Press release:

Dekra Industrial: 'on the rise' in the oil and gas sector

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Dekra Industrial SA has been involved in non-destructive testing (NDT) and inspection in the oil and gas sector – locally and pan-Africa - for some 5 years now, and the company continues to grow its presence in this critical area of the energy arena. This takes place against a background in which - according to global management consulting firm McKinsey in its Global Energy Perspective 2022, released in April last year - the peak in fossil-fuels demand continues to move forward, with oil projected to peak in the next 5 years, while gas remains the most resilient fossil fuel.

This trend is evident from the high level of activity off the coast Africa, for example TotalEnergies' pivotal liquid natural gas project offshore in Northern Mozambique.

Dekra Industrial Managing Director Johan Gerber explains: "Offshore oil and gas rigs present potentially hazardous working conditions while the crew members carry out the required drilling. Rig teams are dealing with highly combustible materials, on an ocean-based platform where cranes are swinging heavy equipment overhead, and other large-scale moving parts are also a constant presence in the immediate environment."

Johann Dorfling, Dekra Industrial's Western Cape Branch Manager, notes: "We are active in the oil and gas and maritime sector both on -and offshore; and have carried out 'before and after' NDT welding integrity inspections around Africa, such as Las Palmas in the Canary Islands, Ghana, Angola and in Mozambique.

On oil rigs, we do crane and slew bolt inspections - and work extensively on drilling risers, which form the connection between the subsea field developments, and production and drilling facilities. An extremely high level of welding is required to ensure that the longevity and structural integrity of the components, structure and pipework on the risers is maintained, as many of these items undergo extreme pressure during their service. NDT and inspection help to prevent the failure of these critically important elements."

The role of NDT and inspection on drilling risers

MC Liebenberg, NDT Level 3 Technician at Dekra Industrial, clarifies: "Similar to pipelines or flowlines, risers act as conduits to transport produced hydrocarbons, as well as production

materials, such as injection fluids, control fluids and gas lift. The cost of a marine drilling riser system can be tens of millions of dollars, but the cost of operational downtime associated with a riser loss or failure can exceed more than one hundred million and this therefore needs to be prevented.

In non-destructive testing, there is not one method which is superior to another, and the methods complement each other. In offshore inspection, we most commonly see the use of magnetic particle (MT) and visual inspection (VT), as well as thickness gauging."

Dorfling adds: "We have performed eddy current, MT and VT inspections, liquid penetrant testing (PT), volumetric as well as ultrasonic UT and phased array ultrasonic testing (PAUT) welding inspections on drilling risers. It is of vital importance to ensure that these risers are in class and do not fail in service, as the result of a leak can be catastrophic for the environment and general safety."

In - or out - of class

Liebenberg clarifies: "Depending on the acceptance criteria of the inspection, NDT can determine if all areas of inspection are in or out of class, and reported on, detailing the extent of wear, corrosion, or defects discovered.

"Dekra Industrial does not determine if a vessel is out of class or not - this is determined by the results of our NDT inspection, which are presented to the client, who then makes the decision on whether to replace the component, or repair it to conform to class standards."

Rope inspections - a competitive differentiator

Dorfling explains that DEKRA Industrial offers rope access inspection across multiple NDT methodologies, including advanced disciplines such as PAUT. "Dekra's capabilities in performing NDT offshore with rope access competitively differentiates us from a number of our competitors, and this is of great importance in this industry – as is the ability to provide a diverse offering," he enthuses. "We are proud to be able to perform advanced inspection using rope access, as building scaffolding on a rig is not a viable option."

Managing Director John Gerber concludes: "Dekra Industrial in South Africa has played a major role in the fields of NDT and inspection locally - across a wide range of industry sectors – for the past 40 years and we are proud to include this important area – NDT and inspections in the oil and gas arena - in our field of expertise. We anticipate doing even more maritime-related work in the future."

(774 words)

About Dekra Industrial and Dekra Institute of Learning

With 97 years in the industry through its global parent company, Dekra Industrial SA has established a formidable reputation as a leader in inspection services, non-destructive testing (NDT), material testing, laboratory services, Advanced NDT, and asset integrity services, and offers industry training through Dekra Institute of Learning. With a Group presence in more than 50 countries on five continents, Dekra Industrial RSA provides safety solutions across a multitude of industries, including power generation, oil and gas, construction, petrochemical, manufacturing, fabrication, pulp and paper, rail, mining, steel industry and foundries, within South Africa and pan-Africa.

Dekra Industrial SA is a holistic services provider of NDT inspection, corrosion control with rope access and lifting, Dekra Industrial SA is Level 3 BBBEE-compliant, with 51 percent black woman ownership.

The company is also RD 0034-compliant, a nuclear safety compliance standard and is one of the few NDT companies locally to hold the ISO 45001 certification.

Dekra Institute of Learning is QCTO-accredited and delivers online learning across all industries, in both public and private sectors, with training pitched to all levels of competency, focusing on HSE, ISO and CPD-aligned courses. Classroom-based and distance learning are also available.

Dekra Industrial strives to be recognised as the 'heroes of safety'.

Editorial Contact

Kendal Hunt

Managing Director

Kendal Hunt Communications PR and Media Liaison Agency

+27 - 11 462 6188

+27 - 82 823 6533

kendal@kendalhunt.co.za