

Engineering Consultants
Project Managers

DEVELOPING ENGINEERING SOLUTIONS



Electrical Engineering













Capital Consulting Engineers Offer Innovative Solutions for:

- Electrical Design & Drafting
- Project Management of Engineering, Procurement & Construction
- Commissioning & Operations Handover
- Quality Assurance

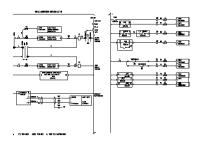
For multi-discipline project delivery from concept through to commissioning and operations handover, Capital Consulting Engineers offer high quality certified Project Managers backed up by an experienced in-house Engineering Team. We offer innovative and cost effective solutions to your Engineering problems.

5 Margaret Vella Drive Paget, Mackay, QLD 4740

Phone: (07) 4952 2022 E-mail: info@capconsult.com.au Web: www.capconsult.com.au

"Your Partners in Success"

DEVELOPING ENGINEERING SOLUTIONS



ENGINEERING SOLUTIONS

Conveyor Control Systems

Mineral Processing

Instrumentation and Control

Power Reticulation

Engineering Investigations

Electrical Drafting

Practical Experience

Capital Consulting Engineers have practical experience in projects from research and development, investigations, feasibility studies, planning, design and project management in industry and mining.

We are a multidisciplinary consultancy which leads to a well-rounded approach to project management, delivering an integrated system that works.

Complete Project Delivery

Capital Consulting Engineers provide clients with in-house services covering most aspects of engineering projects, ensuring a coordinated effort from concept development to final commissioning and project handover.

Engineering Consultants Project Managers

Capabilities

Capital Consulting Engineers provides clients with value in the electrical design process by clarifying their needs, challenging assumptions and developing solutions to achieve the highest level of design quality, sustainability and productivity. CCE's areas of capability include:

Project Management

CCE manages mining and industrial projects, residential developments, equipment installations and commissioning in line with the PMI Project Management principles.

Feasibility studies

- Project evaluation and development potential analyses
- > Financial evaluation and feasibility assessment
- > Engineering Estimates

Engineering Design

- Detailed design analysis
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PROJECT MANAGEMENT

Feasibility Studies

Budget Estimates

Capital Projects

System Upgrades

Software Packages

- Microsoft Project
- AutoCAD Electrical
- > PowerCad



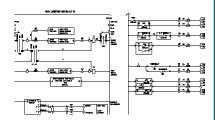
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PROJECT MANAGEMENT

Capital Consulting Engineers have managed a number of large projects and installations for various clients in the Bowen Basin. These cover both surface and underground projects, greenfield installations and expansions.

Major Underground Projects

A number of underground installations have included:

Trunk Belt 1 Extension & Tripper Install

This project included the design checks and installation of a tripper with two extra 630kW drives, component replacements and conveyor extension.

7 North Maingate Conveyor Installation

CCE was involved from the early stages to commissioning with the planning, layout design and construction of this conveyor installation, which included ventilation segregation for the maingate conveyor.

Trunk Belt 2 Design and Installation

As a continuing extension of the main conveyor system for the mine the design, management of the procurement, installation and commissioning of the next 540m of underground mains belt.

8 North Maingate Belt Conveyor Installation

The layout design, installation and commissioning of the 8 North Maingate conveyor installation.

Pit Dewatering

CCE planned and designed the main sump and pump station underground at North Goonyella.

Engineering Consultants Project Managers

Major Surface Projects

A number of surface installations have included:

H40 Vent Shaft Installation

Management of installation of shaft liner for blind bored shaft.

CV101 Gravity Take up Winch Installation

Management of the installation of a winch on the Gravity Take Up to allow for de-tensioning the belt without using a crane.

Main Vent Fan Project

Management of Design and Construct of new Ventilation Fans including changeover and decommissioning of the old Ventilation shaft and system.

Northern Bleeder Fan

Management of Design and Construct of a new bleeder Fan including changeover and decommissioning of the old Bleeder fan setup.

Compressor Shed Installation

From shed layout, including designing of roof venting and pipework installation to route the compressed air underground.

Installation of Mine Cooling

Management of the installation of bulk air cooling for the underground mine, including the design of a safety screen and plenum with airflow regulation capacity.

Winder Installation

Management of the relocation of a shaft winder including design of new support steelwork, and integrating the installation into the plenum for the mine cooling. During the relocation upgrades were made to the system to allow for Automatic operation of the cage.





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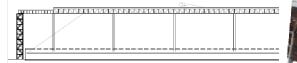
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technology consulting provides a total end to end solution

Bulk Storage Silo and Discharge Control System, Bowen Basin

CCE managed the installation and commissioning of a control system for a 150t bulk storage silo where Stone dust is pneumatically conveyed, in pre-selected batches, from the surface to a pod duster 300m underground through a 5" pipe inserted in a borehole.

- Surface and underground operator interface panels
- PLC control cubicle
- SCADA communication link
- Bin level indication using load cells
- Lightning protection



Power Reticulation to Air Liquide Nitrogen Compression Plant, Bowen Basin

CCE designed and managed the installation and commissioning of the 415V supply to the Air Liquide Floxal Plant, which separates nitrogen from air and pumps this as inert gas in to the GOAF underground.

- Connection of the 11KV overhead aerials to the existing network
- 1.5 MVA 11KV/415V transformer
- Earth grid
- Fenced and gated concrete transformer enclosure
- 415V switchboard and supply cabling to the

Trunk Belt Extension, Bowen Basin

CCE managed the electrical installation of a twodrive tripper unit to increase the length of the existing Trunk Belt

- Tripper starter, substation and all associated field equipment
- Fibre optic communications link with Trunk starter and surface SCADA system
- DAC personnel communication system
- Dupline conveyor control system and associated field equipment

Solsenic Hydraulic Fluid Tank Level and Flow Instrumentation, Bowen Basin

CCE managed and commissioned the installation of ultrasonic level transmitters and inline flow transmitters on tanks supplying hydraulic fluid to the Longwall roof support system

Associations & Certifications



ISO 9001 Certification



Project Management Institute



Australian Coal Preparation Society



Institute of Engineers Australia



Resource Industry Network



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