BSC
BEARING & POWER TRANSMISSION SOLUTIONS

Case Study

Cooper Split Roller Bearing

COOPER®

INDUSTRY

Open Cut Coal Mine

APPLICATION

Stacker Reclaimer

PROBLEM

Shutting a coal mine down for five days is a big problem. We are talking huge dollars. But this is one particular power stations annual maintenance program on a set of SD3134 Sphericals. The seals just couldn't cut it in such a tough environment so the only solution presented to date was to pull the stacker reclaimer down for 5 days every year. So much wasted production and down time for one bearing set.
Problem 1: inferior sealing leads to the ingress of coal and premature failing of the bearing.
Problem 2: bearing change out requires partial disassembly of a machine bigger than the average bearing shop.

SOLUTION

Cooper Split Roller Bearings with superior seals will last longer allow easy inspection and clean (instead of replacement) and will enable eventual change out in hours not days.

BENEFIT

By installing a bearing that can be changed in 8 hours rather than 5 days this time can be used to perform other important and currently neglected maintenance tasks, and get back into production sooner.

The standard spherical has been changed out annually over recent years. The Cooper split roller bearing would only be replaced every 3-5 years although an annual clean out would not be a bad idea.

Over the life of the cooper this application will save this customer anywhere between $1M and $3M. That's big dollars, based on extremely conservative figures, including a down time rate of only $10,000 for a coal mine at a power station.conservative figures, including a down time rate of only $10,000 for a coal mine at a power station.

Sustainability Solutions