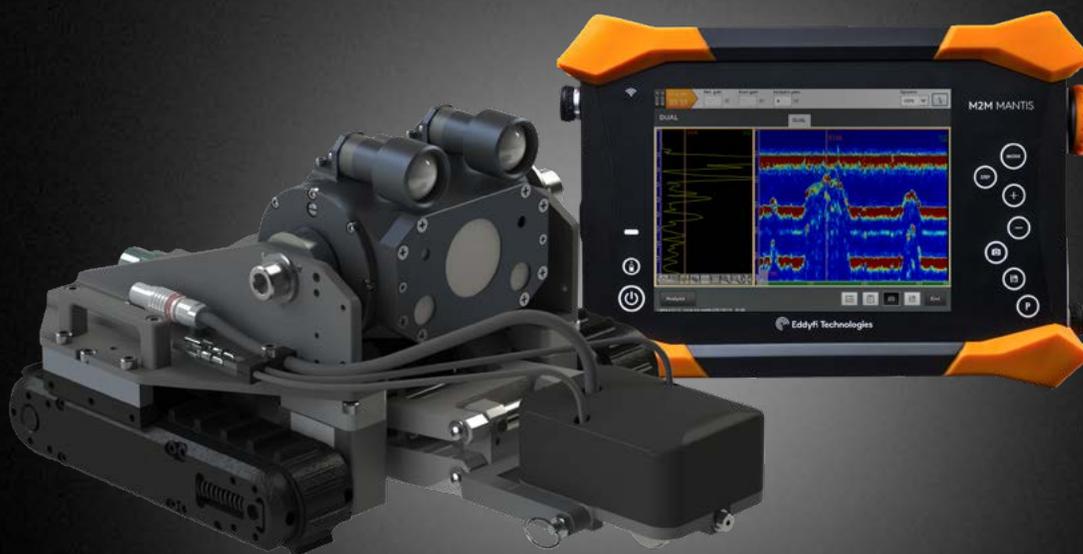


# VersaTrax™

NDT

Remote Visual Inspection and Dry-Coupled Ultrasonic Testing for  
Corrosion Assessment



# A WORKING TEAM THAT WILL GO THE DISTANCE

The VersaTrax™ NDT with R-Scan allows for UT 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 magnetic crawler 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 VersaTrax 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

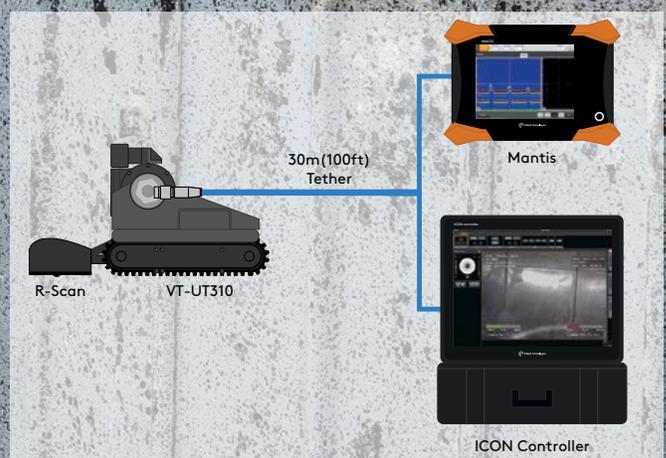
The VersaTrax is a proven and reliable remote inspection crawler system designed to withstand harsh conditions and industrial environments.

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

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

### Applications

- Storage tanks
- Pressure vessels
- Confined space
- Marine vessels
- Offshore platforms
- Large diameter pipelines
- Water towers
- Wind turbines



# MAKING THE MOST OUT OF YOUR EQUIPMENT

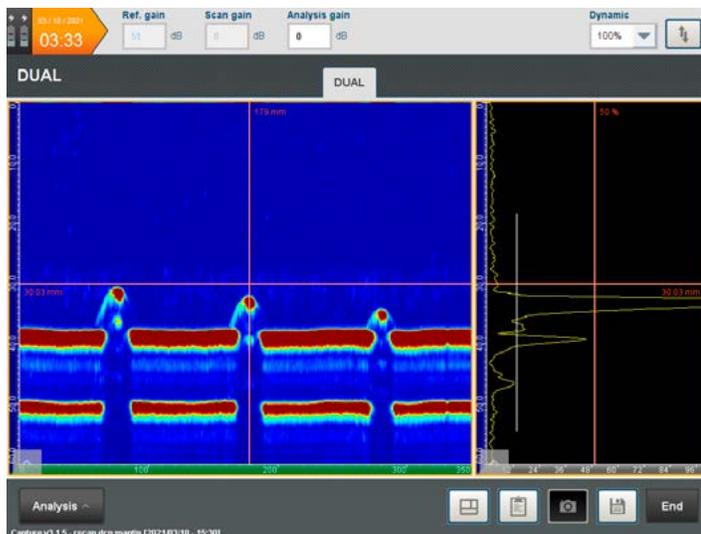
Combining field-proven solutions to overcome the most challenging applications.

## 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 VersaTrax.

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.



## 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.

## 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 VersaTrax 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.



## 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 VersaTrax was built around a multi-mission modular approach that enables the delivery of multiple NDT techniques on top of general visual inspection, including ultrasonics, alternating current field measurement, and more.

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

# SPECIFICATIONS

## WHATS INCLUDED

Crawler	VersaTrax NDT
Crawler controller	IC500 portable controller with ICON software Optional: IC100 in some applications with <30m tether
Tether/Cable length	Crawler: 100m (330ft)/Probe: 30m (100ft)
UT instrument	Mantis 16:64PR with Capture software
UT probe	R-Scan UT for VT-UT310

## VT-UT310

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° tilt, FHD, 10x opt. zoom, 12x dig. zoom
Lighting	LED auxiliary lighting
Mounting	Eddyfi Universal Crawler Mount

## ICON CONTROLLER

Dimensions (W x H x D)	620 x 492 x 223mm (24.4 x 19.4 x 8.78in)
Weight	24kg (53lb)
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	17.3in touchscreen FHD, 1000 nits
Encoder	Track mounted option
Control	Touch screen or Remote handheld controller

\*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 VT-UT310 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	8.4in 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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# VersaTrax™

## NDT

Remote Visual Inspection and Tangential Eddy Current Array  
for Weld Assessment



# GOING THE DISTANCE FOR WELD INSPECTION

The VersaTrax™ NDT with Sharck TECA™ probe enables crack detection and sizing of critical carbon steel welds in hard-to-reach areas most efficiently, without jeopardizing the operator's safety.

## Tangential Eddy Current Array and Remote Visual Inspection

Based on the TECA™ technology, Sharck BW is optimized to detect and characterize fatigue cracks in butt welds.

It can detect cracks, measure their length, and size them precisely up to a depth of 7mm (0.28in). This is achieved without removing paint or protective coatings, unlike more conventional techniques. Combined with the VersaTrax crawler, it is now possible to inspect hard-to-reach areas without erecting scaffoldings or exposing rope access technicians to unnecessary hazards.

The innovative design of the patented Sharck™ probes can address the inspection needs of several industries relying heavily on carbon steel, such as the wind power, and structural industries.

## Ultimate magnetic crawler with intuitive controls for easy operation

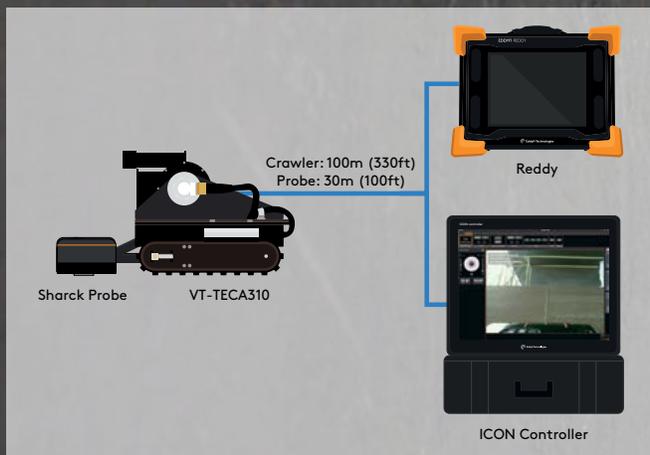
The VersaTrax is a proven and reliable remote inspection crawler system designed to withstand harsh conditions and industrial environments.

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

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

### Applications

- Storage Tanks
- Pressure Vessels
- Pipelines
- Water Towers
- Wind Turbines
- Confined Spaces



# MAKING THE MOST OUT OF YOUR EQUIPMENT

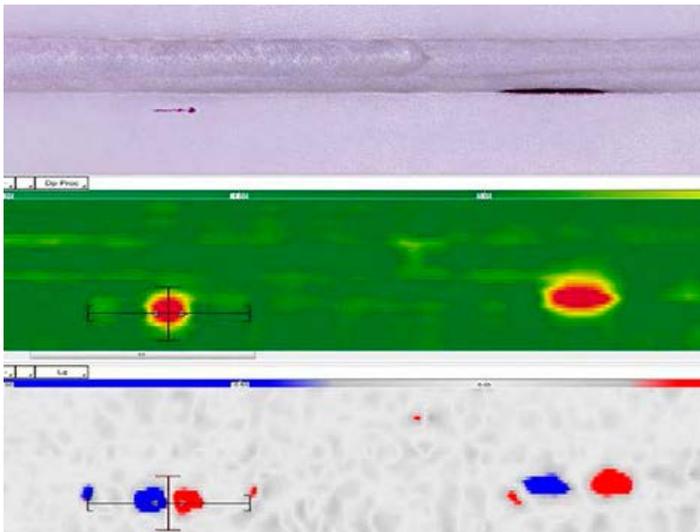
Combining field-proven solutions to overcome the most challenging applications.

## Faster inspections of butt welds

With its 22 spring-loaded ceramic sensors covering a total scan width of 53mm (2.1in), the Sharck™ probe can scan flat or curved surfaces and complete a full butt welds inspection, including the cap, toe, and heat-affected zone in one pass.

Traditional pancake coil axes are perpendicular to the surface under test. TECA, on the other hand, uses tangential coils positioned on their sides, their central axes parallel to the surface under test. Eddy currents also flow parallel to the surface, making them capable of “diving” under cracks.

Its durable and rugged design allows for more reliable, repeatable, and operator-independent data unequaled by any other NDT method.



## Reddy instrument

Reddy is a touch screen self-contained unit incorporating electronics and storage in one rugged enclosure. The multi-touch interface and quick access buttons offer highly intuitive access to all software functions.

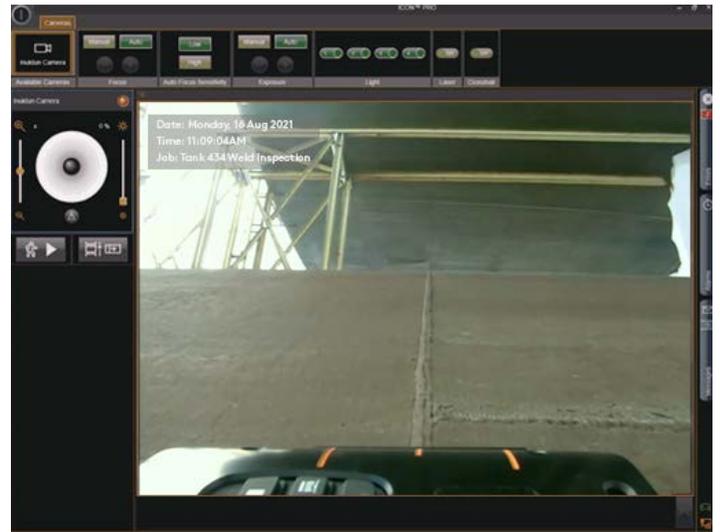
Reddy's embedded software Magnifi GO provides a real-time color map of the inspected area, making data analysis such as measurement and depth sizing of crack indications highly intuitive and easy. With assisted analysis tools and advanced reporting capability, Magnifi GO can generate a complete report on-site with minimal training.

## 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 Sharck probe.

The VersaTrax 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.



## 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 VersaTrax was built around a multi-mission modular approach that enables the delivery of multiple NDT techniques on top of general visual inspection, including ultrasonics, alternating current field measurement, tangential eddy current array, and more.

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

# SPECIFICATIONS

## WHATS INCLUDED

Crawler	VersaTrax NDT
Crawler controller	IC500 portable controller with ICON software Optional: IC100 in some applications with <30m tether
Tether/Cable length	Crawler: 100m (330ft)/Probe: 30m (100ft)
ECA instrument	Reddy with Magnifi software
ECA probe	Sharck BW

## VT-TECA310

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	Eddyfi Universal Crawler Mount

## ICON CONTROLLER

Dimensions (W x H x D)	620 x 492 x 223mm (24.4 x 19.4 x 8.78in)
Weight	24kg (53lb)
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	17.3in touchscreen FHD, 1000 nits
Encoder	Track mounted option
Control	Touch screen or Remote handheld controller

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

## ECA PROBE

Type	Sharck™ BW (22 sensors)
Coverage	Up to 53 mm (2 in)
Maximum scan speed	200 mm/s (8 in/s)
Cable length	30m (100ft) longer options available
IP rating	Designed for IP65

## REDDY

Dimensions (W x H x D)	355 x 288 x 127mm (14.0 x 11.3 x 5.0in)	
Weight (with battery)	6.6 kg (14.5 lb)	
Batteries	Type	Li-ion, rechargeable, DOT compliant
	Typical life	6-8 hours
Display	26.4 cm (10.4 in) Non-reflective (AR coating) Anti-fingerprint (oleophobic coating) 3 mm (1/8 in), chemically strengthened glass Optically bonded LCD and touchscreen Passive backlight enhancement	
IP rating	Designed for IP65	
Storage	SSD, 128 GB	
Drop-test	According to MIL-STD-810G	

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# VersaTrax™

## NDT

Remote Visual Inspection and Alternating Current Field  
Measurement for Crack Assessment



# GOING THE DISTANCE FOR WELD INSPECTION

The VersaTrax™ with ACFM probe enables crack detection of critical components in hard-to-reach areas most efficiently, without jeopardizing the operator's safety.

## Alternating Current Field Measurement (ACFM®) and Remote Visual Inspection (RVI)

ACFM technology has developed a solid reputation for accurately detecting and sizing surface-breaking cracks through paint and coatings.

ACFM is a rugged, tolerant NDT technique ideal for as-is inspection of coated structures, rough welds, and complex geometries. Achieving quantitative assessment of cracking with a high Probability of Detection (PoD) is possible even in the most challenging conditions. When inspecting for cracks that often develop in high rising structural steels, ACFM is the perfect NDT technique.

The ACFM package allows for surface-breaking crack detection in addition to visual inspection up to a distance of 50m (164ft), making the VersaTrax a unique and versatile inspection solution.

## Ultimate magnetic crawler with intuitive controls for easy operation

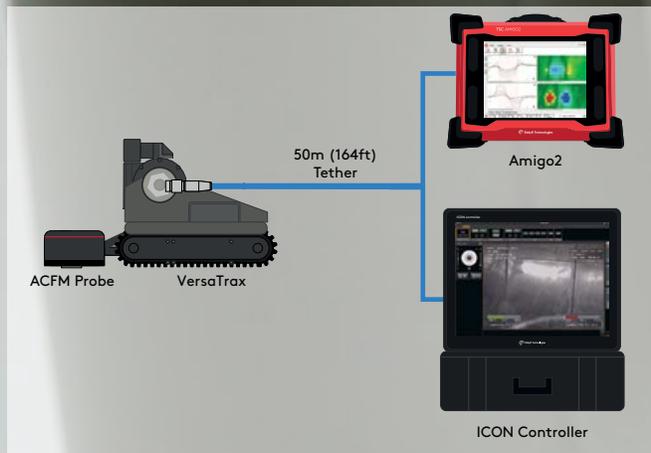
The VersaTrax is a proven and reliable remote inspection crawler system designed to withstand harsh conditions and industrial environments.

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

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

### Applications

- Storage tanks
- Pressure vessels
- Confined space
- Marine vessels
- Offshore platforms
- Large diameter pipelines
- Water towers
- Wind turbines



# MAKING THE MOST OUT OF YOUR EQUIPMENT

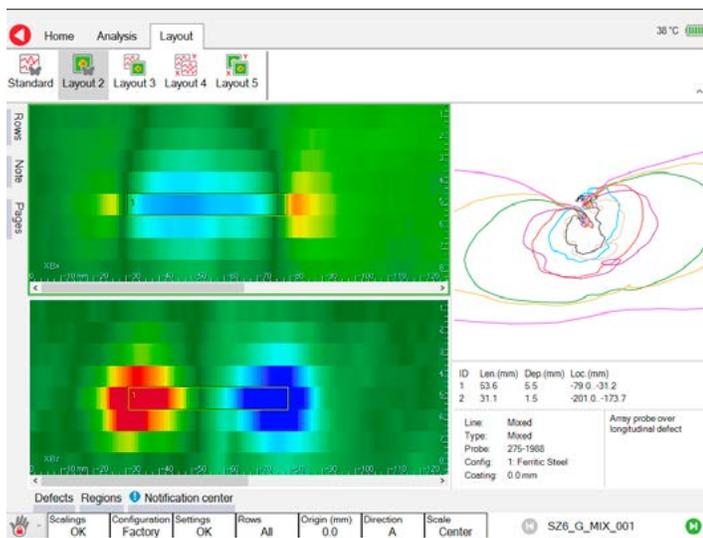
Combining field-proven solutions to overcome the most challenging applications.

## ACFM® probes

Alternating current field measurement (ACFM) is an electromagnetic inspection technique that detects and sizes surface-breaking cracks. The presence of a crack disturbs the electromagnetic field. This disturbance is instantaneously processed using advanced mathematical equations and displayed to the operator as quantitative, easy-to-understand information.

Accurate defect sizing and data recording are major benefits compared to other NDT methods. With ACFM's lower cleaning requirements and fewer false calls, inspections are significantly faster, saving customers money.

The Sensu2 compliant probe in this kit is ideal for inspecting butt or lap welds with raised profile weld caps.



## Amigo2 instrument

Amigo2 is a touch screen self-contained unit incorporating electronics and storage in one rugged enclosure. The multi-touch interface and quick access buttons offer highly intuitive access to all software functions.

Advanced signal processing ensures quality data can be interpreted as it is collected, making for rapid and accurate decisions. An incredible signal-to-noise ratio (SNR) increases the detectability of small defects even through thicker coatings, all at a fast scan rate.

## 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 ACFM array probe.

The VersaTrax 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.



## 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 VersaTrax was built around a multi-mission modular approach that enables the delivery of multiple NDT techniques on top of general visual inspection, including ultrasonics, alternating current field measurement, and more.

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

# SPECIFICATIONS

## WHATS INCLUDED

Crawler	VersaTrax NDT
Crawler controller	IC500 portable controller with ICON software Optional: IC100 in some applications with <30m tether
Tether/Cable length	Crawler: 100m (330ft)/Probe: 50m (165ft)
ACFM instrument	Amigo2 with Assist software
ACFM probe	Sensu2 Compliant Array

## VT-ACFM310

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 (53lb)
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	17in touchscreen FHD, 1000 nits
Position	Track mount encoder
Control	Touch screen or Remote handheld controller

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

## ACFM PROBE

Type	Sensu2 Compliant Array (8 rows)
Coverage	Up to 45mm (1.75in)
Vertical stroke	Independent, up to 12mm (0.47in) per module
Maximum cable length	50m (165ft)
IP rating	Designed for IP65

## AMIGO2

Dimensions (W x H x D)	355 x 288 x 127mm (14.0 x 11.3 x 5.0in)	
Weight (with battery)	6.6kg (14.5lb)	
Batteries	Type	Li-ion, rechargeable, DOT compliant
	Typical life	6-8 hours
Display	26.4 cm (10.4 in) Non-reflective (AR coating) Anti-fingerprint (oleophobic coating) 3 mm (1/8 in), chemically strengthened glass Optically bonded LCD and touchscreen Passive backlight enhancement	
IP rating	Designed for IP65	
Storage	SSD, 128 GB	
Drop-test	According to MIL-STD-810G	

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