Oil & Gas Resources by Engineers



OGRE provides a comprehensive suite of engineering solutions and business services that drive productivity. Our integrated services and management systems balance simplicity and flexibility to deliver turnkey projects for our customers.

Projects are becoming larger, increasingly complex and technologically demanding. High-level of productivity demands robust project architecture, detailed planning and decisive application of experienced Oil and Gas Resources by Engineers.

www.ogre.com.sg

Business Solutions

OGRE delivers turnkey projects for our customers, combining our own expertise with third party services where they are needed.

We provide rig construction, operation and maintenance, project management consultancy, cost estimation and risk analysis that are all critical to the success of any operation.

Electrical Equipment in Hazardous Areas Package

OGRE has developed a proprietary service called the Electrical Equipment in Hazardous Areas Package.

The EEHA is a comprehensive inspection and analysis package divided into several operational and reporting subsets including Hazardous Area Equipment Register, Material Take-off and crucially for platform operators; OGRE delivers a complete rectification solution containing all materials and manpower costs.



Rig Condition Survey

The contracting of a drilling rig necessitates meticulous reporting of its maintenance and working conditions to limit downtime and increase safety.

OGRE provides an accurate analysis and impartial evaluation of the electrical, piping, mechanical and structural systems installed on any drilling rig.

Rig Reactivation

Whether a platform or mobile drilling rig has been cold or warm stacked, OGRE offers a complete service that includes all survey, engineering and design, installation and commissioning stages to reactivate rigs for sale or contract.

OGRE's rig reactivation team provides our customers with peace of mind because their rigs will be operational and compliant to meet schedule and budget.

Manpower Services



OGRE's manpower services range from the placement of highly experienced and qualified personnel up to and including payroll services.

OGRE contracted staff are deployed with the maximum personal and liability insurance.

Our vast experience means we understand the various phases of our clients' projects and proactively recruit and reassign talent as it becomes available.

Engineering

OGRE offers a complete range of value-added engineering services that underpins everything we do. We provide engineering services from concept design to commissioning.





We are committed to supply the right personnel for:

Projects

Managers

Project Manager Construction Manager Commissioning Manager HSSE/QHSE Project Control/Finance

Designers, CAD Operators

Safety Officers

HSSE Officer PTW Coordinator

Support Services:

Project Control Engineer Planning Engineer **Project Administrators Contract Administrators** Secretaries Accountant Purchasing/Buyers & Material Controllers IT Helpdesk Document Controllers

Supervisors, Engineers, Technicians & Inspectors for:

Electrical Electrical CompEx E&I Piping Structural **Painting** Welding Commissioning **Quality Assurance Quality Control Quantity Surveyor Facility** Hydraulic **Drilling Systems** Marine Systems **Power Systems HVAC** Process Production

Mechanical

Operations

OIM's/ Drilling Superintendent **Drilling Engineers** Tool Pushers Drillers Assistant Drillers Subsea Engineers **Barge Engineers** Deck Supervisor/ Crane Operator **Maintenance Supervisors Mechanical Supervisors Electrical Supervisors Marine Engineers** Electricians Electronic Technicians Mechanics **Chief Engineers** Welder Derrickman

Our global offices:

Roughneck Roustabout 1st, 2nd, 3rd Engineers **DP** Master Chief Mates, 2nd Mate/DPO, 3rd Mate/ADPO RSTC, QHSE Storekeeper

Survey Vessels

Marine Crews **Survey Teams**

Dive Support Vessels

ROV Crews Marine Crews

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, N Fax: +65-6265-2132

• Tel: +65-6223-3566 • Tel: +65-6265-2432

South Korea

• United Kingdom

United States of America



offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

EPC/EPIC Services

- Turnkey, all-inclusive EPC package
- Client-focused and adaptable solutions
- Proven track records of successful EPC execution safely, on time, on budget, and in compliance with main class rules and standards (DNV, ABS, IEC, NEC ...etc.)
- Ability to handle engineering project of various types & scales
- Ability to setup qualified and experienced project team in a relatively short time frame

EPIC Project Reference: Songa Offshore (2014-2016)

Total Vessel Contract value USD \$2.4 Billion

The scope of work is to develop the basic GVA 4000 design into detailed engineering, procurement, installation, test, commissioning and delivery of the four (4) GVA 4000 Mobile Offshore Drilling Units (MODUs). This incorporated but not limited to the following main systems:

Power generation & Distribution (HV/LV and VFD Systems). Automation & Power Management Systems, F&G, Marine & Drilling systems, HVAC, Cranes, Dynamic Positioning and VFD Azimuthing Thrusters

The vessel class notation: DNV 1A1 Column Stabilized Drilling Unit, Drill (N), Posmor, ATA, Dynpos-Autro & Dynpos-ER.

OGRE's multidiscipline project team consisted of the following:

Construction Superintendent, Naval Architect, Mechanical Engineer, Marine Engineer, Drilling controls Engineer, Vessel Management System Engineer, Electrical Power Systems Engineer, HVAC Engineer, Commissioning Engineer, Subsea Engineer. Inspectors: Piping, Coatings, Welding, Electrical, Mechanical, Outfitting & Structural

EPIC Project Reference: Atwood Oceanic's (2008-2012)

Total Vessel Contract value USD \$1.3 Billion

The scope of work is to develop the basic Friede & Goldman design into detailed engineering, procurement, installation, test, commissioning and delivery of two Mobile Offshore Drilling Units (MODUs). This incorporated but not limited to the following main systems:

Power generation & Distribution (HV/LV and VFD Systems). Automation & Power Management Systems, F&G, Marine & Drilling systems, HVAC, Cranes, Dynamic Positioning and VFD Azimuthing Thrusters

The vessel class notation: Maltese Cross, A1 Column Stabilised, AMS, DP-2, Circle P Mooring + CDS ABS.

OGRE's multidiscipline project team consisted of the following:

Construction Superintendent, Naval Architect, Mechanical Engineer, Marine Engineer, Drilling controls Engineer, Vessel Management System Engineer, Electrical Power Systems Engineer, HVAC Engineer, Commissioning Engineer, Subsea Engineer, DCC and operational secretary

Inspectors: Piping, Coatings, Welding, Electrical, Mechanical, Outfitting & Structural





For project enquiries email: clientenquiries@ogre.com.sg
For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg Our global offices: •Malaysia •Norway •South Korea •United Kingdom •United States of America



OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007. We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Electrical Equipment in Hazardous Areas (EEHA)

OGRE offer unique turnkey EEHA package in compliance with classification society rules and IEC60079 standards.

Scope of Supply

- Compiling all Ex equipment lists into a Hazardous Area Equipment Register (HAER)
- Inspection to IEC 60079-17
- Sourcing and procurement of materials
- Working to global electrical standards including NEC500 & NEC505
- Rectification of items listed in Non-Conformance report (NCR)

OGRE's EEHA compliance package uses Inspectivity Cloud Platform (ICP) Solution for real time tracking and efficient reporting.

Key benefits of ICP

- Paperless inspections
- Removing duplicated effort
- Clear and auditable NCR workflows
- Monitor progress in real time
- Share information across all global stakeholders

Other available options

- Equipment tagging and linking to the HAER electronically
- Option for Manual Data Input Solution (MDI) as an alternative to ICP.

The EEHA Standard documentation is issued in 3 volumes:

- Volume 1 Electrical Equipment in Hazardous Areas Report
- Volume 2 Completed Hazardous Area Inspection Check Sheets (HAIC
- Volume 3 Electrical Equipment in Hazardous Area Certification

OGRE Personnel

- OGRE personnel are fully licensed engineers
- CompEx Certified
- Hold appropriate offshore medicals (OGUK, PETRONAS)
- Seaman's book

Engineering solutions to rectify the NCR items

- Specifying and sourcing the required spare parts
- Resolving spare part availability issues, with suitable engineering solutions
- Identify equipment quality issues, and propose better solutions to resolve

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-243 • Tel: +65-6223-3566 •Fax: +65-6265-2132 •www.ogre.com.sg

Our global offices: •Malaysia •Norway •South Korea •United Kingdom •United States of America



Asset Lay-Up and Preservation Services

OGRE has developed a comprehensive framework for asset layup and preservation services. We can supply turnkey preservation packages tailored to the customer specific requirements and in full compliance with the main class rules, national & international regulations and offshore standards.

Phase 1. Preservation Planning

- Define customer requirements and goals
- Initial study of the vessel design, equipment and systems
- Evaluate stacking location and applicable rules & regulation
- Full site survey and inspection of the installation
- Start-up and re-activation consideration
- Research suitable preservation materials and equipment (VCIs, de-humidifiers ...etc.)
- Issue detailed report of findings and recommendations to the customer









Well informed customer decision making prior to investment!

Phase 2. Detailed Engineering

- Develop detailed work scope to prepare the asset for stacking
- Load (kW) analysis to determine power requirements during stacking
- Create area/equipment specific preservation solutions and procedures, checklists, safety and QHSE guidelines ...etc.
- Calculate amounts of preservation material required
- Research best solutions for preserving control systems and software
- Regular maintenance and test procedures to meet OEMs, customer, class requirements and recommendations
- Living and accommodation solutions for the stacking crew as needed

Asset specific preservation and maintenance package!

Phase 3. Implementation, monitoring, and continuous improvements

- Full responsibility of all logistics, inclusive of all material and tools (OGRE warehouse is suitable for storage of large equipment and rubber goods).
- Supply all needed manpower during stacking, including a certified marine crew when required
- Assign a dedicated team to carry out implementation work as detailed in the approved preservation procedures, tailored during the
 engineering phase
- · Supervise, review and evaluate the implemented measures on regular intervals to ensure the effectiveness of the program
- Adjust and enhance as required, throughout the preservation and stacking period
- Close communication with the customer through regular maintenance reports, supported by our unique cloud based software package, allowing the client to view in real time all preservation, maintenance and reactivation activities.

Examples of available stacking and preservation options

Warm Stacking

- Guaranteed equipment operational readiness and integrity at the time of reactivation
- Low re-activation costs
- Regular operational and maintenance costs
- Negligible preservation costs

Smart Stacking

- Allows flexibility in the stacking period
- Reduced reactivation costs
- Reduced operational and maintenance costs
- Reduced preservation costs

Cold Stacking

- Negligible operational and maintenance cost
- High preservation costs
- High reactivation costs
- Extended duration to reach operational readiness

Rules & regulations

- All main class rules such as ABS, DNV, Norsok
- Applicable offshore preservation & maintenance standards such as IEC, NEMA standards
- Any other applicable national and international regulations will be investigated and complied with

Bupa/





We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Temporary Refuge (TR) Compliance Package

- TR design reviews for compliance with national and international standards, owner safety case performance standards and guidelines
- TR Integrity Assessment (including onsite pressure integrity, HVAC and fire boundary integrity verifications)
- Turnkey all-inclusive engineering solutions complete with applicable test equipment, software and hardware.

Deliverables

- Onshore/offshore Work Packs
- Test and verification Procedure
- Detailed report of test records and findings
- Non-conformance reports and recommended remedial work
- Certificate of TR Integrity Testing

Guidelines and Standards

- **UK HSE Guidelines**
- **ABS MODU Rules**
- **DNVGL Offshore Standards**
- ISO15138&13702

OGRE Engineers

- OGRE personnel are fully licensed engineers
- ompEx Certified old valid BOSIET & offshore medicals (OGUK, PETRONAS)
- Seaman's book



For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-243 • Tel: +65-6223-3566 • Fax: +65-6265-2132 •www.ogre.com.sg

Our global offices: • Singapore • Malaysia • Norway • South Korea • United Kingdom • United States of America









We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

QHSE and Coaching Services

We provide a scope of support and training services within the offshore and onshore drilling industry. Our services are provided with consistent quality, industry expertise by competent personnel. Our trainers are suitably qualified, versatile and able to provide relevant training onsite or at client's premises.

We aim to build long lasting relationship with our clients and provide our customers with optimum training through personality realization; to explain, make clear and reinforce Company's Vision, Mission, Values to staff and how they can keep this as priority to reinforce unity in diversity in the working environment; to understand & remember that you are a Leader in your job and how you can impact others to keep high standards required by company in a sensible manner. solutions: to provide a better understanding, communication and productivity amongst working colleagues

dules we provide for our clients:

- Coaching Services

 Emergency Management Roll out

 The Colors Personality Program

 Behavior Based Training

 Specialized Training for HSE Engineers (Train the Trainer HSE Management)

 Company Management System Roll out

 - Safety Management System Roll out
 - Orilling for Non Driller's Roll out.

- Rig Audits (Pre & Post)
- mpetency Assessment Roll out and follow up
- Warehouse, Supply Facility and Vendor Audits.

- Facilitation Services
 Campaigns, Seminars and Meetings
 - Rig Engineering Program for New Engineers

Training and Administrative Services

Training Matrix Development and Tracking of Course bookings

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 •www.ogre.com.sg

Our global offices: • Singapore • Malaysia • Norway • South Korea • United Kingdom • United States of America









OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007. We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Secondary Current Injection Tests (SCI)

Circuit protection is a critical factor in an electrical installation. Over the time, circuit protection devices such as breaker and relays do fail due to wear & tear of mechanical and electronic components. Defective protection devices can allow extensive damage, personnel injury, or make an outage more widespread when a fault occurs.

Unfortunately, it is not possible to know if a protection device will operate properly under an electric fault or overload condition, unless tested. Hence, regular testing of the protection devices is required by class rules and standards, and considered essential to safeguard the safety and operability of the installation.

SCI ensures that all protection functions and selectivity set-points are tested and verified to the approved design values. The test engineer connects the SCI test equipment to the breaker, and injects electric current in simulation of an electric fault. The test equipment measures the current and time delay values that causes the breaker's protection unit to operate. These measured values are then compared to the design settings in the relay coordination table, and all deviations are identified and rectified before they become a safety hazard to operators or system.









Benefits of regular SCI testing

- Verifies the integrity of the circuit protection and ensures the safety of the installation
- For new installation, SCI testing checks the protection device settings and ensures they are set and operates correctly with no malfunctions or defects
- For existing installation, it detects device failures, degradations in electronics, unauthorized modifications ...etc.
- Results in high plant productivity and minimize the causes of downtime
- Minimum impact on the plant operation through careful planning of the tests
- Ensure compliance with classification society rules and standards, especially during periodic classification surveys, like SPS
- Added value: our engineers will check the settings and upstream/downstream fault discrimination, and highlight
 any concerns to the client for further investigation

Some of the applicable rules and standards

- IEC 61892, 61439
- ANSI/NETA ATS-2009
- ABS MODU and SVR rules, part 4
- DNV-OS-D201

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg



We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Infrared Thermography (IRT) Surveys

IRT is an efficient and non-destructive inspection technique for early detection of failures in electrical & mechanical equipment and systems.

Level-1 IRT Certified engineers

All OGRE Engineers performing Infra-red surveys on board the vessel come with

Level-1 Infra-red Thermography certificate which is internationally recognized. Their

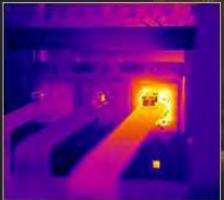
Certification is based on the ASNT SNT-TC-1A certification program.

Key benefits from OGREs regular IRT Surveys

- Detect electrical problems before they cause equipment overload, tripping offline, or starting a fire
- Detect mechanical problems, such as bearing failures, at an early stage
- Carried out while the equipment is live and on-load, to expose potential failures
- Helps preventing catastrophic failures and costly repairs
- Improves equipment safety, reliability, and reduces downtime
- Ensures compliance with class rule requirements, such as ABS and DNV as part of their Special Periodic Surveys (SPS).
- Ensures compliance with Electrical & Fire Safety rules such as NFPA70

Examples of failure conditions detectable by IRT inspection

- Loose/deteriorated connections
- Overloads
- Open circuits
- Unbalanced loads
- Inductive heating
- Harmonics
- Defective equipment



Applicable equipment and systems

- All main electrical equipment, such as Generators, Motors, Switchgears, VFDs, MCCs, Transformers ...etc.
- Mechanical equipment and rotating machines, such as drilling machines, Cementing equipment, piping structures, valves ...etc.
- Top drive service loop, cable trays and others

OGRE's scope of supply

- Supply certified engineers to perform the IRT survey
- Supply state of the art tools and IR Camera required for the survey
- Issue a comprehensive survey report, showing the measurement taken, and detailing areas of concern and failure severity levels.
- Option for following up with a corrective action plan to rectify all problems identified in the survey





Industrial Noise Survey

Purpose









Methodology

- Noise levels are measured based on OSHA Occupational Noise Standard 1910.95b (29 CFR) guidelines
- Noise levels are measured to determine the following three parameters of any given area:

 - Average exposure of noise over a sample period Maximum sudden (fast response) noise level in the sample period
 - Exceeded noise level for a given percentage (usually 90%) of a sample time

Features of noise level meter - Pular Nova

- Wide frequency range (31.5Hz to 16kHz)
- Long measurement endurance (Up to 50 hours)
- Versatile operating temperature (-10°C to 50°C)
- High operating humidity (95% RH Non-condensing) Small size (280mm x 80mm x 42mm)
- Lightweight (440g without batteries)

OGRE's scope of supply

- Supply certified engineers to perform the industrial noise measurement survey
- Supply state of the art tools and measuring equipment required for the survey
- Issue a comprehensive industrial noise measurement report, showing the measurement taken during the survey and detailing areas of concern and non-compliance items.
- Arrangement drawings showing the areas of noise levels above 85dB where ear protection required before entering the area.
- Option for following up with a corrective action plan to rectify all problems identified in the survey

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg



OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007. We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Lighting Design Survey

Lighting surveys are conducted to investigate the illuminance levels in work areas of offshore and onshore installations, and verify the lighting installation complies with the minimum requirements of safety and regulatory rules.

Benefits of the lighting surveys

- Identify areas of insufficient illumination levels, poor luminance distribution and evaluate the associated risks
- Enhance the safety of personnel and workplace and prevent accidents due to insufficient lighting or excessive glare ...etc.
- Ensure compliance with classification society rules and standards

Some of the applicable rules and standards

- IEC Electrical Installation standards
- ABS MODU and SVR rules, part 4
- DNV OS-A101
- API RP









OGRE's scope of supply

- Supply certified engineers to perform the lighting design survey
- Supply state of the art tools and measuring equipment required for the survey
- Issue a comprehensive lighting survey report to customers, showing the measurement taken during the survey and detailing areas of concern and non-compliance items.
- Option for following with a corrective action plan to rectify all problems identified in the survey

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 •Fax: +65-6265-2132 •www.ogre.com.sg



OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007.

We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Cable Management Solution

Cable management plays an integral part in keeping the installation safe and in compliance with the main class rules and standards.

OGRE provide a turnkey package for conducting a thorough inspection of the cable installation and provide comprehensive report of the installation status and required corrective action plan.

Benefits of Cable Management Solution

- Significantly improves the safety and integrity of the installation by detecting cable failures at early stage
- Mitigates the high risks of fire and accidents associated with cable installation problems
- Provides accurate documentation of the installation status, areas of concern, and potential risks
- An important tool to ensures compliance with the safe electrical installation standards, and classification society rules

Some of the applicable rules and standards

- IEC 61892, 60079
- ABS MODU and SVR rules, part 4
- DNV offshore rules, D201
- NEMA VE2-2013
- IEEE45

Example of failures detectable during the survey

- Overloaded cable trays and associated hazards
- Earth continuity, deteriorated, or improper earth bonding
- Incorrect, untidy, or wrongly bunched cables
- Hazardous cable fittings
- Non-compliant tagging and labelling
- Use of incorrect cable tray types
- Inadequate cable tray support

OGRE's scope of supply

- Supply certified engineers to perform the cable installation survey
- Supply state of the art tools and measuring equipment required for the survey
- Issue a comprehensive survey report, showing the measurement taken and detailing areas of concern and noncompliance items.
- Option for following up with a corrective action plan to rectify all problems identified in the survey

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 •Fax: +65-6265-2132 •www.ogre.com.sg











OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007. We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Calibration Surveys for Field Instrumentation

Wear and tear of field instrument and equipment over time is inevitable. To verify the measurement accuracy and traceability, regular checks against a calibrated reference equipment is necessary to detect measurement accuracy problems.

Benefits of the regular calibration surveys

- Assurance of accurate measurements.
- Enhance the safety of personnel and equipment by ensuring the reading accuracy of critical equipment and systems, such as weather sensors used to guide Helicopter landing operation.
- Detects out of tolerance readings, and identify equipment in need of calibration
- Issuance of calibration certificate when the reading accura within the design tolerance

Some of the applicable rules and standards

- ISO/IEC 17025
- ABS MODU and SVR rules, part 7
- DNV OSS-101
- **CAP 437**

OGRE's scope of supply

- Supply certified engineers to perform the calibration survey Supply of state of the art tools and reference equipment to carry
- Equipment calibration certificates after conducting the sur
- Calibration survey report that shows measurements accument in need of calibration identified in the survey







For project enquiries email: clientenquiries For recruitment needs email: recruitment ©

OGRE PTE LTD
31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115
Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg



We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Onshore / Offshore Rig Acceptance Survey (RAS)

Utilising OGRE's independently and uniquely developed RAS package in compliance to all international standards, certifying authorities and flag state requirements, OGRE offers highly experienced teams of inspectors with many years in the offshore/onshore oil and gas industry.

Scope of Supply

- Documentation review
- Periodical maintenance reporting review
- Equipment condition assessment
- Compiling detailed condition and non-conformance reports
- Pictorial details of defects and non-conformance









Applicable Standards

- American Petroleum Institute Specifications and Recommended Practices (API)
- Original equipment manufacturers (OEM) periodic maintenance requirements
- Recognised standard oilfield practices International Association of Drilling Contractors (IADC)
- Other standards required by client to be discussed during pre-survey briefing

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg

Our global offices: •Malaysia •Norway •South Korea •United Kingdom •United States of America



We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

Mechanical Category III & IV Inspection Services

OGRE offers mechanical engineering services that complete periodic maintenance schedules to Original Equipment Manufacturer Design (OEM) and American Petroleum Institute (API) standards for various mechanical primary drilling equipment.

Primary: Drilling Equipment

- Drawwork
- Mud Pump
- Iron Roughneck
- Top Drive
- Travelling Block
- Crown Block

Category III and IV periodic maintenance schedule

Category III periodic maintenance schedule inspection involves disassembly to the extent necessary to complete dimensional measurements to record wear of rotating components along with minimal non-destructive examinations of primary load path components without major disassembly.









OGRE Category III periodic maintenance schedule would be completed on site on board the Drilling Unit during a suitable time frame to complete the work scope.

Category IV periodic maintenance schedule inspection involves disassembly to the extent necessary to complete fully intrusive non-destructive examinations along with dimensional measurements of all rotating components where replacement of parts would be undertaken where below tolerance specified by the original equipment manufacturer.

OGRE Category IV periodic maintenance schedule would normally be completed during a longer time frame where a drilling unit rig move or classification shipyard survey was required, during this time frame the equipment requiring the category IV maintenance would be shipped to our onshore mechanical facility for the work scope to be completed.



For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115
Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 • www.ogre.com.sg



CAP 437 Circle & H Helideck Lighting and Compliance Package

with CAP 437 and HCA requirements by March 31st, 2018, if night

In cooperation with a leading manufacturer of Circle & H lighting systems, OGRE can offer all-inclusive turnkey lighting packages, or the installation and commissioning of a pre-Standards, IEC and applicable class rules and regulations.

Main Features of the Lighting System

- Circle & H lighting system
- Offshore class certified system
- Special design free from on deck JBs and options for cable routing above or below deck
- Suitable for steel and aluminum decks
- ATEX certified, suitable for Zones 1&2
- Easy and quick installation (3-4 days)

OGRE can supply

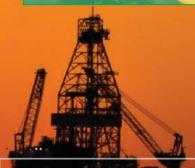
- CAP437 compliant circle & H lighting system
- Helideck Installation Survey Installation and Commissioning
- All required tools and equipment for the installation
 All required material and consumables (cable, trays, MCTs
- glands ...etc.)
- Hands-on and CompEx certified installation team

OGRE Installation team

- Experienced in Circle & H helideck lighting installation
- Competent job supervisors
- Competent and CompEx certified E&I technicians
- Competent mechanical technicians
- Holds required offshore medical (e.g. OGUK)
- Seaman's book







Reference projects

Project CAP 437 Circle & H Helideck Lighting

Vessel 3 Jackup Rigs & 1 Drillship North Sea & Region

Malaysia/Labuan

SOW Installation & commissioning

OGRE is an assembly of multi-disciplined engineers with vast experience in oilfield services, created in 2007. We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-243 • Tel: +65-6223-3566 •Fax: +65-6265-2132 • www.ogre.com.sg. Contact: clientenquiries@ogre.com.sg, recruitment@ogre.com.sg



We offer a comprehensive suite of business services that drives productivity. We deliver turnkey projects for our customers, combining our own expertise with third party services where they are needed.

ROPE ACCESS

Rope access is a means of accessing locations at height that would otherwise be difficult or dangerous to reach using conventional methods. Otherwise described as industrial abseiling, rope access is perfectly suited to onshore and offshore inspection, maintenance and construction. Quick and easy to install, Rope Access systems are the most efficient and cost effective way for clients to inspect, maintain, simplify or upgrade their assets.

- Quick and easy set up to access hard to reach areas, which may not be possible or financially practical using conventional means.
 Greatly reduced man hours for working at height and keeping disruption to an absolute minimum.
- Labour costs can be reduced by up to 30%.
- The introduction of the Industrial Rope Access Trade Association (IRATA) has taken safety standards to new levels with rope access becoming the safest method of access in the industry.

WHY OGRE?

nd competent tradesman who are trained to IRATA Standards for Industrial OGRE uses only

- OGRE's team of highly qualified and experienced multi-disciplined IRATA rope access technicians are Il health and safety commitments required both onshore and offshore in all industry ectors worldwide.
- DGRE's rope access personnel includes welders, electricians, platers, riggers and inspection onnel enabling us to support a range of customers requirements from decommissioning of res, assembly of steel through to electrical and piping work scopes, as well as rigging and
- hly motivated team understand the importance of ensuring work is completed on time environment. This professionalism affords our personnel, and the project, the minimum neir work and is proven in our safety record.
- credited company, OGRE is able to provide you with the comfort and knowledge to stand and support all your "working at height" requirements.

OGRE'S ROPE ACCESS SERVICES

- Inspections
- DROPS
- EX Inspection and Maintenance

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road Jurong Logistics Hub #02-10/11, North Wing Singapore 619115 Tel: +65-6265-2432 • Tel: +65-6223-3566 • Fax: +65-6265-2132 •www.ogre.com.sg

Our global offices: • Singapore • Malaysia • Norway • South Korea • United Kingdom • United States of America







Our Clients

ABB Atec Moxi Atlantica Tender Drilling **Atwood Oceanics BW Offshore** COSL Diamond Offshore Duro Felguera **ESSAR** Exxon Mobil Frigstad Engineering Frigstad Offshore Helix Energy Solutions Group Hercules **HESS** Larsen Oil and Gas Maersk Drilling Moxi NDC **Noble Denton** Northern Offshore Norshore Management AS NOV **Opus Offshore** Petrofac **Petronas** R. Stahl Asia Pacific Rowan Drilling SapuraKencana SBM Offshore Seadrill Shelf Drilling Songa Offshore **Sparrows Engineering & Operations** Stena Drilling Teekay Petrojarl **Upstream Drilling** Vantage Drilling Company Velosi Wilhemsen Woodside

For project enquiries email: clientenquiries@ogre.com.sg For recruitment needs email: recruitment@ogre.com.sg

OGRE PTE LTD

31 Jurong Port Road, Jurong Logistics Hub #02-10/11 North Wing, Singapore 619115

> Tel: +65-6265 2432 +65-6223 3566 Fax: +65-6265 2132

> > www.ogre.com.sg



