





Werkstattgespräch mit der Gildemeister Drehmaschinen GmbH und der Marposs Monitoring Solutions GmbH (Artis)







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# One Partner Many solutions

worldwide present in 34

countries

offices worldwide



more than 3,700 employees



key acquisitions since 2000

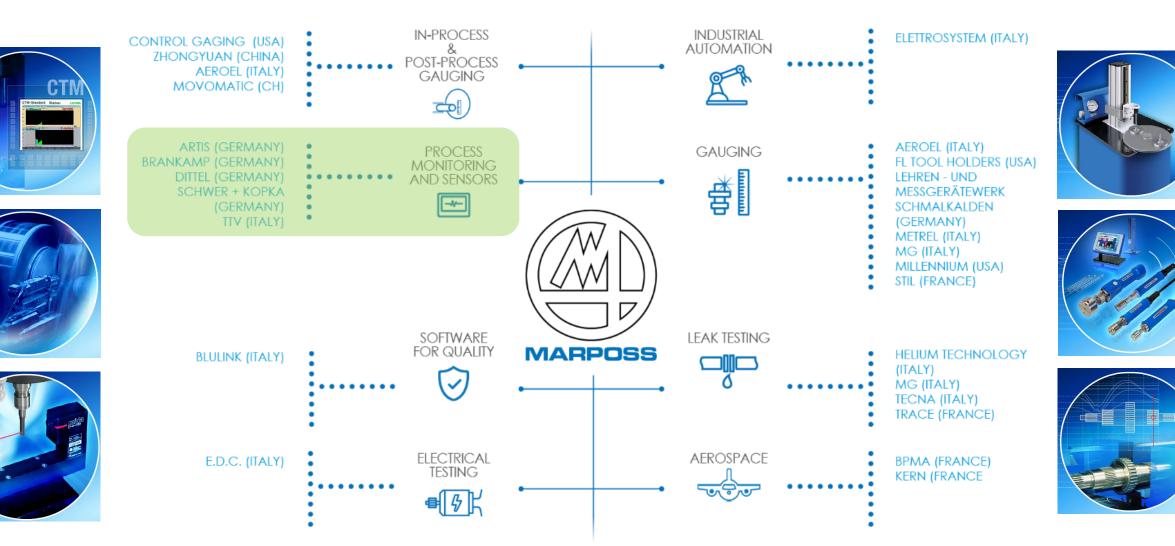
resources invested in R&D

MARPOSS GROUP





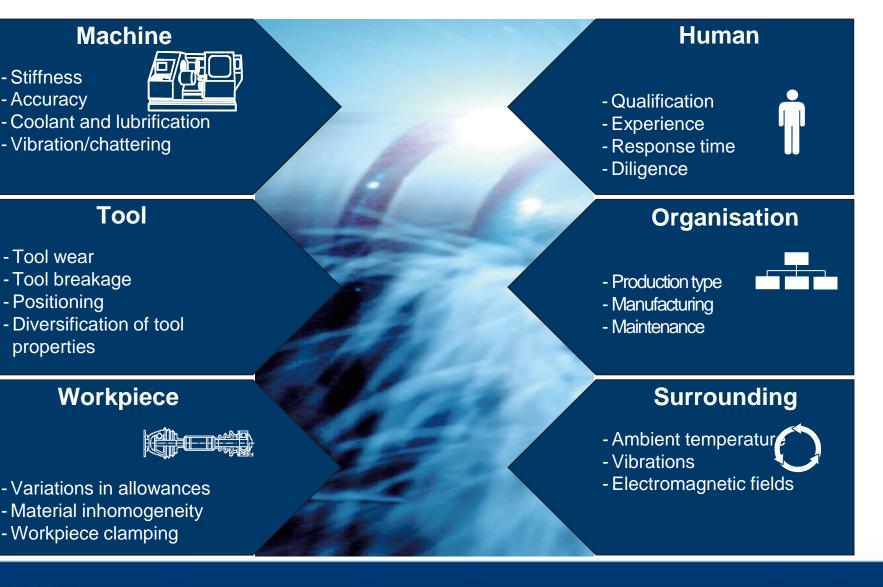
#### MARPOSS companies





MARPOSS

# Factors influencing the production process







# Usage of monitoring systems

Detection of breakage, missing and wear in machining production Machine **protection** (collision) Avoidance of scrap, rework and consequential damage Detection of **clamping errors**, incorrect components and faulty processes **Condition Based Monitoring** (bearings, ball screws, machine components, imbalances,...) Adaptive controls- AC Process visualization and documentation Acquisition and processing of process data Source of **information** for other third-party systems Data provision for **cloud-based** systems





#### Applications for cutting monitoring







#### Applications for machine safety







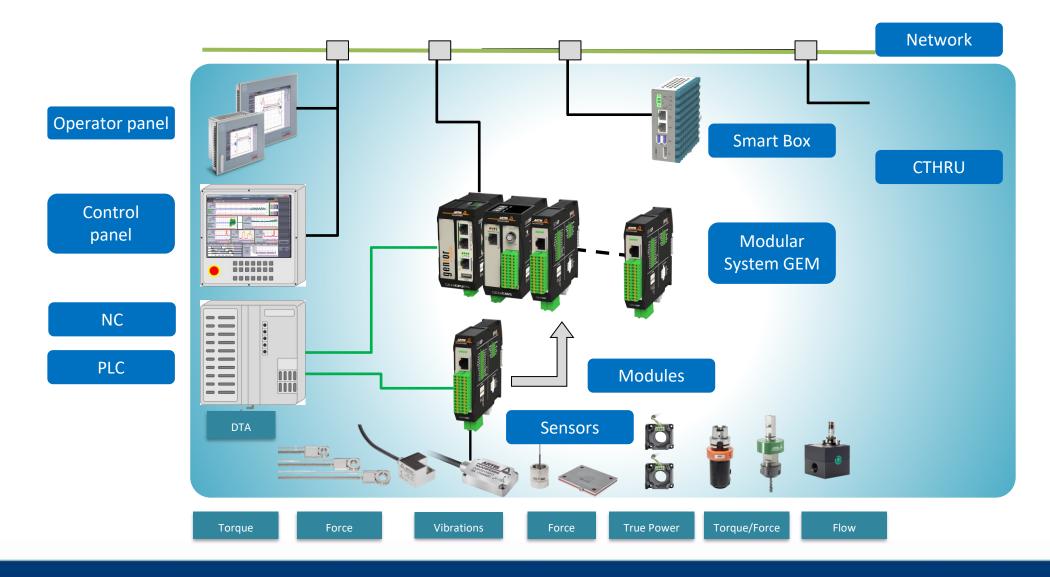
#### ARTIS sensors overview







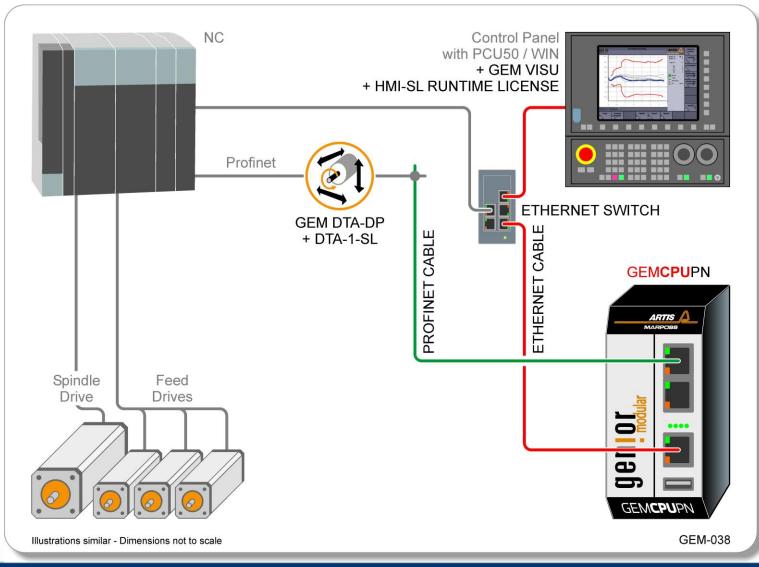
#### Modular System Genior Modular - GEM







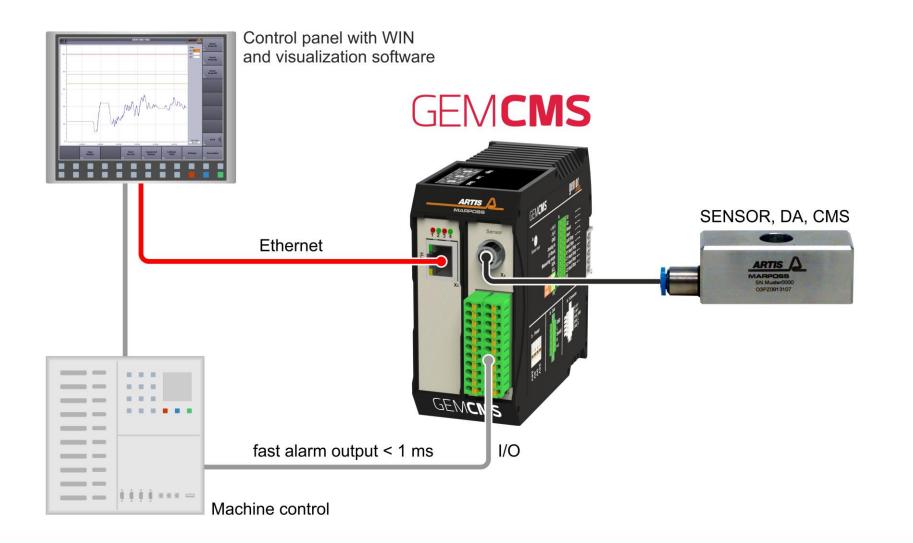
## Monitoring with internal drive data







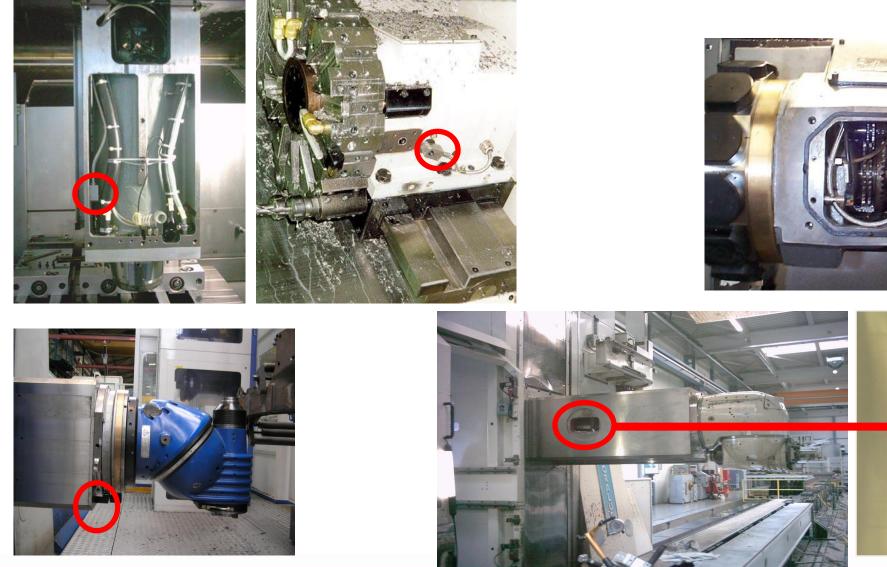
#### Force monitoring for machine safety







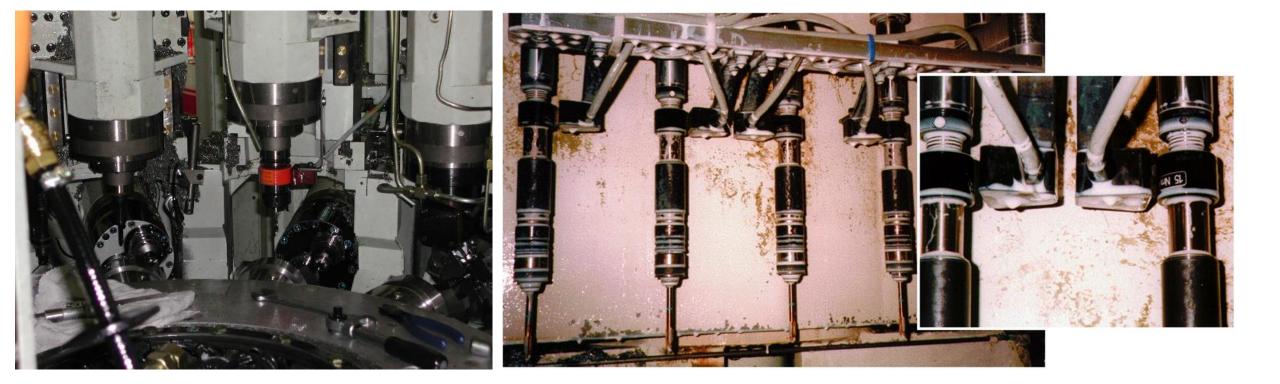
## Cutting/Machine-Protection







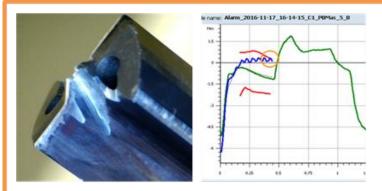
#### Artis Applications





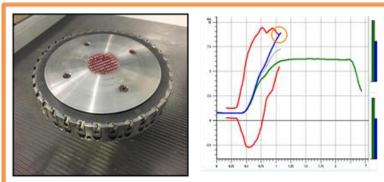


#### **Detected Failures**

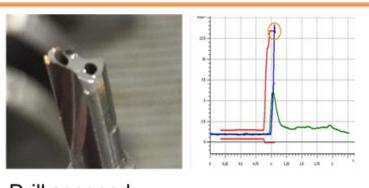


E Point on drill damaged.





Slight chip on 2 out of 32 cutting edges.



Drill snapped.





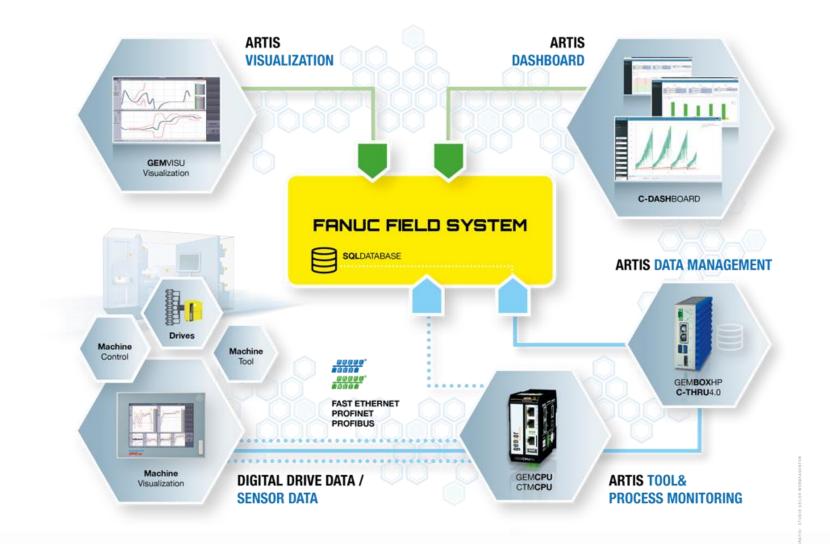
## Monitoring and trend display







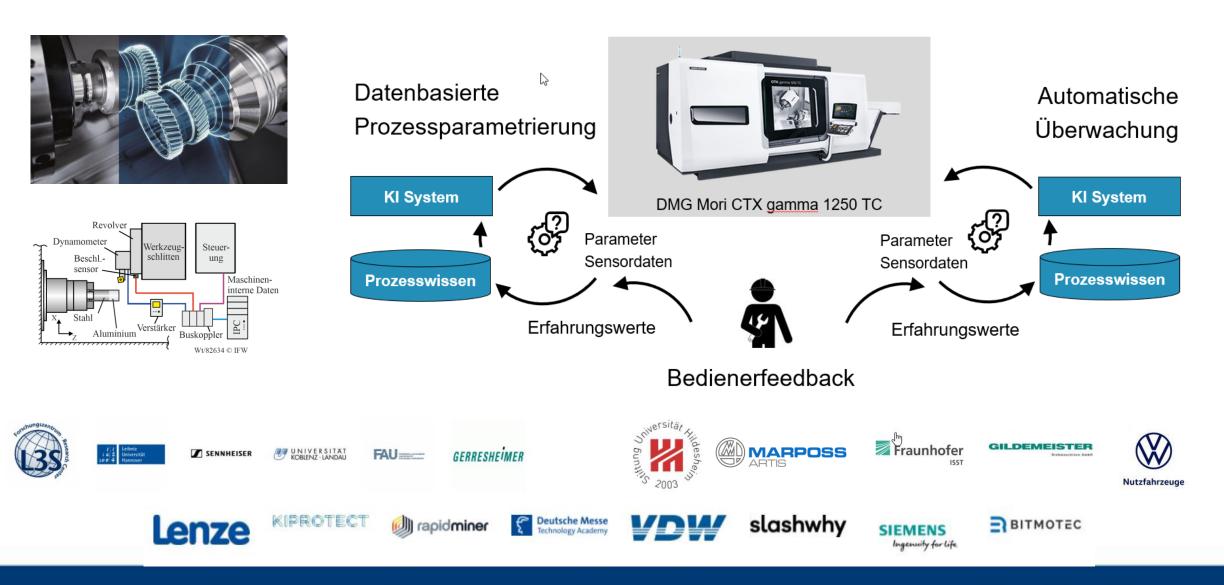
#### Cloud solution Fanuc Field System







## **IIP** Ecosphere









# MARPOSS Smart Factory 4.0

