

# **Glasstech Forms New Solar Systems Business Unit, Includes Several Current High Tech Systems**

**Michael Ondrus Named Director Of Solar Energy Systems.  
Versatile Equipment Provides Flat and Bent, Heat-Strengthened or Tempered  
Substrates.**

Perrysburg, Ohio, U.S.A. – Glasstech, Inc., the world leader in the development of glass bending and tempering equipment, has formed a new business unit to formalize its ongoing activities to meet the solar energy industry’s burgeoning demand for flat and bent glass substrates. The announcement was made by Mark D. Christman, Glasstech’s President and CEO.

Leading the unit will be Michael Ondrus, who has been appointed Director of Glasstech Solar Energy Systems. Ondrus will market the firm’s systems as the ideal technologies for the fabrication of bent glass substrates for concentrated solar power products (CSP) and extremely flat panels for photovoltaics (PV).



“The demand for glass by the solar industry is and will continue to become more significant over the next five years and could, at some point, rival auto industry usage,” Christman said. “And, just like in the automotive industry, the glass substrates used in solar energy will be sophisticated and will require repeatability, tight specifications, innovation and cost effectiveness.”

Ondrus said Glasstech is well suited to meet the demands of the solar energy industry.

“Glasstech has the technology the solar energy industry needs. Attention to extreme detail in the automotive industry has led to the development of highly specialized offerings for the solar industry,” Ondrus said. “Further, who knows glass bending and tempering as well as producing to tight specifications better than Glasstech? The company has been the leading innovator of glass processing systems for more than 35 years.

“And, Glasstech’s personnel have the depth of glass-processing knowledge clients need, whether they are a solar products manufacturer, glass fabricator, solar equipment supplier or turnkey system provider,” Ondrus said.

Glasstech systems 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.

“Heat strengthened and fully tempered glass parts can potentially reduce failures in the field, which can mean increased cost effectiveness and reduced operating costs,” Ondrus said.

He said solar-energy versions of several Glasstech systems are ideally suited for use in the expanding sustainable-energy market.

“This is a high-technology industry that is on the cutting edge. It requires high-tech equipment,” said Jay Molter, Glasstech’s Vice President of Marketing & Sales. “Glasstech is the company with the rugged, production-proven equipment, the track record that will help drive down the cost per kilowatt hour of energy produced and bring repeatable processes and tight tolerances to this market.

“Additionally, Glasstech, being a global company, has a worldwide system of support to assist owners when an infrequent problem arises. This is a comfort to clients who know the longer their systems run without interruptions the more efficient and cost effective they will be.”

## **Glasstech Systems**

Glasstech’s **Cylindrical Radius Bender – Solar Parabolic Shapes (CRB-S™)** is the most efficient and precise system in the world for the processing of parabolic shapes for concentrated solar power (CSP). For the photovoltaic market (PV), the Glasstech **Electric Radiant Heater – Solar Features (ERH-S™)** and the **Forced Convection Heater – Solar Features (FCH-S™)** offer the highest productivity flat-glass systems meeting the very precise flatness specifications required for active plate and cover plate processing.

Glasstech has engineered the CRB-S as a cost-effective and efficient means of providing the glass parts needed by the CSP market.

Glasstech’s CRB-S features a forming bed that is 1,700mm by 2,000mm and processes glass of varying thicknesses, depending on the surface-strengthening treatment required. The system will form glass from 1.6mm up to 5.0mm for the specifications and tolerances needed for solar parabolic trough reflector glass parts.

CRB-S systems maintain characteristics similar to other systems in the CRB family and are able to form constant radius shapes, J-bends and the shapes needed to comply with parabolic trough specifications. The CRB-S meets the needs of the Concentrated Solar Power industry by delivering the tolerances and repeatability required to produce the large volume of glass parts the CSP industry will use.

Glasstech’s CRB-S does not use dedicated tooling. It bends glass using patented, computer-controlled technology. Because of its unique shape control, glass produced on the CRB-S achieves strict tolerances and a high degree of shape repeatability. A typical

system, configured to produce parabolic parts, will produce up to 150 parts per hour dependent upon thickness and size requirements.

The CRB-S's flexibility is due to its computer-controlled forming. Shape changes take only minutes. Each section of parabolic reflector requires distinctly shaped glass parts. Additionally, the CRB-S can produce low-stress glass for lamination and heat strengthened or fully tempered glass parts with minimal system changes.

To meet the needs of the PV market for extremely flat glass substrates, Glasstech has engineered solar glass versions of its gas and electric tempering systems.

The ERH-S is a continuous tempering line featuring Glasstech's electric radiant heater. The system will flat temper high transmission (low-iron) glass for cover panels and active (coated) glass as well as clear glass for PV panels. The ERH-S process these glass parts at fast cycle times with highly accurate perimeter and surface tolerances.

For systems that also will process Low-E glass, an electric convection heater can be selected as an option.

Glasstech's gas-fired convection heater system, the FCH-S, also is a continuous flat-tempering system. The FCH-S requires less floor space than the ERH-S and achieves the speeds and tolerances so important to the PV market.

For additional information, please contact your Glasstech representative or Michael Ondrus ([mondrus@glasstech.com](mailto:mondrus@glasstech.com)).

### **About Glasstech**

Glasstech, Inc., based in Perrysburg, Ohio, is the leading, world-class innovator of highly productive bending and tempering systems used to supply the worldwide automotive, architectural and solar glass markets. Glasstech glass bending and tempering systems have become standards for the efficient fabrication of high-quality glass products.