m|power

Corporate Profile

Power Solutions for Oil, Gas & Mining

POWER WITH PURPOSE

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CONTACT DETAILS

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ABOUT US

MPower Projects is an Australian owned and operated subsidiary of Tag Pacific Limited and is an industry leader providing innovative, reliable power solutions on a national and international level.

Our capabilities are like no other; we combine new and old technologies with a skilled and experienced workforce to create dependable power systems that last the distance. Put simply, we have the energy to deliver and can create solutions from engineering and technical support to full turn-key systems.

Our impressive portfolio is a testament to our positioning in the market, delivering a range of power systems to many industries including oil and gas, mining, defence and construction.

As an industry leader, we are continually investing in research and development to maintain our stance within the power generation sector. Our approach ensures our commitment to quality, reliability and innovation is preserved at all times.

MPower Projects is part of MPower's group of companies including MPower Products, MPower Pacific and MPower Solar. Each company has an interest in offering integrated power solutions for our customers across a range of applications.

"MPower have the energy to deliver"

OUR SOLUTIONS

HVAC

DESMO offers a full turn-key HVAC package to the oil, gas and mining market. Design, engineering and drafting staff are fully qualified and develop preliminary design concepts and briefs into full vessel/plant HVAC system designs together with all system installation details. Our engineering staff are familiar with offshore, marine and harsh environment design requirements to regulations of the certification authorities including Lloyds, DNV, BV and ABS.

DESMO has established a reputation as a world class supplier of complete offshore HVAC systems for state of the art vessels such as FPSO's, drillships and semi submersibles, as well as designs for fixed platforms. We also provide services for naval and defence vessels.

DESMO, powered by MPower, has in house engineering resources and expertise to complete all forms of HVAC design and project management works associated with offshore and onshore facilities for the oil, gas and mining industries.

Engineering disciplines or areas of operation include:

- HVAC Design Engineers
- Electrical, Instrumentation and Control Engineers
- Refrigeration Engineers
- Drafts Engineers
- HVAC Project Engineers
- Procurement Managers
- QA and OHS Administrators
- Installation and Site Supervisors

Power Generation

MPower have a long history within the natural resources industry providing power solutions to a number of projects that have changed the history of Australian, oil, gas and mining exploration. We are a leader within the sector and know how to deliver powerful, dependable solutions that equally meet the requirements of such arduous and demanding conditions associated within the industry.

Over the past two decades, MPower have certainly demonstrated value amongst other industry leaders within the power generation sector and have raised the company profile by showcasing our skills, knowledge and expertise through several world-class projects. MPower's extensive portfolio includes ConocoPhillips Petroleum Bayu Undan Gas Recycle Project, Woodside North Rankin 2 Development Project, Chevron's Gorgon LNG Project, Inpex's Ichthys Gas Project and BHP Billiton's Yarnima Power Station. These projects were highly sought after; against international competition, MPower successfully attained these valuable contracts. This is a true reflection of MPower's capabilities. Our offerings within the oil, gas and mining industry are like no other; with a strong and vast set of skills, knowledge and integrated power solutions, MPower have a strong future within the industry and remain at the forefront of power generation.

Power Conversion

MPower systems extend to electronic AC and DC uninterruptable and continuous power systems. MPower has designed and manufactured a range of power systems, including hybrid power systems utilised by the utilities, oil and gas and mining sectors. Some of these power system application sites include Sino Iron Ore, Condomine Power Station, Kipper Tuna Turrum Project, the Shell Corio plant in Geelong and Shell Bukom, Pulau in Singapore. MPower's own Westpower Rectifiers enable the group to supply Australian and International markets with electro-winning rectifiers used in the recovery of gold as well as plating rectifiers.

Power conversion underpins our green power offering through energy efficient converter/inverter technology, storage power and converting stored power to the electricity grid compensating for power dips. Used for demand management systems and large scale grid connect solar power stations

"MPower design and engineer integrated power solutions that support critical equipment for oil, gas and mining"

OUR CAPABILITIES

MPower Projects is a leading integrated solutions provider, specialising is HVAC, power generation and power conversion for the oil, gas and mining industries. As a full turnkey power solutions provider, we have the capability to provide Design Engineering, Project Management, Installation and Commissioning, Manufacturing and Asset Management.

Design Engineering

Significant investment in research and development has established the company as a leader in the design and development of new technology. The company has invested up to 10% of revenue into R&D every year.

We employ a fully qualified team of engineers in the disciplines of electrical, mechanical, power electronics and control engineering. We utilise the latest design tools including 3D SolidWorks® modelling and AutoCAD®, piping software etc. As an example we perform Finite Element Analysis (FEA) on our designs, which is a mandatory requirement in the oil and gas sector.

Project Management

Our project methodology is based on allocating project management to each of our projects. The group structure separates engineering and operations. Engineering is responsible for technology while Operations is responsible for project delivery and end client relations. We manage projects from a sub component supplier to full turnkey applications utilising the latest project management tools. Projects are reviewed technically and commercially on a regular basis ensuring project budget and timeline are met and communicated to our end customers. Project structures will typically include a project manager, mechanical engineer/s, electrical engineer/s, control engineer/s, documents controllers, schedulers with allocated factory and site trades followed by asset management whom are responsible for equipment maintenance and operation.

OUR CAPABILITIES

Manufacturing

We have a significant manufacturing facility located in Ingleburn with satellite manufacturing capability located around Australia and New Zealand. The Ingleburn facility comprises 4,000sqm of undercover factory space with 3,000sqm metres of hardstand area and 1,700sqm of office space. Additional space is available on an as need basis.

Plant facilities include:

- Overhead crane, jib cranes/hoists
- Welding bay and paint booth
- Significant gas supply for testing gas sets
- Reactive and resistive load banks to 4MW + HV, LV
- Tools and test equipment
- Diesel fuel storage
- Panel wiring area
- Spare parts store
- Workers recreation areas
- Fully equipped engineering offices that can accommodate in excess of 100 engineers and associated administration staff

The majority of our designs are manufactured in house in accordance with our international quality assurance accreditation, ISO9001.

We work with reputable suppliers and select components suited to the application. Our independence ensures we are impartial about the selection of critical components such as engines, alternators, batteries, acoustic enclosures, and control equipment.

Our facility allows comprehensive factory acceptance testing (FAT) to be carried prior to site installation; minimising the time to install and commission plant. Our facilities also allow for the testing of gas and diesel power plants fully load tested synchronised to the grid.

Installation and Commissioning

We work with our clients requirements. These requirements vary from supply only to full turnkey systems or variants of.

Our team of fully qualified engineers and dual qualified tradespersons personnel have vast experience in installation and commissioning of small, medium and large installations.

Many of our projects are part of major building refits or major infrastructure development. Our services blend in with the prime contractors by simplifying system interface points.

Commissioning services are provided throughout Australia and New Zealand as well as overseas. MPower's solutions fit into larger applications or are exported to other countries. Commissioning services have been provided in the Middle East, Chile, Singapore, Indonesia, Korea, China, and North America.

Asset Management

Many of our solutions are capital projects and assets that need to be maintained.

We operate our own service and asset management business to maintain and service our installed base and that of our competitors. These assets are managed through annual service contracts.

We employ a fully qualified and certified field service team to carry out repair and preventative maintenance programs; offering 24 hour 7 days a week emergency call out and same day service.

The uniqueness and success of this offering has seen this service extend beyond our installed customer base where major property managers have engaged us to maintain their assets. We have a strong and growing list of clients who continue to rely on our expertise year after year.

OUR TRACK RECORD

ConocoPhillips - Bayu Undan Project
2002

- First oil and gas project undertaken by MPower Projects
- Required to supply two 80kW wellhead generators and two 1250kW generators
- Generators were installed in tailored canopies with a 25 year design life
- The application consisted of MTU and Cummins Engines with AvK alternators using TEFC configurations with heat exchangers
- These were designed and built to stringent specifications associated with offshore applications including being cyclone rated

Sino Iron Ore
2009

- Design and build of a power electronics application
- Consisted of 3 hybrid power systems for the Sino Iron Ore CGT power station

Woodside NR2: Blackstart and Emergency Diesel Generators
2010

- The project involved the design and manufacture of a 1.26MW Blackstart Generator and a 1.9MW Emergency Diesel Generator
- The design life of the generators is 25 years
- The Blackstart Generator is mounted in a canopy and the Emergency Diesel Generator is mounted in a switchroom
- All design elements of the project have been undertaken on SolidWorks® 3D Modelling.
- The generators are designed and built to stringent Woodside oil & gas specifications
- Components used in the project consist of MTU oil and gas engines, AvK TEFC alternators with heat exchangers, Allen Bradley PLCs and Woodward Controllers

Gorgon MJ751 Temporary Power Station
2011

- MPower secured the contract to design, procure and manufacture the Chevron Gorgon Gas Project with a 20MW continuously rated temporary power station with a SCADA based power management system for the entire plant during the project's construction and commissioning phase
- The designs ensure survival against harsh environmental conditions including category 5 cyclones
- Other key design features include a reduced footprint to minimise environmental impact on Barrow Island and a minimal modular transportable installation package

Shell Refining Bukom Island Singapore
1995

- 1 off TEC 60/120/4565, Electro-Chlorination Rectifier

Shell Seraya Chemical Plant Singapore
1995

- 2 off R3TKAAF 120/1000 Electro-Chlorination Rectifiers

ESSO Turin 2 Hybrid Power System Bass Strait Australia
2011

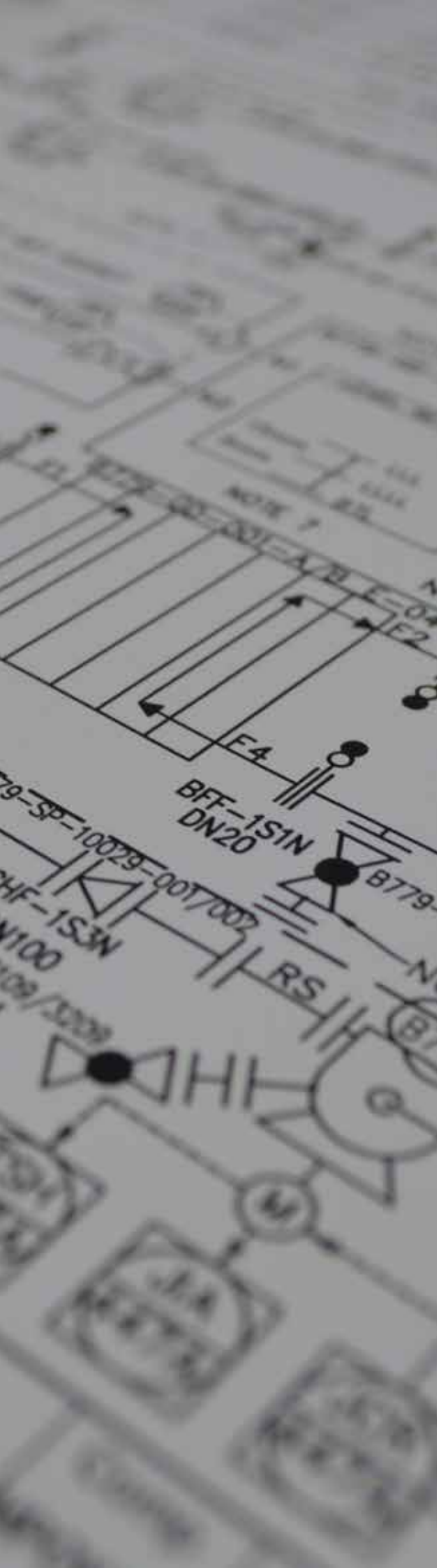
- Design, manufacture, test, document and commission hybrid power system

INPEX Ichthys CPF (Central Processing Facility) Platform
2013 - 2014

- Design, construct and commission two 1.9MW emergency power systems
- Project awarded by Samsung Heavy Industries
- The emergency generator systems have been designed to remain operational in a 200 - year return period and withstand a 10,000 year return period, providing critical power to the CPF ensuring facilities are maintained.

INPEX Ichthys FPSO (Floating, Production, Storage and Offloading) Facility
2013 - 2014

- Design, construct and commission two 1.9MW emergency power systems
- Project awarded by Daewoo Shipbuilding and Marine Engineering Co.,Ltd
- The emergency generator systems have been designed to remain operational in a 200 - year return period and withstand a 10,000 year return period, providing critical power to FPSO ensuring facilities are maintained.



BHP Billiton Yarnima Power Station
2013 - 2014

- Design, manufacture, supply, assist in installation and commission three 1.8MW black-start generators for BHP Billiton Yarnima Power Station Project, located in Western Australia.

TOTAL France, Ofon Platform
2011

- A key objective was to improve operating conditions by installing living quarters onsite, resizing water injection, installing water treatment capacity and improving gas lift activation to existing new wells. DESMO's scope involved the HVAC and mechanical design, detailed engineering, equipment and spare parts procurement, material selection, inspection, fabrication, assembly, painting and coating, insulation and shop testing, Third Party Agency Certification, documentation, preservation, and delivery.
- Project awarded by Hyundai Heavy Industries Co. Ltd

Woodside, North Rankin 2 LQ
2011

- DESMO had full responsibility for the living quarters HVAC systems detailed engineering, and supply of all materials and equipment as per the design and environmental conditions specifications. This included flawless start up, factory acceptance testing, fabrication, documentation, preservation and compliance with HSE
- Project awarded by Hyundai Heavy Industries Co. Ltd

Chevron Australia, Gorgon LNG Project
2012

- DESMO was awarded the provision of HVAC systems serving the substation buildings required for the Chevron development of the Gorgon natural gas field.
- The Gorgon project is one of the world's largest natural gas projects and the largest single resource natural gas project in Australia's history.
- DESMO was commissioned to provide the design, supply, installation and commissioning of 35 climate control & building pressurization systems. The substations were prefabricated in Newcastle and Brisbane, and shipped in a completed state to Barrow Island, Western Australia.

OUR MANAGEMENT SYSTEMS

Safety Management System

MPower, as a group, operate through a wide variety of industries such as oil and gas, mining, defence and construction. Our most important asset is the health and wellbeing of all of our employees.

Our consultative approach helps us to understand and ensure that risks which have been identified are actioned with the commitment, persistence and responsibility of all employees as this is how we do business.

There are many different aspects involved in carrying out our work activities which is why our managed process is maintained through our risk assessment program which evaluates the specific risk to as low as reasonably practicable (ALARP).

The group health and safety management system also provides all employees with the necessary tools and responses to ensure a safe work place. By committing to this, MPower works toward an incident free operation which ensures we maintain our group wide safety culture; this also applies to all contractors we partner with.

MPower's health and safety management works in line with current legislative requirements and best industry practice, thus following the company values and direction.

Our HSE Management System is accredited to AS/NZ4801 & ISO18001.

Environment Management Systems

MPower's benchmark is set high which is essential to the way we do business. MPower works with accredited environmental suppliers who have a proven track record of disposing related industry material and commit to a greenhouse gas emissions report.

We are dedicated to ensuring that all employees who work under the MPower banner are made aware of the importance of:

- Minimising power consumption
- Recycling waste paper, contaminated oils, fluids, metals, wood and cardboard
- Where oils are situated in stored areas, we will have appropriate bunding resources applied
- Utilising recycled materials where fit for use under the work activity application
- Openly report on work based activity which involves the environment

Our Environmental Management System is accredited to ISO14001.

Quality Management System

MPower is one of Australia's leading manufacturers of a total range of generating sets, engine driven welders and control systems covering a range of 1kVA through to 2500kVA for use in many industries including oil & gas, mining, building, utilities, defence and continuous applications for new buildings in case of power failures.

MPower can also supply a completed installation service including all acoustics, wiring, exhaust, commissioning, testing and ongoing maintenance service for protection of equipment at its installation site.

The company has available some very strong overseas associations and can offer selected imported equipment at competitive pricing to meet market place demands. MPower can offer a range of fuel alternatives and is conscious of their environmental responsibilities.

MPower has adopted principles of quality management in accordance with Australian/Standards New Zealand and International Standard AS/NZS ISO9001 "Quality Management Systems – requirements".

The measurement of customer's requirements is important to our organisation and the company is committed to continue with its research and development and improvement of current products and to meet future market demands. The company has set its goal to grow and remain pro active by introducing new products that complement the current range of MPower Projects Pty Limited products.

The company regularly reviews targets set for all areas of the organisation including sales, cash flow, production, warranty and customer satisfaction. All management and staff are aware of and committed to achieve these objectives.

We strive and target at complete customer satisfaction, to meet our customers expected needs in regards to the quality, precision and reliability of our products and the efficiency and flexibility of our service. We will continue to provide customer satisfaction and employee satisfaction, thereby consolidating our stability and future as a leader in a competitive market.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