

SA's Non-destructive Testing Industry at INDUTEC

The South African Industry of Non-destructive Testing (SAINT) has endorsed next week's SA Industry and Technology Fair (INDUTEC) and will be using the international show to highlight the importance of non-destructive testing (NDT) and its crucial role in a safer society. INDUTEC takes place from 20 - 22 May 2015 at Gallagher Convention Centre, Midrand.

"SAINT aims to lead the drive to enhance and support the acquisition and maintenance of NDT professionalism in South Africa, and supports the establishment of a South African Certification scheme that is recognised internationally," says its president, Keith Cain.

"INDUTEC is a major 12-shows-in-one industrial exhibition and provides the perfect platform for SAINT to raise the profile of NDT across all sectors," says John Thomson of Exhibition Management Services, organisers of the show. "INDUTEC's wide variety of exhibitors and diverse visitor profile across many different industries such as mining, engineering, plastics, pumps, valves and pipes ensures that NDT achieves very high visibility."

The Hannover-style industrial and technology fair provides companies with an unprecedented and unique opportunity to network with suppliers and buyers from around the world, all eager to establish business connections in Africa.

What is Non-destructive Testing

NDT detects discontinuities within engineering material without destroying it or limiting its usefulness afterwards. It is used to identify and characterise discontinuities so that engineering decisions relating to refurbishment, maintenance or replacement can be made.

As a diagnostic tool NDT is used within engineering and encompasses all types of manufacturing, construction, maintenance, engineering, refurbishment, replacement or storage, based on information provided by NDT.

“NDT is sometimes called a ‘grudge purchase’, however, it provides an effective tool, if performed correctly, for enhancing Quality Assurance and Control, despite being seen as a non-value adding extra that has to be paid for,” Cain explains.

Advantages of NDT

NDT is performed throughout the engineering cycle and offers many benefits:

- €€€€€€€€ Reduced costs by eliminating defective material immediately during the manufacturing chain
- €€€€€€€€ Safeguards against exorbitant budget increases due to poor product quality
- €€€€€€€€ Ensures quality of products and compliance with end-user specifications
- €€€€€€€€ Improves reliability
- €€€€€€€€ Ensures as-per-design operation
- €€€€€€€€ Facilitates in-service inspection programmes for detecting problems early, monitoring degradation rates and promoting planned refurbishment / replacement programmes
- €€€€€€€€ Facilitates remnant life predictions and planned resource sustainability

“With the potential or actual problems being experienced at aging power plants throughout the world, NDT is now becoming even more critical to determining the remaining life

or extending the life of a plant,” says Cain. “When nuclear power is envisaged, NDT will be one of the critical tools used during the design, fabrication and operational phases of projects.”

The NDT Professional Body

SAINT instituted the Professional Body for NDT as a result of a request from individual members of SAINT.

“The main objective of the Professional Body includes reconciling the different needs of members, and setting a direction and priorities for the organisation and its membership,” explains Cain. This will lead to professionalism in the industry. The vision of the Professional Body is to advance highly skilled professional NDT personnel to the South African industry.”