

CALIBRATIONS AND REPAIR IN-HOUSE OR ON-SITE

RENTAL PRODUCTS CATALOG OCTOBER 2023



RADIOGRAPHY



ULTRASONIC



PMI



VACUUM BOX TESTING



MAGNETIC PARTICLE



VISUAL



HARDNESS TESTING



MATERIAL TESTING EQUIPMENT



RENTAL EQUIPMENT

em Number	Equipment Description
R0900a	Carestream - Industrex Laptop View Station
R1000a	Carestream - HPX-DR 3543 PE Non-Glass, Large Format Detector
R1010a	Carestream - HPX-PRO Portable CR System with Transport Case
R1020a	Carestream - HPX-1 CR System with Transport Case
R1025a	QSA Global - OpenVision DX Corrosion Under Insulation (CUI) RTR System
R1030a	Microtek - NDT-2000 Film Digitizing System with Automatic Film Feeder
R1040a	COMET - EVO 300D (Directional) PXS with Transport Cases
R1045a	COMET - EVO 300P (Panoramic) PXS with Transport Cases
R1050a	COMET - EVO 4-Legged Tube Stand
R1055a	COMET - EVO Light Weight Tube Stand
R1058b	GOLDEN - Model XR200 150kV Pulsed X-Ray Generator including Travel Case
R1059b	GOLDEN - Model XRS3 270kV Pulsed X-Ray Generator including Travel Case
R1060b	GOLDEN - Model XRS4 370kV Pulsed X-Ray Generator including Travel Case
netic Part	icle & Blacklight Inspection Equipment
em Number	Equipment Description
R1100a	Magnaflux - Y-2 AC Yoke with Detachable Cord
R1110a	Parker Research - B-200 AC Yoke
R1120a	Parker Research - DA-400 AC/DC Yoke
R1700a	Spectro-UV Clarity 365 UV-A Inspection Flashlight
R1705a	LABINO - UVG3 2.0 Series Floodlight UV-A Inspection Flashlight Kit
R1710a	LABINO - Apollo 3.0 Series Light Meter
sonic Thi	ckness, Flaw, Phased Array and Blocks
em Number	Equipment Description
R1200a	Olympus - 38DL Plus w/B-Scan Ultrasonic Thickness Gauge
R1210a	Danatronics - ECHO 9DLW Ultrasonic Thickness Gauge
R1221a	Sonatest - WAVE Ultrasonic Flaw Detector
R1230a	Sonatest - WAVE Accessory Kit (Transducers, Wedges, Cables & DSC Block)
R1222a	Sonatest - Veo3 Phased Array 32:128 with TOFD & Live TFM
R1240a	4 Step Calibration Block (1018 Steel)
R1241a	4 Step Calibration Block (304 Stainless Steel)
R1242a	5 Step Calibration Block (1018 Steel)
R1243a	5 Step Calibration Block (304 Stainless Steel)
R1244a	5 Step Calibration Block (4340 Steel)
R1245a	5 Step Calibration Block (316 Stainless Steel)
al Inspect	ion Systems
em Number	Equipment Description
R1300a	Wohler - VIS 700 Plus HD Inspection Camera
R1320a	Wohler - Camera Trolley Kit w/ Stabilizing Sleeve for Light Ring
R2000a	Mitcorp - X1000 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit
R2005a	VSNDT - 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit
R2010b	ViewTech - VJ-3 UV-A (All Way Articulating) Complete Portable Videoscope Kit
Hand Held	d XRF Analyzers/ LIBS Carbon Analyzer
em Number	Equipment Description
R1400a	ThermoFisher - Niton XL2 980 Plus
R1405a	ThermoFisher - Niton XL5 Plus
R1410a	ThermoFisher - Niton Apollo LIBS
R1415a	SciAps - X50 XRF Alloy Analyzer Kit
R1420a	SciAps - Z 902+ LIBS Analyzer Kit
ellaneous	Testing Equipment
em Number	Equipment Description
R1500a	Fischer - FMP30 Feritscope
R1610a	Screening Eagle - Equotip 550 Hardness Testing Kit
R1800a	30" Flat & 18" Corner Vacuum Box System



RENTAL PROTECTION PLAN (RPP)

Protect Your Investment





Rental Liability	Damage Protection
 Significantly reduces your liability for damaged or stolen equipment. Avoid claims against your insurance. The RPP gives you coverage when your business insurance leaves you exposed. 	 RPP provides coverage for repairs due to accidental or incidental damage to equipment. Damage resulting from abuse or misuse is not covered - abuse or misuse is defined as equipment used in an application it was not designed for or an application that exceeds the manufacturers' specifications.

Theft Protection

- You are only responsible for a percentage of the replacement cost.
- A police report must be filed and notification given to QED within 48 hours of the customer being made aware of stolen equipment. If a police report is not provided, the customer is fully liable for the entire cost of replacement.
- In the event that the stolen equipment is recovered, QED will retain ownership.

Plan Cost	Repair	Theft & Loss
15% of List Rate	50% Coverage	30% Coverage

Examples of RPP Savings

50% Coverage of Damage				30% Coverage of Stolen Equipment				
Damage HPX-DR 3543 System (R1000a)) Stolen FMP30 Feritscope (R1500a)				1500a)	
		With RPP	Without RPP			With RPP		Without RPP
List Rate (Monthly)	\$	9,000	\$ 9,000	List Rate (Weekly)	\$	320	\$	320
RPP (15%)	\$	1,350	\$ -	RPP (15%)	\$	48	\$	-
Repair Cost (Mfg. Repair Cost)	\$	50,000	\$ 50,000	Replacement Cost (Mfg. List Price)	\$	5,750	\$	5,750
RPP Benefit (50% of Repair)	\$	25,000	\$ -	RPP Benefit (30% of Replacement)	\$	1,725	\$	-
Total Customer Cost (Rental & Repair)	\$	35,350	\$ 59,000	Total Customer Cost (Rental & Replacement)	\$	4,393	\$	6,070

Don't go without protection! Ask for the RPP on your next rental!

All RPP is based on list rental rate. Customer is responsible for all rental rates up until the day of notification to QED. Ask your local QED office for more details on our Rental Protection Plan (RPP) Agreement.



Item # R1000a

Carestream - HPX-DR 3543 PE Non-Glass, Large Format Detector

NEW NON-GLASS DR!

Carestream NDT once again introduces breakthrough technology for NDT field imaging with our new non-glass DR detector. The new HPX-DR Non-Glass detector design incorporates a tougher plastic material instead of glass for maximum durability against the rigors of NDT field work.

EXPOSURE INTERFACE BOX (EIB)

• Provides a standalone battery powered Wi-Fi access point to HPX-DR Detectors

- Optionally provides a communications interface to support select Golden pulse generator models.
- The pulse generator interface enables timing coordination of the HPX-DR Detector image capture with the Golden X-ray pulse generation.

The HPX-DR Non-Glass detector virtually eliminates costly repairs for broken glass. We're so confident in the design and reliability of our new durable detector that we're offering a two-year warranty!

The HPX-DR detector is unique in design – coming standard with a rugged, weatherproof enclosure perfect for remote field work. Unlike other panels that claim a weatherproof design when used inside their protective carrying case, this detector has an IP57 enclosure rating without the protective case! With the HPX-DR you can stop wrapping your DDA panel in bags and keep working in rain, snow, mud or whatever Mother Nature throws at you!

- **REDUCED EXPOSURE** DDA panels are highly sensitive. Combine this with the ability to do frame averaging and you will likely be able to reduce your exposure time and still capture the sensitivity needed for your critical inspection task.
- FASTER Uses no disposable media in the process, eliminating cassette loading and unloading time, developing, processing and reloading for the next shot. The HPX-DR detector offers quick start up and calibration, and rapid image display after acquisition. Produce high quality digital images in seconds for immediate analysis.
- **EASIER** The HPX-DR detector is lightweight and compact with an all-weather design that is simple to operate. In the lab, it can be operated on a powered tether and in the field it can run 100% on battery. With the 'hot swap' feature the panel can remain on when changing batteries, increasing uptime.
- **WIRELESS** The HPX-DR detector can operate completely wireless giving the user full freedom of movement and minimizing set-up time on site. This is especially helpful for rope access teams looking for minimal weight, high sensitivity and a powerful wireless connection.



Mount kit with pipe cleats to reduce stress on the detector for pipeline imaging.



EXPOSURE INTERFACE BOX (EIB)

- 139u Pixel Pitch
- 139μ Spatial Resolution
- GOS DRX Standard Scintillator
- Portable at 12.5 lbs (5.7 Kg)
- Heavy Duty Shielding
- Exposure Range up to 3 MeV

HIGH RESOLUTION OUTPUT IN THE LAB OR IN THE FIELD













Item # R1010a

Carestream - HPX-PRO Portable CR System with Transport Case

The HPX-PRO CR system is built for high image quality, improved productivity and extreme portability. This next-generation system is lightweight (35 lbs.), portable CR imaging solution that is quick to deploy and rapidly produces high-quality images utilizing a new single-pass scan/erase protocol. The HPX-PRO's software incorporates a new user interface designed to get you set-up and imaging fast, with batch mode interface designed to get you set-up and imaging fast, with batch mode consistency. capacity to keep in pace with extreme process conditions like pipeline maging. The new software tools also provide quick image analysis and customized reporting for generating unique customer reports in seconds.
From hardware to software, to deep in the field and instant image
sharing, the HPX-PRO is a complete system, designed to improve

Carestream spent a considerable amount of time working in the field with



Built for NDT

- Rigid aluminum construction with vibration damping feet
- Filtered air vents replaceable air filter to keep out dust and dirt
- Protective plate feed doors seal off the unit from dirt and dust when in transport or not
- Detachable handle mobile film labs don't have a lot of room every inch counts Battery power mounts for in-use and storage mount for backup, 4 hours standby time ar
- 45 minutes imaging time per battery - Mounting bracket for security in transport on rough roads
- LED erase lamps for high efficiency and low power consumption

Designed for High Throughput

- Ships complete and easily installed in less than 5 minutes on-site by customer
- Maximum 6-inch wide x 96-inch length plate sizes
- INDUSTREX Digital Viewing Software installed and tested prior to shipping Custom EDGE image display filter with 10 predefined filters including 2 specifically for gamma work
- 25 micron, 50 micron & 100 micron resolution

HPX-PRO on-the-Go PRO-fessional Workflow for High PRO-ductivity THE HPX-PRO WILL CHANGE THE WAY YOU WORK IN A MOBILE ENVIRONMENT FOREVER. EASY TO MOVE, EASY TO SETUP, EASY TO USE, EASY TO ACHIEVE HIGH-PRODUCTIVITY, AND PRICED RIGHT FOR EASY PAYBACK. GOING DIGITAL HAS NEVER BEEN **Rapid Job Setup** THIS EASY AND AFFORDABLE. Mobile Lab **Profitable** Go Anywhere and Save On Overhead With the HPX-PRO On-Board: Eliminate bully chemicals and tanks taking up Reduce the overhead cost of a large % ton pick do field work No more need for a generator – lightening the **Shot Time** load considerably Get deeper in the field with a smaller, me versatile, high-production digital mobile lab The HPX-PRO is a **Complete Workflow** Improvement Tool from Start to Finish. Generate **Quick Reports** Image, Analyze & **Approve in Seconds**



Item # R1020a

Carestream - HPX-1 CR System with Transport Case

The HPX-1 Plus offers many improvements. Improved optics for better imaging, up to 30% faster throughput on long saturated plates (very high exposure), an improved imaging plate transport system to protect imaging plates, higher mechanical reliability and a more user-friendly DICONDE compliant software for the best experience in digital imaging.

The HPX-1 Plus is a full width CR reader capable of running extra long imaging plates. The system has a wide dynamic range with high sensitivity, making it ideal for almost any type of imaging application. Whether you're using a gamma or X-ray source, the HPX-1 Plus' high sensitivity can help reduce shot time. It shows exceptional performance in weld applications, delivering weld-quality images consistently and dependably.

Carestream's award-winning HPX family of digital products have improved field reliability and enhanced the capabilities in the NDT marketplace. Long plate and multi-plate scanning combined with SmartErase boosts output productivity so you can get more done in a day than ever before. Our exclusive positive pressure filtered air system keeps dust and dirt out for cleaner images in both the laboratory and in remote operations. With a shock and vibration resistant design your team can image in the harshest of environments brining a new level of confidence to digital imaging in the field.



Ultra High Image Quality

Pixel Pitch: 25μm, 35μm, 50μm and 100μm operation **Spatial Resolution**: 50 microns or better (12 lp/mm) **Laser Spot Size:** 20μm (measured at 85% of peak)



HPX-1 Plus



Positive Pressure Fans for Dirty NDT Environments

Let's face it, NDT environments can be dirty. Drum and flat bed style scanners collect contaminants on the surface where they can be transported into the system or into the optical path and be be imaged. HPX-1 Plus is the only CR system on the market that has positive airflow to keep contaminants outside the unit.



Dual Air Filters (including HEPA)

Clean air is critical to keeping the equipment cool and the imaging areas clean. The HPX- 1 Plus is the only system outfitted with dual filters to make sure the environment is kept outside.



Image Plate Flexibility

HPX systems are one of the most flexible CR systems on the market capable of handling raw imaging plates, multiple plates at one time, custom cut sizes (with Plate Carrier), hard cassettes and long Plates (up to 60") without special feed guides.



Plate Transportation System

The HPX-1 Plus plate transport system has always minimized contact with the imaging plate. Unlike magnetic plate drive systems that require uniquely designed imaging plates (which can be costly) or drum systems that advise using plate protective covers to avoid plate damage, the HPX-1 Plus run plates phosphor side up with a proven transport system that won't damage your imaging plates.



Improved Imaging

HPX-1 Plus' improved PMT's improve its sensitivity and reduce unwanted artifacts. CR systems often also make it possible to lower your exposure while still achieving the required sensitivity. Our adjustable PMT and Laser Power allow you fine tune every image for optimum capture every time.



Powerful Software

HPX-1 Plus is operated using our powerful INDUSTREX software that includes a host of features for measurement, custom designed EDGE Image Filters, full DICONDE compliance, and many other tools designed specifically for NDT.





Item # R1025a

QSA Global - OpenVision DX Corrosion Under Insulation (CUI) RTR System



Corrosion Under Insulation (CUI) Scanning. **Heat Tracer Inspection. Weld Location** Mapping.

OpenVision DX is an easy-to-use, digital x-ray system with live video output for realtime radiographic inspection and reporting. A patented combination of a c-arm mounted 70 kV x-ray source and a digital imager allows you to observe external defects as small as 0.010" (250 μ m) on insulated piping.

OpenVision DX can be used on various insulation and cladding combinations, including mineral wool and calcium silicate with galvanized steel, stainless steel, and aluminum cladding up to 36 inches in total diameter.

OpenVision DX enables the inspection of hundreds of feet of insulated piping to quickly identify indications of corrosion or corrosion precursors such as scaling, external wall loss, and wet insulation. Pictures and real-time videos are recorded and downloaded with the touch of a button for rapid review and reporting.

OpenVision DX is IRR99/IRR17, ANSI 43.5, and CE compliant.

The OpenVision Method

OpenVision is a nondestructive testing (NDT) method using real-time radiography to quickly scan insulated piping systems for indications of corrosion or corrosion precursors, weld mapping, and heat trace location.

Benefits Include

- · High-Speed Scanning
- Easy Operator Interpretation
- Minimal Operator Training
- Reduced Missed Calls
- · Video and Still Image Recording
- Simplified Report Generation





Item # R1030a

Microtek - NDT-2000 Film Digitizing System with Automatic Film Feeder

NDT-2000 Film Digitizing System is a down-to-earth digitization solution developed exclusively by Microtek for use in NDT/RT industry. Besides retaining great functions of the original MII-900 Plus, such as 1200-dpi (21µm) optical solutions, 16-bit grayscale, and exclusive AFF and multi-channel trays, NDT-2000 adopts better optical density via innovative image technology and therefore it can enrich image layers and meet with high requirements about image quality from the NDT/RT industry.

Features

- Equipped with 1200 dpi (21µm) resolutions, 4.5D optical density, and 16-bit grayscale
- Optional Automatic Film Feeder (AFF) and Multi-Channel Tray enhance working efficiency
- Maximum scanning area is up to 14" x J33200", supporting most sizes of industrial films
- Bundled with multi-functional image management software, including functions of file building, searching, measuring, annotating, zooming, report making, saving and burning; meeting with the DICONDE standard
- Supports image formats of DCM, BMP, JPEG, and TIF

Scan Control Module

- Resolution: 150, 300, 600, 1200 dpi
- Scan Area: Up to 14" x 200" - Support: AFF, Multi-tray Feeder
- Depth: 8 or 16 bits (Default)
- File: Tiff, JPEG, JPEF 2000, BMP, etc.
- Integration: TWAIN

ScanWizard-Industry (Bundled)

Image Archive and Viewer

- File: DICONDE
- Local/network database
- Image Enhancement Tools
- Filters
- Report
- Send images over DICONDE network protocol

Software selection:

AcuScreen NDT Pro





Item # R1040a

Item # R1045a

COMET - EVO 300D (Directional) PXS COMET - EVO 300P (Panoramic) PXS



Built to Last - It's Robust and Reliable

Designed and built in Denmark; the EVO systems are comprised of the best components and assembled with the utmost care - making them reliable, long-lasting, and a sound investment. They are fitted with a high-quality metal ceramic X-ray tube, and the robust composite casing now protects all vital parts even better. The systems meet the IP65 standard, making them fully operational in dusty and wet conditions.

It's Light-weight and Easy to Handle

The ergonomic design and the low weight of 64 lbs. make the EVO 300D easy to handle and re-position. A broad temperature range from -4°F to +122°F makes the EVO systems reliable and ensures smooth operation even in extreme environments. The intuitive interface allows for a smarter workflow.

High Performance Capabilities

Built to meet the highest international safety standards, each unit is individually tested and measured for safety and accuracy. The EVO 300D features a combination of 300 kV and 900 W constant potential X-ray power for high penetration - making it well suited for all heavy-duty field inspection jobs.

EVO 300D

Beam type: Directional Nominal voltage: 300 kV mA adjustment: 0.5 - 4.5 mA Max. X-ray power: 900 W

Focal spot, EN 12543: 3.0 mm

EVO 300P

Beam type: Panoramic Nominal voltage: 300 kV mA adjustment: 0.5 - 4.5 mA Max. X-ray power: 750 W Focal spot, EN 12543: 0.5 x 5.5 mm

CONTROL EVO

Built to Last - It's Robust and Reliable

Designed and built in Denmark, the CONTROL EVO is based on state of the art technology. The unit is fitted with a high quality die-casted aluminium chassis protecting all vital parts. It meets the IP66 standard, making the CONTROL EVO fully operational in dusty and wet conditions. It is reliable, long lasting and a sound investment.

Smarter Workflow It's Light-weight and Easy to Handle

The ergonomic design and shoulder strap makes the CONTROL EVO easy to handle and reposition. All information is clearly displayed on the 6.5 inches high contrast color screen. The unit features an exposure calculator and has an intuitive interface with a wide range of advanced functionalities – equalling a smarter workflow.

Compatible It's Backwards Compatible and Future-proof

The CONTROL EVO is backwards compatible with the EVO portable X-ray systems. It has an Ethernet interface allowing for remote diagnostics and software updates. The USB interface facilitates, control of the system via a USB-to-Serial converter, saving diagnostics reports and can also be used for software updates in the field. It even has Bluetooth for future applications. All of these make the EVO system smart and future-proof.

Exposure Calculator

The advanced built-in exposure calculator ensures fast exposure calculations and uniform results. It can calculate the minimum required film focus distance optimising the exposure time. It accommodates the use of a wide range of films, materials and settings.





Item # R1058b thru R1060b

GOLDEN - Model XR200 (150kV), XRS3 (270kV) & XRS4 (370kV) Pulsed X-Ray Generator including Travel Case





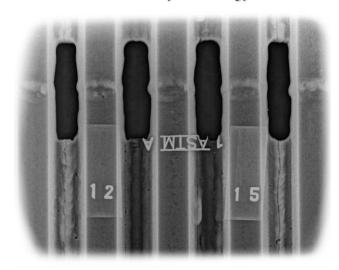


Image taken using an HPX-PRO Carestream CR System

Golden Engineering X-Ray Generators

Golden Engineering X-ray generators are based on Pulsed X-ray technology. Pulsed X-rays generate a high intensity X-ray burst (pulse) in a very short period of time (10 to 50 nanoseconds depending on the model). The operator varies the overall dose of each exposure by changing the pulse setting. The pulse rate varies from 10 pulses per second to 25 pulses per second depending on the model. The generators can fire up to 200 pulses before a four-minute rest period.

Golden X-ray generators are compatible with Conventional Radiographic Film, Computerized Radiography (CR) or Digital Radiography (DR) inspection systems. This provides users with the flexibility to develop a complete radiographic system best suited to their individual needs.

Key Benefits

- Convenience Minimal disruption to normal on-going operations
- **Portability** Applications often require X-ray be transported and used in remote locations with no access to power
- Safety May require inspections within a relatively close proximity to personnel. Golden Engineering Pulsed X-ray generators contain no radioactive material. Minimal leakage to side and rear of the machine and minimal exposure time reduces standoff distance around the machine and reduces the possibility of accidental exposure.
- Durability Rugged design can be used in a variety of environmental conditions and temperatures between -10 to 120°F.

Model	Weight	kV	Penetration in Steel	Avg. Dose mR/Pulse*	Pulse Width	Pulse Rate per Second	Rear Standoff Distance
XR200	11 lbs.	150	0.50"	2.6	50 ns	10	10 Feet
XRS3	11.8 lbs.	270	1.00"	2.6	25 ns	15	10 Feet
XRS4	18.3 lbs.	370	1.75"	4.5 - 7	10 ns	9	20 Feet

^{*}mR per pulse measured 12" from source **3 pulses per count

XR200 Pulsed X-Ray Generator (R1058b)

The XR200 is a 150 kV, single-package, pulsed x-ray generator used by military, law enforcement and industrial personnel for radiographic examination of various items.

XRS3 Pulsed X-Ray Generator (R1059b)

The XRS-3 is a 270 kV, battery powered, pulsed X-ray generator. The XRS-3 is the most versatile unit because it provides exceptional penetrating ability, up to 1" of steel.

XRS4 Pulsed X-Ray Generator (R1060b)

The XRS4 is a 370 kV, battery powered, pulsed X-ray generator. Two features unique to the XRS-4 include a robust aluminum housing, and a bellows located in the handle. Both of these features improve the durability and longevity of the generator.

Weighing close to 19 pounds the XRS4 is significantly larger and heavier than other Golden Engineering generators. However, a 370 kV generator that penetrates more than 1.5 inches of steel and weighs less than 25 pounds is still considered extremely portable by industry standards.



MANUFACTURER OF LIGHTWEIGHT, PORTABLE X-RAY MACHINES



XR200 Pictured



XRS3 Pictured





MAGNETIC PARTICLE

Item # R1100a

Magnaflux - Y-2 AC Yoke with Detachable Cord



AC Electromagnetic Yoke

The Y-2 is an AC electromagnetic yoke, ergonomically designed to improve productivity and reduce operator arm and wrist fatigue. The yoke generates a strong AC magnetic field for the detection of surface indications during magnetic particle testing.

Lightweight with an ergonomic grip and trigger, the Y-2 is designed for the rugged demands of field inspection. Featuring a field swappable cord and isolated trigger switch; the Y-2 is easily serviceable because a severed cord should not stop a job from getting done.

Benefits

Increase inspector productivity and reduce physical fatigue

- Less arm strain, wrist fatigue and physical stress help operators get more done due to the lightweight and ergonomic design.
- · Easily position the yoke in any direction with lightweight, heavy-duty and powerful electronics components.

Keep tools in service with a design that's built to last

- Cords and triggers can be easily replaced, so work doesn't stop and tools aren't scrapped due to accidental damage.
- Prevent dust and dangerous water damage with an IP54 o-ring sealed housing.

Features

- IP54 sealed housing resists dust and water
- · Field-swappable power cord
- Isolated, replaceable trigger switch
- · Steel shields for leg protection
- Exceeds ASTM lifting specifications
- Convenient carrying case supplied with all yoke shipments



Erganomic Handle & **IP54 Sealed** Housing **Resists Dust** and Water



Item# R1120a

Parker Research - DA-400 AC/DC Yoke



AC/DC Electromagnetic Yoke

The DA-400 Contour Probe is a portable, self-contained instrument designed to produce a magnetic field on or within ferrous-magnetic materials.

The selective AC and DC functions are built into a single reliable instrument. The AC mode produces an intense AC field for detection of surface defects and demagnetizing after inspection. The DC mode produces an intense Half Wave Rectified (DC) field for detection of some subsurface defects.

Controls and solid-state electronics are contained within the high impact molded housing. Articulating legs allow the AC or DC field to be applied to the precise area of inspection on nearly any part of the surface shape... in the lab, factory or field site.

Features

- High-Impact, Glass-Filled Nylon Housing
- AC & Half Wave Rectified (DC)
- · Exceeds ASTM Lifting Standards



UV-A EQUIPMENT



PENETRANT RESISTANT • CURRENT REGULATOR • HOMOGENEOUS BEAM • IP68 WATERPROOF & DUSTPROOF

Item # R1705a

LABINO - UVG3 2.0 Series Floodlight UV-A Inspection Flashlight Kit

UVG3 2.0 Series UV-A Inspection Flashlights

Powerful, penetrant resistant and with an Ingress Protection 68 (Waterproof). The beam profile is probably the largest and smoothest from any UV-A torch light on the market. Depending on the model, the beam diameter is 3-5 inches and with intensities that vary from 4,000 to 80,000 μ W/cm²! Battery running times are up to 8 hours.

UVG3 2.0 Single Kit Package Includes:

UVG3 2.0 lamp, UV Glasses, External Charger, Car Charger, 2 Extra Batteries, Carrying Case, Belt Holster and Rubber Bumper.



UVG3 2.0 Floodlight is the only torch UV LED light in the world in compliance with Rolls-Royce RRES 90061 and Airbus AITM-1001!

Features

• Compliance: ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing & USAF

LABINO

- UV Intensity: 4,000 µW/cm² at 15"
- UV Coverage: Ø 4.8 Inches at 15"
- Battery Run Time: 4 Hours (Kit Includes Extra Battery & Charger)
- IP Rating: Water-Proof & Dust-Proof (IP68 Rated)

Item # R1710a

LABINO - Apollo 3.0 Series Light Meter



Apollo 3.0 UV & White Light Meter w/ Case

The Apollo meter is engineered for use in Non Destructive Testing. The visible light sensor is specially designed to measure visible light at short wavelengths (near UV) and starts measuring at 380 nm. The spectral sensitivity of the Apollo visible light sensor closely relates to the reception of the human eye (CIE Standard Observer).

Features

- World's first wireless UV and white light meter
- Tested to comply with ISO 3059-12 Standard
- Red LCD screen for easy readings in the dark
- · Visible light readings delivered on your choice of lux or foot candles
- Reader unit powered by three "AA" batteries that last 100 hours of active measurement

Why a Wireless Sensor?

- Keeps the sensor stable without movements from connecting cables
- No damaged cables as in traditional meters
- · Readings of up to 16 feet from sensor









ULTRASONIC - THICKNESS & FLAW DETECTION

OLYMPUS



4-Step Test Blocks (Carbon Steel and Stainless Steel)

Item # R1200a



Olympus - 38DL Plus w/B-Scan Ultrasonic Thickness Gauge

38DL PLUS Ultrasonic Thickness Gauge

The 38DL PLUS is an innovative instrument that signals a new era in ultrasonic thickness gauging. Ideally suited for almost every ultrasonic thickness application, this handheld thickness gauge is fully compatible with a full line of dual and single element transducers. The versatile 38DL PLUS can be used in applications ranging from wall thinning measurements of internally corroded pipes with dual element probes to very precise thickness measurements of thin or multilayer materials with single element transducers.

The 38DL PLUS comes standard with many powerful but easy-to-use measurement features and a host of application-specific software options. Its sealed case is designed to meet IP67 requirements to withstand the rigors of very wet or dusty environments. The color transflective VGA display provides superior readability from bright sunlight to complete darkness. It features a simple, ergonomic keypad that can be operated with the left or right hand for easy access to all functions.

Key Features

- Wide thickness range: 0.003 in. to 25 in. depending on material and transducer selection
- Corrosion thickness gaging with dual element transducers
- THRU-COAT and Echo-to-Echo measurements on painted and coated surfaces
- Standard resolution of 0.01 mm or 0.001 in. for all transducers
- Time-based B-scan mode; 10,000 reviewable readings per scan
- Designed for EN15317

Item # R1210a

Danatronics - ECHO 9DLW Ultrasonic Thickness Gauge

ECHO 9DLW

Hand-Held Digital Ultrasonic thickness gage with 3.5" Sunlight Readable Color Display for thickness only including: Echo to Echo Software, Plastic Carrying Case, 2 Oz. bottle of couplant (C-02G), Re-Chargeable Li. Ion batteries, DKS537, 5MHz, .375 " diameter Transducer with potted cable, Charger adapter with USB cable and data xl interface program.

Key Features

- Simultaneous Live Color A-Scan and Thickness Display
- 3.5" Sunlight readable color display
- Field upgradeable software options include
- Fast/Min and Fast/Max displays minimum, maximum or both simultaneously with actual thickness at 25 Hz
- Compatible with a wide variety of Danatronics dual and single element transducers
- Multiple languages
- Datalogger interfaces with Microsoft Excel
- Designed for IP67
- Made in the USA

Applications

- Boiler Tubes
- Pressure Vessels
- Storage Tanks
- Ship Hulls
- Piping







ULTRASONIC - PHASED ARRAY

Item # R1221a

Sonatest - WAVE Ultrasonic Flaw Detector

WAVE - Interactive Flaw Detector

Next generation technology at your fingertips

What if you could tailor the settings on your UT device and alter it to your own process and people's needs? An instrument where all the useful parameters are preset and available in less than two clicks? Now you can.

Introducing **WAVE** by Sonatest. It integrates the latest technologies available in order to create a revolution in the ultrasonic non-destructive testing equipment market.

Not only is it innovative, but the customisable interface also optimises the daily workflow, and a unique and embedded interactive scan plan, with ray-tracing capability and simulation tools, consolidates your results.





Mitigate false calls with the new WAVE Interactive Scan Plan

The **WAVE** Interactive Scan Plan has been developed to ease diagnostics on the inspected part. The scan plan can reproduce complex geometries such as curved surfaces and T-Joints. Combined with a real-time Raytracer, this unique feature facilitates the distinction between a real flaw and a geometrical indication, thus avoiding unnecessary repair.

Reach performance & conformity with the Wave Application Concept

The **WAVE** Application Concept combines conformity and performance allowing the operator to customise the user interface according to his/her specific procedure. A lean manufacturing philosophy means less training and long-term financial benefits. The intuitive user interface with an easy to use display will guarantee workflow optimisation as well as preventing potential operational errors.

Item # R1222a

Sonatest - Veo3 Phased Array 32:128 with TOFD & Live TFM



Inspect with Confidence

Retaining the best features of the established Veo line, the new Veo3 now offers a PCAP touch interface, user templates, and more importantly, live TFM.

Key design elements of the Veo3 are user and performance focused. Based on superior and innovative digital technology and its live concurrent multi-scan / multi-technique capabilities, the Veo3 truly helps you to **inspect with confidence**.

The Veo3 multi-techniques allow inspectors to keep inspecting as they always have, with no need to change their current workflow and by doing so, users can benefit from the additional resolution and sizing performance of TFM while carrying out an already approved, trusted and reliable procedure.

Simplicity | Capability | Reliability

Multi-technique Advantages

Even though TFM is now a ubiquitous inspection method, correct configuration and selection of the most appropriate TFM propagation mode for the application is a very real challenge. Comparing modes is frustrating and time consuming. With Veo3, having the ability to simultaneously show a PA and several live TFM scans it is now easier than ever to identify and size flaws with high P.O.D. and increased technician confidence.

The advanced technology in Veo3 also allows the addition of a TOFD scan to the PA and TFM live scans. Inspect with confidence when simultaneously using three complementary inspection techniques.

Flaw Characterisation and Assessment has never been this easy in difficult applications.





Item # R1300a

Wohler - VIS 700 Plus HD Inspection Camera

Wohler VIS 700 HD Inspection System

The Wohler VIS 700 inspection camera offers exactly what professionals have been waiting for: razor sharp high definition images, a focus function for precise inspection, and now wireless locating. The Wohler VIS 700 is the ideal inspection camera for waste water pipes, flue gas and ventilation lines as well as $\ensuremath{\mathsf{NDT}}$ and plumbing applications.

Fully Digital Camera System

A new digital high-resolution sensor assures amazingly sharp images. With the Wohler VIS 700, professionals are able to plan their maintenance services on the basis of clearly visible facts. The displayed level indication ensures you to keep orientation in the pipe. The camera display shows the camera head position and angle for ease of navigation. The home function allows you to realign the camera head straight forward when needed. HD images are displayed for you on the brilliant, touch screen high-resolution monitor.

Individual Control of Sharpness

The focus function via touch screen or joystick makes it possible to precisely control the depth of focus. A simple tip on the joystick ensures a precise, crystal clear image on the screen. Additional settings and extras, such as the touch screen keyboard, are accessable by tapping the touchscreen monitor.





HD

TOUCH VOICE RECORDING



VIDEO FUNCTION









Adjustable to individual requirements, reliable grip when operating the monitor

HOME

HD-TOUCHSCREEN



EASY TO



The free Wohler app allows control and video streaming on your smartphone / tablet. It can't get much more comfortable.



LOCATOR TRANSMITTER

WIRELESS LAN TRANSMISSION

POWER UP TO 4h

VIS 700 APP



Mitcorp













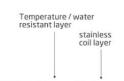
Item # R2000a

Mitcorp - X1000 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit

Key Features:

- Super Image Quality Sharp, Clear and Bright
- 7" TFT LCD Protected by Oil and Scratch Resistant Tempered Glass
- 1m Drop Resistence
- 800 x 480 Display Resolution
- 640 x 480 Video (with Audio)/Photo Resolution (jpeg)
- Rechargeable Li-Battery lasts for 5 Hours
- LED Backlight Function Keys: Ideal for Dark Environment operation
- Capacitive Touch Technology for Best Performance and Durability
- Neck/Hand Strap: Convenience and Great for Operation
- Light Weight: Only 2.86 lb
- IP57 Protection (Main System) Drop and Water Proof
- Provide Flexibilities in Narrow Spaction Inspection
- 360° Articulation
- USB Reader: Simply connect your PC to Retrieve your Data from the SD Card, Card Reader is not Necessary





High Density Stainless Steel Braided Tube provides Durability, Flexibility and also Rust, Water and Temperature Resistance



Introducing the New 3.9mm & 6.0mm Ultraviolet VJ-3 Video Borescope - Available in Lengths ranging from 1.0m to 3.0m

Item # R2010b

ViewTech - VJ-3 UV-A (All Way Articulating) Complete Portable Videoscope Kit

Key Features:

- 3.5" IPS anti-glare LCD, 640*480 Resolution
- Effective Pixels: 450,000 pixels
- Articulation Control: Thumb-actuated, mechanical rocker
- Joystick Lock: Automatic
- Control Buttons: Image Capture, video Capture, LED control, frame rotation, freeze frame, 4X zoom, menu access / navigation
- 6 Super high-intensity Ultraviolet LEDs
- Wavelength 365nm / Intensity ≥1200µW/cm²
- Internal Storage: 16GB SD Card / 10,000 photos or 8 hours video
- Image Format: JPEG (optional date and time stamp)
- Video Format: AVI (optional date and time stamp)
- Rechargeable Li-Battery lasts for 4 Hours
- Light Weight: Only 2.2 lbs.
- Operating Temperature (Base Unit): -5 120°F
- IP Rating (Base Unit): IP54
- Operating Temperature (Insertion Tube): 15 120°F
- IP Rating (Insertion Tube): IP67





POSITIVE MATERIAL IDENTIFICATION (PMI)

Thermo Fisher S C I E N T I F I C

Positive Material Identification is a well established analytical materials testing and materials identification technique used throughout industrial plant as well as within the metal assembly and component manufacturing industries. It guarantees a material's elemental composition as required for safety compliance and quality control.

Failures at petroleum, petrochemical and power generation facilities can have catastrophic consequences. Positive Material Identification (PMI) programmes allow plant operators and maintenance professionals to test critical process components before and after they are put in service, so they do not merely rely on the suppliers' certificates.

Item # R1400a ThermoFisher - Niton XL2 980 Plus

Niton XL2 Plus Handheld XRF Analyzer

Confidently perform elemental analysis with the Thermo Scientific™ Niton™ XL2 Plus handheld XRF analyzer. When durability, performance and productivity are top of mind, industrial businesses rely on the Niton XL2 Plus handheld XRF analyzer for fast results and low detection limits. Identify pure metals and alloys, or obtain geochemical data, the Niton XL2 Plus provides operators the ability to scan a broad range of materials in one versatile analyzer.

Rugged and Reliable

When durability, performance and productivity are top of mind, industrial businesses rely on the Thermo Scientific Niton XL2 Plus handheld XRF analyzer. Offering superior analysis and enhanced robustness, the Niton XL2 Plus is built for the way you work. Founded on a reputation of dependability and reliability, you can count on the Niton XL2 Plus for years to come.

Purpose Built

Maximizing form and function, the Niton XL2 Plus is engineered to conquer your toughest environments. Analyze sharp items while minimizing puncture risk with standard Detector ProGuard protection. Backed by a certified IP54 rating, the Niton XL2 Plus is sealed against moisture and dust, ensuring uninterrupted operation, even in the harshest of industrial environments.



Item # R1405a ThermoFisher - Niton XL5 Plus

Thermo Fisher

Size and Weight

Make light work of heavy industrial tasks utilizing the Niton XL5 Plus. Weighing an industry leading 2.8 pounds, the Niton XL5 Plus is the lightest handheld XRF analyzer available for elemental determination and alloy identification. It's small footprint and featherweight design reduce operator fatigue while increasing productivity.

Small Size, Big Power Fast, accurate, versatile XRF analysis

When versatility, low limits of detection (LODs) and high sample throughput are critical, industrial businesses rely on the Thermo Scientific Niton XL5 Plus handheld XRF analyzer. Providing customers with solutions designed to meet their most demanding applications, the Niton XL5 Plus maximizes performance and productivity.

Rapid Results

Powered by a 5W x-ray tube, the Niton XL5 Plus generates fast and accurate results. An upgraded graphene window ensures optimum sensitivity for each measurement even light elements. Results are displayed in real time, enabling you to make faster decisions. And with a standard system health check designed to verify operating parameters, your device will operate smoothly.

Design

Tight spots are no match for the Niton XL5 Plus. Discover expanded field use with improved compact geometry and ergonomics. Reaching tight welds, corners and joints, are no longer defined as awkward test spots for the Niton XL5 Plus. Standard Detector ProGuard protection also reduces risk when measuring sharp items.

Functionality

ivid new icons and an application interface ease navigation and configuration. Utilize swipe and touchscreen functionality, even with a gloved hand. Optional directional keys provide added usability. A hot swap battery keeps you up and running when it's time to replace a low battery. Micro and macro cameras enable precise sample positioning and collect images for better record keeping. Finally, WiFi accessibility automatically transmits data from your device to PC.



POSITIVE MATERIAL IDENTIFICATION (PMI)

Item # R1415a

SciAps - X50 XRF Alloy Analyzer Kit

SciAps X50

Get exactly what you need with the totally reengineered X-50. It's the highest performing XRF on the market that features classic PiN diode detector technology. A little beefier than SciAps sleeker models, this XRF still offers best-in-class analytical performance and speed for its detector platform, operating at rates 2X or higher than other brands. SciAps powerful, miniaturized X-ray tube combined with highly advanced internal geometry yields fast, precise results.

Reinventing a Classic

X-50 utilizes the original "old school" PiN diode X-ray for great basic analysis of transi-tion and heavy metals. For those who don't need to measure Mg, Al, Si, S, or P, it's the perfect choice. We've reengineered the classic detector technology with a new inter-nal circuit board, new housing and metal components, up-to-date software and user interface, and full recalibration. And we've equipped it with more features, such as a built-in, high-resolution camera for sample viewing and a macrocamera for photo-documentation or 2D/3D bar code reading and storage.

Standard Element Package

The X-50 operates using the same advanced X-ray tube technology as other SciAps X Series models (operating at 40 kV max) for testing, that includes Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, W, Ta, Hf, Re, Se, Au, Pb, Bi, Zr, Mo, Pd, Ag, Cd, Sn, and Sb. More elements can be added upon request.



Data Management

Operates on Android OS with the feel of a smartphone. Using Bluetooth, Wi-Fi and USB, users can print, email, and connect to virtually any information system for real-time data. On-board macro camera allows for photo-documentation, and Bluetooth label printer provides instant hard copy labels.

Item # R1420a

SciAps - Z 902+ LIBS Analyzer Kit



True Portability

Only 4.35 lbs with battery and a narrow profile for accessing the tightest spaces; an aerospace-grade aluminum body for improved performance in high ambient temperatures; and a re-designed, Android-based user-interface all make this system the most usable platform on the market. Wifi and Bluetooth with GPS capability to print, email, and connect to virtually any information management system for efficient, real-time test data and reporting.

A new standard for NDT/PMI

The world's first handheld analyzer to deliver carbon content just got better. SciAps Z-902 Carbon is the key to rock-solid, in-field analysis for alloys. Confirm alloy type and grade 300 series stainless into L, H, and S series. Determine carbon equivalents for welding. Perform material verification pre-and post-fabrication.

Identification of stainless steels and low alloy steels, including carbon analysis down to 70 ppm and instant CE (carbon equivalence) calculations using our uniquely powerful laser, onboard argon purge and high-resolution spectrometer.

- On-board argon delivers results for pennies per test.
- Powerful laser delivers 5-6 mJ/pulse on the sample, with a 50 Hz repetition rate. High energy and high repetition rate mean a clean burn.
- Laser raster can rapid-sample multiple locations in one test for fuller data.
- Analysis averaging available for multi-shot averaging and data rejection.
- Sample alignment micro-camera and LED Spotlight focus just where you want.





MATERIAL TESTING EQUIPMENT

Item # R1500a

Fischer - FMP30 Feritscope





Measurement of the Ferrite Content in Austenitic and Duplex Steel

Sometimes, knowing the exact ferrite content is essential. Especially wherever austenitic steels and duplex steels have to withstand heat, aggressive chemicals and/or high pressure. If the ferrite content is too low, for example in the area of weld seams, this can lead to a loss in strength. On the other hand, too-high ferrite content reduces corrosion resistance, toughness and ductility. But if you check the ferrite content with the FERITSCOPE FMP30, you know for sure.

This handy instrument lets you measure the ferrite content anytime, anywhere – it's fast, precise and non-destructive. The advantages of the robust handheld device come to the fore when used in chemical plants, energy plants and process engineering plants. The wide variety of Fischer probes makes it easy for you to measure the ferrite content, even if the spot is hard to reach. Just apply the probe; the FERITSCOPE FMP30 does the rest.

Simple and Quick Measurements

It is easy to measure the ferrite content accurately when using the FERITSCOPE FMP30. Upon probe placement on the surface of the specimen, the reading is displayed automatically and stored in the instrument. The probe can also be placed onto hard to reach areas. For such applications, the instrument features an "external start" function to trigger the measurements with the push of a button. This is ideal for measurements in pipes, bore holes or grooves.

For easy ferrite content measurements along a weld seam, the instrument offers the "continuous measurement capture" function. When scanning the weld seam with the probe positioned, the continuous readings are captured and stored. This provides a ferrite content profile along the weld seam.

VACUUM BOX TESTING



Vacuum box testing is a non-destructive examination used when trying to locate weld seam leaks. A vacuum box and a pump or compressor create a high or low pressure vacuum while a detergent solution is applied to the test area. The detergent bubbles, making leaks visible within the created pressure envelope. QED utilizes systems compliant with ASTM E515.

Item # R1800a

30" Flat & 18" Corner Vacuum Box System

Simple to Operate

The air ejector has no moving parts and no lubrication is necessary. After applying leak detection fluid along the seam, simply place the vacuum device over the area to be detected and open the air valve.

Rugged Yet Lightweight

Our shockproof Vacuum Devices are built with lightweight acrylic which can be heat formed for special applications. The tough rubber gasket is designed to provide a maximum seal.

Applications

- Lap welds, butt welds, and shell to annular welds
- Piping systems and pressure vessels
- Tank bottoms
- ERW seamed pipe in pipelines
- Objects on which a pressure differential can be created

Kit Includes

- 30" Flat & 18" Corner Vacuum Box
- Vacuum Pump
- 8' Vacuum Pump Hose with Quick Disconnects
- Type 1 SHERLOCK 5-Second Leak Detector, Spray Bottle





HARDNESS TESTING







Item # R1610a

Screening Eagle - Equotip 550 Hardness Testing Kit





Proced's Equotip enables portable hardness inspection of almost any object, polished parts and heat-treated surfaces. The hardness measurements are made by using the dynamic rebound testing method according to Leeb, the static Portable Rockwell hardness test and the Ultrasonic Contact Impedance (UCI) method. The rugged Swissmade metal NDT hardness testers are designed for portable hardness testing in the lab, in the workshop, at production facilities or on site. Equotip Live is the latest innovation featuring a wireless impact device, mobile app, real-time data sharing and cloud backup.

Equotip 550 UCI

The leading Ultrasonic Contact Impedance measurement system with advanced

- 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 applications
- Powerful measurement device on the market packed in a rugged chassis

Applications

- Ultrasonic Inspection of Welds
- Ultrasonic Inspection of Cast and Forged Metals
- Ultrasonic Inspection of Heat-treated Surfaces

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

Productivity



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



User Experience

User guidance, smart material, and probe selection wizards, and ready-to-go reports through a powerful built-in reporting feature facilitate even short measurement campaign.



Software / Workspace App

Tech Specs

Display 7" color rugged touchscreen unit with dual core processor

PC Software Equotip Link allowing direct reporting and custom reports

Memory Internal 8 GB flash memory (> 1'000'000 measurements)



SWISS MADE





Sensor

Tech Specs

Native Scale HV (UCI)

Available Scales HB, HV, HRA, HRB, HRC, HR15N, HR15T, MPA

Available Probes UCI (Adjustable load HV1, HV5 and HV10)

Combination with other Methods Leeb, Portable Rockwell

Average Roughness Ra (µm / µinch) 12.5 / 500





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"FOR ALL YOUR NDT EQUIPMENT, SUPPLIES AND SERVICE - THINK QUALITY"

REPRESENTING OVER 30 MANUFACTURERS

CarestreamNDT





WÖHLER























BUFFALO, NY

3176 Abbott Road, Suite 700N Orchard Park, NY 14127 Telephone: (716) 667-7703 sales@geddirect.com

HOUSTON, TX

4044 Strawberry Road Pasadena, TX 77504 Telephone: (713) 277-7913 txsales@geddirect.com

