CASE STUDY

WEAR PLATES ON CONVEYOR STRETCHING 7KM AT BOLIDEN AITIK MINE SWEDEN

Introduction:

High efficiency is a matter of survival for the Boliden Aitik copper mine in northern Sweden. The proportion of metal in the earth's surface here is so low – less than 0.3 percent – it can only be extracted profitably if the processes are highly automated.

Problem:

Speed at which worn wear plates can be replaced is crucial to the conveyors production efficiency. The regular replacement of wear parts is unavoidable, but regular maintenance allows the downtime to be planned and avoids unpleasant surprises resulting from unexpected repairs. The key factors are speed and precision, as incorrect installation can be considerably more expensive by causing additional, unplanned downtime. The existing method of bolting was simply too slow and so began the search for a new kind of tool.

Solution:

A tool with intelligent joint sensing technology, high run-down speed and final torque accuracy was the chosen solution. Rapid replacement of worn wear plates was performed over sections of the conveyor during planned maintenance, with each and every plate successfully installed. The portability of EvoTorque® was seen as a huge benefit by the engineers; no longer required were the pneumatic multipliers, assortment of hoses and lubrication filters. Once configured, the tool provided operating instructions via the OLED display with torque and angle data clearly is visible.

EVOTORQUE®
ELECTRONIC TORQUE TOOL WITH INTELLIGENT JOINT SENSING TECHNOLOGY