

# PAINT SPRAY TEST EQUIPMENT



NOVABLAST BV
NIJVERHEIDSSTRAAT 25N
3861 RJ NIJKERK
THE NETHERLANDS



WWW.NOVABLAST.COM INFO@NOVABLAST.COM +31 85 444 48 90



# **INDEX**

COATING THICKNESS METER	3
WET FILM GAUGE	11
PAINT INSPECTION KIT	13
HOLIDAY DETECTOR	16
ADHESION TESTER	23
TESTEX REPLICA TAPE	28
SURFACE ROUGHNESS COMPARATOR	31
BRESLE PATCH TEST	34
DUST TAPE TEST	37
RUST GRADE BOOK	40
DEWPOINT METER	42







# **COATING THICKNESS METER**



### COATING THICKNESS METER

The Coating Thickness Meter will measure all coatings on metallic substrates using the magnetic induction or eddy-current principles, ensuring the correct coating thickness has been applied.



One of the most advanced portable Coating Thickness Meters on the market, incorporating all the following user functions.

Calibration: Calibrate on any blasted profile or any shape of substrate using the Calibration Foils supplied.

Calibration Memories: The calibration settings for different substrates and shapes can be stored and recalled when required.

Statistics: Shows Mean, Number of Readings, Max/Min, Coefficient of Variation and Standard Deviation.

Limits: Pass and fail with audible and visual alarm.

Metric/Imperial: Select measurement units.

Batching: Measurements can be stored into batches which incorporate batch number, job number, and date and time. You can also go back to previous batches and look at the statistics and add or cancel readings.

Download: Measurements, statistics and out-of-limit readings can be downloaded to a computer either by batch number or job number into Microsoft Word or Excel using the optional PC Download Cable (CA101).

#### **Specification**

Accuracy:  $\pm 1$  to 3%.

Resolution  $0-1000\mu m/0-2000\mu m$ :  $1\mu m$  (0.1 mil)

Resolution 0-5.00mm: 0.01mm (0.1 mil)

Resolution 0-20.0mm: 0.1mm (0.1 mil)

#### **Compliance**

ISO 2008, ISO19840, ISO 2360, ISO 1461, ISO 2063, ASTM D7091, ASTM E376 and ASTM G12.



Supplied in an industrial foam-filled Carrying Case with Probes, set of 8 Calibration Foils and Zero Disks.

The PC Download Cable shown below is available as an optional extra.

The Calibration Certificates with traceability to UKAS are an optional extra.



ITEM NO.	PART
80864627	COATING THICKNESS METER. INCL 80864604 FERROUS PROBE 0-1000 µM
80864629	COATING THICKNESS METER. INCL 80864605 FERROUS PROBE 0-2000 µM & 0-5.00 MM
80864631	COATING THICKNESS METER. INCL 80864606 FERROUS PROBE 1-20.0 MM
80864635	COATING THICKNESS METER. INCL 80864607 NON-FERROUS PROBE 0-1000 µM
80864637	COATING THICKNESS METER. INCL 80864608 NON-FERROUS PROBE 0-2000 µM
80864661	COATING THICKNESS METER. INCL 80864604 FERROUS PROBE & CS304 NON-FERROUS PROBE 0-1000 µM
80864664	COATING THICKNESS METER. INCL 80864605 F PROBE 0-2000 $\mu$ M/0-5.00 MM & CS304 N PROBE 0-2000 $\mu$ M
80864665	FERROUS PROBE CALIBRATION CERTIFICATE
80864666	NON-FERROUS PROBE CALIBRATION CERTIFICATE
80864622	CALIBRATION FOILS CALIBRATON CERTIFICATE
80864615	PC DOWNLOAD CABLE

# NOVABLAST ( www.novablast.com

#### **Ferrous Probes**

80864604

0-1000µm



Probe Diameter: 9mm (360mils).

Working Headroom: 75mm (3").

Minimum Convex Radius: 4mm (160mils).

Minimum Concave Radius: 25mm (1").

Minimum Sample Area: 4mm (160mils).

80864605

0-2000µm & 0-5.00mm



Probe Diameter: 15mm (600mils).

Working Headroom: 75mm (3").

Minimum Convex Radius: 10mm (400mils).

Minimum Concave Radius: 50mm (2").

Minimum Sample Area: 10mm (400mils).

80864606

1-20.0mm



Probe Diameter: 50mm (2").

Working Headroom: 150mm (6").

Minimum Convex Radius: 100mm (4").

Minimum Concave Radius: 500mm (20").

Minimum Sample Area: 100mm (4").

80864609

 $0\text{--}1000\mu m$ 



Probe Diameter: 9mm (360mils).

Working Headroom: 40mm (1.5").

Minimum Convex Radius: 4mm (160mils).

Minimum Concave Radius: 25mm (1").

Minimum Sample Area: 4mm (160mils).



# **FERROUS PROBES**

Ferrous Probes for use with the Coating Thickness Meter. They will measure all non-ferromagnetic coatings on steel and iron.

Example: Paint on steel. galvanising on steel, metal spray on steel and chrome on steel etc.

Accuracy: ±1 to 3%

Resolution 80864604: 1µm (0.1 mil) Resolution 80864605: 0.01mm (0.1 mil) Resolution 80864606: 0.1mm (0.1 mil)

The Calibration Certificate with traceability to

UKAS is an optional extra.



ITEM NO.	PART
80864604	SPARE FERROUS PROBE 0-1000 µM (TO FIT 80864627 & 80864661 COATING THICKNESS METERS)
80864605	SPARE FERROUS PROBE 0-2000 $\mu$ M & 0-5.00 MM (TO FIT 80864629 & 80864664 COATING THICKNESS METERS)
80864606	SPARE FERROUS PROBE 1-20.0 MM (TO FIT 80864631 COATING THICKNESS METER)
80864609	FERROUS PROBE RIGHT ANGLE 0-1000 µM (TO FIT 80864627 & 80864661 COATING THICKNESS METERS)
80864665	FERROUS PROBE CALIBRATION CERTIFICATE



#### **Non-Ferrous Probes**

80864607

0-1000µm



Probe Diameter: 10mm (400mils).

Working Headroom: 75mm (3").

Minimum Convex Radius: 5mm (200mils). Minimum Concave Radius: 25mm (1").

Minimum Sample Area: 5mm (200mils).

80864608

0-2000µm



Probe Diameter: 10mm (400mils).

Working Headroom: 75mm (3").

Minimum Convex Radius: 5mm (200mils).

Minimum Concave Radius: 25mm (1").

Minimum Sample Area: 5mm (200mils).

80864610

0-1000µm



Probe Diameter: 10mm (400mils).

Working Headroom: 40mm (1.5").

Minimum Convex Radius: 5mm (200mils).

Minimum Concave Radius: 25mm (1").

Minimum Sample Area: 5mm (200mils).



# **NON-FERROUS PROBES**

Non-Ferrous Probes for use with the Coating Thickness Meter. They will measure all non-conductive, non-ferromagnetic coatings on conductive non-ferrous substrates. Example: Paint on aluminium, paint on stainless steel and anodising on aluminium etc.

Accuracy: ±1 to 3%.

Resolution 80864607, 80864608 & 80864610:  $1\mu m$  (0.1mil).

The Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80864607	SPARE NON-FERROUS PROBE 0-1000 µM (TO FIT 80864635 & 80864661 COATING THICKNESS METERS)
80864608	SPARE NON-FERROUS PROBE 0-2000 µM (TO FIT 80864637 & 80864664 COATING THICKNESS METERS)
80864610	NON-FERROUS PROBE RIGHT ANGLE 0-1000 µM (TO FIT 80864635 & 80864661 COATING THICKNESS METERS)
80864666	NON-FERROUS PROBE CALIBRATION CERTIFICATE



# **CALIBRATION FOILS**

Calibration Foils for calibrating the Coating Thickness Meters.

All values shown are nominal values.

Foil Accuracy: ±2%

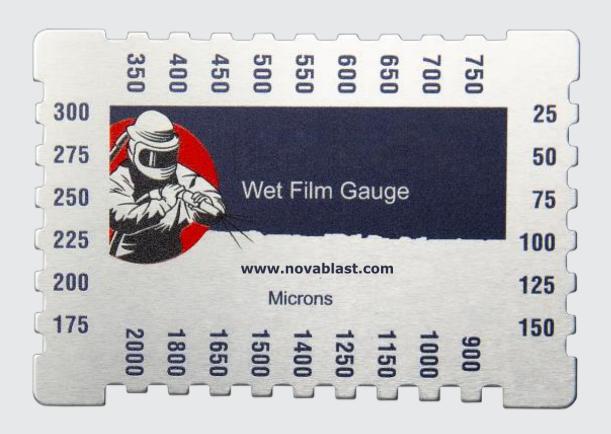
Supplied in packs of eight in a protective Wallet.

The Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80864801	SPARE CALIBRATION FOILS 0-1000MM (25, 50, 75, 125, 175, 250, 500, 750 MM)
80864802	SPARE CALIBRATION FOILS 0-40MILS (1, 2, 3, 5, 7, 10, 20, 30 MILS)
80864803	SPARE CALIBRATION FOILS 0-2000MM (50, 250, 500, 750, 1000, 1250, 1500, 2000 MM)
80864804	SPARE CALIBRATION FOILS 0-80MILS (2, 10, 20, 30, 40, 50, 60, 80 MILS)
80864805	SPARE CALIBRATION FOILS 0-5.00MM (50, 250, 500, 750, 1000, 1500, 2000, 3000 MM)
80864806	SPARE CALIBRATION FOILS 0-200MILS (2, 10, 20, 30, 40, 60, 80, 120 MILS)
80864811	SPARE CALIBRATION FOILS 1–20.0MM (5, 9.5, 15 MM)
80864812	SPARE CALIBRATION FOILS 1-800MILS (200, 360, 600 MILS)
80864675	CALIBRATION FOILS SPECIAL RANGE. SELECT 8 VALUES FROM THE FOLLOWING: 12, 25, 37, 50, 63, 75, 100, 125, 150, 175, 190, 200, 225, 250, 275, 300, 350, 375, 500, 625, 750, 1000, 1250, 15,00, 2000, 3000 $\mu$ M (ALSO AVAILABLE IN MILS ON REQUEST.
80864622	CALIBRATION FOILS CALIBRATION CERTIFICATE
80864815	SPARE ZERO DISK FERROUS
80864816	SPARE ZERO DISK NON-FERROUS
80864817	SPARE ZERO PLATE FERROUS (1–20MM COATING THICKNESS METER)

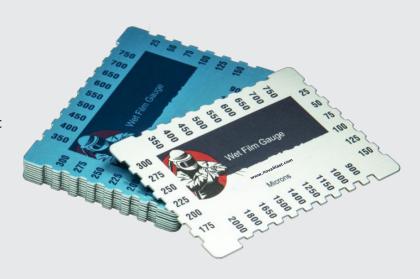




# **WET FILM GAUGE**

### **WET FILM GAUGE**

The Wet Film Gauge will measure the paint thickness while the coating is still wet.



Manufactured in aluminium, the Wet Film Gauge can either be kept has a record for the wet film thickness taken or cleaned in solvents and reused.

Wet film thickness measurement should be taken as soon as possible after the coating application by pressing the Wet Film Gauge onto the coated flat surface so it touches the substrate. Allow sufficient time for the coating to wet the teeth before removing the Gauge.

The coating thickness can now be observed by looking at the base of the teeth. The Coating Thickness measurement lies between the coated tooth and next uncoated tooth.

#### **Specification**

Material: Aluminium.

Number of teeth: 30

Teeth Values: 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 900, 1000, 1150, 1250, 1400, 1500, 1650, 1800, 2000 µm.

#### **Compliance**

ISO 2808 and ASTM D4414.

ITEM NO.	PART
80864500	WET FILM GAUGE (ALUMINIUM) 25-2000 μM (PACK OF 10)
80864505	WET FILM GAUGE (ALUMINIUM) CONFORMANCE CERTIFICATE





# **PAINT INSPECTION KIT**



### **PAINT INSPECTION KIT**

The Paint Inspection Kit contains all the essential equipment needed for the testing of blast-cleaned steel and coating inspection using the following equipment.



Testex Replica Tape / Replica Tape Gauge: Surface Profile measurement of blast-cleaned steel.

Bresle Test: Measurement of salts and corrosion products on blast-cleaned steel.

Dust Tape Test: Assessment of the quantity and size of dust particles on blast-cleaned steel.

Dewpoint Meter: Testing for the probability of condensation on blast-cleaned steel.

Wet Film Gauge: Wet film thickness measurement of the coating.

Coating Thickness Meter: Dry film thickness measurement of the coating.

The Paint Inspection Kit is supplied with the 80864627 Ferrous  $0-1000\mu m$  Coating Thickness Meter. Other models of Coating Thickness Meters

are available on request to cater for thicker coatings and Non-Ferrous substrates.

#### **Compliance**

Testex Replica Tape: ISO 8503-5, ASTM D4417 and NACE SP0287

Bresle Patch Test: ISO 8502-6 and ISO 8502-9

Dust Tape Test: ISO 8502-3

Dewpoint Meter: ISO 8502-4

Wet Film Gauge: ISO 2808 and ASTM D4414

Coating Thickness Meter: ISO 2008, ISO19840, ISO 2360, ISO 1461, ISO 2063, ASTM D7091,

ASTM E376 and ASTM G12



Testex Replica Tape X Coarse (50 impression roll), Replica Tape Gauge and Burnishing Tool.

Bresle Patches (pack of 35), Conductivity Meter, 500ml Deionised Water, 5ml Syringe with Needle, Calibration Solution (14ml), Conditioning Solution (14ml) and 25ml Beaker.

Dust Test Tape (60m roll), Dust Test Comparator (pack of 50) and X10 Illuminated Magnifier.

Dewpoint Meter and Humidity Sensor.

Wet Film Gauge (pack of 5).

Coating Thickness Meter (80864627), Ferrous Probe, set of 8 Calibration Foils and Zero Disk.

Calibration Certificates with traceability to UKAS are an optional extra.

ITEM NO.	PART
80864600	PAINT INSPECTION KIT
80864601	PAINT INSPECTION KIT CALIBRATION CERTIFICATES





# **HOLIDAY DETECTOR**



# **Holiday Detector**

The Holiday Detector is a DC voltage Holiday Detector for detecting pinholes and flaws in insulated coatings on conductive substrates.

Where coatings have to provide an effective safeguard against corrosion, it is essential that any pinholes or flaws that will eventually lead to corrosion are detected at the earliest possible stage, preferably immediately after the coating application.

The test voltage is of high impedance, enabling safe testing, and does not damage or cause burn marks to the coating.

The Holiday Detector is a compact and lightweight instrument, which can easily be carried by the operator with the supplied Carry Bag.

#### **Specification**

Accuracy: ±1%

Resolution 80866000: 0.01kV

Resolution 80866001 & 80866002: 0.1kV

Voltage Type: DC

#### **Compliance**

ISO 29601, ISO 2746, ASTM D5162, ASTM G62, NACE SP0274, NACE SP0188 and NACE SP0490.



Supplied in an industrial foam-filled Carrying Case with High Voltage Probe, Band Brush, 10m Earth Cable and Carry Bag.

Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80866000	DC HOLIDAY DETECTOR 0.5-6 KV (MAXIMUM TEST THICKNESS 1100 µM) INCL HIGH VOLTAGE HANDLE
80866001	DC HOLIDAY DETECTOR 1-20 KV (MAXIMUM TEST THICKNESS 3700 μM) INCL HIGH VOLTAGE HANDLE
80866002	DC HOLIDAY DETECTOR 1-30 KV (MAXIMUM TEST THICKNESS 8000 μM) INCL HIGH VOLTAGE HANDLE
80866005	DC HOLIDAY DETECTOR CALIBRATION CERTIFICATE
80866260	SPARE EARTH CABLE 10M
80866261	EARTH CABLE 20M
80866090	SPARE BAND BRUSH
80866086	SPARE HIGH VOLTAGE HANDLE



# **BROAD BRUSHES**

Brass-filled Brushes for the testing of coatings on large flat areas using the Holiday Detector.

All Broad Brushes come complete with the connector assembly.



ITEM NO.	PART
80866040	BROAD BRUSH 200 MM (8")
80866041	BROAD BRUSH 500 MM (20")



# **CIRCULAR BRUSHES**

Brass-filled Circular Brushes for the testing of coatings on the internal diameter of pipes using the Holiday Detector.

All Brushes come complete with the connector assembly.



ITEM NO.	PART
80866060	CIRCULAR BRUSH & ASSEMBLY 2" (51 MM)
80866061	CIRCULAR BRUSH & ASSEMBLY 3" (76 MM)
80866062	CIRCULAR BRUSH & ASSEMBLY 4" (102 MM)
80866063	CIRCULAR BRUSH & ASSEMBLY 6" (152 MM)
80866064	CIRCULAR BRUSH & ASSEMBLY 8" (203 MM)
80866065	CIRCULAR BRUSH & ASSEMBLY 10" (254 MM)
80866066	CIRCULAR BRUSH & ASSEMBLY 12" (305 MM)



# **ROLLING SPRINGS**

Phosphor Bronze Rolling Springs for the testing of coatings on the external diameter of pipes using the Holiday Detector.

All Rolling Springs require the SA490 Rolling Spring Connector. One Rolling Spring Connector can be used on multiple Rolling Springs.



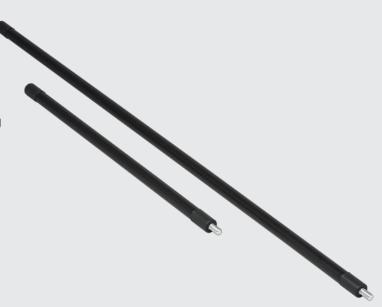
ITEM NO.	PART
80866070	ROLLING SPRING 4" (106 MM)
80866071	ROLLING SPRING 6" (152 MM)
80866072	ROLLING SPRING 8" (203 MM)
80866073	ROLLING SPRING 10" (254 MM)
80866074	ROLLING SPRING 12" (305 MM)
80866075	ROLLING SPRING 14" (356 MM)
80866076	ROLLING SPRING 16" (406 MM)
80866077	ROLLING SPRING 18" (457 MM)
80866078	ROLLING SPRING 20" (508 MM)
80866079	ROLLING SPRING 24" (610 MM)
80866080	ROLLING SPRING 30" (762 MM)
80866081	ROLLING SPRING 36" (914 MM)
80866082	ROLLING SPRING 42" (1067 MM)
80866083	ROLLING SPRING 48" (1219 MM)
80866084	ROLLING SPRING CONNECTOR



# **EXTENSION RODS**

Insulated Extension Rods for extending the reach of the Brushes and Rolling Springs using the Holiday Detector.

Extension Rods can be connected together to make longer lengths when using Circular Brushes down long pipes.



ITEM NO.	PART
80866030	EXTENSION ROD 500 MM (20")
80866031	EXTENSION ROD 1000 MM (40")





# **ADHESION TESTER**



### ADHESION TESTER

The Adhesion Tester is one of the most accurate and versatile adhesion testers currently available. It measures the adhesion bond strength of applied coatings with ease and precision.

The adhesion is measured by the tensile pull on a Dolly glued to the coating surface. The force is applied through the centre of the Dolly by a hydraulically loaded pin. This ensures an exactly central point-loading of the force.

The maximum value achieved at pull-off is recorded by a reset needle that is easily read on the large scale of the pressure gauge.

Ensures effective quality control with a non-destructive capability. To allow the specification minimum to be proven, the dolly can be removed using the heated dolly remover supplied. If necessary, the dolly can be left in place for testing during service as part of a planned maintenance programme.

#### **Specification**

Pressure Gauge resolution: psi 20, Mpa 0.2

Accuracy: ±1% FSD

#### **Compliance**

ISO 4624 and ISO 16276-1 and ASTM D4541.

The Right Angle version of the Adhesion Tester enables the user to test the adhesion of coatings inside pipes with a minimum diameter of 150mm (6").





Supplied in an industrial foam-filled Carrying Case with 5 Flat Dollies, Adhesive, Heated Dolly Remover, Dolly Cleaning Tool and Dolly Plug.

The Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80865000	ANALOGUE ADHESION TESTER (STANDARD) 0-3500 PSI (0-25 MPA)
80865001	ANALOGUE ADHESION TESTER (RIGHT ANGLE) 0-3500 PSI (0-25 MPA)
80865005	ADHESION TESTER CALIBRATION CERTIFICATE
80865045	SPARE FLAT DOLLY
80865046	SPARE TURBO FUSE ADHESIVE
80865047	SPAE DOLLY PLUG (PACK OF 5)



# **CONCAVE DOLLIES**

The Adhesion Tester can test external surfaces of pipes. Because the load reacts internally within the dolly, curved surfaces of pipes can be easily tested.

To obtain a uniform tensile load, Concave Dollies machined to match the diameter under test need to be used. External diameters as small as 51mm (2").



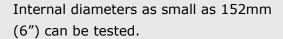
ITEM NO.	PART
80865020	CONCAVE DOLLY 2" (51 MM)
80865021	CONCAVE DOLLY 3" (76 MM)
80865022	CONCAVE DOLLY 4" (102 MM)
80865023	CONCAVE DOLLY 6" (152 MM)
80865024	CONCAVE DOLLY 8" (203 MM)
80865025	CONCAVE DOLLY 10" (254 MM)
80865026	CONCAVE DOLLY 12" (305 MM)
80865027	CONCAVE DOLLY 14" (356 MM)
80865028	CONCAVE DOLLY 16" (406 MM)
80865029	CONCAVE DOLLY 18" (457 MM)
80865030	CONCAVE DOLLY 20" (508 MM)
80865031	CONCAVE DOLLY 24" (610 MM)
80865032	CONCAVE DOLLY 30" (762 MM)
80865033	CONCAVE DOLLY 36" (914 MM)



# **CONVEX DOLLIES**

The Adhesion Tester can test internal surfaces of pipes. Because the load reacts internally within the dolly, curved surfaces of pipes can be easily tested.

To obtain a uniform tensile load, Concave Dollies machined to match the diameter under test need to be used.





ITEM NO.	PART
80867034	CONVEX DOLLY 6" (152 MM)
80867035	CONVEX DOLLY 8" (203 MM)
80867036	CONVEX DOLLY 10" (254 MM)
80867037	CONVEX DOLLY 12" (305 MM)
80867038	CONVEX DOLLY 14" (356 MM)
80867039	CONVEX DOLLY 16" (406 MM)
80867040	CONVEX DOLLY 18" (457 MM)
80867041	CONVEX DOLLY 20" (508 MM)
80867042	CONVEX DOLLY 24" (610 MM)
80867043	CONVEX DOLLY 30" (762 MM)
80867044	CONVEX DOLLY 36" (914 MM)





# **TESTEX REPLICA TAPE**



# **TESTEX REPLICA TAPE**

A unique replica technique and a snap gauge enable accurate, blast-cleaned surface profile measurements.

Testex Replica Tape makes Surface replicas easy to obtain and produces average maximum peak-to-valley readings that ensure optimum blasting effectiveness.

Replicas can be retained for future needs.



The Replica Tape Gauge is used to measure the Testex Replica Tape replica and determine the average maximum peak-to-valley height of the blasted profile.

#### **Principle**

The replica film in the Testex Replica Tape consists of a layer of crushable plastic microfilm coated onto a polyester substrate of a highly uniform thickness 50µm (2mil). When compressed against a hard surface, the Microfoam collapses to about 25% of its original thickness.

During compression the foam acquires an impression of the surface against which it is burnished. The highest peaks on the test surface displace the fully compressed foam and come to rest against the polyester substrate. The deepest valleys on the test surface create the highest peaks on the replica. This method measures an average maximimum peak-to-valley profile. The

anvils of the Replica Tape Gauge flatten the replica profile slightly so that the reading equates to an average maximum value.

#### **Specification**

Replica Tape Gauge accuracy: ±1%FSD

Temperature: Produces accurate replicas on surface temperatures of -10 to +65°C

Storage: Do not expose the Testex Replica Tape to any extremes of temperature or daylight.

Shelf Life: The replica foam has no expiry date. The only degeneration is the adhesive on the Tape. We would recommend that the Tape is used within a 12-month period from date of purchase.

#### **Compliance**

ISO 8503-5, ASTM D4417 and NACE SP0287



The Replica Tape Gauge is supplied in an industrial foam-filled Carrying Case with Testex Replica Tapes Coarse and X Coarse and a Burnishing Tool.

The Replica Tape Gauge Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80863301	TESTEX REPLICA TAPE COARSE (50 IMPRESSIONS) 20-64 MM (0.8-2.5 MILS)
80863302	TESTEX REPLICA TAPE X COARSE (50 IMPRESSIONS) 40-115 MM (1.5-4.5 MILS)
80863200	REPLICA TAPE GAUGE. INCL. TESTEX TAPES COARSE & X COARSE
80863205	REPLICA TAPE GAUGE CALIBRATION CERTIFICATE
80863305	TESTEX REPLICA TAPE CONFORMANCE CERTIFICATE
80863304	SPARE BURNISHING TOOLS (PACK OF 10)





# **SURFACE ROUGHNESS COMPARATOR**



# **ROUGHNESS COMPARATOR**

A precision nickel Comparator plate for grit and shot-blast surface roughness comparison measurement.



When steel has been blast-cleaned, the surface consists of random irregularities with peaks and valleys that are not easily characterised.

Because of this random nature, experts have recommended that the profile should be identified as either angular (where grit abrasives have been used) or dimpled (where shot abrasives have been used) and that they should be graded as fine, medium or coarse with each grade being defined by limits specified in ISO 8503.

The Roughness Comparator method is applicable to steel surfaces that have been blast-cleaned with either metallic or non-metallic abrasives to grades Sa  $2\frac{1}{2}$  and Sa 3.

When a mixture of shot and grit abrasives are used to blast-clean a substrate, the Grit Surface Roughness Comparator should be used.

### **Specification**

Profile Segment 1: Grit 25µm. Shot 25µm.

Profile Segment 2: Grit 60µm. Shot 40µm.

Profile Segment 3: Grit 100μm. Shot 70μm.

Profile Segment 4: Grit 150µm. Shot 100µm.

#### **Compliance**

ISO 8503-1, ISO 8503-2 and ASTM D4417.



The Roughness Comparator is supplied in a protective Wallet.

A X5 Illuminated Magnifier for viewing the Comparator is available has an optional extra.



ITEM NO.	PART
80863400	ROUGHNESS COMPARATOR GRIT
80863410	ROUGHNESS COMPARATOR SHOT
80863420	ROUGHNESS COMPARATOR CONFORMANCE CERTIFICATE





# **BRESLE PATCH TEST**



# **BRESLE PATCH TEST**

The Bresle Test will measure water-soluble salts and corrosion products on blast-cleaned steel.

These compounds are almost colourless and are localized at the lowest point of the rust pits.



If they are not removed prior to painting, chemical reactions can result in blister formation and accumulations of rust that destroy the adhesion between the substrate and the applied protective coating.

#### **Specification**

Conductivity Meter Accuracy: ±2

Conductivity Meter range: 0-1999µS/cm

Conductivity Meter resolution: 1µS/cm

Storage: Do not expose the Bresle Patches to any extremes of temperature or daylight.

Shelf Life: The only degeneration on the Bresle Patches is the adhesive if exposed to extremes of temperature.

We would recommend that the Bresle Patches are used within a 12-month period from date of purchase.

#### **Compliance**

ISO 8502-6 and ISO 8502-9.



Supplied in an industrial foam-filled Carrying Case with Bresle Patches (pack of 35), Conductivity Meter, 500ml Deionised Water 500ml, 5ml Syringe with Needle, Calibration Solution (14ml) Conditioning Solution (14ml) and 25ml Beaker.

The Conductivity Meter Calibration Certificate with traceability to UKAS is an optional extra.



ITEM NO.	PART
80862200	BRESLE TEST. INCLUDES 35 BRESLE PATCHES
80862210	BRESLE PATCHES (PACK OF 35)
80862240	SPARE DEIONISED WATER (500ML)
80862230	SPARE SYRINGES WITH NEEDLES (PACK OF 10)
80862222	SPARE CONDUCTIVITY METER CALIBRATION SOLUTION (14ML)
80862223	SPARE 25ML BEAKERS (PACK OF 5)
80862220	SPARE CONDUCTIVITY METER SENSOR MEASUREMENT HEAD
80862221	SPARE CONDUCTIVITY METER CONDITIONING SOLUTION (14ML)
80862025	CONDUCTIVITY METER CALIBRATION CERTIFICATE
80862026	CONDUCTIVITY METER CALIBRATION SOLUTION CONFORMANCE CERTIFICATE
80862212	BRESLE PATCHES CONFORMANCE CERTIFICATE





# **DUST TAPE TEST**



### **DUST TAPE TEST**

Assess the quantity and size of dust particles on steel surfaces prepared for painting. Dust particles on blast-cleaned steel surfaces may reduce the adhesion of applied coatings, and by absorbing moisture may promote the corrosion of the steel surface.



Accumulation of dust particles occurs more naturally on horizontal surfaces, the interior of pipes and in structural cavities. Inspection should be carried out to ensure that such areas are adequately cleaned and free from dust particles before painting.

The Dust Test Comparator shows 5 classifications of dust particles and 4 sections of contrasting backgrounds where the Tape can be applied.

The Dust Tape Test is suitable for the assessment of dust particles retained after blast-cleaning on rust grades A, B and C.

Because of the limited elasticity of the Tape, it is not possible to penetrate into the deep pits present on blast-cleaned steel rust grade D.

#### **Specification**

Tape adhesion strength: 190nN/metre

Tape width: 25mm (1")

Tape length: 60 metres.

Tape Storage: Do not expose the Tape to any extremes of temperature or daylight.

Tape Shelf Life: We would recommend that the Tape is used within a 12-month period from date of purchase.

#### **Compliance**

ISO 8502-3.



Supplied in an industrial foam-filled Carrying Case with Dust Test Tape (60m roll), Dust Test Comparator and X10 Illuminated Magnifier.



ITEM NO.	PART
80865200	DUST TAPE TEST. INCLUDES DUST TEST TAPE & DUST TEST COMPARATOR
80865231	SPARE DUST TEST TAPE 25MM (1"). 60M ROLL
80865235	SPARE DUST TEST COMPARATOR
80865236	DUST TEST TAPE CONFORMANCE CERTIFICATE
80865237	DUST TEST COMPARATOR CONFORMANCE CERTIFICATE





# **RUST GRADE BOOK**



### **RUST GRADE BOOK**

The Rust Grade Book specifies a series of Rust Grades and Preparation Grades of blast-cleaned steel surfaces.

The various Grades are defined by written descriptions together with photographs.

The Rust Grades and Preparation Grades shown are examples taken from the Rust Grade Book to show the quality of the pictures and to assist with the understanding of the book.



The Book identifies four levels (designated as Rust Grades) of mill scale and rust that are commonly found on surfaces of uncoated erected steel and steel held in stock. It also identifies certain degrees of visual Cleanliness (designated as Preparation Grades) after surface preparation of uncoated steel surfaces and of steel surfaces after overall removal of any previous coating.

Four Rust Grades, designated A, B, C, and D respectively are specified.

There are also fourteen Preparation Grades by blast-cleaning, indicating the degree of cleaning, together with detailed descriptions of the surface appearance to the following Sa Grades.

Grade Sa 1. Light blast-cleaning.

Grade Sa 2. Thorough blast-cleaning.

Grade Sa 21/2. Very thorough blast-cleaning.

Grade Sa 3. Blast-cleaning to visually clean steel.

#### **Specification**

Compiled by: ISO.

Edition: Second. 2007-05-01.

Translation: English, French, German & Swedish.

#### **Compliance**

ISO 8501-1

ITEM NO.	PART
80862600	RUST GRADE BOOK (ISO 8501-1)
80862601	RUST GRADE BOOK CONFORMANCE CERTIFICATE





# **DEWPOINT METER**



#### **DEWPOINT METER**

The Dewpoint Meter enables testing for the estimation of the probability of condensation on a surface to be painted and establishing whether conditions are suitable for painting or not.



The steel surface temperature generally should be at least 3°C above the dew point when paints are applied. Below this temperature the Dewpoint Meter will sound an alarm and the display colour will change to warn you that the surface conditions are not suitable to paint.

Measurements of relative humidity, dew point, air temperature, SurfaceTESTET temperature and surface temperature proximity to dew point (delta T) are shown.

Built in infrared thermometer for surface temperature measurements.

Interchangeable Humidity Sensor allows the user to replace damaged or out-of-calibration-date Sensor.

#### **Specification**

Accuracy Humidity Sensor: 10-90% ±2% rh

 $0-10/90-100\% \pm 3\%$  rh

Resolution Humidity Sensor: 0.1% rh

Resolution Temp: 0.1 °C (0.2 °F)

Accuracy infrared Thermometer: ±2%

Range infrared Thermometer: -20 °C to 80 °C

(-4 °F to 176 °F)

#### **Compliance**

ISO 8502-4



Supplied in an industrial foam-filled Carrying Case with a Humidity Sensor.

The Calibration Certificates with traceability to UKAS are an optional extra.

IR Based – With 12:1 (D:S) Ratio Range -4 °F to 176 °F (-20 °C to 80 °C) Accuracy  $\pm 3.6$  °F ( $\pm 2$  °C)



ITEM NO.	PART
80861200	DEWPOINT METER 1-100%RH/-10 TO 70°C (14-160°F). INCL. HUMIDITY SENSOR
80861212	SPARE HUMIDITY SENSOR 0-100%RH/-10 TO 70°C (14 TO 160°F)
80861213	HUMIDITY SENSOR CALIBRATION CERTIFICATE
80861211	PC DOWNLOAD CABLE