











## **OUR CORPORATE OVERVIEW:**

Marshall Solutions International Ltd (A Boltog Company) is a limited liability company with the aim of providing efficient Drilling Services, Supply of Shale Shakers Screens, EPC in Electrical/Instrumentation, Piping/ Mechanical, Marine and Sub-Marine Engineering and Construction to the upstream and downstream sector of the Oil and Gas industry. Although an Oil/Gas Engineering Service company registered and licensed with adequate Permits, we also offer excellent services to the Power and Industrial companies in Nigeria.

We have over the years attained all required International and Local Engineering Standards due to our strategic technical alliance with foreign internationally recognized companies in different fields of Engineering. Acquisition and mastering of state-of-the-art engineering hardware/software equipment has been an integral part of making Marshall's developmental thrust...

Our team of Personnel is amongst the finest because we believe in adequate and comprehensive staff training. Our sound Human resource system has made the transfer of engineering expertise from our foreign technical partners easy and beneficial.

Marshall Solutions has her operational office at Marshall Energy Centre, Road 5, J213, Ikota VGC, Lekki, Lagos.



#### **OUR VISION:**

To be the biggest oil and gas company in Africa

#### **OUR MISSION:**

To constantly improve what is essential to human progress by mastering science and technology. [In Marshall Solutions, we consciously strive to be the best in all we do]

The Mission Statement can be broken into three components:

1.

#### **CONSTANT IMPROVEMENT:**

This concept is bedrock to Marshall's culture and has been since Odim N. first said, "If you can't do it better, why do it?" It underscores our drive to become and ever better and bigger company.

2.

## MASTERING SCIENCE AND TECHNOLOGY

We must put our science and technology to work to create solutions for our customers and for society.

3.

## ESSENTIAL TO HUMAN PROGRESS:

The services we render find their way into products that provide the Oil and Gas industry world over with improved lifestyles. All of us at Marshall must understand and take pride in this. we must also use this concept to further connect Marshall with the external markets we serve. When we think in terms of the markets we serve, we become more outside-in focused and we can better seek growth opportunities.



### **CONTACT ADDRESS:**

#### COMPANY FACILITIES AND CONTACT INFORMATION

#### **OFFICES**

Marshall Solutions corporate headquarters and operational office is located in Lagos and branch offices in Port Harcourt-Rivers State, and the USA.

Our offices are fully equipped and maintain all required international standards regarding safety of personnel, environment and equipment. There are also ample storage facilities for major equipment, machinery and material consumables.

MARSHALL Solutions Main Office-Nigeria

#### **Head Office:**

Marshall Energy Centre, Road 5, J213, Ikota VGC, Lekki, Lagos.

## **Marshall Port-Harcourt Supply and Logistics Base:**

187 Jegohota Road, Off Uniport Road, Obio-Akpor LGA, Port Harcourt, Rivers State.

### **Sub-Sahara and Middle East Interface Hub:**

Boltog Centre, NPC Complex, Wing A, corporate Block, 12/14 Babs Animashuan, Lagos. Nigeria.

## **North-America Engineering and Manufacturing Oversight Office:**

2810-SE Yonkers Raleigh North Carolina, United State of America.

Tel: +1 919 270 8852 | +234 904 795 1694 | +234 706 409 0107

Email: info@marshallsolutionsgroup.com | sales@marshallsolutionsgroup.com

Website: www.marshallsolutionsgroup.com

Our company euqally has a state-of-the-art fabrication workshop and warehouse used for piping, structural, mechanical, electrical, control and marine engineering operations.

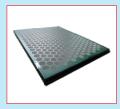
The fabrication workshop also contains as engineering maintenance workshop for all our operational activities.

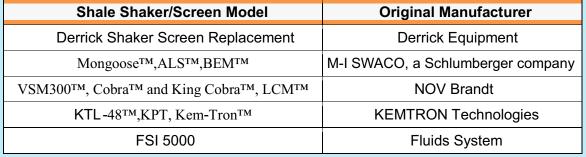


## OUR SERVICES:

### **DRILLING SERVICES**

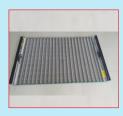
## Marshall Shale Shaker Brands and Screen Type

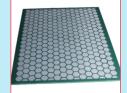












Screen Forma	Mesh Range	Screen Dimension (mm)	Matching Shaker	Weight (kg)
PWP/Flat	20-325	903x1155mm	SWACO BEM-3	5.6
PWP/Flat	20-325	1212x1141mm	SWACO ALS-11	9
PWP/Flat	20-325	697x1050mm	FLC 500 series	6
PWP/Flat	20-325	697x1053mm	FLC 2000	4.2
PWP/Flat	20-325	697x846mm	FLC 313M	4
PWP/Flat	20-325	915x1150mm	BRANDT LCM-2D	8.6
PWP/Flat	20-325	720x1120mm	KEMT -RON KTL48 series	5.6
PWP/Flat	20-250	700x1165mm	S 250	4.6
PWP/Flat	20-250	1186x1280mm	ZX-60	9.2
PMD/pyramid	80-325	635x1253mm	BRANDT BL-50	17.5
PMD/pyramid	80-325	697x1050mm	FLC 500 series	7.5
PMD/pyramid	80-325	697x1053mm	FLC 2000	5.8
PMD/pyramid	80-325	915x1165mm	BRANDT LCM-2D	10
PMD/pyramid	80-325	567x1070mm	HYPERPOOL	8.5
FRAME	20-325	585x1165mm	SWACO MONGOOSE	12
FRAME	20-325	635x1253mm	BRANDT KING COBRA	14
FRAME	20-325	913x650mm	BRANDT VSM 300	12.5
FRAME	20-325	720x1120mm	KEMT-RON KTL48 series	17
FRAME	20-325	712x1180mm	SF300	17
Composite	20-325	585X1165mm	SWACO MONGOOSE PT	12
Composite	20-325	635x1521mm	BRANDT KING COBRA	13.5
FRAME	20-325	735X1066mm	Fluids system	11.8



### **OUR SERVICES:**

#### **DRILLING SERVICES**

#### **WELLBORE CLEANING**

We undertake wellbore casing cleaning with our modern and efficient non rotating scrapers which mechanically assist in cleaning wellbore casing by scoring and removing mud film, residual drilling fluid and other restrictive materials from the inner casing walls.

These restrictive materials can damage completion and affect production

The number and the width of the scraping blades of our scraped is so arranged that the tool scrapes 360 degrees of the casing while being lowered into the well bore without the necessity of rotation, hence our scrapers operate safely and effectively for single pass cleanups to reduce nonm-productive-time and project cost. This tool can be a stand alone device, or more ususally with circulating tools. The main tool body rotates through blade housing, so avoiding wear or damage to the casing during tool rotation. The blades are self centralizing inside the pipe to ensure equal cleaning force at all angles of well inclinations.

These scrapers are manufactures from the highest quality alloy steel and have been heat-treated and tempered. The blades are hard faces with tool steel and precision ground to fit the internal contour of casing. The blades are self-centralizing inside the pipes to ensure equal cleaning force at all angles of well inclination. The simple design and construction of this tool in conformity with API and AISI makes it a friend of the oil field crews.





## **SPECIFICATIONS**

NOMINAL SIZE	CASING RANGE	API CONN.
41/2" (114mm)	96 - 104	23/8 REG
5" (127mm)	106 - 116	23/8 REG
65/8" (168mm)	140 - 156	31/2 REG
7" (178mm)	148 - 166	31/2 REG
95/8" (245mm)	216 - 231	41/2 REG
103/4" (273mm)	242 - 259	65/8 REG
133/8" (340mm)	290 - 330	65/8 REG



## **PRIMARY CEMENTING EQUIPMENT:**

**CENTRALIZER:** Centralizers are used to position the casing in the center of wellbore to guarantee good replacement of the mud with cement.

- Used in vertical, deviated and horizontal wells, this design comes closest to having a one type fits all applications.
- While the design is similar to those that have been in existence for many years refinements in materials and bow design allow this centralizer to perform satisfactorily in almost all application.
- we have centralizers whose bow springs are welded as well as those non welded to the centralizer's collars.





### **Welded Positive Centralizer**

This welded positive centralizer is designed to provide maximum effectiveness in casing centering as well as reducing channels around casing during the cementing process.

The design allows cement to completely surround casing in tight casing to formation conditions resulting in increasing economical effect of formation production



## **FLOAT EQUIPMENT**

Our float equipment are made up of; float shoes and float collars.

They are an all purpose design utilized in applications ranging from close tolerance liner to full casing string.

Standard differential pressure ratings of 5000 psi / 340 atm for sizes up to 9 5/8" Optionally, equipment can be supplies with differential pressure rating to

10,000 p.s.i. / 680 atm.



### **RIG INSPECTION**

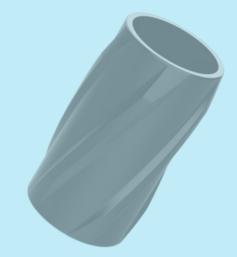
Marshall Solutions in conjunction with its technical partner offers overall range of drilling rig and drilling rig equipment inspection, audit and project services around the world, via our regional head offices in Nigeria, Aberdeen, singapore, Dubai, Australia, Houston and Brazil (Macae).

In essence, our services are grouped into four divisions:

### **Inspections**

We provide inspection packages that are all-in-one mobilizations covering a broadscope, with an excellent report package provided following the inspection. These inspections usually consist of the following (as required):

- Derrick inspections
- Dropped Objects Campaign
- Craned
- Tubular handling equipment and related items
- Padeyes
- Runway beams
- Swing jibs
- Air winches, tuggers and other similar units
- Baskets, containers, skips, gas racks and lifting frames
- All loose lifting tackle
- All lifting machines
- Lifeboat and life raft davit/deployment systems
- Forklift
- Hoisting equipment





NDT of critical load bearing areas like the Cantilever hold downs and beams

Ultrasonic thickness gauging (UT) of high pressure piping systems

UT thickness gauging inspection of air receivers - Client specified

### **Drilling related services**

In addition to the above packages, Marshall/OES also provide the following mainly drilling contractor related, services:

- Rope access / abseiling personnel for inspections and various other services at height work including repairs, difficult at height projects etc
- UT Gauging Hull Preservation / class Special Surveys
- IRT (Infrared Thermographic) Surveys
- Vibration Analysis
- EX / Intrinsic Safety Surveys
- Acoustic Emission (Noise Level) Surveys
- Lux (Light) Surveys Audits

#### **Technical Audit Service**

- This division incorporates our technical audit services, for example:
- Condition audits
- Contract compliance audits
- HSE audits
- Specific audits of (for example) cranes, internal dropped objects systems etc
- Preventative/Precictive maintenance system audits for both compliance and the clients rigs effective utilisation of the program
- Commissioning
- New-build and refurbishment audits, either at progressive stages or at a pertinent moment in the project.
- Audit of rig new-build and/or refurbishment facilities



#### **OIL & GAS PROJECT SERVICES**

- Project-management for new buildings
- Project-management for rig refurbishment
- Specific project personnel to fill gaps in a project team or to assist a busy client
- Structural
- Welding
- Electrical
- Mechanical
- Piping
- Drilling
- QHSE
- Project Administrator

Marshall and her strategic partners have a permanent, and continuously expanding, inspection team that currently numbers approximately 160 personnel. In addition to being approved as an above water inspection company by ABS and DNV, Marshall/OES are an active member of IADC and the Drops Forum.

### **DRILLING TURNKEY PROJECT MANAGEMENT & DRILLING MAN POWER SUPPLY**

Marshall provides drilling personnel to E & P operators. The personnel include but not limited to the following

- Drilling Supervisors
- Drilling Engineers
- Senior Drilling Engineers
- Night/Day Drilling Supervisors



#### DRILLING PROCUREMENT SUPPLY CHAIN

#### **DRILLING PROCUREMENT**

We undertake drilling Services, sourcing and supplies a wide range of Oilfield equipment from Mud Pumps, BOP's and Drill Collars to Fishing and Downhole Tools, spares and general oilfield supplies. We supply spare parts for manufacturers such as Gardner Denver, Emsco, Ideco, and are continually expanding to offer a wider supply range.

As procurement specialists, we can locate both Original Equipment Manufacture (OEM) and Non-Original Equipment Manufacturer (Non-OEM) components from reputable sources from across the globe, ensuring our clients get the best delivery and price available on the market, without detriment to quality.

Our services also include rentals, repairs and NDT inspections as per latest API Specifications.

Shipping out of the United Kingdom and the United States of America, our logistical service ensures all orders are inspected for quality and quantity compliance and despatched promptly to arrive at our client's designated destination in a timely manner.

With a sales team of over 50 years experience in the Oil and Gas Industry we are confident we can provide an efficient service to meet our client's requirements.

Please contact our experienced team with your specifications for a prompt competitive response.

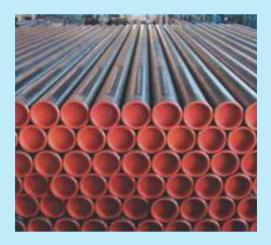
#### **PUP JOINT**

These are pipes of non-standard length used to adjust the length of tubing or casing strings to its exact requirement and also used to adjust the depth of down hole tools. Our Pup joints are made from integral bars of carbon steel, chtomium molybdenum alloy steel and also heat treated in conformity with AISI standard. Typical length of our Pup joints are 2", 4", 5", 6", 10", 15" and 20".



#### **CASING AND TUBING PIPES**

Our seamless casing and tubing are produced with controlled chemical compositions to improve corrosion resistance and mechanical properties in conformity with API spec 5CT, spec 5B and AISI standards. Casing are used for Oil and gas well drilling while tubings are used for extraction of oil and gas from reservoirs.





## **DRILL PIPES**

They are major parts of the drill stem which are connected between the kelly at the top and the collar at the bottom. They are used to convey torque to the drill bit. Our stock of drill pips are in accordance with API and AISI standards.







### TUBULAR REPURPOSING AND MORE: RUN AND SELL USED AND WORKOVER PIPES.

#### **MARSHALL OIL & GAS INSPECTION**

About our Inspection Services

Marshall Solutions Ltd can offer various inspection techniques, customised according to our Customer requirements. Our inspection services range from the basic visual inspection & MPI to API Thread Gauging.

Drilling Services Limited prides itself on quality and reliablity, from the basic tubular inspection to the more critical inspection areas. Our area of expertise is tubular, rig handling and lifting equipment. All inspection services are provided as per latest API Specifications, also meeting the customer requirements. Tubular Inspection includes inspection of New and Used Oil Country Tubular Good including Drill Pipes, Heavy Weight Drill Pipes, Drill Collars, Casing, Tubing and Bottom Hole Assembly, Derrick, lifting & handling equipment.

We have highly experienced, qualified Inspectors available, with equipment that is portable and reliable. Inspection Services provided include:

- Visual Pipe Inspection
- Dimensional Inspection of Pipe
- Ultrasonic (UT) wall thickness inspection
- Ultrasonic (UT) Inspection of Upsets and three feet end area
- EMI Inspection
- Visual Thread Inspection
- Tool Joint Dimensional Inspection
- Dimensional Inspection of Rotary Shoulder Connections
- Magnetic Particle Inspection (MPI) of Pipe Body and Upsets.









### **MARSHALL HSE POLICY AND PROCESS**

## **Quality Health & Safety and the Environment (QHS&E)**

Our current Group HS&E policies were adopted in December 1996 and are applied across the Group through locally adapted policies, procedures and management systems. HS&E performance is also a key area of focus for our customers. Our improvement initiatives are often implemented in conjunction with customers and many of our principal contracts contain HS&E goals as part of performance and reward mechanisms.

#### Health

Our policy is to promote the occupational health and welfare of our staff worldwide. We aim to ensure workplace conditions are free from health risks to employees, including harm from hazardous substances, noise, vibration and stress Safety.

our trained safety officers are always on ground to enforce strict. Compliance to safety rules and standards; these include making sure that personnel protective equipment are worn before commencement of operations, they also ensure that all dange zones are indicated and that there is sufficient protection against such hazards.

Marshall employees are empowered with stop work authority, which makes them accountable for their own safety, the safety of others, and the safety of materials of Marshall property at installation.

It is a stated aim of the Group to achieve the highest practicable standards of safety for employees and those affected by our activities including contractors, customers and members of the public. Good safety practices are a combination of people, process and place and our focus is on the adoption, implementation and communication of Group standards and expectations by our businesses and the contractors who work for us.

The Marshall Solutions Safety Policy is available for your perusal and is an integral part of our QHSE management system.

#### **ENVIRONMENT**

Our policy is to minimize the effects of the discharges, emissions and waste disposal from our operating facilities, with, for example, a number of our project in 2005 eliminating or reducing the use of cleaning solvents in their workshops or offices.



#### **Ethical Conduct of Our Businesses**

The Group Ethics Policy sets minimum standards of conduct, promotes best practice and provides resolution procedures when questions arise. The policy is available to employees on Marshall's website and is distributed to all.

We recognize that quality of service is the key to increasing growth in customer base and client satisfaction. To achieve this, the group strives to improve performance and exceed customer expectations, in part through the adoption of the internationally recognized standard ISO 9001:2000 which emphasizes process management and a structured approach to continuous improvement.

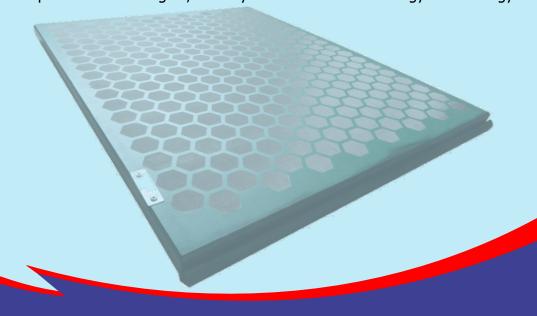
For information about Marshall Solutions services offering for developing, implementing or supporting your project, or any other oil and gas related activity, call MARSHALL. We have the Horsepower to do the job right.

We have a dedicated in-house integrity management team, data management and evaluation tools, and solid industry expertise.

## **QUALITY Oriented...PROJECT Driven**

The Group has established a reputation for quality engineering design, marine/Subsea construction, project management and driving/ROV and Power services. Our focus encompasses upstream oil and gas, Offshore and Deep offshore and subsea environment. Marshall Solutions is fully backed by a hands-on management team, a solid support staff and cutting edge system.

Our philosophy is simple-deliver the highest quality, highest value project on time, within budget and with no suprises. That's our goal, back by Marshall Solutions energy and strategy.





### ADDITIONAL SERVICES PROVIDED BY THE GROUP

### **DIVING/ROV/MARINE ENGINEERING.**

- Saturated/Mixed Gas/Air Diving
- ROV Works/Inspection Class Support

#### **VESSELS**

- Supply Vessels
- Tugboats(1800HP -8000HP)
- Accommodation Barges
- House boat

#### **MARINE CONSULTANCY SERVICES**

- Underwater Construction and Demolition
- Hyperbaric Capabilities
- Subsea Cable laying and Maintenance

#### **CONSTRUCTION AND INSTALLATION**

- Review approved construction drawing and installation procedures
- Preparation of Material as per MOT
- Material inspection and certification
- Preparation work execution schedules and strategy
- Mobilize Material, Personnel and Equipment for construction
- Quality management system implementation
- Pre-commissioning and Commissioning
- Customers inspection, certification and approval
- Handover and project closeout

### **PAINTING AND CORROSION**

- Due diligence audit /check
- Review procedure and specification
- Surface Preparation
- Blasting
- Priming and painting
- DFT check
- Customers verification and approval





### SUBSEA ENGINEERING.

- Subsea marine cable laying
- Subsea marine cable maintenance
- Power cable integrity/due diligence test
- Insulation Test
- HV Power Test
- OTDR Test(Fibre Optics Installation/test)
- Continuity Test

#### THERMAL INSULATION

- Review client specification
- Select insulating material and jacket
- Prepare surface to be insulated
- Follow best practice during surface preparation
- Seal against water ingress
- Inspect and certify
- Client inspection and acceptance
- Handover line register.

### **PIPELINE CONSTRUCTION**

- ROW Clearing
- Pipeline laying and river crossing
- Pre commissioning /Commissioning







# **Global Strategic Partners**

- 1. CORETRAX
- 2. SENWELL DRILLING
- 3. OES RIG INSPECTIONS
- 4. SPY (PIPLINE INSPECTION COMPANY LTD.)
- 5. WELLSTREAM
- 6. VAM DRILL
- 7. Top-Co
- 8. PERMANENT STEEL MANUFACTURING CO. LTD.
- 9. **NEWLAND OILTOOL (USA)**





## THE GROUP IS... **MARSHALL** SOLUTIONS **BOLTOG INVESTMENT LTD** PROJECT MANAGEMENT AND FINANCING **BOLTOG ENERGY LTD** DRILLING SERVICES, EPC, PROCUREMENT AND RIG KIPO SUBSEA LTD INSPECTION SUBSEA MARINE CABLE LAYING AND MAINTENANCE, INSULATION TEST, POWER CABLE INTEGRITY TEST ETC, AND DIVING SERVICES **ROGOF MARITIME** SUPPLY VESSELS, TUG BOATS, ACCOMMODATION BARGE AND HOUSE BOAT. GENERAL LOGISTICS ON LAND AIR AND WATER WAYS **QUALITY INITIATIVE SERVICES** OCTG INSPECTION SERVICES, NDT/PIPE LINE INSPECTION SERVICES **BOLPEX ENERGY** CIVIL/GEO-TECHNICAL CONSTRUCTION INIC/GEO-TECHNICAL CONSTRUCTIO ENGINEERING, FACILITY/PIPELINE LAYING, WEILDIG, FABRICATION, CORROSION CONTROLS AND MAINTENANCE









**WE MASTERED UNCHARTED WATERS** 

## **MARSHALL SOLUTIONS INTERNATIONAL LTD**

• DRILLING SERVICES • PROCUREMENT • RIG INSPECTION • ENGINEERING

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