

Stamping

MINIMIZE DOWNTIME AND SETUP TIME AND ENSURE REMOVAL

Stamping places a load on the sensors as well as the tools. Balluff sensors and accessories function with high reliability even under high forces. Our **rugged components** let you minimize downtime and reduce your overall costs.

Increased product variety requires more frequent tool changes and equipment refitting. But when the presses stop, the costs don't. Our **inductive couplers** simplify tool changes by transmitting the power and signals without contact. This provides high flexibility while also preventing wear. An ID stored in the sensor/actuator hub prevents incorrect associations.

With **IO-Link sensors**, the parameter data can be stored directly in the IO-Link master, so no time-consuming reentering of parameters is necessary. The system loads the data directly into the device.

Removal of stamped parts over slides or belt conveyors needs to run without interruption to avoid bottlenecks and protect the stamping tools from damage. Our light curtains and inductive sensors immediately report any backup to keep parts moving efficiently.

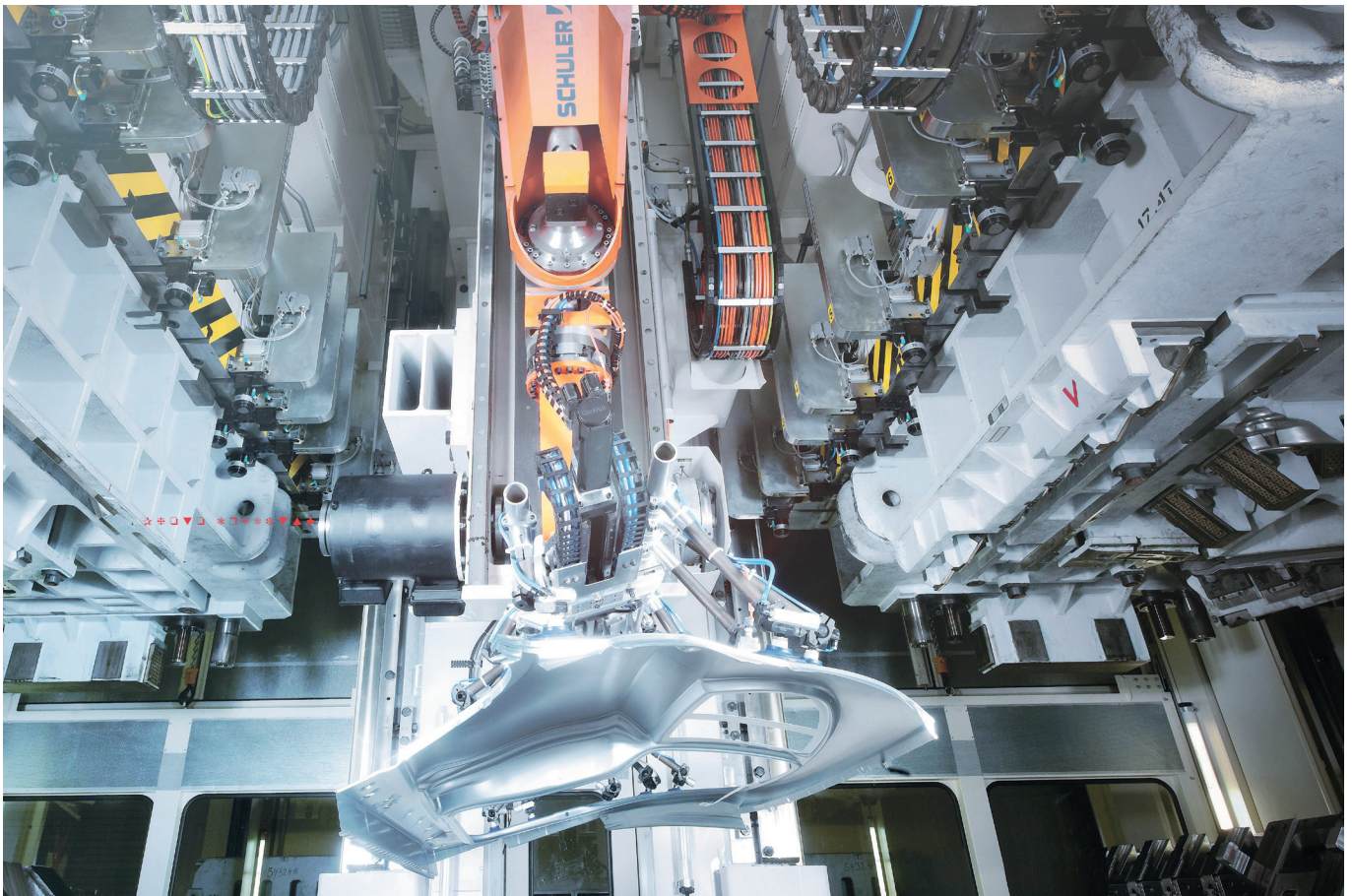
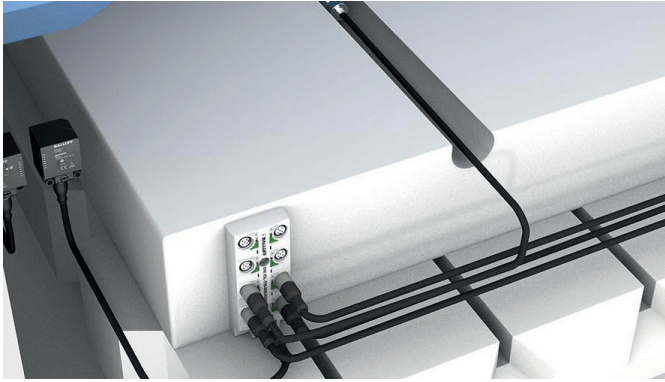
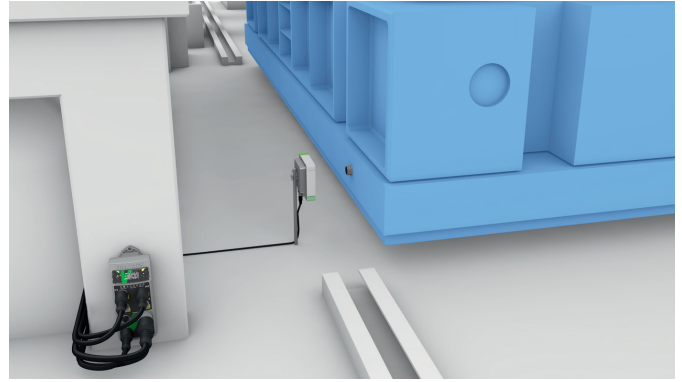


Photo credits: Schuler AG



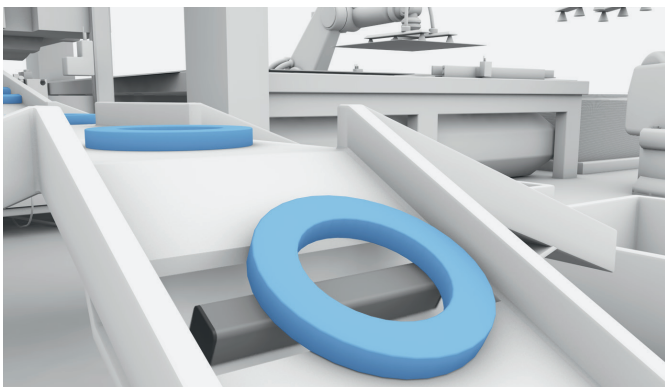
FAST TOOL CHANGING

Our **inductive couplers** assist in automatic tool changes by transmitting data and power over an air gap without any mechanical contact. This minimizes setup times for tool and robotic gripper changing and ensures high uptime. The signal is transmitted again directly after the tool exchanges so production can restart without delay. The correct association is ensured by an ID stored in the sensor/actuator hub.



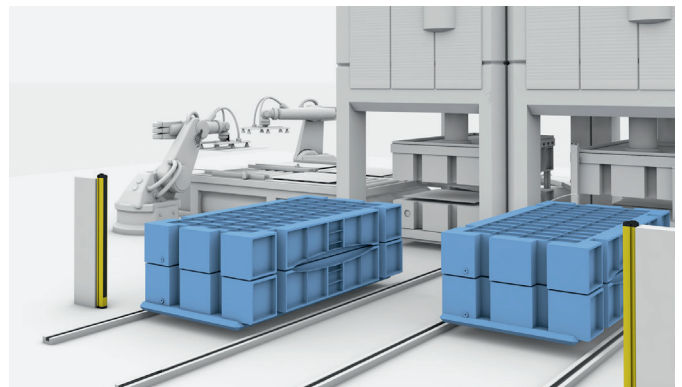
EFFICIENT TRACKING

Install automated RFID technology identification to ensure the right tool is used at the right time in large press lines. In addition, an RFID system can collect part-specific product, production and quality information. Balluff **UHF systems** provide the capture ranges and high protection ratings you need. Setting the parameters is easy: use the Auto-Setup button on the reader to put the system in service in just moments.



RELIABLY DETECT PRESSED PARTS ON SLIDES

When press parts slide from the belt into stack nests or transport containers, our **inductive sensors** are ideal for checking the presses, because with a capture range of up to 300 mm they can monitor the entire slide width. This gives you certainty that nothing is left behind which could damage the tool. Another benefit: use a potentiometer or teach-in button to set the switching distance of up to 30 mm.



SECURE ACCESS TO PRESS LINES

When tool changes require that tools be moved in and out of the presses on rails, the area needs to be secured to prevent injury. Our **non-contact protective devices** detect fingers, hands or bodies and stop the machinery when danger threatens. Deflecting mirrors can secure three sides of the area.