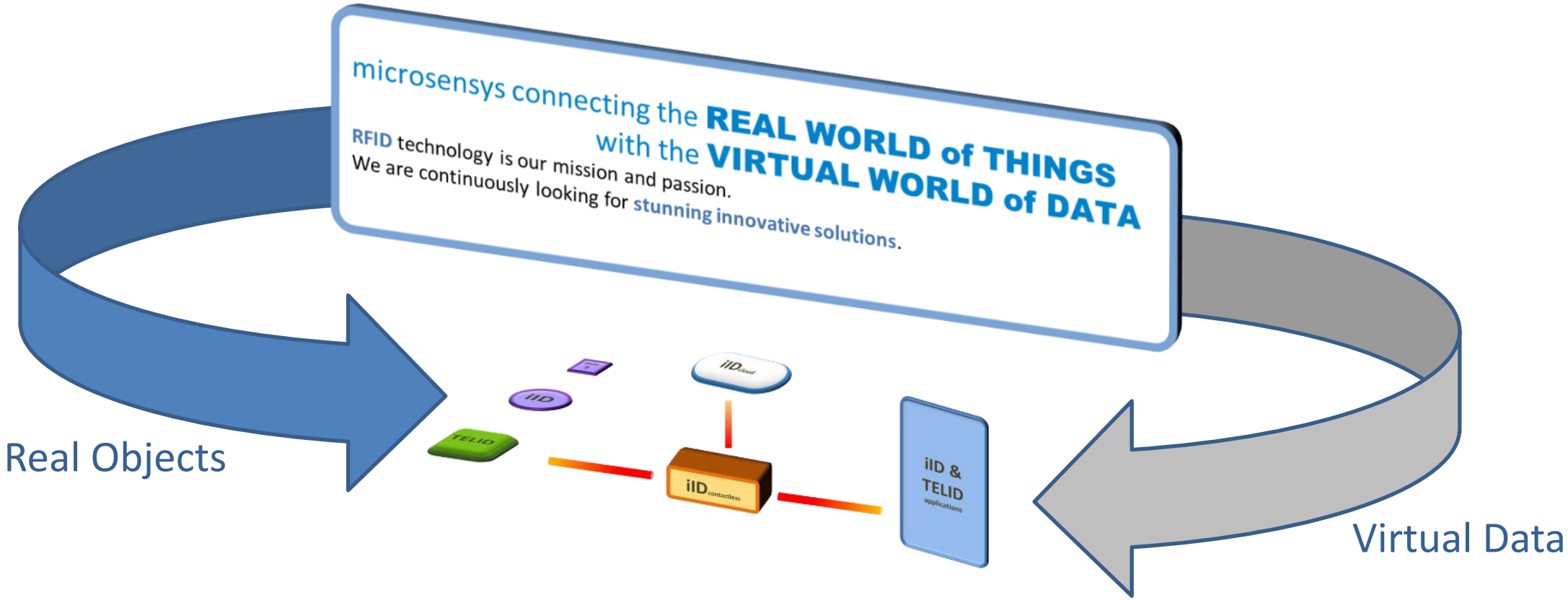
Company Short Presentation

Production and Development of RFID components

Solution Partner
Micro-Sensys GmbH

Ver. 03/2024-06

What we do



our strategy

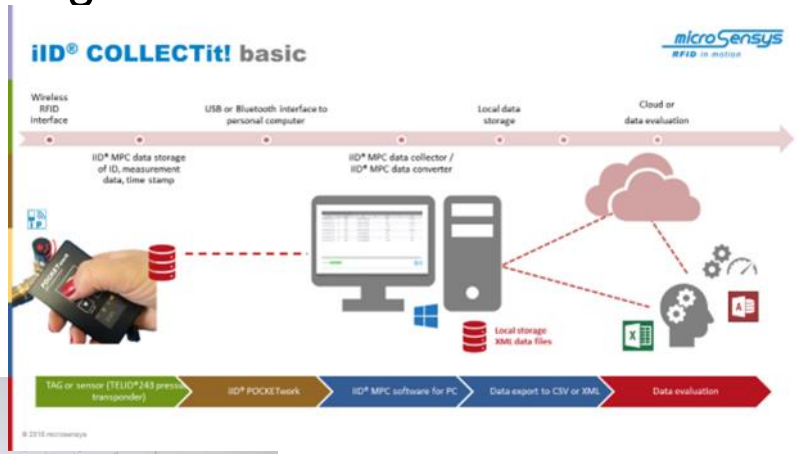
in-house production and development
operating in niche markets with own product portfolio
competencies in RF, sensor and mobile computing technologies

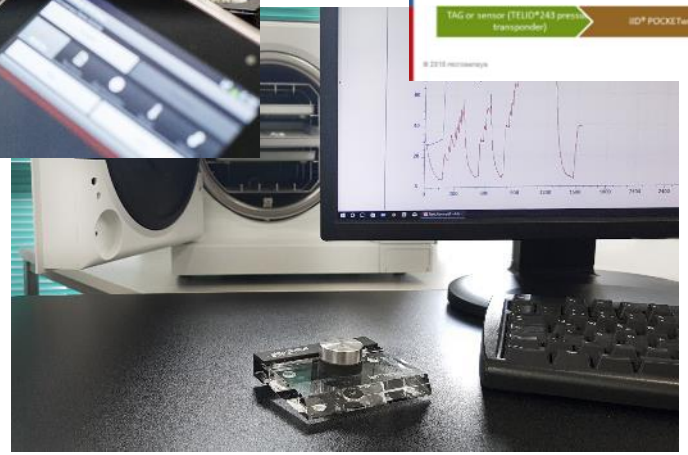
Our wireless ID and sensor solutions

our offer

- from components up to complete Auto-ID solutions
- from consulting, in-house design, in-house production up to system support
- including customization of hard- and software components
- mix of wireless technologies: HF, UHF, SENSOR, BLUETOOTH
- flexible stationary and mobile data capturing based on deep knowledge in wireless communication and data encoding

mic3®	miniaturized transponders
iID®	transponders
TELID®	wireless sensors
iID®contactless	readers
iID®contactless	gateways
iID® &TELID®	applications
iID®cloud	data Services

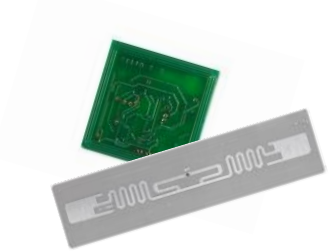


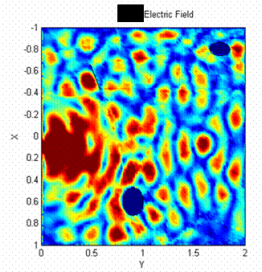


Our products

microSensys
MAKE THINGS WIRELESS

projects, OEM design





- realization concept
- design & simulation
- prototyping
- OEM design & production

PRODUCTION
special transponders

- miniaturization
- special packaging
- critical environments

PRODUCTION
wireless sensors

- passive
- active ultra low power
- rugged design
- special sensors

PRODUCTION
smart readers / reader modules

- mobile
- low power
- smart, innovative

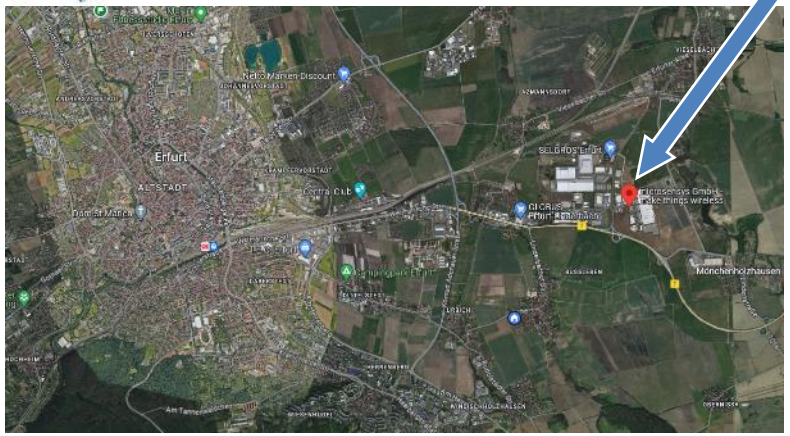
software/ systems

- iID® net
- software & tools

for PC, Android, iOS & embedded

- cloud data collection (via partners)

Where to find us

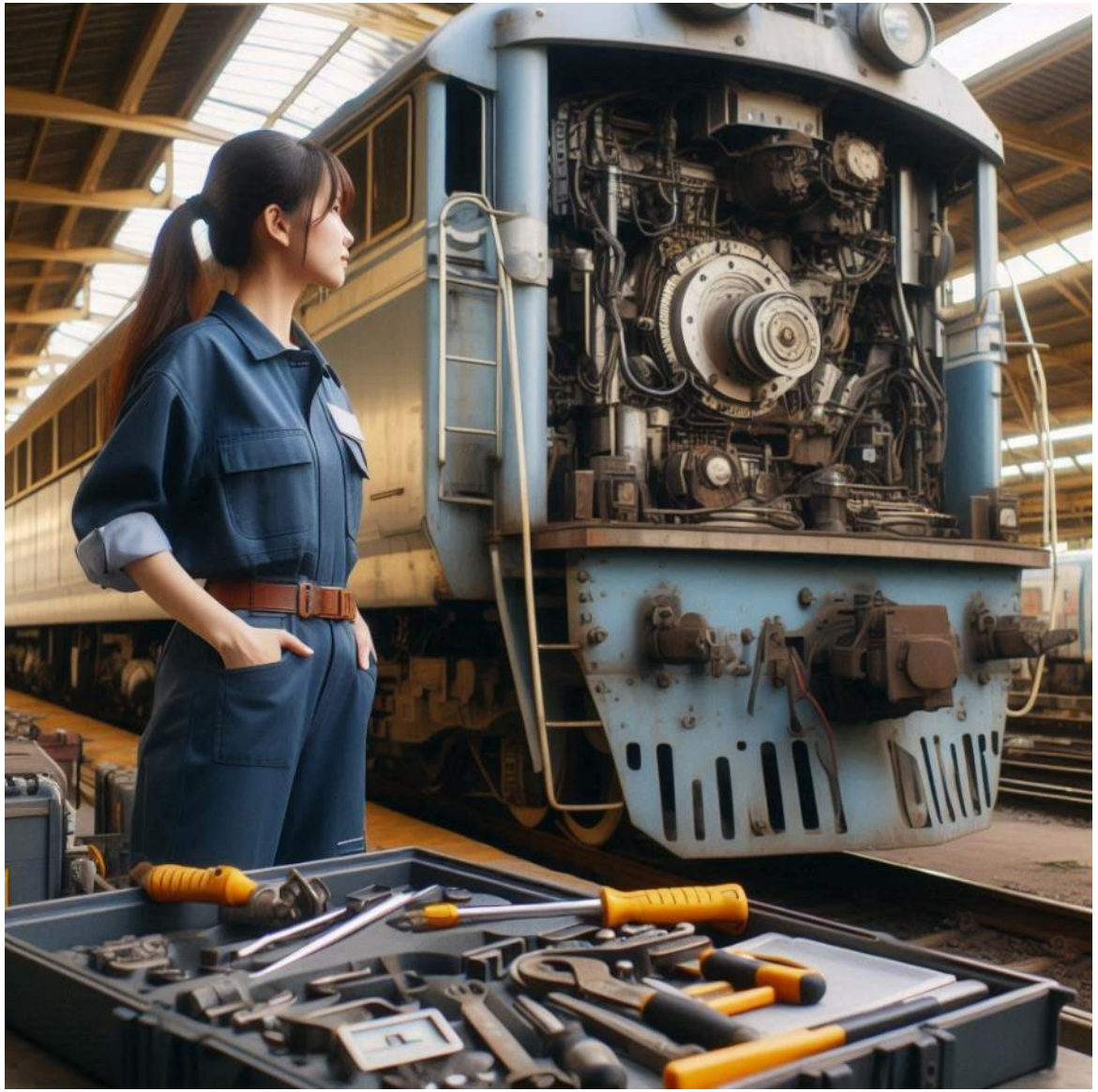


Micro-Sensys GmbH
In der Hochstedter Ecke 2
D 99098 Erfurt

- Founded in 1991
- 35 employees
- 1300m² leased area on three floors
  800m² production area
  500m² administration and development

Wireless ID & sensors for Railway applications

Identification of component parts



- Identify critical component parts on the train (e. g. axis, breaks, and more)
- Read GS1 compliant serial numbers of robust passive UHF transponders according to GIAI or SGTIN encoding schemes
- Improve the maintenance processes using standard smart devices

Railway optimized components

TAG Type	Picture	Technicals	Remarks
Label 1836 DUAL-TAGspecial HF&UHF		Size: 20x38x4.5mm Communication Distance HF: 0…30mm, UHF: 0…150/500mm (non-metal/metal) Storage Temperature:-40°C…+85°C ISO 15693, ISO 18000-6c, Em | echo-V	Dual frequency, shared memory, max. 248 Byte, Printing possible available
Q43S DUAL-TAGspecial HF&UHF		Size: 43x27x5mm Communication Distance: 0…20mm Storage Temperature:-40°C…+85°C ISO 15693, ISO 18000-6c, Em | echo-V	Printing or lasering possible, for mounting on metal available
Q40100 DUAL-TAGspecial HF&UHF		Size: 40x100x7mm Communication Distance HF: 0…80mm UHF: 0…6,5m Storage Temperature:-40°C…+85°C ISO 15693, ISO 18000-6c, Em | echo-V	customer logo, running number and TAG initializing available
D22V6 DUAL-TAGspecial HF&UHF		Size: D22x5mm Communication Distance HF: 0…50mm UHF: 0…2,5m Storage Temperature:-40°C…+85°C ISO 15693, ISO 18000-6c, Em | echo-V	With and without metal plate, customer logo, running number and TAG initializing Samples available, series production Q1/2025

- Robust designs according EN50155 feature sets, supporting ISO/IEC61406
- UHF or NFC plus UHF in one transponder – best fit for component ID
- Special designs support ed by EM echo chip
- Smartphone AND UHF mid range / long rage capability

Railway optimized components

TAG Type	Picture	Technicals	Remarks
UHF Plate2570 UHF		Size: 25x70x4mm Thickness stainless steel plate 0,5 mm Communication Distance: 0…1 m Storage Temperature:-45°C…+125°C ISO18000-6c: AILIEN HIGGS 9	using under very harsh environmental conditions, uniform bending transverse direction (min. R100mm) available
Plate3075 DUAL-TAGspecial HF&UHF		Size: 30x75x4mm Communication Distance HF: 0…50mm UHF: 0…2,5m Storage Temperature:-40°C…+85°C ISO 15693, ISO 18000-6c, Em | echo-V Samples available, series production Q1/2025	using under very harsh environmental conditions, uniform bending transverse direction (min. R100mm) Dual frequency, shared memory, max. 248 Byte,

- Robust designs according EN50155 feature sets, supporting ISO/IEC61406
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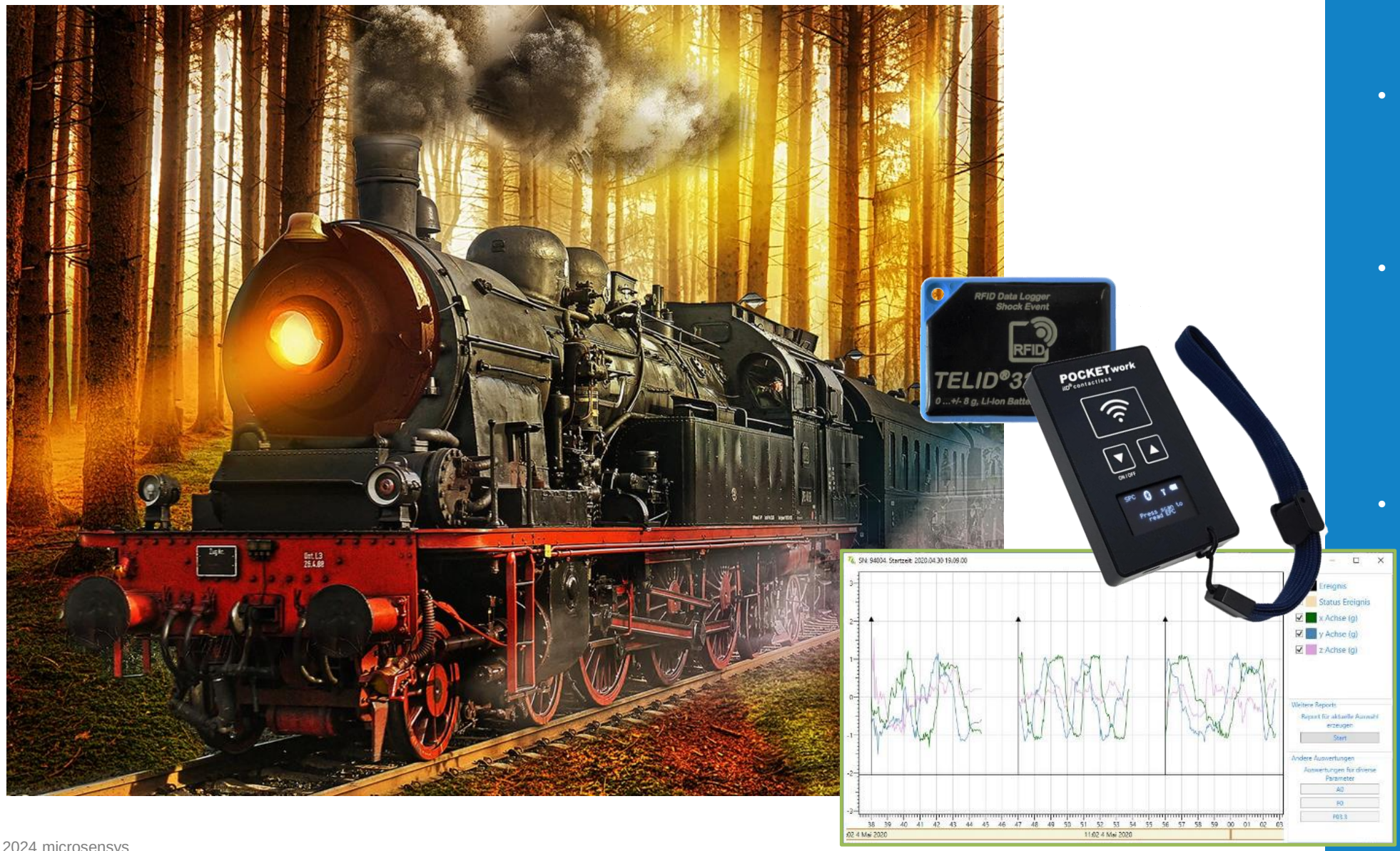
Programming of digital name plates

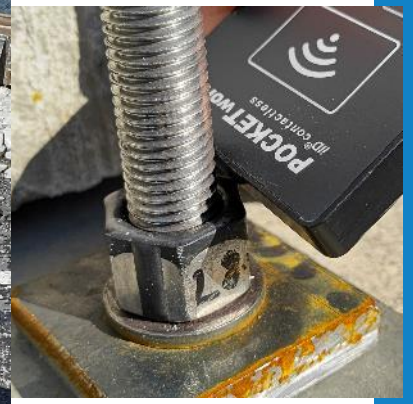
- Enconding and programming of digital name plates in place with GS1 encoding schemes using iID®EPCprogrammer app for Andriod
- Use the app to easily program GIAI or SGTIN
- Improve mobile processes using standard smart devices
- Fixed solution available for in house production

Predictive maintenance – for trains & rails



- Reduce your costs and planning effort for the maintenance process for trains
- Based on the course of the vibration, material and environmental related changes during use can be recognized at an early stage
- Detect material fatigue and reduce unplanned downtime

Checking screw connections

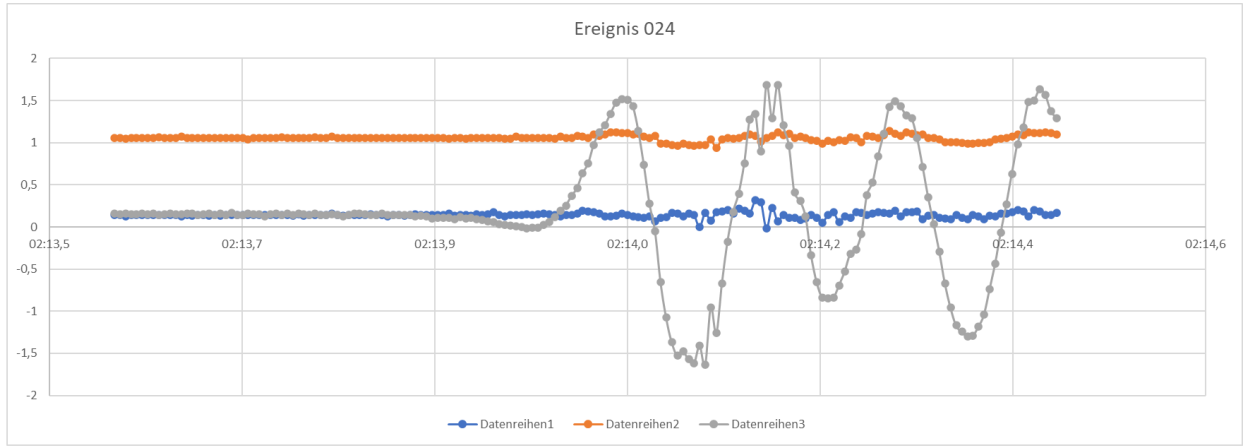


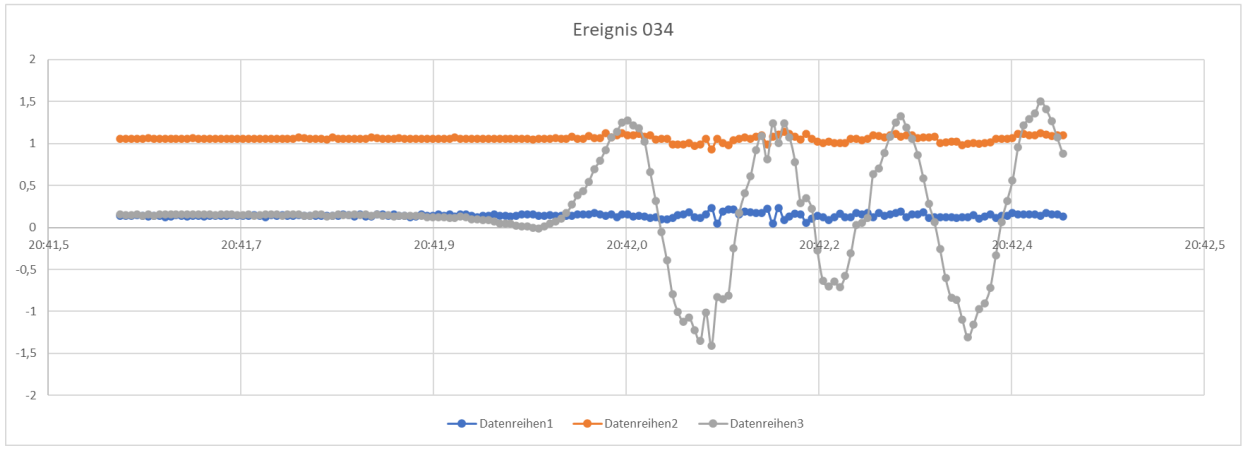
- Improve the safeness of trails with monitoring of fixation of screws
- Long term monitoring of screw connections for **rails, rail switches and sound barrier walls** based on passive RFID sensor transponders TELID® 260
- Intelligent nut allows preload forces on screw connections to be measured contactless and in real time without changing the connection in any way

References

Name plate customization, examples

Acceleration sensor for Infrastructures





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