DIMETIX APPLICATION EXAMPLE

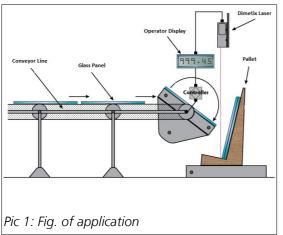
AE-0502

GLASS PANEL POSITION MEASUREMENT

Industry: Glass

Application type: Position measurement

Brief description



A leading fabricator of 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. These pallets were used to transport and store glass panels horizontally. Dimetix laser distance sensors offer several methods of communicating to control systems commonly used in manufacturing and production applications.

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 to stop the glass panel. After stopping the Panel, the machine begin tilting it onto the pallet precisely at the point where there is no chance the glass can slide or be misplaced. It is gently placed on the pallets next to other glass panels.

Customers advantages

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

Products used

FLS-C series

The FLS-C distance measuring device measures absolute distances up to 500 meters on reflective foil without contact. Due to most innovative laser technology the FLS-C has a unique accuracy of ± 1.0 mm. A further advantage of the FLS-C is the guick determination of the positions of moving objects.

The FLS-C is an optical distance measuring device. It measures, maintenance-free, distances up to 65m on natural surfaces. It determines positions of objects that are difficult to access or may have very high surface temperatures. Just as easily, it accurately measures distances in hazardous environments.

The FLS-C is designed to be suitable for both, heavy industrial and outdoor applications. It is constructed of a solid metal case and provides class IP65 environmental protection. It represents a cost efficient solution even at extreme environment temperatures as low as -40° C. Furthermore, various features make it flexible for multiple applications in numerous industries such as automotive, paper, metal and textile.

Specification

- Measuring range 0.05 up to 500m
- Accuracy ±1.0 mm
- Repeatability ± 0.3 mm
- Extended operating temperature
- Solid metal case IP65
- Supply voltage



For new projects we recommend our **D-Series**. Further information can be found <u>here</u>.

For more information please contact us on application@dimetix.com