

# Manufacturing Of NDT Products & Accessories



# LED UV Lamps

We manufacture highest quality of LED UV Products in accordance with international standards ASTM E3022. The AUL Series of LED UV Lamps are considered to be the benchmark in the NDT Industry. These Lamps are light weight, rugged and cost effective which makes them a perfect combination to be used for Fluorescent Inspection.

## AUL Series - LED UV Handheld Lamps

The most unique feature of AUL Series of LED UV Lamps is that depending on the application, operator can choose the model from AC to Battery Operated.



AUL-100

AUL-100D

AUL-125

AUL-150

### Salient Features

- Ergonomically designed robust aluminium housing
- Instant ON/OFF, No Warm-Up time for full intensity
- Long Lasting LED's (40,000 Hrs.) Life
- Even beam profile without hotspots
- UV-A Pass Filter
- Rechargeable Li-Ion Battery\*
- Switchable between UV & White Light\*\*
- Mechanical passive cooling system

Order Part No.		No. of LED's
Internal Battery	AC Mains	
AUL-100	AUL-100 AC	2 UV-A LED's
AUL-100D	AUL-100D AC	2 UV-A LED's + 1 White LED
AUL-125	AUL-125 AC	3 UV-A LED's
AUL-150	AUL-150 AC	4 UV-A LED's
AUL-225	AUL-225 AC	4 UV-A LED's + 1 White LED

\* Not Applicable for AC Models

\*\* Applicable for AUL 100D & AUL 225

## AUF Series - LED UV Flood Lamps

AUF Flood lamps are best choice for stationary fluorescent MPI/FPI. A unique feature of the AUF Series is their interconnectivity; they can be linked together on either side, allowing you to extend the coverage area as needed.



### Salient Features

- Instant ON/OFF, No Warm-Up Time for Full Intensity
- Long Lasting LED's (40,000 Hrs.) Life
- Even beam profile without any spots
- UV-A pass filter
- Robust aluminium housing
- Interconnected with each other
- Switchable between UV & White Light
- Intensity control with pot knob (optional: Remote control through wired remote)
- Mechanical active cooling system with fans

Order Part No.	No. of LED's	Beam Coverage	Order Part No. (Eco)	No. of LED's	Beam Coverage
AUF-350	8 UV-A LED's & 2 White LED's	356 x 279 mm	AUF-350 <sup>Eco</sup>	4 UV-A LED's & 1 White LED	356 x 203 mm
AUF-500	16 UV-A LED's & 4 White LED's	609 x 279 mm	AUF-500 <sup>Eco</sup>	8 UV-A LED's & 2 White LED's	558 x 203 mm
AUF-1000	32 UV-A LED's & 8 White LED's	1066 x 279 mm	AUF-1000 <sup>Eco</sup>	16 UV-A LED's & 4 White LED's	1041 x 203 mm

## Customized LED UV Flood Lamp

Apart from standard flood lamp (AUF series) we can customize the flood lamp as per customer specific requirement in terms of length, width, angle of inspection, specific UVA intensity etc.



## AUT 90 - LED UV Torch

AUT 90 is single LED UV torch ideal for surveyors and auditors due to its compact size suitable coverage of 90mm.



### Salient Features

- Ergonomically designed robust aluminium housing
- Instant ON/OFF, No Warm-Up Time for full intensity
- Even Beam profile without hotspots
- UV-A Pass Filter
- Rechargeable Li-Ion Battery

## AUB 150 - LED UV Bulb

The AUB-150 LED UV Bulb perfectly replaces the conventional mercury vapor bulb or can be used directly on AC mains with E27 holder. The beam coverage of AUB 150 is 8" (200 mm) wide at 15" distance.



### Salient Features

- Instant ON/OFF, No Warm-Up Time for full intensity
- Long Lasting LED's (40,000 Hrs.) life
- Even Beam profile without hotspots
- UV-A Pass Filter
- Replaces Conventional Mercury Vapor Bulb
- Less Fragile than Conventional Mercury Vapor HID Bulb
- Cooler Than Mercury Vapor HID Bulb With Passive Cooling

## Acumen<sup>365</sup> UVA Meter

The Acumen<sup>365</sup> is equipped with dual-wavelength sensor for measuring both ultraviolet and visible light during fluorescent NDT inspections in laboratory or industrial applications.



### Salient Features

- Big and colorful LCD screen Display
- Compact & light weight
- Rechargeable Li-Ion Battery
- Continues 8 hours of battery back up in single charge
- Able to measure both UV-A and visible illuminance in LUX or in foot-Candle.

# Yokes

## Electromagnetic Yokes

AY series yokes are high power, light weight magnetising equipment for site MPI. The AC variant offers light accessory which produces UV light wirelessly, when the yoke is on due to which it eliminate the need of separate UV lamp for Fluorescent inspection.

### Salient Features

- Accessible grip, angled body for better position
- Powerful magnetic field
- Exceed ASTM E709 & ASTM E1444 lifting specifications
- Durable rugged construction
- Adjustable leg spacing
- Detachable power cord for AC yoke
- Effectively useful in remote areas and in yards



Order Part No.	Description
AY-7A <sup>UV/Vis</sup>	AC Yoke with UV-A/ Visible light accessory
AY-7A	AC Yoke
AY-7D	AC/ HWDC Yoke
AY-7B	Battery Powered Yoke

## Permanent - Magnetic Yoke

Permanent Magnetic Yoke Fixed/Wire type are ideal for MPI since they are completely portable & are used where access to AC power is impractical or impossible. It is easy to use, simple & highly economical.



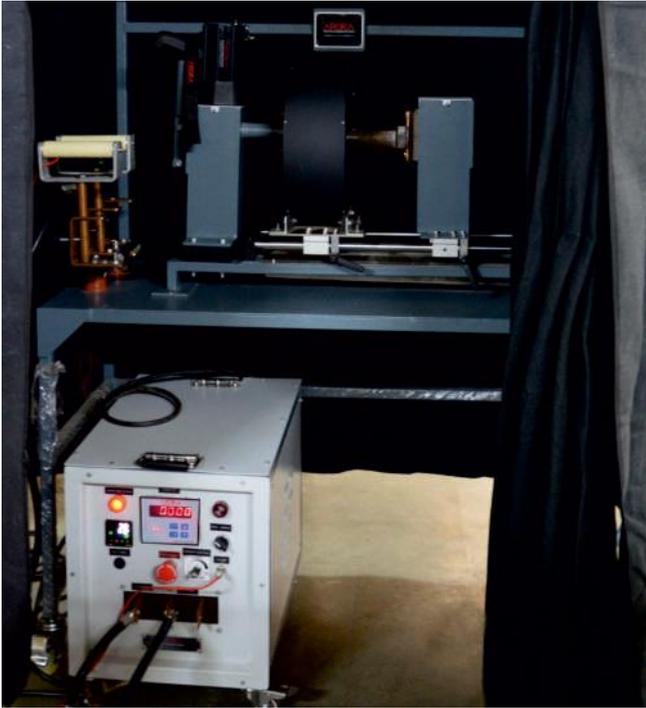
### Salient Features

- Light weight & compact
- No power required
- Suitable for both dry & wet inspection
- Strong magnet with no requirement of re-magnetization

Order Part No.	Description
AY-M5-F	Permanent yoke fixed type
AY-M5-W	Permanent yoke wire type

# ABM Series Magnetic Bench Machine

## ABM-E Educational Bench Machine



The ABM-E is a compact and user-friendly Magnetic Particle Inspection (MPI) system specifically developed for training, demonstration and basic inspection applications in educational institutes, R&D centres, and skill development laboratories.

### Salient Features

- Capable to perform Head Shot, Coil Shot, Central Conductor, Prod Method, Wrap Technique
- Light weight, movable equipment.
- AC & HWDC or FWDC current
- Dark room for fluorescent MPI testing
- Auto AC demagnetization with coil

### Order Part No.

- ABM-E 1500: 1500A AC & HWDC or FWDC educational MPI bench machine
- ABM-E 2000: 2000A AC & HWDC or FWDC educational MPI bench machine

## ABM Series of Industrial Bench Machine

The ABM Series are heavy duty bench machine designed for MPI inspection. The ABM Series magnetic benches are available in seven configuration & three sizes (Small/Medium/Large) that offers 2000 Amps to 10,000 Amps range of Alternating Current (AC), Half Wave Direct Current (HWDC) or Full Wave Direct Current (FWDC)

The Head and coil shots both offer AC, HWDC or FWDC magnetization and are independently adjustable to set each magnetic field i.e. circular or longitudinal magnetization

### Salient Features

- AC, HWDC or FWDC Mag facility with low voltage output
- Automatic sequential mag shot (head followed by coil)
- Auto AC Demagnetization facility with coil only
- Foot Switch, push button or single touch mag shot activation through HMI
- Ergonomically placed 2 digital ammeters for coil and headshot current readings
- Dark room for fluorescent Inspection with ventilation fan
- Top-mounted sliding flood-lamp assembly (flood lamp supplied separately)
- 30 Litre SS tank with pump for bath agitation, circulation & application
- Pneumatic headstock for quick and easy clamping/de-clamping



- Emergency cut-off button & Auto cutoff with temperature sensor
- User-controlled security with password protection, supervisor locks, & customizable operator access profiles
- User-friendly interface for parameter input, operation mode selection, and display

# APP Series Magnetic Power Pack

The APP Series has movable wagon type mobile power pack. These Magnetic Power Packs are available in eleven configuration that offers 1500 Amps to 15,000 Amps range of Alternating Current (AC), Half Wave Direct Current (HWDC) or Full Wave Direct Current (FWDC).

## Salient Features

- AC, HWDC or FWDC Mag facility
- True Calibrated Digital Ammeter
- Low-voltage output for operator safety
- Overload and short circuit protected switching
- Emergency cut-off button & Auto cutoff with temperature sensor
- 2.5 meter long low resistance prod cable (optional extra cable length available)
- Powder coated rust proof MS Housing with matt finish
- Lockable caster wheels for controlled movement of the machine
- Tray on the top for storage of cable and other MPI Accessories
- Locate defects in any direction using Prods, Central Conductor or Cable wrap



## MPT Accessories

### TesMx 200 - Digital Gauss Meter

TesMx 200 is designed to detect residual magnetic fields present in the metallic part surfaces. These are low intensity static fields remaining in the part after the application of a strong magnetic force on that part. It is very important to inspect these residual fields remaining in metal parts to maintain quality and safety standards.

## Salient Features

- Compact and handheld
- Compatible with axial & transverse probe
- Big and colorful LCD screen Display
- Comes with reference magnets for verification



Ketos Ring



Pie Gauge



Centrifugal Tube with Stand



Burmah Castrol Strips



MTU Test Block



Reference Block Type 2



Quantitative Quality Indicators



ASTM Yoke Test Bar



Lifting Blocks



## Aerosol Cans

Order Part No.	Description
WCP 104	White Contrast Paint
BMI 106	Black Magnetic Ink
FMI 800	Fluorescent Magnetic Ink

## Standard Packaging

Aerosol Can of Net Qty 400 ml (1 Box of 10 Cans)

## MPT Chemicals

The selection of high-quality testing chemicals is paramount to the success and accuracy of magnetic particle testing. The FlawGlo series offers a comprehensive range of magnetic particle testing chemicals tailored to various applications, including oil-based, water-based, and dry applications, available in both visible and fluorescent formulations.

All these chemicals complying to international standards whichever is applicable including ASME B&PV Sec V, ASTM E 709, ASTM E144, ASTM E3024, AMS 3042, AMS 3044, AMS 3046, IS 3703:2004, MIL-STD-271, NAVSEA 250-1500-1

## Salient Features

- High Sensitivity
- Superior Flaw Resolution
- Low in Sulphur & Halogen Content
- Processing Temperature Range 0 to 49°C

## Wet Powders

Order Part No.	Description	Dilution
WF 10	Water Based Fluorescent Powder (2-5 µm, average particle size is 3 µm)	10 gm/ltr
WF 834	Water Based Fluorescent Powder (2-5 µm, average particle size is 3 µm)	5 gm/ltr
WF 418	Water Based Fluorescent Powder (2-18 µm, average particle size is 7.5 µm)	6 gm/ltr
OF 800	Oil Based Fluorescent Powder (2-5 µm, average particle size is 3 µm)	1 gm/ltr
OV 106	Oil Based Visible Powder (0.5-4 µm, average particle size is 1.5 µm)	9.5 gm/ltr

## Standard Packaging

Wet powders are available in 1 kg

## LPT Chemicals



## Aerosol Cans

Order Part No.	Description
SC 190	Solvent Cleaner
SWP 139	Solvent Removable Red Dye Penetrant
SD 175	Solvent Suspendable Developer

## Standard Packaging

Aerosol Can of Net Qty 400 ml (1 Box of 10 Cans)

Liquid Penetrant Testing is commonly known as LPT/PT. The selection of high-quality testing chemicals is paramount to the success and liquid penetrant testing. The FlawGlo series offers LPT chemicals tailored to various applications, & suitable to almost every product & materials regardless of their properties.

FlawGlo LPT chemicals complies to various International standards including ISO 3452-2, ASTM E165, ASME B & PV

## Salient Features

- Vivid, high contrast colour
- Low in sulphur and halogens
- Good in wettability, viscosity & capillarity
- Superior flaw resolution
- Solvent type penetrant
- Excellent reliability
- High flash point

## LPT Accessories



TAM Panel



Aluminium Comparator Block



Ni-Cr Test Block



Reference Block Type 1



Reference Block Type 2

## FV Series LED Film Viewers

We manufacture highest quality LED Film Viewers. The FV Series LED Film Viewers are considered to be the benchmark in the Indian fabrication industry. All big companies have been using this series since long. Over the period of time FV series LED Film Viewers have become the preferred choice for overseas customers too.



### Salient Features

- High Power SMD LED's
- Viewing screen adjustable shutters (FV-Series)
- Adjustable viewing angle (adjustable stand)
- Brightness control with pot knob
- Foot switch power On/Off
- Corrosion resistant aluminium body
- Integrated Densitometer with LCD Display (FV<sup>Pro</sup> Series)
- Digital masking in FV<sup>Pro</sup> Series

### Technical Specifications - FV Series

FV Series lets you easily adjust the screen size with a strong, powder-coated aluminum shutter

Order Part No.	LED FV - PC	LED FV - PCS	LED FV - PXL	LED FV - FP
Viewing Area (W X L)	60mm X 200mm 2.5" X 8"	100mm X 300mm 4" X 12"	110mm X 430mm 4.5" X 17"	355mm X 430mm 14" X 17"

### Technical Specifications - FV<sup>Pro</sup> Series

FV<sup>Pro</sup> Series has an integrated densitometer with digital masking screen that can change into five different sizes by pressing a switch on keypad

Order Part No.	LED FV - PC <sup>Pro</sup>	LED FV - PCS <sup>Pro</sup>	LED FV - PXL <sup>Pro</sup>
Viewing Area (W X L)	60mm X 200mm 2.5" X 8"	100mm X 300mm 4" X 12"	110mm X 430mm 4.5" X 17"

## Rhythm 5D - Digital Densitometer

The Rhythm 5D is a battery powered handheld densitometer for measuring the transmission density of x-ray film combining ease of use with high accuracy and repeatability.

The measuring probe of this instrument is of pencil design with ABS casing and it is connected to the instrument using flexible cable length of one meter.

### Salient Features

- Big and colorful LCD screen Display
- Compact & light weight
- Rechargeable Li-Ion Battery
- Continues 8 hours of battery backup in single charge
- Complies with ASTM E-1079 standard



# Ultrasonic Pulser Receiver APR-20

The Microprocessor Based Ultrasonic Pulser Receiver Model APR-20 is a compact, high-performance instrument designed for precise flaw detection, material characterization, and laboratory research. Equipped with a powerful pulser and low-noise broadband receiver, it delivers exceptional signal clarity and repeatability for a wide range of ultrasonic transducers.



APR-20 is compatible with other Ultrasonic Instruments and allows great flexibility when configuring systems for high frequency application or for attenuative materials.

The front panel keypad allows the operator to choose parameters such as Gain, Damping, Mode, Energy etc precisely which are shown on the TFT display. BNC connectors are provided at the back for output and input connections.

## Salient Features

- High voltage broadband pulser for superior signal penetration
- Low-noise, wide dynamic range receiver for accurate signal capture
- Adjustable gain, damping, and pulse repetition controls
- Compatible with longitudinal and shear wave transducers
- Ideal for NDT, academic, and R&D applications discontinuities

# UT Accessories

## General Purpose Probes

We manufacture high quality, durable general purpose straight beam, angle beam and TR probes. These probes are available in 2 or 4 MHz with Lemo female connectors on the probe side. These probes are available in small, medium and large size configuration.



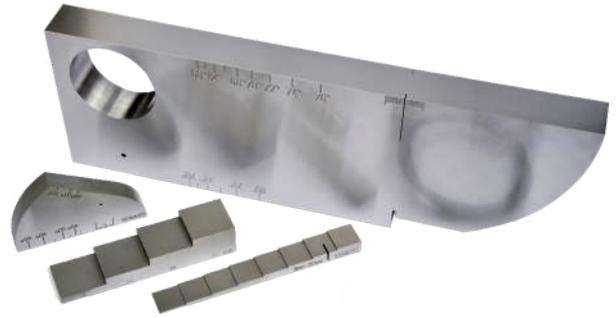
## Cables

We manufacture full range of ultrasonic testing cables. These cables are manufactured with reinforced junctions between the cable & the connector. Cables are available in single, dual with Lemo, Mini Lemo, BNC, Microdot or Subvis connectors. We can also offer customized cable depending upon customer needs or application.



## Calibration Blocks

We manufacture a wide range of Ultrasonic Test blocks which are precisely machined, and quality tested as per specified ASTM, ASME and ISO standards. Standard Test Blocks are available in steel, stainless steel, and aluminum. Test Blocks in alloys are also available, like alloy steel, inconel, titanium, copper-nickel, Duplex steel and others. All Test Blocks are permanently engraved with the part no and serial number.



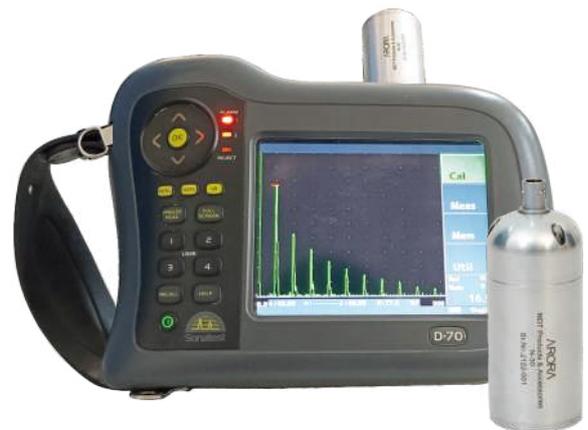
All test blocks are offered with wooden case and test certificate which include dimensional report and positive material identification report. Carbon steel blocks are Nickel coated for rust protection.

## N-30 Calibration Block

The N-30 is an integrally attached calibration block to verify Vertical, Horizontal & Amplitude Control Linearity. It can be used for routine calibration of ultrasonic flaw detectors using conventional pulse echo method. N-30 is an aluminum block of 53 mm long and 38.5 mm diameter (Solid cylindrical shape) attached to a 24 mm diameter 2 MHz longitudinal transducer.

### Salient Features

- Ability to self-calibration
- Single transducer with attached aluminium block for calibration
- Connects directly to flaw detector
- Produces multiple echoes in aluminium
- Check instrument gain over long time period
- Easy to handle and carry



## Couplant

The FlawGel Ultrasonic Couplant is specially designed to work effectively on both horizontal and vertical surfaces. It showcases durability, allowing it to be used on moderately heated surfaces up to around 75°C.

**FlawGel GF** (Gel Form) and **FlawGel PF** (Powder Form), both crafted to enhance the efficient transfer of sound energy between the transducer and the test piece during inspections.

### Salient Features

- Acoustically exact on vertical, horizontal, and overhead surfaces
- Typical concentration: 40 grams per liter, but a thinner or thicker gel can be obtained by altering the concentration of the powder per litre
- Self and quick Deaeration
- Excellent coupling properties on smooth to rough surfaces
- Non-toxic & cost-effective
- Quick gel time at ambient temperatures in less than 5 mins
- Low in Sulphur & Halogens



# Remote Visual Inspection

## ATVISION Videoscopes

**ATVISION** Series of multifunctional videoscope offers HD video quality for inaccessible areas in tubes, pipes, bores, engines, castings, etc. It has a flexible probe with high definition 360° articulating camera at tip with ceramic based light source for necessary illumination. They are best suited for automotive, aerospace industries for inspection of hard to reach areas.

### Salient Features

- High Definition 1080P/720P image/ video quality
- 5" colour display
- 3X zoom capability
- 360° omni directional bending (articulation)
- Wireless transmission of image/video
- Long lasting batteries (8 hours of operation with 2 inbuilt fully charged batteries)



## ATVISION<sup>PRO</sup> Videoscopes

The recent advancement in **ATVISION** Series is **ATVISION<sup>PRO</sup>**. This model offer interchangeable probe length and probe diameters from 1mm to 8mm & motorised articulation. Various light sources such as Visible, Infrared & UV are offered for normal visual inspection, fluorescent inspection or surveillance purpose respectively.



### Salient Features

- High Definition 1920x1080P image/ video quality
- 5.7" HD touch screen
- 8X zoom capability
- 360° omni articulation & 210° oversized bending of probe.
- Automatic defect recognition with MDI based report generation
- Long lasting batteries (8 hours of operation with 2 inbuilt fully charged batteries)
- Multi-lens compatibility for near, mid, and far focus

## ATVISION PTZ Camera System

**ATVISION** PTZ 33-300 is a Pan Tilt Zoom (with Manual Focus function) Camera System packed in a very compact & versatile form factor. Due to its size it is ideal for inspection of small pipes, hard to reach areas etc. With its durable construction and advanced functionality, it's a must have tool for remote visual inspection professionals.



### Salient Features

- Pipe Inspection Camera Unit with Ø33mm, 360° Pan, 180° Tilt, & 30m Cable length
- Manual focus function (Far focus & Near focus)
- 8 inch IPS LCD screen
- Waterproof IP68 grade camera system
- Wireless transmission of image/video for multiscreen viewing
- Wireless keyboard real time typewriting
- Digital meter counter
- Long lasting (6 Hrs) Li-ion batteries for site conditions

**ATVISION** PTZ 50-400 is a Pan Tilt Zoom (with Manual Focus function) Camera System packed in a very compact & versatile form factor.



### Salient Features

- Pipe Inspection Camera Unit with Ø50mm, 360° Pan, 180° Tilt, & 40m Cable length
- Manual focus function (Far focus & Near focus)
- 8 inch IPS LCD screen
- Waterproof IP68 grade camera system
- Wireless transmission of image/video for multiscreen viewing
- Wireless keyboard real time typewriting
- Digital meter counter
- Long lasting (6 Hrs) Li-ion batteries for site conditions

## Eddy Current Sorter (ECS 5000)

The Eddy Current Sorter (ECS-5000) is an advanced metal sorting unit that is capable of separating non-ferrous metals such as aluminium, copper, brass, alloy from dry recyclables. In all industries mix-up of metals in the form of raw, semi-finished or finished products may occur in transit, storage or at different stages at manufacturing processes and is segregated by chemical, Spectro analysis or metallurgical tests.



When proper coils are selected, ECS 5000 is used for segregation of ferrous and non-ferrous metals without even a scratch on job or when bulk materials having external similarity are mixed up. ECS 5000 is widely used for segregation of mixed-up of metals in the form of bars, pipes, tubes, rods, bolts, nuts, gears, machined components, forged parts, and various types of metal components in automobile industries, heat treatment shop, fastener industries, forging unit, metal processing unit, fertilizer, refinery, and petrochemical projects & also final inspection in quality control department.

## ABP Series EC Bobbin Probes Encircling Coil

Our Differential ECT bobbin probes are designed for efficient inspection of non-ferrous heat exchanger tubes. Optimized for sensitivity and phase clarity, each probe is manufactured using precision winding and robust housing materials.

Eddy Current Testing is widely used during tube and pipe manufacturing to ensure the delivered products are free from defects. Freshly produced tubes are continuously passed through encircling coils, which enable high-speed inspection & detection of longitudinal, transverse, & localized imperfections.

## Calibration Tubes

In addition to Eddy Current Probes, we offer calibration tubes in various materials and dimensions, manufactured in compliance with ASME Section V, Article 8 standards. These calibration tubes are essential for system setup, verification, and operator training.



### Salient Features

- Available in multiple frequency ranges: UF (Ultra Low), LF (Low Frequency), MF (Medium Frequency) & HF (High Frequency)
- Coils embedded in durable, wear resistant material
- Stainless steel wear guides at the front & rear
- Light-weight advanced polymer body
- High flexibility and kink-resistant polymer cable
- Available with 15m or 20m cables
- Standard 4-pin Amphenol connectors

We manufacture a complete range of encircling coils from  $\text{Ø} 0.3 \text{ mm}$  to  $\text{Ø} 230 \text{ mm}$ , available in four different coil sizes along with compatible coil holders, guide sleeves, cables, and accessories suitable for online and offline inspection systems

Our encircling coils and inspection solutions are designed & produced in accordance with international quality requirements & standards, including ASTM E309 & ASTM E570

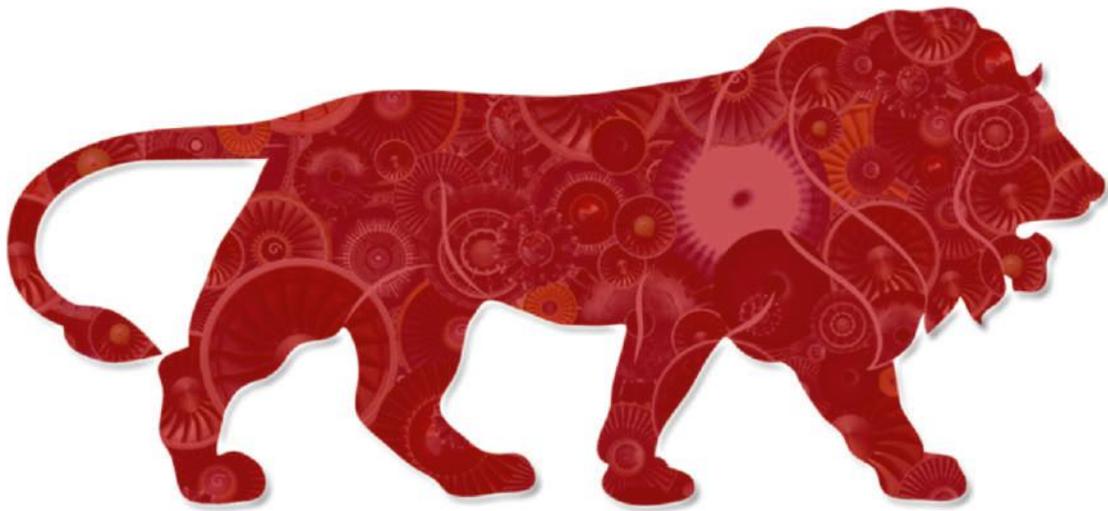
### Available Materials

- Stainless Steel 304/316
- Aluminium
- Inconel 600
- Copper-Nickel Alloys
- Brass (Admiralty, 70/30, 85/15, 95/5)
- Titanium

## 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.



**FlawGlo**<sup>®</sup>  
Series of MPT/LPT Chemicals

**ATVISION**  
Series of Remote Visual Inspection

**Arora Technologies (P) Limited**

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