

Your Global Automation Partner

# TURCK

## Identification Solutions for the Pharmaceutical Industry



Product images are linked to further information.

# Solutions for Reliable Identification of



## Tube connections for precursors

- Increased plant safety and personal protection with large tube connections
- HF RFID tag, freely rotatable, integrated in process connection
- Cost-effective solution through RFID bus mode



## Monitoring of connections

- Increased plant safety thanks to possibility to identify cable branches, field devices or covers
- HF RFID tag integrated in the threaded cap



## Tube connections in Ex Zone 1

- Increased plant safety and personnel protection in the Ex area
- Cost-effective solution thanks to RFID bus mode



## Field devices

- Efficient management and documentation of device maintenance
- Different fixing options of the HF tag to field devices





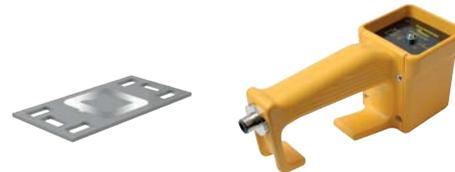
## Accessories for big bags and bioreactors

- Increase of quality and process reliability
- Automatic assignment of tube connections during production in single-use systems



## Accessories for single-use applications

- Increase of quality and process reliability
- Attachment of the HF RFID tag to packaging and connection materials



## Machine operators

- Individual Permission/Access Control
- More secure than PIN method, that could be spied out and used by unauthorized persons



## Data Matrix on medication boxes

- Transparent production and traceability
- Reading and visualizing Data Matrix codes on medication boxes
- Standardized interface to the database





## Cryovessels

- Avoidance of assignment errors through non-interchangeable identification with RFID
- Secure identification even of inaccurately positioned vessels with large HF read/write heads



## Mobile vessels controlled with handhelds

- Controlling the identity and the time stamp of vessels to be sterilized with RFID technology
- High flexibility through manual positioning of the HF handheld



## Mobile vessels

- Assurance of product quality through automatic monitoring of the identity of system components through HF RFID technology
- High flexibility when using different components



## Goods carriers in autoclaves

- Control and documentation of autoclave processes by recording goods carriers during loading and unloading
- Special tags for high temperature, humidity and pressure loads for pasteurization and sterilization applications





## Pallets in a gate

- Reliable pallet identification also with fast pass-through
- Especially powerful and economical by connecting other passive antennas in multiplex operation



## Pharmaceutical samples on leaving the warehouse

- Reliable identification and documentation of all pharmaceutical samples
- Full identification of all samples by using multiple antennas



## Pharmaceutical samples on route to the laboratory

- End-to-end identification and documentation of all pharmaceutical samples in building corridors
- Full identification of all samples by using multiple antennas

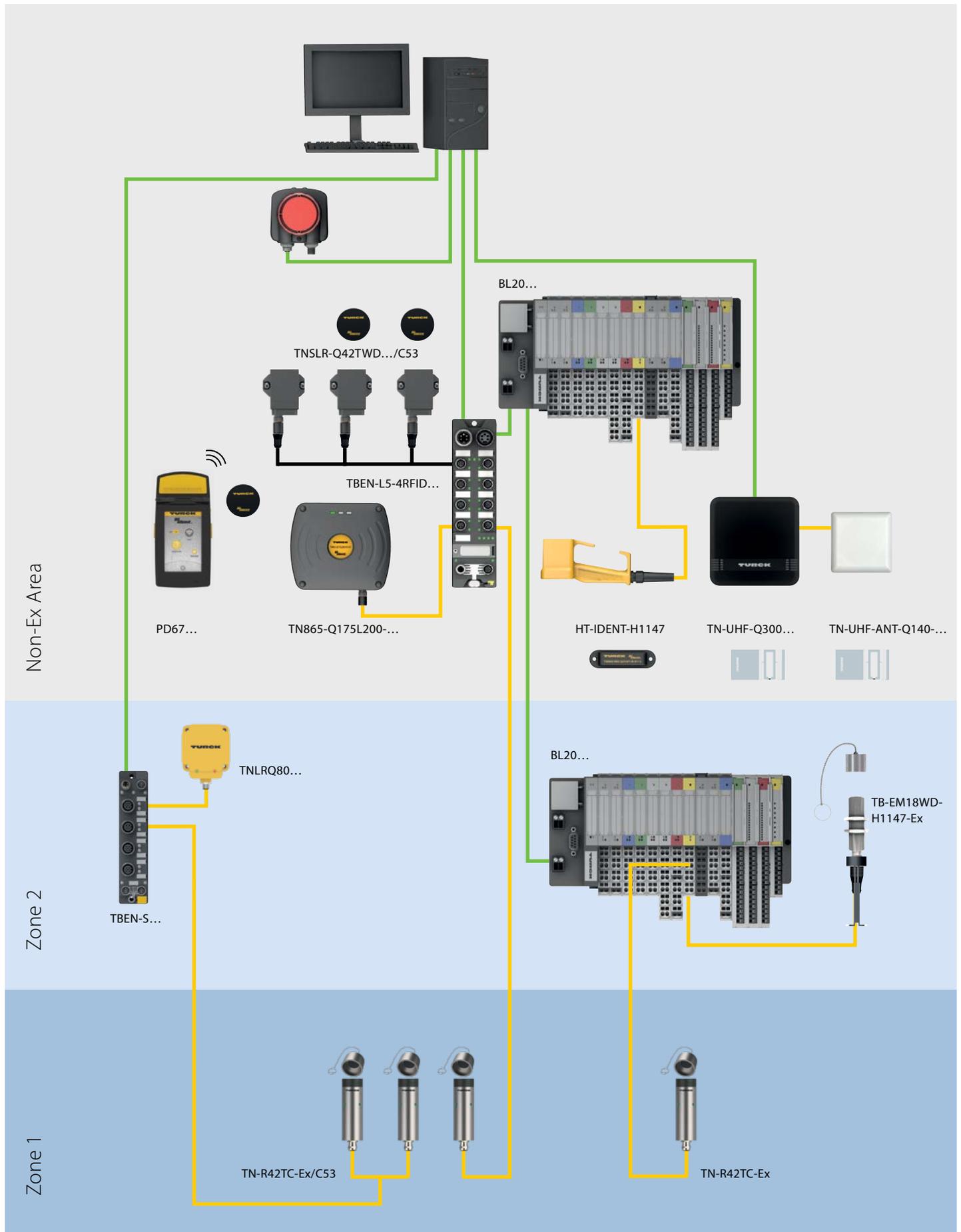


## Pharmaceutical samples in the laboratory

- Reliable identification of the supplied samples
- Complete solution of sample, documentation and control slip



For different identification tasks in the pharmaceutical industry, Turck offers the optimal solution



These products are used in the application examples

Read/write heads	Type designation	Dimensions	Description
	TB-EM18WD-H1147-Ex	18 mm threaded barrel	HF technology, compact threaded barrel, for Ex Zone 2/22
	TN-R42TC-Ex/C53 also available without bus mode	Ø 42 mm x 128 mm	HF technology, cost-effective connection of multiple devices to an RFID interface via bus mode, compact smooth barrel, for Ex Zone 1/21
	TN-Q14-0.15-RS4.47T	52 x 30 x 14 mm	HF technology, compact
	TNSLR-Q42TWD-H1147/C53	67.7 x 42.5 x 42.5 mm	HF technology, protection type IP69K, very long range with compact design, cost-effective connection of multiple devices to an RFID interface via bus mode
	TNLR-Q80L400-H1147	102 x 83 x 40 mm	HF technology, protection type IP67, very long range
	HT-IDENT-H1147	190 x 85 x 70 mm	HF technology, read/write head for manual operation
	PD67-UNI-EU-RWBG	214 x 105.7 x 50.5 mm	HF and UHF technology, robust handheld in protection class IP67 for reading and writing RFID tags from any location, with Wi-Fi and Bluetooth, also available with scanner for reading barcodes and 2D codes.
	TN865-Q175L200-H1147	200 x 175 x 60 mm	UHF technology for particularly long range
	TN-UHF-Q300-EU-CDS and TN-UHF-Q300-EU-LNX	300 x 300 x 61 mm	UHF reader for use of passive UHF antennas
	TN-UHF-Q180L300-EU-LNX	180 x 300 x 61 mm	UHF reader for use of external antennas, without internal antenna
	TN-UHF-ANT-Q260-EU	260 x 260 x 30 mm	Passive UHF antenna
	TN-UHF-ANT-Q140-EU	140 x 140 x 26 mm	Passive UHF antenna
Tag	Type designation	Dimensions	Description
	Tube tags, on request		HF tags for mounting on tubes
	TW-L86-54-C-B128	86 x 54 x 0.8 mm	HF tag in credit card format
	TW-R30-M-B128	Ø 29.9 mm x 10 mm	HF standard tag for flush installation in metal
	IN TAG 300 SLIX and DS-R30 (spacer)	Ø 30 mm	HF standard tag for medium ranges
	IN TAG 500 SLIX and DS-R50 (spacer)	Ø 50 mm	HF standard tag for long ranges
	TW860-960-L73-17-F-B40	73 x 17 mm	UHF standard tag in plastic label
	TW860-960-L73-17-P-B40	73 x 17 mm	UHF standard tag in paper label
	TW860-960-L73-17-F-B42-100PCS	73 x 13 mm	Self-adhesive UHF tag
	TW860-960-L73-17-P-B42-100PCS	73 x 13 mm	UHF tag for printing and affixing
	TW860-960-L72-21-P-M-B210-5KPCS	73 x 21 mm	UHF tag for fixing on metal
	On request		Snap-on cap with integrated tag and attachment chain for Zone 1/21
	TW-ISPTFE-..., on request	Ø 22 mm x 20 mm	Screw cap with integrated tag and attachment chain for Ex Zone 2/22
Other Devices	Type Code	Dimensions	Description
	IVU2PRBW08 (sensor)RD35 (remote display)	81.2 x 77.5 x 51.5 mm (sensor), 97 x 83 x 23 mm (display)	Barcode reader with remote display



Product images are linked to further information.

# Identification Solutions for the Pharmaceutical Industry

## Tailor-made products for pharmaceutical applications

- Comprehensive portfolio of application-optimized RFID tags and read/write heads for the pharmaceutical production
- Solutions for use in hazardous areas up to Zone 1/21
- Resistant to cleaning processes

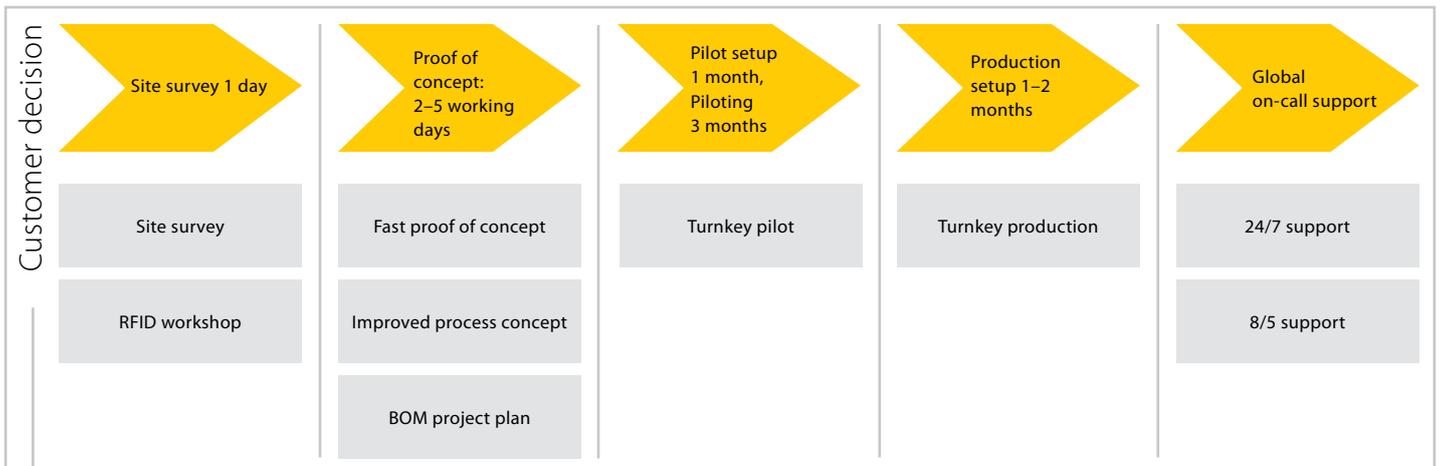
## Benefits of Track & Trace in pharmaceutical production

- Improved plant safety through automatic and tamper-proof monitoring of the correct device assignment and correct use of devices such as tube connections or cryovessels
- Higher personal protection by avoiding media contact with tube connections

- Increased product quality through reliable identification and documentation of precursors and intermediate products
- Serialization through complete traceability of pharmaceuticals from production to transportation
- Seamless identification and documentation of pharmaceutical samples in building corridors and at entrances and exits
- Safe use of field devices by ensuring correct device operation and monitoring maintenance intervals

## Realization of turnkey solutions

From process design to selecting the right tags, our RFID experts are there for you. A successful RFID project starts with a site survey conducted by our specialists. This is followed by our 5-step model for success and — upon request — smooth operation thanks to our 24/7 support. Our experience ensures your success.



Over 30 subsidiaries and 60 representatives worldwide!

