

We pioneer motion

Satisfied vibration experts

thanks to additional analysis tool - from experts for experts

Finnsementti uses the OPTIME wireless solution to automatically and continuously monitor almost all rotating machines in its cement plant on a comprehensive basis. Even without specialist knowledge of vibration analysis, the solution provides easy-to-understand information on the machine condition and possible causes of failures.

However, it was important for the cement manufacturer's experts to obtain deeper insights into data from individual machines. For this reason, Schaeffler introduced the ExpertViewer analysis tool, which was initially developed for internal purposes only, available to the experts of Finnsementti. This gives the vibration specialists even more precise insights and they are absolutely satisfied.

Benefits

- More knowledge about the condition of the machines through exact depth and root cause analysis
- Wide range of analysis tools (e.g. the harmonic and sideband cursors, waterfall diagram)
- Intuitive operation of the analysis software developed with and for experts
- Seamless integration into the OPTIME environment

FINNSEMENTTI

Application

SCHAEFFLER

What our customer does ...

Challenge

Finnsementti has been producing cement at its Parainen and Lappeenranta plants for over a hundred years. The Finnish cement manufacturer's biggest concern – plant downtime – has already been solved with the comprehensive and wireless OPTIME solution (CSS 0144). The maintenance experts wanted to gain deeper insights into the condition of individual machines. Therefore, they were looking for a solution that would allow a deeper analysis of the vibration data of motors fans, pumps and gear units. With this request, the maintenance experts turned to Schaeffler.



Cement plant, Finnsementti Oy, Parainen

In-depth analysis of the vibration data from

>150

Schaeffler OPTIME sensors and increasing.

Schaeffler OPTIME is installed on various machines in the plant.





Harsh environmental conditions: \mbox{OPTIME} does not mind dust and dirt.

Technical information on the units

Fixed speed

Electric motors, gearboxes, 1400 – 3000 rpm

combination of support bearings

Variable speed

Electric motors, fans, 600 – 1000 rpm

combination of support bearings

Fixed speed

Electric motors and 1400 – 3000 rpm

fan combination

What Schaeffler has to offer ...

Solution

Schaeffler experts recommended the OPTIME ExpertViewer for the more in-depth vibration analysis. This software-based solution provides vibration specialists with a comprehensive collection of analysis tools for in-depth and root cause analysis, enabling the experts to evaluate the large amount of vibration data even more optimally. The various included visualization options also allowed the experts to analyze individual machines even more precisely.



View of ExpertViewer software on the computer.

What's special

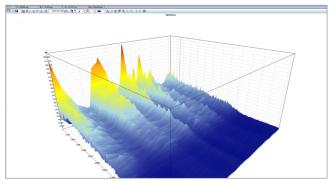
Schaeffler developed the ExpertViewer based on more than 25 years of experience in vibration analysis and would also like to share this expertise with vibration specialists. It can also be used to evaluate data from other Schaeffler condition monitoring products, such as SmartCheck or ProLink CMS.

Information about the ExpertViewer

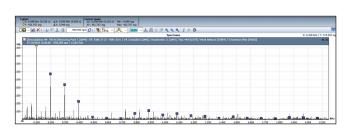
ExpertViewer	Paid digital service (software) for the analysis of vibration data
Provision	via download
Visualization	PC
System architecture	Windows 10



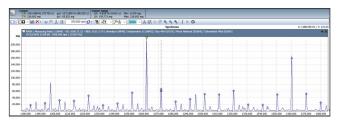
At a glance - All data for one measuring point. No more time-consuming search.



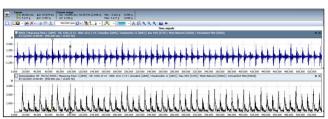
Waterfall diagram - visualizes the development of frequencies over time



Analysis Tool - Harmonics Cursor



Analysis Tool - Sideband Cursor



Analysis Tool - Time Signal Cursor

What our customer says ...



The ExpertViewer is just the right tool for our vibration experts. They can easily take a detailed look at the data.

A "must have" for experts!

Toni Virtanen Maintenance Engineer, Finnsementti Oy

Customer

Finnsementti is a Finnish cement manufacturer. Around 230 employees work at the cement plant The main raw material for cement and limestone is extracted directly on site. Finnsementti celebrated its 100th company anniversary in 2014.