



Shop Floor Integration

From sensor to ERP

We make your factory smarter

Benefits:



More free
capacity



Scalable and
free of main-
tenance



Increased
productivity



Less
waste



Transparency
for material
flow



Real-time
postings of
goods

SFI – The bridge between shop floor and SAP

SFI integrates the physical production world with the planning world in SAP. As a modern **cloud application**, it connects IIoT data sources in real time with ERP processes – quick to implement and without complex IT infrastructure.

A no-code approach allows machine data, sensor technology and tracking events to be flexibly linked to SAP objects. This automatically triggers material movements, **order confirmations** or maintenance processes. This reduces manual intervention, creates transparency and speeds up decisions.

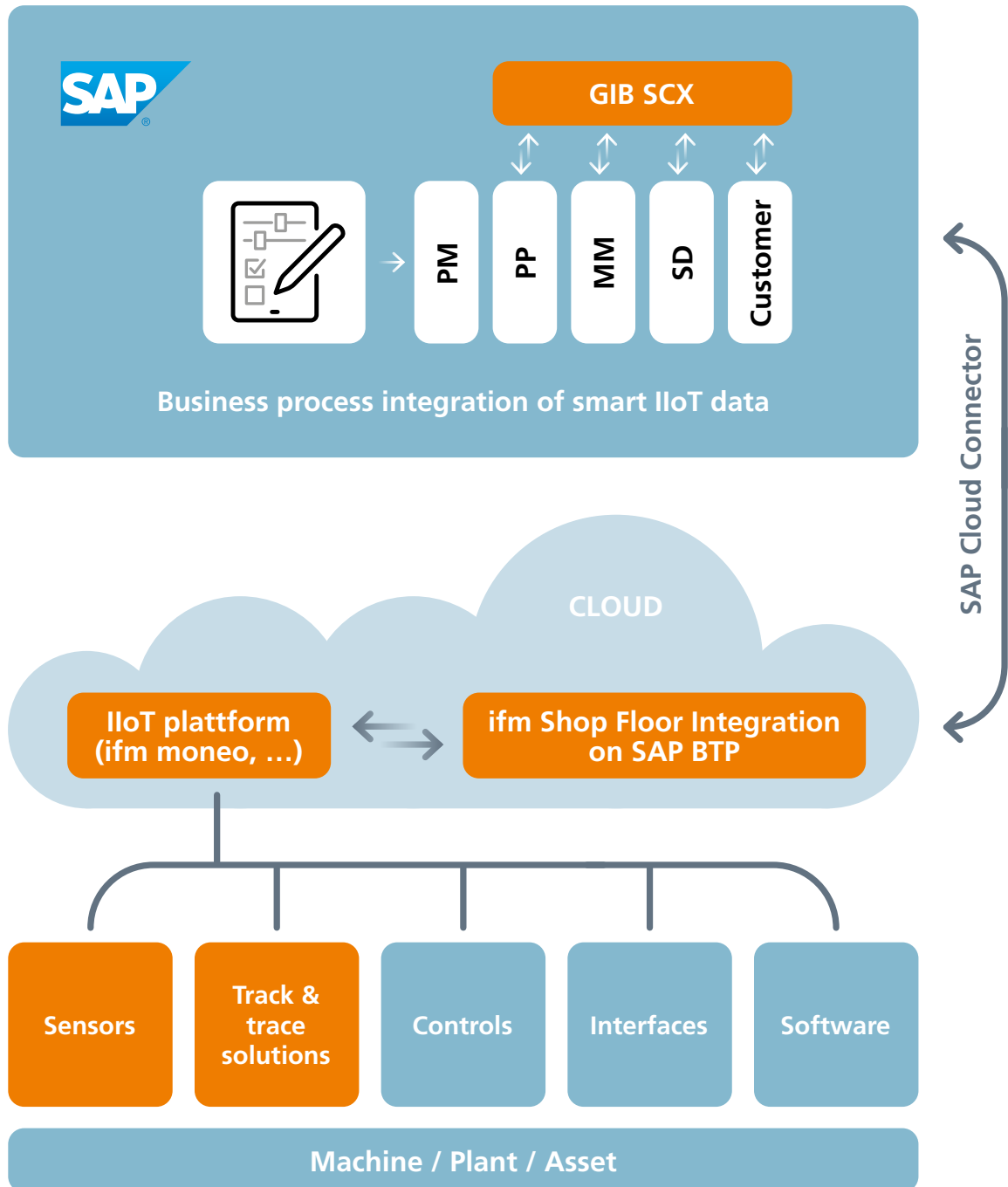
This forms the basis for powerful value-added applications such as:

- ✓ **TRACK & TRACE**
Tracking of materials and orders in the factory
- ✓ **MAINTENANCE**
Integration of condition-based maintenance in SAP Plant Maintenance (PM)
- ✓ **REPLENISHMENT**
Real-time material monitoring and automated replenishment control

The result: maximum transparency, higher plant availability, sustainable use of resources and a future-proof digitalisation platform – fast-acting and ready for immediate use.



ifm Shop Floor Integration Cloud architecture



SFI Overview

What does SFI do?

ifm offers all the components and solutions required for comprehensive process digitalisation from a single source: digital sensor technology and identification hardware for data acquisition, the comprehensive IIoT platform ifm moneo for preprocessing and detailed analysis, and deep integration into SAP business processes with SFI.

In addition to ifm moneo, other established platforms can also be used. This allows complete end-to-end processes to be mapped.

For example, it is then sufficient to move an electronically marked material container between two recording devices in order to automatically post the associated goods movement in SAP. In the same way, Kanban statuses or quantity confirmations for production orders can be recorded automatically.

The scope of delivery includes a whole range of ready-to-use processes that can be put into operation by key users via configuration.

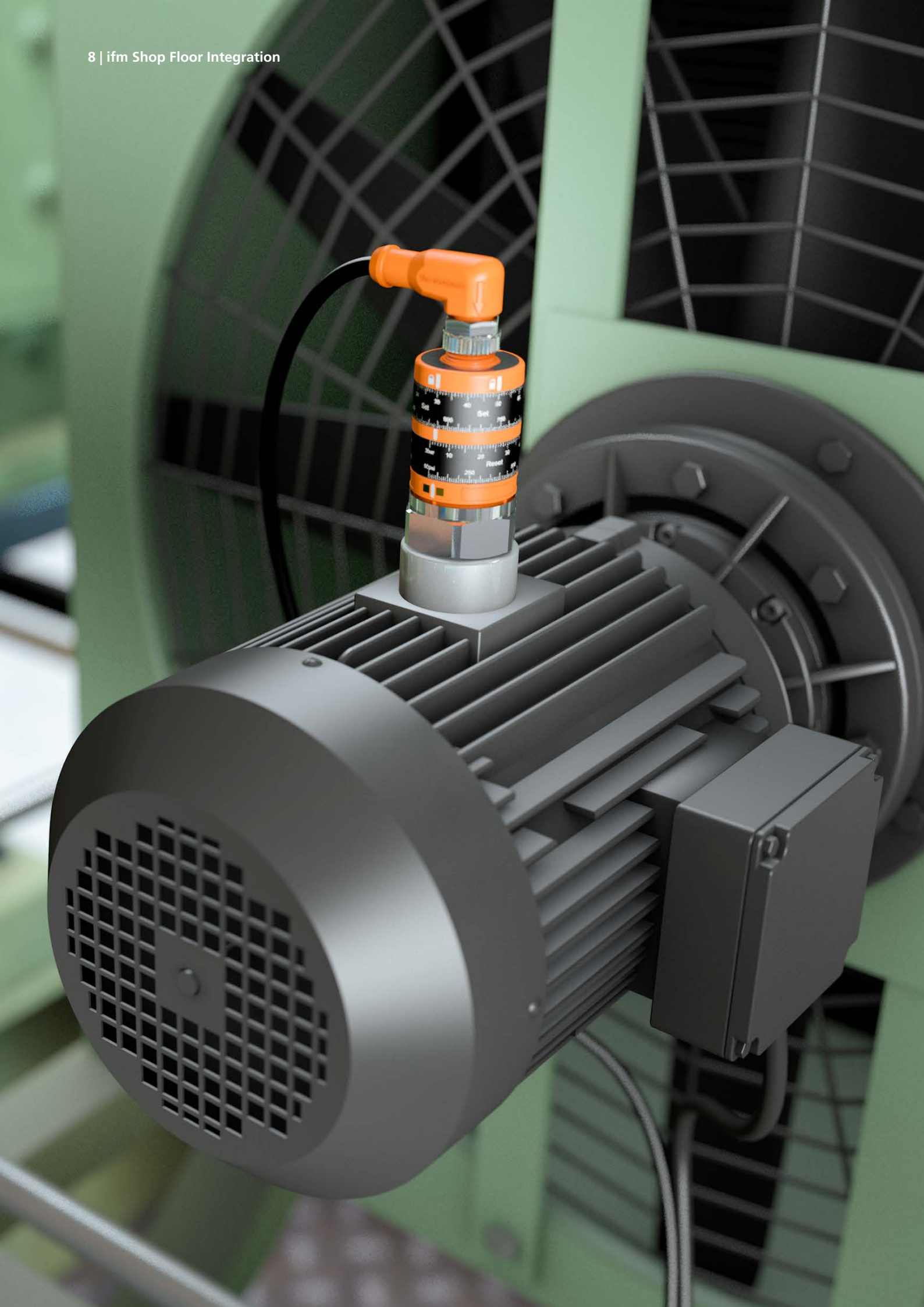




Track & Trace Insight View. Traceability

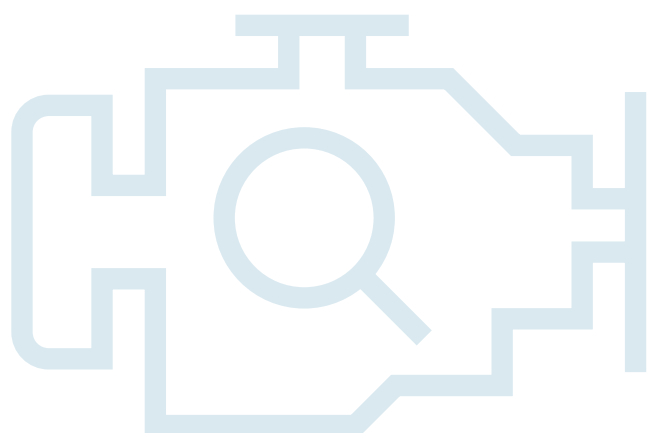


- ✓ Permanent real-time localisation of objects
- ✓ Automatic triggering of business processes depending on object type and position
- ✓ Real-time insights for material flow, inventory and processes
- ✓ Find instead of search
- ✓ Display of ERP statuses directly on the physical object
- ✓ Reduced effort through automatic recording and documentation
- ✓ Greater transparency regarding material movements and stock levels

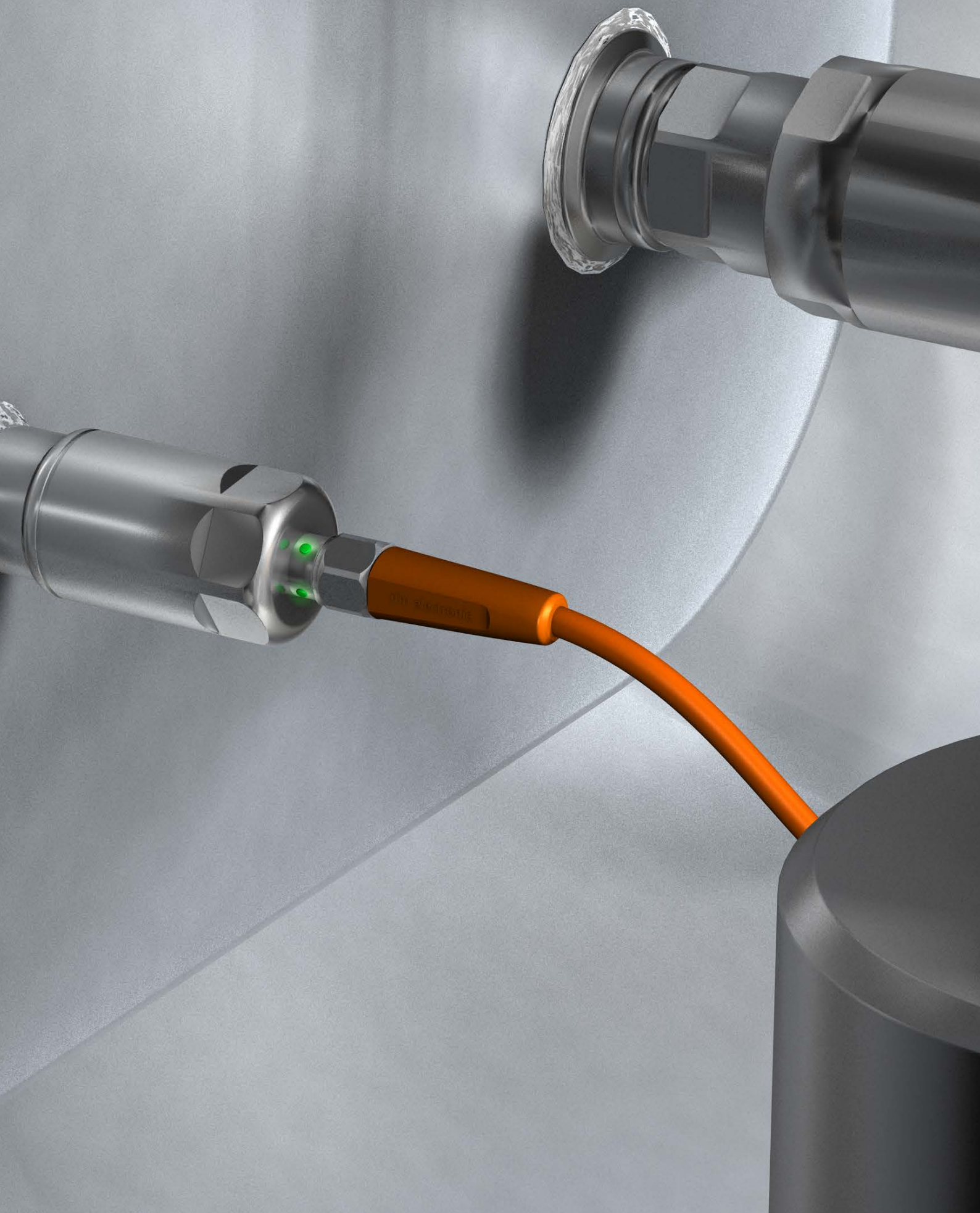


Real-Time Maintenance

Best case. Servicing



- ✓ Higher production throughput thanks to reduced, tailored and predictable maintenance
- ✓ Reduced downtime thanks to sensorbased monitoring of critical components
- ✓ Reduced personnel costs thanks to automatic recording of energy consumption and mileage
- ✓ Real-time monitoring through automated filling of IH order planning
- ✓ Lower costs thanks to longer use of tools, oil, cleaners, etc. through permanent condition monitoring
- ✓ Reduced material consumption and waste through the recording of error rates



Material monitoring

Real time.

Replenishment



- ✓ Greater transparency through sensor-supported recording of material quantities (e.g. using 3D cameras, level sensors, etc.)
- ✓ Automated generation of a material reservation (or KANBAN signal, depending on the customer's process) in real time when the defined minimum quantity is not reached
- ✓ Fewer bottlenecks in material flow through demand-driven and automatically provided replenishment
- ✓ More time for value-adding activities through reduced monitoring and recording efforts



SAP Certified
Integration with RISE with SAP S/4HANA Cloud

SAP Certified
for clean core with SAP S/4HANA Cloud

www.scm.ifm

We reserve the right to make technical changes without prior notice. · Supply Chain Software · ifm electronic gmbh, Martinshardt 19, 57074 Siegen, Phone: +49 271 23871 4000, scm@ifm.com · 03.2026

