

SYSTEM 3 TVC

Three magnetisation modes in one field-proven subsea MPI unit

The System 3 is a field-proven subsea MPI unit with an impressive track record.

Three modes of magnetisation are available with total control from the stainless steel housed topside unit. Offering complete flexibility, AC or HWDC magnetisation can be selected.

The in-built safety features, including earth leakage trips and surface isolation transformer, give the operator peace of mind when using the System 3 in the most arduous conditions.



Key Features

- Three magnetising techniques: Prod, Yoke and Coil
- Demagnetising function
- AC and HWDC magnetising
- 10L quick-release ink reservoir
- Continuous ink agitation
- Operates from 110, 220, 380 or 440V AC power supplies
- Available with high-quality subsea umbilical lengths of up to 300M as standard
- Stainless steel umbilical hand-winch
- Powerful UV Lamp has a 6M combined ink delivery and power umbilical
- Safe 12V DC power source
- Conforms to National and International standards
- Full calibration certification provided, traceable to The National Physical Laboratory (NPL), UK.



Various inks and consumables are available for use with all TVC MPI equipment; see overleaf for further details.

MPI CONSUMABLES

TVC can supply various inks and consumables for use with all TVC ASAMS Subsea MPI equipment. For further information on other consumables and MPI inspection accessories, please visit our website or contact our office.

Mi-Glow® Circle Systems Inc.

Mi-Glow® Underwater 12 contains pre-mixed red particles and powered wetting agent for use in underwater inspection.

The fine to medium red particles in Underwater 12 can be used in visible light, UV light and blue light allowing them to detect a wider range of discontinuities.

Designed for use in a variety of underwater inspection applications including offshore structural welds, pipeline inspection, ship husbandry and to enhance underwater photography.

NEOASTRA D.G.C.U.W. Johnson & Allen

A fluorescent high-grade magnetic particle ink, NEOASTRA D.G.C.U.W. Is a water-based concentrate formulated to give defined indications.

Defects can be viewed using a UV light with a surface intensity exceeding $1000\mu\text{W}/\text{cm}^2$ Tests have confirmed defects can be viewed with up to 500 Lux of ambient light present, however, to comply with **BS EN ISO 9934-2:2015** levels must be restricted to 20 Lux.

NEOASTRA D.G.C.U.W. Is not classified as hazardous after dilution and is certified to meet the Sulphur and Halogen levels required by military, nuclear and ASME standards.

Lumor® J 40 (W) Chemetall

A liquid concentrate diluted directly into water, Lumor® J 40 (W) gives an aqueous fluorescent magnetic ink ideal for the MPI inspection of ferromagnetic materials, structures and components.

The concentrate incorporates a water treatment system suspending the magnetic particles to wet the surface being tested and also includes corrosion inhibitors which work during and after testing.

Used extensively in the automotive industry for the detection of grinding or heat treatment cracks as well as forging bursts, laps, porosity, inclusions and other discontinuities.

Indications appear brilliant yellow-green when viewed under UV light (peak wavelength 365nm).

Complies with **BS EN ISO 9934-2**, **ASME Boiler & Vessel Code**, **ASTM E 1444-05**, **SAE** and **AMS 3044**.

The Validation Centre (TVC) Limited reserves the right to alter or change product specifications without prior notice. Images are representative of full optional additions installed; delivered equipment and software may vary depending on options purchased.



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