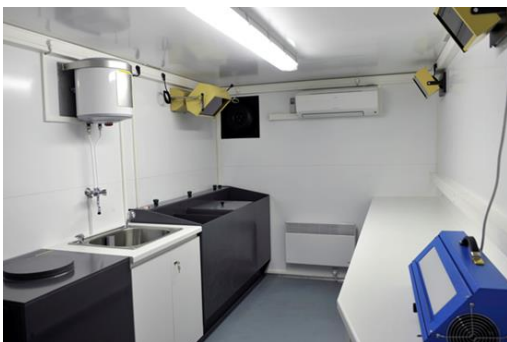




PRODUCTS CATALOGUE

NDT



Non Destructive Testing Products Catalogue

GAMMA RADIOGRAPHY

- 1075 SCARPro source projector
- 880 Series Source Projector
- Handle Grip Control Assemblies
- Source Guide Tubes
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- CPbattery Portable X-Rays Generators
- SITEX CPseries Directional Units /POWERBOX
- SITEX & XS Directional Units
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- INDX 900
- INDX 43 2.0b
- INDX 43/3MW - INDX 43/5MW
- INDX 37 NDT Dryer
- INDX 37M NDT "Mobile"

INDUSTREX Films Solutions for NDT

- Industrex X-ray films
- Industrex Chemicals
- Eco-Friendly Chemicals

INDUSTREX DIGITAL SYSTEM

- Industrex HPX-1
- Industrex HPX-PRO

RT FILM DIGITIZING

- MII-900 Plus
- MII-800XL Plus

X-RAY CRAWLER

- IRIS 6 X-Ray crawler
- IRIS 6 Gamma-Ray crawler
- IRIS 10 X-Ray crawler
- IRIS 10 Gamma-Ray crawler
- IRIS 10XS X-Ray Crawler

MANUAL FILM PROCESSING UNIT

- PROCESSING TANKS
- X-RAY FILM DRYER
- Film Processing Accessories

X-RAY FILM VIEWER

- HALOGEN 10x24
- HALOGEN 10x48
- LEDS 10x24
- LEDS10x48
- KOWOLUX M Series
- Spot viewer LED

DENSITOMETER

- Digit-X Densitometer
- 301 Densitometer
- 331C Portable Densitometer
- DT-200 Densitometer

RADIOGRAPHIC ACCESSORIES

RADIATION SAFETY

- TRACERCOTM T402 and T402HR
- Direct-Reading Dosimeter
- Personal Dosimeter RAD-60R
- Dose Rate Meter 6150 AD5/6
- Dose Rate Meter X5C plus
- Dose Rate Meter RDS-30
- Dose Rate Alarm Lamp
- Personal Dosimeter DMC 3000
- Rad Alert

MOBILE DARKROOM

STATIONARY DARKROOM

WELD MEASURING GAUGES

NDT Demonstration Kit

- Standard RT Kit
- Standard UT Kit

VACUUM DEVICES FOR LEAK TESTING

- vacuum boxes

MAGNETIC PARTICLE INSPECTION & PENETRANT TESTING

PENETRANT TESTING INSPECTION

- Fluxo consumables

MAGNETIC PARTICLE INSPECTION

- Fluxo consumables
- Magnaflux Y1, Y6, Y7
- PM-6 Permanent Magnet
- YM-5 Permanent Magnet

ULTRASONIC FLAW DETECTOR

- ECHOGRAPH 1095
- A-Scan ECHOMETER 1077
- EPOCH 600
- EPOCH 650
- OmniScan MX2
- Ultrasonic Transducers, Test Blocks

ULTRASONIC THICKNESS GAGES

- 27MG
- 38DL PLUS
- 45MG
- UT5000 Thickness Gauge ATEX
- Multigauge 5500

EMAT THICKNESS GAGES

- Portable EMAT thickness gauge

REBOUND HARDNESS TEST

- Equotip 550 Leeb

METAL HARDNESS TESTER

- Equotip Bambino 2

METAL HARDNESS TESTER

- Equotip Piccolo 2
- Leeb Hardness Tester HM-6561

LIFTING EQUIPMENT

- The Handifor
- The dynafor LLX1
- The Dynafor LLZ
- Yale Tigrip Crane Weigher TZR

1075 SCAR Pro Source Projector

SENTINEL™ Model 1075 SCARPro source projector is used for industrial non-destructive testing applications of gamma radiography with Selenium-75.

SCARPro can be used as a category I or II exposure device.

When used in SCAR mode (category I), the SCARPro allows radiography to be performed in congested work areas with a minimal distance to the controlled areas.

When used as a traditional projector (category II), standard SENTINEL™ source guide tubes and collimators allow the Selenium-75 source to be used for axial, radial and panoramic exposures.

Exposure Device

Model 1075 SCARPro is a dual mode radiographic exposure device for Small Controlled Area Radiography and traditional projection radiography.

SCAR

An interchangeable collimator with a 90o incremental adjustment enables safe radiography in areas congested with workers.

Projector

A standard guide tube attachment with an ISO compliant interlock enables traditional axial and radial projection radiography.

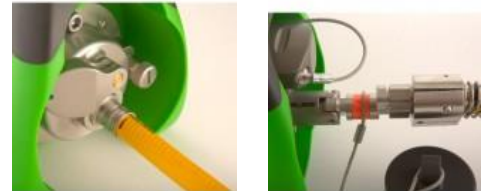
- Length : (22.45 cm) 11.20 in
- Width : (14.99 cm) 5.90 in
- Height : (18.54 cm) 7.30 in
- Weight with Jacket : (13.61 kg) 30 lb
- Weight without Jacket : (12.25 kg) 27 lb
- Shielding : Tungsten 16.5 lb (7.5 kg)

Materials : Tungsten shield with built in source path, Stainless Steel, Aluminum, and Polyurethane

Isotope : Selenium-75

Maximum Source Capacity : 81 Ci (3 TBq) of Selenium-75

Controls and Guide Tubes : 1075 SCARPro Projectors are designed, manufactured and approved for use with SENTINEL™ authorized controls and accessories only.



Product code 10.01.00

880 Series Source Projectors

SENTINEL™ Model 880 Delta, Elite and Omega source projectors are portable, lightweight and compact industrial radiographic exposure devices.

The patented device body consists of a titanium 'S' tube and cast depleted uranium (DU) shield contained within a 300 series stainless steel tube with stainless steel discs welded at each end forming a cylinder shaped housing.

The discs are recessed to provide protection for the rear mounted locking mechanism and front mounted outlet port.

EXPOSURE DEVICE

The exposure device body, containing the DU shield, locking mechanism, outlet port, protective covers and required labels*, comprises the radioactive material transport Type B(U) package.

REMOVABLE JACKET

An impact resistant plastic jacket surrounds the exposure device to protect labels and provide the means for carrying and placement during radiographic operations.

The three models are identified by jacket color; yellow for the 880 Delta, blue for the 880 Elite and orange for the 880 Omega.



880 Delta Projector

- Length : (33.8 cm) 13.33 in
- Width : (19.1 cm) 7.5 in
- Height : (22.9 cm) 9 in
- Weight : (23.6 kg) 52 lbs

880 Elite Projector

- Length : (33.8 cm) 13.33 in
- Width : (19.1 cm) 7.5 in
- Height : (22.9 cm) 9 in
- Weight : (19 kg) 42 lbs

880 Omega Projector

- Length : (33.8 cm) 13.33 in
- Width : (19.1 cm) 7.5 in
- Height : (22.9 cm) 9 in
- Weight : (15 kg) 33 lbs



Product code 10.02.00

Handle Grip Control Assemblies Extreme Condition

A handle control assembly is comprised of the handcrank and gear box, a pair of control housings, a drive cable and a safety connector.

- Available in 25, 35 and 50 ft (7.5, 10.5 and 15 m)
- Light weight polyurethane ergonomic handle design
- Water resistant handle assembly preventing ingress of water, dirt and sand
- Control housings are constructed of light weight, non metallic 3-ply material twined together for maximum dent resistance
- Yellow and black housings for high visibility during night operations
- Large gear ratio providing 1 foot of travel per revolution (ALARA)
- Commercial grade sealed ball bearing
- Noncorrosive stainless steel end fittings
- Extreme temperature operation from -40oF to 212oF (-40oC to 100oC)

Product code 10.03.00



Source Guide Tubes

Source guide tubes are flexible stainless steel tubes with a protective polyvinyl covering and are available to fit all SENTINEL™ projector units.

Product code 10.04.00



Tungsten Gamma Ray Collimators

TCN799

| | | |
|-------------------|---|-----------------------------------|
| Weight | : | 1.75 lb (0.79 kg) |
| Dimensions | : | Length: 1.88 in, Diameter: 1.5 in |
| Attenuation | : | Ir-192: 0.05 |
| Half Value Layers | : | Ir-192: 4.30 |
| Beam Size | : | 60° conical side throw |

Product code 10.05.00

TCN846

| | | |
|-------------------|---|----------------------------------|
| Weight | : | 4.3 lb (1.95 kg) |
| Dimensions | : | Length: 3.75 in Diameter 2.25 in |
| Attenuation | : | Ir-192: 0.0045 |
| Half Value Layers | : | Ir-192: 7.80 |
| Beam Size | : | 20° x 360° panoramic |

Product code 10.05.01



Automatic Exposure Control Unit

The fully automatic motorized wind out system enables radiographers to position a source to expose a radiograph and then retract the source after a pre-set exposure time has elapsed. The system can be used with Cobalt-60 units as well as SENTINEL™ Model 460, 660, and 880 devices.

Product code 10.06.00



THE PIPELINER

The PipeLiner is a rugged, easy to use attachment for the Sentinel 880 Delta, Sigma, Elite and Omega gamma ray radiography projectors.

The PipeLiner system is operated by one person and can be used on 2" and larger diameter pipelines.

Integral wheels mean smooth effortless transport along the pipeline to reduce operator fatigue.

| | | |
|------------------------------|---|--------|
| Weight | : | 31kg |
| Jacket and Projector | : | 24.2kg |
| Collimator and Shoe Assembly | : | 6.8kg |

Product code 10.07.00



Emergency Container EC3

The EC3 is a purpose designed and built emergency container for mass production. This has allowed us to produce a cost effective and weight efficient lead emergency container. The EC3 is designed to be used with Ir192, Se75 and Yb169 sources. The EC3 can be manufactured for use with 660 or 880 compatible source holders. The Type A status of the EC3 allows the package to be used to transport the radioactive contents if the emergency container is put into action. A Type A limit allows transportation of isotopes up to the A1 or A2 value; 1TBq (27 Ci) for Ir192. This allows for dose saving following an emergency incident as there is no need to move the source from a non-transportable emergency container into an approved transport package.

It must be noted that the Safe Store is NOT a licenced transport container.

Product code 10.08.00



RADIOACTIVE ISOTOPES

Iridium-192 Sealed Sources

Natural and enriched Iridium-192 sources are constructed using iridium metal discs or pellets of uniform size in a welded stainless steel capsule. Iridium plus high specific activity sources are also available.

| | | |
|---------------------|---|---------------------------------------|
| Source Model | : | A424-9, SPEC-150 969, INC-IR100 87703 |
| Half Life | : | 74 Days |
| Energies | : | 206-612 KeV |
| Steel Working Range | : | 0.47 in to 2.75 in (12 mm to 70 mm) |

Product code 10.09.00

Selenium-75 Sealed Sources

Selenium-75 sources are available in cylindrical and quasi-spherical focals, permitting shorter SFDs and greater sensitivity on fixed geometries.

| | | |
|---------------------|---|------------------------------------|
| Source Model | : | A424-25W |
| Half Life | : | 120 Days |
| Energies | : | 97-401 KeV |
| Steel Working Range | : | 0.32 in to 1.18 in (8 mm to 30 mm) |

Product code 10.10.00

OpenVision™ OVCF-NDT

OpenVision™ is a light weight live video X-ray imaging system specifically designed for hand-held inspection. It includes a highly sensitive radiographic imager and battery-operated 70kV x-ray tube designed for portable field operation. The proprietary intensified video imaging system captures images and displays them on a hand-held LCD viewer, head mounted display, or portable recorder with LCD display in real-time. This portable system is commonly used for Corrosion Under Insulation inspection. Corrosion Under Insulation (CUI) inspection is a term used to address the inspection of areas that exist between the insulation material and the exterior wall of the pipe.

Product code 10.11.00



PORTABLE X-RAY GENERATOR

CPbattery

Constant potential ultralightweight battery powered X-ray generators for NDT and Security inspections.

The CP120B and CP160B are ultra-light and portable constant potential X-Rays generators that have been specially developed to offer a completely new concept that is able to match the major advances in imaging technology that have taken place in recent years.

Even with their ultra-compact size and being so light in weight, these constant potential generators are capable of penetrating through 10 mm (CP120B) and 21 mm (CP160B) of steel in a very short exposure time.

Constant Potential output.

- 120 kV – 1 mA
- 160 kV- 0.5 mA
- 60° x 60° directional beam.

Focal spot of 0.8 x 0.5 mm / 0.8 x 0.7 mm

7 Kg / 9.2 Kg including battery pack and handling.

Extended operation, external power supply options.

Optimised for new digital and radiographic imaging media

Generators 160 kV- 0.5 mA

Unit

Value

Radiation geometry

-

Directional

Output voltage range

kV

40 to 160

Tube current range

mA

0.1 to 0.5

Tube current at full output

mA

1.0

Maximum power at the anode

W

80

Steel penetration

mm

21

Weight

Kg

9.2

Overall dimensions mm

∅

124 x 490

Leakage dose at 1 m at full output

mSv/h

< 2.0

Optical focal spot

mm

0.8 x 0.7

Inherent filtration

mm

Equiv. 3.5 (Al)

Waterproof level

-

IP54

Product code 11.06.00

SITEX CPseries

Directional Units

While the SITEX CP160D & CP320D weigh just 12 Kg & 23 Kg respectively, they are Extremely powerful and capable of penetrating 42 mm (CP200D) and 70 mm (CP320) of steel in just under 10 minutes.

Furthermore, our unrivalled air-cooling system combined with the CP output translates into a duty cycle at 30°.

Moreover, its broad input power range (from 90 to 264 VAC) enables the SITEX CP SERIES to be operated on virtually any grid in the world and generator sets.

Finally, its low power consumption will ensure that your inspections are more cost-effective and environmentally friendly.

KEY FEATURES

| | |
|--|---------------------------------|
| Unbeatable Power to Weight ratio 0.8 Be window | : V-shaped hand rings |
| Up to 960 W anode dissipation | : Laser pointer |
| 160 to 320 kV range | : Gas insulated |
| 1 kV and 0.1 mA steps | : Shutter & diaphragms included |
| 100% duty cycle at 30 °C | : 7.9 kg control unit |
| Forced air cooled | : 90 to 264 VAC mains |
| 6A at 230V | |

POWERBOX CONTROL UNIT

Developed for the CP SERIES, the POWERBOX control unit is not merely a minor component of the new system. It is one of the best!

Product code 11.07.00



SITEX CP160D

BEAM DIRECTIONAL
POWER SUPPLY MAINS

The **CP160D** is the lightest and most compact generator of the **CP**SERIES. Featuring a built-in Beryllium window, it is the perfect generator for the inspection of light alloys such as aluminum, magnesium or fiber based materials like glass and carbon, as well as the greater thickness of steel. In fact, with its penetration capacity that is capable of reaching up to 37 mm of steel, the **CP160D** is able to execute many different types of NDT tasks without the need to ever have to add extra accessories.

| CP160D | Unit | Value |
|---------------------------------------|-------|--------------------|
| Radiation geometry | - | Directional |
| Output voltage range | kV | 10 to 160 |
| Tube current range | mA | 1 to 10 |
| Tube current at full output | mA | 5.6 |
| Max. power at the anode | W | 900 |
| Constant power mode | - | Yes |
| Working cycle at 30°C (*) | % | 100 |
| Steel penetration (**) | mm | 29 |
| Weight (excluding guard rings) | Kg | 11.9 |
| Overall dimensions | mm | Ø 140 x 725 |
| Leakage dose at 1 m at full output | mSv/h | < 2.0 |
| Optical focal spot (EN12543) | mm | 3.0 (~1.5 IEC 336) |
| Max. useful angle | ° | 60 x 40 elliptical |
| Inherent filtration | mm Be | 0.8 (Be Window) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -30 to +60 |
| Storage temperature | °C | -40 to +70 |
| Built-in carousel featuring 5 outputs | - | Yes |
| Guard rings | - | 2 |
| (*) Open air - 5m/sec airstream | - | - |
| (**) 700 mm FFD, 10 min, AA400, D=2 | - | - |

Product code 11.07.01

SITEX CP200D

BEAM DIRECTIONAL
POWER SUPPLY MAINS

Being just 20 mm longer than the **CP160D**, the **CP200D** represents the best compromise between high penetration (up to 42 mm for steel) and the capacity of the generator to fit with various NDT applications, such as inspections of more technical materials in the aeronautical or space industries. The **CP200D** is one of the most versatile generators on the market and thanks to its built-in multiple X-Ray output carousel it will adapt to a very wide variety of NDT applications, without compromising in any manner its light weight (12 kg) and ease of use.

| CP200D | Unit | Value |
|---------------------------------------|-------|--------------------|
| Radiation geometry | - | Directional |
| Output voltage range | kV | 10 to 200 |
| Tube current range | mA | 1 to 10 |
| Tube current at full output | mA | 4.5 |
| Max. power at the anode | W | 900 |
| Constant power mode | - | Yes |
| Working cycle at 30°C * | % | 100 |
| Steel penetration | mm | 42 |
| Weight (excluding guard rings) | Kg | 12 |
| Overall dimensions | mm | Ø 140 x 725 |
| Leakage dose at 1 m at full output | mSv/h | < 2.0 |
| Optical focal spot (EN12543) | mm | 3.0 (~1.5 IEC 336) |
| Max. useful angle | ° | 60 x 40 elliptical |
| Inherent filtration | mm Be | 0.8 (Be Window) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -40 to +70 |
| Built-in carousel featuring 5 outputs | - | Yes |
| Guard rings | - | 2 |

Product code 11.07.02

2022



SITEX CP225D

BEAM DIRECTIONAL
POWER SUPPLY MAINS

Supplemental to its outstanding penetration capacity (up to 47 mm for steel in just 10 minutes), the CP225D includes a built-in multiple X-Ray output carousel that features a Beryllium window for the inspection of lighter alloys such as aluminum and carbon fiber. The CP225D is one of the most versatile generators on the market and will adapt to an extremely wide variety of applications. In fields as diverse as the construction or petrochemical industries, its power and small focal spot, light weight, compactness and high penetration capacity will be much appreciated.

| CP225D | Unit | Value |
|---------------------------------------|-------|--------------------|
| Radiation geometry | - | Directional |
| Output voltage range | kV | 10 to 225 |
| Tube current range | mA | 1 to 10 |
| Tube current at full output | mA | 4.0 |
| Max. power at the anode | W | 900 |
| Constant power mode | - | Yes |
| Working cycle at 30°C * | % | 100 |
| Steel penetration | mm | 47 |
| Weight (excluding guard rings) | Kg | 12.1 |
| Overall dimensions | mm | Ø 140 x 725 |
| Leakage dose at 1 m at full output | mSv/h | < 2.0 |
| Optical focal spot (EN12543) | mm | 3.0 (~1.5 IEC 336) |
| Max. useful angle | ° | 60 x 40 elliptical |
| Inherent filtration | mm Be | 0.8 (Be Window) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -40 to +70 |
| Built-in carousel featuring 5 outputs | - | Yes |
| Guard rings | - | 2 |



Product code 11.07.03

SITEX CP300D

BEAM DIRECTIONAL
POWER SUPPLY MAINS

Teledyne ICM's CP SERIES has been designed with a view to revolutionizing the handling and performances of portable X-Ray sets. Despite having managed to halve the weight of similar portable X-Ray generators available on the market (while continuing to provide the same power output), the SITEX CP SERIES generators feature a shutter, a laser pointer, a beryllium window, an aluminum filter and two integrated diaphragms (customized sizes are available upon request). Without compromising the robustness and reliability for which Teledyne ICM products are renowned, the small size and light weight of the SITEX CP SERIES will radically change the way that you perform your RT inspections. And you will see a positive impact in terms of both quality and return on investment (ROI).

| CP300D | Unit | Value |
|---------------------------------------|-------|--------------------|
| Radiation geometry | - | Directional |
| Output voltage range | kV | 20 to 300 |
| Tube current range | mA | 1 to 10 |
| Tube current at full output | mA | 3.0 |
| Max. power at the anode | W | 900 |
| Constant power mode | - | Yes |
| Working cycle at 30°C * | % | 100 |
| Steel penetration | mm | 66 |
| Weight (excluding guard rings) | Kg | 23 |
| Overall dimensions | mm | Ø 180 x 839 |
| Leakage dose at 1 m at full output | mSv/h | < 5.0 |
| Optical focal spot (EN12543) | mm | 3.0 (~1.5 IEC 336) |
| Max. useful angle | ° | 60 x 40 elliptical |
| Inherent filtration | mm Be | 0.8 (Be Window) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -40 to +70 |
| Built-in carousel featuring 5 outputs | - | Yes |
| Guard rings | - | 2 |

Product code 11.07.04

SITEX CP200DS

BEAM DIRECTIONAL

IDEAL FOR DIGITAL RADIOGRAPHY

The small focal spot (1 mm) of the CP200DS generator minimizes un-sharpness and gives clearer images, which makes it ideal for digital radiography (DR) when close X-ray shots are possible.

Our CP200DS is a light and powerful generator (200 kV) with a metal-ceramic tube which turns it to be the best power-to-weight ratio in the world.

Its 100% duty cycle combined to its built-in multiple X-Ray outputs carousel make the CP200DS one of the most versatile generators on the market that will adapt to a very wide variety of NDT applications.

The CP200DS, like the rest of the CP Series product range, operates with the plug-and-play POWERBOX control unit.

| CP200DS | Unit | Value |
|---------------------------------------|-------|--------------------|
| Radiation geometry | - | Directional |
| Output voltage range | kV | 10 to 200 |
| Tube current range | mA | 0.5 to 10 |
| Tube current at full output | mA | 3.7 |
| Max. power at the anode | W | 750 |
| Constant power mode | - | Yes |
| Working cycle at 30°C | % | 100 |
| Steel penetration | mm | 40 |
| Weight | Kg | 15.9 |
| Overall dimensions | mm | Ø 140 x 705 |
| Leakage dose at 1 m at full output | mSv/h | < 2.0 |
| Optical focal spot (EN12543) | mm | 1 |
| Max. useful angle | ° | 60 x 40 elliptical |
| Inherent filtration | mm Be | 0.8 (Be Window) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -30 to +60 |
| Storage temperature | °C | -40 to +70 |
| Built-in carousel featuring 5 outputs | - | Yes |
| Guard rings | - | 2 |



Product code 11.07.05

CP160CR

BEAM PANORAMIC

POWER SUPPLY BATTERY CRAWLER

Designed to fit into 6" pipelines and higher, the CP160CR constant potential X-Ray generator for crawlers is – in its category – the most powerful panoramic X-Ray tube head in the world for crawlers. The generator is making the cutting edge constant potential technology of the CP SERIES even more compact into a 9.9 kg – 120 mm diameter X-Ray tube head. The crawler unit is capable of penetrating up to 28 mm of steel in 10 minutes, which corresponds to just a 25 second exposure time for 6" standard pipeline welds.

| CP160CR | Unit | Value |
|------------------------------------|------|-----------------|
| Radiation geometry | - | Panoramic |
| Output voltage range | kV | 40 to 160 |
| Tube current range | mA | 0.5 to 2.0 |
| Tube current at full output | mA | 2.0 |
| Max. power at the anode | W | 320 |
| Constant power mode | - | Yes |
| Working cycle at 30°C | % | 100 |
| Steel penetration (**) | mm | 28 |
| Weight | Kg | 9.9 |
| Overall dimensions | mm | Ø 120 x 688 |
| Leakage dose at 1 m at full output | mS/h | < 2.0 |
| Optical focal spot (EN12543) | mm | Ø 4 x 0.5 |
| Max. useful angle | ° | 360 x (2x20) |
| Inherent filtration | mm | Equiv. 3.5 (Al) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -40 to +70 |



RCU REMOTE CONTROL UNIT

Product code 11.08.00

SITEX & XS DIRECTIONAL

All SITEX and SITEXS units contain a rod anode.

This is the focal spot that is outside the SF6-insulated high-voltage generator.

As maximum advantages are derived from this ideal configuration, for one and the same thickness, the volume of lead required for standard radiation protection is considerably reduced.

SITE-X D1802

Technical specifications :

| | | |
|--|---|------------------------|
| Radiation geometry | : | Directional |
| Output voltage range | : | 60 to 180 kV |
| Output voltage selection step | : | 1 kV |
| Tube current range | : | 1 to 3 mA |
| Tube current at full output | : | 2 mA |
| Tube current selection step | : | 0.1 mA |
| Maximum useful angle of X-ray beam | : | 60 x 40 (°) |
| Dimensions of optical focal spot | : | 0.8 x 0.8 mm |
| Inherent filtration | : | 3.5 mm (Al) |
| Working cycle at 40°C ambient temp. | : | 80 % |
| Operating temperature range | : | -40 to +80 °C |
| SF6 insulation pressure at 20°C | : | 5.0 kg/cm ² |
| Weatherproof level | : | IP65 |
| Penetration into steel at max. power (FFD=700mm/Film D7pb/D=1.5/T=20 min) | : | 24 mm Fe |
| Guard rings | : | yes |
| Position of interconnection socket | : | Axial/Radial |
| Maximum leakage dose at 1 m | : | 10 mSv/h |
| Microcontroller HT measurement | : | yes |
| Overall dimensions | : | ∅ 240 x 573 mm |
| Total weight | : | 9.5 kg |



Generator Control Unit SCU286

Technical specifications:

- Supply voltage: from 198 to 264 VAC
- 5.000 records can be stored
- Storage of exposure parameters: kV, mA, exposure time, FFD, film density, type of materials
- Weight: 14 kg

Product code 11.09.01

SITE-X D3006

Technical specifications:

| | | |
|--|---|---------------------------|
| Radiation geometry | : | Directional |
| Output voltage range | : | 90 to 300 kV |
| Output voltage selection step | : | 1 kV |
| Tube current range | : | 1 to 6 mA |
| Tube current at full output | : | 6 mA |
| Tube current selection step | : | 0.1 mA |
| Maximum useful angle of X-ray beam | : | 60 x 40 (°) |
| Dimensions of optical focal spot | : | 2.5 x 2.5 mm |
| Inherent filtration | : | 2.5 mm (Al) + 0.4 mm (Ni) |
| Working cycle at 40°C ambient temp. | : | 100 % |
| Operating temperature range | : | -40 to +80 °C |
| SF6 insulation pressure at 20°C | : | 5.0 kg/cm ² |
| Weatherproof level | : | IP65 |
| Penetration into steel at max. power | : | 69 mm Fe |
| Guard rings | : | yes |
| Position of interconnection socket | : | Axial/Radial |
| Microcontroller HT measurement circuit | : | yes |
| Overall dimensions | : | ∅ 346 x 831 mm |
| Total weight without guard rings | : | 31 kg |

Product code 11.09.03



SITEX & XS PONORAMIQUE

SITE-X C1802S

Technical specifications :

| | | |
|--|---|------------------------|
| Output voltage range | : | 50 to 180 kV |
| Output voltage selection step | : | 1 kV |
| Tube current range | : | 1 to 3 mA |
| Tube current at full output | : | 2 mA |
| Tube current selection step | : | 0.1 mA |
| Maximum useful angle of X-ray beam | : | 360x (2 x 20) (°) |
| Dimensions of optical focal spot | : | diam. 4 x 0.5 mm |
| Inherent filtration | : | 3.5 mm (Al) |
| Working cycle at 40°C ambient temp. | : | 80 % |
| Operating temperature range | : | -25 to +70 °C |
| Storage temperature range | : | -40 to +80 °C |
| SF6 insulation pressure at 20°C | : | 5.0 kg/cm ² |
| Weatherproof level | : | IP65 |
| Penetration into steel at max. power | : | 17 mm Fe |
| Guard rings | : | yes |
| Position of interconnection socket | : | Radial |
| Maximum leakage dose at 1 m | : | 2 mSv/h |
| Microcontroller HT measurement circuit (kV & mA) | : | yes |
| Overall dimensions | : | ∅ 250 x 653 mm |
| Total weight | : | 9.5 kg |

Product code 11.10.01

SITEX & XS PANORAMIC

SITE-X C3005

Technical specifications :

| | | |
|--|---|---------------------------|
| Output voltage range | : | 90 to 300 kV |
| Output voltage selection step | : | 1 kV |
| Tube current range | : | 1 to 5 mA |
| Tube current at full output | : | 5 mA |
| Tube current selection step | : | 0.1 mA |
| Maximum useful angle of X-ray beam | : | 360 x (2x20) (°) |
| Dimensions of optical focal spot | : | ∅ 5 x 0.8 mm |
| Inherent filtration | : | 2.5 mm (Al) + 0.4 mm (Ni) |
| Working cycle at 40°C ambient temp. | : | 100 % |
| Operating temperature range | : | -25 to +70 °C |
| Storage temperature range | : | -40 to +80 °C |
| SF6 insulation pressure at 20°C | : | 5.0 kg/cm ² |
| Weatherproof level | : | IP65 |
| Penetration into steel at max. power | : | 60 mm Fe |
| Guard rings | : | yes |
| Position of interconnection socket | : | Axial/Radial |
| Maximum leakage dose at 1 m | : | 10 mSv/h |
| Microcontroller HT measurement circuit | : | yes |
| Overall dimensions | : | ∅ 346 x 831 mm |
| Total weight without guard rings | : | 32 kg |

Product code 11.10.02

Generator Control Unit SCU286

Technical specifications:

- Supply voltage: from 198 to 264 VAC
- Printing and transfer from SCU286 to the database
- 5.000 records can be stored
- Storage of exposure parameters: kV, mA, exposure time, FFD, film density, type of materials
- Weight: 14 kg

Product code 11.10.03



PANORAMIC X-RAY GENERATORS FOR CRAWLERS

SITEX C1802

| C1802 | Unit | Value |
|------------------------------------|-------|-----------------|
| Radiation geometry | - | Panoramic |
| Output voltage range | kV | 50 to 180 |
| Tube current range | mA | 1 to 3 |
| Tube current at full output | mA | 2.0 |
| Max. power at the anode | W | N.A |
| Constant power mode | - | No |
| Working cycle at 30°C (*) | % | 50 |
| Steel penetration (**) | mm | / |
| Weight (excluding guard rings) | Kg | 9,5 |
| Overall dimensions | mm | Ø 250 x 653 |
| Leakage dose at 1 m at full output | mSv/h | < 2.0 |
| Optical focal spot (EN12543) | mm | Ø 4 x 0.5 |
| Max. useful angle | ° | 360 x (2x20) |
| Inherent filtration | mm Be | Equiv. 3.5 (Al) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -25 to +70 |
| Storage temperature | °C | -40 to +80 |

Product code 11.11.00

SITEX C3003

POWER SUPPLY CRAWLER BATTERY

| C3003 | Unit | Value |
|------------------------------------|-------|---------------------|
| Radiation geometry | - | Panoramic |
| Output voltage range | kV | 90 to 300 |
| Tube current range | mA | 1 to 5 |
| Tube current at full output | mA | 3.0 |
| Max. power at the anode | W | N.A |
| Constant power mode | - | No |
| Working cycle at 30°C (*) | % | 100 |
| Steel penetration (**) | mm | 54 |
| Weight (excluding guard rings) | Kg | 32 |
| Overall dimensions | mm | Ø 346 x 831 |
| Leakage dose at 1 m at full output | mSv/h | < 10 |
| Optical focal spot (EN12543) | mm | Ø 5 x 0.8 |
| Max. useful angle | ° | 360 x (2x20) |
| Inherent filtration | mm Be | 2.5 (Al) + 0.4 (Ni) |
| Waterproof level | - | IP65 |
| Operating temperature | °C | -25 to +70 |
| Storage temperature | °C | -40 to +80 |

Product code 11.11.01

CCU186

CRAWLER CONTROL UNIT

| CCU186 | Unit | Value |
|--|--------|-----------------------------------|
| Type of power supply | - | Pb |
| Unique supply voltage range | VDC | 105 to 140 |
| Max. mean current (300kV/3mA - SITE-X C3003) | A | 7 |
| Direct kV and mA measurements - control accuracy | % | +0.5 / -0.5 |
| Display of programmed parameters (CCU186R) | - | Yes |
| kV, mA programming step (CCU186R) | kV/mA | 1/0.1 |
| Battery voltage control accuracy | % | ± 0.2 |
| LED display with variable brightness (CCU186R) | line x | 1 x 8 with anti-reflection screen |
| Total weight | kg | 4 |
| Operating temperature range | °C | -40 to +85 |

Product code 11.11.02



COLENTA NDT FILM-Processors (for processing Industrial X-Ray films)

COLENTA INDX 900

| | | |
|---|---|--|
| Processing applications | : | All type of Industrial X-Ray films |
| Film thickness | : | min. 0,10 mm |
| Material width | : | min. 6 cm - max. 36 cm |
| Material length | : | min. 10 cm |
| Time in Developer | : | min.30 sec max. 150 sec |
| Intake Speed | : | 38 cm/min 8 cm/min |
| Cycle Time | : | 2,7 min (162 sec) 13,6 min (816 sec) |
| Tank capacity-Developer | : | 2,6 L |
| Fixer | : | 2,5 L |
| Wash water | : | 3 L |
| Solution heating (Fix and DEV) (350W Inline Heater) | : | variable in a range of 18°C - 43°C |
| Dryer | : | warm air |
| Replenishment | : | fully automatic. |
| water supply | : | 2-way magnetic valve, with 3/4" hose connection by using a DVGW approved system-separating device or pipe-separating device. |
| Wash water flow rate | : | 1,5 ltr/min when film is in process |
| Wash water supply pressure | : | 3 - 10 bar |
| Wash water supply | : | filtered at a temperature of 10°C - 15°C |
| Weight | : | Empty 58 kg With solution 66 kg |

Product code 12.01.00

COLENTA INDX 43 2.0b

| | | |
|-----------------|---|-----------------------|
| Film thickness | : | 0,10 mm - 0,18mm |
| Material width | : | min. 7,5 cm max. 43cm |
| Material length | : | min. 12 cm |

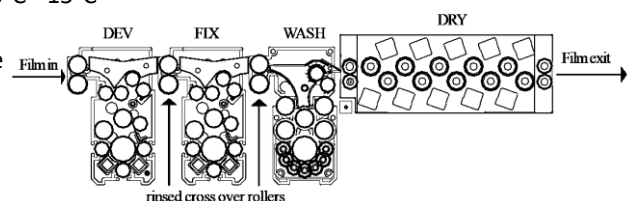
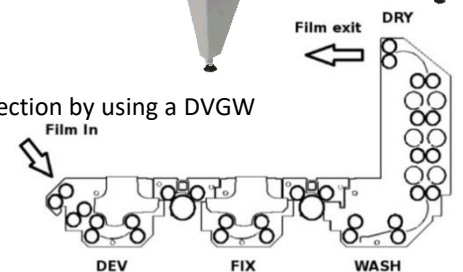
| Time in Developer | Cycle Time (dry to dry) | Intake speed |
|-------------------|-------------------------|--------------|
| [sec] | [sec] | [cm/min] |
| min 25 | 97 | 95 |
| max 170 | 659 | 14 |

| | | |
|--|---|---|
| Tank capacity – Developer | : | 7,0 L (incl Developer filter system) |
| Fixer | : | 6,5 L |
| Washwater | : | 6,5 L |
| Solution heating(Fix and DEV) (separate inline 350Wheaters) | : | adjustable in a range of 18°C - 43°C |
| Dryer | : | warm air adjustable in a range of 18°C - 55°C |
| Replenishment | : | fully automatic. |

replenishment is microprocessor controlled and calculated from information received from sensors measuring the width and length of material entering the processor. Replenishment cycles are adjustable.

| | | |
|---|---|---|
| Wash water distribution | : | built in 2-waymagnetic valve |
| Wash water flow rate | : | 2,5 ltr/min when film is processed |
| Wash water supply pressure | : | 3 - 10 bar |
| Wash water supply with 3/4" hose connection | : | filtered at a temperature of 8°C - 15°C |
| Wash water drain | : | 32mm (5/4inch) hose or tube |
| Weight | : | Empty 150 kg |

Product code 12.01.01



INDX 43/3MW - INDX 43/5MW

Film thickness : 0,10 mm - 0,18mm
 Material width : min. 7,5 cm max. 43cm
 Material length : min. 10 cm

Film processor INDX 43/3MW

| Time in Developer [sec] | Cycle Time (dry to dry) [min] | Intake speed [cm/min] |
|-------------------------|-------------------------------|-----------------------|
| 32 | 2'36" | 77 |
| 176 | 14'18" | 14 |

Film processor INDX 43/5MW

| Time in Developer [sec] | Cycle Time (dry to dry) [min] | Intake speed [cm/min] |
|-------------------------|-------------------------------|-----------------------|
| 30 | 2'08" | 115,4 |
| 165 | 11'45" | 21 |



| | INDX 43/3MW | INDX 43/5MW |
|-------------------------------|---|--------------------------|
| Tank capacity – Developer | : 9 L | 11L (incl Devel. filter) |
| Fixer | : 8 L | 10L |
| Washwater | : 8 L | 10L |
| Solution heating(Fix and DEV) | : adjustable in a range of 18°C - 43°C | |
| Dryer | : warm air adjustable in a range of 18°C - 55°C | |
| Replenishment | : fully automatic. | |
| Wash water distribution | : built in 3-way magnetic valve | |
| Wash water flow rate | : 2,5 ltr/min when film is processed | |
| Wash water supply pressure | : 3 - 10 bar | |
| Wash water supply | : filtered at a temperature of 8°C - 15°C | |
| Wash water drain | : 32mm (5/4inch) hose or tube | |
| Weight | : Empty 132 kg | Empty 150 kg |

Product code 12.01.02

COLENTA INDX 37 NDT Dryer

Automatic NDT Industrial X-Ray Film Dryer

The affordable, compact and easy to use wash and drying solution for the varied and specialised manual developing applications.

- Low noise, Warm air drying with over-temp protection
- Low Maintenance precision gear drive - no worm drive used
- Staggered "minimum contact" roller system ensures safe, Clean and dry x-ray film production.
- Lightweight and compact for easy handling
- Low power requirements, low operating costs.

Technical Specifications:

| | |
|-------------------------------|----------------------------|
| Max Film Width | : 36cm/14inch |
| Min Film Length | : 10cm/4inch |
| Tank body PA | : Wash 3,4 Litre |
| Dryer Temperature | : approx 50°C |
| Water replenishment | : automatic bottle feed |
| Capacity at cycle time | in-feed speed |
| from: | 212 sec. 15 cm/min |
| to: | 70 sec. 45 cm/min |
| (adjustable in 5cm/min steps) | |
| Electr. Power Supply: | 230V, N, 50/60 Hz, 1200W |
| Water Supply | : by supplied water bottle |

Product code 12.02.00



INDX 37M NDT “Mobile”

Colenta INDX 37M NDT

Film Processor suitable for all commonly used NDT film types

- Maximum film feed width : 37cm
- Minimum film length : 10cm
- Production capacity : 13 cm/min
- Automatic Replenishment system for Developer & Fixer
- Water Rinse crossover system between the chemical tanks that reduce carryover and repl. rates
- Anti oxidation & Anti crystallisation cycles
- 3 Pre-programmable operating channels
- Automatic developer temp.control and cooling
- Controlled warm air drying with NO Infra-Red in use
- Prepared as standard for use with fresh water
- Well proven and reliable film transport system
- Prepared with ventilation and exhaust



INDUSTREX Film Solutions for NDT

The “gold-standard” in NDT X-ray film imaging.
Choose from a wide variety of film options

INDUSTREX AA400 Film

This high speed, fine grain, high contrast film is suitable for a wide range of industrial applications. It is excellent for use with lead screens.

INDUSTREX T200 Film

This is our fastest ASTM E1815-96, Type 1 film. It is suitable for use in critical imaging applications and can be used in multiple film loads to provide an extended imaging range.

INDUSTREX MX125 Film

This very fine grain, very high contrast film is suitable for a wide range of applications requiring excellent sensitivity. It can be used with or without lead screens.

INDUSTREX M100 Film

This very fine grain, very high contrast film provides outstanding sharpness. Its excellent sensitivity and low speed make it an excellent choice for critical inspections in a wide range of materials. It can be used with or without lead screens.

INDUSTREX DR50

Film This ultra-fine grain, very high contrast film has outstanding definition and is recommended for highly critical inspection needs with a wide range of materials. This film works well in multiple film techniques

Product code 15.01.00

INDUSTREX Chemicals

Consistent, predictable results every time INDUSTREX Chemicals for manual and automatic processing support the evolving requirements of the non-destructive testing market. Our experience in imaging science spans over one hundred years. But it’s an unbreakable commitment to product innovation and customer service that has allowed the INDUSTREX line of products to achieve superiority in the NDT industry.

INDUSTREX Single Part Developer Replenisher (2 x 20L)

Product code 15.02.01

INDUSTREX LO Fixer and Replenisher (2 x 20L)

Product code 15.02.02

Recommended for all NDT and industrial imaging films. Offers improved archivability, great for automatic and manual processing, can be used in chemical auto mixers.

Eco-Friendly Chemicals

INDUSTREX DX Developer

INDUSTREX FX Fixer

Use with All NDT Processors with No Change to Replenishment Rate. Easy to use. Simply continue to follow the NDT processing cycle standard replenishment rates for your processor.

Replenishment rates: Developer is 665 ml per square meter
Fixer is 1200 ml per square meter.

For optimum processing:

Set developer temperature to 28°C, immersion time 100 seconds

Set developer temperature to 26°C, immersion time 146 seconds

Manual processing developer immersion time/developer temperature equivalency is the same as conventional INDUSTREX chemicals. Starting point is 4 minutes development time at 22°C.



New INDUSTREX Eco-Friendly Chemicals
Available to Order
INDUSTREX DX Developer 2x20L CAT 5504923
INDUSTREX FX Fixer 2x20L CAT 5504931



Industrex HPX-1 Digital System

Rigid Cassette and Phosphor Plate Reader with Integrated Eraser

- Use plates in subdued light loading or use rigid cassettes in normal room light

Dimensions

- Height : 17.5 in. (44.5 cm)
- Width : 23 in. (58.4 cm)
- Depth : 26 in. (66 cm) with feed tray removed, 35 in. (88.9 cm) with tray in operating position
- Weight : 120 lb (54.4 kg) (or less)

Phosphor Plates Supported

- 70 mm to 14-inch (35 cm) width, 8-inch (20 cm) to 60-inch (152 cm) length
- Multiple plate simultaneous feed up to 14-inch (35 cm) width

Rigid Cassettes Supported

- 10-inch (25.4 cm) to 14-inch (35 cm) width, 8-inch (20 cm) to 17-inch (43 cm) length

Scan Rate

- 35 to 135 seconds per 14 x 17 in. / 35 x 43 cm plate, depending on resolution setting

Erase Rate, Automatic High Intensity

- 0.2 - 2.0 in. (0.5 - 5 cm) per second Power
- 100-240 V ~ 50/60 Hz, 12.5 – 8 A - automatic sensing Also Included

- Desktop computer

- High resolution color LCD monitor

- Keyboard and mouse

- INDUSTREX Digital Viewing Software

Other Available Options

- Rugged travel case

- High resolution monochrome LCD monitor

- Laptop View Station with high resolution LCD

- INDUSTREX Flex GP Digital Imaging Plate SO-170

- INDUSTREX Flex HR Digital Imaging Plate 2174

Product code 15.03.00

Carestream Industrex HPX-PRO

Portable Digital System

| | |
|--------------------|--|
| Scanning Optics | Located above imaging area eliminating gravity driven particulates |
| Imaging Plate Feed | Phosphor side up to prevent damage |
| Connectivity | Ethernet |
| Air Flow | Filtered to keep out dirt and dust |
| Erase | LED erase lamps for high efficiency and low power consumption |
| Maintenance | User serviceable parts |
| Calibration | Fully factory calibrated and ready to operate |
| Scan Resolution | 25 microns, 50 micron & 100 micron |
| Plate Sizes | Maximum 6-inch width x maximum 96-inch length |
| Software | INDUSTREX (installed and tested prior to shipping) Windows 7 Ultimate 64 bit |
| Image Filter | Custom EDGE image display filter. 10 predefined filters including (2) specifically for gamma work. |
| Monitor | Laptop, 3MP (color) or 5MP (monochrome) |
| Chassis | Rigid aluminium construction with vibration damping feet |
| Power | 100-240 VAC (Automatic Level Sensing) |
| Battery | 24 volt standard tool battery |
| Battery Life | 4 hr. standby/45 min. active scanning and erasing per battery |
| Warranty | 1 year parts and labor |
| Installation | Ships complete and can be quickly and easily installed in less than 5 minutes on-site by customer |
| Dimensions | 16-inches (41cm) x 13-inches (33cm) x 12-inches (31cm). |
| Weight | 35 lbs (16 kg) |

Product code 15.04.00





RT Film Digitizing MII-900 Plus

Microtek NDT/ RT Film Digitizing System is an all-in-one imaging solution developed exclusively for radiographic inspection. It easily transfers the industrial X-Ray film into digital images for storage and management and makes it convenient to view and share for the professionals

| | |
|----------------------------|---|
| Scanner Type | Sheet-fed film digitizer |
| Image Sensor Type | CCD |
| Resolution | 2400 x 2400 dpi |
| Light Source | LED |
| Scanning Area | 14" x 200" (355.6 x 5080 mm) |
| Scanning Speed | 18 seconds at 300 dpi in grayscale per 14" x 17" film |
| Optical Density | 4.7 Dmax |
| Dynamic Range | 0.5D ~ 4.5D based on ISO 14096, DS 10.0 |
| Bit Depth | 8 / 16-bit grayscale |
| Paper Size | Min: 2.5" x 2.5" (63.5 mm x 63.5 mm) Max: 14" x 200" (355.6 x 5080 mm) |
| Connectivity | Hi-Speed USB (USB 2.0) |
| Scannable Media Types | Transparent |
| Supported Film Types | 8.5" x 4.5", 12" x 3 1/3" |
| OS Support | Windows XP/ Windows 7 / 8 / 10 (ScanWizard Industry) |
| Dimensions | (L x W x H) 10.2" x 18.7" x 9.3" / 260 x 474 x 235 mm |
| Weight | 19.82 lbs (9 kg) |
| Certifications | CE, FCC, BSMI, ETL, CCC, RoHS |
| Power Source | AC 100V ~ 240V, 47 ~ 63 Hz, 1.5A Max |
| Power Consumption | 54.9 Watts |
| Accessories : | |
| Film holders | (8.5" x 4.5", 12" x 3 1/3") |
| Automatic Film Feeder | (Optional) : |
| - Up to 15 pics of film | (Min. 2.5"x10" / Max. 14" x 17") |
| Multi-channel tray | (Optional) : |
| - Up to 3 pics of 30.5 x 8 | |

Product code 22.03.00

MicroTek MII-800XL+

| | |
|------------------------|--|
| Product Name | : MII-800XL Plus |
| Scanner Type | : Flatbed film digitizer |
| Image Sensor Type: | CCD |
| Resolution | : 3200 x 6400 dpi (Default: 400 dpi) |
| Light Source | : LED |
| Scanning Area | : 12" x 16" (305 x 406 mm) |
| Scanning Speed | : 25 seconds @ 400 dpi (scan area: 12" x 15.8") |
| Optical Density | : 4.7 Dmax |
| Dynamic Range | : 0.5D - 4.5D based on ISO14096, DS11.1 |
| Bit Depth | : 8 / 16-bit grayscale |
| Connectivity | : Hi-Speed USB (USB 2.0) |
| Scannable Media Types: | Transparent |
| Supported Film Types: | 8.5" x 4.5", 6.5" x 3.5" and 12" x 31/3" |
| OS Support | : Windows XP / Windows 7 / 8 (ScanWizard Industry) |
| Dimensions | : 24.7" x 14.8" x 7.1" (627.6 x 375.9 x 180.5 mm) |
| Weight | : 35.4 lbs (16.1 kg) |
| Certifications | : CE, FCC, RoHS and ISO 9001: 2000 |
| Power Source | : AC 100V - 240V / 47 - 63 Hz |
| Power Consumption: | 45 Watts |

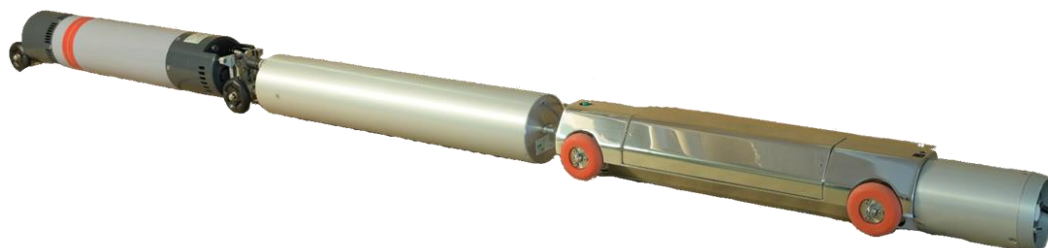
Product code 22.03.01





PIPELINE CRAWLER IRIS 6

IRIS 6 X-Ray Crawler for onshore / offshore pipes diameter ranging from 6" to 18" N.D.



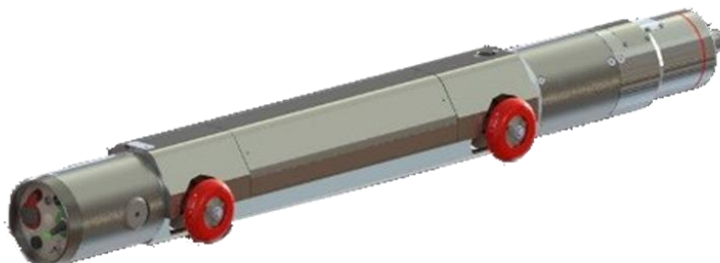
| | | |
|------------------------------------|---|----------------------------------|
| Pipeline diameter range | : | 6" to 18" |
| Length without the X-ray head | : | 2140 mm |
| Speed moving | : | 13m/mn |
| Accepted climbing | : | 30% - 16,6° |
| Maximum bend | : | 10d |
| Operating temperature | : | 40° to +80°C |
| Motor propulsion | : | 2 |
| Propulsion battery power/ capacity | : | Lithium Ion Battery 24V / 7.5Ah |
| X-ray battery power/ capacity | : | Lithium Ion Battery 48V / 12.5Ah |
| Propulsion wheels | : | Clinging rubber |
| X-ray wheels | : | Orthogonal |
| Distance autonomy (propulsion) | : | 4km |
| Exposure autonomy (X-ray) | : | 120 mn |
| Positioning accuracy | : | +/- 5 mm |
| Adjustable exposure | : | 0 à 999 s |
| Safety exposure delay | : | 10s |
| Pilot Command Caesium 137 | : | 740MBq 20mCi |
| Pilot Command magnetic | : | Magnetic System |

| | | | |
|----------------------------------|--------------|-----------|----------------|
| Panoramic X-Ray Generator | C1802 | : | CP160CR |
| Output rating Kv | : | 180 | CP160CR |
| Tube current mA | : | 2 | 2 |
| Focal spot size mm | : | 4 x 0.5 | 4 x 0.5mm |
| Dimensions mm | : | 124 x 580 | 120 x 688 |
| Weight | : | 9.5kg | 9.9kg |

Product code 13.01.00

PIPELINE CRAWLER IRIS 6

IRIS 6 Gamma-Ray Crawler for onshore / offshore pipes diameter ranging from 6" to 18" N.D.



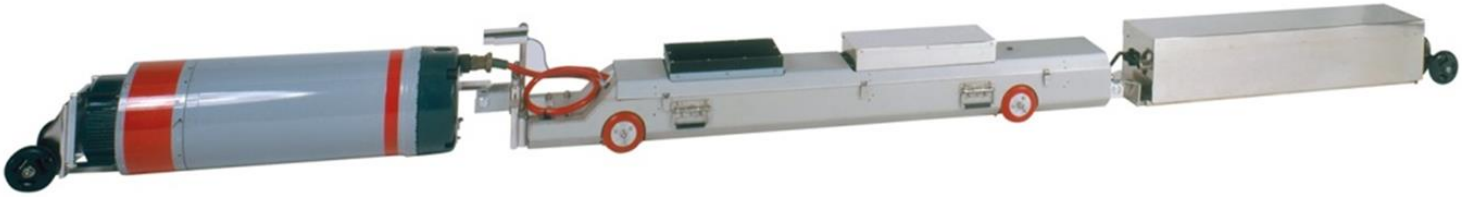
| | | |
|-------------------------|---|--------------|
| Pipeline diameter range | : | 6 to 18" |
| Gamma-ray projector | : | |
| Brand | : | IPSI |
| Model | : | G610 |
| Class | : | A |
| Capacity | : | 740 GBq 20Ci |

Product code 13.01.01



PIPELINE CRAWLER IRIS 10

IRIS 10 X-Ray Crawler for onshore / offshore pipes
diameter ranging from 12" to 60" N.D.



| | | |
|------------------------------------|---|---------------------------------|
| Pipeline diameter range | : | 12" to 60" |
| Length without the X-ray head | : | 700 mm |
| Speed moving | : | 13m/mn |
| Accepted climbing | : | 40% - 22,2° |
| Maximum bend | : | 10d |
| Operating temperature | : | 40° to +80°C |
| Motor propulsion | : | 2 |
| Propulsion battery power/ capacity | : | 24V / 44 Ah |
| X-ray battery power/ capacity | : | 120V / 22 Ah |
| Propulsion wheels | : | clinging rubber |
| X-ray wheels | : | Orthogonal |
| Distance autonomy (propulsion) | : | 4km |
| Exposure autonomy (X-ray) | : | 120mn According X-ray generator |
| Positioning accuracy | : | +/- 5 mm |
| Adjustable exposure | : | 0 à 999 s |
| Safety exposure delay | : | 10s |
| Pilot Command Caesium 137 | : | 740MBq 20mCi |
| Pilot Command magnetic | : | Magnetic System |

| | | |
|----------------------------------|---|-------------------------|
| Panoramic X-Ray Generator | : | ICM SITEX |
| Output rating kV | : | 180 200 225 250 300 320 |
| Tube current mA | : | 2 4 4 4 3 3 |
| Focal spot size | : | 5 x 0.8 mm |
| Working ambient temperature | : | -25°C to 70°C |
| Dimensions | : | 248 x 757 mm |
| Weight | : | from 25 to 27kg |

Product code 13.02.00

PIPELINE CRAWLER IRIS 10

IRIS 10 Gamma-Ray Crawler for onshore / offshore pipes
diameter ranging from 16" to 60" N.D.



| | | |
|-------------------------------|---|--|
| Pipeline diameter range | : | 12" to 60" According the Gamma-ray projector |
| Length without the X-ray head | : | 1700 mm |

ALL TYPE OF Ir192 AND Se75

| | | |
|---------------------|---------------|---------------------|
| Gamma-ray projector | | |
| Brand | QSA Global | GAMMA-RAY PROJECTOR |
| Model | 880 SENTINEL | ALL TYPE |
| Class | B (U) | B (U) |
| Capacity | 3.7 TBq 100Ci | 3.7 TBq 100Ci |

Product code 13.02.01

PIPELINE CRAWLER IRIS 10XS

IRIS 10XS X-Ray Crawler for onshore / offshore pipes diameter ranging from 16" to 30" N.D.

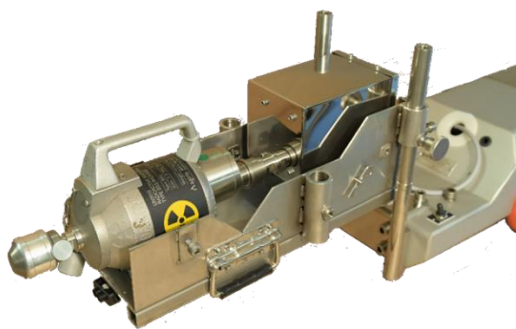
IRIS 10XS Pipeline Crawler are designed to produce panoramic radiographs of circumferential butt welds in pipelines from 16 inches to 30 inches.



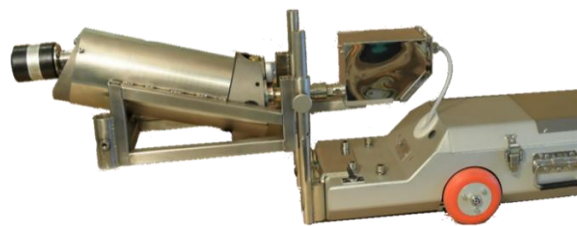
| | | |
|----------------------------|---|----------------------------|
| Min. nominal pipe diameter | : | 16" |
| Max. nominal pipe diameter | : | 30" |
| Travelling speed | : | 13 metres/minute |
| Movement | : | Forward and reverse motion |
| Allowable slope | : | 40% - 22.2 ° |
| Sealed lead battery | : | 48 V 22 Ah |
| Autonomy (on flat ground) | : | 1 500 metres |
| X-Ray Autonomy | : | 1 hours |
| Allowable temperature | : | - 40°C to + 80°C |
| Exposure time | : | from 0 to 999 seconds |
| X-Ray Autonomy | : | 1 hours |
| Safety delay | : | 12 s |
| Propulsion Motor | : | 2 Unit |
| Pilot Command | : | 20 mCi Cs 137 |
| Pilot Command | : | Magnetic System |
| X-Ray Generator | : | SITE-X CP160CR |
| Gamma-ray projector | : | All Type of Ir192 or Se75 |

The safety ejection motor can be adapted to all Gamma-Ray projector

Product code 13.03.00



IRIS10 WITH GAMMATAT



IRIS10 WITH SENTINEL 880



IRIS10 WITH NUCLEAR SU100



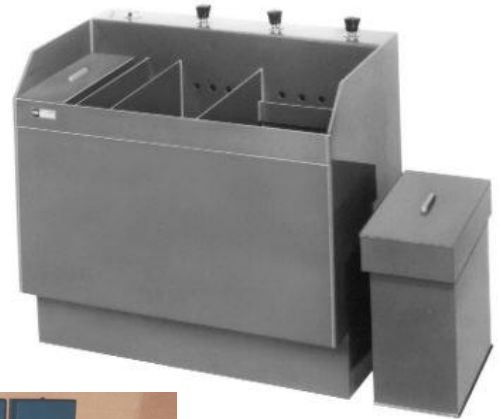
IRIS6 WITH IPSI G610

MANUAL FILM PROCESSING UNIT

Constituted PVC antacid, complete with removable tanks with lid for developing and fixing.

- 1 compartment with developer tank 20 or 40 liters (depending on model) with rapid heating, regulated by a precision adjustable thermostat
- 1 compartment rinsing with frames support
- 1 compartment with fixer tank 40 or 80 liters (depending on model)
- 1 compartment washing generously dimensioned high turbulence of water with frames support

Product code 02.01.00



MANUAL FILM PROCESSING FOR MOBILE

For installation in mobile darkrooms

- 1 developer compartment 20 liters watertight
- 1 rinsing compartment 20 liters watertight
- 1 fixer compartment 40 liters watertight
- 1 washing compartment 40 liters watertight

Product code 02.02.00

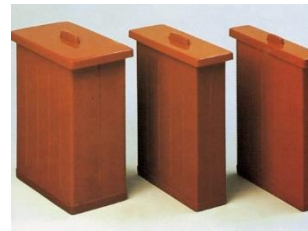


PROCESSING TANKS

PVC tanks take sheet films up to 35cm wide and 48cm long.

10 liters, 20 liters, 40 liters

Product code 02.03.00



X-RAY FILM DRYER

DRYING TYPE 10 OR 25 HANGERS

- Dryer for X-ray films
- Top load
- 1000 W Resistance (2000 W on request)
- All our dryers are manufactured in gray PVC
- The temperature is controlled by a safety thermostat
- They have a removable air filter for easy cleaning
- Unless otherwise indicated, they are equipped with 220v

Silent and powerful ventilation tangential blower

DRYING TYPE 10 HANGERS **Product code 02.08.01**

DRYING TYPE 25 HANGERS **Product code 02.08.02**



DRYER 25 HANGERS

- Dryer for radio film
- Industrial radiology equipment compact made of PVC Model 10mm
- Dryer metal film front door leading to a sliding carriage on dryer metal nylon rollers
- Film dryer fast and quiet Drying tangential turbine and resistance of 1000 W blowing upwards
- Partial recycling of hot air (power saving)
- Dimensions: 900 X 550 X 1000 mm
- Dryer forming work plan

Product code 02.09.00



Film Processing Accessories

Stainless Steel Film Hanger

Channel Type film hangers are used for manual processing of x-ray film.

Specifications

| | | |
|--------------------|---|---------------------|
| Material | : | Stainless Steel 304 |
| Material Thickness | : | 0.6 mm |
| Solder Point | : | Spot Welding |

Product code 02.04.00

Stainless Steel Spirals

Specifications

| | | |
|--------------|---|---------------------|
| Material | : | Stainless Steel 304 |
| Solder Point | : | Spot Welding |

Product code 02.05.00

Darkroom Safelight

The Darkroom Safelight is designed for use in X-Ray darkrooms, emitting light with a wavelength of 640nm

Product code 02.06.00

Cutter and corner cutter

The cutter is suitable for cutting paper, cardboard, foils and thin foils soft plastics.

The self sharpening cutters will give long life and efficient service as far as the maximal capacity under clamp of (1.5 mm) is not overstepped or unsuitable material is cut.

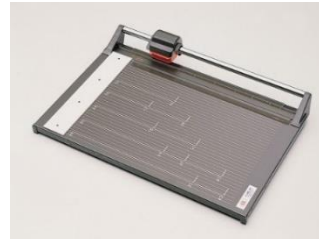
- Cutter size light cm 46 X 15
- Cutter size light cm 51 X 30

Product code 02.06.00

Timers

Darkroom Alarm Timers

Product code 02.07.00



HALOGEN FILM VIEWER 10 x 24

Structure in steel sheet painted with fire, lighting by halogen lamp 1000 w.

| | | | |
|---|-----------------|---|--------------|
| Dual cooling fan. | VIEWING AREA | : | 10 X 24 |
| Tinted windows spaced. | DIMENSION CM | : | 37 X 20 X 22 |
| Diffuser monochrome white. | NUMBER OF TUBES | : | 1 – 1000 W |
| Independent command: | LIGHT SELECTION | : | 1- 10 X 24 |
| Switch for power supply and ventilation | DENSITY | : | 3.7 |

Pedal to switch on lights and intensity

Product code 03.01.00

X-RAY FILM VIEWER 10 x 48

Structure in steel sheet painted with fire, lighting by halogen lamps 3x750 w.

| | | | |
|---|-----------------|---|--------------|
| Dual cooling fan. | VIEWING AREA | : | 10 X 48 |
| Tinted windows spaced. | DIMENSION CM | : | 63 X 20 X 22 |
| Diffuser monochrome white. | NUMBER OF TUBES | : | 3 – 750 W |
| Independent command: | LIGHT SELECTION | : | 1- 10 X 48 |
| Switch for power supply and ventilation | DENSITY | : | 3.8 |

Pedal to switch on lights and intensity

Product code 03.02.00



VIEWER 10 x 24



VIEWER 10 x 48

LEDS FILM VIEWER 10 x 24

| Characteristics | UM | Securities | Characteristics | UM | Securities |
|--------------------------|-------|---------------|---------------------------|----|------------------------------|
| Rated voltage | V | 230 | Altitude | M | 2000 |
| Maximum power | W | 77 | Color Temperature | °K | 6000 |
| Frequency | Hz | 50 | Relative humidity | Rh | 80% |
| Fuses 5X20 | I | T 400 mA | External Dimensions | cm | 21 x 38 x 19,5 |
| Class of insulation | | I | Size reading area | cm | 10 x 2 |
| Laser product class | | 2 | Cable length pedal | cm | 265 |
| Maximum luminance | Cd/mq | 90.000 | Length of supply cable cm | | 185 |
| high density | | (about 3.9 D) | Weight | kg | 6.5 |
| Noise less than | dba | 85 | Degree of protection | IP | 20 |
| Temperature range of use | °C | 10 – 40 | | | Product code 03.03.00 |

LEDS FILM VIEWER 10 x 48

| Characteristics | UM | Securities | Characteristics | UM | Securities |
|--------------------------|-------|---------------|------------------------|----|------------------------------|
| Rated voltage | V | 230 | Relative humidity Max | Rh | 80% |
| Maximum power | W | 136 | Altitude | M | 2000 |
| Frequency | Hz | 50 | Color Temperature | °K | 6000 |
| Fuses 5X20 | I | T 400 mA | External Dimensions | cm | 21 x 62 x 19,5 |
| Class of insulation | | I | Size reading area | cm | 10 x 48 |
| Laser product class | | 2 | Cable length pedal | cm | 265 |
| Maximum luminance | Cd/mq | 90.000 | Length of supply cable | cm | 185 |
| high density | | (about 3.9 D) | Weight | kg | 10.5 |
| Noise less than | dba | 85 | Degree of protection | IP | 20 |
| Temperature range of use | °C | 10 – 40 | | | Product code 03.04.00 |



LEDS FILM VIEWER 10 x 24



LEDS FILM VIEWER 10 x 48

Portable LED Film Viewers

Higher Intensity than Conventional Units

Luminance : 103,000Cd/M2 (323,420Lux)
 Uniformity : 0.95, Diffusion factor: 0.95
 Weight less than : 2.5 Kg
 12 hours continues maximum luminance, Surface temperature rise $\leq 15^{\circ}\text{C}$
 Unlimited dimmer from 5%-100% **Product code 03.05.00**



KOWOLUX M Series mobile NDT film viewers with Power LED



KOWOLUX M1

Product code 03.06.00

Luminance, max. : 100,000 Cd/m²
 Film density, max.: 4.0 D
 Control range : 0.2 ... 100 %
 Viewing screen : 225 x 80 mm
 (for films 10x24 cm)
 Rated power : 70 W
 Power supply : 100 ... 240 V, 50/60 Hz
 24 V DC, 90 W
 Dimensions : 325 x 62 x 150 mm
 Weight : 2.9 kg
 Lifetime of LEDs : 40,000 h
 Color temperature of LEDs : 5,000 K
 Housing : anodized aluminum profile with cooling fins completely closed to environment with gaskets (IP54)

KOWOLUX M2

Product code 03.07.00

100,000 Cd/m²
 4.0 D
 0.2 ... 100 %
 450 x 80 mm
 (for films 10x48 cm)
 140 W
 100 ... 240 V, 50/60 Hz
 24 V DC, 160 W
 552 x 62 x 150 mm
 4.5 kg
 40,000 h
 5,000 K

Viewing screen : crystal glass with 95 percent translucency, thermally cured

Attachment masks :

M1 – for films 6x24 cm **Product code 03.06.01**

M1 – hole \varnothing 30 mm **Product code 03.06.02**

M1 – Iris \varnothing 4 ... 75 mm **Product code 03.06.03**

M1 – 30 mm slit **Product code 03.06.04**

M2 – for films 10x40 cm **Product code 03.07.01**

M2 – for films 10x24 cm **Product code 03.07.02**

M2 – for films 7x48 cm **Product code 03.07.03**

M2 – for films 6x48 cm **Product code 03.07.04**

M2 – for films 6x40 cm **Product code 03.07.05**

M2 – for films 6x24 cm **Product code 03.07.06**

M2 – hole \varnothing 30 mm **Product code 03.07.07**

Spot viewer LED Film Viewer

Adjustable IRIS spot viewer
Extreme high luminance
Two level of Luminance For Choose:
300,000Cd/m² Film: 4.5D
IRIS adjustable light mask
Spot view size can be adjust from $\phi 5\text{mm}$ - $\phi 100\text{mm}$
Programmable "Stand by Luminance"
Stand by Luminance: The luminance of the viewer when you release the foot pedal
Programmable Range : From 0% to 10%
Compact Design, only 2.3Kg



FV-2010T PLUS LED Film Viewer

FV-2010T PLUS LED Film Viewer is developed according to the Norm of ISO5580 Industrial radiographic illuminators - Minimum requirements. Inherited fine traditions of FV-2010 and FV-2009T, adopt powered LED area light source, enable the viewer to high luminance and excellent uniformity, theoretical lifetime span up to more than 50,000 hours

Luminance : 130,000Cd/M (408,200Lux)
High Accuracy : $\pm 0.02\text{D}$
Uniformity : 0.95
Diffusionfactor : 0.95
12 hours continues maximum luminance,
Surface temperature rise $\leq 18^\circ\text{C}$
Unlimited dimmer from 5%-100%
Window Size : 400x100mm (15.8x4")
Weight less than 4.0 Kg (8.8lbs)



Digit-X Densitometer

| | |
|----------------------|---------------------|
| Density Range | : 0.00 to 4.00 D |
| Fibre Optic Aperture | : 3mm |
| Resolution | : 0.010D |
| Accuracy | : 0.050D |
| Repeatability | : 0.020D |
| Drift | : 0.0005/min |
| Power Supply | : 9v PP3 Battery |
| Battery Life | : Alkaline 2500 Hrs |
| Size | : 210x60x40mm |
| Weight | : 175kg |

Product code 03.06.00



301 Densitometer

Provides highly repeatable and accurate measurements of black and white film densities. Large LED numerals can be read easily in bright or dim light.

Product Features :

- Measuring range : 0-5.0D with 2 and 3mm apertures;
- 0-4.0D with 1mm aperture
- Scale factor (slope) stability : $\pm 1\%$ per 6 months
- RS232 output (optional)

Product code 03.07.00



331C Portable Densitometer

Designed for black and white film measurement applications where portability is required. Self-contained light table accommodates film up to 11 inches wide.

Product Features:

- Measuring range: 0-3.5D (1mm) 0-4.0D (2mm)
- Battery operated
- Scale factor (slope) stability: $\pm 1\%$ per 6 months
- Certified step wedge

Product code 03.08.00



DT-200 Densitometer

The DT-200 is a robust, easy to use, separate probe type densitometer for measuring the transmission density of x-ray film.

The unit has been designed for using in one-site mobile darkrooms, laboratories and offices.

Specifications:

| | | |
|-------------------------------|---|---|
| Range | : | 650 Cd/m ² – 320 000 Cd/m ² |
| Density | : | 0.00 – 5.00 D* |
| Optical Aperture | : | 3mm diameter |
| Probe Temperature compensated | | |
| Display | : | 4 digit LCD |
| Accuracy | : | ± 0.03 D |
| Resolution | : | 0.01D |
| Detector | : | Silicon photodiode |
| Power supply | : | (AA/1.5V)x2-Alkaline Battery |
| Battery life | : | 1200 hours (Continuous duty, without illuminated) |
| Dimensions | : | 170mm x 90mm x 60mm |
| Weight | : | 800g |

Product code 03.09.00



RADIOGRAPHIC ACCESSORIES

LEAD MARKERS

Lead markers numbers 8x2 mm

Product code 01.02.00 to 01.02.09

Lead markers letters 8x2 mm

Product code 01.01.00 to 01.02.26

Lead markers numbers 10x2 mm

Product code 01.04.00 to 01.04.09

Lead markers 10x2 mm

Product code 01.03.00 to 01.03.26

Other sizes available on request

LEAD MARKER BOX

Lead Marker Storage Boxes

Product code 01.05.00

LEAD MARKER TAPES

Lead marker tape 5 cm spacing

Product code 01.06.00

Lead marker tape 10 cm spacing

Product code 01.07.00

Other sizes available on request

Image Quality Indicators - IQIs - Penetrators

Image Quality Indicators as per standard

ASTM E 747-97 et ASME SE 747

I.Q.I. ASTM Set A Fe - I.Q.I. ASTM Set C Fe

Product code 01.08.01 - Product code 01.08.03

I.Q.I. ASTM Set B Fe - I.Q.I. ASTM Set D Fe

Product code 01.08.02 - Product code 01.08.04

Wire type Image Quality Indicators / IQIs

EN 462-1

European standard specifications EN 462-1

Product code 01.09.00

Duplex Image Quality Indicator

IQI to EN 462-5 and ASTM E 2002 – 98

Product code 01.10.00

FLEXIBLE CASSETTES

6 x 24, 6 x 40, 6 x 48, 7 x 40, 7 x 48

9 x 12, 10 x 20, 10 x 24, 10 x 40, 10 x 48

13 x 18, 15 x 40, 18 x 24, 20 x 30, 24 x 30

30 x 40, 35 x 43cm.

Product code 01.11.00

Other sizes available on request



PAIR PACK LEAD SCREENS

PACK INTERMEDIATE LEAD SCREENS

0,02, 0,05, 0,10, 0,15, 0,20, 0,25mm

(Format (cm) 6 x 24, 6 x 40, 6 x 48, 7 x 40,

7 x 48, 9 x 12, 10 x 20, 10 x 24, 10 x 40, 10 x 48

13 x 18, 15 x 40, 18 x 24, 20 x 30, 24 x 30

30 x 40, 35 x 43.

Product code 01.12.00

RIGID CASSETTES

The x-ray cassettes are produced in alloy aluminium and special material, the edges are in plastic and aluminium.

Product code 01.13.00

MASKING TAPE

Black PVC Tape 25mm X 50m

White fibrin Tape 19mm X 50m

White nuclear K 226 Tape 25mm X 55m

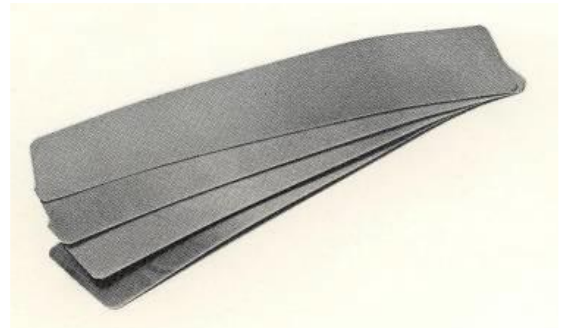
Other sizes available on request

Product code 01.14.00

MARKALL BALL PAINT FIXOLID

Ball Paint Marker Red / White / Yellow

Product code 01.15.00



Radiation Warning Signs

Controlled Area Sign A3, Rigid Plastic

Product code 04.10.00

Radiation Barrier Tape (English).

Heavy duty tape 40mm wide x 50 metres long.

Product code 04.11.00

Tape with enclosed dispenser For 40mm wide tapes

Product code 04.11.01

Isotope handling tongs

For handling detached gamma sources, and source holders in an emergency.

- Isotope Handling Tongs 1,5m long

- Isotope Handling Tongs 2m long

Product code 04.12.00



RADIATION SAFETY

Radiation Dose Rate Monitors

TRACERCOTM T402 and T402HR

| | |
|---------------------------------|--|
| Radiation detected: | T402: X-rays and gamma rays in range 59 keV to 1332 keV. T402HR: X-rays and gamma rays in range 33 keV to 1332 keV. |
| Detector: | Single halogen, energy compensated Geiger Muller tube. |
| Case material: | Robust, chemical resistant polymers. |
| Dose rate range: | Bar graph display 0-1000 $\mu\text{Sv/h}$ |
| T402: | Digital numeric display 1-10,000 $\mu\text{Sv/hr}$. |
| T402HR: | Digital numeric display 0-100 mSv/hr. |
| Accumulated dose range: | T402: Digital numeric display 0-10,000 μSv . |
| T402HR: | Digital numeric display 0-100 mSv. |
| Peak radiation dose rate: | T402: Digital numeric display 0-10,000 $\mu\text{Sv/hr}$. |
| T402HR: | Digital numeric display 0-100 mSv/hr. |
| Sensitivity data: | T402: 1.7 cps per $\mu\text{Sv/hr}$. T402HR: 0.7 cps per $\mu\text{Sv/hr}$. |
| Variation with battery voltage: | Less than 1%. |
| Battery life: | 100-hours typically with background radiation. |
| Low battery indication: | On 4 hours available life left. |
| Battery: | Standard 9V PP3 battery. |
| Ingress protection Rating: | Rated IP65 (dust tight and will withstand water jets). |
| Humidity range: | 0 to 95%. |
| Weight: | 500 grammes. |
| Standard Compliance: | EU directives: 2004/108/EC Compatibility Directive. |

Product code 04.09.00



Direct-Reading Dosimeter

The Direct-Reading Dosimeter is a pocket-size, carbon-fiber electroscopes with an ion chamber.

| | |
|----------------------|--|
| Radiation Detected : | Gamma and X-Ray |
| from | 16 keV to 6 MeV |
| Range : | 0-2mSv, 0-5mSv, 0-50mSv |
| Detector : | Fiber-Electrometer mounted in an Electrically Conductive Plastic Ion Chamber |
| Detector Housing : | Very low permeability plastics - Hermetically-Sealed |
| Accuracy : | +/- 10% of true exposure |
| Rate Response : | Dose rate independent for Gamma and X-Ray |
| Electrical Leakage : | Less than 1.0% of full scale for 24 hours at 50 C |
| Relative Humidity : | Up to 90% |
| Dimensions : | 4.5" (12.4 cm) Length X .6" (1.5 cm) Diameter |
| Weight : | 1.0 oz. (25 grams) |

Product code 04.01.00



Typical Graduated Scale (Enlarged View)

Dosimeter Charger

Easier charging, viewing, dosimeter protection and improved accuracy...

Capable of charging any Direct-Reading Dosimeter

Conforms to ANSI N42.6-1980

Operates on two 1.5 V "AA" Batteries

Has the ability to "Kick" or remove all residual charge from dosimeters properly, which prevents spurious upscale fiber movement

LED Reading Light to allow for easy charging/viewing

Residual static charge removed for improved accuracy

Product code 04.02.00



Personal Electronic Dosimeter RAD-60R

- Radiation detected: gamma and X-rays
- Measurement range:
 - dose: 1 μ Sv - 9.99 Sv or 0.1 mrem - 999 rem
 - dose rate: 5 μ Sv/h - 3 Sv/h or 0,5 mrem/h - 300 rem/h
- Calibration: better than $\pm 5\%$ (Cs-137, 662 keV at 2 mSv/h), Hp(10)
- Energy response: Hp(10), 55 keV - 3 MeV, better than $\pm 25\%$, up to 6 MeV, better than $\pm 35\%$

Product code 04.03.00



DOSE RATE METER 6150 AD5/6

Dose Rate Meters 6150 AD5 or AD6 provide universal radiation protection measuring photon radiation (gamma and x-rays) and the detection of alpha and beta radiation.

6150AD Models

| | Additional functions | Ranges for dose rate and photon energy |
|----------------------|----------------------|---|
| 6150AD1 6150AD1/H | no | High range models: analog: 1 μ Sv/h - 1000 mSv/h digital: 0.1 μ Sv/h - 999 mSv/h |
| 6150AD5 6150AD5/H | yes | »useful«: 0.2 mSv/h - 999 mSv/h 45 keV - 3 (/H:2.6) MeV |
| 6150AD2 6150AD2/H | no | Low range models: analog: 0.1 μ Sv/h - 10 mSv/h digital: 0.01 μ Sv/h - 9.99 mSv/h |
| 6150AD6 6150AD6/H | yes | »useful«: 2 μ Sv/h - 9.99 mSv/h 60 keV - 1.3 MeV |

Product code 04.04.00



DOSE RATE METER X5C plus

- PTB-approved dose rate measuring range : 1.0 μ Sv/h \leq $\dot{H}^*(10)$ \leq 20 mSv/h
- Dose rate indication range : 0 nSv/h \leq $\dot{H}^*(10)$ \leq 20 mSv/h
- Dose indication range : 0 nSv – 10 Sv
- Energy range : 40 keV up to 1.3 MeV
- Dose alarm thresholds : 4, free programmable in the range of 1 μ Sv up to 10 Sv, acknowledgeable
- Dose rate alarm thresholds : 4, free programmable in the range of 1 μ Sv/h up to 20 mSv/h, Acknowledgeable
- Temperature range : -30°C up to +60°C
- Power supply : 9V battery 6LR61
- Acoustic alarm : 80 Db(A) measured in 30 cm distance
- Dimensions/Weight : (152 x 82 x 39) mm / 31pprox.. 400 g (with battery)

Product code 04.05.00



GammaSmart one/two

The dose rate alarm units GammaSmart one/two are very robust, battery operated and easy to handle pocket-sized dose rate alarm units designed for the personal radiation protection.

The GammaSmart one is also approved for the use in potentially explosive atmospheres of zone 1.

Both detect gamma radiation and X-rays, indicating these with clear optical and acoustical single pulses. An increasing dose rate leads to an increasing pulse rate.

The splashproof aluminium housing (IP54) ensures a shielding against electromagnetic influence. An optical battery control indicates the GammaSmart's readiness for use.

A plastic clip is used for attaching the instrument to the clothing

Kind of radiation : gamma radiation / X-rays

Detector : GM tube

Sensitivity : counting rate at 3 $\mu\text{Sv/h}$
approx. 6 counts/minute

Ambient background

Radiation : approx. 1 count in 2 minutes

Power supply : 2 batteries 1.5 V (type AAA)

Housing : aluminium

Dimensions/Weight : 72 × 60 × 22 mm

approx. 100 g (with batteries)

Product code 04.13.00



RDS-30 Rem/Sieverts

Dose Rate Survey Meter

Physical characteristics

- radiation detected : gamma and X-ray
from 48 keV to 1.3 MeV
- detector : energy compensated GM tube
compliant to H*(10)
- dose rate measurement Range : from 0.01 $\mu\text{Sv/h}$ to 100 mSv/h
or from 1 $\mu\text{rem/h}$ to 10 rem/h
- dose rate linearity : $\pm 10\% \pm 1$ digit within the range
of 0.1 $\mu\text{Sv/h}$ to 100 mSv/h or 10 $\mu\text{rem/h}$ to 10 rem/h
- calibration accuracy : $\pm 5\%$ of the reading in ^{137}Cs exposure, at 3 mSv/h,
 $+20^\circ\text{C}$ (68°F)
- energy response : $\pm 30\%$ over the range of 48 keV - 1.3 MeV
- angular response : $\pm 25\%$ within $\pm 45\%$ from the calibration direction at 48 keV
- dose measurement range : from 0.01 μSv to 1 Sv or from 1 μrem to 100 rem
- dose rate follow-up by audible signal with frequency proportional to dose rate
- visual and audible alarm : user settable for dose and dose rate over the whole
measurement range
- histogram capability of up to 480 dose rate values with user settable logging interval
- backlit display with six large digits
- display in either $\mu\text{Sv/h}$ or in mrem/h

Product code 04.06.01

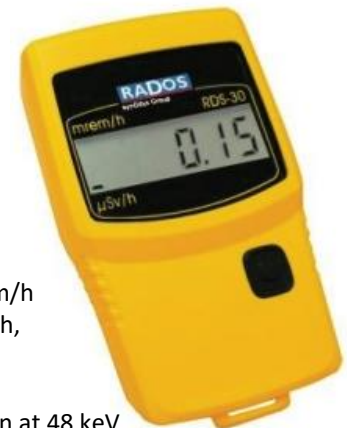
Electronic Personal Dosimeter, X-ray & Gamma

The DMC 3000 Personal Electronic Dosimeter has a rugged, high impact polycarbonate-ABS case, is small, lightweight, and is cost effective personal radiation monitoring device.

Display dose: 1 μSv to 10 Sv (0.1 mrem to 1000 rem)

Display rate: 10 $\mu\text{Sv/h}$ to 10 Sv/h (1 mrem/h to 1000 rem/h)
or 1 $\mu\text{Sv/h}$ to 10 Sv/h (0.1 mrem/h to 1000 rem/h)
extended option.

Product code 04.07.00



Dose Rate Alarm Lamp GWL 10m

| | |
|--------------------|--|
| Kind of radiation: | gamma radiation / X-rays (DC installations) |
| Detector: | energy compensated GM tube |
| Measuring: | ambient dose rate equivalent $\dot{H}^*(10)$ |
| Alarm thresholds: | 7.5 $\mu\text{Sv/h}$, 25 $\mu\text{Sv/h}$, 1 mSv/h, 10 mSv/h |
| Acoustic alarm: | > 93 dB(A) measured in 30 cm distance, can be switched off |
| Energy range: | 40 keV up to 1.3 MeV |
| Temperature range: | -30°C up to +60°C |
| Power supply: | accumulator (operating time with fully charged accumulator approx. 48 hours, without acoustic alarm) |
| Housing: | aluminium combined with high impact plastic, protection class IP65 |
| Dimensions/Weight: | (120 × 120 × 250) mm 2300 g (with accumulator) |

Product code 04.08.00



RAD ALERT

The Radiation Alert® line of radiation area monitors protects your personnel and your facility.

The base controller unit includes a Touch Screen LCD, latching, siren light and strobe. Internal or external radiation probes are available for most models, with Geiger Muller or Sodium Iodide Probe options.

A rugged, wall mount enclosure option is available for portal monitoring and high traffic areas to protect the sensor while on duty.

RANGE OPTIONS:

| | |
|-----------------------|--|
| AM-7149: | 0.2 - 16,000 mR/hr (2.0 - 160,000 $\mu\text{Sv/hr}$) Using an Internally Mounted LND 7149 Energy Compensated GM Detector. External mounting also available |
| AM-7128: | 15 $\mu\text{R/hr}$ – 200 mR/hr (0.2 - 2000 $\mu\text{Sv/hr}$) Using an Internally Mounted LND 7128 Energy Compensated GM Detector. External mounting also available |
| AM-71313: | 0.1 to 1500 mR/hr (0.5 - 15,000 $\mu\text{Sv/hr}$) Using an Internally Mounted LND 71313 Energy Compensated GM Detector. External mounting also available |
| AM-1X1NAI: | 1 $\mu\text{R/hr}$ to 500 mR/hr (0 $\mu\text{Sv/hr}$ – 5 mSv/hr) Using an Externally Mounted 1X1 NaI(Tl) Scintillation Probe |
| AM-2X2NaI: | 0.1 $\mu\text{R/hr}$ to 75 mR/hr (0 – 750 $\mu\text{Sv/hr}$) Using an Externally Mounted 2X2 NaI(Tl) Scintillation Probe |
| MAX CABLE LENGTHS: | GM Probes - 100ft, Scintillation Probes - 50ft |
| TOUCH SCREEN DISPLAY: | 5-digit 4.3 inch TFT 480x272 touch screen LED display |
| BASE DISPLAY UNITS: | Can display in $\mu\text{R/hr}$, mR/hr, $\mu\text{Sv/hr}$, mSv/hr, cpm, Kcpm, cps, and Kcp |
| FEATURES: RESPONSE: | Varies automatically from 20 seconds to 2 seconds |
| INDICATORS: | Ultra-Bright Strobe and Audible Alarm Can trigger up to three relays with DB-9 serial connection USB VCP for computer data logging, which can also be used to control the unit with use of remote software for alarm indication and acknowledgment (Silence by remote) |
| ETHERNET: | 10 Base-T connection for use with remote software for alarm indication and acknowledgment (Silence by remote) |
| CALIBRATION CONTROLS: | Functions accessible through touch screen push button under calibration cover enables secure access to changing settings |
| HIGH VOLTAGE: | User adjustable from 200 to 1200 volts |
| DEAD TIME: | User adjustable to compensate for dead time of the detector and electronics |
| POWER: | 12 VDC (110/220) wall mount adapter with four sets of international adapters for almost any style wall receptacle |
| BATTERY LIFE: | Typically 7.5 hours in non-alarm condition; 6 hours in alarm condition |
| BATTERY CHARGER: | Battery is continuously trickle charged when the instrument is connected to line power and turned on |
| CONSTRUCTION: | Easy mount steel enclosure |
| TEMPERATURE RANGE: | -10 to 60 °C (14 to 140 °F) |
| SIZE: | 16.2 x 26.6 x 5.3 cm (6.4 x 10.5 x 2.1 in.) |
| WEIGHT: | 84.8 oz (5.3lbs) Without Probe and Cable |
| INCLUDES: | Management software for use with networked area monitors , Base Unit, Power Supply, CD with Software and Operation Manual, Mounting Clips (External Versions Only), C to C Cable (External Versions Only). |



MOBILE DARKROOM

This radiographic processing film darkroom is designed to be used in countries with strong climatic variations. It is fixed on the rear chassis of an all-purpose vehicle.

This device enables technicians to have the laboratory near to the working site.

Product code 14.01.00



STATIONARY DARKROOM

This radiographic processing film darkroom is designed to be used in countries with strong climatic variations.

It is fixed on skids and is made of 3 rooms : darkroom, drying and desk areas.

Product code 14.02.00



Weld Measuring Gauges Adjustable Sizes

Medium Size Tool Kit

- V-WAC Gage*,
- Magnifier,
- AWS Type Gauge*,
- Hi-Lo Gauge,
- Micrometer w/ Ball*,
- Telescoping Mirror & 6" SPI Scale*

(*) Measurement Scale: Inch or Metric

Product code 18.01.00



American Welding Society (AWS) Tool Kit

- 0-150mm Dial Caliper,
- 6" Scale w/ Clip,
- 0-1" Micrometer,
- 2" Reading Glass,
- 7 Piece Fillet Weld Set,
- V-WAC Gauge* & AWS Type Gauge*

(*) Measurement Scale: Inch or Metric

Product code 18.02.00



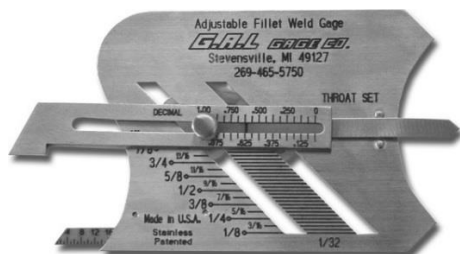
Brief Case Type Large Tool Kit/Lock & Key

- V-WAC Gauge*
- Fillet Weld
- WTPS Gauge
- Bridge Cam
- Single Purpose*
- 6" SPI Scale*
- Telescoping Mirror
- Micrometer w/ Ball*
- Hi-Lo Gauge
- Skew-T Fillet Weld w/ Calc
- AWS Type Gauge*
- ADJ Fillet Weld*
- Magnifier

Product code 18.03.00



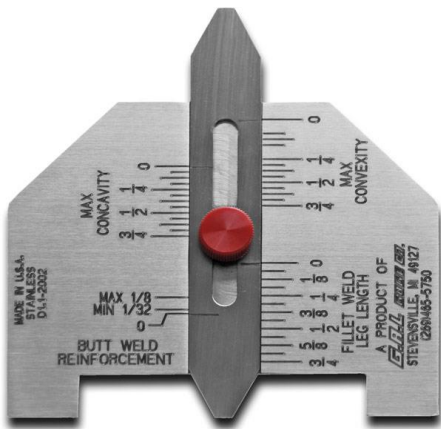
Adjustable Fillet Weld Gauge



Measure Fillet Weld & Weld Throat Thickness, Available in Inch or Metric

Product code 18.04.00

Automatic Weld Size Weld Gauge



For Accurate Calibration of Butt Fillet Type Welds, Available in Inch or Metric

Product code 18.05.00

Bridge Cam Gauge



The following measurements are possible in either inches or millimeters: Angle of Preparation, Excess Weld Metal, Depth of Undercut, Depth of Pitting, Weld Throat Size, and more.

Product code 18.06.00

Economy Single Purpose Hi-Lo Welding Gauge



Eliminates Rejects - Improves Productivity, Available in Inch or Metric

Product code 18.07.00

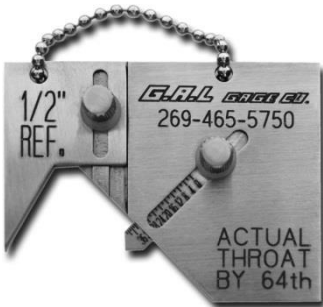
HI-LO Welding Gauge



Measures Internal Alignment, New Slim Design Is 30% Lighter

Product code 18.08.00

"Mini Sub" Socket Weld Gauge



Check Throat Dimensions, Checks All Pipe Schedule, All Stainless Steel

Product code 18.09.00

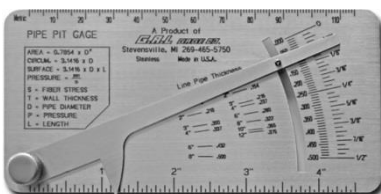
Pit Depth Gauge



Undercuts/Pits to 1/2 Inch by 1/32 Inch Increments. Check Undercuts/Pits, Porosity, All Stainless Steel.

Product code 18.10.00

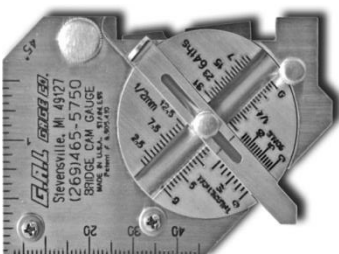
Pipe Pit Gauge



Range is 0 to 1/2" in 1/64" & .010 Increments, Arm Can be Locked in Place at Any Dimension, All Stainless Steel, Available in Inch or Metric

Product code 18.11.00

Pocket Bridge Cam Gauge

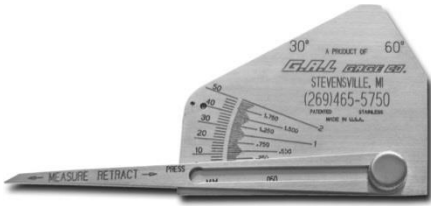


Check Angle of Preparation, Excess Weld Metal, Depth of Undercut, Depth of Pitting, and more.

Product code 18.12.00



Skew-T Fillet Weld Gauge



Check Angle of Vertical Member, Weld Acute Side, Weld Obtuse Side, Available in Inch or Metric

Product code 18.13.00

"V-WAC" Single Weld Gauge



Undercuts/Pits to 1/4 Inch, Crowns to 1/4 Inch by 1/64 Inch Increments (Tolerance .006"). Check Undercuts/Pits, Porosity, Crowns, All Stainless Steel.

Product code 18.14.00

"V-WAC" Single Weld Gauge



Undercuts/Pits to 0.240, Crowns to 0.240 by 0.020 Increments. Check Undercuts/Pits, Porosity, Crowns, All Stainless Steel.

Product code 18.15.00

"V-WAC" Single Weld Gauge



Undercuts/Pits to 6mm, Crowns to 6mm by 0.5mm Increments. Check Undercuts/Pits, Porosity, Crowns, All Stainless Steel.

Product code 18.16.00

Pit Gauge



Undercuts/Pits to 0-2mm by 0.2mm Increments. Check Undercuts/Pits, All Stainless Steel.

Product code 18.17.00

Pit Gauge



Undercuts/Pits to 0.08", Crowns to 0.04" by 0.005" Increments. Check Undercuts/Pits, Crowns, All Stainless Steel.

Product code 18.18.00

NDT Demonstration Kit (Demo Kit)

The flaws in these specimens can be examined by several different NDT methods to demonstrate the advantages and disadvantages of each NDT method.

Material: Carbon Steel

Kit Spec: 5 specimens

◦MT/PT (1) Tee @ 0.25”T x 4” x 8” x 4”

◦VT (1) Plate @ 0.25”T x 4” x 8”

◦UT (1) Plate @ 0.625”T x 4” x 8”

◦RT (1) Pipe 4” Sch80 (0.337” wall) x 8” & (1) Plate @ 0.625”T x 4” x 8”

Flaws : 2 each in plates and tee, 3 in pipe, 11 total

Doc Pack: Includes C of C, CAD Drawings, RT Film & Test Sheets

Product code 19.01.00

Standard RT Kit (Radiographic Testing)

Material: Carbon Steel

Kit Spec: 10 Specimens

◦(5) Plates @ 0.375”T

◦(3) Plates @ 0.625”T

◦(1) Tee @ 0.375”T

◦(1) Pipe @ 4” Sch80 (0.337” wall)

Flaws: 2 each specimen, 20 total

Doc Pack: Includes C of C, CAD Drawings, Test Sheets & Radiographs

Product code 19.02.00

Reference Radiograph Set

Film Set Contains: 16 Radiographs of 20 "Real Flaws"

plus ~6 Processing Defects

Radiographs are of 10 carbon steel specimens as follows:

◦(4) Plates @ 0.375”T

◦(3) Plates @ 0.625”T

◦(1) Tee @ 0.375”T

◦(2) Pipe @ 4” Sch80 (0.337” wall)

Product code 19.03.00

Standard UT Kit (Ultrasonic Testing)

Material: Carbon Steel

Kit Spec: 10 Specimens

◦(4) Plates @ 0.375”T

◦(4) Plates @ 0.625”T

◦(1) Tee @ 0.375”T

◦(1) Pipe @ 4” Sch80 (0.337” wall)

Flaws: 2 each specimen, 20 total

Doc Pack: Includes C of C, CAD Drawings and Test Sheets

Product code 19.04.00





Magnetic Particle / Liquid Penetrant Testing Kit VACUUM DEVICES FOR LEAK TESTING

The vacuum boxes are designed to be used with a compressed air source. Maximum efficiency is achieved with only 4 cubic feet per minute of air flow. This efficiency allows our boxes to operate on jobsite air or with portable air compressors powered by electric current.

Model: 30 FB

Flat bottom box for testing lap joint welds of 3/8" plate on flat surfaces

Operates using compressed air

Outside Dimensions: 30"L x 7"W x 1 5/8"H

Viewing Area: 26 7/8"L x 4"W

Product code 20.01.00

Model: 18 CB

Corner vacuum boxes are specifically designed for testing the inside corner, where the bottom meets the sidewall at 90 degrees.

Operates using compressed air.

Outside Dimensions: 18"L x 5 1/4"W x 5 1/4"H

Viewing Area: 15"L x 2 7/8"W

Product code 20.02.00

Model: 20FB

Flat bottom box for testing butt welds on flat surfaces

Operates using compressed air.

Outside Dimensions: 20"L x 7 "W x 1 5/8"H

Viewing Area: 16 7/8"L x 4 "W

Product code 20.03.00

Model: 40 CB

Corner vacuum boxes are specifically designed for testing the inside corner, where the bottom meets the sidewall at 90 degrees.

Operates using compressed air.

Outside Dimensions: 40"L x 5 1/4"W x 5 1/4"H

Viewing Area: 37"L x 2 7/8"W

Product code 20.04.00

Model: 30 CB

Corner vacuum boxes are specifically designed for testing the inside corner, where the bottom meets the sidewall at 90 degrees.

Operates using compressed air.

Outside Dimensions: 30"L x 5 1/4"W x 5 1/4"H

Viewing Area: 27"L x 2 7/8"W

Product code 20.05.00

Vacuum Box Accessories

Replacement Gasket

The replacement for the original gasket attached to the vacuum box.

Gaskets are the highest quality material with the proper softness for an easy seal, yet durable enough to last for multiple uses. Replacement of the old gasket requires its removal. The surface is cleaned of the old material as much as possible. Contact cement is then applied to the surface of the replacement gasket and to the surface of the vacuum box. When tacky, the replacement gasket is applied to the box. Care must be taken when applying the replacement gasket as there is no opportunity for adjustment.

Air Hose

3/8" x 50' air hose

Made in USA by Goodyear

Oil resistant





1/4" male threaded ends

Product code 20.06.00

Gauge

Replacement vacuum gauge.

Measurement range: 0 - 30 inches of mercury.

1/4" NPT threaded connection

Conversion: Pressure (inches of mercury)

= 2.03602 x Pressure (psi)

Accuracy ASME B40.1 standard (grade B) (3-2-3%).

Product code 20.07.00



Venturi

Replacement compressed air venturi.

4cfm air flow required for maximum effectiveness.

No moving parts for long term mechanical reliability.

The venturi comes with a removable sound suppressor (plastic piece on end of exhaust).

Product code 20.08.00



MAGNETIC PARTICLE INPECTION & PENETRANT TESTING



PENETRANT TESTING INPECTION

FLUXO P125

Red Dye penetrant

Sensitivity 2

Spray can 500ml -300ml- drum

Product code 16.01.00

FLUXO R175

Developer

Spray can 500ml -300ml- drum

Product code 16.02.00

FLUXO S190

Solvent remover

Spray can 500ml -300ml- drum

Product code 16.03.00

FLUXO P578

Fluorescent penetrant

Sensitivity 2

Spray can 500ml

Product code 16.04.00

FLUXO N130

Penetrant remover

Spray can 500ml

Product code 16.05.00

MAGNETIC PARTICLE INPECTION

FLUXO 3

Black magnetic ink

Spray can 500mL – drum

Product code 16.06.00

FLUXO 7

White contrast Paint

Spray can 500ml

Product code 16.07.00

FLUXO 4

White contrast Paint

Spray can 500mL – drum

Product code 16.08.00

FLUXO 5

White contrast Paint remover

Spray can 500mL

Product code 16.09.00

FLUXO 6

Fluorescent magnetic ink

Spray can 500mL – drum

Product code 16.10.00

Y1 ELECTRO-MAGNETIC YOKE

The Magnaflux Y1 is a lightweight yoke, ergonomically designed and is used for the detection of surface cracking in any ferro-magnetic material.

- 230 Volt 50/60 Hz

- Weight: 2.07kg

Product code 16.22.00



Y6 ELECTRO-MAGNETIC YOKE

The Y6 is a lightweight encapsulated AC yoke designed for reliable, one-person detection of surface indications. Its articulated legs make it ideal for inspecting components of different geometries.

Product code 16.22.01



Y7 ELECTRO-MAGNETIC YOKE

The Y7 Yoke offers either a constant AC field to reveal surface defects or a pulsed DC field for revealing both surface and near-surface defects. Designed for one-person portable inspection, its articulated legs contour to any part shape to assure good contact

Product code 16.22.02



PM-6 PERMANENT MAGNET

The PM-6 is a portable, lightweight, state-of-the-art magnetic particle testing device for reliable one-man inspection. The PM-6 Permanent Magnet Yoke operates anywhere and needs no external power source and it is spark-proof for tests in "red" fire or explosive zones.

Product code 16.23.00



YM-5 Yoke

Permanent magnet adjustable arms. 3 Kg mass breakout force greater than 18 daN. Height of the handle at the end of the poles, 177 mm. For magnetic particle inspection on site (MPI).

DIMENSIONS

Handle Length: 200mm

Height: 177mm handle to leg tip

Poles: 35mm

Weight-Yoke: 3.02 Kg

Weight-With Keeper: 3.34 Kg

Product code 16.24.00



ULTRASONIC FLAW DETECTOR

Digital Ultrasonic Flaw Detect

ECHOGRAPH 1095

High-tech meets comfort: Ultrasonic Testing made simple

Besides the proven qualities of its predecessor model the new ultrasonic flaw detector ECHOGRAPH 1095 features time corrected gain and backwall echo attenuation. It is the ideal instrument for manual ultrasonic testing: digital, high-contrast and comfortable in practical applications. It is reliable and sturdy and thus can be used outdoors or in rough industry environment.

- is lightweight (only 2 kg) and easy to handle
- is equipped with a very large and high-contrast TFT colour display (7" diagonal, resolution 800 x 480 pix) with automatic brightness control and a large viewing angle
- guides the user safely and self-explanatorily through the applications by means of its plain text menu
- ensures extremely simple and complete adjustment with its user guidance
- supports the operator during probe handling and instrument adjustment (DAC, TCG, AWS, DGS, JIS, ...)
- offers direct access to all important key functions
- displays up to 6 measured values in large digits
- is equipped with 3 monitors to measure amplitude and time-of-flight, as well as 3 associated control lamps on the front panel for monitoring threshold values
- enables to show reference echoes and to record echo dynamics
- enables simple freezing and storing of A-scans
- allows to move all 3 monitor gates in "freeze" mode and recalculates the displayed measured values accordingly
- comes with a convenient text editor which enables the storage of each data set with an individual file name
- contains a probe data base for easy entering of probe data, even for third-party probes
- displays all functions in plain text on the screen, in addition to the 6 function keys
- permits selection of the pulse repetition frequency (PRF) from 10 Hz up to 5000 Hz:
 - low PRF to avoid ghost echoes, and high PRF for high testing speed in case of automated testing
- saves all data, e.g. screenshots as BMP files or series of measurements as CSV files, on a removable 8 GB SD flash card
- evaluates the time-of-flight between transmitter pulse and an echo within the monitor gate
- measures the wall thickness between echoes of two monitors, either between echo peaks, edges or zero crossings
- provides 0.01 mm indication accuracy in echoecho-mode
- allows evaluation also on curved surfaces (e.g. pipes)
- provides a VGA output for external monitors
- is delivered with a colour rubber protective holster to avoid sliding and for additional protection
- offers a separate adjustable gain in the third monitor, e.g. for individual backwall echo attenuation
- has an adjustable square pulser with a pulse width automatically adapted to the frequency of the probe when it is loaded, but which can be changed manually as well
- features digital filters for optimal adaption to the probe
- is dust-proof and provides protection against water jets according to IP65



The ECHOGRAPH 1095 available in 4 versions:

1095 Basic - 1095 DAC/TCG/AWS - 1095 AVG/DAC/TCG - 1095 AVG/DAC/TCG/AWS/JIS **Product code 17.15.00**

A-Scan ECHOMETER 1077 Portable and Multichannel Rack Version

Measurement Of Wall Thickness And Sound Velocity

Display TFT colour display, 320 px x 240 px, 50 mm x 37 mm approx., illuminated

Measurands Wall thickness, sound velocity, transit time

Measurement uncertainty of gauge for wall thickness measurement (resolution):

* 0.1 mm, 0.01 mm, 0.001 mm, 0.0001 Inch, 0.001 μ s (selectable)

Measurement uncertainty of gauge for sound velocity measurement (resolution):

1 m/s, 0.1 m/s and 1 Inch/s (selectable)

Ranges for wall thickness measurement: 0.25 mm .. 450 mm (depending on probe)

Measurement uncertainty (gauge) in mm: 0.001 mm (may be limited by application)

Measurement uncertainty (gauge) in Inch: 0.001 Inch (may be limited by application)

Product code 17.16.00



Ultrasonic Flaw Detector

EPOCH 600

The EPOCH 600 is mid-level, handheld ultrasonic flaw detector. Weighing only 1.68 kg (3.72 lb.), its horizontal case is built to withstand the rigors of very harsh environments

- Designed to meet the requirements of EN12668-1
- Perfect Square™ tuneable square wave pulser
- Digital high dynamic range receiver
- Eight 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
- Long battery life, supporting lithium-ion or alkaline batteries
- Standard dynamic DAC/TVG and on board DGS/AVG
- 2 GB MicroSD memory card for data transfers and storage
- USB On-The-Go (OTG) for PC communication
- Alarm and VGA outputs
- Optional analog output

Product code 17.01.00



EPOCH 650

The EPOCH 650 is designed for use in nearly any inspection environment, from bench top testing in a laboratory to extreme outdoor and hazardous conditions

- Large, full VGA resolution transfective display for vivid clarity in any indoor lighting and direct sunlight conditions
- Rubber overmolded bumpers on all four corners for shock absorption and anti-marring considerations
- Four-point harness connection for chest straps
- “No tools” access to battery compartment and side I/O door
- Continuous position stand with right angle crook for improved stability from 0 to 180 degrees
- Gasketed side door for USB OTG connection and removable memory
- Standard internal, rechargeable lithium-ion battery
- Lightweight, ergonomic design for increased portability and ease of use

Product code 17.02.00



OmniScan MX2

Modular Instrument

A Platform that Evolves as your Needs Grow

Designed to secure both your current and future phased array investments, the OmniScan MX2 houses more than 10 different Olympus modules.

State of the Art PA2 and UT2 Modules

As a world leader in phased array technology,

Olympus has released a new line of modules compatible with MX2 instrument.

PA2

The new phased array offer-led by the new innovative PA2 modules, features multiple improvements, such as:
Best Phased Array and TOFD Signal Quality Ever
Better signal-to-noise ratio

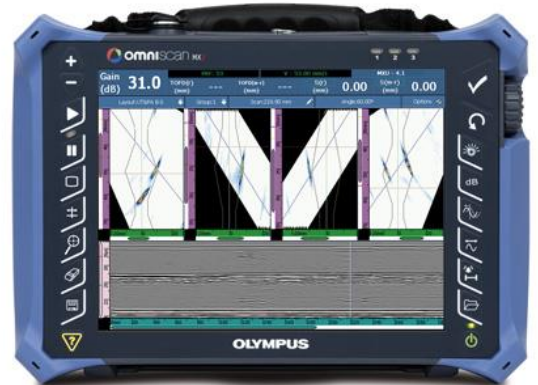
More powerful pulsers

64 pure gray tone

More Multi-group Capabilities

Ability to use PA and UT channels simultaneously

UT2 TOFD Module and MXU Software



The new OmniScan MX2 UT2 module from Olympus represents a powerful, yet affordable solution for TOFD inspection.

Product code 17.03.00

Ultrasonic Transducers

Atlas European Standard Transducers feature LEMO connectors, metric unit element diameters, and common frequencies, such as 1, 2, and 4 MHz. They are designed to meet inspection criteria referenced throughout Europe and the rest of the world.

Product code 17.04.00

Test Blocks

Calibration and/or Reference Blocks should be used in every application.

Product code 17.05.00

Ultrasonic Transducers

Transducers & Wedges

- The single crystal range of shear wave transducers are available in various angle sizes.

- Phoenix developed the gold series transducer range to offer superior performance. Available with a stainless steel case, modified internal design and rear entry connectors, gold series transducers provide exceptional results.

- Twin crystal shear wave transducers hold two crystals mounted at inward angles that provide improved near-surface resolution and superior signal-to-noise ratio.

Compression Wave Transducers

- Single crystal compression wave probes are used to measure thickness and detect flaws on plates, bars, forgings and castings.

- Twin crystal compression wave probes are suitable for use on corroded and pitted surfaces, thickness measurement, brazed joint testing and for lamination detecting. High gain and resolution are achieved with a very low cross-talk.

Thickness Gages

27MG

The 27MG is a basic ultrasonic thickness gage designed to make accurate measurements from one side on internally corroded or eroded metal pipes and parts.

Product code 17.06.00

38DL PLUS

The versatile 38DL PLUS can be used with dual element transducers for the measurement of corroded pipes to the very precise thickness measurements of thin or multilayer materials with a single element transducer.

Product code 17.07.00

45MG

The 45MG is an advanced ultrasonic thickness gage 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 gage transducers.

Product code 17.08.00



UT5000 Thickness Gauge ATEX & IECEx Certified

UT5000 Intrinsically Safe thickness gauge with CorDEX CONNECT™ measures metal thickness for Non-Destructive Testing (NDT) and Predictive Maintenance (Pdm) on pipelines and fixed equipment within hazardous locations.

| | |
|-----------------------------|---|
| ATEX Certificate No. | Baseefa11ATEX0114 |
| IECEx Certificate No. | IECEx BAS 11.0094 |
| Memory | Stores up to 1000 measurements |
| Screen | 8cm (3.1inch) RGB TFT colour screen with backlight Right/left handed set up |
| Material Velocity Selection | Preloaded via Drop-Down menu, or user defined. |
| Transducer | Dual Element |
| Pulse Rate | Standard transmit pulse rate of 4Hz |
| Adjustable from single shot | up to 8Hz |
| Receiver Bandwidth | 1MHz to 15MHz (-3dB points) |
| Frequency | 4MHz, 3mm up to 100mm (0.01in to 3.9in) |
| Accuracy | +/- 0.05mm (0.01in) RFID Tag Reader |

- Operates with 13.54MHz passive tags
- Detection range up to 5cm (1.9in)
- Supports ISO/IEC 15693-2, ISO/IEC 18000-3 tag formats
- Lithium thionyl chloride primary 3.6V cell
- 100 hours continuous operation with back light restrictions
- Low battery warning

Operating Temperature -10 to +50C (14° F to 122° F)

Weight 1.1Kg (2.4lb)

Product code 17.09.00



Ultrasonic Thickness Gauge Multigauge 5500

The Multigauge 5500 has been designed for hands free use when climbing on staging, ladders, scaffolding or when accessing by rope. Whether it's onboard a ship, on large storage tanks, climbing on top of a road tanker or inspecting underneath a bridge, the 5500 will make the job much easier.

- Ignores coatings up to 6 mm thick using Multiple Echo.

Coating Plus+ ignores coatings up to 20 mm.

- Automatic Measurement Verification System (AMVS).
- Mounts onto waist belt or chest harness for hands free use.
- No zeroing required.
- Single crystal soft faced probe protected by a membrane.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- Echo strength indicator.

| | |
|-----------------------|--|
| Resolution | 0.1 mm (0.005") or 0.05 mm (0.002") |
| Accuracy | ± 0.1 mm (0.005") or ± 0.05 mm (0.002") |
| Coatings Range | Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)* |
| Display | Red 4 character 7 segment LED |
| Batteries | 3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD |
| Battery Life | Up to 50 hours continuous use using alkaline batteries |
| Dimensions | 147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1") |
| Weight | 320 g (11.3 ounces) including batteries |
| Environmental | Case rated to IP65. RoHS and WEEE compliant |
| Operating Temperature | -10°C to +50°C (14°F to 122°F) |
| Storage Temperature | -10°C to +60°C (14°F to 140°F) |



The Multigauge 5500 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterization and verification of ultrasonic thickness measuring equipment.

Product code 17.11.00

Portable EMAT thickness gauge

The gauge enables measurements to be taken at a vast range of surface temperatures, going from -20 to +720 degrees Celsius.

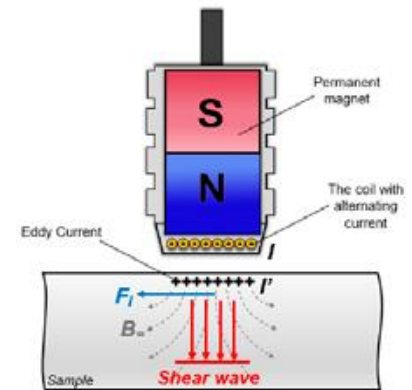
A convenient, compact, sophisticated and innovative field instrument, the EMAT Wall Thickness gauge «UltraSonic» can be used to easily yet precisely measure the thickness of components, pipes, vessels and other metal objects.

| | |
|---|---|
| Weight of the device (with batteries) | 1430 g |
| Weight of transducer | 178 g |
| Overall dimensions (LxWxH) | 274x168x36 mm |
| Power supply: | replaceable batteries (AA type, 8 pieces) |
| Operation time at a brightness of 50% | 12 hours |
| (using belt with additional external power supply unit) | 40 hours |
| Temperature range whilst in operation | - 10°C up to +50°C |
| Temperature range of the test object (in basic design) | - 20°C up to +720°C* |
| Measurement unit | millimeter |
| Measurement range | 1.5 – 100 mm |
| Precision | 0.01 mm |
| Accuracy | 0.001 mm |
| Distance from test object up to | 4 mm** |
| Transmission rate | 4 MHz |
| Type of ultrasonic wave | transversal |
| Gain | 80dB |
| Dead band at 4 MHz | max. 4 µs |
| Pulse Repetition Frequency (PRF) at least | 150 Hz |
| Hz ultrasonic speed | 1000-9999 m/sec |
| NVRAM | 1 MB |
| Sampling rate | 40 MHz |
| 4.3" colour TFT screen with adjustable lighting | 480x272 Pixel |

* Depending on transducer and time measured

** Depending on the surface coating and probe specifications

Product code 17.10.00



Hardness Testing

Equotip 550 Leeb

Rebound Hardness Test

The Equotip 550 is the most versatile all-in-one solution for portable hardness testing.

The Leeb hardness principle is based on the dynamic (rebound) method and is best suited for on-site testing of heavy, large or already installed parts.

Equotip Leeb

Automatic conversions to all common hardness scales (HV, HB, HRC, HRB, HRA, HS, Rm) as required

Highly accurate ± 4 HL (0.5% at 800 HL) with automatic correction for impact directions

Wide measurement range with a variety of impact devices and support rings to serve most hardness testing requirements

Extensive range of precise hardness test blocks available for each impact device with different hardness levels for regular verification

Product code 24.01.00

Equotip Leeb Impact Devices:

| | |
|--------------------|---|
| Measuring range | 1-999 HL |
| Measuring accuracy | ± 4 HL (0.5 % at 800 HL) |
| Resolution | 1 HL; 1 HV; 1 HB; 0.1 HRA; 0.1 HRB; 0.1 HRC; 0.1 HS; 1 MPa (N/mm ²) |
| Impact direction | Automatic compensation (excl. DL probe) |
| | 11.5 Nmm for D, DC, E, S probes |
| | 11.1 Nmm for DL probe |
| | 3.0 Nmm for C probe |
| | 90.0 Nmm for G probe |
| Impact energy | |



| | |
|-----------------------|---|
| Mass of impact body | 5.45 g (0.2 ounces) for D, DC, E, S probes 7.25 g (0.26 ounces) for DL probe 3.10 g (0.11 ounces) for C probe 20.0 g (0.71 ounces) for G probe |
| Ball indenter | Tungsten carbide, 3.0 mm (0.12") diameter for C, D, DC probes Tungsten carbide, 2.78 mm (0.11") diameter for DL probe Tungsten carbide, 5.0 mm (0.2") diameter for G probe Ceramics, 3.0 mm (0.12") diameter for S probe Polycrystalline diamond, 3.0 mm (0.12") diameter for E probe |
| Operating temperature | -10°C to 50°C (14 to 122°F) |

Metal Hardness Tester Equotip Bambino 2

The Equotip Bambino 2 is a handy measuring device for an easy metal hardness test on most diverse part geometries. It combines modern electronics with a patented impact device that integrates the test cycle into one simple motion.

Product code 24.02.00

Technical Data

| | |
|-------------------------------------|--|
| Testing method | Leeb rebound |
| Impact energy | 11.5 Nmm (impact body Equotip D) 11.2 Nmm (impact body Equotip DL) |
| Spherical test tip | Tungsten carbide, 3 mm diameter |
| Minimum radius of surface curvature | 10 mm |
| Testing range | 150-950 HLD 250-970 HLDL |
| Resolution | 1 HL; 1 HV; 1 HB; 0,1 HRC; 0,1 HRB; 0,1 HS |
| Accuracy | ± 4 HL (0,5 % bei 800 HL) |
| Dimensions | 147,5 x 44 x 20 mm |
| Weight | 110 g |
| Housing material | scratch proofed anodized aluminum |
| Display | large, high contrast LCD |
| Internal data storage | not applicable |
| Communication | not applicable |
| PC application | not applicable |
| Battery | Lithion, charges through device USB port, over ~ 20,000 impacts on a full charge, intelligent wake-up/sleep mode |
| Operating temperature | -10 to +60 °C |
| Humidity | max. 90 % |



Portable Metal Hardness Test Equotip Piccolo 2

The revolutionary portable metal hardness test of the Equotip Piccolo 2 convinces with precise measurements on most metals. It offers the same features as the Equotip Bambino 2 but also allows user defined hardness conversions, free Piccolink software for systematic real time monitoring of hardness, automated portable metal hardness test during serial production and full remote control of the Equotip Piccolo 2 settings.

With this instrument for the portable metal hardness test customers can enjoy full bi-directional communication via USB interface and free online firmware updates.

Product code 24.03.00



Technical Data

| | |
|-------------------------------------|---|
| Testing method | Leeb rebound |
| Impact energy | 11 Nmm (Equotip D probe) |
| Spherical test tip | Tungsten carbide, 3 mm diameter |
| Minimum radius of surface curvature | 10 mm |
| Testing range | 150 - 950 HL |
| Resolution | 1 HL; 1 HV; 1 HB; 0.1 HRC; 0.1 HRB; 0.1 HS; 1 MPa (1 N/mm ²) |
| Accuracy | ± 4 HL (0.5% at 800 HL) |
| Dimensions | 147.5 x 44 x 20 mm (5.71 x 1.75 x 0.79 in.) |
| Weight | 110 g |
| Housing material | scratch proofed anodized aluminum |
| Display | large, high contrast LCD |
| Internal data storage | ~ 2'000 readings (non-volatile memory) |
| Communication | USB, bidirectional, incl. remote control and operator lock through Piccolink software |
| PC application | Piccolink software included |
| Battery | Li ion, charges through device USB port, over ~ 20,000 impacts on a full charge, intelligent wake-up/sleep mode |
| Operating temperature | -10 to +60 °C (14 to 140 °F) |
| Humidity | 90% max |

Leeb Hardness Tester HM-6561

Technical Specifications

| | |
|-----------------------|--|
| Display: | 12.5mm LCD with back light |
| Accuracy: | Display error ±0.8% at LD=900 |
| Measuring range: | 200-900L |
| Conversion: | HL-HRC-HRB-HB-HV-HSD |
| Materials: | 9 different common materials With RS232C interface |
| Memory: | 250 data can be stored and re-readable |
| Impact device: | D Will handle the majority of hardness testing applications. |
| Weight: | 75g |
| Power supply: | 2x1.5V AAA size battery |
| Dimension: | 146x65x36mm |
| Weight: | 130g (not including batteries) |
| Working temperature : | - 10°C/+50°C |

Product code 24.10.00



SPECTRO xSORT

Handheld XRF Analyzer Delivers Improved Speed, Precision in Analysis of Light Elements

The design, performance, and simple operation of the SPECTRO xSORT handheld spectrometer make it ideal for performing positive material identification (PMI) for infrastructure integrity testing at refineries, power plants, and petrochemical complexes — as well as scrap metal analysis and sorting in the recycling industry.

The SPECTRO xSORT Alloy model delivers grade identification in seconds.

The even more powerful SPECTRO xSORT AlloyPlus analyzes most alloys in 2 seconds, and identifies alloys based on light elements such as aluminum, magnesium, silicon, phosphorus, and sulfur in 7 seconds. Advantages include:

- Ease of Use: With SPECTRO xSORT, operators don't have to switch methods between samples, or bother with helium flushes or vacuum systems. Its compact, one-piece 1.64 kg (3.62 lb) design is optimized for easy use in the field, even in tight or less accessible spots.
- Built-In Protection and Calibration: A shutter that automatically closes the measurement window between analyses — to protect internal components — also functions as the sample material for unique, automatic iCAL standardization. All calibrations loaded into SPECTRO xSORT are always ready for use.

Additional features include an X-ray safety gasket to prevent backscatter radiation from light element matrix samples; wireless LAN; quick-change battery; interface bezel with operator-defined hot keys; “live” analysis results; simplified software with touchscreen; and the SPECTRO iCAL one-sample, one-time easy automated calibration system. Options include an integrated GPS receiver and integrated video camera. The new SPECTRO xSORT analyzer is available in different models. The SPECTRO xSORT Alloy employs an innovative silicon PIN (Si-PIN) detector and delivers grade identification of metals in seconds without extensive analysis.

The SPECTRO xSORT AlloyPlus (Combi) features a top-of-the-line silicon drift detector (SDD) and provides reliable, high-productivity measurement and analysis.

Product code 26.01.00



Lifting Equipment

The Handifor

The Handifor electronic mini weighing Scale is perfect for weighing and measuring loads up to 200kg.

Built to a robust specification, the innovative and compact design of the Handifor makes it easy to operate and store

- Operating life batteries 100h
- Lightweight (ONLY 220g)
- 2x AAA batteries
- The Units can be easily adjusted via the featured 'soft key pad'
- Large Displays IP40
- Accuracy +/-0.5% From 20 up to 200kg
----- Please specify when ordering! - -
- Rugged, lightweight & compact

Product code 25.01.00



The dynafor LLX1

The dynafor LLX1 dynamometers are precision force sensors used to measure forces and indicate loads. The shape of this model allows the use of standard shackles on both ends. The dynamometers of this range function in all positions for the measurement of force & suspended for weighing.

Model Precision Increment Weight

| Model | Precision (daN) | Increment (kg) | Weight (kg) |
|------------|-----------------|----------------|-------------|
| LLX1 0.5T | 0.2 | 1.1 | 1.1 |
| LLX1 1T | 0.5 | 1.1 | 1.1 |
| LLX1 2T | 1 | 1.3 | 1.3 |
| LLX1 3.2T | 1 | 1.5 | 1.5 |
| LLX1 5T | 2 | 2.3 | 2.3 |
| LLX1 6.3T | 2 | 2.3 | 2.3 |
| LLX1 12.5T | 5 | 4.3 | 4.3 |
| LLX1 20T | 10 | 7 | 7 |

Product code 25.02.00



Dynafor LLZ

Dynafor LLZ range of electronic dynamometer load cell with digital display for pulling and lifting applications. Using strain gauge sensor the LLZ models are designed for use between shackles or brackets. These units operate in all positions for forces measurement and vertically for load checking and measurement.





Features:

- 0.25 - 20Tonnes
- Capable of displaying a wide range of units (kg, T, daN kN, lbs)
- Accuracy : 0.8% of capacity
- Coefficient of utilisation : more than 6
- Built in Liquid crystal display (LCD) : 5 digits 18 mm high
- Offers the 'Tare' function
- Ambient temperature range : -10°C to +40°C
- Weatherproof and dustproof in accordance with EN 60 529 : IP65
- Body in painted aluminium alloy
- Power supply : 3 x 1.5 V, AA or R6 (diameter 14 x 50 mm).
- Battery life (using 2000 mAh batteries) 850 hours approx.
- Meets IP65 & is fine to use in severe weather

Product code 25.03.00



Yale Tigrip Crane Weigher TZR (0-100 Tonnes)

The new generation of Load Indicators designed and manufactured by industry experts, Yale. These are quality and extremely compact handheld units perfectly engineered for the weighing of loads ranging from 0 to 100 Tonnes depending on the model chosen.



The 'TZL' unit is the standard unit featuring a digital display. The TZR model is exactly the same however comes delivered with a remote control.

Model: TZR 1.0 - TZR 2.5 - TZR 5.0 - TZR 10.0 - TZR 20.0 - TZR 35.0 - TZR 50.0 - TZR 100

Product code 25.04.00

Hydraulic Adhesion Tester

The Hydraulic Adhesion Tester is an extremely versatile Type III adhesion gauge which can be used for many adhesion requirements. Tests can be made on flat or curved (concave and convex) surfaces. The Adhesion Tester is the ideal gauge for coatings on Tanks, Pipelines, etc.

- Hand-Powered and portable
- Ideal for site work
- Reusable stainless steel dollies

Digital Adhesion Gauge features:

- Maximum hold - displays the highest value reached
- Backlit display for dark areas
- Rubber protective casing
- Switchable Metric/Imperial

The Adhesion Tester can be used with convex and concave dollies, making this the gauge for adhesion of coatings on all pipelines including those with small diameter, tanks and other curved surfaces. There is a wide range of curved dollies available, each designed for a specific range of curvature.

