

Case Study

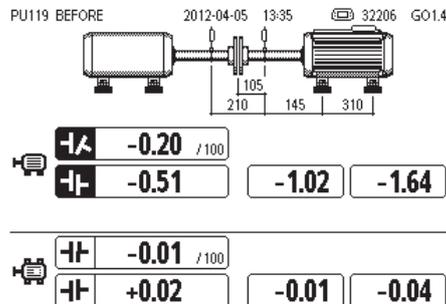
Condition Monitoring

INDUSTRY

Coal Mine Wash Plant

PROBLEM

BSC conducts routine condition monitoring for a large coal mine wash plant. On our condition monitoring data collections, our reports indicated vibrations had significantly increased for both motor and pump bearings which warranted serious concern. The main water pump provides water to the plant and should this pump prematurely fail, it would consequently shut the plant.



APPLICATION

Main Water Pump

SOLUTION

BSC Engineering Services recommended that the machine be taken out of service for maintenance including an inspection of the coupling and alignment review. After our inspection the analysis report confirmed that the coupling was out of alignment as indicated in the initial reading. BSC laser aligned the shafts to the required tolerance, in accordance with the manufacturer's application specification and rotating speed.

BENEFIT

This application is now running much cooler, quieter and prevented an unwanted premature failure. Using condition monitoring prevented an unforeseen break down and consequent downtime which is estimated at a value of \$100k per hour, an estimated 6-8 hours to change out the pump, **saving \$600,000 to \$800,000.**

