

Magnetic Particle inspection

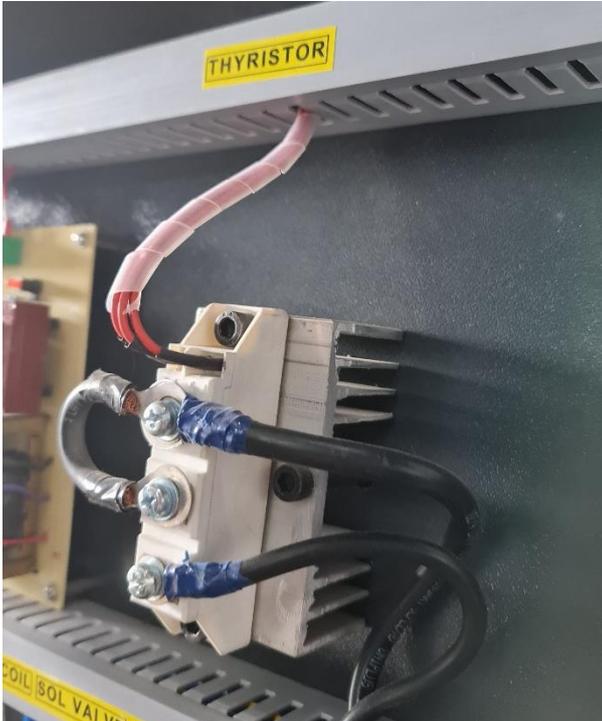
Equipment Features

- All Equipment are designed to meet the requirements of **ASTM – E 1444** and **NADCAP**



- Superior **Stainless Steel (SS 301)** Bath tank & Main Tank design allows operator to use both **Oil based and water-based systems**

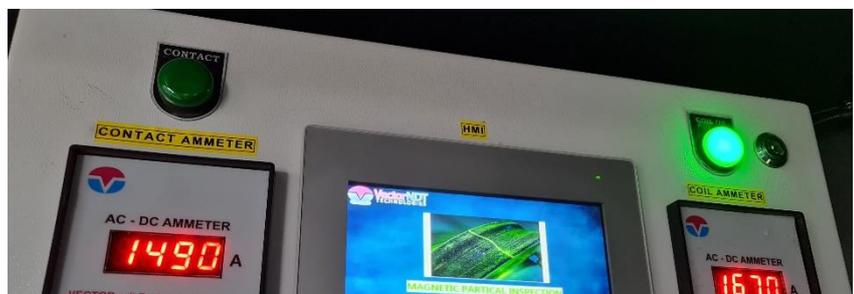
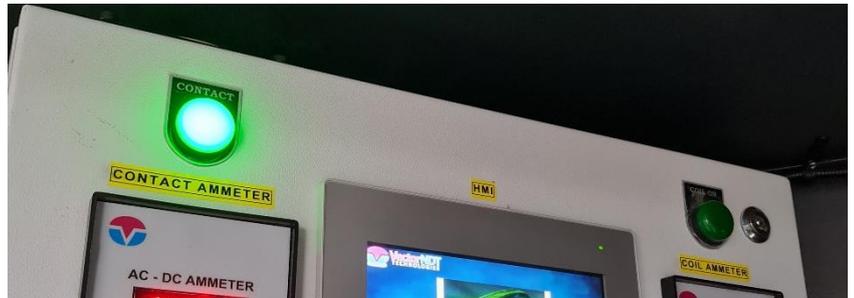




Thyristorized current control – stepless control with Feedback system – Ensures delivery of set currents within the range of $\pm 10\%$ with an alert to the operator

Current Flow assurance Indicator

Visual & Audio



Superior Transformer design

with F class Insulation



6.2.4 Magnetizing Current Application— Alternating current is to be used only for the detection of defects open to the surface. Full-wave rectified alternating current has the deepest possible penetration and must be used for inspection for defects below the surface when using the wet magnetic particle method. Half-wave rectified alternating current is advantageous for the dry powder method because it creates a pulsating



E 1444

AC / FWDC output current (for 3000 Amps and Above) machines.

Refer ASTM -E 1444 . 6.2.4 FWDC is recommended to be used when inspecting with **wet continuous method** of Magnetic Particle Inspection





Bath Pump with controlled agitation system

Ensures the safety of the Fluorescent Particles from getting damaged there by creating loose pigments which will interfere in quality of inspection and lesser life

Superior Pneumatic cylinders

Brand - SMC or FESTO





In house Fabrication and testing of all welds using Liquid Penetrant Inspection (LPI)

MS Powder coated Inspection Hood –

**Protects from Fire hazards and better aesthetic
look**





Digital Ammeters with memory retention – will retain the reading till the next magnetizing shot

HMI controls with large screen

- Optional





Low Air Pressure alarm



Bath Level indicator & alarm



Transformer Overload Protection & alarm



Optional Features



New age Multi Directional Machine – Optional



New age Multi Directional Machine – Optional

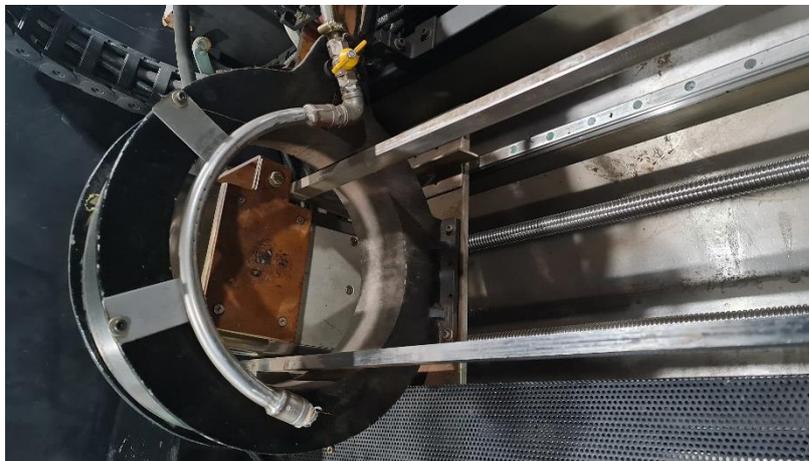


- **3 Phase output** machines exclusively for Aerospace Industry with Reversing DC Demag and Quick break circuit

Optional Servo driven Tail stock for automatic length adjustment



Optional Servo driven Magnetizing Coil for automatic multiple coil shots

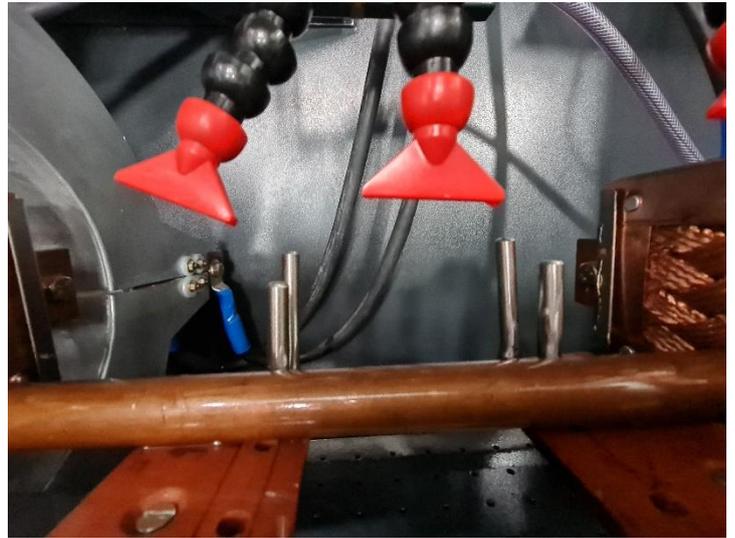


Optional Flux- Flo coils

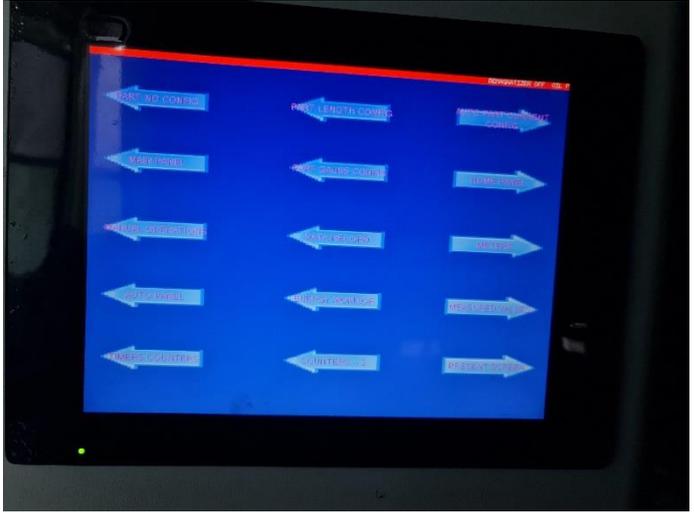
Cable Drag Chains for better life of Magnetizing cables



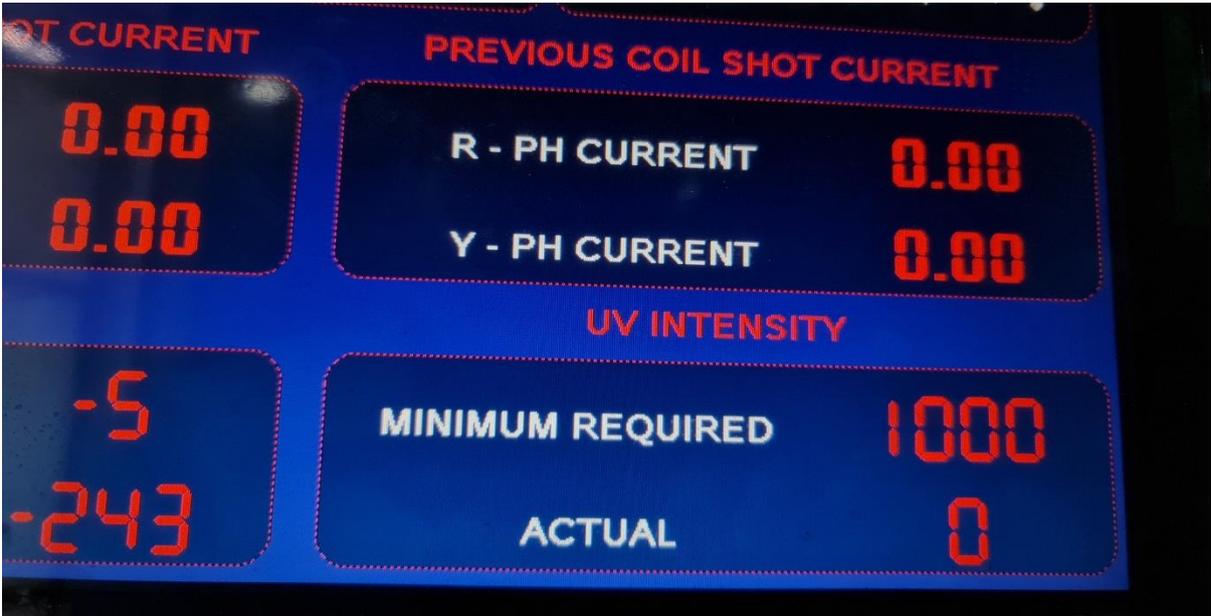
Custom designed Fixturing for any Component –



Data , recording logging and recall with optional connectivity to internet



Automatic Black Light Intensity monitoring – optional



- Interlocking for set current assurance
- Interlock for Demagnetization sequence
- Dark adaptation timer – to protect eyes from dark adaptation
- MPI Power Packs with rugged design from 2000 to 20,000 Amps
- Multidirectional Power Packs

