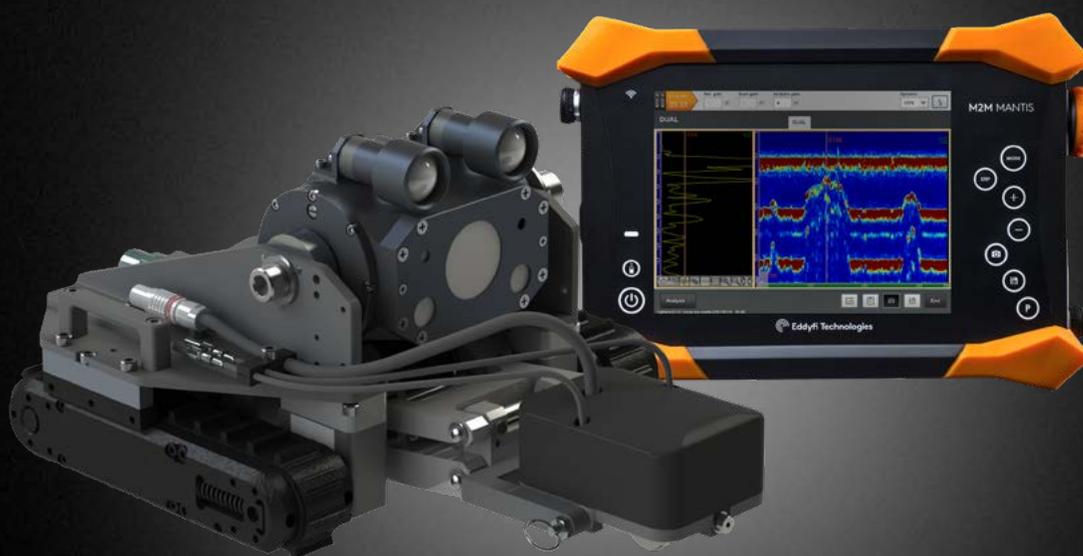


# Magg™ with Dry-Coupled UT

Remote Visual Inspection and Ultrasonic Testing for Corrosion Assessment



# A WORKING TEAM THAT WILL GO THE DISTANCE

The Magg™ with R-Scan UT allows for inspection in hard-to-reach areas most efficiently, without jeopardizing the operator's safety.

## Ultrasonic Testing (UT) and Remote Visual Inspection (RVI)

The R-Scan package allows for the collection of UT wall thickness measurements up to a distance of 30m (100ft), making the RVI-capable Magg a unique and versatile inspection solution.

UT thickness measurements are collected every 1mm (0.04in) and displayed to the operator in real-time as a B-scan, A-scan trace, and thickness measurements. Compared to traditional spot readings, the R-Scan delivers a much higher Probability of Detection (PoD) with a reliable, recorded, and auditable data set and all from a safe location.

The Magg can be used as part of a regular maintenance and monitoring operation or to troubleshoot a problem quickly in an emergency.

## Ultimate Magnetic Crawler with intuitive controls for easy operation

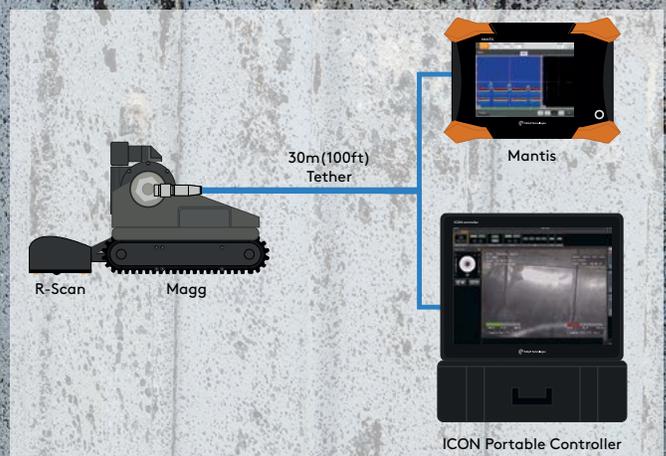
The Magg is a proven and reliable remote inspection crawler system designed to withstand harsh conditions and industrial environments.

With its industry-leading tracks, the Magg can quickly and easily navigate critical restricted access areas, whether the surface is clean or close to unpracticable. The unique combination of raw power, agility, and magnetic downforce allows the Magg to accomplish inspections that most wheeled vehicles and crawlers could not.

Any owner or service provider required to perform UT or RVI in confined spaces with limited access needs to add the Magg as an essential part of their NDT toolkit.

### Applications

- Storage tanks
- Pressure vessels
- Confined space
- Marine vessels
- Offshore platforms
- Large diameter pipelines
- Water tower
- Wind turbine



# MAKING THE MOST OUT OF YOUR EQUIPMENT

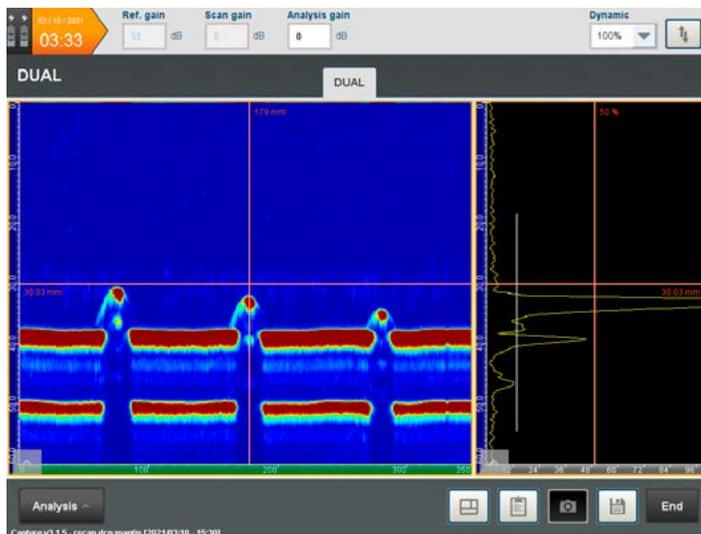
Combining field-proven solutions to overcome the most challenging applications.

## R-Scan with dry-coupled ultrasonic probe

Designed to be used in remote locations and harsh petrochemical environments, the R-Scan utilizes a unique dry-coupled ultrasonic (UT) wheel probe, eliminating the need for couplant or constant water supply, making it the ideal partner for the Magg.

The probe, a dual crystal 5MHz ultrasonic transducer with a unique rolling probe face, can measure material thickness ranging from 2.5mm up to 100mm (0.1in up to 4in).

The R-Scan scanning head is fitted with an encoder to provide accurate positioning information during an inspection. Magnetic wheels assist when scanning vertically or if inverted by minimizing the possibility of encoder slippage.



## Rugged inspection camera

The fully integrated HD continuous tilt camera allows incredible details and clarity. Whether you're close, far, underwater, or in a dark tank, the image will provide you with an astounding amount of detail.

The ICON™ software records all the RVI data. Operators can easily take a snapshot of any areas of interest and then correlate it with the sensor data collected from the vehicle-mounted UT probe.

The Magg comes with auxiliary lighting, lasers, 10x optical zoom, and much more. From top to bottom, the system has been uniquely optimized to allow a clear image streamed in a matter of milliseconds, allowing real-time decision-making.



## Mantis™ ultrasonic instrument

Made for the field, the Mantis is one of the most robust and reliable industrial ultrasonic instruments ever produced by Eddyfi Technologies, thanks to careful consideration of the highly durable materials chosen.

Mantis not only offers conventional UT but more advanced PAUT, ToFD and TFM all through its streamlined user interface, Capture™. With three different models, Mantis addresses both general and advanced applications without compromising productivity.

## Robotic NDT solutions

Eddyfi Technologies offers a range of standard, off-the-shelf, proven robotic NDT solutions to inspect critical components in difficult to reach locations or confined spaces, reducing the risks to inspection personnel.

The Magg was built around a multi-mission modular approach that enables the delivery of multiple NDT techniques on top of general visual inspection, including Ultrasonics (UT), alternating current field measurement (ACFM), and more.

Talk to our experts to discuss which robotic crawler is best suited for your application.

# SPECIFICATIONS

## WHATS INCLUDED

Crawler	Magg™ 310 Enabled
Crawler controller	ICON controller (IPC) with ICON software
Tether/Cable length	Crawler: 100m (330ft)/Probe: 30m (100ft)
UT instrument	Mantis 16:64PR with Capture software
UT probe	R-Scan UT for the Magg

## MAGG 310

Dimensions (W x H x D)	310 x 295 x 200mm (12.2 x 11.6 x 7.9in)
Weight/Vertical Payload (tether + load)	10.9Kg (24lb)/14kg (31lb)*
Maximum scan speed	3.6m (11.8ft) per minute
Tether length	100m (330ft)
Depth Rating	60m (without the probe)
Camera	160° pan, FHD, 10x opt. zoom, 12x dig. zoom
Lighting	LED auxiliary lighting
Mounting	Universal actuator

## ICON PORTABLE CONTROLLER

Dimensions (W x H x D)	620 x 492 x 223mm (24.4 x 19.4 x 8.78in)
Weight	24kg (53lbs)
Operating power	Input: 100-240VAC, 50/60Hz Output: 70VDC, 450W Max
Computer	i7-8650U, 16Gb DDR4+2666, 500Gb SSD
I/O	1x USB 3.0 1x USB 2.0 Gigabit Ethernet 1x HDMI auxiliary video and RS485 1x Tether connector
Display	17,3" touchscreen FHD, 1000 nits
Position	Track mount encoder
Control	Remote Controller Mouse/Keyboard

\*Actual payload is affected by surface condition and magnetic property of the surface

## R-SCAN

Dimensions (W x H x D)	65 x 54 x 122mm (2.5 x 2.1 x 4.8in)
Adhesion	Magnetic wheels and Magg or hand pressure
Transducer	5MHz twin element dry-coupled
Near-surface resolution	2.5mm (0.1in)
Material thickness range	2.5mm (0.1in) - 100mm (4in)

## MANTIS

Dimensions (W x H x D)	311 x 220 x 86mm (12.2 x 8.7 x 3.4in)
Weight (with battery)	3.7kg (8lb)
Display	8.4" high contrast resistive screen
Resolution	1024 x 768 px
Operating time	4h (hot-swappable battery)
IP rating	IP65
Storage	SSD, 128 GB
Drop-test	According to MIL-STD-810G

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