





# RVS Quality Certifications Pvt. Ltd.



# **OUR INSPECTION SERVICES**

# **NDT INSPECTION SERVICES**

WE OFFERS THE FOLLOWING NDT **SERVICES** 

- Visual Testing (VT)
- Liquid Penetrant Testing (LPT/PT)
- **Magnetic Particle Testing (MPT/MT)**
- Ultrasonic Testing (UT)
- Ultra Sonic Thinkness Gauging (UTG)
- Radiography Testing (RT)
- Radiography Film Interpretation
- Services (RTFI)
- Eddy Current Tesing (ET)
- Phased Array Ultrasonic Testing (PAUT)
- Time of Flight Diffraction Method (TOFD)

# **MECHANICAL DT SERVICES**

WE OFFERS THE FOLLOWING MECHANICAL DT SERVICES

- **Tensile Testing**
- Hardness Testing(Rockwell, Vickers & Brinell)
- **Bend Testing**
- **Proof Load Test**
- **Charpy Impact Testing**
- **Chemical Analysis:** (AAS, SPARK SPECTRO)

Positive Material Identification (PMI)

# CALIBRATION SERVICES

We offers the following Calibration Services Electrical, Electronics, Mechanical, Chemical, Process, Analytical and other instruments

www.rvsglobe.com

# **OUR MISSION:**

RVS Globe was established with a mission to provide industrial knowledge among young aspirants by providing Quality education and services of high standards in the following categories.

RVS Globe is Focused with third party inspection services, consultancy, Man power supply, Training & certification.

RVS Globe is a Team of multi talented Qualified engineers/Inspectors QC supervisors, Design Engineers and safety officers, undertaking the challenging assignments.

### **OUR VISION:**

Our vision is to enhance our presence worldwide by being a premier technical training & industrial service provider with high industrial standards, professional services focusing on customer satisfaction.

# **OUR QUALITY POLICY:**

Our policy is understand the needs of the customer and delivers the training and services to the customer satisfaction level.

#### NON DESTRUCTIVE TESTING

Nondestructive testing is a wide group of analysis techniques used in science and technology industry to evaluate the properties of a material, component or system without causing damage



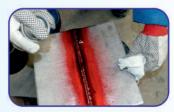
# Visual / Optical Testing (VT)

Visual inspection is one of the NDT methods used extensively to evaluate the condition or the quality of a weld or component. It is easily carried out, inexpensive and usually doesn't require special equipment. It requires good vision, good lighting and the knowledge of what to look for.



# PENETRANT TESTING (PT)

Apart from visual inspection this is probably the oldest and most widely used of all the NDT methods. It can be used on any non-porous material. Its use is confined to the detection of surface breaking defects.

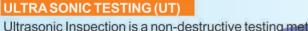


# MAGNETIC PARTICLE TESTING

Magnetic Particle Testing Magnetic particle inspection (MPI) is used for the detection of surface and near-surface flaws in ferromagnetic materials. A magnetic field is applied to the specimen, using a permanent magnet (or ) electromagnet to detect imperfections in material, using the following yokes and prods.



i) AC Yoke iii) AC | DC Yoke iii) Prod



Ultrasonic Inspection is a non-destructive testing method in which beams of high-frequency sound waves are introduced into materials for the detection of subsurface flaws in the material. the reflected beam is displayed and then analyzed to define the presence and location of flaws or discontinuities.





Ultrasonic thickness gauging is a widely used non destructive testing technique for measuring the thickness of a material from one side. It is fast, reliable, and versatile, and unlike a micrometer or calliper it requires access to only one side of the test piece. It will give very accurate results in terms of micrometer and, as per client requirements we can access the painted surfaces and cladding surfaces also.





### Radiography Testing (RT)

This technique involve the use of penetrating Gamma or X-radiation to examine parts and products for imperfections. An X-ray machine or radioactive isotope is used as a source of radiation. Radiation is directed through a part and onto film or other media. The resulting shadowgraph shows the internal soundness of the part. Possible imperfections are indicated as density variations in the film.



# Radiography Film Interpretation Services (RTFI

In addition to producing high quality radiographs, We are also providing Radiography Film Interpretation Services (RTFI) for clients as per their requirements, we also supply well experienced RTFI Manpower to clients, Interpretation of radiographs takes place in three basic steps: (1) detection, (2) interpretation, and (3) evaluation. All of these steps make use of the radiographer's visual acuity. Visual acuity is the ability to resolve a spatial pattern in an image.



#### **EDDY CURRENT TESTING (ET)**

TUUV provides complete Heat Exchanger inspection solutions for various tube materials by following methods.

- Eddy Current Testing (ET) for Non-Ferromagnetic Tubes.
- IRIS (Internal Rotary Inspection System) Any material for accurate wall thickness.
- Magnetic Flux Leakage Testing (MFLT) for Ferromagnetic and Fin fan Coolers Tubes.
- Remote Field Eddy current Testing (RFT) For Ferromagnetic Tubes.



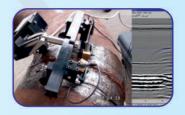
#### Phased Array Ultrasonic Testing (PAUT)

Ultrasonic Phased Array Ultrasonic Testing to inspect welds of process equipments, piping and structures. Ultrasonic phased arrays ( PAUT ) offer very reliable detection and sizing capabilities along with a permanent record of ultrasonic inspection.



### Time-of-flight diffraction (TOFD)

TUUV provides Ultrasonic TOFD to inspect welds of process vessels and piping. TOFD is a reliable and fast advancing ultrasonic technique with good sizing capabilities and higher inspection speed.



# POSITIVE MATERIAL IDENTIFICATION (PMI)

Positive Material Identification (PMI) is the identification and analysis of various metal alloys by their chemical composition through non-destructive methods. PMI can be conducted on-site or in the laboratory.

PMI helps our customers choose the right materials for their application from this
vast market.





#### **DESTRUCTIVE TESTING SERVICES**

Mechanical testing is done to determine the physical properties of metals. (Tensile, Yield and Elongation test, compressive test & bend test) Equipments used for these tests are Universal testing machine of 40 Tons capacity (400KN), Charpy and Izod test is a standardized high strain rate test which determines the amount of energy absorbed by a material during fracture and this absorbed energy is a measure of given materials notch toughness and acts as a tool study temperature dependent ductile-brittle transition and this test is used to



determine the ductility of a material (whether the fracture of material is brittle or ductile) and toughness of materials. (Charpy & Izod testing) is done at Room and Sub-zero temperature and in Hardness testing machine uses Rockwell & Digital hardness tester (HRC, HRB).

# **IMPACT TESTING**

Impact testing is used to determine material behavior at higher deformation speeds. Classical pendulum impact testers determine the impact energy absorbed by a standardized specimen up to break by measuring the height of rise of the pendulum hammer after impact.



# TENSILE TESTING

Tensile testing is one of the simplest and most widely used mechanical tests. By measuring the force required to

elongate a specimen to breaking point, material properties can be determined that will allow designers and quality managers to predict how materials and products will behave in their intended applications



# HARDNESS TESTING (HT)

Hardness is the resistance of a material to localized deformation. The term can apply to deformation from indentation, scratching, cutting or bending. In metals, ceramics and most polymers, the deformation considered is plastic deformation of the surface. We will provide all types of hardness measurements like

- i) Brinell Hardness Testing.
- ii) Rockwell Hardness Testing.





# **CHEMICAL ANALYSIS: (AAS, SPARK SPECTRO)**

We offer Chemical analysis using Optical emission spark spectrometer (Germany make), Atomic Absorption Spectrometer (AAS ECIL make) and wet analysis of ferrous and Non-ferrous metals







# Our facilities include servicing and calibration for following instruments

Mechanical Instruments Welding machine calibration Vernier Caliper / Micrometer Dial Gauges / Height Gauges Feeler Gauge Tensile / Compression Tester NDT machine calibration RPM Meter Anemometer Pressure and Vacuum Gauges Manometer BPApparatus Centrifuge Load Cell Push pull Gauges Torque Tester

# LIST OF EQUIPMENTS ULTRASONIC FLAW DETECTORS:

S NO	MODEL	MAKE	TYPE	DISPLAY	EQ. S NO
1	USM 35	GE	Digital	A-Scan	E4553-0513
2	Einstein TFT II	Mod sonic	Digital	A-Scan	E1120-0607
3	Einstein TFT II	Mod sonic	Digital	A-Scan	E3512-0216
4	DS 322	EECI	Digital	A-Scan	E1512-0315
5	USM 36	GE	Digital	A-Scan	19057551

# **RADIOGRAPHY PROJECTORS:**

S NO	MODEL	MAKE	ISOTOPE	SOURSE SIZE(mm)	CAPACITY
1	Roli-2	BARC, India	Ir-192	2.5X1.8	60 Ci
2	Roli-2	BARC, India	Ir-192	2.5X1.8	60 Ci
3	Roli-2	BARC, India	Ir-192	2.5X1.8	60 Ci

# **MAGNETIC PARTICLE TESTING**

S NO	MODEL	MAKE	TYPE	VOLTAGE RANGE	TOTAL QUANTITY
1	Parker	USA	AC/DC	220 Volts	2 No
2	Y-2	SIMS,India	AC/DC	220 Volts	3 No
3	Prod	SIMS, India	HWDC/AC	1500 Amps	1 No



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#### **ABOUT US**

RVS Globe is built on strong material inspection expertise, founded in 2010 by group of professionals to serve the industry. The company strictly follows good work culture and ethics in business.

RVS Globe values every client cares for the quality of their products and believes in strong customer relationship by providing dedicated, quick and timely services. Understanding the strict process and delivery schedules of the client our team relentlessly strives to complete every project in time.

RVS Globe is an adaptable NDT service provider, capable of addressing a variety of Non-Destructive Testing demands worldwide. The Company has established itself as a high-tech lab specializing, research and developments in the area of Non Destructive Testing at Ameerpet (Hyderabad) with highly equipped laboratory.

RVS Globe NDT Provides all the Major Nondestructive testing methods like Visual Testing(VT), Radiography testing (RT), Ultra Sonic Test(UT), Magnetic Particle Test (MT), Penetrant Test (PT), Visual Test (VT) Eddy-current Testing (ET) Time of Flight Diffraction Ultrasonic testing (TOFD), Phased Array Ultrasonic Testing (PAUT) of welds As per SNT-TC-1A (&) EN 473 & ISO 9712.

RVS Globe develop Quality importance in order to produce and ensure the level of Quality with international standards to make the product life longer and to establish a good market value. To provide good quality services and training to the professionals to make them more competent and confident in delivering their responsibilities in the level of quality expected

#### ASNT LEVEL II & III TRAINING & CERTIFICATIONS (Online & Offline)

We provide ASNT Level II & Level II Training and Certification & Level III Training to internationally recognized certification scheme and employer based scheme as per ASNT SNT –TC-1A & ANSI/ASNT CP-189, With our well experienced and qualified ASNT Level III persons, We also provide in-house NDT Training tailored to meet client requirements, in the following methods.

### CONVENTIONAL NDT TRAINING

- Radiography Testing (RT)
- Ultrasonic Testing (UT)
- Magnetic Particle Testing (MPT)
- ◆ Liquid Penetrate Testing (LPT)
- Visual Testing (VT)
- UT of TKY Joints
- Radiographic Film Interpretation (RTFI)
- Ultrasonic Thickness Gauging (UTG)

# **ADVANCED NDT TRAINING**

- Phased Array Ultrasonic Testing (PAUT)
- Time-of-flight diffraction (TOFD)
- Eddy Current testing (ET)
- Aerospace NDT (NAS- 410)

#### **CONSULTANCY SERVICES**

**NDT Level III Services** 

**Third Party Inspection** 

Welder Qualification Test (WQT), WPS, PQR preparations as per International Standards

**Hydro Pressure Test** 

**Manpower Recruitment** 

- NDT Level III Consulting Services Selection of right nondestructive testing methods and techniques suitable for the
  application.
- Preparation of written practices as per ASNT Recommended practice SNT-TC-1A.
- Training and certification of personnel as per employer's written practice.
- Preparation of procedures based on International, National or in-house Codes, Standards and specifications to meet customer requirements. Procedure preparation for Advanced NDT methods such as Magnetic Particle Testing (MPT), Ultrasonic testing (UT), Liquid Penetrant Testing(PT), Radiographic Testing, Positive Material Identification (PMI) and Hardness Testing. Review of procedures based on International, National or in-house Standards & Specifications.

# SETTING UP NEW NDT FACILITIES AT CUSTOMER LOCATIONS

With in-house experienced NDT level III's RVS Globe NDT DIVISION can help you in setting up new facilities and can assist you in the following:-

- Study of methods and techniques suitable for the components as per applicable codes, standards and specifications or client requirements.
- ◆ Feasibility study in selecting the right equipments suitable for the application
- Purchasing appropriate equipment for use at competitive price.
- Inspection and commissioning of equipments.



# **RVS Quality Certifications Pvt. Ltd.**

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