

# Solutions for the Pharmaceutical Industry

For over a decade, Turck is your trusted partner for the pharmaceutical industry. Our customers around the globe benefit from industry-specific automation solutions in the areas of sensors, fieldbus, connection and I/O technology as well as RFID solutions – from pharmaceutical companies, architectural and engineering firms and super skid suppliers to system integrators and electrical contractors.

Whether it is new greenfield construction or expansion or modernization of existing production facilities, the Turck pharmaceutical team will be happy to assist you with providing application spe-

cific solutions for your projects in many fields: Fermenter control, mixing & batching, water and clean steam production and distribution, filtration, and chromatology, the handling of solvents etc.

Our support ranges from worldwide project management to the application-specific advice on site. From planning to commissioning, we will guide you in all phases of the project.

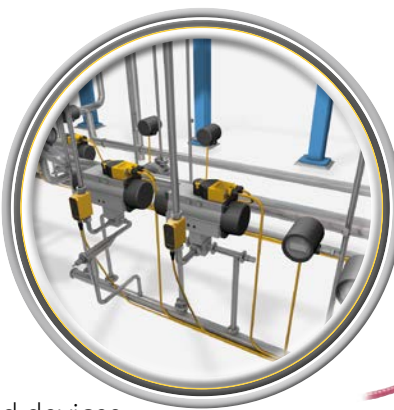


28 subsidiaries and over  
60 representations worldwide!



## Identification of portable tanks

- The RFID system BL ident ® ensures increased plant efficiency and traceability of the production processes through the reliable detection of mobile containers
- Application-optimized data carriers, even for direct mounting on stainless steel, and for use in the pharmaceutical production



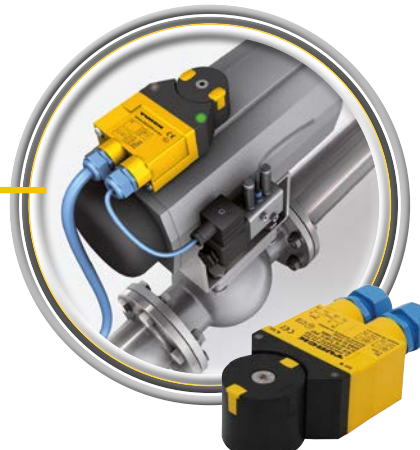
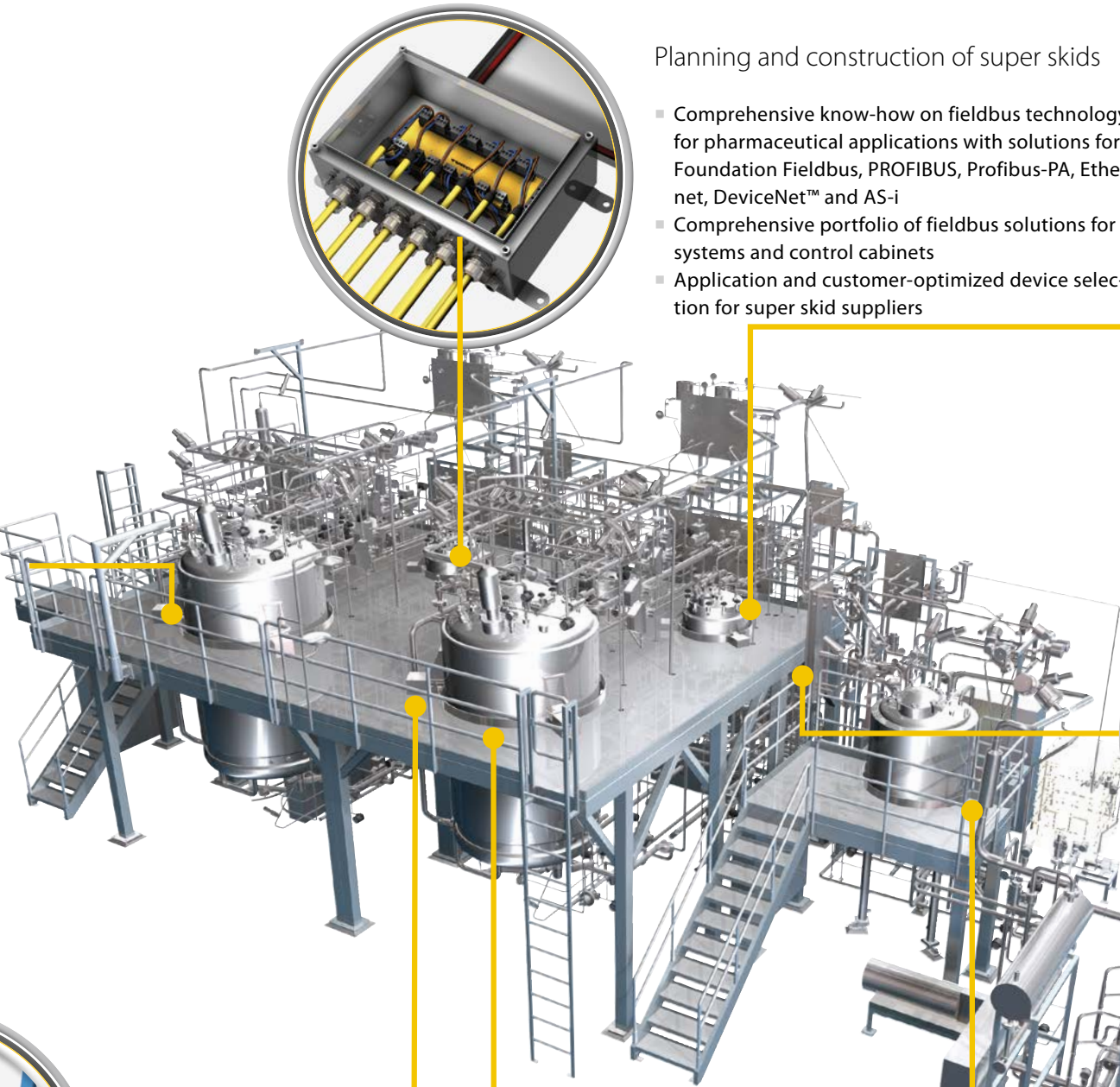
## Easy connection of field devices

- Efficient and failsafe connection of field devices thanks to the process wiring connection technology realized with our quick disconnect connectors
- Comprehensive portfolio with connectors, cables and splitter boxes reduces cabling
- Flexible and highly chemical-resistant PVC cables
- Shielded twisted pair cables for analog and HART® signals



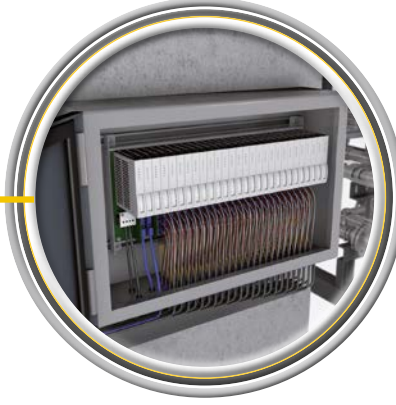
## Planning and construction of super skids

- Comprehensive know-how on fieldbus technology for pharmaceutical applications with solutions for Foundation Fieldbus, PROFIBUS, Profibus-PA, Ethernet, DeviceNet™ and AS-i
- Comprehensive portfolio of fieldbus solutions for systems and control cabinets
- Application and customer-optimized device selection for super skid suppliers



## Monitoring of quarter turn actuators

- The inductive DSU35 dual sensors capture the valve position of quarter turn actuators
- Easiest assembly and adjustment
- Detergent-resistant plastic housing
- Analogue output option
- Various electrical output signals: Intrinsically safe, AC/DC 2-wire, DC 3-wire, NAMUR, AS-i, DeviceNet™
- SIL 2



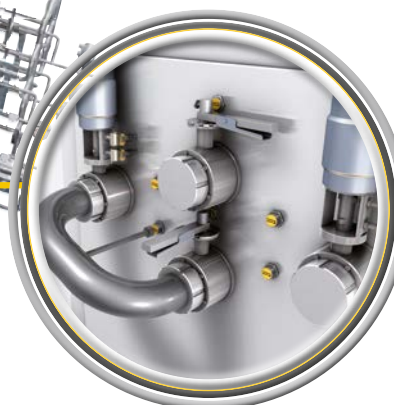
## Cabinet guard

- Monitoring of the door as well as exceedance of temperature and interior humidity
- Applicable up to zone 1



## Coupling stations/Elbow distributors

- The inductive uprox®+ WD sensors with terminal chamber are easily commissioned and maintained
- Tightly sealed housings that are resistant to chemicals
- Same increased switching distance on all metals
- Version with M12 connector and ATEX approval for zones 2 and 22



## Remote signal I/O

- The modular I/O systems excom® and BL20 support application-optimized signal processing
- Use in the non-Ex and Ex areas in zones 1 and 2, as well as 21 and 22
- High system availability through redundant communication and power supply
- Support of all standard fieldbus protocols



Your Global Automation Partner

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## Collect Precisely

Linear position sensors and encoders

- Contactless measuring system
- Easiest assembly and adjustment
- i. a. ATEX approval for zones 1 and 21

Flow sensors

- Measurement and monitoring of flow rates
- Different compact designs
- Many different process connections

Dual sensors

- Position feedback of fittings
- Optimum connection possibilities thanks to the compact design
- Comprehensive range of accessories
- Easily mounted on all standard rotary actuators
- SIL versions
- Analog versions

Pressure and temperature sensors

- Many different process connections
- Parametrizable via standard interfaces
- Simple operation
- Robust design

Proximity sensors

- Available in many different designs, sizes and housing materials
- Inductive, capacitive ultrasonic and magnetic field sensors
- Ex approvals and SIL certification
- Wash down

## Connect Reliably

Cable and connectors

- Connectors – different types and designs
- Ready-made or customizable
- Different cable materials for every application

Foundation™ fieldbus/Profibus-PA

- Multibarriers, junction boxes in IP67 and IP20, ready-made cables and many more...
- Rugged and space-saving designs for harsh environments
- Suitable for FISCO applications

Interface devices

- For separation, supply, conversion and protection tasks
- Available in modular housing for DIN rail mounting, as backplane solution or as cartridge in IP67 housing
- Many different input and output signals

## Communicate Effectively

Remote I/O excom® for zones 1, 2 and non-Ex area

- HART® and NAMUR signals
- High availability through redundant communication and power supply
- Integration in conventional control systems
- FDT technology for easy operation

BL20 I/O System

- HART® and NAMUR signals
- Connection to different control systems
- ATEX approval for zone 2
- Redundant power supply, optional

Diagnostic Power Conditioner DPC

- FOUNDATION™ fieldbus power supply for simple and redundant applications
- Excellent efficiency and high output power (28 V at 800 mA)
- Commissioning support and long-term diagnostics via FF-HSE, DTM and web interface

## Automate Efficiently

RFID system BL ident®

- Compact IP67 solution for different fieldbuses
- HF/UHF mixed operation possible, UHF read/write heads acc. to ISO 18000 6C
- Application-optimized data carriers and read/write heads for Ex and dust-Ex areas
- Connection to different control systems

Cabinet Guard IMX12-CCM

- Efficient condition monitoring for cabinets and protective housings
- Continuous monitoring of temperature, interior humidity and improperly closed doors
- Data recording
- Intrinsically safe 2-wire transducer power source for use in hazardous areas

Visual-SPS-Lösung VT

- SPS, HMI and Fieldbus-Master
- Programming mit CODESYS, Visualization with QVIS
- PROFIBUS-DP Master, Modbus RTU Master/Slave