MFE
Inspection Solutions

Non-Destructive Testing (NDT)
Equipment Catalog

Providing 30 years of equipment rentals, sales, repairs, calibrations & training

MFE

Table Of
Contents

Valued
Customers

CORTEVA agriscience

ExxonMobil

RioTinto

BASF
We create chemistry

Chevron

Shell

Who is MFE Inspection Solutions?

Welcome to MFE. Our story isn't just a list of products and services, it's about a team driven to innovate in non-destructive testing (NDT), remote visual inspection (RVI), environmental monitoring (ENV), and the use of unmanned robotic systems. We're the combination of MFE Enterprises, MFE Inspection Solutions, and NDT Electronics—a blend that's pushing the industry forward.

Starting Point: MFE Enterprises
(Founded in 1994)

It all started with MFE Enterprises. Founded by Bill Duke and his family, we hit the ground running with Magnetic Flux Leakage (MFL) technology for inspecting storage tanks and pipelines. With tools like the 65 lb Mark IV Tank Floor Scanner and the 61 lb MFE Edge, we've made inspections faster, more accurate, and cost-effective. This foundation of innovation and quality set the pace for everything that followed.

Expansion: MFE Inspection Solutions
(Founded in 2009)

Building on MFE Enterprises' legacy, we launched MFE Inspection Solutions in 2009. Starting in a modest office in Texas, our ambition was global. MFE's focus has been on delivering the best tools and technology, supported by dependable customer service. With 14 offices in five countries, we ensure we're always where our customers need us.

Broadening Our Scope: NDT Electronics
(Founded in 1981, Joined in 2016)

The acquisition of NDT Electronics in 2016 expanded our capabilities. Founded in 1981 by William Ganch, Jr., NDT Electronics brought decades of expertise in calibration and repair services, as well as a catalog of NDT equipment and supplies. This addition has allowed us to offer a broader range of services and maintain our commitment to quality and value.

Forward Together

Today, MFE stands as a unified force in the inspection industry, dedicated to innovation, excellence, and serving our customers. Our combined experience and expertise mean we offer a comprehensive range of products and services designed to meet your needs.

We're committed to your success and pride ourselves on offering solutions that enhance your projects with precision and safety. If you have questions or need support, our team is ready to help.

Thank you for choosing MFE. We're excited to continue this journey with you, providing the reliable, professional service you expect and deserve.

ACFM Flaw Detectors

TSC Amigo 2

Faster Inspections & Better Data

Amigo 2 is engineered around a highly advanced signal acquisition and processing system able to process data significantly faster than the original Amigo, for a data range that's 14 times better. This offers you smoother, higher resolution indications that increase the detectability of small defects and the coating thickness through which you can inspect.

Portable Unit with Embedded & Remote Software

Amigo 2 is a self-contained unit incorporating electronics, a multi-touch display, and storage in one rugged enclosure. This removes the need for a remote computer and cables, enhancing portability. Of course, those of you who still wish to use a remote computer still can.

A New Platform for Evolution

Amigo 2 features SENSU® 2 connectors which will be used by a new generation of ACFM probes—manual or array. The SENSU 2 connector supports up to eight digital inputs for high-speed, large-array applications.

Key Features

- Accurate sizing of surface-breaking cracks
- Inspect through paint and coatings
- Less cleaning compared to other methods
- Up to 10 times faster than the first generation
- Legacy probe support
- New SENSU 2 probes for high-speed, large-array applications

Applications

- One or two-person operation (e.g., confined spaces)
- High-temperature applications
- Inspection through thick coatings
- Thread inspection
- Splash zone inspection
- Weld inspection: w/ standard probes and single-pass array probes

FOR RENT

Acoustic Imaging Camera

Fluke SV600

By using an array of sophisticated sound sensors, the SV600 can be mounted close to any equipment or asset, to any area of the production line, or where human access is restricted or dangerous to ensure you can monitor the most important parts of your facility without interruption.

As a fixed, automated solution, the SV600 integrates with your process and eliminates the need for lengthy fault-finding processes such as soapy water tests, when used as part of your product leak testing process. By continuously monitoring your environment, you can quickly detect and fix air leaks – reducing your consumption of compressed air and energy to help save your facility money.

SV600 Payload for Spot® from Boston Dynamics

The SV600 Acoustic Imager can be used as a payload for Spot® from Boston Dynamics. Spot automates sensing and inspection, while the SV600 enables you to continuously detect, locate and visualize the unheard and unseen.

Capture limitless data with Boston Dynamics' remote inspection software, Orbit. See the full potential of autonomous robotics for your industrial maintenance needs. Explore the future of maintenance with Fluke Process Instruments and Boston Dynamics.

Key Features

- High-end 24/7 acoustic monitoring
- 64-digital MEMS microphones placed in a sunflower array
- Integrated visual light camera
- Power over ethernet (POE)
- Ingress protection IP54
- Option for IO support through fieldbus coupler
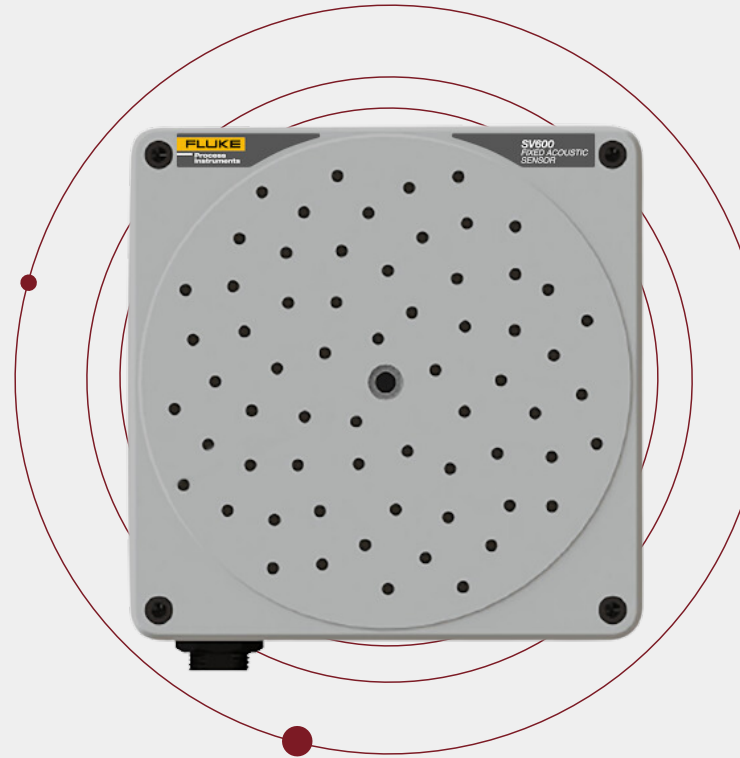
FOR SALE & RENT

Acoustic Imaging Camera

FLIR Si124

The FLIR Si124-LD Plus is an easy-to-use, stand-alone system for locating and quantifying pressurized leaks in compressed air systems. This lightweight, one-handed solution is designed to help maintenance, manufacturing, and engineering professionals identify air leaks up to 10 times faster than with traditional methods. Built with 124 microphones, the Si124-LD Plus produces a precise acoustic image that visually displays ultrasonic information, even in loud, industrial environments. The acoustic image is overlaid in real time on a digital camera picture, allowing you to accurately pinpoint the source of the sound. The Si124-LD Plus features a plugin that enables you to import acoustic images to FLIR Thermal Studio suite for offline editing, analysis, and advanced report creation. Field analysis and reporting can also be done using the FLIR Acoustic Camera Viewer cloud service. Through a regular maintenance routine, the FLIR Si124-LD Plus can help facilities save money on utility bills and delay the expense of installing new compressors.

Accurately Find the Smallest Leaks

Accurately detect and measure small compressed air and gas leaks (from 0.016 l/min to 0.004 l/min) up to 10 times faster with sound imaging, Auto Distance, and Auto Filtering features

Key Features

- 2x digital zoom
- Camera: 980 g (2.2 lb)
- Over 120 dB
- Recommended –10°C to 50°C (14°F to 122°F)
- Operating and storage humidity
- Operating and storage temperature range

FOR RENT

Eddy Current Flaw Detectors

Eddyfi Lyft

Lyft® can scan through thick insulation, as well as aluminum, stainless steel, and galvanized steel weather jackets. It also benefits from a range of PECA, single-element PEC, and application-specific probes to support various applications.

Wall Thickness Measurement Tool for Smaller Flaws

Under sizing is a well-known phenomenon for PEC where defects smaller than the probe's averaging area appear shallower than they really are. The Lyft's Compensated Wall Thickness (CWT) tool mitigates the phenomenon by quantifying the minimum wall thickness of a specific region in a C-scan. The CWT tool's specialized algorithms isolated a defect's contribution to the A-scan signal to more precisely compute its minimum wall thickness.

Key Features

- Inspect through thick insulation and fireproofing
- Save on insulation removal costs
- Real-time imaging for instant results
- Unrivalled productivity with PECA
- Easy setup with SmartPULSE™ calibration
- Highest confidence with Tau-scan™ and PermTool™ advanced analysis tools

Applications

- Corrosion under insulation (CUI) and fireproofing (CUF)
- Insulated pipes and vessels
- Through aluminum, stainless steel, and galvanized steel weather jackets
- Safe, in-service scab corrosion assessment, no need to remove the scale
- In-service inspection of storage tank annular plates
- Underwater and splash zone structures
- Ship deck inspections through tiles and coatings

FOR RENT

Eddy Current Flaw Detectors

Nortec 600

Olympus converges its latest advancements in high-performance digital circuitry and eddy current flaw detection into one compact and durable portable unit—the new NORTEC 600. With its crisp and vivid 5.7 inch VGA display and true full-screen mode, the NORTEC 600 is capable of producing highly visible and contrasting eddy current signals in any lighting condition.

The redesigned interface of the NORTEC 600 borrows the intuitive, knob-operated navigation of its NORTEC predecessors and combines it with the simple menu structure and highly efficient direct-access keys of other popular Olympus instruments. Available in four versatile models, the NORTEC 600 offers a wide range of innovative functionalities, including an Application Selection menu, an all-in-one display, real-time readings, and signal calibration in Freeze mode, ensuring that inspections are quick and easy for any level of operator.

Reliable & Robust

Based on an already field-proven instrument case, the NORTEC 600 is built for endurance in harsh field conditions. Its casing's durability and resistance to extreme weather makes the NORTEC 600 an instrument you can trust for any eddy current inspection job.

Key Features

- Designed to meet the requirements of IP66
- EN-15548 compliant
- Long battery life (up to 10 hours)
- Bright, 5.7 inch (14,5 cm) VGA display
- Full-screen option in any display mode
- Improved filters for rotary scanner mode
- Intuitive interface with application selection presets

- All-settings configuration page
- 10 Hz to 12 MHz frequency capacity
- Automatic internal balancing (BNC connector)
- Up to two real-time readings
- True automatic mixing
- Storage capacity of up to 500 files (program and data)
- On-board file preview

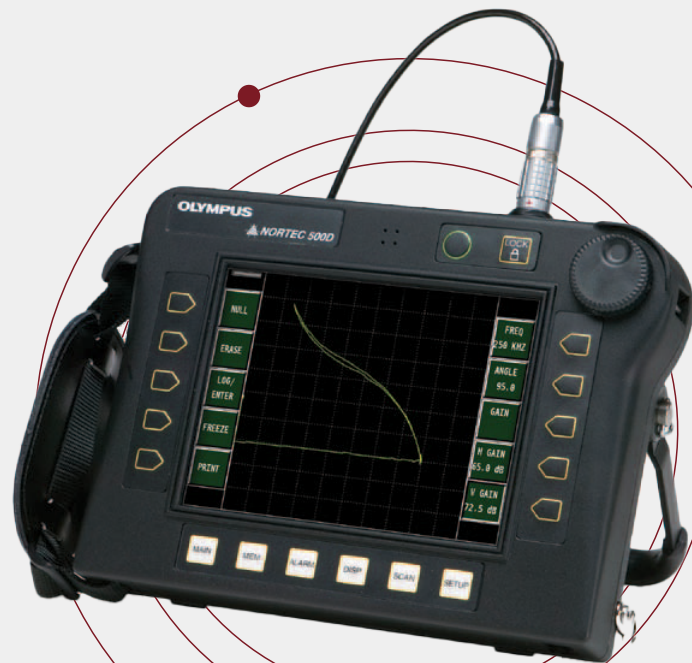FOR RENT

Eddy Current Flaw Detectors

Nortec 500D

The NORTEC 500 Series, Olympus' newest eddy current flaw detectors incorporate a full range of features: internal balance coils, VGA output connector (for heads up displays, monitors, and projectors), and a USB interface for rapid information transfer. The NORTEC 500 also includes PowerLink™, for automatic probe recognition and program set-up.

The NORTEC 500 improves on previous NORTEC eddy current instruments and is available in four configurations. Each configuration includes USB port and increased resolution with reduced noise. Internal balance coils allow use of inexpensive absolute probes without the need for external balance coil adapters. A built-in preamp adds extra gain when needed for difficult tests. VGA output allows for the display to be projected or viewed on a standard computer screen.

Key Features

- Designed to meet the requirements of IP66
- EN-15548 compliant
- Long battery life (up to 10 hours)
- Bright, 5.7 inch (14,5 cm) VGA display
- Full-screen option in any display mode
- Improved filters for rotary scanner mode
- Intuitive interface with application selection presets
- All-settings configuration page
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- True automatic mixing
- Storage capacity of up to 500 files (program and data)
- On-board file preview

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Eddy Current Flaw Detectors

Eddyfi Ectane 2

The Ectane 2 Eddy Current Flaw Detector from Eddyfi is a versatile multi-technology instrument for non-destructive testing of tubing and surfaces.

Field testing relies on a number of techniques and equipment to perform a thorough inspection, but with the Ectane 2's built-in capabilities, inspectors can use a single instrument to perform tests using a combination of technologies including:

Eddy current testing (ECT), Eddy current array (ECA), Remote-field testing (RFT) Near-field testing (NFT), Magnetic flux leakage (MFL), Internal rotating inspection system (IRIS) ultrasonic testing.

This unit provides lightweight portability and is battery-powered, providing you with 8 hours of field use. The Ectane 2 is designed to plug into your network and simply work, eliminating the need for BootP which can be difficult to use.

Key Features

- The temperature compensation feature adjusts the material velocity for changes in material temperature
- Optional oxide/Scale feature measures and displays the thickness of the steel and the oxide/scale build-up
- Average/min mode saves the average or minimum of several successive thickness measurements
- A-scan display is brighter with better contrast and visibility
- Uses a vast selection of dual element and single element contact, delay line, and immersion transducers
- EMAT transducers for no-couplant steel thickness measurements through heavily scaled surfaces
- The file-based alphanumeric datalogger can use longer file names (32 character max) and id numbers (20 character max)
- Every thickness reading in a stored B-scan can now be reviewed in the GageView interface program and on the gage
- Select to view (min/max, alarm, or a-scan flags) flags for grid points
- Grid files can be expanded by adding rows or columns or by changing the incrementing direction
- Patented Thru-Coat™ technology measures and displays the thickness of the metal part and its coating using a single back wall echo

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Gas Detection Camera

FLIR GF77

The FLIR GF77 is a groundbreaking uncooled optical gas imaging camera with interchangeable lens options that detect methane, sulfur hexafluoride (SF6), ethylene, ammonia, and other gas emissions. Capable of both gas detection and radiometric temperature measurement for thermal inspections, the GF77 is ideal for electric power utilities, oil and natural gas operations, chemical/manufacturing facilities, the food and agriculture industry, and first responders. This affordable solution offers the benefit of built-in thermographic calibrations and the flexibility to detect a wide range of gases by simply changing lenses. The purchase of a GF77 camera includes a 3-month subscription to FLIR Thermal Studio Pro and FLIR Route Creator.

Visualize Methane Leaks Faster, More Accurately

Spectrally-filtered for methane detection to improve worker safety and leak location identification.

Key Features

- FLIR IR Lens hr (9.5-12μm) with case
- Hard transport case
- Lens case
- Nylon pouch with shoulder strap
- Power supply, 15 W/3 A.

- USB 2.0 A to usb type-c with power supply
- USB type-c to hdmi and pd adapter
- FLIR inspection route - camera option
- Extended warranty for gf77 and pt6xx-series
- Bluetooth headset

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Gas Detection Camera

FLIR GF320

The FLIR GF 320 is a revolutionary infrared camera capable of detecting methane or volatile gases in real-time.

This latest technology from FLIR can significantly improve work safety and regulatory compliance by giving inspectors a quicker and more efficient method to trace leaks to their source.

The FLIR GF 320 provides more reliable performance than traditional "sniffer" detectors; gas leaks look like smoke on an infrared optical gas imaging detector. This easily identifiable feature lets inspectors perform a broad sweep of thousands of operating components to see and document gas leaks quickly and accurately. This incredible feature allows components to be safely tested during inspections without shutting down systems, leading to a safer environment and reducing revenue loss. This can also provide verification that a repair was successful in stopping a leak.

The GF-series optical gas detection cameras can locate methane, benzene, and other natural gases. Accurately document and report problem areas with built-in features such as a video recorder, digital camera, laser pointer, and embedded GPS location data.

Key Features

- Real-time visualization of even very small gas leaks thanks to the excellent high sensitivity mode (<25mK)
- Measures temperatures from -40 °c to +350 °c with ±1 °c accuracy
- Built-in video recording, rigital camera, laser pointer
- Nylon pouch with shoulder strap
- Embedded gps data helps to identify the precise locations of noncompliance
- High performance lcd & tiltable high resolution viewfinder delivers bright and vivid image in poor lighting environment or under sunlight
- Lightweight (2.4 kg) and robust design
- User-inspired ergonomics: rotating handle, direct access buttons
- Dual use, detects gas leaks and carries out electrical inspections (radiometric image data)

FOR RENT

Gas Detection Camera

MFE OGI

The Ventus OGI are integrated into crewed and uncrewed ground or aerial vehicles, handheld portable and fixed mounted continuous monitoring systems. They are an industry-leading 640 x 512 HOT (high operating temperature) mid-wave infrared camera core designed to detect and visualize hydrocarbon gasses, including methane, propane and butane. The high-performance, low SWaP package is an invaluable tool for the oil and gas industry's efforts to save time and money, increase efficiency, limit product loss, protect lives and reduce harm to the environment. Our Gas Enhancement Mode (GEM), which colorizes the hydrocarbon carbon gas leaks, such as methane, propane, benzene, etc., to detect leaks at well pads, tank farms, gas processing facilities, pipelines, refineries, etc. quickly and accurately. Our Ventus OGI camera was OOOOa certified in 2018.

MFE OGI Detector

The MFE OGI camera brings together the very latest in detector, cooler and lens design for optimizing the visualization of methane, propane, butane, and many other hydrocarbon gas leaks.

Key Features

- Long-life hot mwir detector
- 640 x 512 resolution / 15 μm pixel pitch
- 25 mm / 50 mm lens models
- F 1.5 optic; 2x, 4x, 8x digital zoom
- Uncorrected 14-bit cameraLink®

- High operating temperature mwir
- 1/4-20 tripod mount, M3 tapped mounting holes
- 2 lens options
- 15 micron pixel pitch
- Low swap light payloads

FOR SALE

MALÅ GPR Easy Locator

MALÅ Easy Locator Core is a state of the art, high quality, intelligent ground penetrating radar for utility locating professionals. MALÅ Easy Locator Core includes real-time interpretation support through MALÅ AI; wireless data collection using mobile devices; cloud storage, post-processing and on-site reporting using MALÅ Vision Cloud Software.

MALÅ Easy Locator Core is a completely new solution and the next revolution in Utility Locating. It honors our traditional MALÅ values: market leading ease-of use, unsurpassed reliability, and data quality. The first Easy Locator series became the industry standard two decades ago. The Easy Locator Core is now the new standard for utility locating professionals. Easy Locator Core is the result of Guideline Geo's commitment to deliver customer-oriented solutions.

High Dynamic Range Easy Locator

The MALÅ Easy Locator is easy to use, more accurate and offers high resolution. This ground penetrating radar system has become the benchmark for GPR utility locating.

Key Features

- Ergonomic, compact and field rugged design
- Minimal setup time
- Simple, one-button, operation
- Mulitple battery management, no swapping (up to 4 batteries)
- Real-time zoom (no 'depth window' setting necessary

- Multiple language support
- Detects metallic and non-metallic utilities
- On-site marking of utilities and objects
- Back up cursor for quick and accurate utility marking
- Rough terrain cart as option

FOR RENT

12

Ground Penetrating Radar

MALA CX-12

The MALÅ CX-12 Concrete Imaging System is a Ground Penetrating Radar (GPR) system designed for ease of use for non-destructive testing and inspection of concrete and other structures.

This concrete imaging system allows inspectors to scan concrete structures to locate and identify metallic and non-metallic objects or features that could pose a danger to equipment and personnel during cutting, coring, or drilling of the structure during construction.

The MALÅ CX-12 System offers three project measurement modes – 2D, 3D Grid, and Object Mapper. Each mode allows system operators to scan concrete structures safely and in real-time. This leads to more timely inspections, safer operating environments, as well as a more cost-effective option compared to other competing systems or traditional radiographic methods.

Key Features

- Full data retension for post-processing or on-site data review
- Industry leading screen visibility, even in bright sunlight
- Aircraft quality aluminum housing with IP67 rating
- Superior Li-Ion battery technology for all day operation on a single charge
- LINUX operating system for fast and reliable job processing
- Intuitive project driven user interface for enhanced work flow

- Project modes for 2d, 3d grid, and object mapper™
- In-the-box 3d processing to clear jobs on site
- Hyperbola fitting and migration tool for velocity calibration
- Screen-shot function for verification and simple reporting
- GPS compatible
- 3D PC processing software included

FOR RENT

Hardness Testers

alphaDur mini II

aphaDUR mini II is the latest innovation in portable hardness testing from BAQ. Building upon the reliable foundation of the alphaDUR mini, the alphaDUR mini II brings advanced capabilities and superior usability to professionals in manufacturing, inspection, and quality control.

Key Upgrades

Display: Transitioned from a 2.4" color LCD to a 3.5" TFT-LCD color display, improving clarity and user experience with a resolution upgrade from 320×240 to 640×480 pixels.

Memory: A significant increase in memory capabilities, now featuring 2 GB RAM and 8 GB eMMC-Flash-Memory, supports over 1,000,000 measurements, allowing for extensive data logging.

Data Transfer & Interfaces: Enhanced with Bluetooth 5.0 BLE for wireless data transfer, alongside a modern USB Type C interface for charging and data exchange, ensuring seamless connectivity.

Battery & Operating Time: Upgraded to a 6800 mAh Li-ion battery, extending the operating time to approximately 10 hours, supporting longer usage periods without the need for recharging.

Dimensions & Weight: Slightly larger and heavier, the new dimensions are 154 x 84 x 23 mm, and the weight is 430 g, accommodating the enhanced features while maintaining portability.

Further Features: New functionalities include a status LED, error log file, key lock, graphic display of measured values, and a Verification Mode, offering a more comprehensive and user-friendly experience.

Key Features

- Fast and easy hardness testing
- Measuring method according to din 50159 and astm A1038
- Conversion according to en iso 18265 and astm E140
- Robust metal casing

- Large colour lcd display
- Built-in lithium-Ion battery
- Extensive storage and statistical functions
- USB-c interface for data transfer to pc and usb flash drive

FOR SALE & RENT

AlphaDur Mini
UCI Hardness Tester

The alphaDur mini is the small and handy variant of the alphaDUR which has been successfully used in hardness testing since many years. The technology is identical and the accessories are compatible.

The operation of the alphaDUR mini is very easy because all information is shown on the large display. Hardness scale and material can quickly be changed by special keys.

Due to the UCI measuring method measurements can be done fast and accurate. The measured value is displayed directly after the test load has been applied. A test load between 0.3 kg (HV 0.3) and 10 kg HV 10) can be chosen depending on the application and the sample surface.

More Information for the selection of an propper probe are available in our application support documents.

Key Features

- Fast and easy hardness testing
- Measuring method according to din 50159 and astm A1038
- Conversion according to en iso 18265 and astm E140
- Robust metal casing

- Large colour lcd display
- Built-in lithium-Ion battery
- Extensive storage and statistical functions
- USB-c interface for data transfer to pc and usb flash drive

FOR RENT

Hardness Testers

GE MIC 10

The GE MIC 10 is a compact tool that allows for quick and convenient, on-site hardness testing virtually anywhere.

Unlike traditional optical evaluation with conventional hardness testers, the MIC 10 electronically measures the material's surface and instantly displays the results. Measurements can be made on various materials, objects with various shapes and sizes, and even heat treated surfaces. Erroneous single values can also be edited without interrupting the measurement process. Keep your inspection on track with adjustable visual and audible alarms when reaching critical measurement values.

The MIC 10 is automatically calibrated for low and non-alloyed steel materials, but can easily be re-calibrated for other materials. The instrument operation can just as easily be customized for application-specific hardness testing requirements, allowing the inspector to reduce key presses by disabling unnecessary functions and simplifying operations. The narrow probes also give the inspector access to difficult to reach areas.

Key Features

- On-site hardness testing according to the ultrasonic contact impedance (uci) method
- Standardized according to ASTM A1038
- Probes with test loads from 1n (hv0.1) to 98n (hv10)
- Automatic conversion into different hardness scales and tensile strength
- Display of single value or average from a test series
- Data logger version with internal data memory for measurement data and instrument settings

FOR RENT

Hardness Testers

Equotip 550

The leading Ultrasonic Contact Impedance measurement system with advanced capabilities:

- Unmatched versatility owed to HV1, HV5, and HV10 test loads in a single probe
- Patented adjustable test load for higher accuracy on a wide range of application.
- Powerful measurement device on the market packed in a rugged chassis
- Adjustable test load and a rugged touchscreen with enhanced software and analysis features

Efficiency
Efficiency to the power of 2 thanks to three loads in one single probe HV1, HV5, and HV10 and possible combination with Portable Rockwell and Leeb in one device.

Productivity
Features with wizards, user guidance, personalised views, and on-screen feedback to reduce measurement inaccuracies that can be caused by the operator.

Key Features
- IP54, fully rugged with shock absorbing casing
- Scratch-resistant gorilla® glass screen protection
- Circuit and connector protection against dust, debris, chemicals and voltage spikes
- Foldable additional screen cover for additional protection during storage and transportation
- Measurement wizard
- Heat-affected zone (haz) maping tool

FOR SALE & RENT

Thermal Imaging Camera

FLIR T540

Diagnose potential faults in industrial, electrical, and mechanical systems, or discover temperature anomalies in R&D testing with the 464 × 348 resolution FLIR T540. This portable, ergonomic thermal camera offers advanced features like 1-Touch Level/Span and continuous laser-assisted autofocus, making it the perfect non-contact diagnostic tool for condition monitoring and research applications. Streamline electrical/mechanical surveys, troubleshooting, and repairs with Inspection Route mode, which runs pre-planned routes created in FLIR Thermal Studio Pro (Route Creator plugin required) so users can record temperature data and imagery in a logical sequence. The built-in Macro Mode allows R&D users to quickly switch from wide angle to close-up analysis without changing the lens. When coupled with Research Studio software, the T540 helps engineers assess unexpected hot spots and find potential design flaws.

Outstanding Image Clarity

The T540 uses the power of FLIR Vision Processing™ to deliver detailed, smooth pictures with very little image noise. FLIR Vision Processing combines IR resolution, MSX®, and UltraMax® image enhancement with FLIR's proprietary adaptive filtering algorithms to produce brilliant thermal images with up to 3.1 million pixels. Plus, the T540 is sensitive enough to detect temperature differences down to <30 mK, for clear, low-noise results.

Key Features

- 5 MP, with built-in led photo/video lamp
- <40 mK, 24° @ 30°c (86°f)
- 4", 640 × 480 pixel touchscreen lcd with auto-rotation

- Uncooled microbolometer, 17 µm
- Resizable and movable
- Real-time radiometric recording (.csq)

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Thermal Imaging Camera

FLIR T640

The fantastic new FLIR T640 Thermal Imager combines the comfortable, ergonomic design of the Flir T-series with the incredible thermal imaging capabilities of the Flir P-series. The 640 x 480 pixel detector resolution provides professional thermographers with the highest thermal resolution and sensitivity on the market for high accuracy temperature measurements up to an impressive 2000°C. This high resolution combined with the dual 5-megapixel digital cameras allows the T640 to offer the sharpest visible light and thermal images required for the comprehensive documentation of a system's thermal condition. The Flir T640 has the flexible ergonomics of the T-series, with a unique rotating optical block that offers 120° range of motion for increased comfort and mobility when acquiring infrared images. In addition, the T640 has a built-in colour viewfinder for easier viewing in bright environments.

Now also featuring FLIR MSX Technology, the T640 makes is even easier find and identify problems. FLIR MSX Multi-Spectral Dynamic Imaging extracts high-contrast highlights from the camera's image and then uses FLIRs patented technology to superimpose the enhanced details on the infrared image. This offers enhanced clarity on thermal imagery, providing sharper looking thermal images with more texture.

Key Features

- Bluetooth headset
- Large eyecup
- Stylus pen
- Cigarette lighter adapter kit, 12 vdc

- Battery Charger
- HDMI type c to hdmi type a cable 1.5m
- Tripod adapter
- Nylon pouch with shoulder strap

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19

Thermal Imaging Camera

FLIR T865

The FLIR T865 thermal imaging camera is a non-contact inspection tool with 180° rotating optical block that allows users to safely and comfortably assess the condition of critical electrical and mechanical equipment in utility and manufacturing applications. With advanced features including unmatched temperature measurements down to -40°C, accuracy as good as 1°C/1%, 1-Touch Level/Span contrast enhancement, and laser–assisted autofocus, you'll get highly accurate temperature measurements every time. Pair the T865 with a FLIR FlexView™ dual field of view lens for the convenience to instantly switch from wide-area to telephoto scanning; or choose a 6° FOV IR lens to perform inspections on small targets from long distances. The on-board Inspection Route system helps you record temperature data and imagery in a logical sequence for faster troubleshooting and repair.

Improve Workflow Efficiencies

Develop inspection routes in FLIR Thermal Studio Pro and upload to a T865 using Route Creator to quickly and easily collect and manage critical data.

Work Safely & Comfortably

Assess the state of equipment from a safe distance, at any angle, or in any lighting condition using the 180° rotating optical block, integrated eyepiece viewfinder, and 4–inch color IPS display.

Key Features

- Nylon pouch with shoulder strap
- Hard transport case
- Power supply for battery charger
- USB type-c to usb type-c cable

- FLIR inspection route - camera option
- Macro mode for 24° lens
- Optional dual streaming
- Calibration target

FOR SALE

Thermal Imaging Camera

FLIR E95

The FLIR E95 has the sensitivity and resolution you need to diagnose electrical faults, find hidden deficiencies, and keep your workplace running smoothly. This thermal imaging camera offers high-performance features, such as laser-assisted autofocus and on-screen area measurement, plus 161,472 (464 x 348) temperature measurement points and wide temperature ranges, up to 1500°C. In addition, the E95 has a superior spot-size ratio and is sensitive enough to detect minute temperature differences.

A Clear View from Any Angle

The E95 features a brilliant new touchscreen with a 160° viewing angle to help you keep an eye on the thermal image as you work. Plus,with image enhancement options such as MSX® and UltraMax®, you'll get the best image clarity every time.

Wide Temperature Ranges

E95 offers temperature ranges up to 1500°C (2732°F) for steel mills and other applications requiring accurate high-temperature measurements.

Intelligent Autocal™ Optics

FLIR engineered all new lenses for the E95 that you can auto-calibrate to your camera and share between cameras.

Key Features

- Uncooled microbolometer, 17 μm
- <0.04°C @ 30°C (86°F), 24° lens
- Embosses visual details on full resolution thermal image
- Infrared, visual, MSX®, picture-in-Picture

- 4", 640 × 480 pixel touch screen lcd with auto-rotation
- Moisture alarm, insulation alarm, measurement alarms
- Real-time radiometric recording (.csq)
- Li-ion battery, charged in camera or on separate charger

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Thermal Imaging Camera

FLIR E96

The FLIR E96 is our first pistol-grip camera with 640 × 480 thermal resolution so inspectors can survey high-voltage, hazardous targets safely and quickly diagnose electrical and mechanical failures. The FLIR E96 offers complete coverage of near and distant targets through a range of lens options. Pair the E96 with a FLIR FlexView™ dual field-of-view lens to instantly switch from wide-area to telephoto scanning in one push of a button. The onboard FLIR Inspection Route runs pre-planned routes to help inspectors stay organized when surveying large or multiple locations. FLIR Ignite provides automatic uploading of E96 images directly from the camera to the cloud for easy, secure storage and sharing.

Outstanding Thermal Imagery

The 640 × 480 thermal resolution plus FLIR UltraMax® and MSX® image enhancement ensure the E96 produces the most vibrant, easiest-to-interpret images in its class.

One Lens, Two Fields of View

Pair your Exx-Series camera with a FLIR FlexView dual field-of-view lens to conveniently switch from wide-area to telephoto scanning with one push of a button.

Key Features

- 5 MP, with built-in led photo/video lamp
- Power Supply for battery charger
- USB Type-c to hdmi and pd adapter
- Mounting kit

- HDMI 2-Port Video Splitter
- Bluetooth headset
- RFLIR thermal studio suite
- Optional dual streaming

FOR SALE

Material Testing Equipment

FMP Deltascope

The Fisher FMP 30 Deltascope is a material testing device used to provide highly precise measurements of a wide variety of metal and non-metal coatings.

Using a magnetic induction method of measurement, the FMP 30 Deltascope provides non-destructive coating thickness measurement. NDT inspectors can measure metal coatings such as chrome, copper and zinc as well as non-metal coatings such as paint, varnish, enamel or plastic coatings on steel and iron surfaces.

With ample memory space to store up to 20,000 readings and 100 different calibrations, the FMP 30 is designed for customer-specific measurement applications. Users can input tolerance limits and this instrument will provide acoustic and visual warnings when tolerance limits are reached. The calculation of the associated process can be analyzed graphically and statistically.

Key Features

- External key-triggered measurement acquisition, e.g. in hollow cylinders with small diameters
- Audible and visual warning when tolerance limits are exceeded
- Option bluetooth or com additional available to the default usb interface
- Application memory for up to 100 measuring applications incl. calibration (adjustment settings)
- Memory for up to 20,000 readings
- Allocation of readings into up to 4,000 blocks
- Date and time stamp for blocks
- Application linking mode: common normalization/calibration of measuring applications
- Validation of the corrective calibration by test measurements on standards

FOR RENT

Material Testing Equipment

FMP Feritscope

The Fischer FMP 30 Feritscope uses magnetic induction to measure the ferrite content in both austenitic and duplex steel.

This NDT inspection tool offers a method of measuring the excess or deficit of metal ferrite content, which can lead to reductions in strength and flexibility. This is particularly important for the chemical and petrochemical industries where weld seams in pipes, containers and boilers need to maintain an optimum level of ferrite content after welding.

The FMP 30 Feritscope has user-friendly features such as a large display, automatic probe recognition, continuous measurement, and tolerance warnings. The rugged housing keeps the instrument safe in extreme conditions. Connect with a PC to transfer measurement data.

Key Features

- User-friendly operation menu
- Multiple language selections
- Large, easy to read color display
- Robust housing
- Non-destructive measurement of the ferrite content in a range from 0.1 to 80 % fe or 0.1 to 110 fn
- Units of measurement switchable between wrc-fn and % fe
- Automatic probe recognition
- Sliding cover for keypad; however, on/off and evaluation keys remain accessible at all times
- Protection of settings though lockable keypad
- Battery or line operation
- Automatic instrument shut-down or continuous operation

FOR RENT

Material Testing Equipment

Positector 6000

A sophisticated, rugged, and fully electronic device designed to accurately and quickly measure the thickness of coatings on all metal substrates. Utilizing magnetic and eddy current principles, this gauge is immediately ready for use, requiring no calibration adjustments for most applications. Featuring a larger 2.8inch impact-resistant color touchscreen and a redesigned keypad, it ensures quick and easy navigation. Encased in a weatherproof, dustproof, and water-resistant IP65-rated enclosure, it guarantees durability and resistance to harsh conditions. The PosiTector 6000 is equipped with a wear-resistant ruby probe tip for enduring calibration and boasts an interchangeable platform allowing the attachment of any PosiTector probe to a single gage body. With seamless USB, WiFi, and Bluetooth connectivity, this device syncs effortlessly with PosiSoft PC, Mac, and smartphone software. Every unit comes with a Certificate of Calibration, traceable to NIST or PTB, and complies with a wide array of international standards. Proudly made in the USA, the PosiTector 6000 sets a new benchmark in coating thickness measurement.

Key Features

- New weatherproof, dustproof, and water-resistant—ip65-rated enclosure
- Ready to measure—no adjustment required for most applications
- RESET feature instantly restores factory settings
- Certificate of calibration showing traceability to nist or ptb included
- Built-in temperature compensation ensures measurement accuracy
- Hi-res mode increases displayed resolution for precision applications

FOR SALE & RENT

Material Testing Equipment

MFE Mark IV Scanner

With 30 years of tank scanner manufacturing experience behind them, MFE Enterprises set out to redesign the tank scanner. They designed the Mark IV Tank Floor Scanner to be lighter than ever at only 65 lbs. The slim handle assembly contains all of the electrical components within its carbon fiber frame. In lieu of large batteries weighing the unit down, the Mark IV is powered solely by the rugged Getac F110 tablet's hot-swappable batteries. Not only does this lighten the load, but it also allows for uninterrupted scanning.

The Mark IV tank floor scanner offers both manual and mapping modes. The manual setting provides inspectors with a real-time display alongside a C-Scan mapping preview screen. In order to retain consistent results, operators receive immediate feedback while scanning from the new Speed Tracking feature. This feature ensures operators that they are scanning within an optimal speed range. Along with Speed Tracking, the Mark IV tank scanner contains Speed Compensation Software which normalizes the signal response when scanning within the speed tracking range.

Key Features

- Manual & mapping modes
- Fully integrated software
- True real-time display
- Tank drawing
- Analytical & reporting features

- Detachable handle
- Fully adjustable handle
- Advanced mil-spec breakaway cables
- Integrated electronics
- Hot swappable batteries

FOR SALE & RENT

MFL Inspection Equipment

MFE Edge

The MFE EDGE features the user-friendly, quick and efficient software of the Mark IV Tank Scanner and has a pivoting handle that allows the scanner to fit tight against the storage tank shell in the critical zone.

Manual & Mapping Modes
The Mala Easy Locator is easy to use, more accurate and offers high resolution. This ground penetrating radar system has become the benchmark for GPR utility locating.

Only 61 Lbs
The MFE EDGE's lightweight build separates into two convenient, easily transportable sections that are stored in their own custom cases. Lifting the equipment, shipping the equipment, and even sending the MFE EDGE via airline transport reduces time and costs for any job.

Key Features

- Real-time display
- Carbon fiber casing
- Pivoting handle assembly
- User-friendly software
- Hot swappable batteries

- Manual & mapping modes
- Adjustable handle assembly
- Seamless compatibility w/ mark Iv
- Disconnect bridge for easy shipping
- Only 61 lbs!
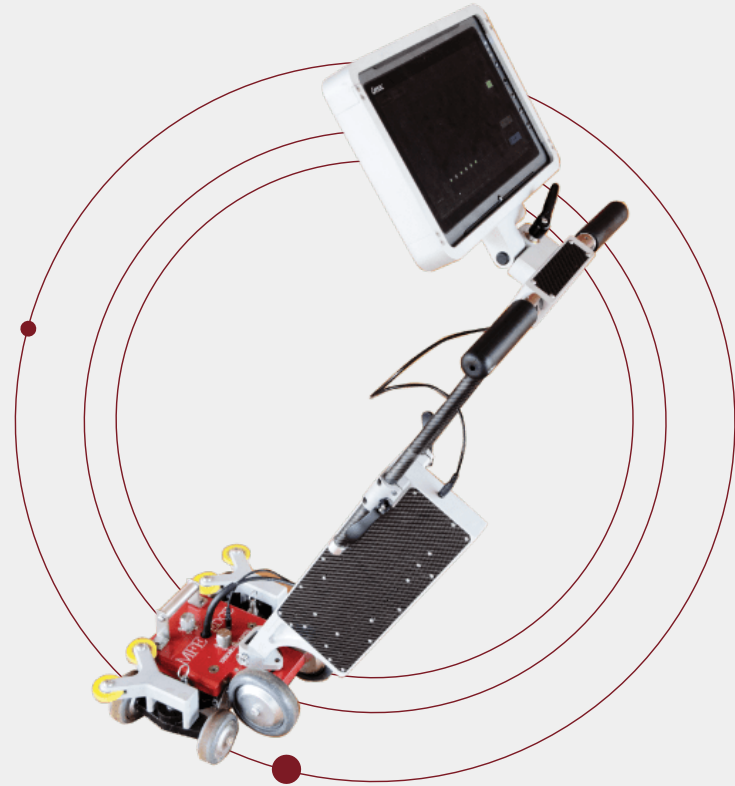
FOR SALE & RENT

Ultrasonic Flaw Detectors

Omniscan X3

Power You Can Carry

Housed in the field-proven rugged and portable OmniScan X3 enclosure, the OmniScan X3 64 flaw detector's powerful focusing capabilities supported by its larger element-aperture capacity enable you to fully exploit 64-element phased array probes and 128-element aperture TFM. Utilize its enhanced performance to meet the inspection challenges of thick and attenuative materials and expand your potential to develop new procedures for a wider range of applications.

Confidence You Can See

The OmniScan X3 flaw detector is a complete phased array toolbox. Powerful tools, including total focusing method (TFM) imaging and advanced visualization capabilities, backed by its high image quality enable you to complete your inspection with greater confidence.

Key Features

- Twice as fast as the OmniScan MX2 (pulse repetition frequency)
- Single TOFD menu for an accelerated workflow
- Improved fast phased array calibration minimizes frustration
- 800% high amplitude range reduces the need to rescan
- IP65 certified, rain and dustproof

- Compatible with existing probes and scanners
- 32:128pr model, featuring 64-element tfm
- 16:64pr and 16:128pr also available
- Up to 8 groups, 1,024 focal laws
- Compatible with mx2/sx files for convenience

FOR RENT

Ultrasonic Flaw Detectors

Epoch 650

The large, full VGA transflective display combined with our patented digital high dynamic range receiver provides a stable, striking A-scan representation in any lighting condition. The EPOCH 650 is designed to meet the requirements of EN12668-1 and allows a full range of standard and optional flaw detection features. Multiple onboard reporting tools and a comprehensive data filing system enable you to easily collect and report high quality inspection data. The rugged, ergonomic design allows use in nearly any inspection environment, while the flexible PerfectSquare™ pulser and highest number of digital filters in its class can tackle nearly any application.

The EPOCH 650 Digital Ultrasonic Flaw Detector combines Olympus' industry leading conventional flaw detection capabilities with the efficiency of a highly portable, intuitive instrument. The EPOCH 650 flaw detector's blend of efficient menus and direct access keys allows you to take advantage of the highest quality flaw detection platform with exceptional ease of use.

Key Features

- Designed to meet the requirements of iso 22232-1
- PerfectSquareTM tunable square wave pulser
- Full screen a-scan mode
- Digital high dynamic range receiver
- Thirty digital filters for enhanced signal-to-noise ratio
- 2 kHz prf for rapid scanning
- Knob or navigation pad adjustment configurations
- Large, full vga sunlight readable display

- 15+ hours of battery life
- Standard dynamic dac/tcg and onboard dgs/avg
- Multiple on-board report formats
- Microsd memory card for data transfers
- Optional corrosion module software with encoded b-scan
- USB on-the-go (otg) for pc communication
- Alarm and vga outputs
- Optional analog output

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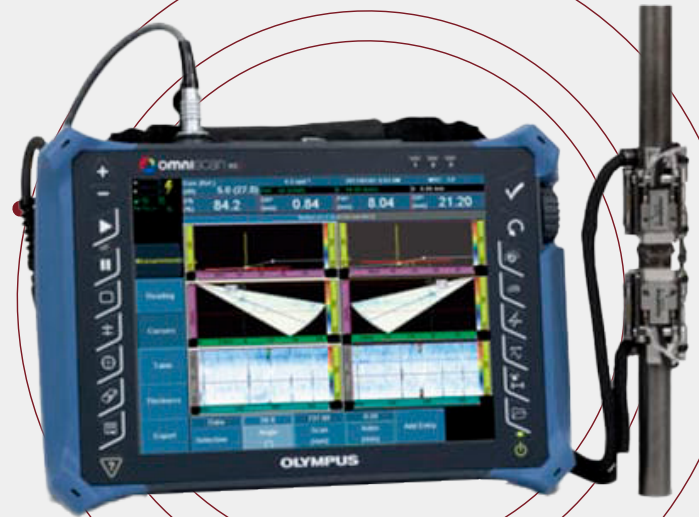
Ultrasonic Flaw Detectors

Cobra Scanner

The COBRA® manual scanner, combined with the OmniScan® PA flaw detector, is used to perform circumferential weld inspections on small-diameter pipes. The COBRA scanner holds up to two PA probes for inspections on pipes with outside diameters ranging from 0.84 in. to 4.5 in.

With its slim design, this manual scanner inspects pipes in limited access areas where minimal clearance is required. Adjacent obstructions, such as piping, supports, and structures, can be as close as 12 mm (0.5 in.). This spring-loaded scanner is designed to clasp carbon steel and stainless steel pipes of various diameters using multiple links. This unique feature enables the scanner to be installed and operated from one side of a row of pipes. The COBRA scanner is characterized by its smooth-rolling encoded movement, which enables precise data acquisition. The scanner holds up to two phased array probes for complete inspection of the weld in one pass. For pipe-to-component inspections, the scanner can be configured quickly to perform one-sided inspections using a single probe.

Key Features

- Covers standard pipes from 0.84 in. to 4.5 in. OD (21 mm to 114 mm)
- Operates within 12 mm (0.5 in.) clearance (on all standard pipes), permitting inspections in limited access areas
- Holds up to two phased array probes for complete weld coverage in one pass
- Easy installation and manipulation from one side of a row of pipes
- Can be configured to perform one-sided inspections for pipe-to-component evaluations
- The included mechanical setup templates eliminate the need for pipe samples when preparing the scanner for standard pipes
- The design provides stable and constant pressure around the full circumference of the pipe
- Urethane wheels provide smooth radial movement and limited axial drift
- Encoder resolution of 32 steps/mm
- Wedges and probes can be changed quickly and easily
- The distance between probes can be adjusted from 0 mm to 55 mm
- The spring-loaded scanner can be used on ferromagnetic and nonferromagnetic pipes
- Waterproof and rust free

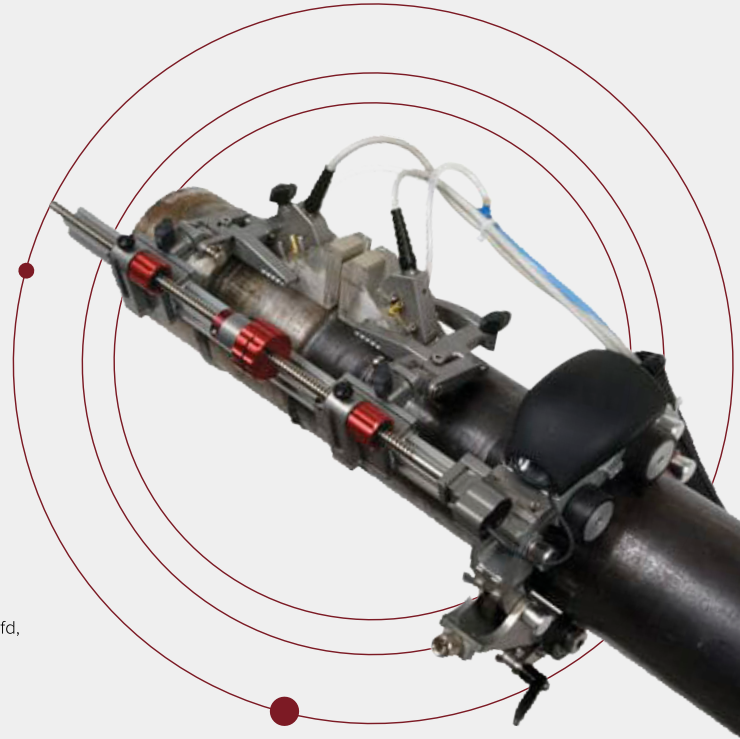**FOR RENT**

Ultrasonic Flaw Detectors

Chain SCANNER

The ChainSCANNER provides a manual pipe-inspection solution for pipes ranging from 45 mm to 965 mm OD (1.75 to 38 in. OD). The scanner, held by chain links instead of magnetic wheels, is well suited for weld or corrosion inspection on various material types, using UT, TOFD, and PA technologies.

The ChainSCANNER facilitates the manual inspection of pipes with outside diameters of 45 mm to 965 mm (1.75 in. to 38 in.), offering the possibility for two-axis encoding. The scanner, which is held by chain links instead of magnetic wheels, is able to inspect ferromagnetic or nonferromagnetic surfaces. The chain links also help ensure a straight displacement of the scanner by eliminating steering problems. Finally, it is useful when the area around the pipe is difficult to access as the scanner can be rotated around the pipe using the chain links.

Key Features
- Standard configuration using one or two probes and optional configuration using four probes for tofd, phased array, or pulse-echo inspections.
- Encoded manual scan on one or two axis
- Ergonomic handle to protect encoder connectors and provide cable management
- Independent chain links mounted on bearings wheels coated with urethane for smooth rolling.
- Easy clamping device for quick scanner positioning.
- The majority of adjustments can be made without the use of tools.
- Compatible with the OmniScan®, the tomoscan FOCUS LT™ (with optional adaptor), and other instruments using the appropriate encoder cable

FOR RENT

Ultrasonic Thickness Gauges

Cygnus 1

A heavy-duty ultrasonic thickness gauge, the Cygnus 1 has been specifically for use in hazardous areas to measure corrosion defects in metal. Easy to use and featuring a lightweight, ergonomic design, the Cygnus does not require surface coating removal to gather accurate ultrasonic thickness measurement readings. The 1I.S has been certified Intrinsically Safe to both EXII 1g EEX iaIIC TG and CSA Class1, Group A, Division1 standards.

The Cygnus 1 I.S. Thickness Meter is supplied with 2 batteries, battery charger probe, spares kit, test block, operating manual and transit case.

Main Uses

• Circumferential-pipe weld inspections with phased array, time-of-flight diffraction (TOFD), or conventional UT
• Corrosion mapping of small areas with phased array or conventional UT (using XY; 2 encoder models)

Key Features

• Use in a hazardous atmosphere – ex II 1 g eex ia IIc t6
• No plant shut-down or hot-work permit necessary
• Rugged construction
• Stable calibration – linear accuracy – no zero adjustment
• 1.0-99.9mm measurement range
• Rechargeable batteries with charger
• Usable on metals and other materials
• On switch is only a control automatic off
• LED display with polarised filter
• Imperial readout option

Applications

• Chemical plants
• Dry, dusty environments where ignition could occur
• Fuel depots
• LPG vessels
• Oil and gas production facilities such as pipelines and offshore platforms
• Petroleum, chemical storage tanks
• Processing vessels
• Road transport tankers carrying potentially explosive contents
• Structures and facilities in mines

Intrinsically safe

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Ultrasonic Thickness Gauges

45 MG

The 45MG is an advanced ultrasonic thickness gauge packed with standard measurement features and software options. This unique instrument is compatible with the complete range of Olympus dual element and single element thickness gauge transducers, making this innovative instrument an all-in-one solution for virtually every thickness gauge application.

In its basic configuration the 45MG is a simple and straightforward gauge that requires minimal operator training to tackle most common thickness gauging applications. With additional optional software options and transducers however, the 45MG can become significantly more advanced and take on applications well beyond that of a typical entry-level gauge.

Key Features

- Gain Adjust (standard, high, and low)
- Password instrument lock
- Rugged, designed for ip67
- Optional protective rubber boot with gauge stand
- Simple keypad for right hand/left hand operation

- Min./max. mode
- Two alarm modes
- Differential mode
- Time-based b-scan
- Reduction rate

FOR RENT

Holiday Tester

PCWI DC30

The DC30 High Voltage Holiday Tester is used to identify coating defects in dielectric coating materials.

This lightweight instrument is portable and is ideal for measuring coatings on storage tanks, valves and pipelines. It features voltage and battery indicators on digital display during continuous measurement, or momentary measurement for increased safety. It can even be used while the batteries are charging.

The DC 30 has a changeable clip-on battery pack that makes it easy to change voltage without swapping power supplies or probes.

Key Features

- Lightweight with abs case
- Momentary on switch allows auto shut-off
- Digital display of applied voltage with integral battery condition indicator
- Regulated dc voltage
- Voltage ranges of 0-15kv or 0-30kv, fully adjustable
- Clip-on battery pack

- Sensitivity control
- Overcharge protection
- Single power supply
- Earphones for noisy environments
- Optional on/off switch in handle

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Holiday Tester

Tinker & Rasor

The Model AP/W has built upon the advancements of the Model APS and packaged them into a belt worn instrument to provide a holiday detector with the application flexibility to move from pipe, to tank, to concrete and beyond. This pulsating DC holiday detector with regulated voltage* has a range of 800 volts to 35,000 volts, giving complete coverage for coating specifications.

Key Features

- 800 volts to 35,000 volts in one instrument
- Safety cutoff switch
- LCD output meter
- Audible & visual detecting holiday indicators
- MIL-SPEC, locking power-pak cable
- Open, ergonomic design reduces user fatigue
- Integrated belt loop system
- Portable
- 6v Rechargeable Battery

Applications

- Pipelines
  - Internal
  - External
- Tanks
- Concrete
- Sewers
- Manholes

FOR SALE & RENT

Eddy Current Flaw Detectors

Eddyfi Reddy 64

Reddy® portable 64-ch. surface ECA instrument with a large, premium-quality multi-touch display. Incl. 2 batt., power supp., manual, rugged case. Requires Magnifi® GO software subscription, sold separately.

Highlights

- Very capable unit for surface ECA inspections
- No MFL capabilities
- Upgradable later to 128-channel, with or without MFL

Key Features

- Wi-Fi indicator
- Alarm indicator
- Save inspection data button
- Clear active Lissajous button
- Probe nulling button
- Start/Stop acquisition button
- Heavy-duty bumpers

- Multi-touch display
- Handle
- Keypad arrow mode selection button
- Keypad arrows
- Enter button
- Change active view button
- Data display button

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