

Case Study

W22M Motor & SSW07 Soft Starter



INDUSTRY

Mining / Quarrying

PROBLEM

A quarry located North of Melbourne had an old slip ring motor and liquid resistance starter. When purchased as new, the motor and starter were current technology in motor starting. The motor needed to be changed over. Both the replacement cost and overhaul cost of the motor to maintain the same technology were prohibitive.



APPLICATION

Crusher

SOLUTION

BSC proposed a solution to replace the slip-ring motor and liquid resistance starter with the latest in motor design, the WEG W22M mining spec motor and robust motor starting and protection with the WEG SSW07 soft starter.

The W22M is specifically design for harsh applications such as quarries with a service factor of 1.15, IP66 rating, class H insulation, taconite labyrinth seals, roller bearings, high tensile steel shaft and, E3 level high efficiency.

The SSW07 is a robust starter providing a kick start with either a voltage ramp of current limit start, rated to 55deg ambient with integral bypass contactors.

BENEFIT

The cost of the 110kW 6p motor and starter were well within the budget expectation of site. Additionally, the high efficiency of the W22M mining spec motor is estimated to save the site \$1730 and 18.5 tonne of CO2 per annum. The fact that both motor and starter were in stock in Melbourne meant the timetable to change out the old technology was not delayed by long lead times.

Being specifically designed for harsh applications like quarrying, the W22M is expected to provide a long service life. The SSW07 soft starter will ensure smooth acceleration and reduced mechanical stress on start up, as well as reduced ventilation requirements within the electrical cabinet.