





People for Process Automation

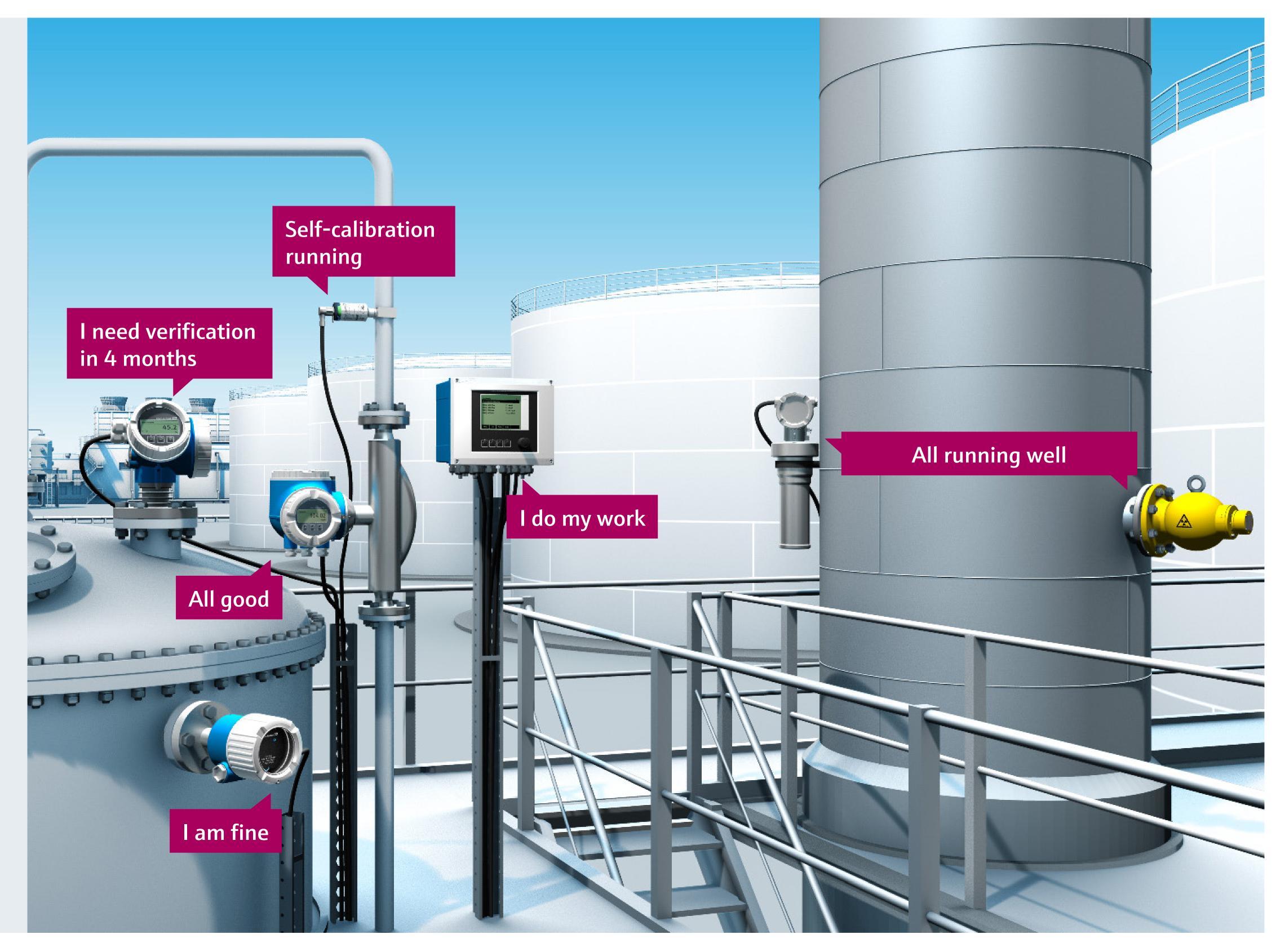
Make the status of your devices visible Diagnostics with Heartbeat Technology

Heartbeat Technology breathes life into your devices:

- Devices continuously show their status: from the sensor to the output signal
- You receive up to 98% diagnostic coverage
- Full texts give clear guidelines on what to do
- Everything at a glance: Efficient maintenance according to actual needs
- You increase the availability of your plant as you avoid unplanned shut-downs

You always know exactly how well your plant runs and what to do based on real-time data.









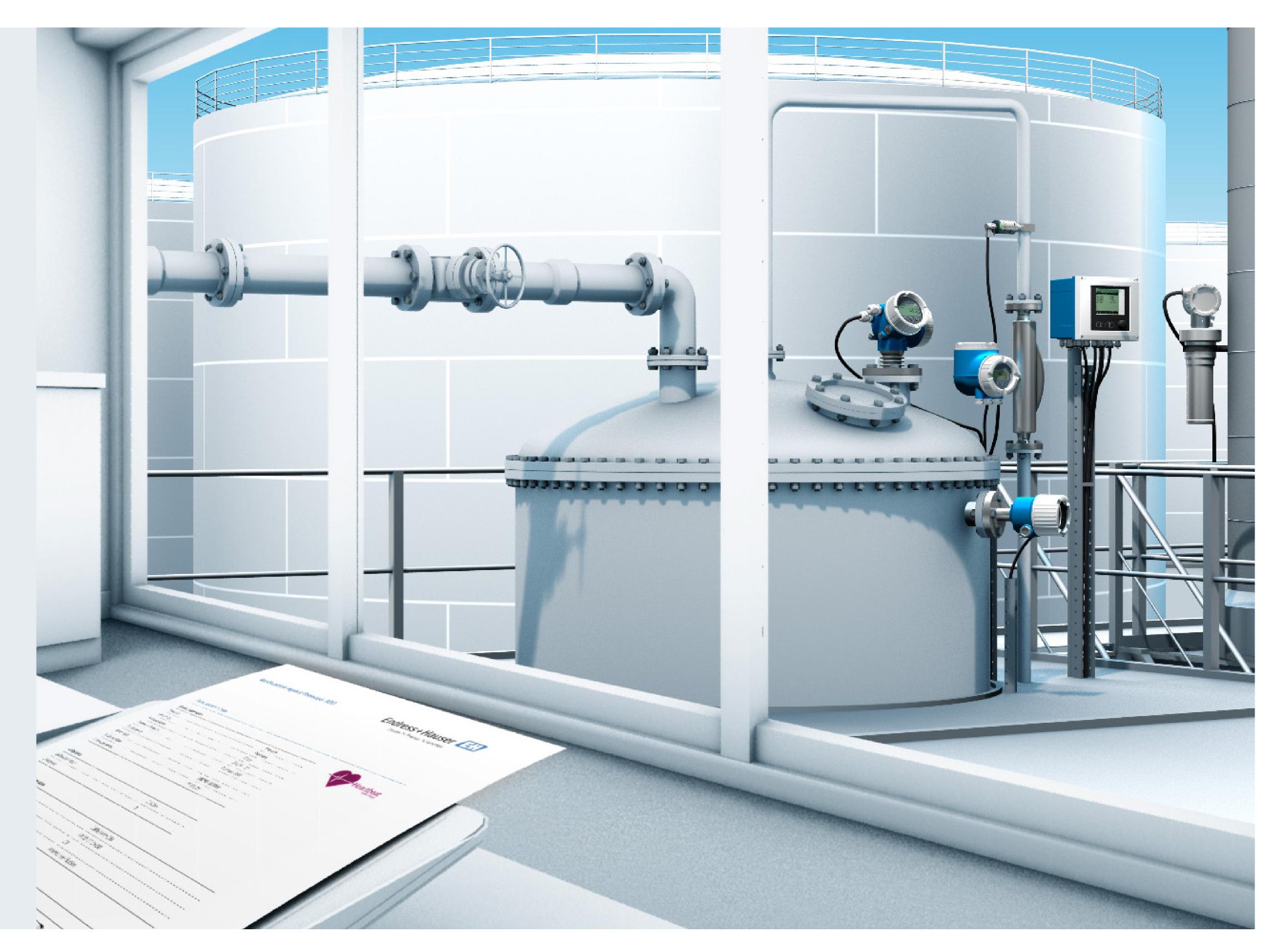
Verify without process interruptions Verification with Heartbeat Technology

With Heartbeat Technology you reduce your verification efforts to a minimum:

- You can verify the performance of your instruments without any process interruptions
- Test cycles are extended significantly, minimising effort for repeat tests
- Clear result: "passed" or "failed"
- Documentation for authorities at the push of a button
- Verification of device performance according to ISO 9001 quality management

Make your life easier and reduce verification efforts.







Legally water-tight documentation for authorities



Predict maintenance and optimise your strategy Monitoring with Heartbeat Technology

Optimise your maintenance strategy according to the actual need:

- Detects sensor damage immediately
- Predict maintenance needs with sensor monitoring data
- Identify trends to adapt your processes and plan maintenance works efficiently
- Detect foam or build-up and automatically apply control measures
- Commissioning wizards ensure error-free commissioning of a device

Save money by performing maintenance only when it is needed and not according to standard maintenance plans.









Potential for connected services Industrial Internet of Things

Exploit the potential of IIoT and connect Heartbeat Technology with cloud services

- Combine monitoring data with
 Endress+Hauser's Netilion Predict app to
 calculate the optimum date for
 maintenance
- You are informed when maintenance is due by a message on your smartphone
- Connect the data with other business processes via the cloud to automatically order replacement devices via e-procurement
- Integrate data of devices with different fields of applications

Automate your processes and analysis while saving money.



