



Optimising processes in the steel industry

Examples and solutions

F'IS solutions for successful maintenance



Rolling stand

Hot wide strip mill

Increased plant availability through specific customer training

Challenge:

- Customers are often not sufficiently familiar with the operations involved in professional mounting of rolling bearings on work rolls
- If rolling bearings are mounted incorrectly, this can lead to sudden downtime and lost production

Solution:

- Customer-specific training on the mounting of rolling bearings with emphasis on the practical mounting of work roll bearings

Customer benefits:

- Build-up of internal know-how in professional mounting of bearings
- Prevention of bearing damage due to mounting errors
- Increase in bearing service life
- Prevention of unplanned downtime and lost production

Preventing unplanned downtime by means of online monitoring

Challenge:

- Extreme operating conditions and short downtime lead to high bearing loads
- This results in bearing failures and unplanned downtime

Solution:

- Permanent online monitoring of vibration behaviour using the FAG DTECT X1

Customer benefits:

- At all times precise knowledge of machine status
- Early warning of approaching damage
- Necessary maintenance measures can be planned well in advance
- Prevention of unplanned downtime and expensive secondary damage

Arcanol greases

ensure that bearings achieve a long service life with favourable running behaviour and high operational reliability.



FAG DTECT X1 is a versatile online monitoring system for early detection and diagnosis of damage.



Cold rolling mill

Roughing stand

Quality assurance in cold rolling plant

Challenge:

- Corner breaks must be cut off with very high demands on width tolerances
- Chatter marks arising from production conditions (non-measurable density variations) lead to defective coils

Solution:

- Online monitoring including automatic data evaluation by means of FAG ProCheck

Customer benefits:

- Rapid availability of data on condition and quality
- Necessary response to changes detected in quality can be implemented without losing time
- High plant availability ensures competitiveness
- Customer-specific service (e.g. teleservice)

Reconditioning of cylindrical roller bearings

Challenge:

- The bearings in the roughing stand are subjected to extreme loads (due to very high rolling forces) and critical ambient conditions (water and scale)
- Any possible damage to a cylindrical roller bearing in the roughing stand jeopardizes the availability of the complete plant

Solution:

- Reconditioning of cylindrical roller bearings including all necessary steps, such as regrinding of raceways, production of new rolling elements, etc.

Customer benefits:

- After only a short time the bearing is ready for use again
- Reduction in inventory costs for replacement parts
- Reconditioning costs are approximately 2/3 of the price of a new bearing
- Ensuring plant availability



FAG ProCheck

is a robust system for self-sufficient online monitoring in all sectors of heavy industry.



For further information, simple request a copy of our catalogue!

F'IS - First in Services

FAG Industrial Services (F'IS) supports the steel industry in increasing plant productivity and product quality. With innovative products and solutions specifically matched to rolling bearings – the fundamental component of industrial plant - F'IS helps to minimise production stoppages and increase the competitiveness of companies in heavy industry. The quality requirements of F'IS are characterised by the many years of experience gained by the established

brands INA and FAG in the manufacture of precision rolling bearings.

As service provider company of Schaeffler Group Industrial, F'IS is your effective partner for the complete range of rolling bearing-related services in the steel industry. F'IS can help you to achieve savings on maintenance costs, optimise your plant availability and prevent unforeseen machine downtime.

