

Cost Reduction through condition-based Maintenance

The paper manufacturer Industrie Cartarie Tronchetti (ICT) intended to introduce condition-based maintenance. For this purpose, 73 critical machines in the plant were selected. The monitoring solution consisted of an online and offline combination. These measures enabled alignment errors and vibration problems on fans, pumps and the extraction stand to be detected at an early stage. The paper manufacturer also wanted to become an expert himself. Therefore, the personnel was trained on site.

Savings: 250,000 euros annually.

Benefits

- Early detection of misalignment and vibration problems with fans, pumps and extraction scaffolding
- Reduced repair costs through training of own personnel
- Savings by switching to condition-based maintenance



Customer

ndustrie Cartarie Tronchetti,

Sacto

Pulp and Paper

Application

Andritz machine (pumps,

fans, extraction stand)

Solution

Condition monitoring, damage analysis, training

SCHAEFFLER

What our customer drives ... What Schaeffler has to offer ...

Challenge

Due to the high technical requirements of a paper plant ICT wanted to introduce condition-based maintenance on its Spanish site. Thus, the company was looking for a partner who could fulfill this demanding task. This partner was supposed to offer maintenance services, products and bearings as well as providing professional training, as ICT also wanted to gain own knowledge in the field of condition-based maintenance.

Solution

Schaeffler's solution package included condition monitoring and control of critical machines, damage cause analysis of critical machines, a training program for maintenance staff and on-site support.

Schaeffler started with the inspection of 73 critical machines. Most of the monitoring was done offline with the Schaeffler Detector III, but for some special units an online monitoring system* and thermographic measurements were also used. The Schaeffler solution enabled alignment errors and vibration problems on fans, pumps and the extraction stand to be detected at

an early stage. Thanks to the customerspecific training, the ICT maintenance team has maintenance knowledge that will enable them to check the condition of the machines themselves.

What's special

Since the introduction of condition monitoring and the start of the training program by Schaeffler Iberia, ICT maintenance has improved considerably. The customer was satisfied with the results and extended the contract to 80 additional machines.

SAVINGS & GROWTH

> 250,000 €

Yearly savings in maintenance

10 %

Yearly production growth



Vibration measuring device Detector III



Balancing kit Detector III

*Note

At the time, the online-solution wa implemented with the FAG DTECT X1 online-monitoring system.
Today, Schaeffler would use the current ProLink CMS.

Customer

Industrie Cartarie Tronchetti (ICT) is a paper company with manufacturing sites in Italy, Spain and Poland. The plant in Spain started operating in October 2005 and manufactures paper with an annual total production capacity of 70,000 tons.



Plant in Spain

Technische Informationen zur Anlage

Andritz machine (pumps, fans, extraction stand)

Product

Tissue paper

Capacity

70,000 tons/year

Technical Information about the Solution

Schaeffler Detector III functions used:

- ISO 10816
- Condition of gears
- Condition of rolling bearings
- In-depth diagnosis based on the signals and frequency spectra
- Free PC software
- Measuring routes
- Automatic measuring point identification by means of RFID technology
- Static and dynamic balancing on site