

DATA SHEET

RISERS, FLEXIBLE RISERS, CAISSONS & CONDUCTORS INSPECTION

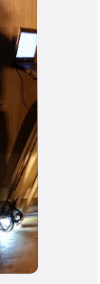
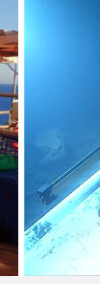
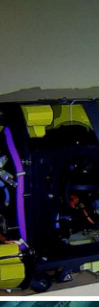
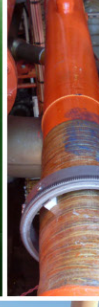
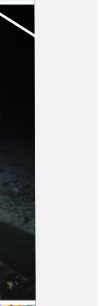
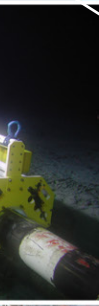
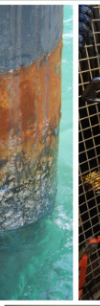
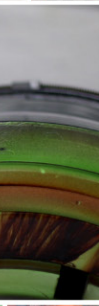
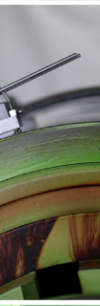
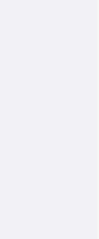
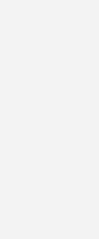
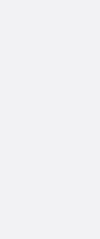
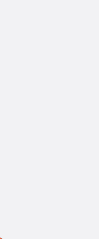
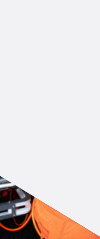
MEC™ - MPS200 SCANNER WITH INTEGRATED ULTRASONIC AND ADVANCED CLEANING SYSTEM

THE PURPOSE

This document is composed to assist our clients and the supply chain with a high-level understanding of the benefits and services associated with our Risers, Flexible Risers, Caissons & Conductors Inspection capabilities using the MEC™-MPS200 Scanner with Integrated Ultrasonic and Advanced Cleaning System.



SONOMATIC



RISERS, FLEXIBLE RISERS, CAISSONS AND CONDUCTORS INSPECTION

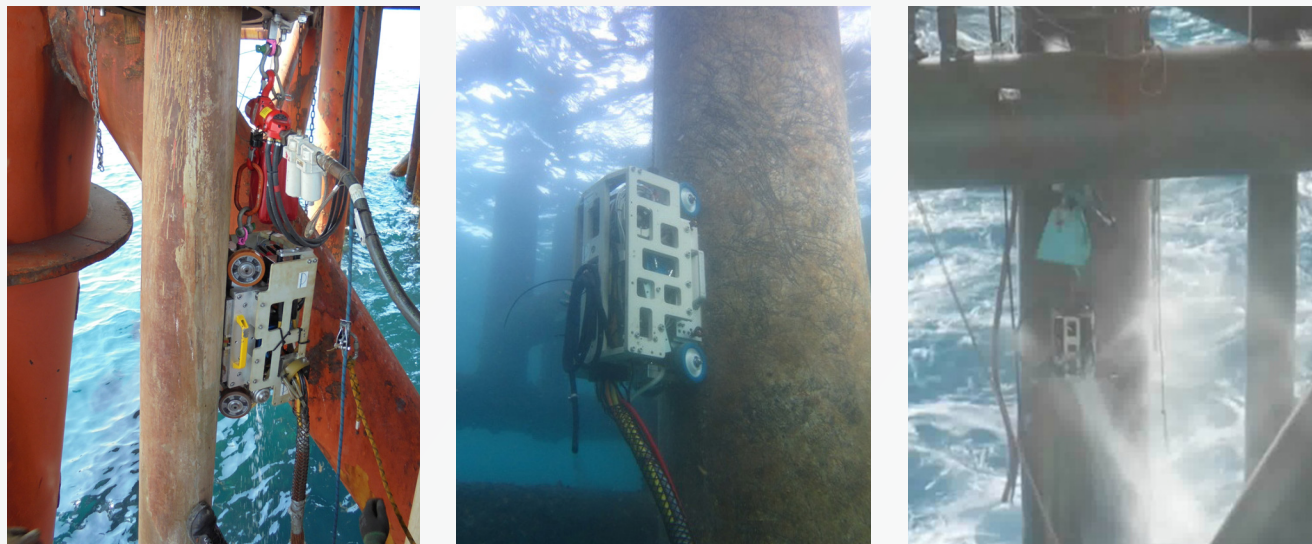
The marinised MEC™-MPS200+ Scanner from our Innospection division, supports the internal and external splash zone inspection of risers, caissons, conductors and structures with wall thickness up to 1" and through coating of up to 15mm Neoprene and 3mm Monel clad.

It is based on the next generation MEC™ (Magnetic Eddy Current) technique. By operating on high frequency magnetic field controlled Eddy Current with specially developed Eddy Current sensors, the MEC™ technique offers enhanced inspection capabilities including the detection and sizing of internal and external defects at higher wall thickness and coating range.

The MEC™-MPS200+ Scanner enables the integration of an Ultrasonic sensor array working in parallel to the Eddy Current sensors to provide additional information relevant to the asset integrity. It also allows the integration of an advanced cleaning system for the simultaneous removal of marine growth during the inspection operation.

The capabilities of MEC™-MPS200+ with integrated Ultrasonic and advanced cleaning system are:

- ✔ High sensitivity in the detection of internal and external corrosion and defects through higher wall thickness with the integrated UT sensor array.
- ✔ Smooth transition into the splash zone without a break in the continuity of remote controlled inspection.
- ✔ Ability to work at various subsea depths.

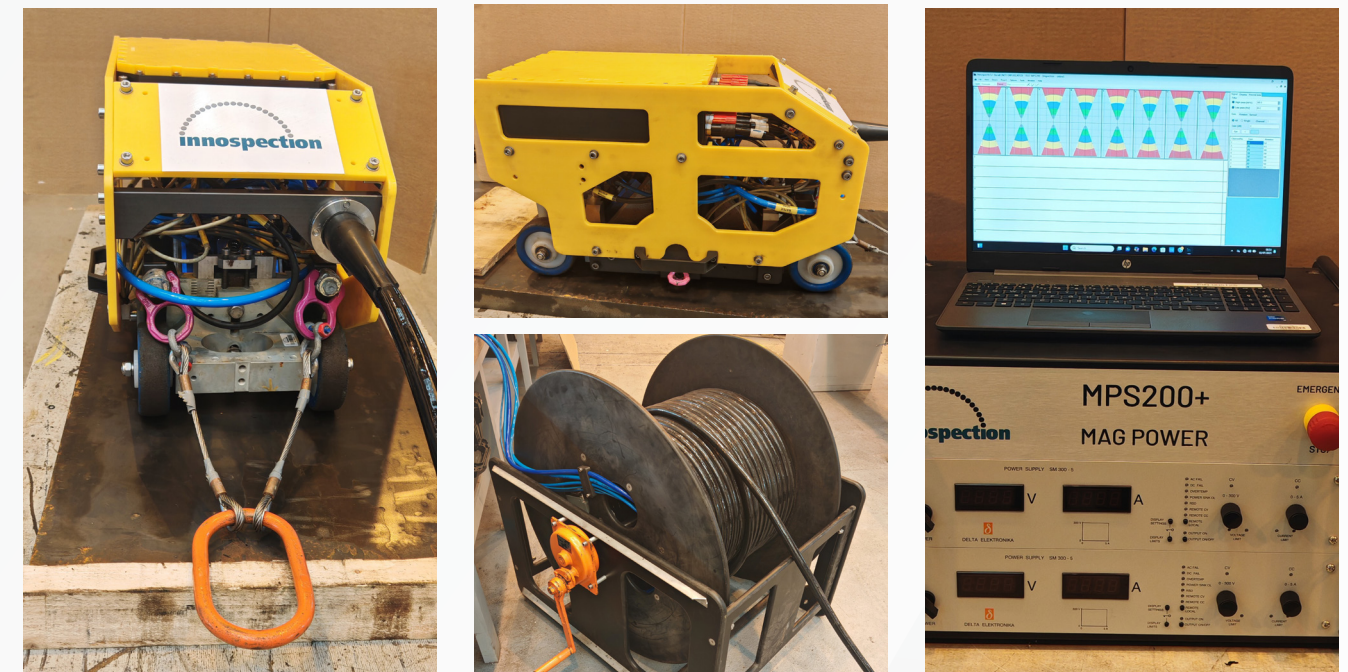


MEC™ - MPS200+ SCANNER

The marinised MEC™-MPS200+ Scanner enables the detection of internal and external corrosion and defects in risers, caissons, conductors and structures while scanning externally. A change-out of the curvature adaptation enables the MEC™-MPS200+ Scanner to be used for internal inspection.

Its subsea deployment is flexible as it can be operated from the installations, driving downwards along the risers, caissons and conductors. The scanning is performed at a high speed of approx. 10-15m/min.

The signal data is converted to ethernet within the tool electronics pod and transferred in real time via the new light weight umbilical to the inspection computer located on the support vessel or on the installation to provide instantaneous inspection results. The advanced reporting software utilises a combination of comprehensive C-Scan mapping of the internal and external wall condition, individual defect sizing analysis as well as matrix data to provide reliable information about remaining wall thickness, thus forming a robust basis for asset integrity assessment.



TECHINCAL SPECIFICATIONS

External Deployment	
From Installation	By rope access support, running through the splash zone
Subsea Deployment	Only where required - supported by diver (ROV on request)
Capabilities	
Wall Thickness Range	Up to 25.4mm (1")
Coating Thickness Range	Up to 15mm
Diameter Range	6" to flat
Depth Threshold for Detection	Defects ≥ 10% WT wall loss (external or internal)
Defect Detection	Smallest calibration defect detection setup; From 3 - 5mm diameter at depth threshold of 20% WT for far side wall defects
Accuracy	± 5% - 10% of nominal wall thickness
Defect Separation	External from internal defects with separate external / internal mapping report
Dimensions	
Depth Rating	100 metre water depth (deeper rating on request)
Weight	80kg in air, approx.
Sizes (L x W x H)	660mm x 350mm x 410mm
Sensors (MEC™)	8 sensors in circumference with 180mm scan width
Sensors (UT) - Optional	Multiple UT Sensor Array 8 or 16 UT channels operating at 3 or 5 MHz
Magnetisation Unit	Electromagnet
Camera	2x IP Cameras plus 2 x LED Lights
Umbilical	Via standard Hand winch - 70 metre (longer length on request)
Access Requirements	
Required Clearance	Dependent on the tool setup; 500mm of external space is required to allow for axial scanning
Coating	Coating is not required to be removed for the inspection
Marine Growth	Heavy marine growth is required to be cleaned off. Offered by Sonomatic either with separate or integrated advanced cleaning system.
Reporting	
Reporting Software	InnospectIT Software - Version 5.2. Recorded inspection data in high resolution d-base format is transferred by data logger.

QA AND HS&E

Sonomatic operate under an integrated QHSE management system and are committed to the highest quality and safety of service provision | ISO 9001: 2015: 00007140 | ISO 14001:2015:00037371 | ISO 45001:2018:00037372 | ISO 17020: 2012: 4276 | Achilles FPAL Verified: 076712 | SEQual 1988 | British Safety Council Member: S0388440 |



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