

Drilling equipment

Inspection, maintenance, repair and overhaul to ensure integrity and compliance

Our experienced team perform inspection, maintenance, overhaul, refurbishment and repairs on all classes of rigs, rig systems and equipment. This includes structural, mechanical, hydraulic, Non-Destructive Testing (NDT) and electrical activities which can be undertaken on-site or at our local maintenance facility.

As well as delivering routine inspection and maintenance, our field mechanics and technicians often provide troubleshooting and repair services on all plant and equipment.

Our solutions give you access to:

- A refurbishment process that meets classification / design code guidelines in line with OEM recommended practices
- Qualified and skilled OEM trained personnel
- A reactive workforce to ensure a short turnaround
- A wide range of capabilities (full scopes managed in-house)
- Significant cost savings while meeting OEM and client criteria.



Mud pump reassembly.

OVERHAUL AND REPAIR

Our local expertise and capability allows us to deliver a quick and cost effective service for equipment repair, overhaul, commissioning, upgrade and recertification. We work to all classification, certification and OEM requirements to ensure compliance.

Typical services we deliver include:

- Full mechanical, hydraulic and electrical disassembly and assembly of equipment
- Mechanical and structural repairs on drilling equipment
- Rig equipment removal and replacement utilising specialist rope access personnel
- Fabrication repairs by qualified welders
- Reverse engineering of spare parts where required in the absence of OEM
- Project engineering.

The equipment we often inspect, overhaul and repair includes:

- Derricks
- Hydra tongs
- Casing tongs
- Cementing units
- Mud pumps
- Drawworks
- Top drives
- Rotary tables
- Crownblocks
- Traveling blocks
- Deadline anchors
- Hooks
- Winches (electric, hydraulic, pneumatic)
- Hydraulic Power Units (HPUs).

INSPECTION

Our inspection services provide you with confidence in the integrity of your equipment. We utilise a wide range of traditional and advanced examination and testing techniques and our rig activation services support you to achieve classification.

Typical services include:

- API RP 4G CAT III and CAT IV inspections
- Dropped Object Surveys (DROPS)
- Hazardous Area Equipment Register (HAER)
- Pressure Relief Valve (PRV) testing and certification
- Rig audits and conditional assessments of drilling equipment

All work is completed in accordance with API RP 4G, 7G, 7L, 8B, and 53

NDT TECHNIQUES

Conventional and advanced NDT techniques we utilise include:

- Close Visual Inspection (CVI)
- Magnetic Particle Inspection (MPI)
- Liquid Penetrant Inspection (LPI)
- Ultrasonic Testing (UT)
- Eddy Current Testing (ECT)
- Alternating Current Field Measurement (ACFM)
- Phased Array Ultrasonic Testing (PAUT)
- Time of Flight Diffraction (ToFD)
- Electromagnetic (E-mag)

All NDT surveys can be carried out via rope access which is a cost-effective alternative to stripping down a full piece of equipment or erecting scaffolding.

1.



2.



3.



4.



1. Assembled crown block cluster.
2. NOV HDB500/650 travelling block.
3. NOV 1625 drawworks disassembly.
4. NOV 12P-160 mud pump fully assembled.

Please visit www.sparrowsgroup.com/contact to find your nearest office

