

### smart **G**

# Health monitoring and alerting for Power transmission components

**Cyber-physical system for Clutch Brake transition analysis and Gearbox Condition Monitoring** 

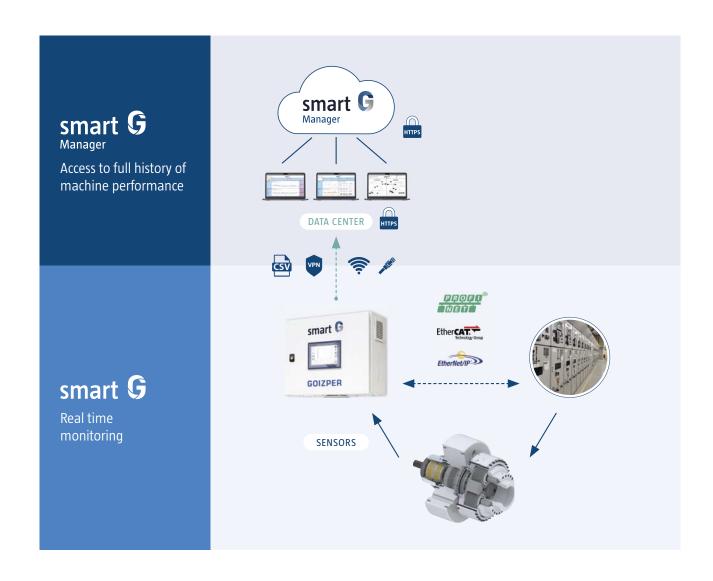


# HOW TO PREVENT CRITICAL FAILURES IN POWER TRANSMISSION COMPONENTS?

**Smart-G Manager** is a platform that consolidates all the information recorded by Smart-G. It provides dynamic monitoring of historical data and performs clustering of the different operating modes, highlighting the deviations that have been identified. This allows for a clearer understanding of system behavior over time and supports the early detection of anomalies or inefficiencies.

**Smart-G** & **Smart-G Manager** is a technological solution whose objective is to provide industrial maintenance services related to its components (clutch-brakes and gearboxes).

- > Control and monitor in real time the condition of the machines' transmission components.
- > Identify, foresee and reduces possible breakdowns and downtime in its manufacturing processes.
- > Help to know when it is the right moment to replace a specific machine component.
- > The company minimizes preventive maintenance costs.
- > Improve the spare parts management and the TAS Service.



**Smart-G** works with the most advanced technological applications, allowing:

- > Calculate the functional indicators of the component
- > Monitor and analyze the current state of the component.
- > Offers a diagnosis and feedback to support a decision of the machine.
- > The value information recorded locally may be sent remotely to a cloud platform (Smart-G Manager).
- > The user can access to the historical information related to the use of its component.

This device plays a fundamental role in the implementation of Industry 4.0: the local and remote capture and transmission of information regarding the status of the machine components and industrial processes in order to reduce unplanned downtimes and increase the availability of the equipment.

Whether stand-alone or in a modular configuration, Goizper's components are equipped with **smart-G** technology, providing continuous, cloud-based:

- > Monitoring.
- > Diagnosis.
- > Feedback.
- > Predictive Maintenance Alerts.

### Components that allow monitoring



### **Functions**

Smart-G provides intelligent control data for each Power Transmission Component:

#### CHUTCH BRAKE

- > Friction wear
- Slipping
- · Pressure
- Clutch Brake
- Valve response
- ClutchBrake response
- Mechanical response
- Lubrication condition(s)

### COMPLETE PRESS DRIVE

- > Friction wear
- Slipping
- > Pressure
- · Clutch Brake
- Valve response
- ClutchBrake response
- Mechanical response
- Lubrication condition(s)
- → Vibration(s)
- Flywheel displacement

### **GEARBOX**

- <sup>></sup> Pressure
- Lubrication condition(s)
- → Vibration(s)
- <sup>3</sup> Hydraulic elements status
- → Oil quality







## GOIZPER-GUIBE YOUR PARTNER IN POWER TRANSMISSION



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