



Sensors

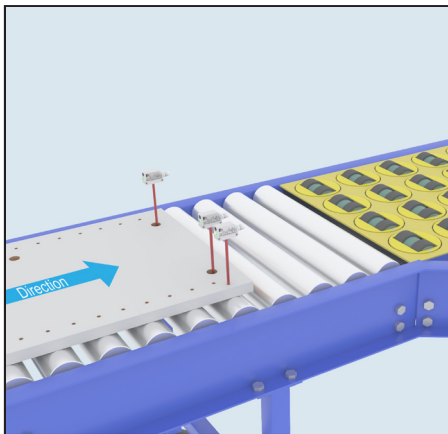


Switches



Controls

Application notes



Application Note : June 2021

Market involved : Wood industry

Product : PD30CT...IO

Customer : OEMs

Subject : Pattern recognition

CUSTOMER ISSUE :

The manufacturers of panels for furniture need to verify that all the drilled holes or the mounted tabs are present and put in the right position.

If an error is detected, the panel must be pushed over to an inspection conveyor belt.

OUR SOLUTION :

The PD30CT...IO or the PD30ET...IO are available in Diffuse reflective, Background suppression or Retro-reflective versions that can be suitable for this application.

By means of the IO-Link the sensor can be configured to run the operation as a stand-alone solution.

An implemented "Pattern recognition" function allows the possibility to record a reference pattern and the panels will be compared to the preinstalled reference patterns.

If the monitored pattern does not match, the sensor responds on its outputs.

BENEFITS :

- A PLC is no longer necessary to run this operation. A Trigger sensor is needed to detect the full length of the object while one or more main sensors will detect each pattern to be verified. The Main sensor itself will compare the pattern on the panel with the pre-recorded pattern and if an error is found the Main sensors will respond.
- The IO-Link allows easy customization of distance, timer, logic functions as well as different output configurations.