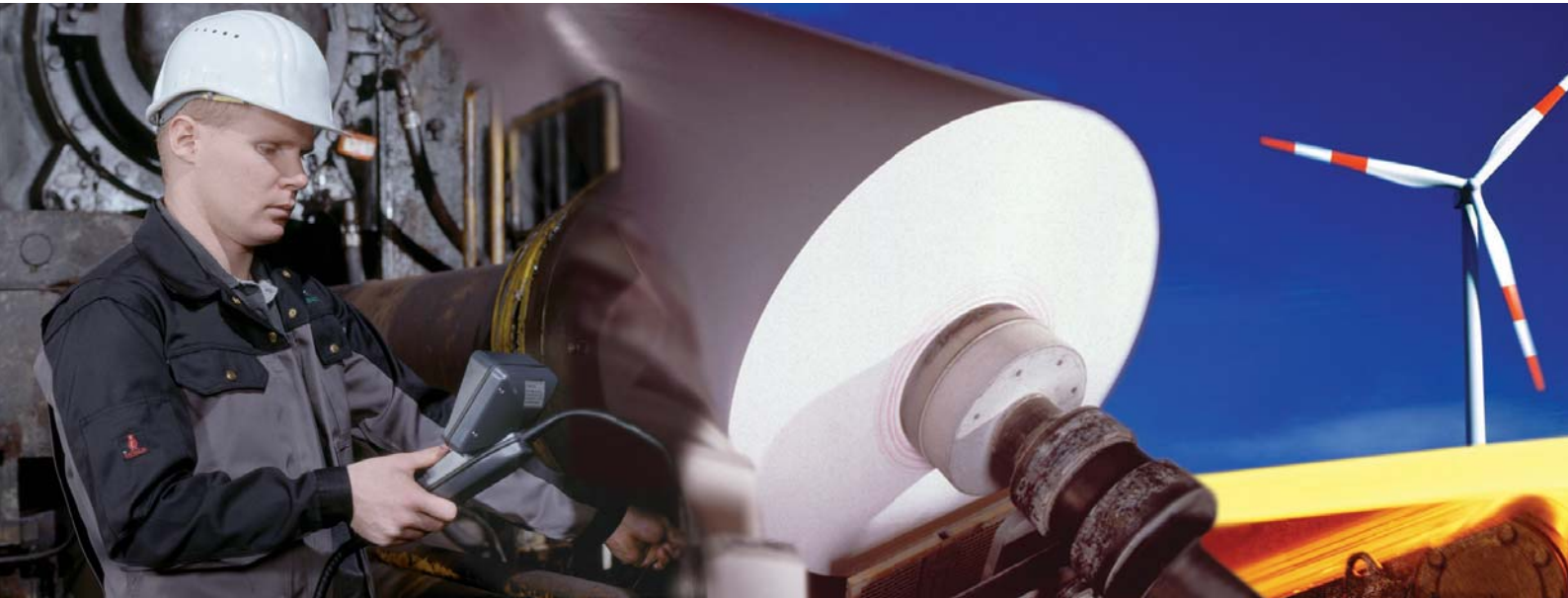


## Endoscopy Service



### Light the Dark

*Endoscopy reveals damage*

#### Example: Inspection of gearings

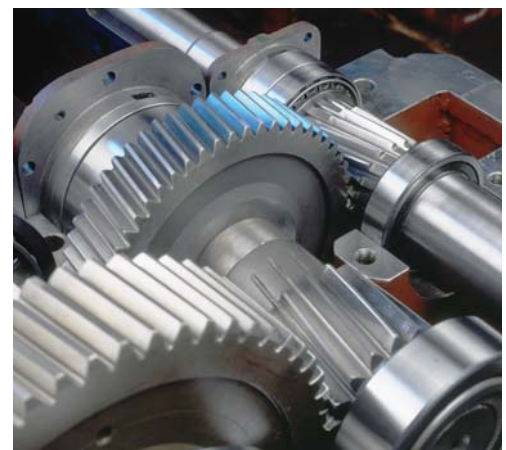
When a paper machine was overhauled, the condition of the hard to access gearings in a dryer section was assessed.

#### Measures taken

- Inspection of gearings with an endoscope without major dismantling work
- Damage analysis on the basis of the endoscopy results (images and videos)

#### Customer benefit

The customer received a detailed damage report with specific recommendations that helped prevent the damage from spreading.



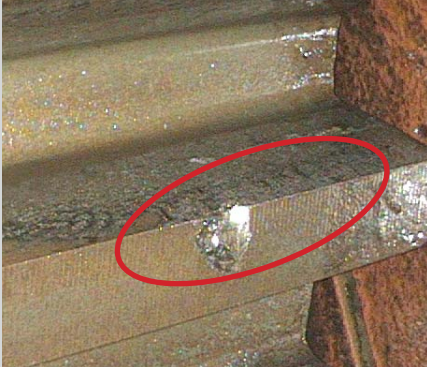
Multistage gearbox



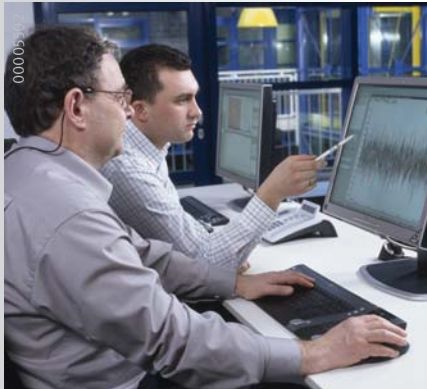
\* Based on an assumed shutdown of 3-4 hours, costing about € 7,500 / hour.



Gearbox for wind power plants



Damage on a gear wheel



Online Monitoring Center

## Requirements, advantages and fields of application

Endoscopy requires specialist knowledge. With this method experts are able to carry out a visual inspection of components inside a machine in only a few hours. Typical fields of application are industrial, marine or wind turbine gearboxes. Being an imaging inspection method, endoscopy provides concrete information about the condition of rolling bearings, gearings and other machine elements – without time-consuming, costly dismantling work.

### Typical industrial applications

- Bearings
- Gearings
- Electric motors
- Special machines, for example turbine blades

### Our services – More than just images and videos

- Identification of damage by means of vibration diagnosis and other methods
- Damage analysis and in-depth diagnosis by means of endoscope inspections which show the severity of the damage in the form of images and videos
- Specification of damage repair measures
- Experienced fitters provide support in repairing the damage

Endoscopy is just one element of our comprehensive range of condition-based maintenance products and services. Depending on the application in question, it is used in combination with other services such as vibration measurements, thermographic measurements, etc.

For further information on FAG condition monitoring products just ask for a copy of our catalogue!



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