



## Optimum Protection of Gearboxes through constant oil and vibration monitoring



FAG Wear Debris Check and the proven FAG condition monitoring solutions provide extensive protection for machines.

- More simple and accurate detection of gear damage - even to planetary gears
- Early detection of bearing damages (e.g. cage damages)
- Support in the analysis of problems – also in the form of other services such as engineering services, video endoscopy, lubricant analyses, etc.
- Increased plant availability and overall productivity



Massive gearbox failure



FAG Wear Debris Check



Consulting

## Typical Applications

- **Steel and Aluminium**  
e.g. pinion stand gear units and reduction gears
- **Raw Material Extraction and Processing**  
e.g. mills and rotary kilns
- **Pulp and Paper**  
e.g. drying cylinder gears and wire drive roll gears
- **Wind Power**  
planetary gears
- **Marine**  
e.g. ship propulsions  
Oil and Gas  
e.g. top drives and drawworks gearboxes

## Operating Benefits

- **Efficient and early detection of damage**  
through reliable detection of wear, classified according to material and size
- **More precise localisation of damage**  
through analysis of the material properties of wear debris particles combined with frequency-selective vibration analysis
- **More reliable prediction of a machine's condition**  
by combination of oil particle and vibration measurement data
- **Simple integration of FAG Wear Debris Check**  
also into existing online condition monitoring systems and machinery controls

## Supplementary Schaeffler Services

- Video endoscopy for determining the actual extent of damage
- Professional mounting service for reducing shutdown times
- Component based engineering for increasing the service life and performance of gears

Further information  
Catalogue IS1

Schaeffler Technologies GmbH & Co. KG  
Georg-Schäfer-Straße 30  
97421 Schweinfurt

Internet [www.schaeffler.com/services](http://www.schaeffler.com/services)  
E-mail [industrial-services@schaeffler.com](mailto:industrial-services@schaeffler.com)

Phone +49 2407 9149-66  
Fax +49 2407 9149-59