacturing and processing experience and knowledge to his position as Glasstech's Director of Solar Energy Systems.

"Mike's experience and educational background make him ideal to guide our efforts into this rapidly developing market segment," said Jay Molter, Glasstech's Vice President of Marketing & Sales.

Most recently, Ondrus was Manager of Sales and Marketing – Glass Operations for Atwood Mobile Products/Spec-Temp Glass, Antwerp, Ohio.

Previously, Ondrus held positions of increasing responsibility in the Building Products Division of Pilkington N.A., including Inside Sales Manager and Manager of Market Research and Planning.

Ondrus holds a Bachelor of Business Administration degree from The University of Toledo, Toledo, Ohio; and a Master of Business Administration degree from Ohio University, Athens, Ohio.

AFTERMARKET

Kinetix® Drives Keep Systems Operating

Any firm that operates large, complex manufacturing systems knows the key to productivity is to keep the systems operating. The sooner a production problem can be diagnosed and corrected, the sooner the system can be returned to profitability.

At Glasstech that process just got faster and easier with the addition of the Allen-Bradley® Kinetix™ 6000 multi-axis servo drives. The new motor drives complement the A-B ControlLogix® Controllers used by Glasstech on its automotive glass bending, tempering and annealing systems.

The Kinetix 6000 uses a SERCOS Interface™ to provide seamless integration into the ControlLogix platform for multi-axis integrated motion.

Glasstech's Steve Connell, Manager of Systems Engineering, said the new drives can be retrofitted to existing Glasstech automotive systems as well as being ordered on new automotive systems.

Among the Kinetix 6000's advantages Connell listed the following:

- Additional diagnostics
- More feedback from the drive and motor
- Noise immunity resulting from the use of fiber optic cable, instead of a wire, for data transmission
- Easier maintenance, since parameters are stored in the computer
- No re-tuning needed

Providing additional diagnostic, drive and motor information, the Kinetix 6000 further enhances Glasstech's remote troubleshooting ability. By using ControlLogix Controllers, Glasstech can monitor automotive systems as they operate in manufacturing locations worldwide from Glasstech's Perrysburg headquarters.

For more information on all Glasstech Aftermarket products and services, including the new Kinetix 6000 motor drives, contact your Glasstech sales representative.

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Glasstech is committed to continuously improve and provide its products and services so that they meet or exceed its own and its customers' quality, cost and schedule requirements. Images depicted within are representative of Glasstech glass forming capabilities.

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