



Esteem APV Inspection Services Sdn. Bhd.

Provides highly qualified and experienced non-destructive testing technicians to a wide range of companies throughout the World, including sectors such as aerospace, power generation - both nuclear and conventional, oil & gas, petrochemical, general engineering/fabrication, marine, motorsport and transport.

In addition to all general forms of non-destructive testing we also provide technicians skilled in more specialist disciplines such as tube testing and digital radiography. Level III personnel are also able to provide non-destructive testing consultancy and audit support.

Our team includes specialists coming from diverse academic backgrounds and having a broad set of skills and solid experience. Each of the Esteem APV Inspection Services members is a well-motivated and organized worker being able to bring talent and creativity to the company

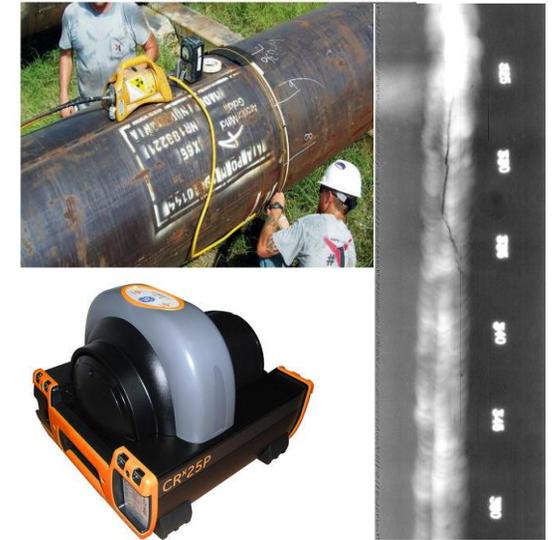
Our Mission

Esteem APV is committed to provide the most reliable, consistent and accurate professional services, and cost effective Non-destructive Testing, and Inspection services to the oil, gas, petrochemical, pipelines, power plants, desalination plants, construction and heavy fabrication sectors.

Our Vision

To become the number one provider of best inspection, testing services to the industries in Malaysia and ultimately beyond the borders. Also to achieve and maintain the highest level of customer confidence and satisfaction.





Ultrasonic Testing

Ultrasonic testing (UT) is the collective term for a variety of non-destructive testing techniques that use ultrasonic sound waves in materials to detect flaws or make accurate thickness measurements. Ultrasonic Testing - Pulse-echo (Angle Beam Shear wave & Normal beam longitudinal wave)

Typical inspections include Weld inspection both Structural and Piping, components, castings, forgings and welded fabrications.

Ultrasonic Thickness Gauge

The usage of an ultrasonic thickness gauge (UTG) for non-destructive testing to check material properties such as thickness measurement, is now regularly utilized in all areas of industrial measurements.

Penetrant Testing

Dye penetrant testing (also known as liquid penetrant inspection) is a non-destructive testing method for detecting surface-breaking flaws such as cracks, corrosion, porosity, laps and bursts in a variety of non-porous materials including metals, ceramics and plastics.

Magnetic Particle Testing

Magnetic particle inspection (MPI) processes are non-destructive methods for the detection of surface, near-surface and sub-surface defects and flaws in ferrous and ferromagnetic materials.

Radiographic Testing

The radiographic testing (RT) technique involves the use of penetrating gamma or X-radiation to examine parts, welds and products for imperfections. An X-ray machine or radioactive isotope are used as a source of radiation, where the radiation is directed through a part and onto film.

Computed Radiography Testing

Computed radiography (CR) uses very similar equipment to conventional radiography except that in place of a film to create the image, an imaging plate (IP) made of photostimulable phosphor is used.



Visual Inspection

Visual Inspection of Welds can be performed using limited equipment; usually a welding gauge or fillet gauge and a torch, with photographic images if requested. Visual inspection, with or without optical aids, is the original method of NDT. Many defects are surface-breaking and can be detected by careful direct visual inspection

An industrial video scope is a flexible inspection tool used to remotely inspect areas that are not otherwise visible, Cameras are typically used for image reproduction

Hardness Testing

Hardness is a measure of how resistant solid matter is to various kinds of permanent shape change when a compressive force is applied. When using a fixed force load and a given indenter, the smaller the indentation, the harder the material.

Positive Material Identification Testing

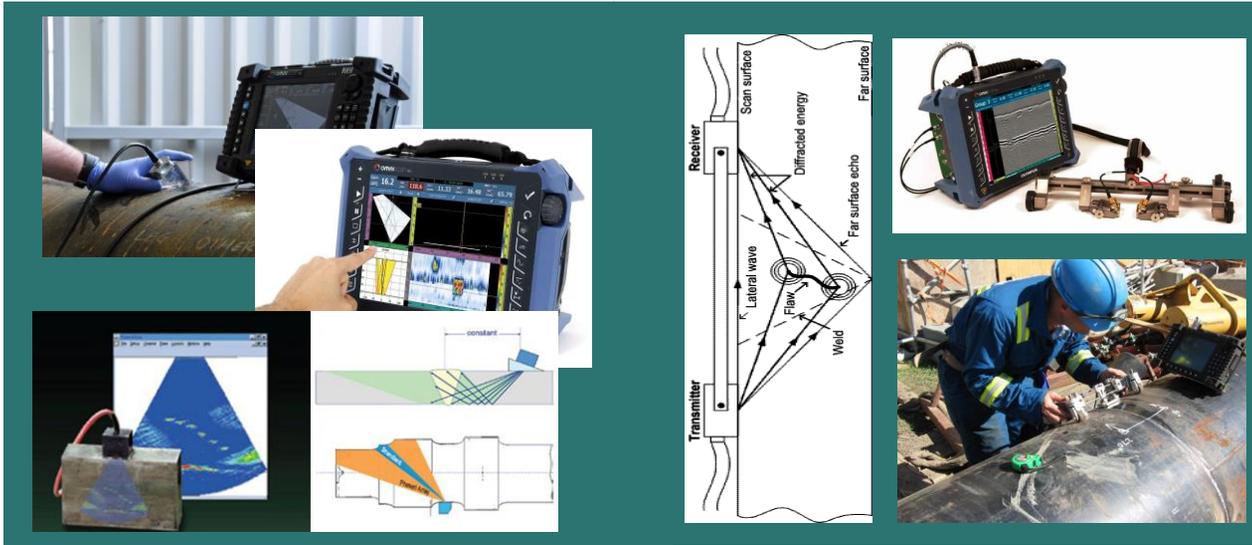
Positive Material Identification (PMI) is the analysis of a metallic alloy to establish composition by reading the quantities by percentage of its constituent elements. Typical methods for PMI include X-ray fluorescence (XRF) and optical emission spectrometry (OES).



Eddy Current Testing

Eddy Current testing is one of several NDT methods that uses the principal of “electromagnetism” as the basis for conducting examinations.

Eddy currents are created through a process called electromagnetic induction. When an alternating current is applied to the conductor, such as copper wire, a magnetic field develops in and around the conductor. This magnetic field expands as the alternating current rises to maximum and collapses as the current is reduced to zero. If another electrical conductor is brought into the close proximity to this changing magnetic field, current will be induced in this second conductor. Eddy currents are induced electrical currents that flow in a circular path.



Phased Array Ultrasonic Testing (PAUT)

Phased array ultrasonic systems utilize multi-element probes, which are individually excited under computer control. By exciting each element in a controlled manner, a focused beam of ultrasound can be generated. Software enables the beam to be steered. Two and three dimensional views can be generated showing the sizes and locations of any flaws detected.

Phased array can be used for Inspection of Welds, Thickness measurements, Corrosion inspection and Flaw detection.

Time of Flight Diffraction Testing (TOFD)

In TOFD systems, a pair of ultrasonic probes are used, sitting on opposite sides of a weld-joint or area of interest. A transmitter probe emits an ultrasonic pulse which is picked up by the receiver probe on the opposite side. In an undamaged part, the signals picked up by the receiver probe are from two waves: one that travels along the surface and one that reflects off the far wall. When a discontinuity such as a crack is present, there is a diffraction of the ultrasonic sound wave from the top and bottom tips of the crack. The depth of the crack tips can be calculated automatically by trigonometry application. This method is even more reliable than traditional radiographic, pulse echo manual UT and automated UT weld testing methods.



Contact Us

Esteem APV Inspection Services Sdn Bhd
 No: 2-13A,
 Glomac Centro,
 Jalan Teratai PJU 6A,
 47400, Petaling Jaya,
 Selangor, Malaysia.
 Phone No :+60-37499 7279
 Email: admin@esteemapv.com

www.esteemapv.com