



Client: Forbes Coal

Site/Location: Dundee, Kwazulu Natal

Project Period: Jan 2012 – Feb 2012

Project Description:

Magdalena and Avimore Collieries are underground coal mines. The mines recently initiated a production ramp up programme at its underground operations, which included the addition of two continuous miner production sections. Management has identified the coal transport infrastructure as a production constraint and wishes to initiate investigations to determine the requirements to alleviate this constraint for the remaining life of mine.

Project Scope:

The Project Includes:

- Compare upgrading the current system versus new layout
- Investigate various layouts and recommend the best option considering the following:
 - Disruption to current production system
 - Installation time
 - Capital expenditure
 - Operating cost
 - Capacity
- Be based on high level designs and benchmarked capital and operating costs
- Conclusions and recommendations to alleviate the capacity constraint
- Specifications on the following:
 - Belt speed and width
 - Motor sizes
 - Gearboxes
 - Chutes
 - Drives
 - Best practices
 - Systems conducive to the safe operations of the system are to be considered and this may include, but not be limited to sequencing, non-slip protection, appropriate C&I etc.
- Bill of quantities:
 - A detailed bill of quantities is required
 - The procurement and installation of the new conveyor system will be the mine's responsibility

Services Provided:

- Project management
- Engineering design (mechanical and electrical) services
- Peer reviews
- Production and equipment simulations