

NDTS : Utilizing Technology & Expertise to Enhance Value

NDTS
ISO 9001:2008 Certified Company

Non-destructive testing (NDT) is the process of inspecting, testing, or evaluating materials, components or assemblies for discontinuities, or differences in characteristics without destroying the serviceability of the part or system. In other words, when the inspection or test is completed, the part can still be used. NDTS India is the brainchild of Mr. Mukesh Arora, an NDT expert with vast experience in the field. The company was established with a motive of building a professionally managed enterprise dedicated to the challenging field of NDT. An ISO certified company, NDTS is today engaged in sales & distribution of NDT products, On-site inspection services, Training & Certification and Level III Consulting. The company with an impressive list of customers endeavors to fulfill their inspection needs and quality assurance. "We in effect help customers to control and ensure their product quality," says Mr. Mukesh Arora in a one-to-one with Mr. P.K. Balasubramanian. Excerpts:



Mr. Mukesh Arora is a Mechanical Engineer from Mumbai University with 20 years of experience in the non-destructive testing field. He is Managing Director & CEO at NDTS India (P) Limited and Director at Arora Technologies (P) Limited, both based in Mumbai. He is currently Jt. Secretary, Mumbai Chapter and member of the National Governing Council of the Indian Society of Non-Destructive Testing (ISNT).

Q. You claim to be a complete NDT company. What are the products & services you offer under your umbrella?

As a company, we have two major verticals: Sales & Distribution of NDT (Non-Destructive Testing) Products: Under this we represent many leading companies based in USA & Europe and look after the marketing and distribution of their products in India. Inspection Services: Under this we offer 24X7 on-site inspection services, training & certification and equipment rentals.

Keeping the vision of "Make in India" our sister company, Arora Technologies (P) Limited focuses on manufacturing of NDT Accessories.

Q. What's the significance of NDT in quality assurance? And what's its role as an effective predictive maintenance tool?

NDT has a very significant role in QA/QC as by performing NDT you are ensuring that no

bad part goes in the components. This means minimal downtime and maximum efficiency. With continuous developments, today many techniques and tools are available for effective predictive maintenance which helps you to plan your shutdowns and enhance the life of components/plants.

Q. Which are the various methods you use for inspection?

We use most of the NDT Techniques like Ultrasonic, EMAT (Electromagnetic Acoustic Transducer), Radiography, Eddy Current, Visual Inspection, Magnetic Particle Inspection, Liquid Penetrant Inspection, Thermography, etc.

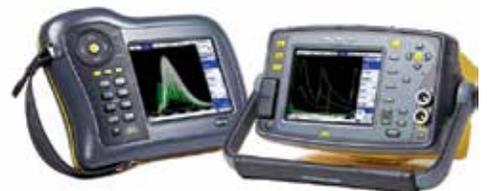
Q. What dictates the method/technique to be used for a specific job?

Essentially what you want to inspect determines the technique/equipment. If you are looking for internal cracks the choice is between Ultrasonic and Radiography; for surface cracks, you will have to choose from Eddy

ULTRASONIC PRODUCTS



Thickness Gauges



Flaw Detectors

EDDY CURRENT PRODUCTS



Flaw Detector

Conductivity Meter

X-RAYS



X-Ray Machines

Customized X-Ray Solutions

REMOTE VISUAL INSPECTION



Pipe Inspection Crawlers

Video scope

OTHER SOLUTIONS



Portable Hardness Testers

Current, Magnetic Particle Inspection or Liquid Penetrant Inspection.

Q. What are the various equipment you use for inspection and how often are they calibrated?

We use Ultrasonic Thickness Gauges, Flaw Detectors, TOFD & Phased Array, Multi-Channel multi frequency Eddy Current tools, Various Inspection Cameras, Wire Rope Testers, etc. As most of these equipment use the most advanced electronics, they do not need calibration/verification like analogue based equipment, but if you go by ISO norms it recommends yearly calibration/verification.

Q. The accuracy of test results depends not only on the equipment used but also on the professionals operating them. Could you say something about the cognizance and domain knowledge of your personnel carrying out inspection?

For performing NDT you have to train people

and they have to be certified by various affiliations like ASNT, ISNT, ISO, etc. and depending upon their certification, they are graded as Level I (Beginners), Level II (Practitioners) & Level III (Experts). Our team comprises ASNT Level III, and Level II Engineers & Technicians.

Q. We understand that you also impart training. Which are the standard and customized programs you conduct that culminate in skill development in the country?

We provide Level II training & certification as per ASNT SNT-TC-1A in following streams:

Advanced NDT Courses

- Phased Array Ultrasonic Testing(PAUT)
- Time of Flight Diffraction (TOFD)
- Conventional NDT Courses
- Ultrasonic Testing
- Radiography Testing Film Interpretation
- Magnetic Particle Testing'
- Liquid Penetrant Testing
- Visual Testing
- Eddy Current Testing



Wire Rope Tester

Our courses are based heavily on practical exercises, which when combined with the recording, reporting & answering of quizzes, results in the understanding of a specific syllabus segment. Upfront lecturing is reduced to a minimum and the emphasis is on training to the precise, specific need of the individual.

Customized Training Programs:

Depending upon the customer need, we conduct tailor made programs in terms of location, duration, certification, specific technique, etc.

Q. How do you keep your people abreast of the technological developments in the field?

We keep updating their knowledge through continuous learning.

Q. Which are the various accreditations you have?

We are one of the very few organizations where we have embraced the written practice of ASNT SNT-TC-1A; wherein we train and certify our own manpower.



In-house testing facilities at NDTs



Onsite inspection using Ultrasonic method



Eddy Current method



Advanced NDT service

NDTS

A training session in progress. NDTs conducts both standard and customized training courses in NDT



Q. Which are the industry segments you serve, and who are your prime customers?

The industries we have served range from Oil and Gas, Refineries, Petrochemicals, Engineering, Manufacturing and many more...Our current clientele include Government & Public Sector Undertakings, establishments such as BARC, IGCAR, VSSC, HAL, ISRO, NML, NPL, BHEL, SAIL etc. and private sector companies such as Reliance, L&T, Tata Motors, Tata Steel, Thermax, Kirloskar, Jet Airways, etc.

Q. So what are your major strengths?

Human Assets, Satisfied Customers & Unrelenting quest for excellence are our major assets.

Q. What's your barometer for gauging customer satisfaction?

Repeat business and company by choice!

Q. What are the challenges involved in non-destructive testing and how do you set industry benchmarks for NDT solutions?

Like any other industry we also face some common challenges like obsolescence of technology, Lack of skilled manpower and one which is unique to our industry is lack of automation.

One challenge which is in our control is skilled manpower.

So we ensure that our technicians are updated on the latest through continuous in-house training and personality development programs. ■