

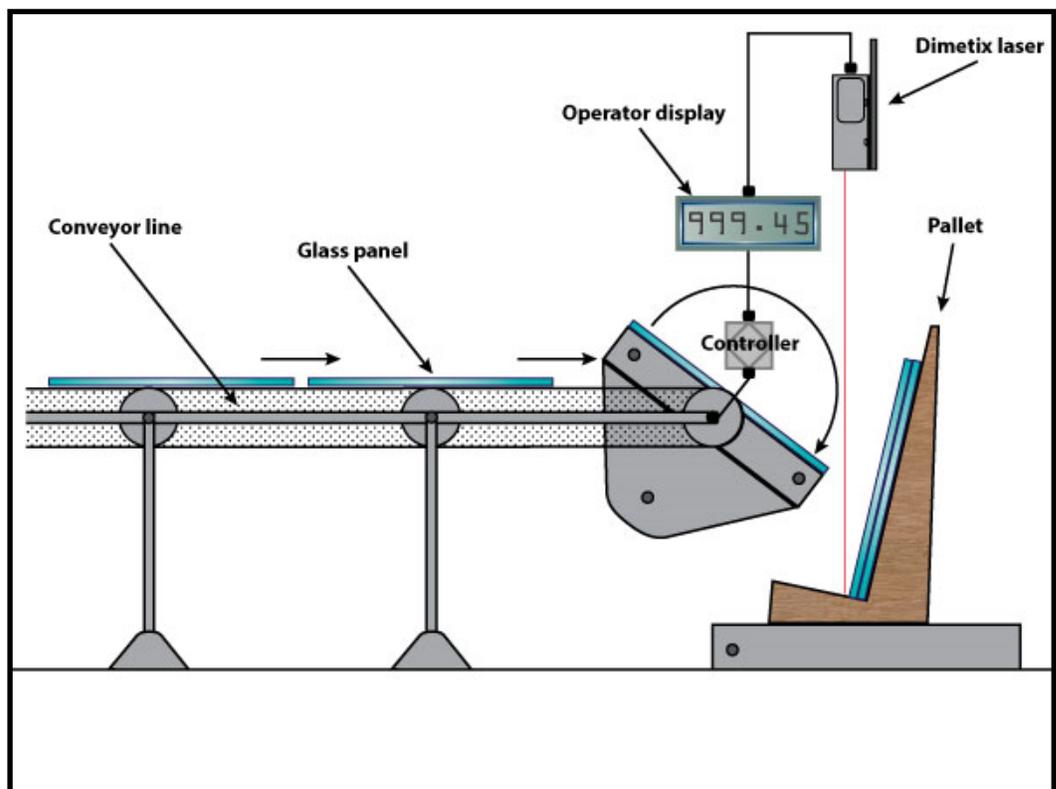
Application Brief:

Glass Manufacturing LASER MEASUREMENT SOLUTION PREVENTS DAMAGE TO GLASS PANELS DURING PRODUCTION

INDUSTRY: GLASS MANUFACTURING

APPLICATION: NONSTANDARD PALLET HEIGHT MEASUREMENTS

SUMMARY: A leading fabricator of sealed insulating glass units required a sensor solution that would monitor and precisely adjust glass panel position on a production conveyor based on the exact height of nonstandard pallets used to transport and store glass panels horizontally. Dimetix lasers offer several methods of communicating to control systems commonly used in manufacturing and production applications.



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Overview

Challenge

A leading fabricator of sealed insulating glass units required a sensor solution that would monitor and precisely adjust glass panel position on a production conveyor based on the exact height of nonstandard pallets used to transport and store glass panels horizontally.

Solution

In an area at the facility where glass panels are staged, a servo driven actuator system identifies and tracks the leading edge of the glass as it moves along the facility's conveyor line. After the conveyor apparatus picks up the glass, it was unable to compensate for nonstandard height of the pallets used to transport and store the glass panels in a horizontal position.

The Dimetix laser distance sensor measures the height of the pallet and adjusts a position offset to stop the glass panel and begin tilting it onto the pallet precisely at the point where there is no chance the glass can slide or be misplaced as it is gently placed on the pallets next to other glass panels.

KEY APPLICATION NOTES:

- Production delays and breakage eliminated
- Non-contact, eye-safe laser measurement
- Measurements can be acquired by a PLC or PC
- Maintenance free — no breakable moving parts
- Economical, rugged, and compact package

Technology

Dimetix laser distance sensors operate on a principle called phase shift. The laser signal is reflected directly back to the device. This technique provides high accuracy at a significantly lower cost than traditional laser triangulation methods and is generally more accurate than time of flight methods. Since the transmit and receive signals come back straight to the device, the laser can be mounted in tight spaces, making retrofits simpler. The device is also capable of measuring with 1.5 mm accuracy, even up to 500m. Distances over 65m usually require a special reflective plate affixed to the target.

Please [contact](#) Dimetix USA today to discuss your next application.

