

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 **80 fires** in these production facilities in the **last 5 years** (as of 2020) in Germany, Austria and Switzerland alone.

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**.

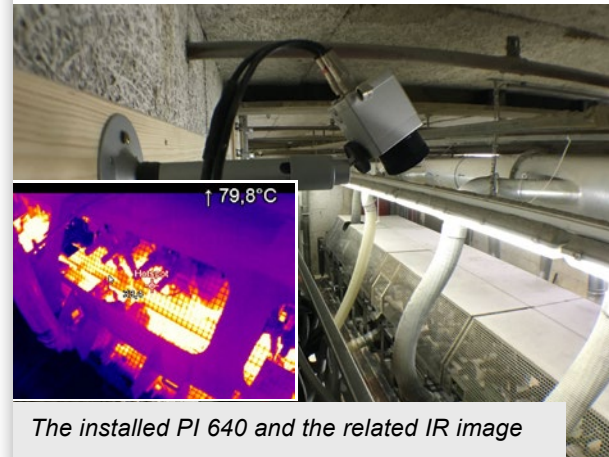


Monitoring the process via a large live monitor
(image: binderholz)

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.

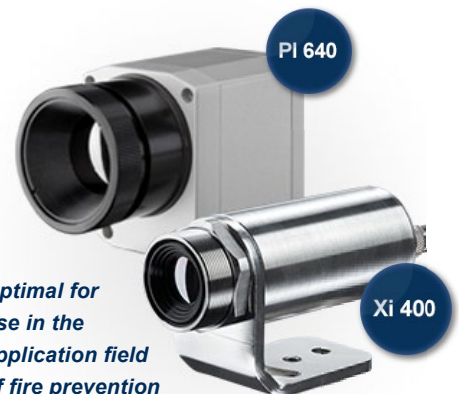
- Robust & compact design (IP64)
- Withstands harsh environments
- Up to 125 Hz measurement
- Easy to install, even in tight spaces
- Network connection
- Different optics available
- Automatic hotspot detection with alarm output
- Self-monitoring system (fail-safe signal)
- Multiple cameras visible 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