

MILANO

2016 OCTOBER 19

INDUSTRY 4.0 ITALY

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CEO BALLUFF AUTOMATION SRL

BALLUFF – A GLOBAL PROMISE

Global proximity to customers – strengthening local support



9 production sites

61 subsidiaries and representatives

366 € Mio revenue

3000 employees

BALLUFF IN ITALY A KEPT PROMISE

proximity to customers – strength support



Grugliasco (TO)

Italian Headquarters

20 years as direct subsidiary

24 € Mio revenue

55 employees

BALLUFF – A GLOBAL PROMISE

We represent progress – from the spaetzle press to a complete portfolio for industrial automation



1921



2016

BALLUFF – A GLOBAL PROMISE

We are ensuring sustainability through innovation

1921 founded _____ 95 years of creativity _____ 60 years of sensor technology _____



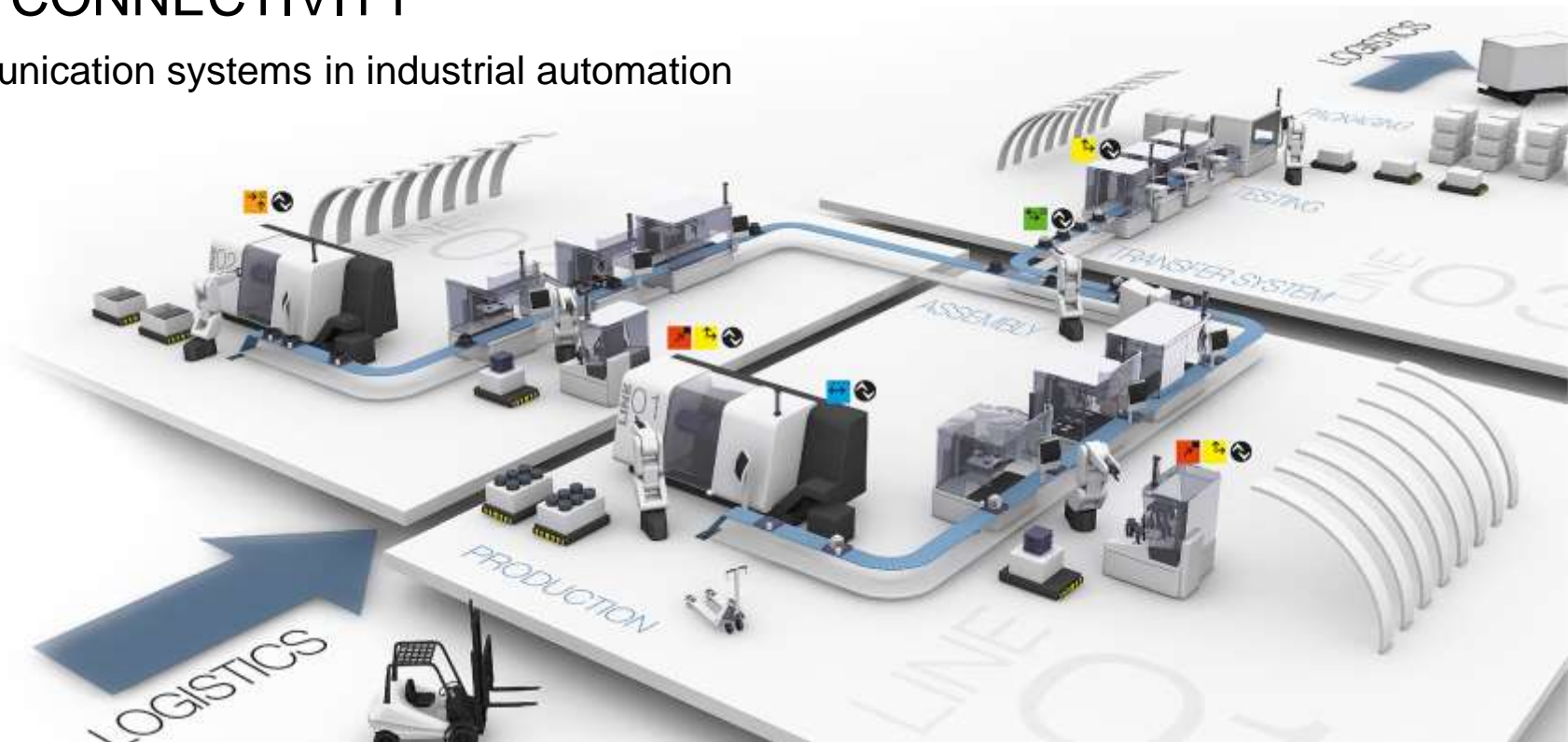
BALLUFF – A GLOBAL PROMISE

We develop individual industry solutions – focused and flexible



INDUSTRIAL NETWORKING AND CONNECTIVITY

Communication systems in industrial automation



INDUSTRIAL IDENTIFICATION

Industrial RFID and image processing systems ensure maximum quality



RFID supports process control: Are the parts being brought to the right production stage at the right time?



For engine assembly RFID ensures reliable parts traceability throughout all the production steps.



RFID ensures access control even through stainless steel.



Just-in-time: RFID ensures the correct delivery of all materials in intralogistics.

INDUSTRIAL IDENTIFICATION

Industrial RFID and image processing systems ensure maximum quality



RFID ensures continuous material flow in kanban facilities.



RFID enables fully automated tool management, thereby guaranteeing optimal tool utilization.



Image-processing vision sensors read and inspect the codes on circuit boards.



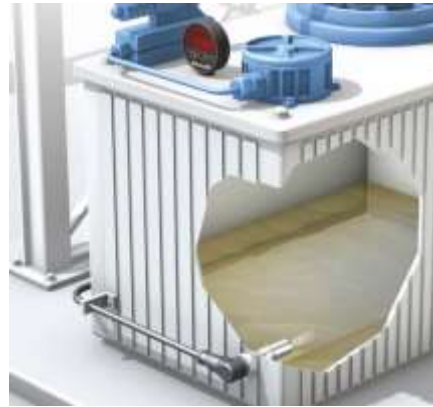
Is the cap sitting on the bottle? Completeness inspection in bottling systems is handled by vision sensors.

OBJECT DETECTION

Need-based solutions with the highest level of reliability



On the conveyor belt photoelectric sensors perform presence checking of engines.



Capacitive sensors monitor the level in an oil tank in machine building.



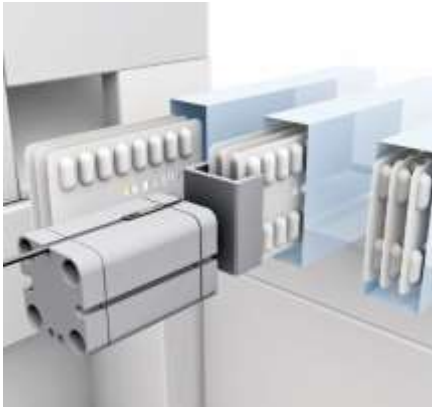
Photoelectric sensors are recommended for cap checking in a pharmaceutical filling system.



Inductive sensors detect rotor speed in power technology.

OBJECT DETECTION

Need-based solutions with the highest level of reliability



Magnetic sensors monitor the position of pneumatic grippers in the packaging industry.



Mechanical sensors are ideal for position detection in robotics control.



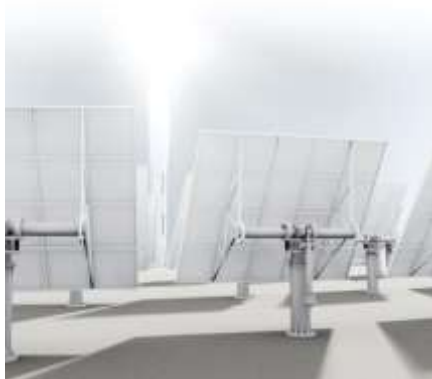
In the handling sector inductive sensors check for the presence of components.



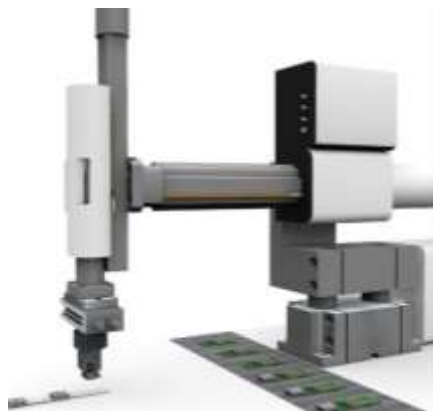
In the plastics industry ultrasonic sensors precisely count the number of workpieces produced.

LINEAR POSITION SENSING AND MEASUREMENT

The right measuring principle for the maximum result



Incremental magnetically coded position and rotary encoder measurement systems have proven themselves for years in high-precision mirror guiding to follow the sun.



Absolute magnetically coded position and rotary encoder systems ensure high-dynamic and precise positioning of the components.



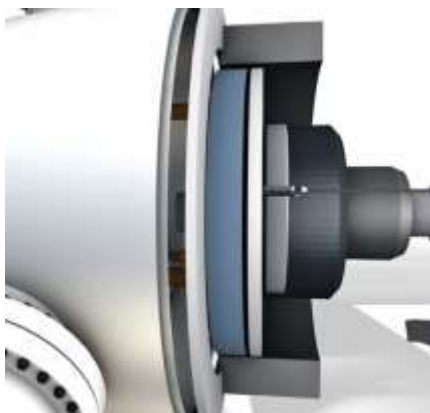
Inductive travel sensors provide linear positioning monitoring of drive spindles and clamping fixtures for tools.



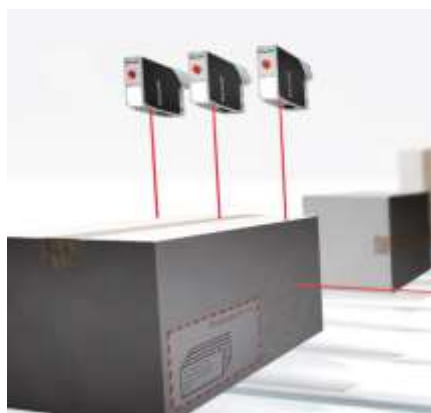
Linear transducers integrated into hydraulic cylinders provide exact measurement of position and traverse speed.

LINEAR POSITION SENSING AND MEASUREMENT

The right measuring principle for the maximum result



Inductive distance sensors precisely check the brake discs in wind power systems.



Optical distance sensors continuously determine dimensions or contours of products on the conveyor.



Ultrasonic sensors check the distance of transport boxes and detect whether they are full or not.



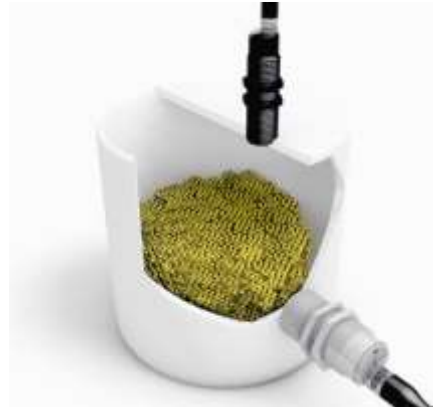
For fully automated control of the water level on weirs, inclination sensors detect all the intermediate positions.

PROCESS MONITORING IN FACTORY AUTOMATION

Different demands require different concepts



The capacitive SmartLevel principle ensures reliable signal detection.



Capacitive sensors can also be used for detecting solids.



Capacitive sensors measure levels of aggressive media.



Fast filling processes are precisely monitored by Micropulse transducers.

PROCESS MONITORING IN FACTORY AUTOMATION

Different demands require different concepts



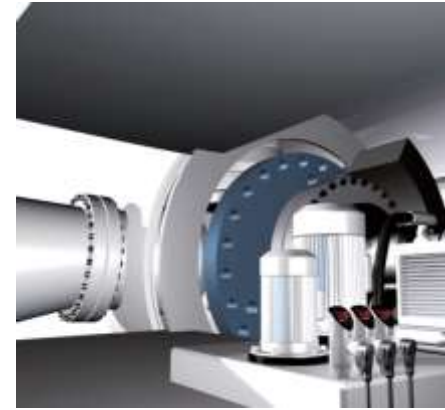
Sonar sensors offer hygienic level detection without contact with the media.



Monitoring vacuum gripping processes is the job of pressure sensors.



Pressure sensors ensure continuous inflow of coolants on machine tools.



In wind turbines the central hydraulic power unit is monitored using pressure sensors.

ACCESSORIES

High quality accessories are part of a complete sensor package



The 3-D sensor holder enables flexible mounting of sensors and lights.



Our diverse range includes product-specific accessories such as reflectors for through-beam sensors.



Sensors are simple to position precisely using the flexible mounting system.



Intelligent power supplies are recommended for decentralized applications using IO-Link, with IP 67 protection.

**THANK YOU FOR YOUR
ATTENTION!**

**If there are any questions, please
feel free to contact me.**

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