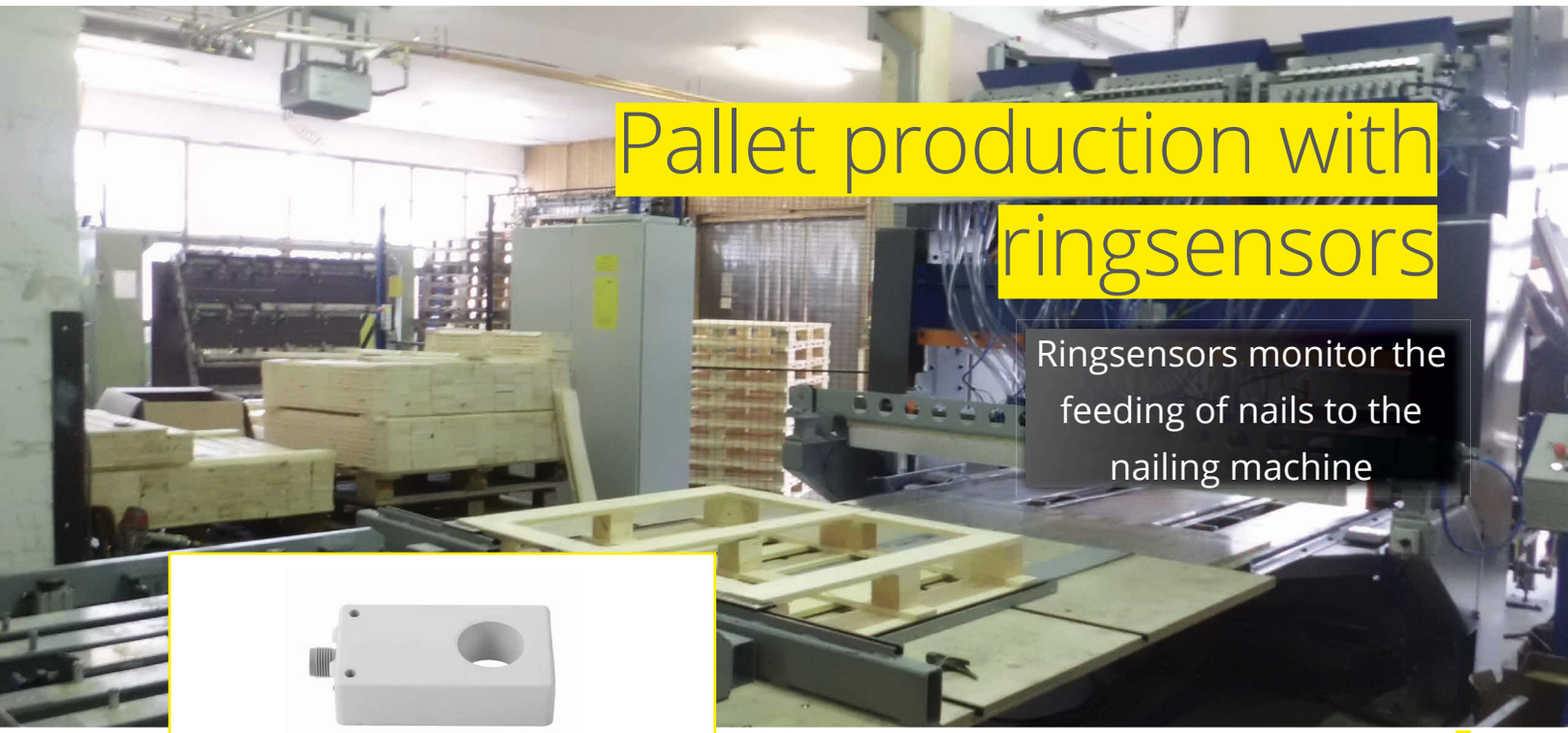

Pallet production with ringsensors

Ringsensors monitor the feeding of nails to the nailing machine

Proxitron ringsensor IKV 025.23 GK

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Wooden transport pallets are now a crucial part of many logistics processes. They are used in numerous types of business and are available in a wide range of designs and shapes. The best-known form is the EURO pallet. These pallets are produced according to the guidelines of EPAL, the European Pallet Association, and are designed to ensure a smooth material flow.

Automated nailing machines are used in producing these pallets. Nails are shot with compressed air through hoses to firmly connect the individual pieces of wood together. This is often performed with as many as 34 nails at the same time. It is vitally important that all nail joints are connected correctly. Missing nails could result in the pallet's deformation or disassembly during subsequent operation. With automated logistics processes (such as in high-bay warehouses), it may result in material congestions resulting in the total loss of the transported goods.

In this application, Proxitron ring sensors are preferred by many manufacturers. These sensors reliably detect the nails that are rapidly shot through the hoses. The sensors can be adjusted allowing for various nail sizes. The sensors detect the nails in the hoses right before they reach the impact machinery and thus allow you to monitor the exact number of nail joints used in the process for producing pallets. If there is any deviation, the pallet is removed from the production process and can be manually checked and reworked if necessary.

Proxitron ring sensors for nail machines are equipped with an external switchable control LED that can precisely display, via the process control, the particular hose where the nail did not reach the impact machinery. This makes it possible to eliminate the cause (e.g. a nail jam in the machine) quickly and the defective pallet can be reworked exactly at this point.

At a glance

- Pulse extension option
- Can be fitted in lines
- Stackable
- High quality plastic housing
- Detection of nails, screws, and similar
- Part counting
- Easy installation

Technical data

Minimum object size:	4 mm Ø (steel ball)
Max. object speed:	60 m/s
Output:	PNP normally open
Operating voltage:	10 - 30 V DC
Housing material:	Plastic
Ambient temperature:	-25 to 70 °C
Control LED:	Yes

Options

- NPN output
- Normally closed version
- Numerous cable and plug variants
- Customer-specific solutions
- Analogue output

*We thank company Weck Industrieverpackungen & Sägewerk, Inh. Johannes Kirchner e.K., for the permission to public the photos.
For further information about company Weck please go to www.weck-holz.de

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