



GRK GROUP

Singapore Entities

GRK Engineering & Management Pte Ltd
GRK Marine Services Pte Ltd.
Unisteel Engineering Pte Ltd
Pacific Oriental Pte Ltd
GRK Employment Services Pte Ltd

Overseas Entities

Malaysia - GRK Constructions Sdn Bhd
Malaysia - Pasifika Perak Sdn Bhd
India - GRK Engineering (India) Pvt Ltd
Indonesia - PT GRK Engineering Karya



 www.grkgroup.biz

INTRODUCTION

GRK Engineering & Management Pte Ltd was established in the year 2009 and specializes in the fields of Oil & Gas, Process Plant Construction & Maintenance, Mechanical Completions, Fabrication & Installation, Manufacturing, Industrial Waste Water Treatment, Recruitment & Manpower Solutions.

GRK Group's M/s Unisteel Engineering Pte Ltd. is a well-established Marine Service company in Singapore with experienced and highly skilled workforce. Unisteel has been growing steadily achieving its mission for comprehensive range of services for Keppel Offshore & Marine Singapore including Shipbuilding & Ship repairs, Offshore Structures, FPSO, FSO, FLNG conversions, Marine Engineering Works, Piping Electrical Scaffolding & Marine Painting.

GRK Employment Services on the other hand is a Singapore MOM licensed company (09C4549) and is responsible for headhunting specialized foreign workforce from India, Bangladesh and Philippines through its business associates Green Channel Overseas Express Pvt. Ltd in India, Prominent Marine Pvt. Ltd. in Bangladesh and Pacific Far East Management & Consultancy Corp. in the Philippines to cater the requirements of GRK Engineering, its projects and clientele in Singapore and to any part of the world.



OFFSHORE & MARINE SPECIALIZATION

Shipbuilding & Ship Repairs

- AHTS Vessels
- Pipe Laying Vessels
- Bulk Carrier Vessels
- Cable Laying Vessels
- LNG & LPG Vessels

Building Mega Structures for FPSO & FLNG Conversion

- FPSO – Moon Pool Structures
- FPSO – Bogie Support Structures
- FPSO – Gantry Support Structure
- FLNG – Sponson Tank
- FLNG - Pipe Rack Superstructure



FPSO External Turret Rigid Arm Structure

SPECIALIZED PROJECTS

FLNG, FSRU, FPSO, FSO – Offshore Vessel Fabrication & Integration / Conversion Scope

- Internal Turret Includes Bogie Structures, Moon pool, Turret Gantry and Swivel Stack
- External Turret such as Rigid Arm Cantilever, Turret Gantry & Swivel Stack
- Top side Pipe Rack and Superstructures
- Spread mooring porches
- Offshore Helidecks
- Tank Conversions repairs and refurbishment works
- Hose Reel & Offloading Platform
- Living quarters & accommodation extension works
- Flare Tower & Vent Stack
- Top side Module Stools & Pancakes
- Superstructure Pipe Rack
- Crane Column & Pedestals
- Piping - (Cargo line, Ballast & Fresh water lines, Cooling systems, Hydraulic lines.)

Project Milestones

FPSO MOON POOL CONSTRUCTION AND INTEGRATION - 400M TONS



Moon Pool Erection Joint



Moon Pool Segment Assembly



Moon Pool Assembly



**Moon Pool Assembly &
Grand Assembly**



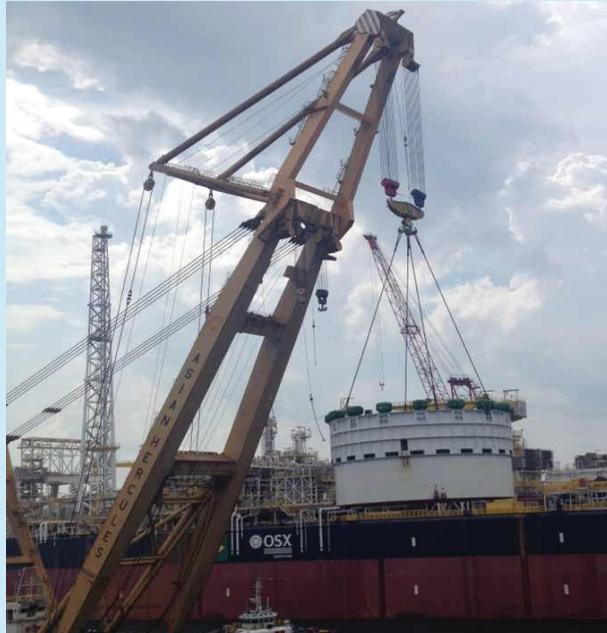
Moon Pool & Up-Righting



Turret Moon Pool FPSO

Project Milestones

FPSO TURRET BOGIE STRUCTURE CONSTRUCTION AND INTEGRATION - 500MTONS



Project Milestones

FPSO TURRET GANTRY STRUCTURE CONSTRUCTION AND INTEGRATION - 700M TONS



Fabrication



Assembly 1



Assembly 2



Assembly 3



Assembly 4



Integration / Erection

Project Milestones

FLNG – SPONSON TANK CONSTRUCTION AND INTEGRATION - 1000MTONS



Sponson Tank ready for erection



Green sea barrier erection on to Sponson Tanks

FPSO / FSRU – TOP SIDE CRANE COLUMN AND PEDESTAL FABRICATION AND INTEGRATION: 50TONS



Crane pedestal Assembly



Crane pedestal Transporting to Grand Assembly

Project Milestones

FLNG – SPONSON TANK CONSTRUCTION AND INTEGRATION - 1000M TONS



FPSO / FSRU SEA WATER LIFT PUMP CAISSONS & PLATFORMS CONSTRUCTION AND INTEGRATION: 100M TONS



Overseas Entities & Clientele

GRK Engineering (India) Pvt Ltd – Handles various Marine projects with Hindustan Shipyard Ltd., in Visakhapatnam India and also specialized in Erection in steel Structural , Piping and Civil Construction and Maintenance projects.

PT GRK Engineering Karya – We supplied around 30 pipe fitters and 30 SS / Duplex and Carbon Steel welders who worked for Conoco Phillips for their offshore South Belut Project in Indonesia.

Pasifika Perak Sdn Bhd – We are currently providing a total of 400 Nos of Pipe Fitters, Welders, Electricians, QA/QC other Skilled Manpower for Substation, Commissioning, General Civil works, material handling and other general support services for RAPID Project – Package 6, 12B & 14.

GRK Constructions Sdn Bhd – To enhance our Malaysian operations under GRK Brand of companies a subsidiary company GRK Constructions Sdn Bhd has been incorporated.

GRK GROUP'S MAJOR CLIENTS:

- Stone and Webster Asia Inc. – SPT
- McConnell Dowell SE Asia Pte Ltd.
- Atlantic Projects Company Pte Ltd.
- WEC Engineers & Contractors.
- Sulzer Chemtech Pte Ltd.
- Hai Leck Engineering Pte Ltd
- Hyundai Engineering & Construction Co. Ltd.
- Hyundai Engineering Co. Ltd.
- NEX Global Engineering Pte Ltd.
- Cairn India
- Hindustan Shipyard Ltd., India
- Punj Lloyd Pte Ltd.
- UTOC Engineering Pte Ltd
- Woolim Plant Engg & Construction
- Royscan Engineering Pte Ltd.
- SK E & C Singapore Branch
- Sankyu Singapore Pte Ltd.
- Cape East Pte Ltd.
- Samsung E & C
- Petronas Refinery and Petrochemical Corporation Sdn, Bhd.
- Hindustan Prefabs Ltd., India
- NIKOM, India



Summary of Projects and Scope – GRK Group

Client	Project Name	Scope
WEC Engineers & Constructors Pte Ltd	SPT Project	Fresh Water system, Cold Water return & supply system, Hot Water return & supply system and Caustic Basin System
Stone and Webster Asia Inc	SPT Project	Fire Water Line, Fresh Water Line, Cold Water return & supply line, Hot Water return & supply line, Lube Oil system, Cold Liquid System, Warm Air System & Cold Air System. We Worked in Under Ground Piping for Fire Water Main Line & Pipe Racks. Worked on C3 Splitter ½ tower, Amine Wash Tower, Caustic Day Tank, Spent Caustic Filter & Caustic Effluent Filter.
Atlantic Projects Company Pte Ltd	SPT Project	High Pressure Stream 150, Super High Pressure Stream 369 and Low Pressure Stream 29
Punj Lloyd Pte Ltd	SPT Project	Lube Oil system, Cold Liquid System, Warm Hare System and Cold Hare System
Sulzer Chemtech Pte Ltd	SPT Project	C3 Splitter ½ tower, Amine Wash Tower, Caustic Tower, Mini Primary Fractionator Tower, Water Quench Tower, Lean Caustic Day Tank, Spent Caustic Filter and Caustic Effluent Filter
UTOE Engineering Pte Ltd	Lanxess PBR - NdBR Project	Worked on Nitrogen, LP Stream, HP Stream, Cooling Water Return, Cooling water supply, Flare Gas, Waste Water, Vent Gas, Caustic Soda and Demineralized Water System
McConnell Dowell South East Asia Pte Ltd	Lanxess PBR - NdBR Project	Worked on Cooling Water Return, Cooling water supply System, Painting works and Installation of Concrete Bollards.
Woolim Plant Eng & Const Co.	Jurong Rock Cavern Project	Seepage Water line 1 & 2, Product Pump Line 1 & 2, Alarm Line, Tubing Assembly, Flare Gas, Waste Water, Vent Gas, Caustic Soda and Demineralized Water System
ConocoPhillips Indonesia Inc. Ltd, PT Rajawali Swiber Cakawala	South Belut Project	Construction crew (Welders 6G - Stainless Steel / Duplex / Carbon Steel and Pipe fitters)
SAMSUNG C & T	Singapore LNG Terminal Project Ph3 (Ongoing)	Manpower Supply for completion of Tank -3&4 Piping, Painting & Commissioning Works (Ongoing)
Hyundai E & C	Jurong Rock Cavern Project	Manpower Supply for Liquid Hydro Carbon system, Hydro testing & Painting works
Hyundai-HEC (HHJV)	EFW @ Sakra (Ongoing)	Manpower Supply for Mechanical, Piping modification & Structural works for Boiler 1 & Boiler 2 of Waste Treatment Plant (On going)
Petronas Refinery and Petrochemical Corporation Sdn. Bhd-Malaysia	RAPID Project – Package 6, 12B & 14 (Ongoing)	Providing a total of 400 Nos of Pipe Fitters, Welders, Electricians, QA/QC other Skilled Manpower for Substation, Commissioning, General Civil works, material handling and other general support services for the project.

Summary of Projects and Scope – GRK India

Client	Project Name	Scope
CAIRN India	RAVVA Refinery Project	Piping & Insulation Work
Hindustan Shipyard Limited	Shipbuilding Unit Modernisation Of Guest House	Insulation of Piping and Structural Work, including Maintenance works Construction of Civil Works like Earth work and Building Works
Hindustan Prefabs Ltd	Swatch Bharat Project (Government of India)	Structural Fabrication, Erection & Civil Works
Hindustan Prefabs Ltd	Indian Naval Coast Guard Ship	Main Deck railing installation & civil work.
Hindustan Prefabs Ltd	Residential Colony	Upkeep maintenance work at HSL & staff residential colony
Hindustan Prefabs Ltd	DPD Building Renovation (VC-11184 Project)	HSL Yard DPD, Office building renovation in all aspects (Electrical, Plumbing, Civil, Interior & Exterior Design.
G.R. Enterprises	Foot over Bridge	Providing & Fixing of Foot over bridge including Fabrication and Painting for BUS RAPID TRANSPORT SYSTEM
Hindustan Shipyard Ltd	Ambedkar Community Hall	Hindustan Shipyard Colony Community Hall – Complete Civil & Painting Works
Hindustan Shipyard Ltd	Modernization of Officers Residential Houses	Construction, Civil Works, Painting Works and Building Works for colony office residential houses
GRK Engineering India Ltd	Kakinada Residential Flats 20	Earth work, PCC work, Electrical, Civil, Internal & External design for 20 residential apartments
NIKOM (Nakilat Keppel Offshore Marine)	Al Safliya LNG Vessel	Piping & Mechanical Works
NIKOM (Nakilat Keppel Offshore Marine)	Al Wukir LNG Vessel	All valves removal, maintenance & installation
NIKOM (Nakilat Keppel Offshore Marine)	Al Deebel LNG Vessel	Vessel Blasting & Painting and Tank Cleaning by using chemicals

Pacific Oriental Pte Ltd

In 1986 Pacific Oriental Pte Ltd was established to help the growing demands of Engineers and Technical Personnel in the Marine, Oil & Gas and Petrochemical sectors in Singapore and Asia Pacific region.

Pacific Oriental – Projects Summary

A. AOKA MIZU FPSO

Bluewater Energy Services B.V. awarded a contract to Pacific Oriental to supply Commissioning Technicians (Electrical, Instrument & Mechanical), E&I Inspector, ATEX Inspector and Electrician. Onshore commissioning started on November 2007 and ended on November 2008. Offshore Commissioning started on December 2009 and ended on September 2009. A total of 70 technicians were deployed for the said project.

B. GLOBAL PROCESS SYSTEM (Cogee Montara FPSO & CIDADE De Sau Mattheus FPSO)

GPS awarded to Pacific Oriental the completion of the construction of 19 modules (carry over from Batam) for both FPSO. We supplied more than 200 personnel of various disciplines such as Inspectors, painters, welders, fitters and general workers. The project started in June 2008 and ended December 2008.

C. PROSAFE (VAN GOH APACHE FPSO)

PROSAFE awarded the construction of the said project. Demolition phase were done at Subic Shipyard from April to December 2007. More than 30 personnel from Construction Manager down to Inspectors were mobilized during the demolition stage. Completion of construction phase was done in Singapore at Keppel Shipyard. Construction was completed in May 2009.

D. KEPPEL FELS LTD

In year 2005 to 2007, Keppel Fels Ltd-QA Department, commissioned Pacific Oriental to supply various personnel requirements of QA Department such as QAQC, E&I Inspector, Structural / Piping/Welding/NDT Inspector for Keppels various project such as B268, B277, B282, B283, R285, R286, R291, R293 & R298.



Pasifika Perak Sdn Bhd

Pasifika Perak Sdn Bhd was established in the year 2004 to help the growing demands of Engineers and Technical Personnel in the Marine, Oil & Gas and Petrochemical sectors in Malaysia.

Pasifika Perak – Project Summary

RAPID Project – Package 6, 12 & 14 (Southern Johor) - Ongoing

Malaysian Oil and Gas Company Petroliam Nasional Berhad (Petronas) is developing a refinery and petrochemical integrated development project (RAPID) and other associated facilities in Pengerang, Southern Johor, Malaysia, through a project called Pengerang Integrated Complex (PIC)

Launched in May 2012, PIC is part of the larger Pengerang Integrated Petroleum Complex (PIPC) proposed by the Johor state government. Total investment for the PIPC project is approximately MYR97bn (\$27bn), of which the RAPID project costs MYR57bn (\$16bn) and the associated facilities around MYR40bn (\$11bn).

Pasifika Perak was one of the contractor which was awarded to provide Pipe Fitters, Welders, Electricians and other Skilled Manpower for Substation, Commissioning, General Civil Service works, Material handling and other general support services for the project.

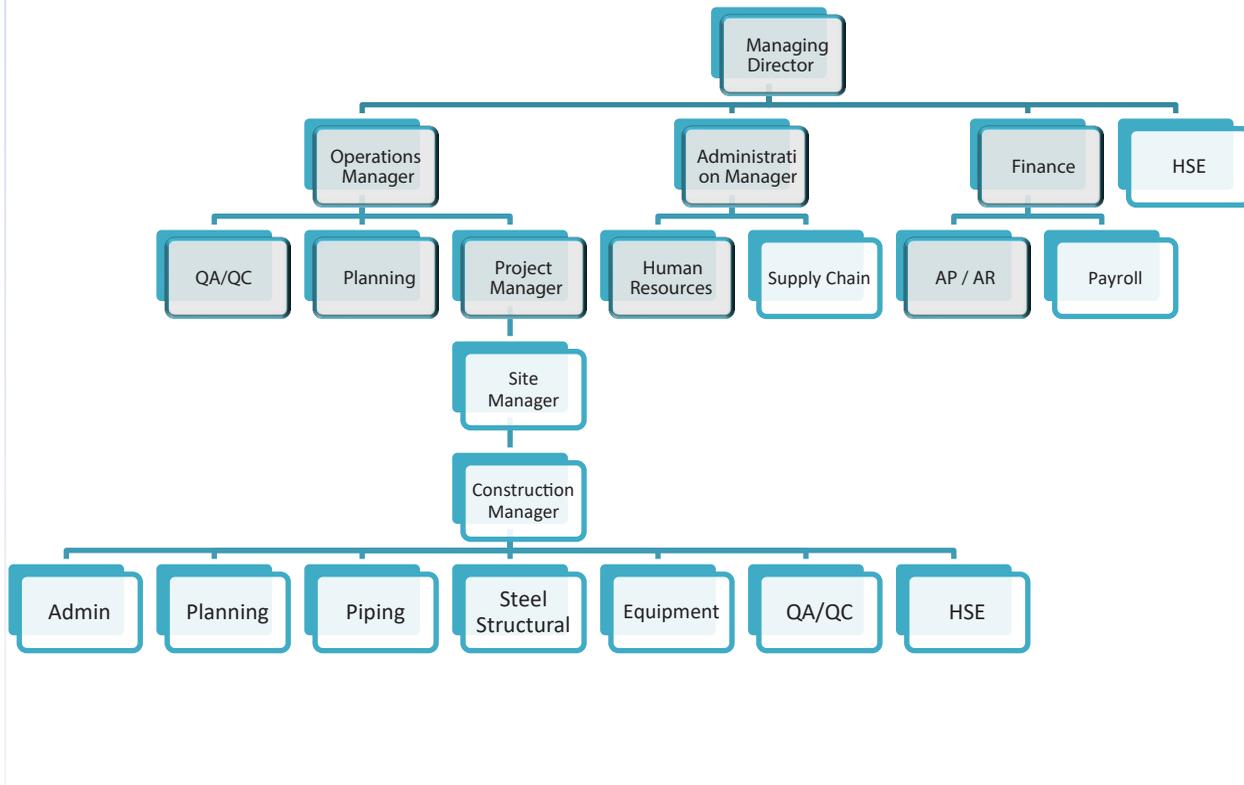
SHELL – Gumusut Kakap Offshore Project

We had about 60 electrical commissioning technicians and 30 mechanical commissioning technicians who were deployed for this project.



Org Chart & ISO

GRK ENGINEERING & MANAGEMENT PTE LTD - SINGAPORE



Our Services

Civil Construction
Inspection Services
Mechanical Completion
Installation & Hook Up
Commissioning
Hydraulics
Fabrication & Installation
Marine Mechanical Services



FPSO, FLNG & FSRU Conversions
Drill Ships
Jack Up Rigs
Semi Submersible Rigs
Ship Building
Process Plant Construction
Industrial waste water treatment





GRK GROUP

Specialized in Offshore & Marine Services including:

Shipbuilding & Ship Repairs | Offshore Structures | FPSO, FSO & FLNG
Conversions | Engineering Works | Piping | Electrical | Scaffolding |
Marine Painting | Oil & Gas | Process Plant Construction & Maintenance |
Civil Constructions | Mechanical Completions | Fabrication & Installation
| Industrial Waste Water Treatment | Manpower Solutions



-  WEST CONNECT BUILDING
10 Buroh Street, #03-30, Singapore 627564
-  +65 62646752 /54
-  ravi@grkgroup.biz