

## **ABB Robotics Provides Standardized Global Solutions for Automating Solar PV Lines**

*Diverse product line helps customers increase productivity in solar module manufacturing*

AUBURN HILLS, Mich. (November 11, 2008) – From high-speed FlexPicker™ robots to larger industrial robots for glass and ingot handling applications, ABB Robotics, a leading robotics manufacturer, provides a diverse robot range for customers in the solar photovoltaic (PV) industry. ABB's standardized solutions allow customers to automate solar cell and module manufacturing operations, improving productivity to meet the needs of the increasingly demanding solar power industry.

“We received a tremendous response from customers at the Solar Power Show in San Diego,” said Erwin DiMalanta, ABB solar segment driver. “ABB's extensive product line combined with the company's experience in cell and module applications places ABB in a strong position to provide automated solutions to the solar industry.”

ABB's automated solutions for solar cell and module manufacturing include:

### ***High-Speed Cell and Wafer Handling***

- Utilizes ABB's FlexPicker technology, combining high-speed IRB 360 robots with integrated vision and global service and support.
- An ideal selection for wafer handling lines and specialized wafer equipment.

### ***Robotic Soldering and Busing***

- ABB robots work in coordinated motion to load bus bars, protective sheets and other materials required for soldering tabs to bus bars.
- Integrated vision guidance system directs the robots to the soldering locations.

### ***Laminate Edge Trimming***

- Robots are fitted with an integrated trimming and module handling tool to cut excess laminate material.



- Robot's precise path ensures accurate path performance, allowing high precision with short cycle times for laminate edge trimming applications.

### ***Thin Film Glass Handling***

- A number of high-payload robot configurations for thin film glass handling.
- Clean room options for thin film processing.

### ***Framing, Glass and Module Handling***

- Solutions for end-of-line pack out, front-of-line load and station-to-station transfers for large thin film glass and crystalline module applications.
- Robots are used to load and unload frame sections for module assembly.
- Capitalizes on ABB's extensive experience in glass handling in the automotive and structural glass industries – similar methods are used for large-scale automated solar module manufacturing.

For more information, visit [www.abb.com/robotics](http://www.abb.com/robotics).

### **About ABB, Inc.**

ABB ([www.abb.com](http://www.abb.com)) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 120,000 people.

### **About ABB Robotics**

ABB is a leading supplier of industrial robots – also providing robot software, peripheral equipment, modular manufacturing cells and service for tasks such as welding, handling, assembly, painting and finishing, picking, packing, palletizing and machine tending. Key markets include automotive, plastics, metal fabrication, foundry, electronics, pharmaceutical and food and beverage industries. A strong solutions focus helps manufacturers improve productivity, product quality and worker safety. ABB has installed more than 160,000 robots worldwide.

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