

STAKE TECHNOLOGIES NIG. LTD

Corporate Profile

1, Elioparanwo Road, Off Ada George Road By Gateway Junction, Port Harcourt, Rivers State Nigeria. 500102

+234 (0) 704 034 6741 +234 (0) 806 315 4348

service@stkng.com

www.stkng.com







Stake Technologies Nig. Ltd. (STNL) RC: 1637376 is a company registered in Nigeria specializing in providing steel wire ropes reliability solutions for clients in the marine, mining, entertainment, construction and oil and gas industries. We perform non-destructive inspection and lubrication of in-situ steel-wire ropes equipped on a wide variety of lifting appliances from Wharf Cranes, Ship Cranes, ROV Cables, Mobile Cranes, Oil & Gas Platform pedestal & articulated cranes, Anchor Ropes, Deck Winches, Overhead Cranes, Ship Loaders, Drilling Derricks e.t.c.

Inspections and lubrications form the heart of the business wherein we endeavor to offer best-in-class non-destructive inspection technology for accurately determining deterioration rates in steel wire ropes. In cases where ropes are reasonably assessed as outside acceptable limits or damaged, we make recommendations on replacement ropes based on the specific application and proffer procurement from outstanding manufacturers in the business.

Our focus on lubrication centers on our understanding of wire rope mechanics and the importance lubrication plays in enabling its proper application and life extension. We ensure we offer our clients premium heavy duty lubrication greases alongside use of advanced lubrication tools for the proper impregnation of steel-wire ropes as well as oils for protection of gearboxes and transmissions. Whether in service or in storage, these tools & lubricants shall ensure the integrity of these critical assets for our clients and provide them a powerful tool in their maintenance and reliability program.



## **CORE VALUES**

Cost Reduction is a core part of our business ideology and remains the foundational basis for all our services. With escalating costs for users in several industries especially in marine and energy, our interest remains in improving costs outlook for our clients.

Safety is our guiding lamp. At Stake Technologies, we believe that no work can be said to be fully accomplished unless it is done safely and everyone returns to their loved ones in full health of mind and body.

**Integrity** of our services is our business cornerstone. Guaranteeing the quality of our services ensures we remain your reliable partner always.

Environmental Protection is synonymous with us. Our use of advanced technologies reduces lubricant usage and prolongs rope service life reducing replacement costs and conserving resources.



## HISTORY & BUSINESS DESCRIPTION

Stake Technologies Nig. Ltd as a technology company specializes in providing steel wire rope inspection and lubrication services to clients involved in shipping, mining, construction and oil and gas industries. We have a strong focus on maintaining the integrity of this critical component used by lifting appliances in material handling and man-riding operations to avoid accidents.

Accidents that occur in all industries can be traced to a multitude of factors ranging from design flaws, inadequate training, poor maintenance regimen or simply negligence. Steel wire ropes being a critical component in lifting appliances are inherently designed with no built-in redundancies hence a failure of this component in service will see an immediate effect that could likely result in material loss, facility or equipment damage or fatalities.

An important question that has been asked for as long as wire ropes have been in use has been the real integrity of ropes employed in a specific lifting operation. A company may have a wire rope inspection program either at monthly, quarterly, or annual intervals mainly using visual checks. The question

becomes, how can one reliably ascertain the quality of the rope from a mere visual inspection?

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The rope nominal diameter may appear minimally reduced within acceptable limits on the outside but can one affirm with a high degree of certainty the condition within the locked strands with mere visual methods? Measuring ropes while under tension is generally not recommended so a better method has to exist to reliably affirm the

integrity of in-service ropes.

In many ways, wire rope is a machine with dozens of parts that require lubrication to keep working properly. New ropes contain the lubricant necessary to let these dozens of parts move smoothly. Without re-lubrication of the rope at intervals the rope will deteriorate quickly and have to be replaced before its normal life expectancy.



Simply greasing the ropes by common methods such as brush application or pouring simply results in wastage of lubricant, grease fling off due to sharper bending radius on small sheaves and the risk of inner bonded members of the rope receiving little to no lubricant during relubrication intervals. Steel wire ropes work efficiently by bending effortlessly and interacting with each other. Different constructions permit different wear rates. One wire with less lubricity than the other may see increased local abrasion and wire breaks. In-addition, use of a wrong

lubricant on wire ropes will see high fling off rates resulting in grease deposits being left over walkways creating slip hazards for personnel.

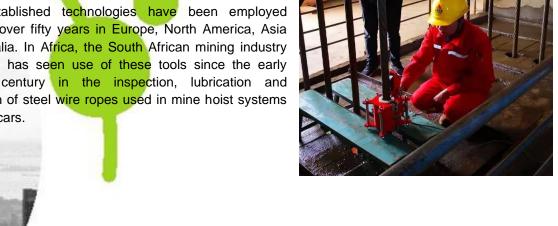


The use of general purpose or hydrophilic lubricants in marine and corrosive environments usually results in accelerated corrosion of the outer wires with a reduced service life.



Stake Technologies introduces non-destructive inspection devices and advanced lubrication technologies to clients in these industries who employ basic visual inspections and manual lubrication in ensuring the integrity of in service and in-storage steel wire ropes.

These established technologies have been employed widely for over fifty years in Europe, North America, Asia and Australia. In Africa, the South African mining industry regulations has seen use of these tools since the early twentieth century in the inspection, lubrication and certification of steel wire ropes used in mine hoist systems and cable cars.



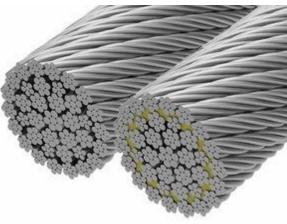


### **OUR SERVICES**

At Stake Technologies, we execute the following for your business;

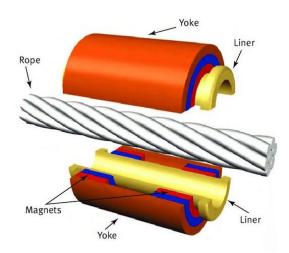
- Regular non-destructive inspection to monitor the rate of degradation of your in-service ropes and suitably forecast its service lifespan.
- Steel Wire Rope pressure lubrication using greases with penetrating characteristics that provides excellent corrosion protection and; life extension rope for your in-service ropes.
- Prepare or review inspection programs where none exists or is inadequate.
  - Detail out proper storage sites and methods for wire ropes to prevent early deterioration.
- Recommend what types of ropes can be used in a specific application i.e., Overhead, Mobile or Pedestal Cranes of different applications.
- Procure ropes of any construction and application, install on appliances or advise on correct installation methods to avoid failure and accidents.
- As experts, we analyze individual rope applications and recommend suitable greases. We procure these lubricants and deliver them to your warehouses.
- Cranes and lifting accessories inspection and certification service inclusive of safe disposal of defective lifting accessories in accordance with local, state, or federal guidelines.
- Personnel training and certification (API Spec 2C & RP2D Offshore Crane Inspector Certification).
- Recommend & procure heavy duty lubricants that protect diesel engine gearboxes and transmissions from premature wear and tear.
- Procurement and leasing of cranes of any tonnage for small to large scale projects.



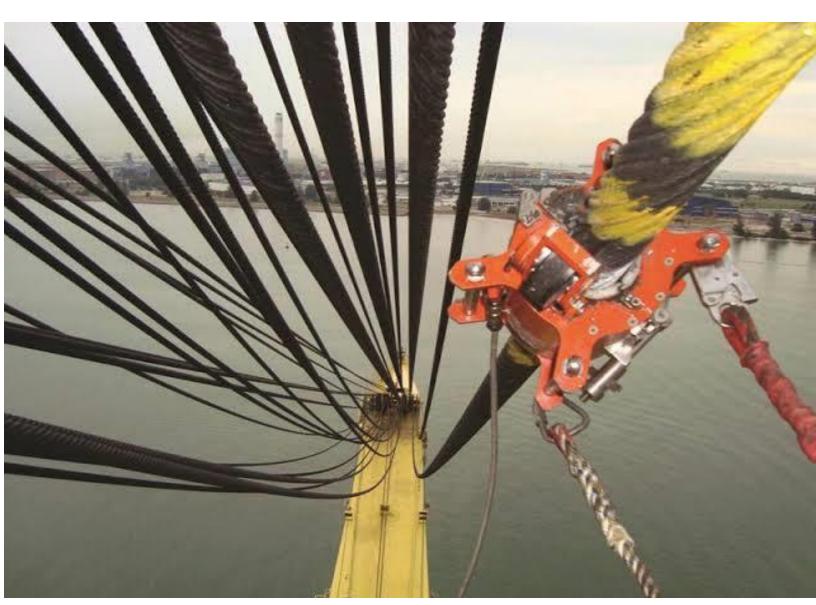




### NON-DESTRUCTIVE INSPECTION



We employ the use of non-destructive inspection tools that provides a powerful method to determine the rate of degradation of a rope. Regardless of if it is covered in heavy grease or marine growth this magnetic tool is well suited to determine to a high degree of accuracy wire rope wear, wire breaks, corrosion and any distortions ex-factory specifications. Wire ropes of any construction can be tested ranging from ½" (12.7mm) to 2-1/2" (63.5mm) from slow speeds to fast speeds.



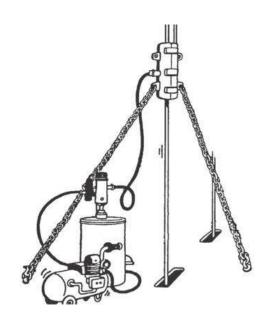


#### WIRE ROPE LUBRICATION

With lubrication, we make use of in-line lubricant application systems which are available to suit a wide range of rope sizes and constructions. These systems operate by forcing the lubricant into the rope under high pressure, whilst simultaneously cleaning the rope and removing the moisture, residual lubricant and contaminants on the outer wires of the rope.

This provides a superior corrosion protection for installed ropes and enhances its service life reducing costs and prolonging replacement intervals. The average lifespan for untreated wire rope in moderate service with factory primary lubrication is typically about two years and is condemned due to distortions caused by wear and friction. Our lubrication technique extends this to three to four years even under heavy usage.

All lubricants we provide are compatible with original lubricant applied by the rope manufacturer







# HEAVY DUTY LUBRICANTS AND OIL SUPPLIES

We supply premium heavy duty multipurpose lubricants produced by the best manufacturers in the business of wire ropes and lubricants. We have working relationships with globally recognized manufacturers that puts us in a unique position to avail our customers at affordable costs internationally certified greases and specialty oils and lubricants designed for maximum protection against corrosion of steel wire ropes and degradation of transmissions & gearboxes.

Cost reduction remains a significant selling point for us. Our lubricant application technique is guaranteed to eliminate lubricant wastages associated with manual application and reduce the equipment downtime associated with wire rope inspection and lubrication. It simplifies and speeds up the process and generally creates a safer environment for workers.

Safety remains a core requirement in our workplace and we intend to maintain that as a fundamental duty to our clients and our staff.

All ensure all rope dressings we supply are compatible with the rope manufacturers' factory lubricant.

















### LIFTING SELECTION & PLANNING

Every lifting activity is a unique system of its own that requires careful planning and co-ordination. Starting from the weight of the load to every other piece of rigging gear involved in executing the lift, we engage, to provide you the best rigging equipment and lifting plans.

From the choice of crane to slings to shackle to below the hook devices, our plan is to provide you a proper risk assessment that enables you carry your lift safely with minimum disruptions.





### WIRE ROPE PROCUREMENT

We can provide different constructions and lay in half-locked coil or full locked coil spiral ropes. Standard ropes from 3 to 19 strands, rotation resistant, low rotation, compacted and plastic impregnated in different lay directions for various crane designs and applications.

Whatever your crane configuration and application we are well suited to make available to your facility high performance ropes using our knowledge of quality steel wire ropes.



















### TÜV & HCS TECHNICAL TRAINING



Looking for competent crane personnel trained to undertake your crane maintenance and inspection programs? It's easy. Enroll your staff/personnel today for the TÜV/IICS 4.1 Certified Offshore Crane Inspector & API RP 2D Offshore Crane Inspector Certification Program.

API trained & certified inspectors can help to foresee equipment failure using time tested tools and techniques, eliminate or reduce downtime, enhance your facility safety and reliability and save you costs in unscheduled downtime or regulatory penalties.

This program has three interrelated purposes:

- > Firstly, to introduce students to the safe operating environment and inspection procedures of Offshore Class Cranes.
- Secondly, to develop practical crane inspection skills with an actual crane.
- > And finally, to assess each student's individual abilities through an evaluation process.

Organized with support from IDC Training House Sdn Bhd, Malaysia, participants would be given access to a world class certificate issued by TÜV Nord, the international certification body and recognized globally.

Get in touch with us today.



### CRANE LEASING & PROCUREMENT

Where you need lifting support on your construction or infrastructure project, we will work with you to ensure cranes & heavy equipment of the right tonnage is available.

Having the right crane for your operations is vital to improve your efficiency. We work with experienced crane hire companies to give you the best maintained equipment options for your project.

Either on a short-term or a long-term lease, you won't have to worry about the maintenance and repair of these equipment. We have them all covered in the rental agreement.

Insurance cover protects you and your people from any liabilities in operation. Give us a call today and we'll work out the right set of options for your business.







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