Automated NDT Systems

ARORA

Arora Technologies (P) Limited

Thorough knowledge and enormous experience is the key to any Automated NDT System. We offer online/offline NDT Systems under the supervision of our principals who are world leaders in their respective fields. The process starts from identifying the appropriate NDT Technique, codes, inspection speed, end customer requirement, budget, etc. Based on this information our objective is to offer a robust and cost-effective system.

Nordinkraft, Germany has more than 30 years of experience in the design, development, and production of automated ultrasonic systems. It offers inline and offline ultrasonic testing systems for industrial automatic inspection of plates, strips, ingots, welded & seamless pipes, bars, billets & rails, etc.

Tecscan, Canada is renowned for fully automated immersion ultrasonic testing systems. Their products comprise small tanks/ scanners to large multi-axis industrial ultrasonic immersion systems & squirter gantry systems for non-destructive testing in laboratory, industrial, and aerospace applications including complex composite parts & metallic skin structures.

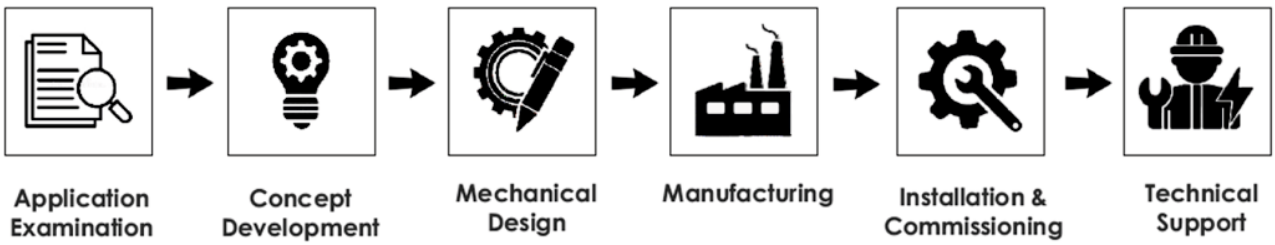
Pruftechnik/Fluke Reliability, Germany is specialized in Eddy Current Testing (ECT) and Magnetic Flux Leakage Testing (MFLT). Their top-notch solutions for tube, bars, and wires have gained recognition for their exceptional quality and performance, enabling customers to ensure the integrity and reliability of their products.

System Automation & Robotics

"Automation applied to an efficient operation will magnify the efficiency"

Apart from On-line/Off-line Systems, we also offer small systems (stationary/mobile) for various applications. Our approach is to understand customer requirements, applicable codes, inspection speed, application challenges, budget, etc, and based on this we identifying the appropriate NDT Technique/Solution and our objective is to offer a robust and cost-effective System.

Our Automation Methodology



Retrofits:

One of the biggest challenges in today's world is technology obsolescence. Apart from selling new systems, we also support our customers with retrofits/upgrading to latest hardware & software either in NDT or in Automation.

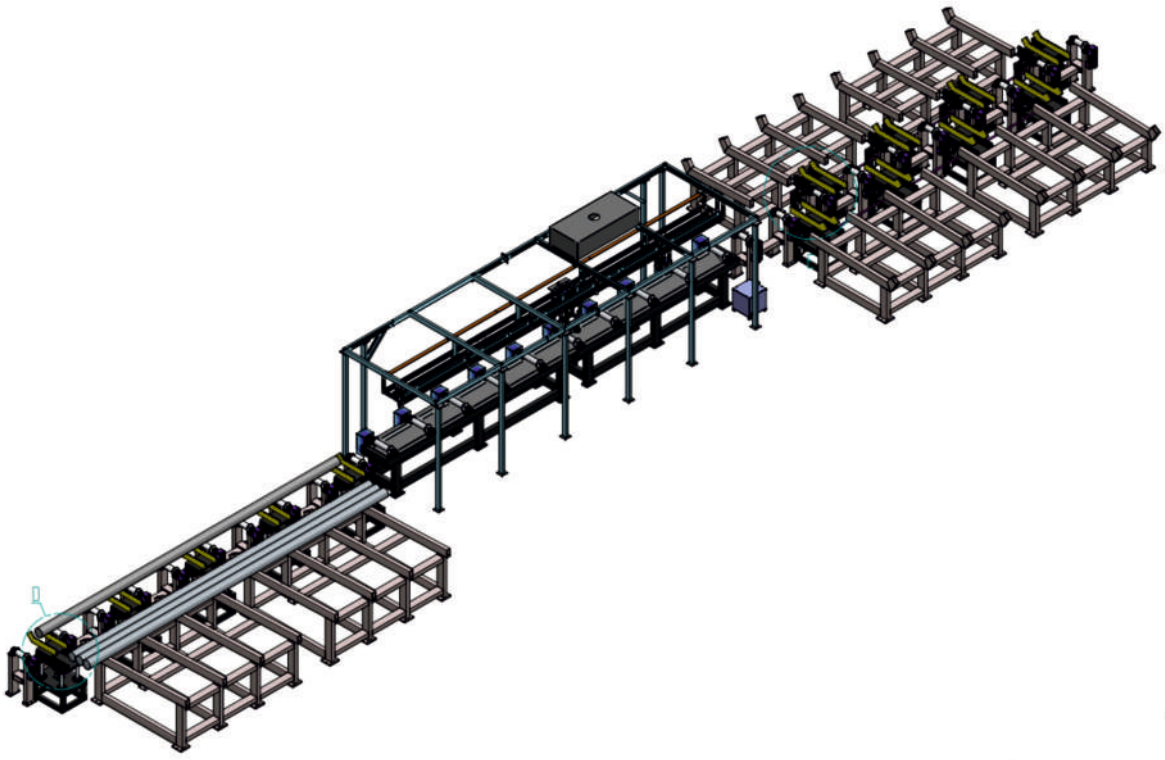
Annual Maintenance Contract:

While the equipment is under warranty our professional services are available free of cost (subjected to our standard terms & conditions). Once the warranty is over, apart from providing post-warranty services we also offer an annual maintenance contract. During the contract, our trained engineers will check the equipment thoroughly for predictive and preventive maintenance to ensure that there are minimal break downs and the system is available for usage whenever required.

Magnetic Particle Inspection

Semi-Automated MPI system for the inspection of long bars

Our Semi-automated magnetic particle inspection (MPI) system consists of material handling equipment with an integral magnetic inspection station. The MPI unit provides low-voltage, high-amperage current for magnetization and AC for demagnetization.



Salient Features

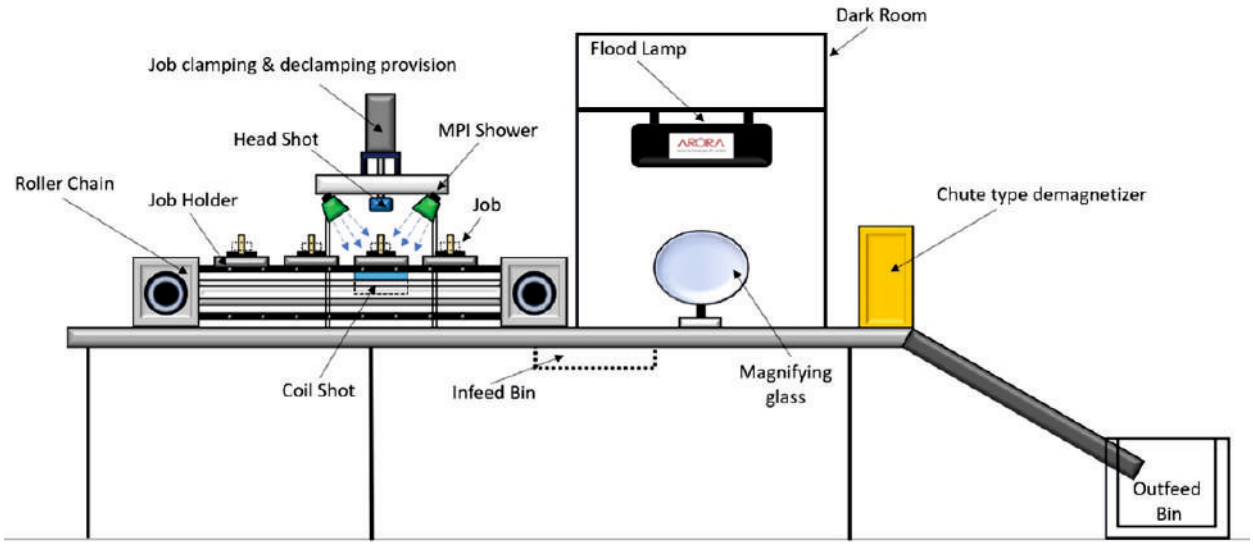
- State-of-the-art robust offline solution for the MPI of long products i.e., round and square cross section
- AC, HWDC & FWDC Mag facility
- Auto demagnetization with coil only
- PLC & HMI operated system for precise operation and better human interpretation
- Footswitch, push button (at control panel), and emergency cut-off for ease and safety of operation
- Dark room with black curtain & ventilation fan to facilitate inspection under UV/Blacklight
- External pump system for particle auto shower agitation, circulation, and MPI bath application.
- Low-voltage output with overload & short circuit protected switching
- Current assurance indication & audible alerts
- User-controlled security systems with password protection, supervisor locks & customizable operator access profiles

Major Components

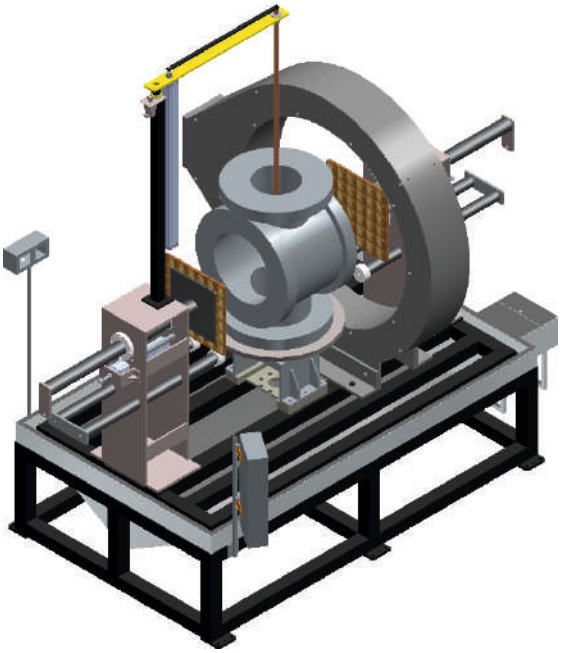
- Bundle loading table
- Infeed roller conveyor with bar singling unit
- Magnetic particle inspection (MPI) station
- Demagnetizer setup
- Outfeed roller conveyor with bar kicker arm assembly
- Accept & Reject cradle

Semi-Automated MPI system for the inspection of bearing shell

It is a state of art Magnetic Particle testing system for the inspection of steel bearing shell. Ideal and cost-efficient semi-automated solution for bearing manufacturing companies for the inspection of ID and OD cracks. Provides easy & efficient operation with multiple job loading facility.



Semi-Automated MPI system for the inspection of valves



It is a state-of-the-art Magnetic Particle Testing system designed for the inspection of industrial valves. An ideal and cost-efficient semi-automated solution for valve manufacturing companies to detect surface and subsurface defects. Ensures precise and reliable inspection of critical areas with enhanced operational efficiency. Provides easy & efficient operation with multiple job loading capability for increased productivity.

Plates & Coils

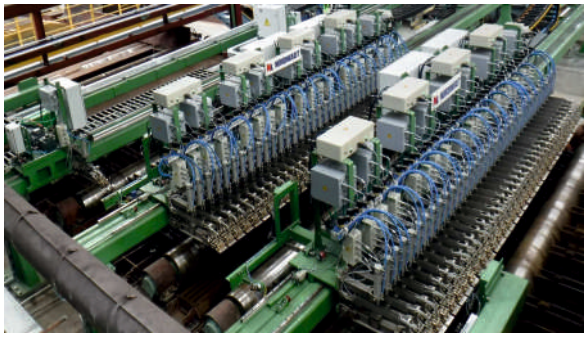
NORDISCAN-PL

Equipment for automatic ultrasonic examination of plates with TR phased array UT probes

Salient Features

- Phased array base
- Perfect signal-to-noise ratio
- High and smooth sensitivity
- Wide range of thicknesses
- Small untested zones
- Meets most of international standards & specifications

In Line



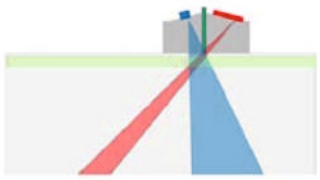
Specifications of plates to be tested

- Width 500 – 6000 mm
- Thickness 3 – 250 mm
- Material – carbon steel etc.
- Temperature from +0 °C to +80 °C
- Length 3 – 100 m and more
- Test speed of up to 1.5 m/s
- Test capacity – up to 80 plates/hour (for 12 m long plates)

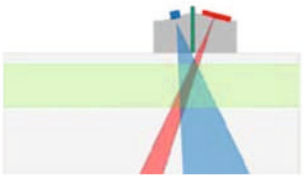
Off Line

Specifications of plates to be tested

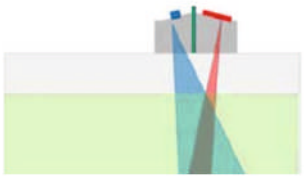
- Width 500–6000 mm
- Thickness 3–250 mm
- Material – carbon steel etc.
- Temperature from +0 °C to +80 °C
- Length 1–50 m
- Plates are on the floor or on the roller conveyor
- Test capacity – up to 12 plates/hour (for 12 m long plates)



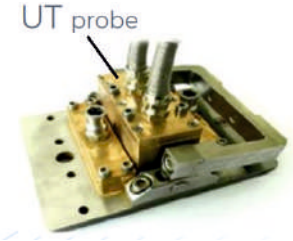
0-3 mm



3-40 mm



40-250 mm



EMATEST-PL

Equipment for automatic ultrasonic examination of plates with EMAT (non-contact UT-probe)

Salient Features

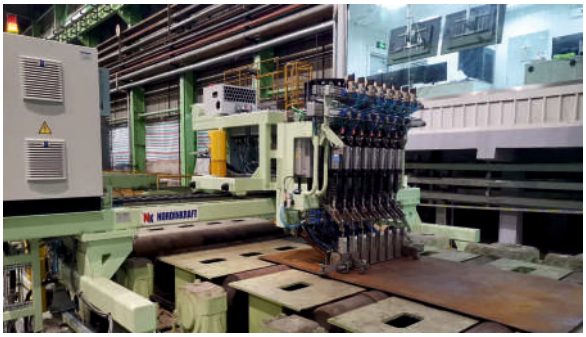
- Small untested zones
- Test capacity – up to 80 plates/hour (for 12 m long plates)
- Meets most of the requirements of international standards & specifications
- EMAT based, non-contact
- High and smooth sensitivity
- Wide range of temperatures

In Line

Specifications of plates to be tested

- Width 500 – 6000 mm
- Thickness 3 – 60 mm
- Material – carbon steel etc
- Temperature from -20 °C to +600 °C
- Test speed of up to 1.5 m/s
- Length 3 – 100 m and more

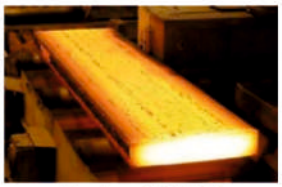
Off Line



Specifications of plates to be tested

- Width 500–6000 mm
- Thickness 3–60 mm
- Material – carbon steel etc
- Temperature from -20 °C to +600 °C
- Test speed of up to 1.5 m/s
- Length 1–50 m
- Plates are on the floor or on the roller conveyor

-50 °C



Up to +650 °C

EMATEST-Coil

Equipment for automatic ultrasonic in-line examination of coils with EMAT (non contact UT-probe)

Salient Features

- EMAT based, non-contact
- High and smooth sensitivity
- Wide range of temperatures
- Small untested zones
- Meets most of the requirements international standards & specifications

Specifications of coil to be tested.

- Length 3 – 100 m and more
- Width 500 – 4000 mm
- Thickness 3 – 30 mm
- Material – carbon steel etc.
- Temperature from -20 °C to +600 °C
- Test speed of up to 2.0 m/s

NORDISCAN-PL-HS

Equipment for automatic examination of plates and coils for HARD SPOTS

Salient Features

- Type of probe – PEC (pulse eddy current probe)
- Perfect signal-to-noise ratio
- High and smooth sensitivity
- Minimal hard spot to be detected 10 mm x 10 mm or less
- No influence of rolling scale
- No influence of residual magnetization
- Demagnetization is not required
- No untested zone on longitudinal & transversal edges
- Meets most of international standards & specifications

In Line

Specifications of plates to be tested

- Length 1 – 100 m and more
- Width 500 – 6000 mm
- Thickness 3 – 60 mm
- Material – carbon steel etc
- Temperature from -10 °C to +100 °C
- Test speed of up to 1 m/s
- Plates are on the roller conveyor
- Test capacity – up to 80 plates/hour (for 12 m long plates)
- Test is performed from above. Additional unit with PEC-probes located under the plate is optional

Off Line

Specifications of plates to be tested

- Length 1– 50 m
- Width 500–6000 mm
- Thickness 3–60 mm
- Material – carbon steel etc
- Temperature from -10 °C to +100 °C
- Test speed of up to 1 m/s
- Plates are on the floor or on the roller conveyor
- Test capacity – up to 12 plates/hour (for 12 m long plates)

NORDISCAN-PL-HS+UT

Equipment for automatic off-line examination of plates for HARD SPOTS and Laminations

Salient Features

- Type of probes – PEC & Phase Array UT-probes (Hybrid probes)
- Simultaneous test for hard spots and laminations
- Perfect signal-to-noise ratio
- High and smooth Sensitivity
- Minimal hard spot to be detected 10mm x 10 mm or less
- Small or no untested zones at edges
- No influence of rolling scale
- No influence of residual magnetization
- Demagnetization is not required
- No untested zone on longitudinal & transversal edges
- Meets most of international standards & specifications
- Test capacity – up to 12 plates/hour (for 12 m long plates)

Specifications of plates to be tested.

- Length 1–50 m
- Width 500–6000 mm
- Thickness 3–250 mm
- Material – carbon steel etc.
- Temperature from -10 °C to +100 °C
- Test speed of up to 1 m/s
- Plates are on the floor or on the roller conveyor

NORDISCAN-PL (Immersion)

Equipment for Immersion automatic off-line UT of plates and slabs made of titanium or aluminum

Salient Features

- Immersion test
- Perfect signal-to-noise ratio
- Types of probes – immersion phased array and conventional UT probes
- Layer-to-layer electronical scanning by phase array focusing technique
- Sensitivity – FBH 0.8 mm and higher
- Untested zones – 1.5 mm under surfaces
- Automatic calibration and verification
- Standards – AMS, NADCAP, BOEING, AIRBUS, ASTM, EN, IGC
- Reference test capacity, about – 10 m^2/hour for thickest plate

Specifications of plates to be tested

- Length – from 3 m to 12 m
- Width 100 mm – 3000 mm
- Thickness 3-200 mm
- Material – Titanium or aluminum

ALUTEST-PL (Non-Immersion)

Equipment for automatic off-line UT of aluminium plates and slabs

Salient Features

- Type of probes – phased Array UT-probes
- Sensitivity for internal defects – FBH-0.8 mm
- Sensitivity for surface defects – notch 0.2 mm x 10 mm (D x W)
- Automatic calibration and verification
- Standards AMS, NADCAP, BOEING, AIRBUS, ASTM, EN, IGC
- Reference test capacity: time for testing of one plate of 8 m x 3 m is about 30 min for thickest plate

Specifications of plates/slabs to be tested

- Length from 1 m to 20 m
- Width 1 – 5 m
- Thickness 3-800 mm
- Material aluminum, titanium etc.

RIDER-NK

Push Cart for examination of plates

Salient Features

- UT or ECT based
- Perfect signal-to-noise ratio
- High & smooth sensitivity through the whole plate thickness
- Wide range of thicknesses
- Small untested zones
- Test capacity – up to 7 plates/hour (for 12 m x 4 m plates)
- Meets most of international standards & specifications

RIDER-NK-300

Ultrasonic examination of plates with TR PHASED ARRAY PROBE^{S}

Specifications of plates to be tested

- Length 1 – 50 m
- Width 500 – 6000 mm
- Thickness 3 – 250 mm
- Material – carbon steel etc.
- Temperature from +0 °C to +60 °C
- Plates are on the floor
- Wide range of thicknesses
- Small untested zones
- Meets most of international standards & specifications

RIDER-NK-HS

Examination of plates for HARD SPOTS with PEC

Specifications of plates to be tested

- Length 1 – 50 m
- Width 500 – 6000 mm
- Thickness 3 – 250 mm
- Material - carbon steel etc.
- Temperature from +0 °C to +60 °C
- Plates are to be tested on the floor
- Minimal hard spot to be detected 10 mm x 10 mm or less
- Small or no untested zones at edges
- No influence of rolling scale
- No influence of residual magnetization
- Demagnetization is not required

Bars & Billets

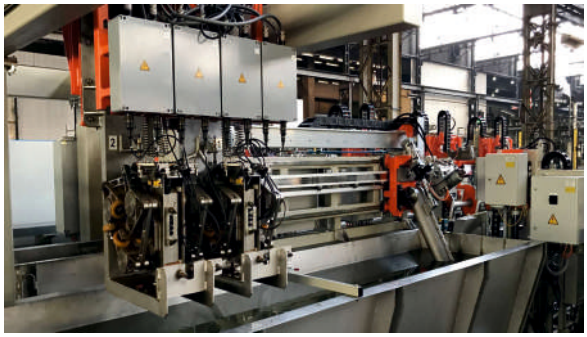
NORDISCAN-BB

Equipment for local immersion automatic ultrasonic in-line examination of bars & billets

Salient Features

- Type of test – local immersion
- Type of UT probes – multi-channel arrays
- High signal-to-noise ratio
- No rotation of the probes is needed
- Sensitivity – up to FBH 0.7 mm
- Small untested zones
- Meets all international standards & specifications including AMS, NADCAP, BOEING, AIRBUS, ASTM, EN, IGC

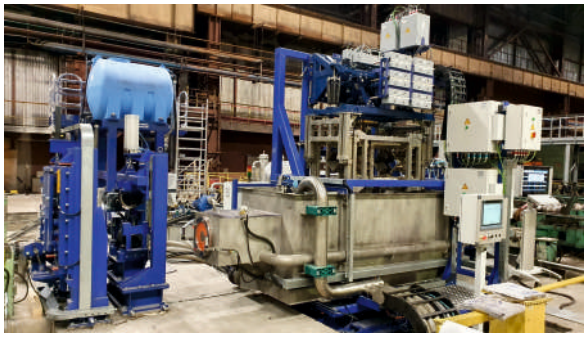
NORDISCAN-BB-200



Specifications of bars to be tested

- Length from 3000 mm to 14000 mm
- Diameter 10 – 200 mm
- Material – steel, aluminum etc
- Test speed up to 2 m/s depending on diameter

NORDISCAN-BB-200-Hybrid

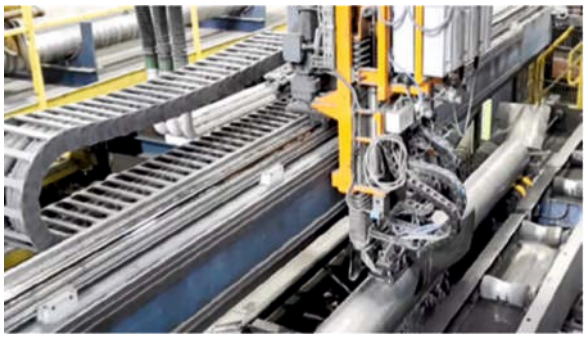


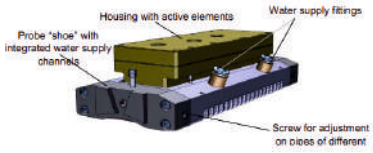
Specifications of bars & billets to be tested

- Length from 3000 mm to 14000 mm
- Diameter/Sides 10 – 200 mm
- Material – steel, aluminum etc
- Test speed up to 2 m/s depending on diameter

NORDISCAN-BB-500

Systems for automatic ultrasonic off-line examination of steel/aluminium bars





Salient Features

- Type of test – local immersion
- Type of UT probes – multi-channel arrays
- High signal-to-noise ratio
- Rotation of bars is needed
- Sensitivity – up to FBH 0.7 mm
- Small untested zones
- Meets all international standards & specifications

Specifications of bars/billets to be tested

- Length from 3000 mm to 14000 mm
- Diameter – 100 – 500 mm
- Material – steel, aluminum etc.

NORDISCAN-BB-F

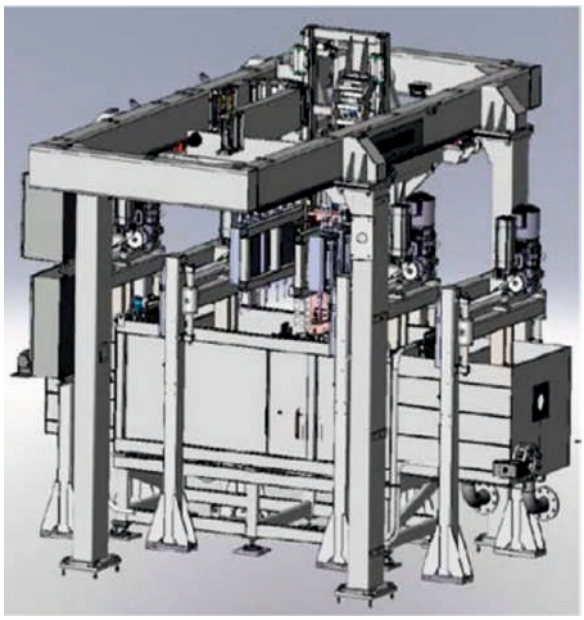
Equipment for local immersion automatic ultrasonic off-line examination of flat bars

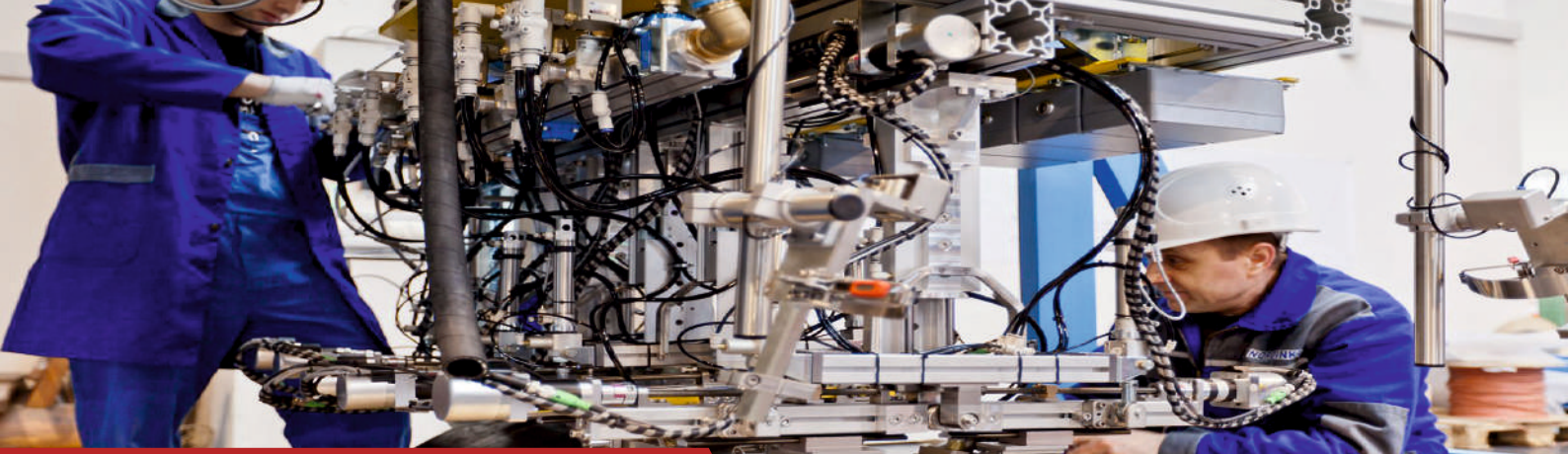
Salient Features

- Type of test – local immersion tank
- Defects to be detected – internal defects & surface & transversal cracks
- Type of UT probes – multi-channel arrays
- High signal-to-noise ratio rotation of the probes is needed
- Sensitivity:
  - up to FBH 0.7 mm
  - transversal & longitudinal notches 0.2 mm x 10 mm
- Small untested zones
- Meets all international standards & specifications including AMS, NADCAP, BOEING, AIRBUS, ASTM, EN, IGC

Specifications of flat bars to be tested

- Length from 3000 mm to 12000 mm
- Sections range: from 15x15mm to 90x110mm
- Material stainless steel
- Test speed up to 1 m/s





Pipes

NORDISCAN-PI-LSAW

Equipment for automatic ultrasonic in-line examination of LSAW pipes

Salient Features

- Type of probes - conventional and Phased Array probes
- Meets all the internationally recognized standards & specifications including DEP 31.40.20.37 – February 2023 (adopted IOGP), International Association of Oil & Gas Producers (IOGP) IOGP S-616 Ver1.0 (2019), Ver2.0 (2022) "Supplementary Specification to API Specification 5L and ISO 3183 Line Pipe" DNV-ST-F101- 2021 ASTM-E-317:2021 GS EP PLR 202 Rev.8 "Fabrication of longitudinally submerged arc welded pipes for pipelines (sweet service)"

Specifications of pipes to be tested

- Diameter 406 mm – 1524 mm
- Wall thickness 6 mm – 60 mm
- Material carbon steel, all grades of API 5L
- Test capacity – up to 15 pipes per Hour

NORDISCAN-PI-ERW

Equipment for automatic ultrasonic in-line examination of ERW pipes (Body + Ends)

Salient Features

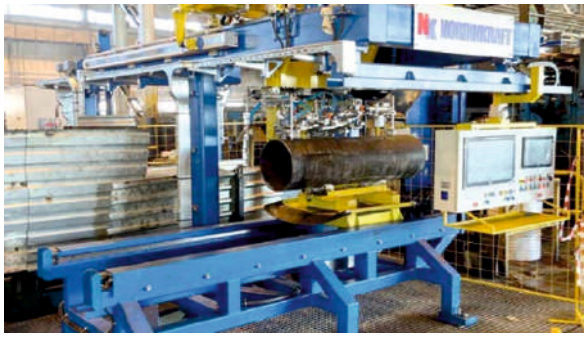
- Type of probe – Multi-channel array probes
- Coverage – all body including ends
- Sensitivity according to API 5L and other Standards and specifications for ERW pipes
- Test capacity – up to 160 pipes per hour

Specifications of pipes to be tested

- Diameter 80 mm – 570 mm
- Wall thickness 4 mm – 30 mm
- Material carbon steel, all grades of API5L

NORDISCAN-PI-W

Equipment for automatic ultrasonic in-line examination of ERW pipes (weld + HAZ inspection)



Salient Features

- Type of probe single crystal angle probes or phase array UT-probes
- Sensitivity SDH 1.6 mm, up to N5
- Automatic tracking of weld seam
- Fully automatic calibration
- Meets all international specifications

Specifications of pipes to be tested

- Diameter 80 mm – 570 mm
- Wall thickness 4 mm – 30 mm
- Material carbon steel, all grades of API 5L

NORDISCAN-PI-S

Equipment for automatic ultrasonic in-line examination of SEAMLESS and ERW pipes

Salient Features

- Type of probe – multi-channel UT array probes
- Pipes move and rotate
- Sensitivity according to API Spec 5 DP and other standards for seamless pipes
- Test capacity – up to 200 pipes per Hour

Specifications of pipes to be tested

- Diameter 32 mm – 426 mm
- Wall thickness 3 mm – 40 mm
- Material carbon steel, API grades

EMATEST-PI-WT

Equipment for automatic ultrasonic in-line non-contact wall thickness measurement

Salient Features

- Type of probe EMAT (non-contact)
- Wall thickness accuracy, up to 10µ + 2R

Specifications of pipes to be tested.

- Diameter 70 mm – 500 mm
- Wall thickness 0.5 mm – 50 mm
- Material – most of metals, including cast pipes

Rails & Wheels

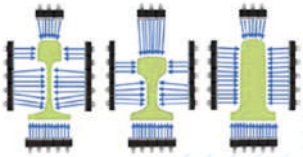
NORDISCAN-RAIL

Equipment for automatic ultrasonic in-line examination of rails

Salient Features

- Test in local immersion tank
- High signal-no-noise ratio
- Type of probe - Phased Array
- Electronical adjustment for new types of rails takes less than 20 min
- Meets most of specifications & standards, e.g. AREMA, EN, GOST, local standards

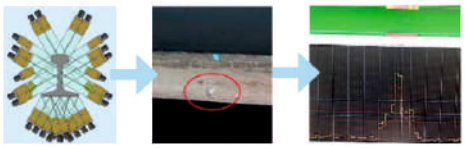
NORDISCAN-RAIL-I
(For INTERNAL DEFECTS)



Specifications of rails to be tested

- Length up to 150 m and more
- Rails types P50, P65, P75, OP50, OP65, 60E1A1, 54E1A1, 54E1A2, 49E1A2, 49E1, 49E2, 50E6, 60E1, 60E2 etc.
- Test speed - up to 2 m/s
- Type of detected defects – internal defects through the whole perimeter

NORDISCAN-RAIL-S
(For SURFACE DEFECTS)

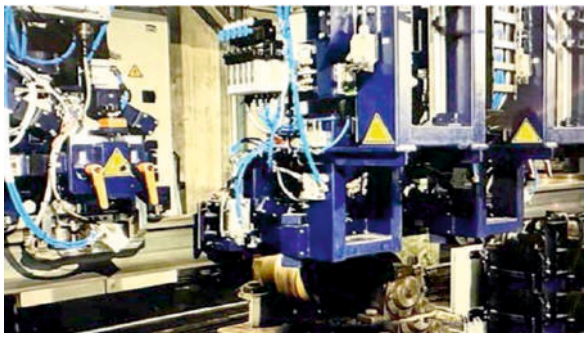


Specifications of rails to be tested

- Length up to 150 m and more
- Rails types P50, P65, P75, OP50, OP65, 60E1A1, 54E1A1, 54E1A2, 49E1A2, 49E1, 49E2, 50E6, 60E1, 60E2 etc.
- Test speed - up to 2 m/s
- Type of detected defects – longitudinal, transversal, & complicated shapes of surface defects around the whole perimeter
- Sensitivity for surface Defects:
  - 0.2 x 20 x 0.5 mm for longitudinal
  - 0.2 x 10 x 0.5 mm for transversal

EMATEST-RAIL

Equipment for non-contact automatic ultrasonic in-line examination of rails for INTERNAL DEFECTS with EMAT



Salient Features

- Type of probe EMAT (non-contact)
- Sensitivity for internal defects: according to GOST

Specifications of rails to be tested

- Length up to 150 m
- Rail types P50, P65, P75, OP50, OP65, 60E1A1, 54E1A1, -54E1A2, 49E1A2, 49E1, 49E2, 50E6, 60E1, 60E2
- Material carbon steel
- Test speed up to 2 m/s

NORDISCAN-W

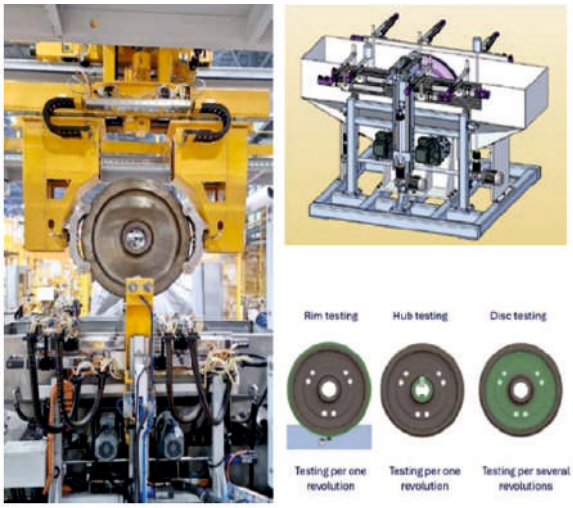
Equipment for immersion automatic ultrasonic in-line examination of railway wheels

Salient Features

- Sensitivity – up to FBH Ø 1 mm for rim
- Type of test – immersion
- A, B, C scans available
- Type of UT probes - multi-channel phase arrays
- Highest level of signal-to-noise ratio
- Small untested zones
- Meets all international standards & specifications

Specifications of railway wheels to be tested

- All standard sizes of solid-rolled railway wheels in accordance with BN 277 918, AAR M-107 / M-208, EN 13262:2004, GOST 10791-2011 and other international standards
- Test capacity 80 s for one wheel – rim, hub, disk



Eddy Current System

Systems for Tubes & Wires

Eddychek 610

High-performance eddy current testing system for complex quality & process control tasks

- Reliable semi-finished product testing
- Tubes, bars & wire - all applications
- Up to 10 channels at 6 test positions
- Intuitive graphical user interface

Eddychek 605

Eddy current testing system for advanced quality & process control

- Reliable semi-finished product testing
- Tubes, bars & wire - all applications
- Up to 5 channels at 3 test positions
- Intuitive graphical user interface

Eddychek 605 Compact

The economic eddy current testing system for reliable quality & process control

- Reliable semi-finished product testing
- Tubes, bars & wire - all applications
- Up to 5 channels at 3 test positions
- Intuitive graphical user interface

Sensors & Accessories

Encircling Coil

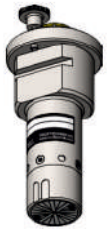
Eddy current sensors for better quality control

- Various sensitivities available
- With or without absolute channel for circumferential crack detection
- Continuous monitoring
- Automatic parameter setting
- Test piece diameters: 0.1–227 mm (1/8 – 8 7/8 inches)
- Special designs available for unusual profiles

Segment Coils

Eddy current sensors for weld seam inspection

- Ideal for detecting a weld seam so that the seam can be positioned where needed for tube-forming processes such as bending.
- Test piece diameters: 10–520 mm (3/8–20 7/16 inches) or flat
- Special coils available with 50°, 90° and 180° segment size



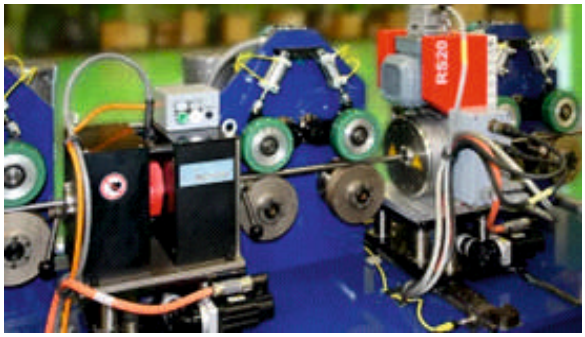
Finger Probes

Finger probes are small sensors that can be used for hard-to-reach places such as complex profiles, and for localized testing.

- Various diameters
- Various inspection core positions
- Various probe lengths
- Probe holders

Eddy Current Rotating System For Bright Bars

For identification of longitudinal defects

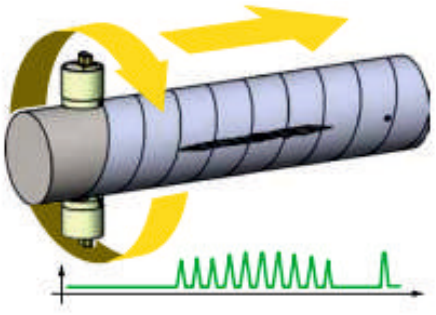


Salient Features

- Reliable quality assurance for your semi-finished products
- High-speed eddy current testing
- For offline, inline and continuous testing
- Electronic lift-off compensation system for optimum signal to-defect correlation
- Extremely robust design

Working Principle

The test specimen moves longitudinally through the rotating test probes & is helically scanned without contact. If a probe passes over a material defect, it detects a change in the induced eddy current & displays this in real-time as a defect signal. The angular position of the defect along the circumference of the test specimen is shown via a special graph



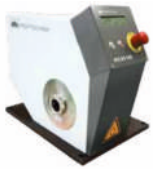
Defect resolution

The minimum defect length (i.e. the minimum safely repeatable, detectable defect length) is a function of the rotational speed of the probe and the throghput speed of the material being tested. The minimum defect depth is 0.05mm and depends on the sample's surface qualities..

Rotating system in 4 sizes

RS20

For the semi-finished products with dia. 2–20 mm (1/16–3/4 in)



RS35HS

For the semi-finished products with dia. 3–35 mm (1/8–1¼ in)

RS65

For the semi-finished products with dia. 5–65 mm (3/16–2½ in)

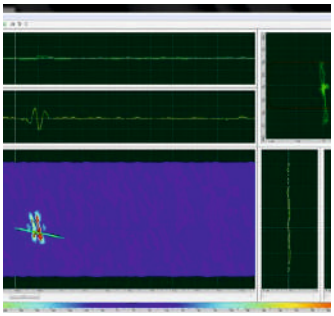
RS140

For the semi-finished products with dia. 10–140 mm (3/8–5 1/2 in)

Automated Eddy Current Bearing Inspection Systems

TecView™ EC

With the TecView™ EC software package, the inspector can set live and post-acquisition alarms for acceptance or rejection criteria. In the analysis module, both the C-Scan and the independent tracks can be visualized and analyzed with different alarms, gain and rotational settings. Eddy Current Inspection reports with all the recorded tracks and the triggered alarms can be generated using the report utility.



Magnetic Flux Leakage Testing

Highly sensitive inspection of black / bright metal bars and seamless tubes

Salient Features

- Fully automatic quality control
- Complete logging of all test specimens
- Easy to integrate into existing finishing lines
- Material diameter 10-200mm
- 100% inspection with test speeds of up to 3m/s
- Material classification with 3 alarm levels

Easy to integrate, reliable, cost saving

As a producer of black or bright metal bars, you are confronted with customer demands for high quality products-and for good reason, since semi-finished products are often used in safety critical parts for public transport, automobiles, construction, etc. we can help you find cracks reliably and reduce scrap and material expenses effectively the NOVAFLUX flux leakage system provides a dependable and reasonably priced method for ultra-sensitive bar testing: It defects cracks as small as 0.1mm in depth

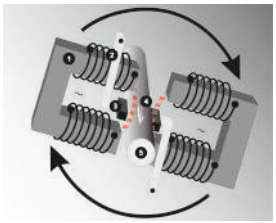
Compatibility: Can be freely combined with existing rotating system or testing electronics of other manufacturers
Testing at high speeds: High throughput, test frequency, and rotational speed

Saving on materials: Facilitates the retrieval of repairable material
Cost effective investment: Reasonably priced test unit

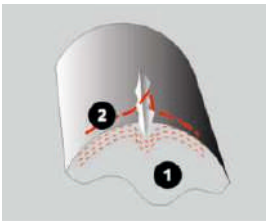
Sensitivity at work

Based on the flux leakage method, the NOVFLUX rotating system finds minuscule surface defects typical for bars and tubes. the defects can be as small as 0.1mm and are distinctly visible in the signal display, unobscured by pseudo signals from uneven surfaces

Pure Precision for reliable test results



1. Yoke
2. Magnetizing coil
3. Probe with lever
4. Defect
5. Test piece



1. Magnetic flux in test piece
2. Leakage flux

Flux Leakage Method

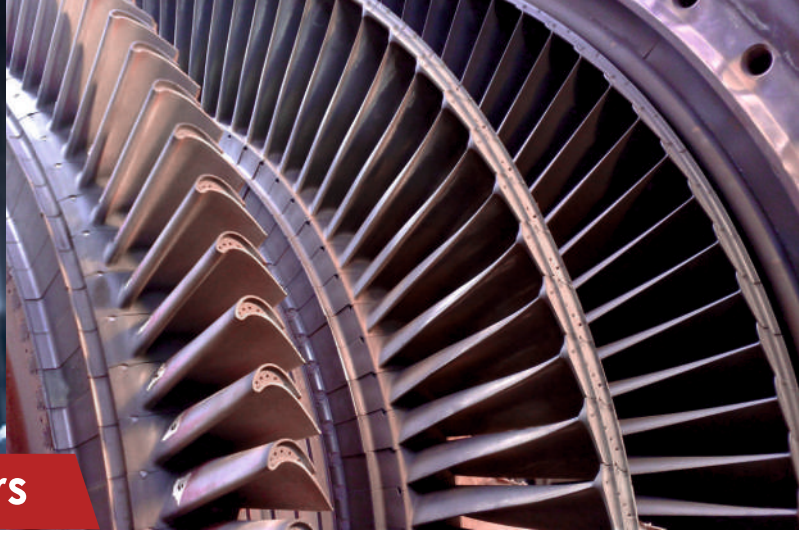
AC current flows through two rotating magnetizing yokes. The yokes magnetize the test piece at a distance of a few millimeters. Special test shoes with protected probes located between the yoke arms scan the surface of the test piece by sliding over it

Detecting minuscule defects

The AC magnetic field generates a magnetic flux inside the test piece. If the test piece has an inconsistency in its surface, the magnetic field is deviated & a leakage flux is generated. The sliding probes detect the leakage flux and the NOVAFLUX testing system displays and reports this deviation including exact localization information.

Rotating system in different sizes

- **RFL 70 -** 5-70 mm (0.20-2.75 in)
- **RFL 140 -** 10-140 mm (0.39-5.51 in)
- **RFL 200 -** 30-200 mm (1.18 – 5.51 in)



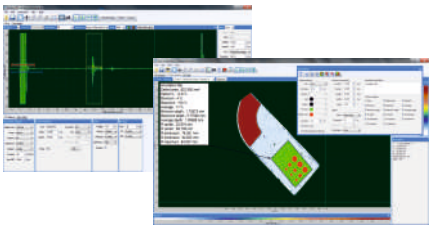
Ultrasonic Immersion Scanners

We provide fully automated Immersion Ultrasonic Testing Systems for effective inspection of various components. Our systems range from small tanks for laboratory immersion ultrasonic testing to large multi-axis industrial ultrasonic immersion systems & squirter gantry systems. With our systems you can perform manual immersion ultrasonic testing or advanced and automated immersion ultrasonic testing with contour following or full 3D inspection for your complex components.

Single element or Phased Array ultrasonic transducers can be used on all our immersion systems and tanks. Our immersion ultrasonic testing systems are used for detection of flaws in metallic and composite materials. Ultrasonic C-scan and tomography are achieved using these automated ultrasonic testing systems by raster scanning the inspected samples with appropriate ultrasonic transducers.

TecView™ UT NDT Data Acquisition & Analysis Software

TecView™ UT is a complete software system solution which allows you to perform non-destructive Automated Ultrasonic Testing (UT) of material. It is designed for managing the entire procedure of Ultrasonic Testing including scanner motion control, data Acquisition and data Analysis. It is also user-friendly and has intuitive menu design which makes it easy to understand and navigate through. TecView™ UT supports many common Pulser/Receiver and Digitizer cards. TecView™'s UT primarily components are the Inspection and Analysis modules.



This Ultrasonic software assists with the task of performing UT inspection from start to finish. It includes data acquisition, data management, robotic control, imaging, analysis, and interpretation modules. All these operations could be performed simultaneously. This modular software package consists of two main components: an Acquisition as well as a data Analysis module.

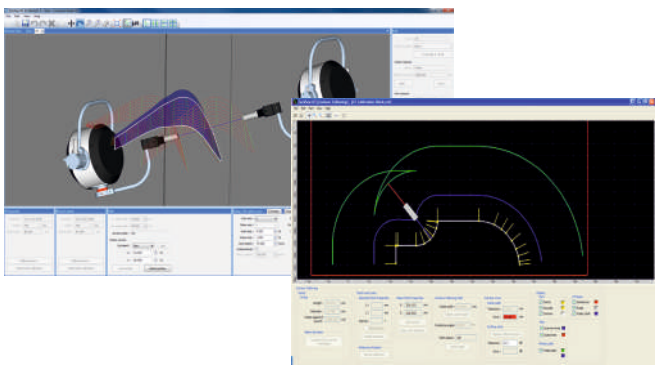
The ACQUISITION module aids the user in the setup of all scanning parameters, from controlling the transducer motion all the way to setting all the gates and Ultrasonic parameters. With the data stored and tagged, the analysis of the collected data may be performed in the ANALYSIS module. Partial or full C-Scan in addition to A-Scan and B-Scan images are obtained with a click of the mouse. The C-Scans can be obtained based on amplitude information, TOF or thickness. Signal and image filtering, as well as rotation, inversion and 3D projection can be performed on the C-Scans.

TecView™ 3D

TecView™ 3D is a NDT software featuring basic and advanced contour following capabilities. This software is designed to perform inspection of curved structure while keeping constant orientation and separation of the probe with regards to the structure.

The basic contour following capabilities of TecView™ 3D is perfectly suited for extruded parts or similar structures, while the advanced 3D scanning is designed to permit automated inspection of more complex parts with a complete tri dimensional surface following.

Contour following begins with the activity to interactively "teach" the geometry of the tested specimen TecView™ software. The teaching method is quick & efficient, particularly for parts with smooth curvatures. A mesh of the part is then defined in order to ensure constant scanning resolution during the scan. The system therefore "learns" how to perform the inspection based on the taught geometry. This method assures full inspection of the entire part with complex geometries. Part definitions obtained during the teaching process can be further recalled to inspect identical pieces, or refined for similar parts.



About Us

Keeping the vision of "Make in India", M/s. Arora Technologies (P) Limited is focusing on Manufacturing and Distribution of NDT Products & Accessories.

Our vision is to Innovate, design and manufacture NDT Products, Systems and Accessories for global markets by incorporating Quality & Excellence in our DNA. We are committed to build long-term relationships with our customers and pursue our business through innovation, latest Technology & unrelenting quest for excellence.

Arora Technologies (P) Limited
Plot No. D-183/8, MIDC, TTC Nerul, Navi Mumbai, Maharashtra 400706, India
T: +91-22-6138 0600 | **E**: info@arorandt.com | **W**: www.arorandt.com