

# **Power & Water**





Murray & Roberts Power & Energy Engineers and Constructors



Murray & Roberts Water Engineers and Constructors Genrec



# **Power & Water**



The Power & Water platform, which is focused on engineering, procurement, construction and management of projects, is playing a major role in building two of the world's largest coal-fired power stations, Eskom's Medupi and Kusile.

#### The Power & Water platform

oversees the activities of a number of companies:

- Murray & Roberts Power & Energy
- Genrec
- Murray & Roberts Water
- Aguamarine Water Treatment

The companies that comprise the platform are Engineering Procurement and Construction ("EPC") projects implementer, Murray & Roberts Power & Energy - with a focus on power and energy projects, Genrec - a steel engineering and fabrication company and Murray & Roberts Water (incorporating Aguamarine) - focusing on providing water and wastewater treatment solutions to the industrial and municipal sectors.

The operating platform co-operates extensively with other Group operations to accelerate its African penetration, prioritising mining and minerals processing as well as power sectors. Substantial opportunities exist across Africa for the operating platform in water infrastructure, waste water, acid mine drainage and desalination.

## **GEOGRAPHY**

Africa

#### **VALUE CHAIN**

- Project development and design
- Planning and engineering
- Construction works
- Maintenance and refurbishment

## **SAFETY**

People remain our most valuable asset, and the safety of employees and stakeholders is not negotiable. We believe that our people and others impacted by our activities are entitled to a safe, healthy and productive life in harmony with nature.

Stop. Think, Act, 24/7 is a widely recognised Murray & Roberts health and safety brand aimed at educating and motivating employees to take responsibility for their own and their colleagues' safety at home and in the work environment.

"Act" emphasises the importance of taking action to correct unsafe conditions and behaviours, as well as recognising positive behaviour, whilst "24/7" highlights the need for safety awareness at all times whether at work or at home

## **MURRAY & ROBERTS GROUP**

A Group of world class companies and brands aligned to the same purpose and vision, and guided by the same set of values with a common owner, Murray & Roberts Holdings Itd.

- Infrastructure & Building
- Power & Water
- **Underground Mining**
- Oil & Gas

# **Murray & Roberts Values**

- Care
- Integrity
- Respect
- Accountability
- Commitment

# **Murray & Roberts Purpose**

Delivery of infrastructure to enable economic and social development in a sustainable way.

#### **Murray & Roberts Vision**

By 2020 we will be a leading international diversified project engineering, procurement and construction group in selected natural resources and supporting infrastructure sectors.

**Our Values:** 

Care

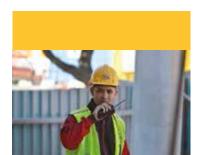
Integrity

Respect • Accountability •

Commitment











# Murray & Roberts Power & Energy

**Engineers and Constructors** 

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www.powerenergy.murrob.com

## **ABOUT THE COMPANY**

Murray & Roberts Power & Energy is a leading engineering, procurement and construction company, serving the South African and African market. Our South African offices, based in Johannesburg, South Africa, provide a leading portfolio of services to our clients, utilizing its market and sector experts, in multidisciplinary engineering, procurement and construction together with strategic global partnerships.

In order to maintain our leading market position and enhance our offering to our clients, Murray & Roberts
Power & Energy is involved in the project management of the entire life-cycle of the project, ranging from conceptual design, pre-feasibility and feasibility studies, basic and detail engineering, procurement, construction, commissioning and start up, operations and maintenance (including asset renewal/refurbishment) and asset retirement

Our EPC and SMP capabilities are focused along two sectors:

Power – Murray & Roberts Power & Energy, through collaboration with its subsidiaries operating in the Power Generation sector. Through its highly qualified and experienced technical and managerial staff and strategic technology partnerships , the company is able to provide total solutions to power utilities, Independent Power Producers, Industrial Plants and other potential clients in all technologies ranging from coal, gas, nuclear and renewable energy (particularly CSP and biomass).

Energy (Oil & Gas) — In the oil & gas sector, the company has undertaken several downstream projects, including some special applications such as modular mini-refineries and the revamping or installation of refinery units. Murray & Roberts Power & Energy are able to support projects for Sasol and nationally, through its established fabrication shop, based in Secunda.

## **ABOUT OUR PROJECTS**

Project		
Description Description Detailed engineering, fabrication, construction management, erection and site support of boiler units  Project Mozal 1 and 2 and Hillside 3 Aluminium Smelters BHP Billiton Description Project implementation of Aluminium Smelter Programme — EPCM Services  Project New Multi-Product Pipeline (NMPP) Transnet Description Heidelberg Tank Farm — Tank engineering, fabrication and erection  Project New Hot Blast Stoves Client Arcelormittal Description Brownfields — EPC Services  Project Mondi Pulp Client Mondi Limited Description Brownfields expansion to the Richards Bay Mill — EPCM  Project Nchalo Off-crop Shutdown Client Illovo Sugar Plant (Malawi) Description Supply and install superheater elements, integral piping, furnace seal. Inspect and replace drum internals. Install economiser elements  Project Client Linde Process Plants Description Alpha Olefins Hexene Train 3  Project SAPREF SPM Crude Oil Import Pipeline	Project	Medupi & Kusile Power Stations (South Africa)
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Project SAPREF SPM Crude Oil Import Pipeline	Client	Linde Process Plants
	Description	Alpha Olefins Hexene Train 3
Client Shell & BP South Africa	Project	SAPREF SPM Crude Oil Import Pipeline
	Client	Shell & BP South Africa
Description  Design, installation and commissioning of the facility and involved the bottom tow of 2.8 km of 48" diameter pipeline	Description	

Asset Management — In the immediate future, focus will be more on further development and expansion of existing engineering capabilities and leveraging the opportunities in the repair, operation & maintenance area; utilising in-house resources and strategic partnerships. The JV with Worley Parsons — MWPS has been set up specifically for power plant O&M Services.

Murray & Roberts Power & Energy is committed to providing a healthy and safe operating environment and is committed to the Murray & Roberts Group Stop. Think.Act.24/7 philosophy.

**Our Values:** 

Care

Integrity

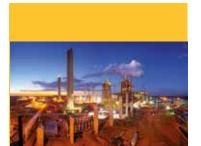
Respect •

Accountability

Commitment











# Murray & Roberts Water

**Engineers and Constructors** 

Telephone: +27 11 456 1000 Fax: +27 11 455 1264 Email: info.water@murrob.com

www.water.murrob.com

#### **ABOUT THE COMPANY**

M urray & Roberts Water has the capability and expertise to undertake feasibility studies, design, supply equipment, construct, commission, operate and maintain water treatment plants in Africa, and to supply modular plants globally.

#### These include:

- Mine Water Treatment
- Sea Water Desalination
- Industrial Effluent Treatment
- Municipal Water and Waste Water Re-use
- Water Supply for Power Generation Infrastructure

These can be offered as large scale permanent plants or modular containerised plants with the option to scale up if necessary. The plants performance can be remotely monitored by experienced engineers and operators.

Murray & Roberts Water provides complete water treatment solutions with appropriate technology and commercial packages that are structured to meet specific client requirements such as:

#### **ABOUT OUR PROJECTS**

Project	Gold Fields Tarkwa Project
Client	Gold Fields Ghana Limited
Description	Combination of LSTK, Loan, Rental and O&M
Project	Basic Engineering Design and Pilot Tresting
Client	Newmont Ghana Gold Limited
Description	Feasibility study, pilot testing and Capex and Opex estimates
	on a reimbursable basis

#### Technology

- Lime Softening
- Clarification
- Microfiltration
- Ultrafiltration
- Nanofiltration
- Electro Dialysis Reversal
- Reverse Osmosis
- Ion Exchange
- Evaporation

# Commercial

- Design Build
- Design Build Operate
- Design Build Operate Transfer
- Renta
- Public Private Partnerships
- Performance Guarantees

Murray & Roberts Water adds maximum value by developing sustainable water treatment solutions that meet our clients' needs whilst simultaneously developing local capacity through skills transfer.

Aquamarine, a Murray & Roberts Water company, is a company that designs, manufactures and installs water treatment solutions. It offers a complete customised solution, including support for and maintenance of its installations. Aquamarines' technology is ideal for small to large water treatment solutions including containerised modular plants.

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**Our Values:** 

Care

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Commitment









# Genrec

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www.genreceng.co.za

## **ABOUT THE COMPANY**

Genrec provides a comprehensive range of services from structural steel fabrication and erection, to heavy fabrication and machining, offering clients a one-stop service.

The company covers the full spectrum of engineering, structural detailing, procurement, fabrication and construction services. Capabilities further include total project management, engineering design and detailing, light/medium and heavy structural fabrication, planning, logistics and programming to erection. Genrec has provided its services to some of the world's most recognized projects.

Situated in Wadeville, bordering Johannesburg, Genrec's facility has more than 55 000m <sup>2</sup> of undercover workshops equipped with the latest systems, CNC equipments, welding processes, as well as high volume blasting and painting resources with open areas of 19 500m <sup>2</sup>. Its training facility provides development and the training of boiler-makers, detailers, operators, riggers and inspection personnel.

Working with care, honesty and integrity, respect, accountability and commitment, our team is committed to fabricating innovative steel solutions to meet our client's specific needs, on time, within specification and within budget.

Genrec is committed to providing a healthy and safe operating environment and is committed to the Murray & Roberts Group Stop.Think.Act.24/7 philosophy.

#### **ABOUT OUR PROJECTS**

Project	Medupi and Kusile Power Stations (South Africa)
Client	Hitachi and Eskom
Description	100 000 tons of fabricated steel over 5 years
Project	El Abra Copper Mine (Chile)
Client	Bechtel
Description	3 300 tons of fabricated steel over 12 months
Project	Burj Al Arab Hotel (UAE)
Client	UAE Government
Description	11 000 tons of fabricated steel over 24 months
Project	Muskeg River Oil Sands Project (Canada)
Client	Shell, Chevron, Marathon Oil
Description	6 500 tons of fabricated steel over 18 months
Project	Closed Cycle Gas Turbines
Client	Camfil Farr
Description	2 551 tons of fabricated steel over 14 months
Project	Sheik Zayeh Cricket Stadium (UAE)
Client	Abu Dhabi Cricket Authority, Dubai
Description	800 tons of fabricated steel over 12 months
Project	Carnival City (South Africa)
Client	WBHO
Description	700 tons of fabricated steel over 14 months
Project	Emirates Towers (UAE)
Client	Besix & Multiplex
Description	3 000 tons of fabricated steel over 24 months
Project	Khalifa Sports Complex (UAE)
Client	SNC Lavalin
Description	8 500 tons of fabricated steel over 18 months
Project	Aluminium Pot Steel (Mozambique)
Client	SNC Lavalin
Description	9 800 tons of fabricated steel over 14 months
Project	CMT Spinning Mill (Mauritius)
Client	Construction Management & Allied Services
Description	1 730 tons of fabricated steel over 14 months

Our Values: • Care • Integrity • Respect • Accountability • Commitment

