

## Keeping a Rolling Sheet From Meandering Out of Alignment

### Challenge

Paper manufacturing, packaging machines and metal stamping are some of the processes that have long rolling sheets of material that needs to stay aligned during the production process. The use of fiber-optic sensors helps make sure the material is passing over rollers and feeds correctly into the machine process.

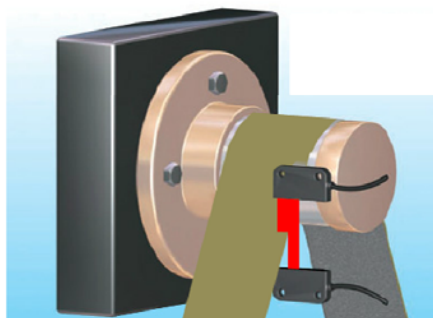
### Solution

By using E3X-HD Fiber-optic Amplifiers and E32-T16 area monitoring sensing heads, the position of the sheet can be controlled. The amplifier can be set to provide an output signal if the material starts to meander and becomes misaligned. This will keep the manufacturing system from shutting down or damaging material.

### How It Works

The E3X-HD fiber-optic amplifier provides ultra-stable performance and smart tuning for high-speed, reliable detection of sheet materials. The fiber-optic sensor can be tuned to precisely sense the position of the material and send a signal when the material starts to meander.

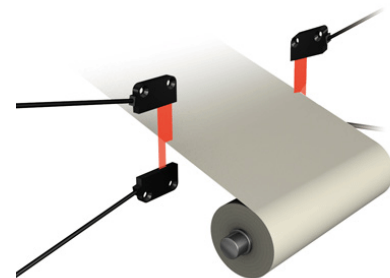
The E32-T16 Series sensing head can be located perpendicular to the material and as the material moves from side to side, the E3X-HD amplifier can determine the amount of light returned. This will indicate if the material starts to move out of alignment. All of this can be done at high speeds to increase the through-put of the material and increase the amount of end product being produced or packaged.



E32-T16  
Fiber Head



E3X-HD  
Amplifier



2 sets of Fiber-optic Amplifiers  
and Fiber Sensing Heads

### For More Information

For more information on the E3X-HD Fiber-optic Amplifier and E32-T16 Fiber Head visit [www.omron247.com](http://www.omron247.com) or contact Omron at 800-55-OMRON.