

# APPLICATION NOTE



# SAFETY

## IR TEMPERATURE MEASUREMENT ON THE PLANING LINE

FOR FIRE PROTECTION AND QUALITY CONTROL



Wood industry



Fire prevention



Quality control

### Customer requests

Fires in sawmills and other forestry product plants are a **real threat!** There have been nearly **130 fires** in these production facilities between 2010-2014 in the US alone and **79 fires** in the **last 5 years** (as of 2020) in Germany, Austria and Switzerland.

At the Austrian company **Binderholz GmbH**, various products are machined using planing machines. During the production process, **excessive friction** can generate heat, which can cause **shavings to ignite** and cause a fire. The company was looking for a solution to **prevent the risk of fire**.

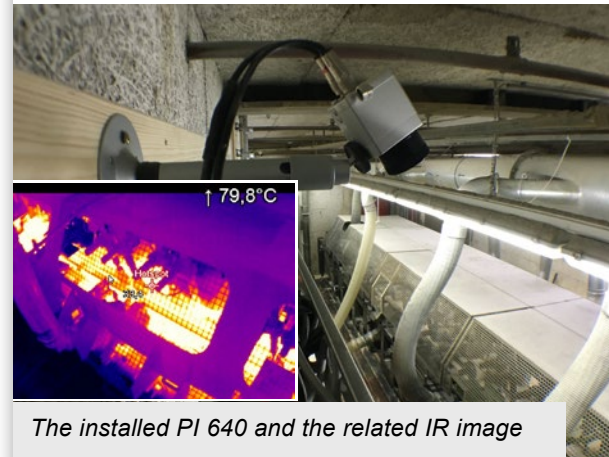


Monitoring the process via a large live monitor  
(image: binderholz)

### Solution by Optris

To avoid the risk of fire, Optris installed Infrared temperature monitoring systems across the planing line. This system contains the optris **infrared cameras (PI 400 and PI 640)** and the license-free **software optris PIX Connect**. The compact design of the cameras is a major advantage for the application and allowed **quick and easy installation** of the system.

- Robust & compact design (IP64)
- Withstands harsh environments
- Up to 125 Hz measurement
- Easy to install, even in tight spaces
- Network connection
- Different optics available
- Automatic hotspot detection with alarm output
- Self-monitoring system (fail-safe signal)
- Multiple cameras visible on one software screen simultaneously
- Camera resolution of 382 x 288 pixels or 640 x 480 pixels
- Display infrared images on a standard PC or with IRmobile App on a mobile device
- Various optional accessories available like CoolingJacket or air purge



The installed PI 640 and the related IR image  
(image: binderholz)

### Further advantages

The Optris cameras are also used for **quality control** in this application. Depending on the contact pressure of the stop rail, the wood surface can likewise heat up considerably - discoloration or even scorch marks are then the results. By **monitoring the wood surface** temperature by the Optris cameras directly in the machine such quality defects can be detected early and the **scrap rate** can be **reduced significantly**.



Optimal for use in the application field of fire prevention