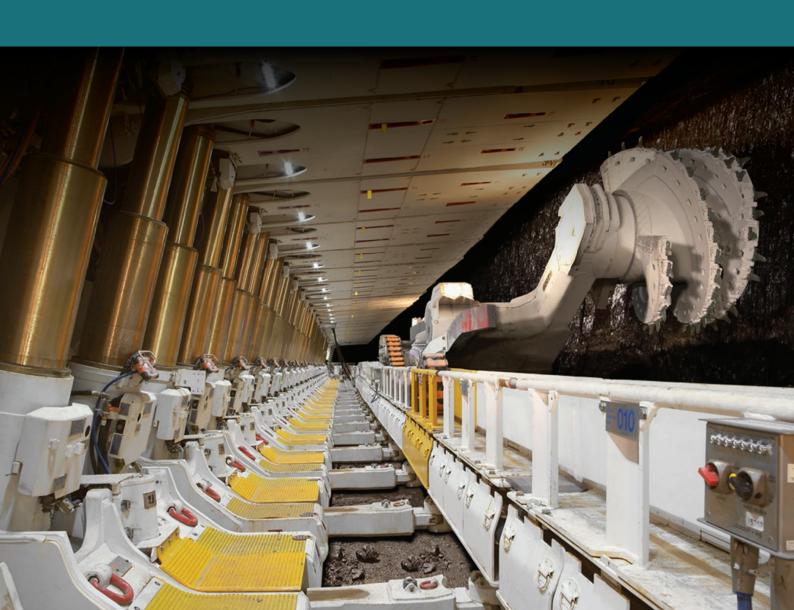


Underground Mining Services

As Australia's leading OEM of underground power distribution and electronic equipment, Ampcontrol is committed to supporting our customers in maintaining efficient and safe coal and hard rock mining operations.

Key to this commitment is our 24/7 Underground Field Service team who provide onsite support and service to ensure your underground electrical and electronic systems are compliant and run at optimum levels.

Our underground services are complemented by a comprehensive range of high voltage services to provide you with mine wide services.





Our onsite team is backed by specialised engineering resources, a service fleet of vehicles and equipment, as well as strategically positioned workshops across the country, to provide a comprehensive suite of support services to manage and maintain your underground electrical infrastructure.



Longwalls

Longwall Support

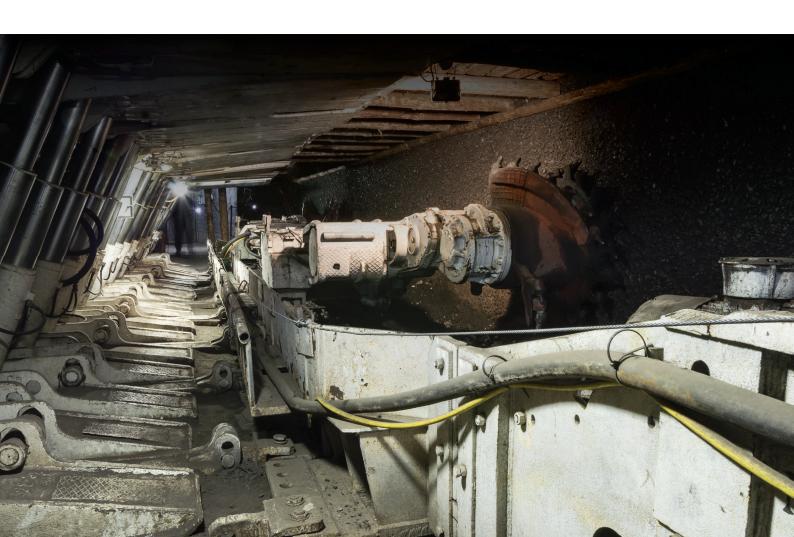
As electrical equipment OEMs, Ampcontrol know the operational value of what we design and manufacture. That's why we are committed to providing early intervention and best practice maintenance procedures that minimise disruption and ensure the availability of our longwall system.

Our onsite service teams provide time phased longwall electrical maintenance plans and corresponding inspection documentation to ensure the highest safety standards are maintained and compliant to the statutory requirements of AS 2290, providing peace of mind your equipment will run as it is supposed to, when it's supposed to.

Our typical support plans include a range of testing, maintenance, overhaul and site services.

End of Block Upgrades and Repairs

Works required are identified through the inspection process and implemented across the longwall production period. Depending on the works required upgrade and repairs can be completed onsite in situ or in Ampcontrol's workshops in QLD and NSW.



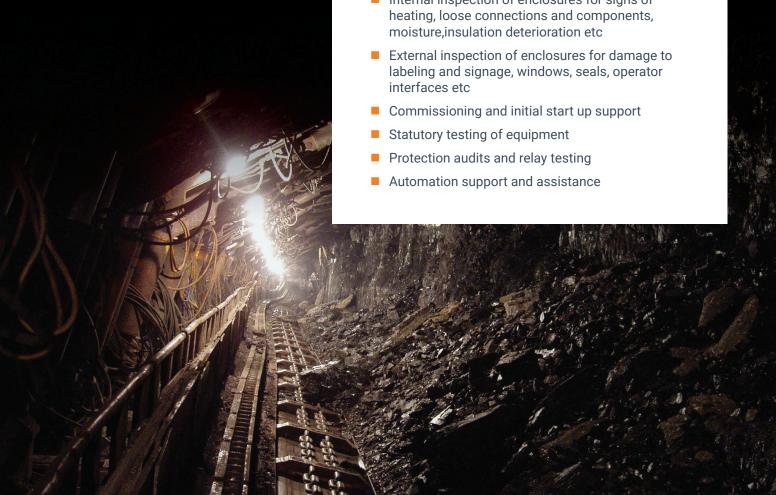
Longwall Relocations

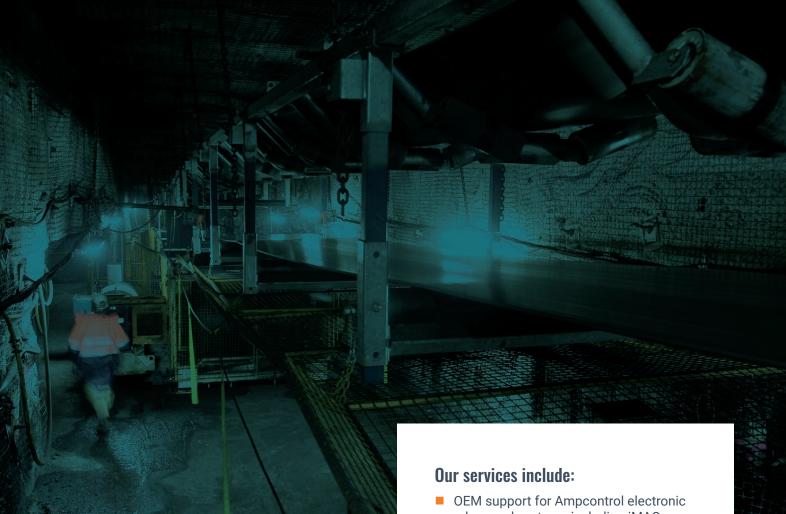
compliant longwall relocations with customised relocation management packages and onsite support.

We understand the logistical and resource heavy requirements associated with longwall relocations. Our specialists work alongside your onsite staff, to manage the electrical requirements of the relocation, to ensure your electrical components are put back in service in an efficient and compliant manner.

Our services include:

- OEM support for Ampcontrol electronic relays and systems including iMAC, VoiceCom, Gasguard and **OCS**
- A single point of contact for the site enabling open and direct communication
- Pre longwall relocation audits and inspections to assist with formulating scopes of work and planning
- Offsite coordination and management of equipment being modified, overhauled or repaired
- Document management including introduction to site, installation checks prepower and commissioning
- Equipment introduction to site and return to service management
- Complete or part equipment installation assistance
- Internal inspection of enclosures for signs of moisture,insulation deterioration etc





Conveyor Systems and Fixed Equipment Support

Our specialist team can provide engineering, onsite and workshop support services to keep your conveyors and fixed equipment working efficiently.

- OEM support for Ampcontrol electronic relays and systems including iMAC, VoiceCom, Gasguard and OCS
- Equipment introduction to site and return to service management, as well as power on commissioning as per OEM and system specifications
- Periodic maintenance of conveyor and fixed electrical installations for both hazardous and non-hazardous areas
- Pre-overhaul audits of explosion protected equipment
- AS/NZS 4871 audits of equipment and installations
- Fixed equipment installation inspections and maintenance
- Fixed equipment installation audits
- Statutory testing of equipment
- Safety system (SIL) maintenance including fault diagnostic and repair (including re-validation) and time phased proof testing
- Protection audits and relay testing
- Advice and consultation in respect to compliance and overhaul scopes of work
- We can also support overland conveyors and above ground systems

Installation and Commissioning

Installation Assistance

Our onsite technicians can install, or provide assistance to help your team install, a range of electrical equipment including:

- Electrical supply systems (substation, DCB, CME supplies)
- Longwall electrical systems
- Monorail electrical systems
- Lighting systems
- Gas monitoring systems
- Conveyor signal line systems

Commissioning Assistance, **Support and Coordination**

Our onsite team can commission and install a range of electrical systems using Ampcontrol's or your documentation including:

- iMAC / Voicecom systems
- Gas systems (both Ampcontrol Gasguard or other)
- Lighting systems (both Ampcontrol Burn Brite or other)
- Electrical supply systems (substation,

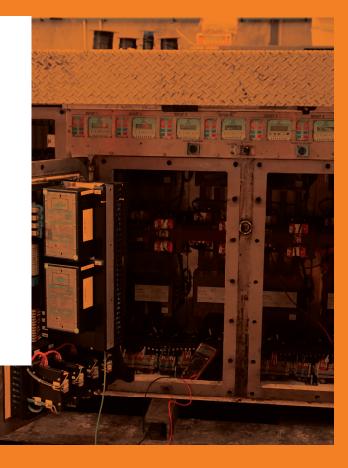


Inspection and Testing

Periodic Inspections

Periodic inspections can be undertaken using Ampcontrol's or your documentation and include:

- Inspection of enclosure internals for signs of heating, loose connections and components, moisture, insulation deterioration etc
- Inspection of enclosure externals for damage to labelling and signage, windows, seals, operators interfaces etc
- Statutory testing of protection functions
- Protection audits and setting updates
- Transformer oil sampling and training of onsite staff to undertake oil sampling



System Testing

Through system tests we can ensure correct operation of critical electronic systems. System tests can include:

- Gas detection system testing
- iMAC and VoiceCom system testing
- SIL system testing (functionality only)
- Review of fault logs / capture of data

SIL System Proof Testing and Validation

Safety systems with SIL ratings require periodic proof and validation testing.

We can complete this testing in our workshops or in situ underground as required including:

- Time phased proof testing
- Fault diagnostics and repairs (including re-validation)





Our services include:

- Site introduction compliance inspections
- Review of machinery safety dossiers for compliance
- Installation support of Dieselguard gas management systems
- Onsite support for all types of gas monitoring on systems for mobile equipment
- Service exchange program for Ex d componentry
- Assistance onsite for management of Ex d register



AS/NZS 3800 Overhauls

Ampcontrol operates two fully certified AS/NZS 3800 workshops, one in New South Wales and one in Queensland, to complete overhauls as per the statutory requirements for hazardous area protected equipment.

Our certification allows us to complete overhaul works on all OEM equipment.

Our overhaul process is certified to meet required standards by external auditing authorities.

At the same time as your AS/NZS 3800 overhaul we can also upgrade, repair and review your equipment to improve its overall operational availability.

The results obtained from these two audits can be compared to help determine the level of deterioration of the explosion protected properties of the enclosure. These results can be used as a guide to determine the continued safe operation of the Exd enclosure as per AS/NZS 2290.1 or if an overhaul is required.

The pre-overhaul audits also help to develop the scope of the AS/NZS 3800 overhaul.



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