PME specialises in developing, implementing and maintaining solutions to the Mining industry.

Our Mining Services:
- Engineering & design
- EPC services
- High voltage design, installations and testing
- Installation and maintenance of low, medium & high voltage electrical reticulation
- Reeling and trailing cable repairs as per AS1747
- Submersible pump repairs and sales
- Fixed & mobile plant maintenance personnel
- Electrical switchboard manufacture
- On-site project management
- Construction and shutdown personnel
- Leaky feeder communications installation and maintenance
- DCS, SCADA and PLC programming and design and installation
- Asset Management / Maintenance
- Turn key design and construction
- Suppliers of Instrumentation and Process Control Equipment
- Telecommunications
- Hazardous Area installation works

At PME you can be assured there are no gimmicks! We offer reliable service, quality products and knowledgeable, well trained staff, to help you take the guess work out of choosing the right solution for you. So call us today and get the best service and price in Port Moresby.
PME believes that engineering is the first step on the road to successful completion of a project and its quality can greatly affect the final outcome regardless of project size.

Our services cover all facets of the project life cycle from feasibility through to construction and plant upgrades.

**Our scope of services includes, but is not limited to the following:**
- High Voltage
- Instrumentation and Control
- Automation and Motor Control
- Electrical
- Hazardous Area

**EPC services**

EPC stands for Engineering, Procurement, Construction and that is exactly what we like to provide at PME. Carrying out the detailed engineering design of the project, procuring all the equipment and materials necessary, and then constructing to deliver a functioning facility or asset to our clients.

PME’s Electrical Construction Division has been established in-country for over 40 years and has participated in all major marque projects in Port Moresby. PME has also undertaken remote electrical construction projects throughout PNG with highly successful outcomes.

PME provides procurement resources, processes, systems, market knowledge, and volume-leveraged pricing to maximise return-on-investment.

**High Voltage**

Fundamental to PME is the health and safety of all those involved and benefiting from our services. That’s why every member of our high voltage (HV) team is certified with a nationally recognised HV Jointer licence.

All our team members are highly trained in HV cable jointers and terminators, which includes PNG power trained personnel to perform HV terminations, jointing and very low frequency (VLF) testing.
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PORT MORESBY ELECTRICAL CO.
PO Box 5555 Port Moresby NCD 111 Papua New Guinea
+675 325 3533 | info@pmepng.com | www.pmepng.com

ON TIME, WITHIN BUDGET
Mining

High Voltage Maintenance Services
Completing the total HV package for our customers we offer and recommend custom scheduled maintenance plans for your HV assets. If you don’t have or are not sure if you require periodic maintenance of your High Voltage (HV) assets, please contact us. We can advise you free of charge what your legislative requirements are for your particular case. The regular servicing of HV equipment dramatically reduces high voltage faults that can occur on switch equipment and transformers. Some of the maintenance procedures we recommend are:

- Cleaning of HV switchgear
- Cleaning of HV insulators
- Thermal Imaging of connection points to ensure no hot spots are present.
- Wooden power pole testing and certification
- Soil resistivity, earth mat testing and installation
- Transformer oil sampling and testing and replacement.
- Switchyard vegetation management
- Asset auditing and inspections

Power Services
PME also offer low voltage power service work as well. This covers distribution and installation of 415 and 240 volt cables from high voltage equipment such as pad mounted transformers. Other services also include:

- Installation of LV (Low Voltage) Boards
- Installation of LV cables to LV Boards and main switchboards
- LV cable jointing
- Installation of turrets/cabinets including new subdivision works
- Repairs or extension to existing earth mats

Reeling and trailing cable repairs
Trailing and reeling cables are electrical power cables for mobile apparatus, such as large excavators, draglines, stackers and reclaimers. The cable allows the mobile apparatus to move without disconnecting its electric power supply.

A reeling cable is specifically designed to be frequently reeled on and off a cable drum or reeler, such as an an iron ore rail-mounted reclaimer. Whereas, a trailing cable is specifically designed to be moved with the mobile apparatus, like a coal mine dragline or mineral sands mobile processing plant.

Trailing and reeling cables pose an elevated safety risk, so as an example, a damaged trailing cable can lead to earthing faults and workers being exposed to electric shock hazards.
Mining

They require specific design mitigation measures, which are detailed in the Mines Safety and Inspection Regulations 1995.

Submersible Pump Repairs and Sales

Mining pumps refer to the types of pumps required as part of the mining process.

Slurry pumps, centrifugal pumps, magnetic drive pumps, submersible pumps, borehole pumps, diaphragm pumps and self-priming pumps are all used in the mining industry, depending on the fluid transfer and application needed.

Mining pumps work for abrasive sludge dewatering, mineral processing, slurry transfer, reagent (acid and chemical) dosing, water supply and boosting, and waste water and tailing transfer.

Leaky feeder communication installation and repairs

A leaky feeder communication system consists of a coaxial cable running along tunnels, which emit and receive radio waves, functioning as an extended antenna. The cable is "leaky", in that it has gaps or slots in its outer conductor to allow the radio signal to leak into or out of the cable along its entire length.

This leakage of signal means line amplifiers are required to be inserted at regular intervals, typically every 350 to 500 metres (380 to 550 yards), to boost the signal back up to acceptable levels. The signal is usually picked up by portable transceivers carried by personnel. Transmissions from the transceivers are identified by the feeder and carried to other parts of the tunnel, allowing two-way radio communication throughout the tunnel system.

The system has a limited range, and because of the frequency it uses (typically VHF or UHF), transmissions cannot pass through solid rock, which limits the system to a line-of-sight application. It does, however, allow two-way mobile communication.
Mining

Instrumentation and Control

At PME, we have established strong relationships with various manufacturers to supply instruments and equipment to our clients. Our company is built upon years of experiences, which enables us to help choose a manufacturer and model that is most suitable for your application.

It will not only be reliable but the most cost-effective and high-quality option available.

Our access to this vast range of equipment from a number of manufacturers guarantees that we can find solutions for our clients.

Our services include:

- Temperature elements, including RTDs and thermocouples
- Temperature transmitters
- Pressure transmitters, gauge and differential
- Various flow transmitters, including magnetic, vortex and pitot tubes
- pH transmitters and probes
- Belt weighers (weightometers)
- Solids flow transmitters and impact weighers
- Valves and positioners
- Speed transmitters
- On-board weighing solutions
- Actuators

Automation and Motor Control

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For automation and motor control we provide:

- PLC programming
- Operator interface/HMI/SCADA programming
- Motor/Servo motion control
- Troubleshooting & optimisation
- Industrial networking/communications

- Instrumentation
- Pneumatics/Hydraulic control
- Telemetry
- Data gathering and report generation

Electrical

For all facets of the electrical industry, PME provides detailed design services. Regardless of the industry that clients work in, PME is always able to assist in their engineering requirements.

Our services include:

- PLC programming
- Front end engineering design (FEED)
- Conceptual design
- Preliminary design

- Detailed design
- Construction documents
- Specifications
- Bills of material

Hazardous Area

One of our specialties is inspections and installations of hazardous areas in electrical. PME has extensive experience from mining to oil and gas, defence and military, and chemical and food industries.

All of our electricians have comprehensive training and experience in inspection and compliance of electrical installations in potentially explosive atmospheres.

Using this industry knowledge and know-how, we offer our customers with unparalleled inspection programs, ensuring the integrity of equipment and systems.

At PME, we can assist you in providing assurance that your company is complying with the latest international standards, codes and practices, and all legal obligations. Our cost-effective solutions to hazardous area installations and inspections have a minimum interruption to your daily business.