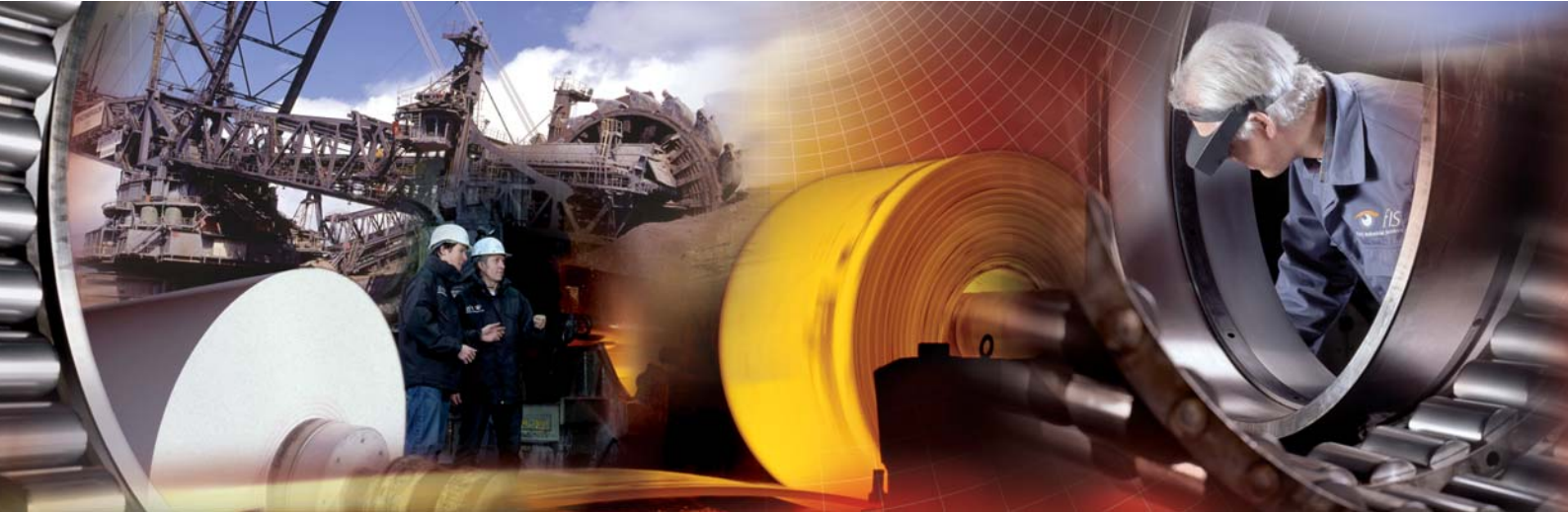


Smart Performance Program



Diagnosing Roll Imbalances with FAG Detector III

Industry: Pulp and Paper

Customer: WBW Industriemontagen GmbH, Castrop-Rauxel (Germany)

WBW Industriemontagen GmbH belongs to the WBW Group. The 1977 founded group comprises four separate companies and employs a workforce of about 180. The service provider installs machines and pipelines and offers, among others, services to the pulp and paper industry, for example dismantling or rather reassembly services and general overhauls.

Challenge for Schaeffler

The operator of a paper mill had asked WBW Industriemontagen GmbH to overhaul various guide rolls of a board machine. In order to determine in advance which rolls were suitable for reconditioning, the company called in FAG Industrial Services (FIS).



Technical Information about the Paper Machine

Paper quality:

Waste paper based fluting, gray board and testliner with basis weights of 100g/m² to 600g/m²

Working width:

5 m

Production capacity:

370,000 t/a, produced on 3 machines

Schaeffler Solution

The FIS vibration experts conducted measurements with the FAG Detector III at the paper machine while it was running, with a focus on measuring the imbalance of the rolls. In the past, the imbalance diagnosis had always been performed at the WBW workshop. The measurements revealed 22 rolls which were no longer suitable for reconditioning due to imbalance.

Customer Benefit

Thanks to the in-situ checking of the rolls, the company was able to identify the damaged rolls that were no longer suitable for reconditioning betimes. As a result of the reduction in transport and inspection cost, WBW Industriemontagen GmbH was able to realize the following savings:

Cost of transporting the 22 rolls to workshop:	approx. € 3,000
First and second balancing at workshop as part of reconditioning (22 x € 1,020):	€ 22,440

Total savings:	approx. € 25,500
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Service providers can pass these savings on to their customers, thus increasing their loyalty and their own competitiveness.

What's special

Measuring campaigns are a field proven procedure for appraising the condition of a machine. But their use as a quality check and thus as a basis for appraising the condition of machine elements prior to reconditioning is new. It is applicable for all tasks of the same type where the suitability of existing machine elements for reconditioning is to be determined on the basis of bearing condition and imbalance.

Technical Information about the Solution

Used FAG Detector III functions:

The FAG Detector III was used to measure the following characteristic values
 – ISO 10816
 – Vsel



Contact details for worldwide contact persons as well as further **Smart Performance Solutions** can be found on our homepage www.smartperformanceprogram.com