

**Location**

*Bowen Basin,
Central QLD*

Value

\$ 20 Million

Owner

*Carborough Downs Coal
Mine*

Owners Representative

VALE Projects

Contract Type

Schedule of Rates

Duration

12 Months

Peak Labour Force

105

Total Man hours

~150,000

Walz construction was contracted by VALE Coal Projects to construct a series of surface conveyor systems from the existing underground mine through to the new Coal Handling Preparation Plant covering a distance of approximately 4.5km. Carborough Downs is located approximately 190km west of Mackay down the Peak Downs Highway and mines the Leichardt coal seam using continuous miners for development prior to the new longwall extraction.

The overland conveyor system starts with the Drift conveyor running from the new long wall mining equipment underground with a product capacity of approximately 5,500 tons per hour feeding the stockpile conveyor. This conveyor is powered by twin 2MW, 11 kV motors, powering variable speed CST drive units. The stockpile stacker rises approximately 42m high and is driven by twin 750W CST drives. The stockpile coal is then pushed onto the Joy Stamler chain feeder passing onto the reclaim conveyor. This is then elevated up into the Screen House and Metso Rotary Breaker station. Once crushed and sorted the system will feed approximately 1,200 tonnes per hour on the overland conveyor onto the surge bin feed conveyor for final wash plant storage and regulated plant feed rates.

The Walz Electrical Division completed the installation and commissioning of 3 new transportable switchrooms complete with 11kV feeders, transformer yards and earthing systems throughout the project. This includes both split system and ducted air conditioning systems. The 4km Over Land Conveyor has triple 415 variable speed drives. All associated fully automated field devices, DACS and fibre optic communications systems, have also been installed and commissioned. Walz Electrical has been responsible for the installation and testing of all project general power, conveyor walkway lighting, emergency and solar lighting systems and area floodlighting.

The Surface Conveyor Project was completed with no lost time injuries, complementing our Zero Harm procedures and policies.