

Improving the application of non-destructive testing and enhancing quality management through AFRA

Background...

Non-destructive testing (NDT) techniques play an important role in industrial quality control. Most AFRA Member States do not possess the capability to train and certify NDT personnel in all basic techniques and at all levels of qualification. Until recently, they have lacked the capability to certify NDT personnel at the level of expertise necessary for a sustainable capacity with regard to training and promoting NDT techniques at the national level.

AFRA approach and successes...

African Member States have opted for a regional approach in order to maximize resources. AFRA Member States rely on the training and certification of NDT personnel at Regional Designated Centres, such as the Southern African Institute of Welding (SAIW) in South Africa and the Centre technique des industries mécaniques et électriques (CETIME) in Tunisia.

Until recently, no AFRA Member State had acquired the necessary capability to certify NDT personnel at level III. This level represents the expertise required to establish a sustainable NDT capacity for training and promoting NDT techniques at the national level. Since 2003, several regional training courses leading to certification at level III have been conducted and have led to some 100 new level III NDT certifications in conformance with ISO 9712. With NDT practitioners from 14 Member States benefiting from this work, the capability to train and certify NDT practitioners to level III has been established within the region.

In addition to industrial applications of nuclear techniques, the AFRA programme has focused on strengthening quality management capacity and competence for nuclear and related institutions in participating Member States through the promotion of good quality management practices.

The AFRA programme has provided quality management training to managers and decision makers, facilitated regional networking and promoted the certification of nuclear laboratories in several countries. This network has already held its second regional conference on quality management in AFRA Member States, aimed at improving the recognition and implementation of ISO standards and their benefits for international trade and communication in Africa.



Carrying out ultrasonic testing of a weld.



First NDT Conference and Exhibition in Sudan, June 2008.