

Schaeffler Global Technology Solutions

Raw material extraction and processing

Mátrai Erőmű Zrt., Hungary

FAG CONCEPT8 provides Constant Lubrication

The Mátrai Erőmű Zrt. power plant at the Visonta location is a subsidiary of RWE Power and is one of the largest power plants in Hungary. The company owns a power plant and two open pit mines (Visonta and Bükkabrány).

Challenge for Schaeffler

At the Visonta open pit mine, coal is transported to the power plant via kilometer-long belt conveyors. Smoothly operating belt conveyors are thereby decisive in ensuring a trouble-free process. In order to ensure this process, optimum lubrication – despite contamination and severe vibrations – is necessary. Furthermore, the lubrication points are often difficult to access or are very isolated. The customer was therefore looking for a reliable relubrication system, which would increase the operating life of the rolling bearings for the belt conveyor systems of the open pit mine and reduce the manual service work.

Schaeffler Solution

The local Schaeffler sales partner Euro-Borsod Trade Kft. recommended using the FAG CONCEPT8 lubrication system filled with high quality Schaeffler lubricants from the Arcanol range. This combination makes it possible to permanently and reliably relubricate the drum bearings during operation. The installation of the lubrication systems and the permanent maintenance and replacement of the lubricant cartridges is also carried out by the authorized Schaeffler sales partner.



MÁTRAI ERŐMŰ ZRT.

Technical Information about the Plant

Location:

Visonta open pit mine

Raw material supplied:

Brown coal

Output per year:

4,5-5 mn. t.

Length of belt conveyors:

40 km

Diameter of drums:

Up to 1500 mm

Bearings:

FAG spherical roller bearings with outside diameter of up to 650 mm





Belt conveyor system



Lubricant connection to the belt conveyor drum bearing



FAG CONCEPT8

Customer Benefit

The FAG CONCEPT8 has proven itself under the harsh environmental conditions in the power plant. In the period between 2014 and 2016, over 100 lubrication systems including the corresponding lubrication cartridges were installed. Ever since, these have ensured the reliable provision of lubricant to all belt conveyor drum bearings. The risk of premature bearing failure, which can result in failure of the entire belt conveyor system, has therefore been minimized. With regards to personnel, during this period it was possible to significantly reduce the expenditures for manual relubrication and for time-consuming repairs. From a technical standpoint, the customer was particularly impressed with the user-friendliness and the robust design of the lubrication system.

What's special

The Mátrai Erőmű Zrt. power plant is so satisfied with the Schaeffler products and the services of the local Schaeffler sales partner Euro-Borsod Trade Kft. that it would like to further develop this cooperation in the future. In addition to the Schaeffler lubrication systems and Schaeffler rolling bearings already in use in the Visonta open pit mine, the Bükkabrany open pit mine will in future also be supplied with Schaeffler products.

Technical Information about the Solution

Lubrication system:

FAG CONCEPT8

Operating mode:

Internal time control

Cartridge with lubricant reserve:

800 cm³

Lubricants:

- Arcanol LOAD460
- Arcanol MULTITOP

Hoses:

- FAG PA1.2 hoses
- OD 6 mm, ID 4 mm