TQC

Vision on quality
www.tqc-usa.com

Developers and manufacturers of paint test equipment

COMPANY INFORMATION

TQC are developers and producers of laboratory- and field test equipment for the paint and coatings industry. Founded in 1977 TQC has established a strong position in the coatings industry based upon know-how and an extensive customer service.

TQC's scope contains instruments and equipment to test or measure properties like adhesion, layer thickness, condensation and climate, corrosion, coating elasticity, impact resistance, hardness, washability and scrub resistance, cure profile, drying time, surface pre-treatment, gloss and appearance, viscosity, etc..

TQC products are using the latest state of the art technologies and components. Besides top quality much attention is given to operator safety issues and ergonomics.

At TQC they understand their customers processes and closely follow market developments. To guarantee the products meet the market demands the members of the TQC design team are always in close contact with a panel of relevant users within the industry. TQC listen to the customers!

With offices in USA, The Netherlands, Germany, Italy and Norway and a strong dedicated network of distributors in all major area's of the world TQC is able to respond quickly on inquiries and provide local support.

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DIGITAL MEDIA

TQC not only innovated their products but also their way to communicate. Digital media are these days just as important as paper media. The newsletters and website were already well-known. TQC however have expanded the communication activities with LinkedIn, Facebook, Twitter and YouTube. Not only providing the most up-to-date information but providing also new ways to ask questions to TQC and, for TQC, new ways to interact with you as a customer.

WHAT DO ALL THESE MEDIA BRING?

LinkedIn: This professional network site allows an exchange of know-ledge in your field of experience. The site houses multiple communities on various topics. TQC started the group Coating Inspection Methods, where all intrigues of the performed tests are discussed. Looking for information on performing a test, no matter if it is lab or field? Then join the group.

Facebook: This well-known social network provides a good way to connect to colleagues and relatives. Join in and become a friend of TQC.

Twitter: This micro blog provides you twice a week with short and interesting articles and news about TQC and what is happening in the industry. Giving you a head start when it comes to being informed on the coating industry.

YouTube: The best known video media in the world just got better when you are into the coating industry. Product video's about TQC products show how to use the products and help you make a choice.

When you want to join one of our digital media visit www.tqc.eu and click on the link correlating to the media you want to follow.

QR-Code: The QR codes in this brochure refer to the dedicated product movies on TQC's YouTube channel. If you don't have a QR-reader, just visit http://www.youtube.com/user/TQCBV.
All product movies are gathered here.

VISCOSITY CUPS

The process of flow through an orifice can often be used as a relative measurement and classification of viscosity. Viscosity Flow Cups are used for measuring the consistency of paints, varnishes and other similar products. Each TQC viscosity cup is made under continuing quality control procedures and provided with an engraved unique serial number. Since not all orifices are specified in the standards, additional orifices have been designed to comfort unspecified applications. All orifices are fixed and made of stainless steel.

LAB-TYPE VISCOSITY CUPS

Lab-type Viscosity Cups Standard ISO 2431

Orifice	Aluminum	Stainless St.
3	VF2048	-
4	VF2049	-
5	VF2183	-
6	VF2050	VF2057
8	VF2051	VF2058

Lab-type Viscosity Cups Standard ASTM D1200 'FORD'

Orifice	Aluminum	Stainless St.
1	VF2029	VF2041
2	VF2030	VF2042
3	VF2031	VF2043
4	VF2032	-
5	VF2033	-

Lab-type Viscosity Cups Standard DIN 53211*

Orifice	Aluminum	Stainless St.
2	VF2000	-
3	VF2001	VF2014
4	VF1999	VF2015
5	VF2002	VF2016
6	VF2003	-
8	VF2004	-

* Cups with orifice #4 according to DIN53211. Other cups similar to DIN53211

Lab-type viscosity cup with interchangeable nozzles: Special aluminum cup, fitted with a stainless steel nozzle retainer. Stainless steel nozzles, available from orifice 1mm to orifice 8 mm, to be ordered separately. Inner dimensions similar to DIN 53211.

VF2020 Aluminum Viscosity Cup with retainer for interchangeable nozzle

Interchangeable nozzles

Orifice (mm)	1	2	3	4	5	6	7	8
nozzle	VF2181	VF2022	VF2023	VF2024	VF2025	VF2026	VF2027	VF2028

DIP-TYPE VISCOSITY CUPS

Dip-type Viscosity Cups Standard DIN 53211

Orifice	Aluminum	Stainless St.
2	VF2071	VF2213
3	VF2072	-
4	VF2073	VF2215
5	VF2074	VF2216
6	VF2075	VF2217
8	VF2077	VF2219

Dip-type Viscosity Cups Standard ASTM D1200 'FORD'

Orifice	Aluminum	Stainless St.
1	VF2084	VF2232
2	VF2085	VF2233
3	-	VF2234
4	VF2087	-
5	VF2088	VF2236

Dip-type Viscosity Cups Standard DIN EN ISO 2431

Orifice	Aluminum	Stainless St.
2	VF2089	VF2220
3	VF2090	-
4	VF2091	VF2222
5	VF2185	-
6	VF2092	VF2224
8	VF2093	-

Dip-type Viscosity Cups Standard ASTM D1084 / D4212 'ZAHN'

Orifice	Aluminum	Stainless St.
1	-	VF2226
2	-	VF2227
3	-	VF2228
4	-	VF2229
5	-	VF2230

VISCOSITY RING STAND FOR VISCOMETER CUPS

Simple and affordable ring stand made of galvanized steel, suitable for all DIN, ISO and ASTM viscosity beakers.

VF2062 Ring stand for viscosity cup

DESIGN STAND FOR VISCOSITY CUP

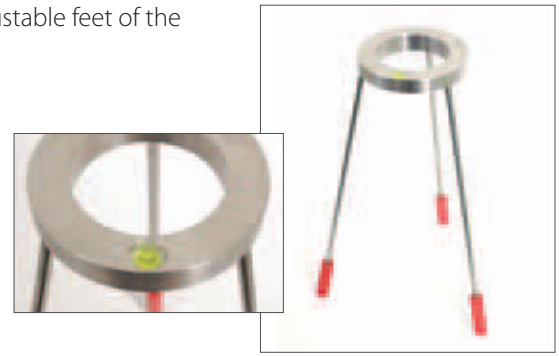
Deluxe stand, adjustable in height. Equipped with a hinged cover plate and spring loaded stopper which enables quick measurements. Built-in spirit-level and adjustable feet. Suitable for all DIN, ISO and ASTM viscosity beakers. Optional temperature control jackets are available.

VF1980 Design stand for viscosity cup

TRIPOD STAND WITH SPIRIT LEVEL

A tripod stand with built-in spirit . The spirit stand is easy to level thanks to the adjustable feet of the unit. The ring and legs are stainless steel and the feet PVC.
Suitable for all DIN, ISO and ASTM viscosity cups.

VF2061 Tripod stand with spirit level



TEMPERATURE CONTROL JACKETS

A double jacketed casing of anodized aliminium to bring the viscosity beaker to the required temperature with temperature controlled liquids. complete with two 90º angled rotating quick couplings for easy connection of liquid-tubes. Each support leg is equipped with a non-slip plastic foot that is adjustable in height to level the jacket. A water-level is integrated to check the level of the appartus.

TEMPERATURE CONTROL JACKETS

Dip-type Viscosity Cups Standard ASTM D1200 'FORD'

	With tripod	For design stand
For DIN + ASTM labtype cups	VF2067	VF1982
For ISO + AFNOR labtype cups	VF2068	VF1981

DIGITAL STOPWATCH

VISCOSITY / DENSITY

Simple yet accurate digital stopwatch, resolution to 1/100th of a second. Split times, built-in-alarm. Clear display with large digits. Ultra flat and robust water- and shockproof design, complete with carrying cord. Indispensable for viscosity measurements.

Resolution: 1/100 sec., batery: 3V CR2032 lithium, Dimensions: 80 x 60 x 17 mm, 142 gr

DI10076 Digital stopwatch

DIGITAL THERMOMETER

VISCOSITY / DENSITY

The TQC Precision Thermometer is a handy pocketsize thermometer with foldable stainless steel probe. Suitable for measurements in liquids and semisolids. Large clear display, ergonomic design and easy to clean. The instrument is equipped with an ON/OFF, MAX/MIN switch and can easily be set to fahrenheit if necessary.

Temperature Range: -49.9 to +149.9°C / -58°F to +300°F, resolution: 0.1°C / 32.2°F (°C / °F alterable), accuracy: ±0.5°C between -49.9 to 99.9°C, ±1°C above 100°C, battery: MN2400 (AAA), battery Lifetime: 8000 hours, display: 15mm LCD, dimensions: 19 x 52 x 155mm, weight: 76 gram.

TE0027 TQC Precision Thermometer

VISCOSITY CONVERSION DISC

VISCOSITY / DENSITY

Indicative conversion table relating viscosity (in Cst) to flow time of different cups. Printed on the front is the No.4 complying with BS-NF-ASTM-DIN and ZAHN 2, on the back ISO no.'s 3-4-5-6 and ZAHN 3 as well as the Gardner viscosimeter.

VF2053 Viscosity conversion disc

AUTOMATIC KREBS VISCOMETER

VISCOSITY / DENSITY

The TQC Automatic Krebs Viscometer is widly used for determination of the viscosity according to Krebs KU, as used in the paint, coating and ink industry. The TQC Automatic Krebs Viscometer is equipped with a clear display and easy user interface that ensure highly reproducible results in fully automatic measuring cycles.

The TQC Automatic Krebs Viscosity can be used automatic and manually. In both modes waiting and measuring time can be preset by the user between 0 and 99 seconds. Results can be printed by means of a thermal printer and serial communication RS232.
The meter is both highly accurate and simple to use, making it suitable for research as well as production environment.

DV1300 TQC Automatic Krebs Viscometer

ROTATIONAL VISCOMETER DV1400

TQC Rotational Viscometer according to Brookfield Method, allows quick determination of viscosity in laboratory, research centres, and during production. The intuitive, easy functionality. light weight, and the fact they are battery operated provide great versatility. TQC Rotational Viscometer can even be used as a portable instrument.

Its main feature, compatibility to the Brookfield method, allows comparative measurements with results obtained in quality control laboratories using standard rotational viscometers. (when used with the same spindle type and the same rotational speed)

Two different models are available, one with a fixed speed of 60rpm, the other one with a fixed speed of 20rpm.

DV1401 TQC Portable Rotational Viscometer DV1400 - 60rpm
DV1402 TQC Portable Rotational Viscometer DV1400 - 20rpm

AUTOMATIC FILM APPLICATOR

The TQC Automatic film applicator provides a reliable basis to apply coating films to test charts, panels or foils in a uniform and reproducible way in order to eliminate variations caused by human factors. Variations in speed, pressure and direction of draw down cause irregularities. Other factors that may influence the result are the shear rate and the weight of the applicator. With the TQC Automatic film applicator these variable factors are being stabilized. Over the complete surface the film thickness is even. Samples created with the TQC Automatic film applicator are reproducible. It's possible to produce a large number of identical laboratory precision draw downs in a short period of time.

The quality of the applied film is important for research on rheological properties of the applied media. To prepare samples for testing rheological properties, abrasion resistance, hiding power and gloss the TQC Automatic film applicator is a must have.

SPECIFICATIONS

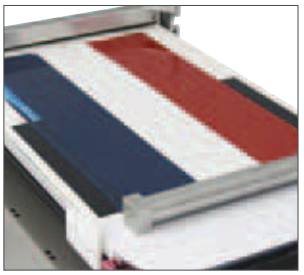
Traverse speed	2 - 500 mm/s	(0.08 - 19.7 inch/s)
Traverse speed accuracy	+/- 1% of set speed	
Stroke length	50 – 359 mm	(2 - 14.1 inch)
Stroke length accuracy	+/- 2mm	(0.08 inch/s)
Maximum test chart size	A3	
Max. width alternative film applicators	max. 300 mm	(11.81 inch)
Max. height alternative film applicators	max. 55 mm	(2.15 inch)
Power supply	230/115 V selectable, 50/60Hz	
Power consumption	max. 80 Watt	

SCOPE OF SUPPLY

Motorised automatic film applicator (one of the six models), Rubber placemat (only with glass plate), Certificate of Conformance, English manual, Powercord

VERSATILITY

All types and styles of applicators can be used such as wire wound rods or spiral bar coaters, doctor blades, Bird- or Baker type applicators, Quadruplex, or film casting knife applicators.



TQC AUTOMATIC FILM APPLICATOR

AB3120 230V
AB3125 110V
Motorised automatic film applicator with glass bed and combined attachment assembly for standard block applicators and wire bar coaters.

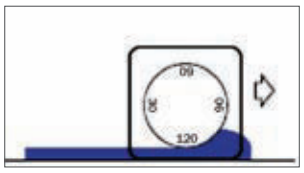
AB3220 230V
AB3225 110V
Motorised automatic film applicator with perforated vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and wire bar coaters.

AB3320 230V
AB3325 110V
Motorised automatic film applicator with double channelled vacuum bed, built-in vacuum pump and combined attachment assembly for standard block applicators and wire bar coaters.

BAKER FILM APPLICATOR

FILM APPLICATION

Cylindrical film applicator with 4 application sides for applying paint-films of 4 different pre-defined thicknesses. The Baker applicator is available in film width 2.4 inch and 3.15 inch and suitable to apply a host of different products onto flat and relatively solid substrates. The high-grade stainless steel will not be affected by acid or alkalic elements.



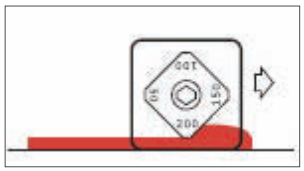
VF2145 TQC Baker film applicator, width 2.4 inch, 15/30/60/90µm
VF2146 TQC Baker film applicator, width 2.4 inch, 30/60/90/120µm
VF2147 TQC Baker film applicator, width 2.4 inch, 50/100/150/200µm
VF1500 TQC Baker film applicator, width 3.15 inch, 15/30/60/90µm
VF1501 TQC Baker film applicator, width 3.15 inch, 30/60/90/120µm
VF1502 TQC Baker film applicator, width 3.15 inch, 50/100/150/200µm
VF1510 TQC Baker film applicator, width 2.4 inch, 4 gaps as desired
VF1515 TQC Baker film applicator, width 3.15 inch, 4 gaps as desired

BIRD FILM APPLICATOR

FILM APPLICATION

TQC Prismatic Bird film applicator with flat edges. Four application sides for applying 4 different pre-defined thicknesses. The TQC Bird applicator is available in film width 2.0, 3.0 and 4.0 inch and suitable for applying a host of different products onto flat and relatively solid substrates. The high-grade stainless steel will not be affected by acid or base elements.

We can give no guarantee of the wet thickness that will be obtained. The wet thickness is dependent upon the solids and vehicle content of the wet material as well as other factors. Film thickness deposited may vary from 40% to 80% of the actual gate clearance of the TQC Bird applicator.

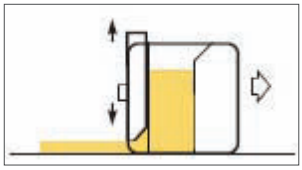


VF2161 TQC Bird film applicator, width 2.0 inch, 50/100/150/200µm
VF2162 TQC Bird film applicator, width 3.0 inch, 50/100/150/200µm
VF2163 TQC Bird film applicator, width 4.0 inch, 50/100/150/200µm
VF1837 TQC Bird film applicator, width 2.0 inch, 4 gaps as desired
VF1530 TQC Bird film applicator, width 3.0 inch, 4 gaps as desired
VF1535 TQC Bird film applicator, width 4.0 inch, 4 gaps as desired

QUADRUPLEX APPLICATOR

FILM APPLICATION

The TQC Film Applicator (Quadruplex) has four application sides for applying paint films with four different predefined thicknesses, in film width 2.4 or 3.15 inch. One side of the applicator is supplied with a guidance support for straight application. This support may be removed as well. The high grade stainless steel will not be affected by acid or base elements.



VF2167 TQC Film Applicator (Quadruplex) width 2.4 inch, four gaps, size on request.
VF2168 TQC Film Applicator (Quadruplex) width 2.4 inch, gaps 15, 30, 60 and 90 µm.
VF2169 TQC Film Applicator (Quadruplex) width 2.4 inch, gaps 30, 60, 90 and 120 µm.
VF2170 TQC Film Applicator (Quadruplex) width 2.4 inch, gaps 50, 100, 150 and 200 µm.
VF2172 TQC Film Applicator (Quadruplex) width 3.15 inch, four gaps, size on request.
VF2173 TQC Film Applicator (Quadruplex) width 3.15 inch, gaps 15, 30, 60 and 90 µm.
VF2174 TQC Film Applicator (Quadruplex) width 3.15 inch, gaps 30, 60, 90 and 120 µm.
VF2175 TQC Film Applicator (Quadruplex) width 3.15 inch, gaps 50, 100, 150 and 200 µm.

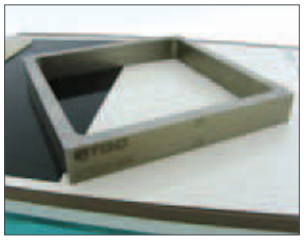
OCTOPLEX APPLICATOR

FILM APPLICATION

Multifunctional film applicator with 8 pre-defined thickness sides for applying paint-films of: 25, 50, 75, 100, 125, 150, 175, 200 micron.

Film width 60 mm. The high-grade stainless steel will not be affected by acid or base elements.

VF1550 Octoplex film applicator 25, 50, 75, 100, 125, 150, 175 and 200µm



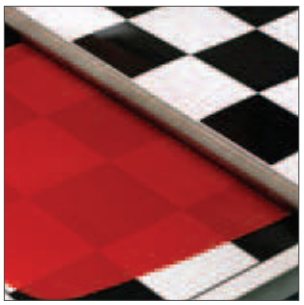
SPIRAL TYPE APPLICATOR / BARCOATER

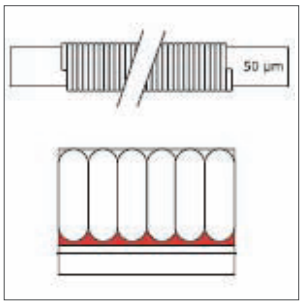
FILM APPLICATION

TQC Spiral bar applicator with a film width of 12.2 inch and available in ranges from 4 to 200 µm The Spiral bar or wire wound / drawdown rod applicator is ideal for applying a film on thin materials such as sheets or plastic. Also works on flexible substrates, and with motorized film applicators*. The high-grade stainless steel will not be affected by acid or base elements.

Totale length: 17.3 inch, Length application area: 12.6 inch.

* TQC Spiral bar coaters with starting art. code AB.... fit TQC Automatic Film Applicator Models sold from 2012 and on. If you have an older model TQC Automatic Film Applicator, another type of spiral film applicator has to be used.





AB3070 Spiral bar-coater 12.6 inch, plain polished
AB3050 Spiral bar-coater 12.6 inch, 4 µm
AB3051 Spiral bar-coater 12.6 inch, 6 µm
AB3052 Spiral bar-coater 12.6 inch, 8 µm
AB3053 Spiral bar-coater 12.6 inch, 10 µm
AB3054 Spiral bar-coater 12.6 inch, 12 µm
AB3055 Spiral bar-coater 12.6 inch, 14 µm
AB3056 Spiral bar-coater 12.6 inch, 15 µm
AB3057 Spiral bar-coater 12.6 inch, 20 µm
AB3058 Spiral bar-coater 12.6 inch, 24 µm
AB3059 Spiral bar-coater 12.6 inch, 30 µm
AB3060 Spiral bar-coater 12.6 inch, 34 µm
AB3061 Spiral bar-coater 12.6 inch, 38 µm
AB3062 Spiral bar-coater 12.6 inch, 40 µm
AB3063 Spiral bar-coater 12.6 inch, 50 µm
AB3064 Spiral bar-coater 12.6 inch, 56 µm
AB3065 Spiral bar-coater 12.6 inch, 60 µm
AB3066 Spiral bar-coater 12.6 inch, 76 µm
AB3067 Spiral bar-coater 12.6 inch, 100 µm
AB3068 Spiral bar-coater 12.6 inch, 120 µm
AB3069 Spiral bar-coater 12.6 inch, 200 µm

LEVELLING AND SAG APPLICATOR

FILM APPLICATION

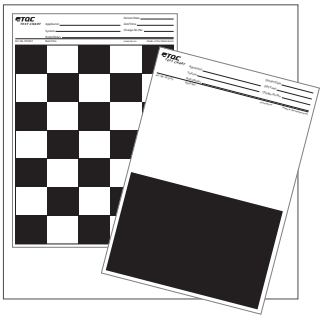
The TQC Sag and Levelling Film Applicator is a special film applicator with dual function. One side with 10 gaps from 75 to 300 micron to test the tendency to sag in relation to the film thickness. At the counter side 5 pairs of notches of increasing depth are made to create sets of two film stripes. The merging of the stripes can be evaluated to define the leveling ability. The high-grade stainless steel will not be affected by acid or base elements.

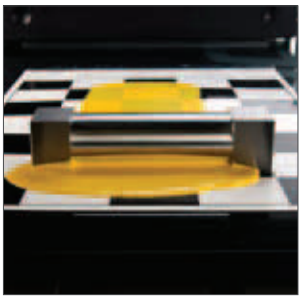
Complies with ASTM D4400 and ASTM D2801.

VF2246 TQC Sag and Levelling Film Applicator
Sagging: 300, 275, 250, 225, 200, 175, 150, 125, 100, 75 µm.
Levelling: 0.01, 0.02, 0.04, 0.08 and 0.16 inch.

TEST CHARTS

FILM APPLICATION





A wide range of consistent test charts for testing physical properties of coating, lacquers and inks. Suitable for determining hiding power, opacity and spreading rate. They come in a variety of dimensions from DIN A6 up to and including DIN A4. All charts are film laminated for an excellent solvent and chemical resistance and an even film spread. On each chart there is a section for filling out the date, time and test number.

Special designs are possible with quantities over 10.000 pieces per chart.

VF2345 Test charts 8.2 x 11.7 inch White / Black B+ with optical brightner, sealed
Supplied in sturdy box of 250 pieces.
VF2321 Test charts 8.2 x 11.7 inch White / Black B- without optical brightner, sealed
Supplied in sturdy box of 250 pieces.

VF2347 Test charts 8.2 x 11.7 inch Black / White chequered B+ with optical brightner, sealed, Supplied in sturdy box of 250 pieces.
VF2325 Test charts 8.2 x 11.7 inch Black / White chequered B- without optical brightner, sealed, Supplied in sturdy box of 250 pieces.

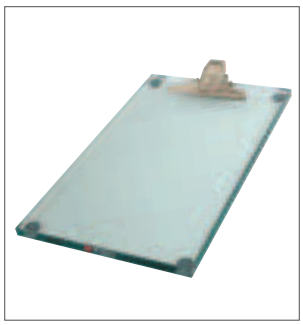
VF2344 Test charts 5.8 x 8.2 inch White / Black B+ with optical brightner, sealed
Supplied in sturdy box of 250 pieces.
VF2319 Test charts 5.8 x 8.2 inch White / Black B- without optical brightner, sealed
Supplied in sturdy box of 250 pieces.

VF2346 Test charts 5.8 x 8.2 inch Black / White chequered B+ with optical brightner, sealed, Supplied in sturdy box of 250 pieces.
VF2323 Test charts 5.8 x 8.2 inch Black / White chequered B- without optical brightner, sealed, Supplied in sturdy box of 250 pieces.

VF2343 Test charts 4.1 x 5.8 inch White / Black B+ with optical brightner, sealed
Supplied in sturdy box of 250 pieces
VF2317 Test charts 4.1 x 5.8 inch White / Black B1 without optical brightner, sealed
Supplied in sturdy box of 250 pieces

TEST CHART APPLICATION TABLE

FILM APPLICATION



A series of ultra-flat TQC Glass Film Application Tables, designed to draw down sample coatings on test charts with a high degree of reproducibility.

The glass application tables are equipped with a strong clamp to hold down the charts and four rubber feet at the bottom to prevent the glass application table from slipping.

Supplied with rubber top cover for use with specific applicators.
To be used with Bird Applicator, Baker Applicator, Quadruplex Applicator, Bar Applicator, and any other type film applicator.

VF1601 TQC Glass Film Application Table, 15 x 10 inch, Weight: 3.8Kg / 8.4 Lbs

PYKNOMETER ISO 2811 DIN 53 217 ASTM D 1475

DENSITY

Pyknometers for determining the specific gravity or density (or weight per gallon wpg)of coatings , pastes or similar liquids.

Density is defined as weight per unit volume at a specified temperature.
Available in anodised aluminium and stainless steel, 100 ml. and 50 ml.

All models are supplied with a calibration certificate.

VF2097 Pyknometer ISO 2811, DIN 53 217, ASTM D 1475, model 100 ml aluminum
VF2098 Pyknometer ISO 2811, DIN 53 217, ASTM D 1475, model 50 ml aluminum
VF2099 Pyknometer ISO 2811, DIN 53 217, ASTM D 1475, model: 100ml stainless steel
VF2100 Pyknometer ISO 2811, DIN 53 217, ASTM D 1475, model: 50ml stainless steel

GRINDOMETERS FINENESS / GRIND GAUGES

FINENESS OF GRIND

The TQC Grindometers or Fineness of Grind Gauges are precision instruments to determine particle size and fineness of many materials like paints, lacquers, pigments, filler, chocolate etc.. Most TQC Grindometers have double grooves with graded slopes graduated in three different parameters: µm (microns), NS (Hegman) and PCU (North). Gauge and beveled scraper are made of hardened stainless steel and have an accuracy of 2 µm.

VF2110 TQC Grindometer FM15/2 DIN-ISO, Range: 0-15 µm (micron), 10-8.5 PCU (North), 8-6.8 NS (Hegman), Graduation: 1.5 µm (micron), Double groove
VF2111 TQC Grindometer FM25/2 DIN-ISO, Range: 0-25 µm (micron), 10-7.5 PCU (North), 8-6 NS (Hegman), Graduation: 2.5 µm (micron), Double groove
VF2112 TQC Grindometer FM50/2 DIN-ISO, Range: 0-50 µm (micron), 10-5 PCU (North), 8-4 NS (Hegman), Graduation: 5 µm (micron), Double groove
VF2113 TQC Grindometer FM100/2 DIN-ISO , Range: 0-100 µm (micron), 10-0 PCU (North), 8-0 NS (Hegman), Graduation: 10 µm (micron), Double groove

BK DRYING TIME RECORDER

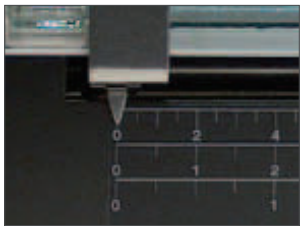
The BK 3 speed Drying Recorder (Beck Koller method) is used widely in the coatings industry throughout the world for several decades. A needle carrier holding six hemispherical ended needles travels the length of the six 305 x 25 mm test strips in 6, 12 or 24 hours. Other speeds are available to special order. A time scale on the side cover is graduated to suit the three different travel times.

The BK 6 and BK 10 Recorders have independently operating tracks allowing tests to be made at different start times. Pairs of tracks operate at the same speed, and a wide range of travel times are available. Travel times of 6, 12, 24 and 48 hours are all considered as standard. A time scale on the front cover is graduated to suit the instrument's drying time ranges. Each pair of tracks has its own individual operating switch.

The Recorders define stages in the drying process as:

Stage 1 A pear shaped impression corresponding to the time taken for evaporation of solvent.
Stage 2 The cutting of a continuous track, corresponding to a sol-gel transition.
Stage 3 An interrupted track corresponding to the surface-dry time.
Stage 4 The needle no longer penetrates the film, corresponding to the final drying time.

VF8000 BK-3 Drying Recorder, Specify supply voltage: 110V / 230V
VF8005 BK-6 Drying Recorder, Specify supply voltage: 110V / 230V
VF8010 BK-10 Drying Recorder, Specify supply voltage: 110V / 230V



TQC MFFT TEST / MINIMUM FILM FORMING

Temperature gradient plate for determining minimum film forming temperature test.
The minimum film forming temperature is the lowest temperature at which an emulsion, latex or adhesive will uniformly coalesce when applied on a substrate as a thin film.
Knowing the MFFT temperature allows formulators to create a product that cures correctly under the required application conditions. The instrument can also be used to define the white point/glass transition temperature of dispersion materials, synthetic resins, enamels etc. and the blocking power and stacking capability of coated papers, foils, prints...

TQC MFFT TTEST is a sophisticated test instrument with a ground hard-chrome plated metal platen as to deposit the specimen. By heating and cooling the platen any variable temperature gradient within the range of -30 to +250 °C can be produced and kept constant for any given period. The platen is equipped with 10 or 20 evenly spread temperature sensors. The temperature is controlled through an integrated digital controller with a digital display and measuring-point selector that covers the whole range.To define the MFFT the specimen is applied on the platen with a film-applicator and protected from ambient conditions through a transparent cover in which a flow of dried air is created to prevent condensation and to assure repeatability. To determine the blocking power the specimens on the platen are weighed by defined loads to simulate the stacking capability.The TQC MFFT TEST meets the following standards: acc. to current standards: DIN ISO 2115 – DIN 53366 – ASTM D 2354 – ASTM D 1465 – ISO 2115 – ISO/DIS 4622

VF9600 TQC MFFT 10 -10...+80°C, 10 built-in temperature sensors, Temperature gradient: max. 20 K (depends on the external cryostat), Hinged transparent cover made of PMMA, max. working temperature 80°C, 220V*

VF9700 TQC MFFT 20 -30...+250°C, 20 built-in temperature sensors, temperature gradient: max. 100 K (depends on the external cryostat), Hinged transparent cover made of PMMA, for temperatures up to +80°C, Hinged transparent cover made of stainless steel and safety glass for temperatures up to +250°C. 220V*

* 110V available on request.

CURVEX-2 OVEN LOGGER - STANDARD

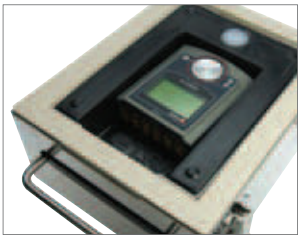
DRYING / CURING

Profiling an industrial powder coating oven starts right here with the CurveX-2 Oven Logger standard KIT. It contains all necessary items, just add the desired magnetic or clamp-type probes to make the oven logger KIT complete.

The heart of the KIT is the CurveX-2 USB Oven datalogger that offers easy-to-use, high quality temperature logging for industrial paint and powdercoat cure ovens. The oven data tracker is fitted with a large display for easy menu-driven operation and quick display of measurement results.

Ideal Finish Analysis software allows you to analyse the logged temperature data and create detailed reports. Advanced oven profiling features like cure data analysis, ideal cure and tolerance bands, together with a wide range of display, report and printing options, make CurveX-2 Oven Logger the most flexible temperature logging solution available.

Excellent suited for industrial oven and laboratory oven temperature profiling. Mandatory test in Qualicoat, QIB and GSB accredited laboratories.



CX1500 CurveX-2 USB oven logger standard kit comes complete with:
- **CX1002** CurveX-2 USB with TQC Ideal Finish software and datacable.
- **CX2005** Insulation box 300°C - 570°F
- **CX2011** Energy absorber
- **CX2071** Silicon gasket
- **CX2100** Probe identification kit
- **CX4003** Carrying Case

SPECIFICATIONS CURVEX-2 STANDARD LOGGER

Channels:	6 probes	Measuring range:	-50°C to +1.200°C / -58°F to +2.200°F
Accuracy:	±0.3°C / 0.6°F	Memory:	10 batches with 25300, or 1 batch with 253000 readings.
Battery:	3 x 1,5V, Type AA	Resolution:	0.1°C / 0.2°F
Interface:	USB		

CURVEX-3 OVEN LOGGER - BASIC

DRYING / CURING

In the first quarter of 2013 TQC will launch a new version Oven Logger: CurveX-3 Basic. The CurveX-3 Basic is an oven recorder designed for daily use in powdercoating lines.

This 4-channel temperature datalogger is built in a sturdy metal case that fulfils the basic needs for quality control in powder coating applications. Its ease of use and affordable price level makes it the ideal job-coaters instrument.

The user interface consist of 3 large buttons and 3 multi coloured LED indicators. Operation is intuitive, no manual required.

CX3010 CurveX-3 Basix Kit consists of:
- **CX3005** CurveX-3 Basic Datalogger with TQC Ideal Finish Analysis software and datacable
- **CX2005** Insulation box
- **CX3050** CurveX-3 Positioning Bracket

Several optional items are available (as are all insulation boxes and temperature probes)
CX2011 Energy absorber
CX4003 Carrying Case
CX2100 Probe ID kit

SPECIFICATIONS CURVEX-3 BASIC LOGGER

Channels:	4 probes	Measuring range:	0-500°C / 32-932°F
Accuracy:	± 1°C / 1.8°F	Interval:	1s - 3600s
Memory:	4000 readings per channel	Batteries:	Lilon rechargeable
Battery life:	1200 hour	Display:	no display LED indicators

A COMPLETE RANGE OF PROBES

All Curve-X probes have been especially designed to guarantee accurate readings:

- Perfect probe-surface contact
- Low mass and optimised shape to avoid influence on temperature behaviour
- Cable with easy to clean Teflon outer shield, highly flexible due to the twisted cable cores and extremely strong due to the breaded metal mesh armour.

Magnet surface probe: This probe is fitted with an ultra strong magnet but still has a very low mass and size. The actual sensor is thermally isolated from the magnet in order not to affect the part's temperature. This sensor is suited for use on round parts, such as tubes.

Clamp-type surface probe: Small and elegant surface probe for any type of material. Silver tipped sensor is thermally isolated from the clamp by ceramics.

Ring-type surface probe: Universal probe with aluminium ring at the tip for fast response

Air probes: Available with either clamp or magnet.

Probe-cable: Most of our standard probes are equipped with our special probe-cable. This cable is easy to clean due to the Teflon outer shield.

Wire-type probe: Universal probes that can be used for either air or surface temperature measurements. Measuring element is an open thermocouple that can be attached by adhesive tape or other mechanical means.

Infrared probes: The infrared probes are designed to profile the IR-radiance inside an oven. Because of their shape and design they will give reproducible results each run. Note the actual part temperature is not necessarily equal to the temperature of the IR-probes.

Low cost temp probes: A set of 6 pieces exposed junction wire probes with attachment pads. Each logger comes with a set of metal probe-tags to match the probes with the channels.

Prod. code	Cable length cm.	Cable Type	Application	Probe Type	Max. T.
CX2020/21/22	150/300/500	Teflon	Air	Clamp	300°C/570°F
CX2069/68	150/300	Teflon	Air	Magnetic	300°C/570°F
CX2030/40/41	150/300/500	Teflon	Surface	Clamp	300°C/570°F
CX2050/60/62	150/300/500	Teflon	Surface	Magnetic	300°C/570°F
CX2065/66/72	150/300/500	Teflon	Universal	Ring ø 6 mm.	300°C/570°F
CX2063/64/67	150/300/500	Teflon	Universal	Wire	300°C/570°F
CX2055/56	150/300	ss braided lead	Surface	Magnet	480°C/900°F
CX2048/49	150/300	ss braided lead	Surface	Clamp	480°C/900°F
CX2085/86	150/300	ss braided lead	Universal	Ring ø 6 mm	480°C/900°F
CX2023/24	150/300	ss braided lead	Air	Clamp	480°C/900°F
CX2090/91/92	150/300/500	Inconel tube	Universal	Ring ø 6 mm.	1000°C/1830°F
Infrared Probes					
CX2095	150	ss braided lead	" Surface"	Clamp	480°C/900°F
CX2096	150	ss braided lead	" Surface"	Magnet	480°C/900°F
CX2097	150	ss braided lead	" Air"	Clamp	480°C/900°F
Exposed junction Wire Probes					
CX3145	100	ptfe insulated	" Surface"	Wire	250°C/482°F

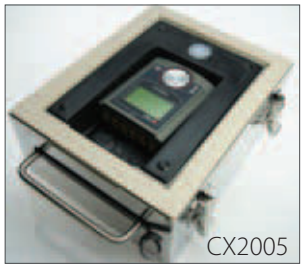
Special cable lengths or probe designs are available on request.

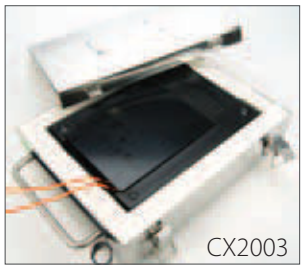
HEAT BARRIERS

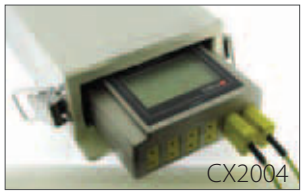
CurveX Data Trackers are used in both batch- and conveyor ovens. When positioned outside the batch oven during the heating process, the instrument's display provides a clear insight of the progress of the curing process inside the oven.

When conveyor ovens are utilized the CurveX data tracker has to travel with the parts on the conveyor through the oven. TQC provides a series of heat barrier systems to protect the oven data tracker from the high temperatures.

A number of standard insulation boxes are available. Custom made barrier systems are available upon request for most applications.


CX2005


CX2003


CX2004


CX2002

A number of standard boxes

CX2005 Standard Barrier System. Heat sink system for standard powder coating applications. Its high protection rate allows the operator to run the CurveX oven profiler numerous times through the oven without introducing cooling down periods.
Dimensions: 5.12 inch H x 10.04 inch + 1.18 inch (handle) L x 8.86 inch W.
Max. temperature 300°C / 575°F.

CX2003 Low Clearance Barrier System. Heat sink system for use with ovens with low clearance as for example often used for curing panels or flat items. Low total height of the barrier system of only 2.75 inch.
Dimensions: 2.76 inch H x 9.84 inch + 1.18 inch (handle) l x 7.87 inch W.
Max. temperature 300°C / 575°F.

CX2004 Ultra Low Barrier System. Heat sink system for use with ovens with ultra low clearance. Ideal for ovens with very low height or short duration or low temperature oven profile processes. Front loading box with two point stainless steel closure clips located on both sides. Total height of barrier system of 2.0 inch. only.
Dimensions: 1.97 inch H x 9.45 inch L x 4.13 inch W.
Max. temperature 300°C / 575°F.

CX2002 High Temperature Barrier System. This barrier system is designed for higher temperature processes or profiling process with a very long duration at lower temperatures. Typical applications are PTFE or Teflon coatings.
Dimensions: 7.09 inch H x 11.02 inch + 1.18 inch (handle) L x 9.06 inch W.
Max. temperature 500°C / 930°F.

IDEAL FINISH ANALYSIS SOFTWARE

The TQC Ideal Finish Analysis Software is the most advanced coating cure, coating climate and coating thickness monitoring software package available today. Detailed graphic representations and customizable reports help you to make the right decisions to optimise your production process.

With two user levels Ideal Finish Analysis offers user friendly reporting functions for standard production work as well as advanced calculations for in depth analysis of the climate parameters prior to coating, the curing process and oven performance during coating and the thickness after coating.

Detailed graphic representations and customizable reports help you to make the right decisions to optimise your production process. Ideal Finish Analysis is updated frequently to keep up with the latest developments in the coating and corrosion prevention industry and to comply with new operatings systems like Windows Vista and Windows 7.

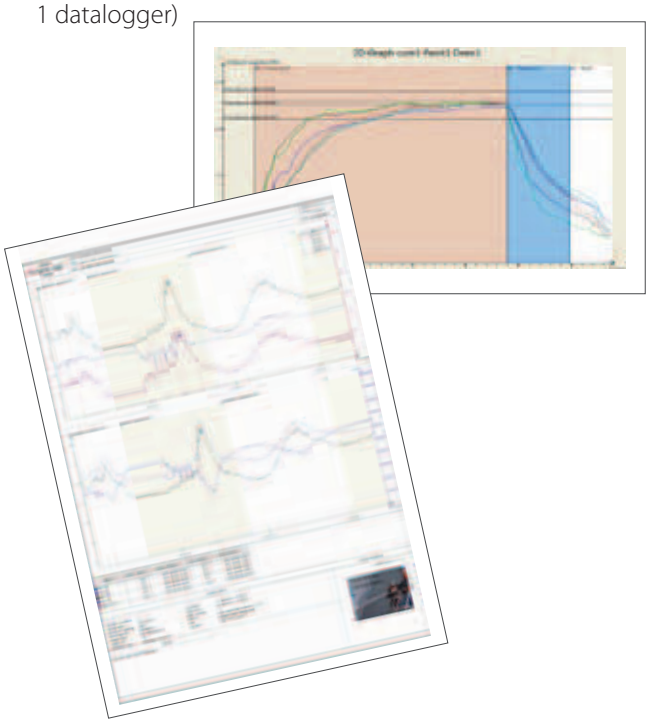
Supported Gauges:
Cure: TQC CurveX, TQC CurveX-2, TQC CurveX-2 USB, TQC CurveX-3 Basic, Elcometer 215/1 and 2, TQC CurveX-3 BASIC.
Climate: TQC DewCheck 4 and Elcometer 319/2
Thickness: Defelsko PosiTector 6000-2 and Defelsko PosiTector 6000-3

IDEAL FINISH ANALYSIS Ready

Supported Operating Systems:
- Windows XP
- Windows Vista
- Windows 7

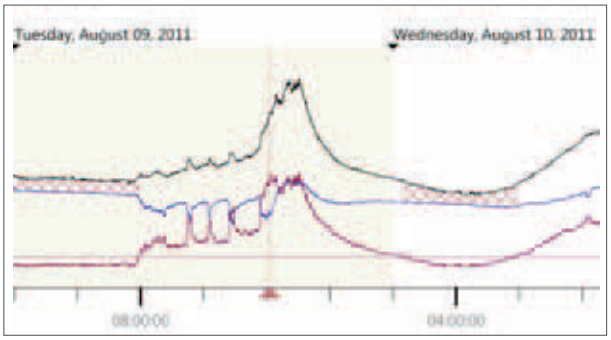
Product specifications:
CX2077 TQC Ideal Finish Analysis Software with printed manual in box.

Related Products:
CX5010 TQC Ideal Finish Analysis License Key (valid for 1 datalogger)

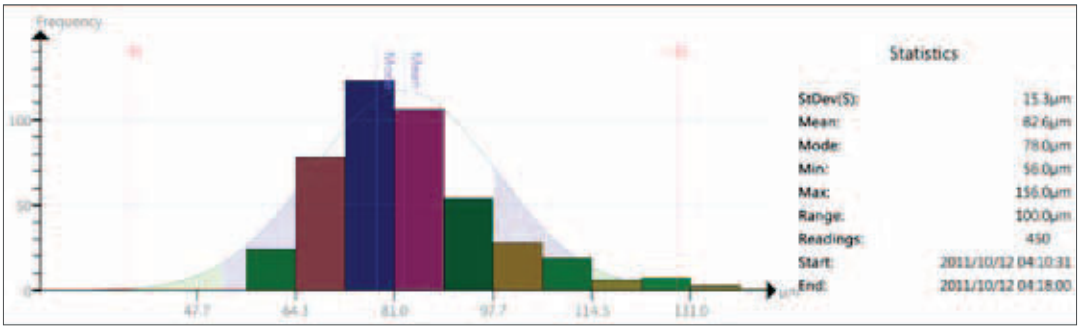


TQC Ideal Finish Analysis can be used to analyse logged interval data over time, manual logged data points at a certain moment in time or to analyse data in real time. Multiple graphs make the analysis of various applications easier than ever before. With the possibility to define the desired columns with results in your report, define limits to quickly locate and indicate critical moments and the visualization of events you will be able to create and hand over professional looking reports.

A fully customizable report header allows adding your company details and operator name.

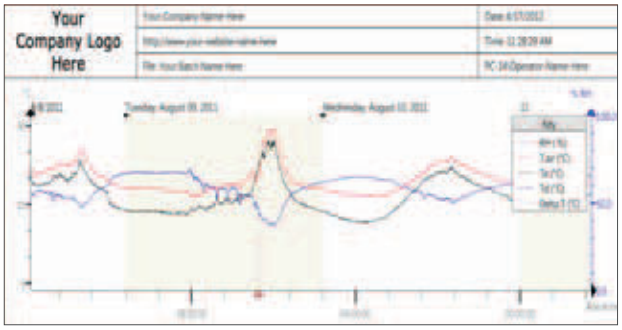


Coating Thickness Statistics Graph with standard deviation, mean, mode, minimum and maximum data.



Temperature Humidity Dew point Graph

Right: Analysis of ambient temperature, surface temperature and relative humidity measured over several hours during two days. Hatched areas marking the moments where temperature and humidity variations made the application of paint critical. At the centre the vertical line indicating an event has occurred.



Results table showing the user defined columns as desired. More than 30 calculations are available for the results table in your report.

Name	Max. Value	Time of Max.	Min. Value	Time of Min.
RH (%)	69.6	2011/08/09 07:50	37.1	2011/08/09 18:12
T.air (°C)	29.1	2011/08/09 17:25	16.3	2011/08/09 08:18
Te (°C)	27.5	2011/08/09 18:05	11.5	2011/08/10 05:05
Td (°C)	13.7	2011/08/08 18:23	7.5	2011/08/09 13:54
Delta T (°C)	14.5	2011/08/09 18:05	1.4	2011/08/09 07:13

BUCHHOLZ HARDNESS INDENTATION TEST

HARDNESS / ELASTICITY / ABRASION

The TQC Buchholz Hardness Indentation Test provides a method for carrying out an indentation test on coatings complying with the ISO 2815-2003 standard. The TQC Buchholz Hardness Indentation Test consists of a calibrated slip-on weight with a sharp-edged metal wheel, an illuminated microscope, a level gauge, a digital dual timer, and two markers with template.

The calibrated slip-on weight with sharp-edged metal wheel is positioned on the test specimen for a set period of time. The length of the indentation mark in the coating is an indication of the hardness of the surface. The Buchholz Hardness Indentation Test is a mandatory test in Qualicoat, QIB and GSB accredited laboratories.

SP1900 TQC Buchholz Indentation Test

PENCIL HARDNESS TESTER

HARDNESS / ELASTICITY / ABRASION

The TQC Pencil Hardness Test according Wolff Wilborn provides in a simple method to test the scratch hardness of coatings. In this test, pencils in a range of 6B to 8H hardness-grade are used. The pencil is moved scratching over the surface under a 45° angle with a constant pressure. Then an optical assessment is carried out to see which pencil hardness damages the surface. Delivered with a set of 20 Koh-i-noor pencils and a pencil sharpener.

VF2377 TQC Pencil Hardness Test according Wolff Wilborn dual weight (750g & 1000g), (1.65 lb and 2.2 lb)
VF2378 TQC Pencil Hardness Test according Wolff Wilborn (750g), (1.65 lb)
VF2379 TQC Pencil Hardness Test according Wolff Wilborn dual weight (500g), (1.1 lb)

PENDULUM HARDNESS TESTER

HARDNESS / ELASTICITY / ABRASION

The TQC Pendulum Hardness Tester has a lot of unique features that ease defining hardness by the König and/or Persoz method as described in ISO 1522. Both methods work on the principle that the damping time of a pendulum oscillating on a sample indicates the hardness.
The instrument has an easy menu-driven interface with jog dial. The automated electronic counting mechanism is not affected by reflections from the surrounding area. The water-level is located on the test specimen, rather than on the instrument's base. Once the instrument is leveled further calibration is not required. The gas-spring supported transparent draft cover allows easy access to all parts of the instrument.

TQC's Pendulum Hardness Tester is a modular system. The instrument itself can be used for both the König and- Persoz method. Both pendulums should be ordered separately. After placing the correct pendulum, switching between the two measuring methods only takes a push of a button. The Pendulum is positioned fully automatically by means of a stepper motor. Also the release of the Pendulum is automated through electro-magnetic system. The end of a test is indicated by a visual and acoustic signal. The TQC Pendulum Hardness Tester base device is available as a 110 Volt and a 220 Volt model.

SP0500 TQC Pendulum Hardness Tester 230V, Pendulum base device, without Pendulum
SP0501 TQC Pendulum Hardness Tester 110V, Pendulum base device, without Pendulum
SP0505 TQC König Pendulum for hardness test
SP0510 TQC Persoz Pendulum for hardness test

HARDNESS TEST SP0010

HARDNESS / ELASTICITY / ABRASION

The TQC Hardness Test SP0010 is a pocket instrument for testing the hardness and wear/scratch resistance of materials such as coatings, lacquers, plastics or related products. A tungsten carbide tip is drawn over the surface with a defined constant pressure. The pressure on the tip can be changed using the slide or by changing the spring. A visual mark on the surface after use of the TQC Hardness Test SP0010 indicates a fail of the surface hardness or wear/scratch resistance. Can be used on flat and curved surfaces.

The Instruments is supplied with 3 springs: 1. 0-3N, graduation 10 g, 2. 0-10N, graduation 50 g 3. 0-30N, graduation 150 g. The laser-engraved scale is clearly visible on the grey background. The diameter of the tip is Ø1 mm. Tips of Ø 0.75 mm (Bosch) and Ø 0.5 mm (van Laar) are available as an option.

SP0010 TQC Hardness Test SP0010, Range: 0-3N, 0-10N and 0-30N, Dimensions: Ø 14 to 19 mm, length 175 mm, Weight: 60 g, Material: Body in anodised aluminium, tips in tungsten carbide.

TABER SHEAR SCRATCH TESTER

HARDNESS / ELASTICITY / ABRASION

Motorised instrument for testing the resistance to scratching of materials. A sample plate rotates while a conical diamond point is pressed on the sample plate. The relation between the depth of the scratch and the applied (pre-set) pressure indicates the hardness.

TB2000 Taber 551 Shear/Scratch Tester–5 rpm

DUROMETER / SHORE HARDNESS GAUGE

HARDNESS / ELASTICITY / ABRASION

The TQC Shore Hardness Gauge is a reliable instrument for measuring the impression hardness of soft materials such as coatings, plastics and rubber. Equipped with a drag indicator, which holds the highest measured result. Delivery includes a simple test block.

Optional accessoires: Set of Testblocks, Operating stand 9 (See next page)
Complies with: DIN 53505, ISO 868 and ASTM D 2240

LD0550 TQC Shore Hardness Gauge type A for materials such as elastomers, vinyl, rubber, leather, pvc, silicone-rubber, teflon, neopreen, etc.. Range: 0 -100 shore, Accuracy: 1 shore, Dimensions: 102 x 57 x 44 mm (4.0 x 2.2 x 1.7 inch)

LD0551 TQC Shore Hardness Gauge type D for materials such as polyester, ABS, nylon, polyurethane, kevlar, acryl, wood, polystyrene etc.. Range: 0 -100 shore, Accuracy: 1 shore Dimensions: 102 x 57 x 44 mm (4.0 x 2.2 x 1.7 inch)

SHORE HARDNESS TESTBLOCK KIT

HARDNESS / ELASTICITY / ABRASION

The TQC Shore Hardness Testblock Kit with different values of hardness. As a reference check it will indicate if a durometer is operating within tolerances. The indivual test blocks are provided with serial numbers to guarentee incontestable identification. Comes with custom made carrying case.

LD0555 TQC Shore Hardness Testblock Kit, 7 test blocks for Durometer A. Range: 30, 40, 50, 60, 70, 80 and 90 shore hardness. Dimensions: 54 mm x 54 mm x 8 mm.
Calibration Certificate: included

LD0556 TQC Shore Hardness Testblock Kit, 3 test blocks for Durometer D. Range: 60, 75, 85 and 90 shore hardness. Dimensions: Ø 51 mm x 9,5 mm. Calibration Certificate: included

SHORE HARDNESS GAUGE TEST STAND

HARDNESS / ELASTICITY / ABRASION

The TQC Shore Hardness Gauge Test Stand is suitable for Shore A, C, and D* type Durometer. The test stand construction includes operating handle, adjustable glass stage, (height) adjustable Durometer fixture. With this test stand hardness tests of rubber or plastics with a Durometer can be performed more accurately and reproducibly.

When this Test stand is used with TQC Shore D meter an extra weight of 4000gr is necessary.
Order separately: TQC SHore Hardness Gauge (Durometer)

LD0559 TQC Shore Hardness Gauge Test Stand (for Durometer shore A + D).
Scope of supply: Test stand with weight. Dimensions: 160 x 114 X 290 mm. Weight: 5720 g

BARCOL HARDNESS TESTER

HARDNESS / ELASTICITY / ABRASION

Simple, portable instrument for testing the hardness of materials acc. to ASTM D2583.
When pressure is applied to the device, a point penetrates the material and the degree of hardness is displayed on a dial, which is graduated from 0 to 100.

VF6500 GYZJ-934-1 Barcol hardness tester. For metals, hard plastics etc. With conversion table into Brinell, Vickers & Rockwell B, E, F, H . Complies with: ASTM D2583

MANUAL CUPPING TEST

HARDNESS / ELASTICITY / ABRASION

Revolutionary apparatus for testing the resistivity of coatings at various stages of deformation in accordance with ISO 1520. The built in gear-box minimizes the manual force which is required to deform the test panel, allowing to perform a smooth deformation. The degree or deformation is digitally displayed at a resolution of 0.01 mm.

Mandatory test in Qualicoat, QIB and GSB accredited laboratories.

SP4400 TQC Manual Cupping Test

AUTOMATIC CUPPING TESTER

HARDNESS / ELASTICITY / ABRASION

TQC Automatic Cupping Tester to perform a cupping (Erichsen / Dent) test on coated steel panels to define the resistance of paint, varnish or related products to cracking and/or detachment from a metal substrate when subjected to gradual deformation by indentation under standard conditions.

The test is either used as a "pass / fail" test by testing to a specified depth or defining the minimum depth at which a coating fails by gradually increasing the indentation.

The ISO1520 standard requires panels to be slowly deformed at a steady rate between 0,1 mm/s and 0,3 mm/s without interruption. Especially with thicker steel panels hand-operated testers not always allow an uninterrupted deformation.

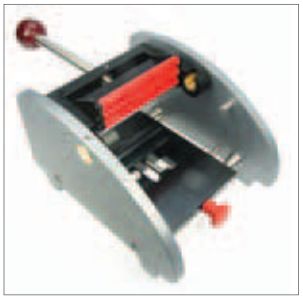
The TQC Automatic Cupping Tester is driven by a micro-step controlled electro motor which allows precise and steady deformation with 0,01 mm steps. Operation is intuitive by means of a jog-dial switch and a multi-lingual operating menu on a large illuminated display.
An integrated LED powered sample illumination system comforts examining the coating under test. To guarantee maximum visibility of all possible types of surface including high gloss, matte or colored samples the angle of the LED light can be set. Choose light from just one or all directions. The strength of the LED's is adjustable but also the colors can be changed to achieve maximum contrast. Mandatory test in Qualicoat and QIB accredited laboratories.

SP4300 TQC Automatic Cupping Test 230V
SP4305 TQC Automatic Cupping Test 110V

CYLINDRICAL BEND TEST

HARDNESS / ELASTICITY / ABRASION

The TQC Cylindrical Bend Test is used to determine the elasticity adhesion and elongation of paint on sheet metal in accordance with ISO 1519. A test panel (max. size 150 x 100 mm / 6 x 4 inch) is bent over a cylindrical mandrel. The smaller the diameter of the mandrel, the larger the tension on the coating. The test panel is then checked for cracks or damage in the coating.



The luxurious desktop holder with 14 mandrels can also be wall mounted.
Mandatory test in Qualicoat, QIB and GSB accredited laboratories.

SP1820 TQC Cylindrical Bend Test 100 mm / 4 inch, and desk holder with set of 14 mandrels with a diameter of 2, 3, 4, 5, 6, 8, 10, 12, 13, 16, 19, 20, 25 and 32 mm.

BEND TEST CONICAL MANDREL

HARDNESS / ELASTICITY / ABRASION

The TQC Bend Test Conical Mandrel is a laboratory apparatus to bend coated test panels over a conical shaped mandrel in order to assess the elasticity or resistance of a coating-, paint or varnish to cracking, elongation and/or detachment from a metal test panel in accordance with ISO 6860 and ASTM D522. The conical shap of the bending area allows the deformation of the test panel and examination of the elasticity range of a coating over any diameter between 3.1 and 38 mm / 0.12 to 1.5 inch in one single test.

SP1830 TQC Bend Test Conical Mandrel, Mandrel Diameter Range: 3.1 to 38 mm, Maximum Test panel Size: 100x180 mm / 4 x 7 inch, Maximum Test panel Thickness: 0.8 mm / 0.03 inch, Complies with: ISO 6860, ASTM D522

IMPACT TEST

HARDNESS / ELASTICITY / ABRASION

The TQC Impact Test is used to determine the impact resistivity and flexibility of coatings. The dual scale instrument is equipped with a special guidance which assures that the distance between each impact is always according to the standard. For correct positioning a spirit-level is built-in. Each Impact test comes as a complete set (instrument and accessoires) to perform a test according DIN/ ISO 6272, ASTM D2794 and ASTM G14

Mandatory test in Qualicoat, QIB and GSB accredited laboratories.

SP1880 TQC Impact Test according to ISO 6272-2 and ASTM D2794, Type: Indirect Impact Tester Content: Base plate assembly, guide tube, release collar, punch Ø12.7 mm / 0.5 inch , punch Ø15.9 mm / 0.625 inch, weight 1 kg, die Ø16.3 mm / 0.63 inch

SP1895 TQC Impact Test according to ASTM G14, Type: Direct Impact Tester Content: Base plate assembly, guide tube, release collar, punch Ø15.9 mm / 0.625 inch weight 1.361 kg and a V-notch vise with spring clamp to hold the pipe

SP1890 TQC Impact Test according to ISO 6272-1, Type: Direct Impact Tester, Content: Base plate assembly, guide tube, release collar, clamp device, ball Ø20 mm, die 27mm, weight 1 kg / 2.2 lbs

SP1891 TQC Impact Test according to ISO 6272-1 and ASTM D2794 (before 1993), Type: Direct Impact Tester, Content: Base plate assembly, guide tube, release collar, clamp device, ball Ø20 mm, die 27mm, weight 1 kg / 2.2 lbs, ball Ø15.9 mm / 0.62 inch, die 16.3mm / 0.63 inch, weight 0.9 kg / 2 lbs

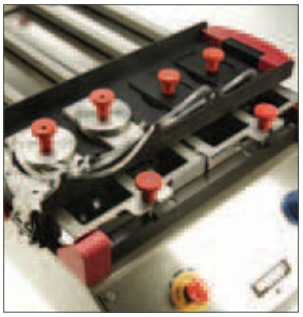
WET ABRASION SCRUB / WASHABILITY TEST

HARDNESS / ELASTICITY / ABRASION

TQC Automatic Washability Test to perform a Abrasion and washability scrub test on coated panels to define the resistance of paint, varnish or related products to scratching, wear and colour loss due to wet or dry scrub abrasion. Simulating everyday wear from cleaning actions or general use. Also suitable for testing plastics, woodpanels, kitchentops, white goods etc..

The test is either used as a "pass / fail" test by testing to a specified number of strokes or defining the minimum number of strokes at which a coating fails by checking at regular intervals.

The TQC wet abrasion scrub testers are also suitable to test the performance of of cleaning agents and compounds.



Many standards require dry or wet abrasion and scrub test to be performed to determine the quality of coating. Like the EN 13300 for example. This standard defines a quality ranking for interior coatings to wet abrasion.

The TQC Automatic Washability Tester is driven by a micro-step controlled electro motor which allows precise and steady speed and sinus wave form control. Operation is intuitive by means of a jog-dial switch and a multi-lingual operating menu on a large illuminated display.

The two integrated pumps allow the user to test two fluids simultaneously. Per pump two test beds are fed and can be controlled separately. This allows the TQC Automatic Washability Tester to be used both in coating industry and detergent industry. The adjustable tool carrier allows the user to safely perform test on a wide array of samples.

AB5000 TQC Automatic Washability Test 230V
AB5005 TQC Automatic Washability Test 110V

BUSINESS
Coating industry, industrial finishing, laboratory, detergent industry

STANDARDS
DIN 53778, ASTM D2486, ASTM D4213, ASTM D4828, ASTM D3450, ISO 11998, ASTM F1319, ISO 105X12, Renault D431010, GME 60269, ECCA T11, EN 13523-11, EN 60730-1 and EN 13300.
Look up the appropriate standard for a correct execution of the test.

FEATURES
- easy-to-use
- Multiple stroke speed
- Integrated fluid pumps incl. ramping
- 8 user programmable default setting
- Multiple languages
- Adjustable tool carrier
- Adjustable stroke length

SCOPE OF SUPPLY
- Automatic Washability Test
- Two test beds
- Two sample clamps
- Tubing and fluid container set
- Power cord
- Manual

ACCESSORIES
AB5010 DIN 53778, Wild Boar Brush
AB5011 ASTM D2486, Nylon Brush
AB5012 ASTM D4213-92 / D4828, Sponge
AB5013 ISO 11998, Abrasive pad
AB5014 Weight 60g / 0.132 lbs
AB5015 Weight 100g / 0.220 lbs

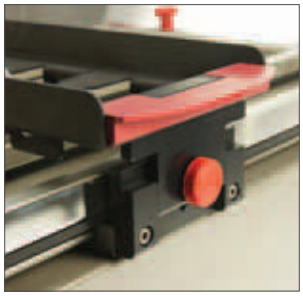
SPECIFICATIONS
Technical Data:
Stroke speed: 1 – 60 strokes / minute*, Stroke length: 20 - 300 mm* / 0.8 - 11.8 inch*, Max. panel width: max. 80 mm / 3.15 inch per channel, Max. panel length: max. 350 mm / 14 inch, Max. panel thickness: max. 35 mm / 1.4 inch in the middle of the sample track
* Stroke speed and length achievable depend on the tools used.

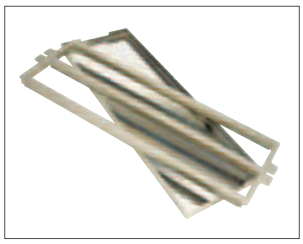
Dimensions and Weight:
Depth: 650 mm / 25.6 inch, Width: 350 mm / 13.8 inch, Height: 350 mm / 13.8 inch,
Net weight: approx. 35 kg / 77 lbs

Basic Unit:
Power Supply: 115 – 230 V, 50 - 60 Hz, Power consumption: max. 80 Watt, Display: Blue Illuminated, graphic 100 x 35 mm, 193x64 pixels, Safety: Emergency Button, integrated Acoustic Alarm, Function: Jog Shuttle knob by Rotation / Pushing

Accuracy:
Indenter Speed accuracy: +/- 1% of set speed, Pump Speed accuracy: +/- 1% of set speed
Stroke length accuracy: +/- 0.01 mm / 4 mil

USE
The AB5000 TQC Washability Test has a menu-driven interface and an integrated flush function.
Check the manual for full details.





TABER ABRASER

HARDNESS / ELASTICITY / ABRASION

Taber Abrasion is used to determine relative resistance to abrasion defined as 'the ability of a material to withstand mechanical damage' such as rubbing, scraping or erosion.

The Taber Abraser is an industry standard used in the wear and durability testing of parquet, metals, leather, textiles, rubber, lacquered surfaces, carpets, coatings etc..

Single or dual versions available. A wide range of accessories and options is available.

Complies with virtually all relevant international standards such as:
EN 438-2 • EN 660-2 • EN 13329:E • EN 13672 • EN 13696 • EN 14431 • EN 14864 • EN ISO 5470-1 • ASTM D1044 • ASTM D3389 • ASTM D3730 • ASTM D3884 • ASTM D4060 • ASTM D4685 • ASTM D4712 • ASTM D5146 • ASTM D5324 • ASTM D6037 • ASTM D7255 • ASTM F362 • ASTM F510 • ASTM F1478 • BS 3900 • DIN 52347 • DIN 53109 • DIN 53754 • DIN 53799 • DIN 68861 T2 • ISO 7784-2 • ISO 9352 • TAPPI T476 • NEN 1857 • ...

TB0156 Taber 5135 Single Head Abraser Set
TB0157 Taber 5155 Dual Head Abraser Set

TABER OSCILLATING ABRASION TESTER

HARDNESS / ELASTICITY / ABRASION

The Taber® Oscillating Abrasion Tester – Model 6160 is also known as an "oscillating sand tester". Described in ASTM F735, The Taber® Oscillating Abrasion Tester is used to measure the resistance of a material to surface abrasion and scratching. Its primary application is for transparent materials and coatings in lenses and windows. However it can also be used to evaluate materials such as organic coatings, plastics, metals etc.

TB0180 Taber 6160 Oscillating Abrasion Tester

TABER LINEAR ABRASER

HARDNESS / ELASTICITY / ABRASION

The TABER® Linear Abraser is designed to test virtually any size or shape specimen, the Linear Abraser is ideal for material properties of contoured surfaces and finished products.

Initially developed to evaluate wear resistance, this instrument can also be used to evaluate scratch resistance (single or multiple pass), color transfer (commonly referred to as crocking or a crockmeter), and perform coin scrape tests. Plus, with the universal or a custom attachment, 'real world' testing and other forms of material durability can be performed. The Linear Abraser can be used for both wet and dry testing.

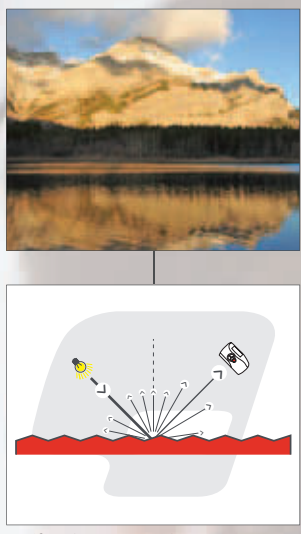
TB0165 Taber 5750 Linear wear resistance tester

TQC GLOSS METERS

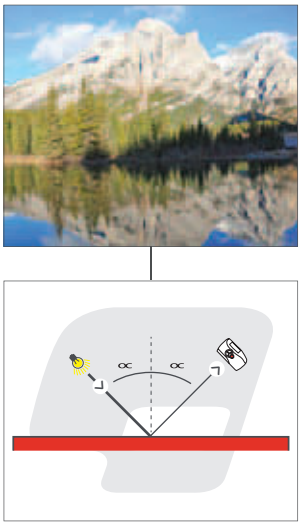
A NEW LEVEL OF CONFIDENCE

In an economy where production efficiency is key there is no room for errors. Quality has to be perfect as consumers tend to be more demanding than ever and will accept nothing less than perfection. Production is moving all over the planet. Traditional high performance products are now often manufactured in less traditional countries in order to retain competitive production costs.
To safeguard the quality "cutting edge" inspection instruments are crucial to maintain consumer confidence.

The TQC Gloss meter allows the user to measure fast and simple accurate gloss levels on any flat surface. Whether it be paper, paint, plastic, wood or any other material. No special training or skills are required. Just place the gauge, press the scan button and read the values. Template options can also provide the flexibility for use with curved surfaces or small test areas.



Diffusely scattered

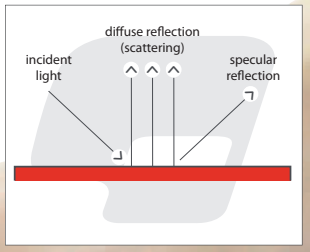


Directly reflected

GLOSS

The visual perception of a surface is strongly influenced by the proportion of light with specular reflection from that surface. As an inspection criterion it is equally as important as colour.
The optical properties of gloss analysis depend on a range of variables. Gloss itself is based on the interaction / reflection of light and the physical characteristics of a surface.

In definition gloss is a measure of the proportion of light which has a specular reflection from the surface. The variables that affect gloss are the refractive index of the material, the angle of incident light and the surface topography (structure / smoothness / roughness)
Materials with smooth surfaces appear glossy, while rough surfaces reflect no or little specular light and therefore appear matt or flat.



In daily life different levels of gloss are recognized. Without knowing specific numerical values we define surfaces as glossy or shiny, semi-glossy, satin or matt (flat, dull). By using a gloss meter you are able to provide numerical data to back up visual perception.

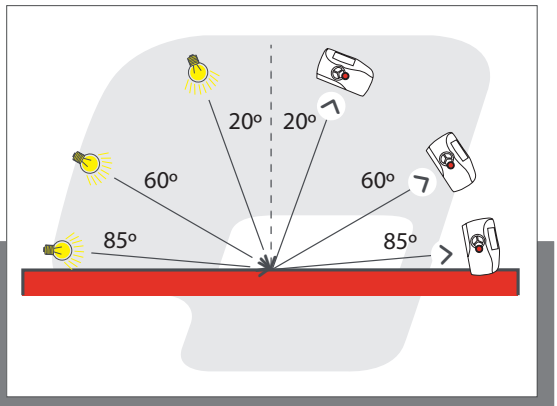
THE RANGE

TQC SOLOGloss®
The 60° singe-angle instrument of the TQC Gloss meter range. Preferred instrument for measurements in the semi-gloss range. Suitable for most applications. Light source and detector are positioned under an angle of 60° of the surface to be measured.

TQC DUOGloss®
The TQC Duo Gloss meter is a versatile instrument that combines the 20° and 60° angle into one gloss meter. The 20° angle is ideal for measurements in the high-gloss area while the 60° covers the semi-gloss range.

TQC POLYGloss®
The top of the TQC Gloss meter range is the triple angle instrument PolyGloss. Besides a 20° and 60° measuring angle the TQC PolyGloss is also equipped with a 85° measuring angle thus covering the entire gloss-spectrum. The 85° is for low gloss levels (high diffuse reflection) or mat surfaces.*

(Depending on the model the instrument can be set to measure and display just one or several measurement angles simultaneously)
**The TQC Polygloss will be available Q1/2013*

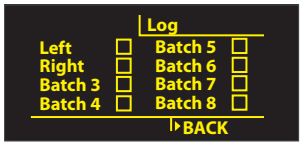


GEOMETRY | different measuring angles for different applications
It is common practice to use a 60° angle gloss meter for almost every application. Most specifications specify a gloss level measured at 60° which often deviates from international standards.

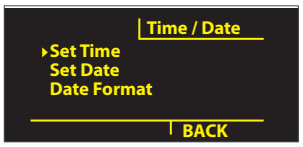
ISO 2813 advises to use the following geometries to obtain improved differentiation on high-gloss or low-gloss surfaces:
- 20° measuring angle for high-gloss surfaces where a 60° gloss meter typically indicates values higher than 70 GU.
- 85° measuring angle for low-gloss surfaces where a 60° gloss meter typically indicates values lower than 10 GU.

The measuring angle should always be mentioned in combination with a gloss value.

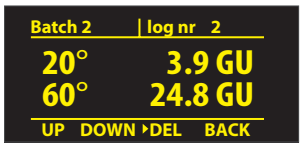
THE FEATURES



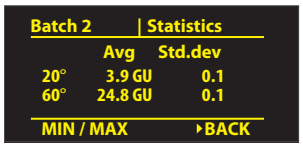
Data logging All TQC Gloss meters are equipped with an extensive memory of max. 2000 measurements which can be organised in 8 different batches. The name of each batch can be programmed into the instrument in order to allow data retrieval at a later stage.



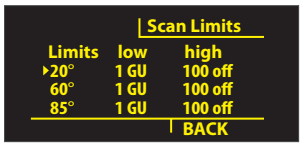
Date Time stamp The internal clock and calendar provides each stored measurement with a date/time stamp. A choice of four different date formats is available.



Data handling Via a "plug and play" USB interface the measuring data can be downloaded to your PC. Scrolling through a batch with the Up and Down function shows individual data directly on the instrument's display. It is possible to delete individual false measurements directly from the instrument's database. Batches can be cleared one by one or the entire memory can be emptied in one action. See also the section TQC Ideal Finish Analysis Software.



Statistics Of each batch statistical data can be observed on the Gloss meter's display. The instrument shows minimum- and maximum values, average and standard deviation.



Limits / Thresholds When measurements have a specific specification to meet, it is possible to set High and Low limits. An audible and visual alarm indicates when measurements are off limits
operating as a pass/fail option. Depending on the type of TQC Gloss meter individual limits can be set for each measuring angle.

MECHANICS

Optical stability The optical components are mounted on an extremely stable chassis made from a combination of precision milled aircraft-grade aluminium and a special injection moulded hi-tech plastic. The rock solid base assures measurements to be accurate under all circumstances and conditions.

USB-B Port
TQC Gloss meters are equipped with a USB-B port for quick data transfer

Light source TQC Gloss meters utilise LED (Light Emitting Diode) as light source to guarantee long term stability. Unlike tungsten light bulbs LED does not generate heat. Drifting measurements caused by temperature changes are therefore eliminated. Accuracy remains optimal for many years and lamp replacements are no longer required.

ERGONOMICS

OLED Display TQC Gloss meters are equipped with the latest OLED (Organic Light Emitting Display). This new type of display offers extremely high visibility and contrast at a range of viewing angles. The innovative OLED display is positioned at an angle of 35 degrees which ensures excellent readability in all conditions. When measuring on horizontal or vertical surfaces or any angle in between.

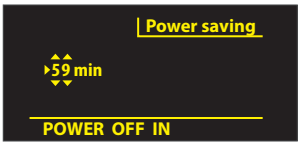
Operation Menu driven operation allows new users to benefit from all the features of the instrument without having to refer to the user's manual. The intuitive structure guides the user through the different screens to change the settings of the instrument.

Shape The case of the instrument is designed to comfort both right- and left handed users. The upper part is "soft touch" coated for ultimate grip and the wrist strap prevents accidental drops. The rubber operating buttons offer a pleasant feel and user friendly operation.

CALIBRATION

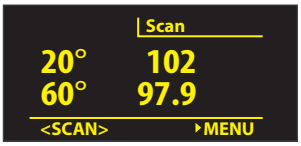
In production TQC Gloss meters are calibrated against a series of reference tiles certified by the German BAM (Bundesanstalt für Materialforschung und -prüfung). Each Gloss meter comes with a protective holder with integrated calibration standard for field calibration.

THE FEATURES



Power saving The instrument utilises low power consuming LED light sources and a battery friendly OLED display. A full set of batteries has a 10.000 reading life expectancy. However, in order to get the maximum operational life from the batteries the instrument is equipped with an adjustable "auto power off" function which can be set by the user between 1 and 59 minutes. Power is provided by two standard AA-batteries.

Languages The instrument is designed for optimal user comfort. Use of a manual is hardly required due to the intuitive menu driven user interface . To make life even easier the TQC Gloss meter comes in a wide selection of languages. Standard languages are English, German, French, Spanish and Italian but the number of languages will grow over time. Check our website for the latest status.



Scan mode Keeping the "Scan button" pressed down allows the gloss meter to measure continuously at a rate of approximately 70 readings per minute. If selected the readings will be stored in the instrument's memory.

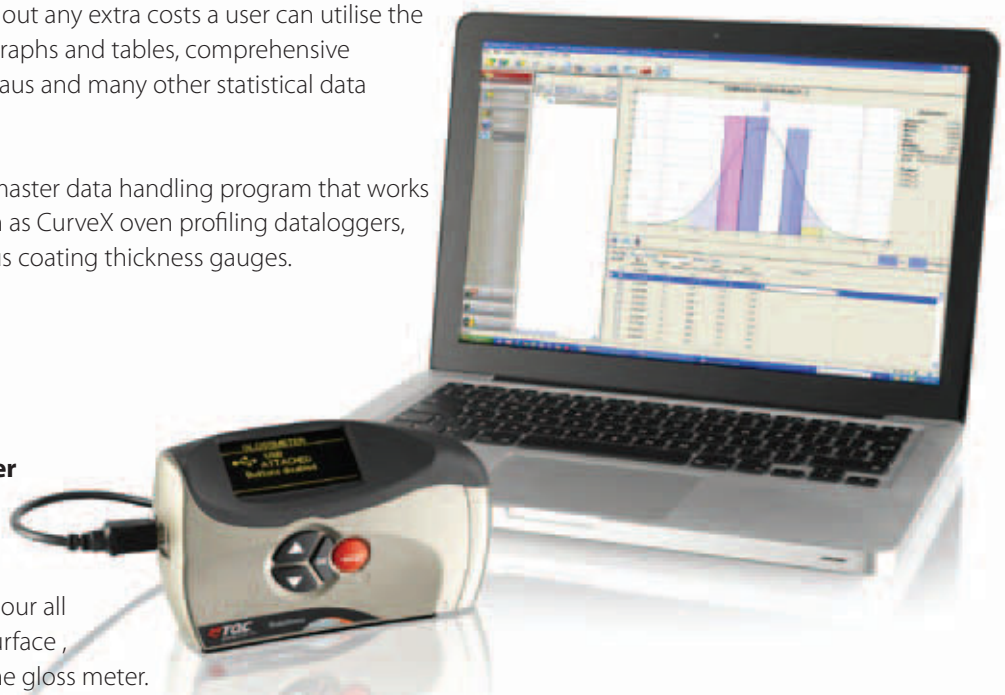
Login Protection To prevent unwanted change of settings by unauthorised users certain functions can be protected with a Login Code. The protection can be activated or de-activated by choice. This code is user programmable. Instrument setup, limit changes, delete readings, or clear memory are all protected by the selected code.

Calibration The protective holder has an integrated calibration standard for field calibration.

IDEAL FINISH ANALYSIS SOFTWARE

TQC Gloss meters are supplied as standard with the powerful TQC IDEAL FINISH ANALYSIS evaluation and analysis software. Without any extra costs a user can utilise the software to create reports including graphs and tables, comprehensive statistics and SP-calculations. Trend, Gaus and many other statistical data sets are possible within the software.

TQC IDEAL FINISH ANALYSIS is TQC's master data handling program that works with an array of TQC instruments such as CurveX oven profiling dataloggers, DewCheck climate gauges and various coating thickness gauges.



RESEARCH

The science behind the Gloss meter

Gloss meter development started with an understanding of the basic principles of Gloss. Surface textures, translucency and colour all influence the visual perception of a surface , but also influence the fine optics of the gloss meter. Micro scale surface deformations cause scattering of light and divide it into specular and non-specular. This is the fine threshold where the TQC Gloss meter is able to determine the gloss at the highest accuracy level.

Sending and receiving

To determine the best light source and detector setup components from suppliers all over the world have been tested. Spectral sensitivity, stability and linearity all proved to be exceptionally stable using the TQC Gloss meter.

Standardization

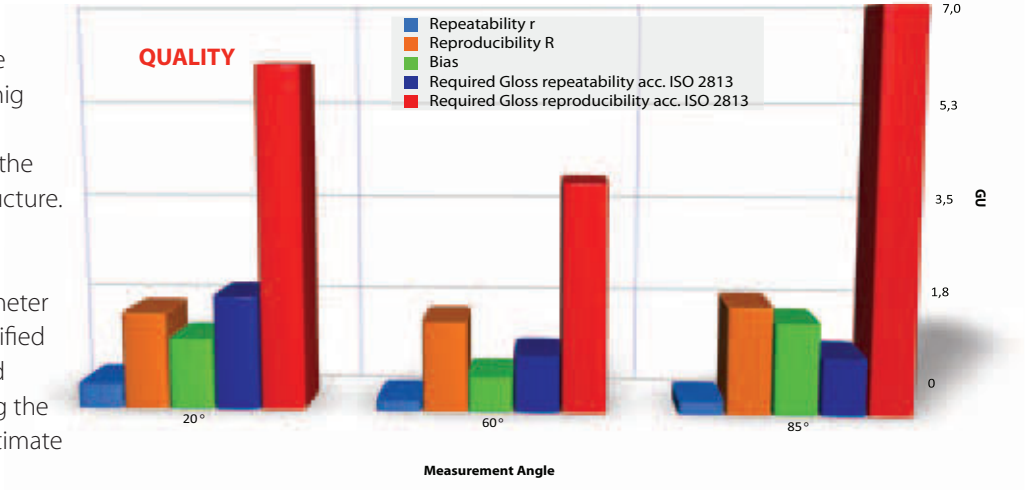
In order to guarantee the TQC Gloss meter to be one of the most stabile meters available and fullfills all the demands of the ASTM, DIN and ISO standards. TQC joined all of the standardization bodies and are actively involved in testing criteria relating to the standards. Ensuring the highest level of conformity .

Precision engineering

In order to get the best stability the TQC Gloss meter's unique double frame system has been engineered with the hig hest precision. Carefully controlling the interior of the light patch helps to give the TQC Gloss meter robust and stabile structure.

Ten thousands of readings

To assess the quality of the TQC Gloss meter we took thousands of readings on certified substrates to test stability, reliability and durability. With or without shock testing the TQC Gloss meter proved to have the ultimate level of performance.



SPECIFICATIONS

APPLIED PRODUCTS:

GL0010	TQC SoloGloss 60˚
GL0020	TQC DuoGloss 20˚/60˚
GL0030	TQC PolyGloss 20˚/60˚/85˚

OPERATIONAL:

Calibration standard:	Integrated tile in dust cover
Display:	High Contrast OLED display
Light source:	Extreme low drift LED light source
Power source:	2x AA alkaline batteries
Batches:	max 8
Readings per batch:	max 500, non-dependant of number of angles
Total max Readings:	2000 readings with time stamp
Scan function:	Yes
Statistics:	Min. / Max. / Avg. / Std.dev / number of measurements
Security:	Password protection
Software:	TQC Ideal Finish Analysis

DIMENSIONS:

Size:	90 x 140 x 45 mm (h x w x d)
	3,5 x 5,6 x 1,7 " (h x w x d)
Weight:	398 g / 13,7 oz

MEASUREMENT:

Base dimensions:	45 x 130mm / 1,7x5,1"
Orifice size:	10 x 50mm / 0,4x2,0"
Spot size:	≈ 5 x 5 mm / 0,2x0,2" @ 20˚
	≈ 20 x 9 mm / 0,8x0,35" @ 60˚
	≈ 40 x 9mm / 1,5x0,35" @ 85˚
Measurement speed:	70 measurements per minute at 3 angles
Simultaneous measurement:	3 geometries
Power saver option:	User selectable
Units:	Gloss Units (GU)
Resolutions:	0,1 GU (0-100GU)
	1GU (>100GU)

	20˚	60˚	85˚
Range	0-2000 GU	0-2000 GU	0-2000 GU
Repeatability r*	0,4 GU	0,2 GU	0,2 GU
Reproducibility R*	1,7 GU	1,6 GU	1,9 GU
Bias*	1,2 GU	0,6 GU	1,6 GU

**Acc. ISO 2813 (range 0-100 GU)*

WARRANTY:

TQC will grant a warranty for a period of 12 months for TQC Gloss meter and 12 months for all related equipment from the date of delivery in respect of any evidence of faulty workmanship and materials. TQC will extend the warranty for TQC Gloss meter to a period of 24 months from the date of delivery if TQC Gloss meter is licensed via the TQC Ideal Finish Analysis software.

STANDARDS:

ISO 2813; ASTM D523; ASTM D2457; ASTM C584;
AS 1580 (602.2); BS 3900 D5; DIN 67530; JIS Z 8741;
ISO 7668; MFT 30064 (exception 45˚ angle)

SCOPE OF SUPPLY:

Each TQC Gloss meter comes with the following items:

- 2 AA type batteries
- Plastic protective case
- Screwdriver
- USB stick with TQC Ideal Finish Analysis software
- Micro fibre cleaning towel
- USB cable
- Calibration certificate

Made in
the Netherlands

GLOSS-HAZE-DOI METER

APPEARANCE

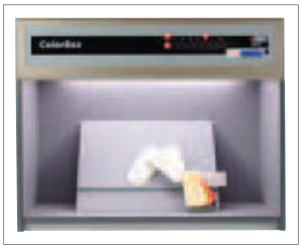
The new Rhopoint IQ meter with 20/60/85° gloss and Haze/Rspec/DOI information. The Rhopoint IQ meter quantifies surface quality problems that are invisible to a standard glossmeter.
Pocket sized instrument with integrated tile holder, Fast and simultaneous measurement of all parameters, Onboard Statistics and Graphs, USB results download to PC without the need to install software, Results batching with user definable names, Fully automatic calibration with tile detection and verification, Bluetooth serial output of measured values, ISO 17025 UKAS calibration certificate.

VF2477 Rhopoint IQ Glossmeter with 20/60° gloss and Haze/Rspec/DOI information.
VF2478 Rhopoint IQ Glossmeter with 20/60/85° gloss and Haze/Rspec/DOI information.

ILLUMINATED ASSESSMENT CABINETS

APPEARANCE

TQC Colorboxes offer a extensive range of illumination conditions for any visual inspection. Th multiple selectable light sources allow assessment of gloss, structure, damages and metamerism. The Colorboxes are available in 60 and 120cm width. All are supplied with removable viewing table and runtime counter. Both interior and exterior are finished to the highest quality standard. The ability to switch between light sources without flickering makes the cabinet extremely stable.



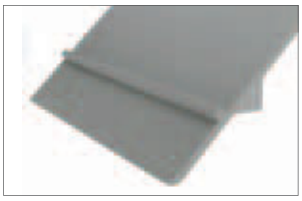
VF0600 TQC Colorbox illuminated assessment cabinet, 60cm + 45°sample table
Light sources: light bulb type "A" 40 W E 27, light tube "shop light" TL84 (F11) 60cm
light tube "day light" D65, 60 cm, light tube "day light" D5000 (D50) 60cm
light tube "black light" UV 60cm

VF1200 TQC Colorbox illuminated assessment cabinet, 120cm + 45°table
Light sources: light bulb type "A" 40 W E 27, light tube "shop light" TL84 (F11) 120cm
light tube "day light" D65, 120 cm, light tube "day light" D5000 (D50) 120cm,
light tube "black light" UV 120 cm.

VIEWING TABLE 45° FOR COLORBOX

APPEARANCE

Solid table made of MDF, painted in Munsell N5 ,5 flat grey. The table is constructed under an angle of 45° being the ideal angle to view objects inside a color assessment cabinet.
(Note each Colorbox is ready supplied as standard with 1 viewing table)
Display dimensions: 400 x 270 mm / 15.75 x 10.6 inch



VF0603 Viewing table for colorbox

RAL 840-HR - RAL CLASSIC COLOURS

APPEARANCE

Semi matt, A5-sized (14.8 x 21.0 cm), colour illustration A6-sized (10.5 x 14.8 cm), Binding colour samples for colour matching and quality control, Including X-Y-Z-values, colour distance from the original standard and reflectance curve, Cards are also individually available

VF6600 Primary standards of all 213 RAL CLASSIC colours

RAL 841-GL - RAL CLASSIC COLOURS

APPEARANCE

High gloss, A5-sized (14.8 x 21.0 cm), colour illustration A6-sized (10.5 x 14.8 cm), Binding colour samples for colour matching and quality control, Including X-Y-Z-values, colour distance from the original standard and reflectance curve, Cards are also individually available

VF6603 Primary standards of all 210 RAL CLASSIC colours

RAL K7 - RAL CLASSIC COLOURS

APPEARANCE

Fan deck size 5.0 x 15.0 cm, colour illustration 2.0 x 5.0 cm, five colours per page, Gloss. In larger order quantities also available with personalized Company logo.

VF6606 Colour fan deck containing all 213 RAL CLASSIC colours

RAL K5 - RAL CLASSIC COLOURS

APPEARANCE

U-shaped protective cover, full page colour illustration 5.0 x 15.0 cm, well-suited for colour combination and colour comparison, semi matt or gloss. In larger order quantities also available with personalized Company logo.

VF6607 Colour fan deck containing all 213 RAL CLASSIC colours

RAL K1 - RAL CLASSIC COLOURS

APPEARANCE

Booklet size 10.4 x 19.0 cm, colour illustration 1.8 x 2.8 cm, 16 colours per page, Gloss. In larger order quantities also available with personalized Company logo.

VF6608 Booklet with 210 RAL CLASSIC colours

RAL K6 - RAL CLASSIC COLOURS

APPEARANCE

A4-sized (21.0 x 29.7 cm), semi matt

VF6609 Ring binder with all 213 RAL CLASSIC colours

RAL F5 - RAL CLASSIC COLOURS

APPEARANCE

Overall size 47.5 x 29.7 cm, folded 21.5 x 29.7 cm, colour illustration 1.2 x 2.2 cm, all colours at a glance, gloss. In larger order quantities also available with personalized Company logo.

VF6611 Information card with 210 RAL CLASSIC colours

RAL E1 - RAL EFFECT COLOURS

APPEARANCE

420 solid colours and 70 metallic colours, solid colours are based on waterborne paint systems, metallic colours are based on acrylic paints, fan deck size 21.0 x 5.0 cm, solid colours 5.0 x 2.5 cm, metallic colours full page, solid and metallic colours can be viewed jointly or separately, solid colours semi matt, metallic colours high gloss

VF6612 Box with primary standards of all 490 RAL EFFECT colours

RAL E2 - RAL EFFECT COLOURS

APPEARANCE

420 solid colours and 70 metallic colours in a high grade box, based on waterborne paint systems A6-sized (10.5 x 14.8 cm), colour illustration 10.5 x 13.8 cm, binding colour samples for colour matching and quality control, solid colours semi matt, metallic colours high gloss. In larger order quantities also available with personalized Company logo.

VF6614 Multifunctional double colour fan deck with all 490 RAL EFFECT colours

RAL E3 - RAL EFFECT COLOURS

APPEARANCE

420 solid colours and 70 metallic colours, solid colours are based on waterborne paint systems, metallic colours are based on acrylic paints, fan deck size 21.0 x 5.0 cm, solid colours 5.0 x 2.0 cm, metallic colours 5.0 x 3.8 cm, every page shows six solid colours and a matching metallic colour, solid colours semi matt, metallic colours high gloss. In larger order quantities also available with personalized Company logo.

VF6615 Colour fan deck with all 490 RAL EFFECT colours

RAL E4 - RAL EFFECT COLOURS

APPEARANCE

70 metallic colours, full page colour illustration 12.8 x 5.0 cm, based on acrylic paints, high gloss. In larger order quantities also available with personalized Company logo.

VF6616 Colour fan deck with all 70 RAL EFFECT metallic colours

RAL EFFECT SINGLE SHEETS SOLID / METALLIC

APPEARANCE

Overall size 47.5 x 29.7 cm, folded 21.5 x 29.7 cm, colour illustration 1.2 x 2.2 cm, all colours at a glance, gloss

VF6617 RAL EFFECT single sheets solid
VF6618 RAL EFFECT single sheets metallic

RAL D2 - RAL DESIGN SYSTEM

APPEARANCE

Fan size 24.0 x 5.0 cm, colour illustration 5.0 x 2.5 cm, semi matt. In larger order quantities also available with personalized Company logo.

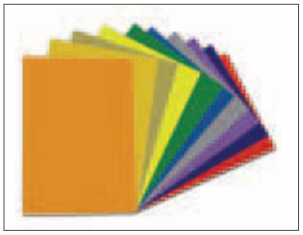
VF6619 Colour fan set in box containing all 1625 RAL DESIGN colours

RAL DESIGN SINGLE SHEETS COMPLETE SETS

APPEARANCE

Colour samples of all RAL DESIGN colours, complete sets

VF6620 Colour samples of all RAL DESIGN colours



COLOURS OF HEALTH & CARE - DESIGN SYSTEM

APPEARANCE

Colour fan deck with the 120 most important colours of health & care. The colour fan deck displays the 120 most important colours in 'Colours of Health & Care', an extensive research project.
120 RAL DESIGN colours related to health & care, with four detachable colour chips per colour, 56 pages, fan deck format: 8.7 x 21.4 cm

VF6626 Colour fan deck with the 120 most important colours of health & care

RAL C1 - RAL DIGITAL 4.01 - SOFTWARE

APPEARANCE

RAL is now offering a creative tool for jacket pockets. With the new RAL DIGITAL 4.01 USB flash memory, architects, designers, tradesmen and amateur colour designers can retrieve the colour information they need on the spot. RAL DIGITAL 4.01 on flash memory (Window or Mac) runs on every computer – in the full version – and colourises files (motifs and objects) of all types in the selected RAL colour. RAL DIGITAL finds the colour that matches the original colour and also specifies which RAL colours correspond to any user-defined colour. RAL DIGITAL provides new CMYK colour values for RAL CLASSIC, RAL DESIGN and RAL EFFECT. For RAL CLASSIC and RAL EFFECT, the CMYK values were sampled manually for the highest possible degree of precision. With 2,328 RAL colours, RAL DIGITAL is the basis for perfect, professional on-screen colour design.

VF6632 RAL C1 - ral digital 4.01 - software with 2328 RAL colours - Mac version / Windows version

RAL P1 - RAL PLASTICS

APPEARANCE

Creative colour design for innovative products. A yellow that says 'warm' and 'fresh' at the same time? Colours that radiate peace and security? For sophisticated colour design, we have handpicked 200 new RAL P2 colours from the internationally renowned RAL DESIGN System used by architects, designers and product designers. 200 additional RAL DESIGN colours – including cool teals, juicy leaf greens, earthy ochres, brilliant berry hues and delicate lilacs have added a range of new colour statement options to the plastics palette. For plastics manufacturers and plastics processors, for products in the cosmetics industry and the construction sector, and for household goods and packaging. New colour combinations for games, sports and leisure time. RAL P2 contains 160 opaque and 40 special, transparent colours. Together with the 100 classic shades within RAL P1 the RAL PLASTICS colour standard now comprises 300 colour samples. Each colour is also available as a single plate.

VF6627 RAL P1 - RAL PLASTICS - *now including RAL P2*

RAL P1 SAMPLE - RAL PLASTICS

APPEARANCE

Plastics colour sample format: 105 × 148 × 3 mm, Material: polypropylene, Three sample thicknesses show the colour fully opaque and in various opacity levels:, 3 mm, 2 mm and 1 mm
Three different surfaces allow you to interpret the colour in relation to roughness: high gloss polished, VDI 24, VDI 42, Includes reflectance curve, absolute values and the divergence from the RAL PLASTICS, original sample, Protective sleeve for every plastics colour sample

VF6628 The RAL colour standard for plastics - 100 colours from the RAL CLASSIC collection

RAL COLOUR FEELING 2012+ - RAL TRENDS

APPEARANCE

Colour Feeling 2012+ is the ideal creative tool for designers, architects and interior architects, interior decorators and painters as well as for design-oriented consumers: four major colour trends with eight trend colours each, numerous examples of colour combinations, inspiring images and informative texts, full-page, coated fan deck (3.5 x 10.5 cm) with all 32 trend colours, coated tear-off colour chips in RAL quality for all 32 trend colours, 56 pages, 30.5 x 26 cm

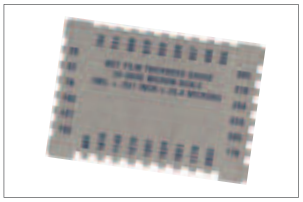
VF6633 Colour trend book with fan deck and tear-off colour chips

ALUMINUM MEASURING COMB

COATING THICKNESS

Rectangular promotion measuring comb with a range of 25 to 2032 µm. Made of top-quality, weather-resistant aluminum. Special printing possible with larger orders.

LD2030 Aluminium measuring comb, 25-2032 µm / 1-80 mil in 30 steps



WET FILM THICKNESS GAUGE

COATING THICKNESS

The TQC Wet Film Thickness Gauge WG is a hexagonal/octagonal precision measuring comb made of heavy stainless steel. The high-grade stainless steel will not be affected by acid or base elements. Models available for several different applications.

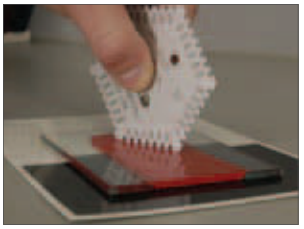
SP4000 TQC Wet Film Thickness Gauge WG-1 20-370 µm in 24 steps (6x4) for decorative paints and primers.

SP4001 TQC Wet Film Thickness Gauge WG-1 0.5-15 mils in 24 steps (6x4) for decorative paints and primers.

SP4010 TQC Wet Film Thickness Gauge WG-2 25-2000 µm in 36 steps (6x6) With edge radius check (2mm) for protective coatings and high solids.

SP4011 TQC Wet Film Thickness Gauge WG-2 1-80 mils in 36 steps (6x6) With edge radius check (2mm) for protective coatings and high solids.

SP4020 TQC Wet Film Thickness Gauge WG-3 50-10000 µm in 72 steps (8x9) for extremely thick films such as floor coatings, fillers, fire proofing, plaster, adhesives etc.

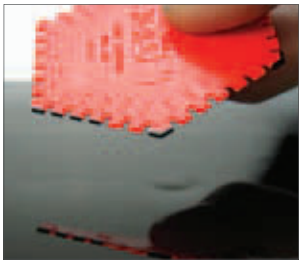


PLASTIC WET FILM COMB

COATING THICKNESS

The TQC Wet Film Comb made of plastic, to measure wet film thickness between 25 and 900µm. The TQC Wet Film Comb is designed as a disposable thickness gauge. It can be kept as a record of wet film thickness measurement for ISO or customer requirements. One side of the comb measures the wet film thickness in µm (30 steps between 25 and 900µm)., the other side measures in mills (30 steps between 1 and 35 mils). One set TQC Wet Film Combs contains 500 pieces.

LD2020 TQC Plastic Wet Film Comb, 500 pieces, 25-900µm / 1-35 mils in 30 steps;



WET FILM THICKNESS WHEEL

Specially by TQC developed instrument for use on wet lacquers, paint and coil coated surfaces. Equipped with a precision roller-bearing for smooth rolling over the surface . The wheel has three rims, the inner rim being eccentric to the two outer rims. The outer rings are notched for a firm grip inthe surface to prevent slipping. Made of stainless steel and with an aluminum grip.

VF2255 Wet film thickness wheel, model: NS100, Range: 0-100µm, Division: 10µm, Diameter: 50mm. Graduation: 10µm
VF2256 Wet film thickness wheel, model: NS300, Range: 0-300µm, Division: 30µm, Ø: 50mm /1.96"
VF2257 Wet film thickness wheel, model: NS600, Range: 0-600µm, Division: 60µm, Ø: 50mm / 1.96"

COATING THICKNESS GAUGE SUPER-PIG

The TQC SP1000 SuperPIG is a destructive precision tool for inspection and thickness measurement on single or multiple coats on virtually all substrates, including wood, plastics, metals etc. Also observes and measures substrate and film defects. Applies a small incision in the layer of paint, and uses an integrated microscope with measuring reticle.

SP1000 SuperPIG, destructive coating thickness gauge, range: 2 to 2000 microns, Microscope : Magnification 50X (with graduation-scale), Scale range : 0,00 – 2,50 mm (rectilinear measured), Variation : Accuracy depends on chisel cut angle and users reading Battery : AAA 1,5 volt, Material : Titanium anodised aluminum, Width : 25mm, Height : 110mm, Length : 60mm, Delivery: SuperPIG with wrist strap, black marker, cutting knifes 1, 2, 3, hex diagonal wrench, leather pouch with belt clip

SP1200 The SuperPIG is also available as a basic version. The SuperPIG Basic (SP1200) comes without knives and neither has a multi-knife holder, nor a revolving system. TQC Super PIG Basic, without knives. Destructive coating thickness gauge Super PIG, destructive coating thickness gauge, range: 2 to 2000 microns, Microscope : Magnification 50X (with 360° revolving graduation-scale), Scale range : 0,00 – 2,50 mm (rectilinear measured), Variation : Accuracy depends on chisel cut angle and users reading, Battery : AG3 button cell battery (4x), Material : Titanium anodised aluminum, Width : 25 mm / 10 inch, Height : 120 mm / 4.7 inch, Length : 60 mm / 2.36 inch

SUPERPIG CAMERA ADAPTER

Special camera adapter to record destructive dry film thickness measurements of TQC SuperPIG (all grey models) with a digital compact camera. The pictures can be used for detailed reporting or as evidence.

The SuperPig camera adapter is easy-to-use. Simply clamp the adapter on the microscope of the SuperPIG. Now you can take pictures with almost any digital compact camera.

The SuperPIG camera adapter is delivered in a leather softpouch with belt clip.

SP1030 Camera adapter to be used with SP1000 Superpig II

ELECTRONIC COATING THICKNESS GAUGE

COATING THICKNESS

This handy and robust TQC coating thickness gauge is ideal for measurement tasks in various industries and paint applications. This compact meter allows measurement of painted objects, or other corrosion protective layer thicknesses, with accuracy measured in both (Fe) or iron or steel (NPE) aluminum, copper, brass or non-magnetic steel. Especially the automatic surface detection, the extended range and high measurement speed and accuracy over the entire measuring range, easy operation

LD0400 TQC electronic thickness gauge for Fe/NFe substrates.

COATING THICKNESS GAUGE QNIX 4500

COATING THICKNESS

QNix® 4500 - a handy, fast and robust coating thickness gauge. QNix® 4500 was developed particularly for measuring tasks in the automobile industries. This compact gauge permits extremely precise measurements of lacquer and anti - corrosion protection coating thicknesses, both on steel and iron as well as on non-ferrous metals such as aluminum, zinc and copper. The automatic substrate recognition, extended measuring range, and increased measuring speed is what make this gauge special.

With the practice-oriented product properties, professionals immediately recognize the handwriting of QNix® gauges: Extremely precise: high measuring accuracy, Simple operation: no calibration, one button, one-hand operation, Innovative technology: Hall-sensor and Eddy-current technology Broad spectrum of use: measurements on steel and iron, Protective measuring: polished ruby tip

LD0411 QNix 4500 coating thickness gauge (with integrated Fe 3000 µm/NFe 3000 µm probe)

POSITEST DFT for metals

COATING THICKNESS

The PosiTest DFT Coating Thickness Gage measures coatings on ALL metals. It is the economical choice that retains the uncompromising quality of DeFelsko coating thickness and inspection instruments. PosiTest DFT Ferrous: measures non-magnetic coatings on steel..
PosiTest DFT Combo: measures both non-magnetic coatings on steel AND non-conductive coatings on aluminum, brass, etc. Automatically recognizes the substrate and takes a measurement.

LD6011 PosiTest DFT Ferrous
LD6012 PosiTest DFT Combo

POWDER COMB

COATING THICKNESS

This simple, easy-to-use gage measures the thickness of applied dry coating powder ...before it's been cured! Check Powder thickness with Powder Comb before curing to help ensure correct cured film thickness the first time through the line. Avoid stripping and re-coating which can cause problems with adhesion and coating integrity. Ideal for set-up and quality control. Works on a variety of part sizes, shapes and substrates such as metal, plastic, wood, glass, and more. Easy to carry; convenient shirt pocketsize Available in microns (metric) or mils (inch)

SP7309 Powder Comb

POSITECTOR 6000 SERIES for metals

Ergonomic rugged and weatherproof coating thickness gauges. Solvent, acid, oil, water and dust resistant, wear-resistant probe tip, thick, impact and scratch resistant Lexan® display suitable for harsh environments, built-in temperature compensation ensures measurement accuracy, conforms to national and international standards including ISO and ASTM.

IDEAL FINISH ANALYSIS Ready

Two models - standard and advanced

All models have memory, statistics, HiLo alarm and a USB port. No software required - Browse gage readings and charts using your computer's file explorer, or upload to the internet through our website.

Advanced Models - all Standard features plus...

- High contrast reversible color LCD
- Scan Mode stores continuous readings without lifting the probe
- Large memory - 100,000 measurements with sub-batching
- Data transfer via USB or Bluetooth Wireless Technology
- On-screen help, real time graphing, picture prompting, batch notes and more

LD6057 TQC Coating Thickness Gauge, Positector 6000 (2) Standard
LD6058 TQC Coating Thickness Gauge, Positector 6000 (3) Advanced

NEW

TURN YOUR POSITECTOR 6000 INTO A SPG SURFACE PROFILE GAUGE

Features Include:

- The universal gauge body accepts all PosiTector probes easily converting it from a coating thickness gauge to a sur face profile gauge
- Internal memory, statistics and a USB port
- Fully interchangeable probe tips available with 60° and 30° angle
- No software required
- Durable tungsten carbide tip for long life and continuous accuracy - field replaceable

PSPC 90/10 Rule

With the PSPC an new rule for coating thickness results was introduced, the PSPC 90/10 rule.

This rule states that 90% of all thickness measurements shall be greater than, or equal to NDFT (Nominal Dry Film Thickness) and none of the remaining 10% measurements shall be below 0.9 x NDFT. This is one of the hardest standards to calculate . The PosiTector 6000 gives the user PSPC results for the 90/10 rule as a "Pass or Fail" as measurements are taken.

FERROUS PROBES				NON - FERROUS PROBES				COMBINATION F/FN			
Art. Nr	Model type	Probe type	Range	Art. Nr	Model type	Probe type	Range	Art. Nr	Model type	Probe type	Range
LD6025	F	Built-in	0-1500 µm 0-60 mils	LD6027	N	Built-in	0-1500 µm 0-60 mils	LD6028	FN	Built-in	0-1500 µm 0-60 mils
LD6099	FS	Regular		LD6104	NS	Regular		LD6109	FNS	Regular	
LD6017	FRS	Right-Angled		LD6019	NRS	Right-Angled		LD6022	FNRS	Right-Angled	
LD6100	F0S	0° microprobe	0-1150 µm 0-45 mils	LD6105	NAS	Anodizing	0-625 µm 0-25 mils	LD6023	FNTS	Separate Thick	0-6 mm 0-250 mils
LD6101	F45S	45° microprobe		LD6106	N0S	0° microprobe					
LD6102	F90S	90° microprobe		LD6107	N45S	45° microprobe					
LD6026	FT	Built-in Thick	0-6 mm 0-250 mils	LD6108	N90S	90° microprobe					
LD6018	FTS	Separate Thick		LD6024	NKS	Thickest	0-13 mm 0-500 mils				
LD6020	FKS	Thickest	0-13 mm 0-500 mils								

POSITECTOR 200 for wood, concrete, plastics...

Non-destructively measures a wide variety of applications using proven ultrasound technology. Measures coating thickness over wood, concrete, plastics, composites and more. Advanced models measure up to 3 individual layer thicknesses in a multi-layer system and features a graphic readout for detailed analysis of the coating system. Proven non-destructive ultrasonic technique conforms to ASTM D6132 and ISO 2808 and SSPC PA9.

LD0201 Coating thickness gauge for non-metal substrates, PosiTector 200 B standard thickness gauge, Measures total thickness Without graphic display, Typical applications: polymer coatings on wood, plastic etc. Range (polymer coatings): 13 - 1000 microns; 0,5 - 40 mils Accuracy: +/- (2microns = 3% of reading); +/- 0,1 mills + 3% of reading)

LD0202 Coating thickness gauge for non-metal substrates, PosiTector 200 B advanced thickness gauge, Measures total thickness and individual layers, With graphic display
Typical applications: polymer coatings on wood, plastic etc. Range (polymer coatings): 13 - 1000 microns; 0,5 - 40 mils, Accuracy: +/- (2microns = 3% of reading); +/- 0,1 mills + 3% of reading), Minimum individual layer thickness*: 13 microns; 0,5 mils
* For multiple layer applications only. Dependent on material being measured

LD0203 Coating thickness gauge for non-metal substrates, PosiTector 200 C standard thickness gauge, Measures total thickness, Without graphic display, Typical applications: thicker coatings on concrete, fiberglass, etc. Range (polymer coatings): 50 - 3800 microns; 2 - 150 mils, Accuracy: +/- (2microns = 3% of reading); +/- 0,1 mills + 3% of reading)

LD0204 Coating thickness gauge for non-metal substrates, PosiTector 200 C advanced thickness gauge, Measures total thickness and individual layers, With graphic display
Typical applications: thicker coatings on concrete, fiberglass, etc.
Range (polymer coatings): 50 - 3800 microns; 2 - 150 mils
Accuracy: +/- (2microns = 3% of reading); +/- 0,1 mills + 3% of reading)
Minimum individual layer thickness*: 50 microns; 2 mils
* For multiple layer applications only. Dependent on material being measured.

POWDER COATING METER

The TQC PowderChecker XP optimizes the powder application by measuring the output of the cabin. The TQC PowderChecker XP measures uncured powder coatings using ultrasonic technology to automatically calculate a predicted cured thickness. This is sent by Bluetooth® to the recorder, where the value is shown in the large display. Taking a measurement is fast and accurate (3%) in the range of 30 to 110 microns / 0.8 - 4.3 mils.

Using the TQC PowderChecker XP saves on powder and reduces loss of products. For most powders no calibration adjustment is required.

LD5820 TQC PowderChecker XP

POSITEST for steel

COATING THICKNESS

Magnetic pull-off thickness gage for the Non-destructive measurement of non-magnetic coatings (paint, enamel, plastic, galvanizing, metalizing, plating, etc.) on STEEL.

LD5003 PosiTest GM 0 - 8 mils
LD5004 PosiTest FM 0 - 80 mils

POSIPEN for steel

COATING THICKNESS

PosiPen coating thickness gage has a very small, unique magnet which can be placed with pin-point accuracy on extremely small parts, and on peaks and valleys. Ideal for measuring non-magnetic coatings such as paint, enamel, plating, hot-dip galvanizing on steel.

LD6000 PosiPen 0.25 - 20 mils

COATING THICKNESS STANDARDS

COATING THICKNESS

Certified thickness Standards are used to verify the accuracy and operation of coating thickness gages and are an important component in fulfilling both ISO/QS-9000 and in-house quality control requirements. Contracts often specify that coating thickness measurements be taken by gages whose measurement accuracy is traceable to a National Metrology Institute such as NIST or PTB.

LD5400 Coating thickness calibration standard, set of 5 Plastic Shims, Non-Certified
25 µm (1 mil) Orange ± 20%, 50 µm (2 mil) Red ± 10%, 125 µm (5 mil) Blue ± 5%, 250 µm (10 mil) Brown ± 5%, 500 µm (20 mil) Yellow ± 5%

LD5401 Defelsko CAL S1 standard, Metal plate, S series, Epoxy on Steel, 0/75/250/500 µm, 4 plates

LD5417 Coating thickness calibration standard, set of 8 Plastic Shims, Certified, accuracy ±2 µm (±0.08 mil) 25 µm (1 mil) Orange, 50 µm (2 mil) Red, 75 µm (3 mil) Green, 125 µm (5 mil) Blue, 250 µm (10 mil) Brown, 500 µm (20 mil) Yellow, 1000 µm (40 mil) White, 1500 µm (60 mil) Black

LD5418 Coating thickness calibration standard, single Plastic Shim, Certified, ±2 µm (±0.08 mil)
Select one from: LD5417

ULTRASONIC WALL THICKNESS GAUGE

MATERIAL THICKNESS

Ultrasonic thickness gauge specifically designed to measure the thickness of metallic and non-metallic materials e.g. aluminium, titanium, plastics, ceramics, glass and plastics. It can also be used to monitor all types of pipes and pressure vessels for loss of thickness due to corrosion or erosion. The gauge is easy to use and, after a simple calibration to a known thickness or sound velocity, the gauge will give accurate readings to an accuracy of 0.5%.

Sound velocities of 11 different materials (Steel, Cast iron, Aluminum, Red copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray cast iron, Nodular cast iron) are pre-set, or choose user-set sound velocity (range 500-9000 m/s).

LD7008 TM-8812 Ultrasonic thickness gauge. Measuring method: Ultrasonic pulse echo Measuring frequency: 5MHz. Measuring range: 1.20 - 200 mmm / 0.05-7.9 inch (steel); Actual range varies with the types of material measured. Accuracy: +/- (0.5%H ± 0.1) mm. (0.5% RDF +/- 0.04 inch) Sound velocity: 500 - 9,000 m/s. Display: large LCD display. Resolution: 0.1mm. (0.04 inch) Working temperature: 0 ºC ~ +50 ºC / 32ºF + 122ºF. Power Supply: 4 AAA alkaline batteries (total 6.0V). Weight: 160g / 0.352LBS; 0.09 LBS (main unit); 40g (probe)

POSITECTOR ULTRASONIC

MATERIAL THICKNESS

The PosiTector UTG instruments are handy Ultrasonic Thickness Gauges as Standard or Advanced Models. Both available with a selection of 2 probe styles, UTG C – Corrosion Probe for measuring the effects of corrosion and erosion on tanks, pipes or other structures which only can be accessed on one side or UTG M – Multiple-Echo Probe to measure, non-destructive, the underlying metal (material) thickness to be measured on objects that are already provided with a coating.

The PosiTector UTG Standard models include:

- Monochrome display
- Smart Couple TM
- Storage of 250 readings
- No software required

The PosiTector UTG Advanced models include:

- Hi contrast reversible color LCD
- B-Scan
- Smart CoupleTM
- Storage of 100,000 readings
- Onscreen help
- Screen Capture
- No software required
- A-Scan
- Auto Gain control
- Scan mode
- Store thickness
- Data transfer via USB to a PC or via Bluetooth Wireless Technology
- Onscreen batch annotation

LD7106 Defelsko Positector UTGC3-E Corrosion Gauge advanced
LD7108 Defelsko Positector UTGM3-E Multiple Echo gauge advanced
LD7105 Defelsko Positector UTGC1-E Corrosion Gauge standard
LD7107 Defelsko Positector UTGM1-E Multiple Echo gauge standard

HIGH VOLTAGE HOLIDAY DETECTOR

POROSITY

The TQC High Voltage Holiday Detector or porosity test provides accurate detection of pinholes, flaws, inclusions, thin spots and bubbles in a coating. The gauge has been specifically designed to revolutionise high voltage DC testing of coatings, making it safer, easier and more reliable than previously possible.

The high voltage technique can be used to test coatings up to 36 mm thick. This method is ideal for inspecting paint on pipelines, tankbottoms and other protective coatings. Coatings on concrete can also be tested using this method.

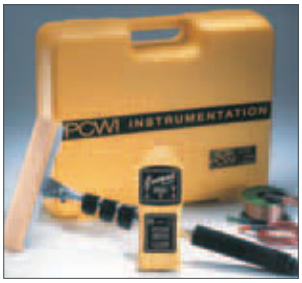
The instrument has a lot of unique features. A current limiting to avoid coating damage, , and a safety hand grip without sensitive electronics. Extended ribbing on the handle provides an effective barrier between the high voltage and the user. Accurate sensitivity adjustment allows use on metal-lised or slightly damp coatings.

Pictures copyright: PCWI

LD8503 TQC High Voltage Holiday Detector 30kV
LD8504 TQC High Voltage Holiday Detector 15kV

PINHOLE DETECTOR - LOW VOLTAGE

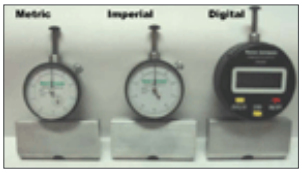
POROSITY



The TQC Low Voltage Pinhole Detector or porosity tester utilises the wet sponge technique and has been designed to set a new standard for wet sponge detectors - namely, a high quality, low voltage detector with similar accessories to a high voltage spark tester.

LD8510 TQC Low Voltage Pinhole Detector. Testvoltage: (9, 67.5, 90V)

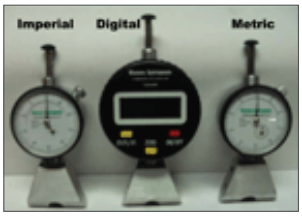
BASIC PIT GAUGE



Western Instrument Pit Gauges Assure compliance with Corrosion Allowances for equipment whenever corrosion affect materials such as pipeline, vessels, piping, storage tanks and much more.
The Basic Pit Gauge has a Center Mount 2 ¼ base . "Our most popular Gauge"
Available in three model: Imperial, metric and digital.

SP1580 Basic pit gauge

POCKET PIT GAUGE



The Reversible Blade of the Pocket Pit Gauge (N88-4) is used to measure isolated pitting with its two Contact Surfaces, a 1.5" (38mm) long Knife Edge Blade, as well as a Spot Blade with two Reference Points that are 0.375" (9.5mm) apart.

Available in three model: Imperial, metric and digital.

SP1581 Pocket pit gauge

CONTACT POINTS

Western offers a variety of Contact Points for the Pit Gauge Product Series which are all 0.625" (16mm) long. Any ADG Contact point can be used with our special dial indicators but a different length may affect Height Zeroing of the Pit Gauge or the vertical position of the Dial Indicator within a Pit Gauge Blade. Contact Points are easily replaced by extending the Dial Indicator to the maximum depth position and turning it counter clockwise

SP1582 Contact points
SP1583 Contact points
SP1584 Contact points

TRI-GAUGE

The Tri-Gauge® is today's most versatile Lever Pit Gauge, with its Metric and dual Imperial Scales. Additionally, the Tri-Gauge® serves as a basic Weld Inspection Gauge for; Undercut Depth, Weld Crown Height, a Porosity (diameter) Comparitor; and both Metric and Imperial Rules. The Tri-Gauge® is fitted with a Patented pointer Offset Correction® for improved accuracy and repeatability.

SP1589 Tri-Gauge

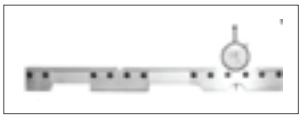
BRIDGING PIT GAUGE SYSTEM

Western's advanced Bridging Pit Gauge System® and our new Jr. Bridging Pit Gauge® take over, where the capabilities of standard Pit Gauges fall short, for evaluating large areas of Weightloss Corrosion. These Bridging Bar type Pit Gauges can also be used to measure Dents and Buckles on Pipelines, Shell Settlement on Storage Tanks, etc. All of these Bridging Bars can be used with any of our Dial Indicators (Imperial, Metric, or Digital), and any of our Contact Points.

SP1586 Bridging pit gauge system

JR. BRIDGING PIT GAUGE

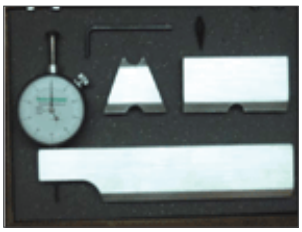
Formally the Span Gauge the Jr. Bridging Pit Gauge® was introduced to provide a lower priced "Bridging Bar" as an alternative. The following is a list of components for the 3 models of Jr. Bridging Pit Gauge®. These units are provided disassembled in a carry case, along with it's hardware, extra contact point, and instructions, with the following components; Jr. Bridging Pit Gauge® (N88-11) - Assembles to 13 ½" long. • Magnetic Main Blade and Dial Indicator • 2 Extender T's • 2 End Blades Jr. Bridging Pit Gauge Plus® (N88-11P) - Assembles to 15 ½" long. • Magnetic Main Blade and Dial Indicator • 2 Extender T's • Magnetic Connector Blade • 2 End Blades (second can be used as a Slider Blade) Jr. Bridging Pit Gauge Super® (N88-11S) - Assembles to 27" long. • Magnetic Main Blade and Dial Indicator • 4 Extender T's • 3 Magnetic Connector Blades • 2 End Blades (second can be used as a Slider Blade)



SP1587 Jr. Bridging Pit Gauge

VESSEL INSPECTORS KIT

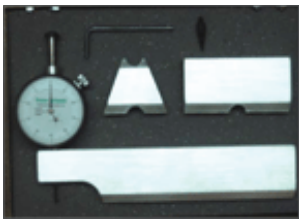
The Vessel Inspectors Kit consists of the following components:
Carry Case, Dial Indicator, Reaching blade, Pocket blade, Basic Blade, Allan key, Spare contact point, Operator instructions



SP1588 Vessel Inspectors Kit

PIPELINE INSPECTORS KIT

The Pipeline Inspectors Kit consists of the following components:
Carry Case, Dial Indicator, Reaching blade, Pocket blade, Basic Blade, Allan key, Spare contact point, Operator instructions



SP1589 Pipeline Inspectors Kit

CROSS CUT ADHESION TEST KIT

The TQC Cross Cut Adhesion Test KIT's CC1000/CC2000/CC3000 are used to test the adhesion of dry coats of paint on their substrate by means of a series of cuts through the coating. Two series of parallel cuts cross angled to each other to obtain a pattern of 25 or 100 similar squares. The ruled area is evaluated by using a table chart after a short treatment with a stiff brush, or adhesive tape for hard substrates.

FEATURES

The round cutting knife of the TQC Cross Cut Adhesion Test KIT CC1000 has eight cutting edges that can be changed easily by rotating the knife. The self positioning knife bracket of the TQC Cross Cut Adhesion Test KIT CC1000) ensures equal pressure on the cutting knife.

The cutting knife of the TQC Cross Cut Adhesion Test CC2000 is easy to exchange without the use of extra tools. The self positioning knife bracket of the TQC Cross Cut Adhesion Test CC2000 ensures equal pressure on the cutting knife.
The cutting depth of the TQC Cross Cut Adhesion Test KIT CC3000 can be adjusted while the cutter is guided by two ball bearings to assure reproducible results. The depth of the TQC Cross Cut Adhesion Test KIT CC3000 is adjustable to measure coatings up to 250 µm thick.

SCOPE OF SUPPLY

Each TQC Cross Cut Adhesion Test KIT's CC1000/CC2000/CC3000 contains a grip with cutter, a brush, an illuminated loupe and a roll of adhesive tape acc. EN ISO 2409.
The CC2000 is also available as a basic cutter, without tape, brush, adhesive tape and illuminated loupe.

OPTIONAL ITEMS

SP3007 Adhesion tape, single roll, adhesion to steel 4.3 N/cm
SP3010 Adhesion tape, set of 3 rolls, adhesion to steel 4.3 N/cm
SP3020 Adhesion tape, single roll, adhesion to steel 7.6 N/cm
SP1710 Nylon Brush for Cross Cut Adhesion Test
SP9700 Lighted Magnifier 2.5x

CROSS CUT ADHESION TEST KIT

Knife	CC1000 kit	CC2000 kit	CC2000 basic	CC3000 kit
ISO 1mm	VF1839	SP1690	SP1660	SP1680
ISO 2mm	VF1842	SP1691	SP1661	SP1681
ISO 3mm	VF1844	SP1692	SP1662	SP1682
ASTM 1mm	VF1846	SP1699	SP1663	SP1683
ASTM 1,5mm	VF1847	SP1700	SP1664	SP1684

OPTIONAL ITEMS

Spare knife	CC1000	CC2000/CC3000
ISO 1mm	VF2355	SP1702
ISO 2mm	VF2357	SP1703
ISO 3mm	VF2358	SP1704
ASTM 1mm	VF2359	SP1705
ASTM 1,5mm	VF1861	SP1706

MASTER PAINT PLATE

ADHESION

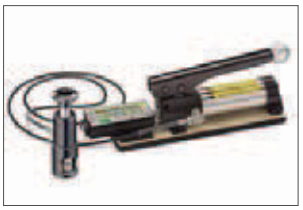
The TQC Cross Cut Adhesion Test KIT (Master Paint Plate) is a stainless steel measuring tool that features: a 1 mm, 1.5 mm, 2 mm and 3 mm cross cut adhesion test according NEN-EN-ISO 2409:2003 and ASTM D 3359 (X-cut) andreas cross, wet film thickness gauge from 50 up to 160 microns, edge grind checker for correct roundness of edges, wet film applicator ranging from 0 to 180 µm as well as leveling test provi-ding an indication of the viscosity of the coating. Delivery includes cutting tool and tape.

Dimensions: 100 x 55 mm, Cross cut test ASTM and ISO, Wet film thickness test (50-160µ, in steps of 10µ), Leveling test (1, 1.5 and 2 mm), Film applicator (0-180µ, in steps of 20µ), Edge radius 2, 3, 4 and 5 mm

SP3000 TQC Cross Cut Adhesion Test Kit (Master Paint Plate)

TESTER POSITEST AT-A (AT)

ADHESION



The new PosiTest AT-A Automatic Adhesion Tester measures adhesion of coatings applied on metal, wood, concrete and similar substrates.The system is equipped with an electronically controlled hydraulic pump and measures according to ISO4624 and ASTM D 4541. The unit is equipped with a self aligning quick coupling which secures the dollies tight. Tests are performed by a simple press on the button. Preset values like psi or MPa, Dollie size, adhesion force according international test methods and storing results into memory. Big display with Hold function for indication of max. values. Evaluating measured values on PC is possible by using an adapter and PC-software.

LD9300 Defelsko PosiTest AT-A Adhesiontester. Automatic controlled hydraulic Pull-Off Adhesion Tester with large display.

LD9301 Defelsko PosiTest AT Adhesiontester. Manually controlled hydraulic Pull-Off tester with large display.

ADHESION TEST PAT HANDY

ADHESION

The TQC Adhesion Test Pat Handy is an easy to use, lightweight hydraulic adhesion tester that applies an increasing level of pull off force to a dolly adhered to the surface under test simply by turning the handle. The adhesion test head has self adjusting legs, which ensure that the pull off force is always applied 90º to the coating even on uneven substrate surfaces. The self adjusting feature results in extremely accurate and reproducable adhesion test results. The TQC Adhesion Test Pat Handy weighs only 1250 gram / 2.75 LBS and comes complete with an A4-size carrying 80 mm height case.

LD9200 TQC Adhesion Test Pat Handy. Maximum pull force: 6.3 kN. Range: depending on the dolly use to max. 120 mPa. Accuracy: 1%. Accuracy: nm

BRISTLE BLASTER

SURFACE PREPARATION

This system combines ease of use, superior performance and safety of operation in a versatile tool that handles a wide variety of surface preparation tasks. Pneumatic and Electric Drive Units optimized for safety and performance — Specialized Wire Belts for a wide variety of surface preparation tasks — Vinyl Eraser Wheel for removing vinyl decals, tapes and adhesives. The system's revolutionary technology offers distinct advantages over conventional surface preparation methods and will yield superior results — with far less time and effort.

SURFACE PROFILE/COMBINATION GAUGE

SURFACE ROUGHNESS

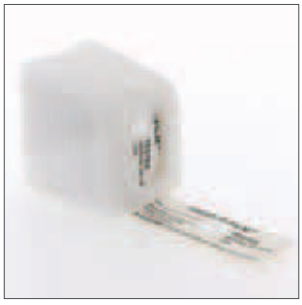
The TQC Surface Profile & Coating Thickness gauge is a combination gauge. that can be equipped with two different tips, one for surface roughness and another for coating thickness. Supplied with a sharp tungsten carbide replaceable tip for surface profile measurement, a hardened round tip for coating thickness measurement, a glass plate for zero calibration and a leather carry pouch that fits all items.

SP1560 TQC Surface Profile and TQC Coating Thickness gauge, Complies with: ISO 2808, ASTM D4417-B, JIS K 5600-1-7, BS EN ISO 2808, BS 3900-C5, IMO MSC.215(82),
Range: 0~3,4 mm / 0~0.13 inch, Resolution: 1µm / 0.04 mil, Accuracy: ± 5µm / 0.2 mil,
Optional: Calibration certificate

TESTEX REPLICA TAPE, PRESS O-FILM

SURFACE ROUGHNESS

Replica tape for measuring blasted surface profiles. By placing the TQC replica tape on the surface and rubbing over it, the Rt (total roughness) or peak-to-valley height of the profile can be taken and then measured with a film thickness meter.



1. TQC Replica tape consists of a layer of compressible foam affixed to an incompressible polyester substrate.
2. When pressed against a roughened/gritblasted (steel) surface, the foam collapses acquiring an impression of the surface.
3. Placing the compressed tape between the anvils of the SP1570 micrometric thickness gage, and subtracting the contribution of the incompressible substrate (50 micrometers or 0.002 inches), gives a measure of the surface profile.

One box of Testex contains tape for 50 measurements.

LD2065 Type Testex-tape Medium, foam layer thickness 0.4 mills/10µm not to be used with a film thickness meter
LD2066 Type: Testex-tape coarse Minus, range 0.5 to 1.0 mils/ 12 to 25 µm
LD2071 Type: Testex-tape COARSE range: 0.8 to 2.5 mils / 20 to 64 µm
LD2070 Type: Testex-tape X-COARSE range:1.5 to 4.5 mils / 38 to 115 µm
LD2067 Type: Testex-tape X-coarse Plus, range 4.6 to 5.0 mils / 116 to 127 µm

FILM THICKNESS GAUGE FTG2000

The TQC Film thickness gauge is a high precision film and foil thickness gauge, especially developed for measuring so-called "replica tapes" as Testex®, used mainly to measure the surface profile.
The large clear display makes it easy to read the measurement under all conditions. Values can be displayed in either microns or inches. To minimize the influence of body/hand temperature the gauge is mounted detached from the holder.

The TQC film thickness gauge operates completely according to "ISO 8503-5 Preparation of steel substrates before application of paints and related products

- Surface roughness characteristics of blast-cleaned steel substrates
- part 5: Replica tape method for the determination of the surface profile."

As described in this standard the closing force is 1,5 N as specified in the standard. The gauge has to have an accuracy of 5 micron and a resolution of 1 micron. The TQC Film thickness gauge is supplied in a hard case.

SP1570 The TQC Film thickness gauge, Range: 0-1000 Micron / 40 mil.,
Resolution: 1 Micron / 0.05 mil, Accuracy: ± 5 Micron / 0.2 mil, Battery: 1,5V Type SR44

STEEL SURFACE ROUGHNESS COMPARATOR

Comparison standard according to ISO 8503 part 1 and ASTM D 4417 Method A, made of quality steel. Indicates the surface condition of blasted steel acc. To ISO 8503 in grades of fine, medium, and coarse. The Surface Roughness Comparator allows quick and easy identification of the various grades.

By placing the appropriate comparator (G for Grit, S for Shot) against a blast cleaned surface, the finish achieved can be compared against the four sections of the comparator. It is then a simple matter to identify (by sight and touch) the standard surface:

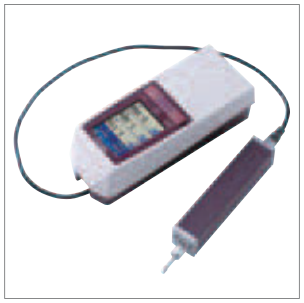
- Fine grade equal to or above segment 1 but below - segment 2
- Medium grade equal to or above segment 2 but below - segment 3
- Coarse grade equal to or above segment 3 but below - segment 4

LD2040 Surface roughness comparator grit
LD2050 Surface roughness comparator shot

Other available comparators:

LD2051 KTA keane-tator surface profile comparator model - KTA-standard SAND
LD2052 KTA keane-tator surface profile comparator model - KTA-standard GRIT
LD2053 KTA keane-tator surface profile comparator model - KTA-standard SHOT
LD6010 Rugotest no.3

SURFACE ROUGHNESS GAUGE SJ-210



Surface Roughness Meter SJ-210 offers a choice of 39 roughness parameters (according to DIN EN ISO, VDA, JIS, ANSI, MOTIF and freely selectable variables) and a probe geometry according to DIN EN ISO 3274: 2 ìm / 60 ° (recommended). The device has an incredibly simple intuitive menu navigation on a 2.4 "high resolution TFT color display. The screen is rotated electronically. The integrated drive unit can be removed or used.

Surface Roughness Meter SJ-210 has an internal memory for ten measurements. This can be extended with external storage in the form of a Micro SD card. The SJ-210 Surface Roughness Meter provides interfaces for USB, RS232, SPC and connection for footswitch. Included are USB data analysis software tools and cable-SJ.

LD0015 Surface roughness meter Mitutoyo SJ210 with SJ-tools. Data analysis software

HULL ROUGHNESS GAUGE

Measuring and controlling the roughness of a ship's hull plays an important roll in the performance and operating costs of a vessel. The roughness of a ship's hull increases due to corrosion and/or bio fouling. Proper maintenance and the correct application of high end anti-fouling coatings reduce the hull roughness which will lead to significant savings on fuel consumption and CO2 emissions. For that reason the hull roughness is measured during indocking and outdocking surveys.

The TQC HRG is a compact system to measure the AHR value (Average Hull Roughness) of sea going vessels. The sensor is equipped with three non-slip wheels and a carbide tipped stylus and is moved over the ship's hull in a horizontal way collecting series of 12 measurements each. Statistics, time/ date and location of each series and the average hull roughness are automatically calculated and stored in the instrument's internal memory which connects to a personal computer via USB connection.

The control unit can be operated with just one hand, a 4-WAY directional push button operates an intuitive menu on a large illuminated display. The neck strap keeps the users hands free when required.
The sensor is compact and equipped with a set of LED's to indicate the status of the instrument so operation is possible without observing the control unit.

Large illuminated LCD display of 80 mm.

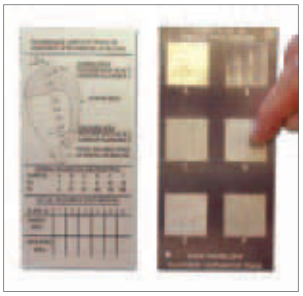
SPECIFICATIONS:

Dimensions Sensor:	205 X 80 X 40 mm (8 x 3.1 x 1.6 inch)
Weight sensor:	630 g (1.4 LBS)
Dimensions Control Unit:	200 X 115 X 40 mm (8.1 x 4.5 x 1.6 inch)
Weight Control Unit:	±350 g (0.78 LBS)
Memory capacity:	4000 series
Display:	LCD 80mm (3.14 inch), illuminated

DC9000 TQC Hull Roughness Gauge

SHIP PROPELLER ROUGHNESS COMPARATORS

SURFACE ROUGHNESS



TQC Ship Propeller Roughness Comparators to the estimate the surface roughness by both touch and sight. The TQC Ship Propeller Roughness Comparators are developed for the specific profiles related to the condition of ships propellers over the life of the propeller. Each Ship Propeller Roughness Comparator have 6 specimens of Ship Propeller Blade surfaces in various conditions, Each Ship Propeller Roughness Comparator have 6 specimens of Ship Propeller Blade surfaces with profiles varying from Ra 1-30 µm, Rz 6-180 µm. TQC Ship Propeller Roughness Comparators are also supplied with guidance on the report for Propeller Blades.

LD2041 TQC Ship Propeller Roughness Comparator, Superintendent version. For use above water, for example in drydock or office.

LD2042 Ship Propeller Roughness. Comparator Divers version. For use under water.

TQC BRESLE KIT

SURFACE CLEANLINESS

The TQC Bresle Kit - Chloride Test Kit complies with the ISO 8502-6 and ISO 8502-9 standards that describe the Bresle Method to assess the level of soluble salts using a patch, distilled water and a conductivity gauge. The conductivity is mainly directly proportional to the concentration of dissolved chloride ions in the solution. The kit includes all the necessary equipment to execute a Bresle test that will indicate the contamination of soluble salts on blast-cleaned surfaces prior to coating. Inside the TQC Bresle Kit - Chloride Test Kit is a conductivity gauge used for the assessment of soluble salt ions as chlorides, sulphates and nitrates.

The TQC Bresle kit has changed significantly. In comparison to the other kits on the market it's accuracy increased 60 fold, making it the most advanced kit available.

ISO 8502-6, ISO 8502-9, ISO 11127-6, ISO 11127-7

The TQC Bresle Kit - Chloride Test Kit is also suitable to determine the contamination of blast-media in use. This important test described in the ISO 11127-6 and ISO 11127-7 standards helps to prevent that the dissolved salts in the recycled abrasive media or water will not re-contaminate the surface being cleaned.

Digital conductivity meter, 25x bresle patch, 6x 25ml beaker, 200ml distilled water, 20ml syringe with needle, calibration and rinse solution, magnetic Bresle test spot marker.

SP7310 TQC Bresle Kit- Chloride Test Kit

TQC BRESLE PATCHES

SURFACE CLEANLINESS

The TQC Bresle Patch is used to test for surface contaminants, such as salt, which may cause major problems and increase maintenance costs for shipping, vessels, ballast tanks, oil and gas piping, industry buildings and steel structures in general. Coating failure such as blistering and corrosion may be the result of a too high level of salt prior to painting. The Bresle Method described in the ISO 8502-6 is commonly used to measure the level of surface salts prior to coating. A so-called bresle patch (a small self-adhesive plastic patch) with a washed latex membrane and a known surface area is used to dissolve the soluble salts.

LD6504 TQC Bresle Patches

CHLOR*TEST

SURFACE CLEANLINESS

CHLOR*TEST was developed for ease of use and to prevent outside and cross contamination. The components are premeasured to ensure accurate results in parts per million and micrograms per square centimeter

SP7305 Chlor*Test

CHLOR*TEST A

SURFACE CLEANLINESS

Chloride Ion Test for Abrasives A test that you can do in the field. CHLOR*TEST "A" is a self contained, accurate, and reliable test kit that provides results in minutes. Cross contamination, from test to test, is eliminated through one time use of individual components. The components are premeasured to ensure accurate results in parts per million. In addition, no temperature correction is needed from 41ºF to 176ºF. Use this innovative product confidently with any abrasive.

SP7306 Chlor*Test A

CHLOR*TEST W

SURFACE CLEANLINESS

Chloride Ion Test for Water/Liquids CHLOR*TEST "W" is a complete, ready to use test kit. Even an inexperienced person can accurately measure chloride levels. CHLOR*TEST "W" was developed for field and laboratory use. Cross contamination from test to test is eliminated through one time use individual components. Accurate results in parts per million are obtained. No temperature correction is needed from 41°F to 176°F. Testers around the world will use this innovative product with confidence. Whether in the laboratory or out at the job-site, obtain accurate ion specific measurement of chlorides from 0 - 2,000 ppm. Use CHLOR*TEST "W" for water and many other liquids.

SP7307 Chlor*Test W

CHLOR*TEST C

SURFACE CLEANLINESS

Detect and measure chlorides in concrete. Chloride penetration into concrete frequently causes corrosion of rebar and other steel. Chlor*Test "C" is the only complete and easy to use concrete test kit - even an inexperienced personcan get accurate results.

SP7308 Chlor*Test C

AMINE BLUSH KIT

The TQC Amine Blush Kit is a multi step amine blush indicator. Due to advanced research on suitable media the TQC Amine Blush Kit is the most advanced kit on the marked. Based on a double colour change the indicator is the first to implement this multi step colour change.

SP7500 TQC Amine Blush kit

DUST TEST KIT

The TQC Dust Test Kit according to ISO 8502-3 allows assessment of the quantity and size of dust particles on surfaces prepared for painting. Dust on blast cleaned surfaces can reduce coating adhesion, leading to premature coating failure and sub-standard coating finish. The dust test kit can be used in accordance with the recommendations of ISO 8502-3 either as a pass/fail test or as a permanent record of the presence of dust.

STANDARDS

ISO 8502-3

SCOPE OF SUPPLY

Box with dust comparator display board, dust assessment plate, illuminated magnifier, adhesive tape and a set of test record sheets.

OPTIONAL ITEM

Spring loaded roller for dust test tape

The TQC Spring Loaded Roller is used to perform objective dust tests according ISO 8502-3, and eliminates the human error by pressing with a constant force on the dust test tape. The ISO 8502-3 quantifies the quantity and size of dust particles on surfaces prepared for painting using a standarized tape for dust test. Dust on blast cleaned surfaces can reduce coating adhesion, leading to premature coating failure and sub-standard coating finish.

The Spring Loaded Roller presses the tape onto the surface with a constant force of 44,13 Newton (4,5kg) by means of a spring system, four wheels, and a special rubber roll with a specified hardness. The apparatus is made of titanium anodized aluminum.

SP3200 TQC Dust Test Kit
SP3600 Spring loaded roller for dust test tape

PRETREATMENT TEST KIT (PTK)

SURFACE CLEANLINESS

The TQC Pretreatment Test Kit is especially composed to control all relevant parameters during the pretreatment of steel prior to painting. The PTK is available as BASIC KIT and FULL KIT.
The strong double walled suitcase holds a smart selection of inspection tools and measuring devices to assist the paint inspector on a survey to inspect blast cleaned steelwork.

The BASIC KIT contains a Bresle Test for surface and blast media measurements, a Dust Test kit and Telescopic inspection mirror. The FULL KIT has a large number of extra items: DewCheck 4 dew point gauge, Coating Adhesion Tester MasterPaintPlate, TQC Surface Profile / Coating Thickness Gauge, TQC Spring Loaded Roller, ISO8501-1:2007 Blast Cleanliness Standard Book, Grit profile Comparator, UV Inspection Flashlight. It is also possible to make a selection out of the optional items.
The quality of correct pretreatment of a surface prior to application of the coating is essential to ensure the quality of the coating and that its optimum lifetime is achieved.

STANDARDS

ISO8502-6 and 9, IMO MSC.215(82), IMO MSC.244(83), ISO8502-3, ISO 8502-4, BS 7079-B4, US Navy NSI 009-32, US Navy PPI 63101-000, ASTM D4417 – B, ISO 2808-3, ASTM D4138, ISO8501-1:2007, ISO 8503 part 1and 2, ASTM D 4417 Method A, ASTM E2501, ISO 2409 :2003 and ASTM D3359.

SP7315 Pre Treatment Kit Full
SP7316 Pre Treatment Kit Basic

UV INSPECTION LANTERN

VISUAL INSPECTION

Robust, handheld rechargeable inspection spotlight powered by 7 high-flux UV LED's, with a total emission power of over 2200mW. TQC UV inspection lantern is used to detect contaminations that react under UV-illumination and cannot be seen with naked eye such as some organic fats, alkaline contaminants etc.. Ideal to inspect the cleanliness of steel prior to painting. Delivered in a sturdy plastic suitcase complete with yellow safety glasses for optimal contrast, mains adapter.

Wavelength: 390 nm, LED lifetime:10,000 hours, Runtime (fully charged): approximately 2 hours

LD7225 TQC UV Inspection Lantern

INSPECTION MIRRORS

VISUAL INSPECTION

Ideal for visual inspection of hard-to-reach spots. Spots that are difficult to inspect are even more difficult to blast or coat. With a simple inspection mirror a visual inspection behind stiffeners, under- or on top of I-beams or other awkward places is easy to perform.

Article no.:	LD3004	LD3025
	Compact telescopic mirror	Robust telescopic mirror
Diameter mirror (mm) / (inch)	Ø 31 / 1.22 inch	Ø 56 / 2.2 inch
Length in / out (mm) (inch)	in 130 / out 455 - 5 /18 inch	in 254 / out 375 - 10 / 15 inch
Materials	Glass / metal	Glass / metal
Weight (gr) / (LBS)	40 / 0.09 LBS	100 / 0.352 LBS

LD3004 LD3025

SSPC-VIS 1 PICTORIAL SURFACE

VISUAL INSPECTION

Standard dry blast cleaning. Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning.

SSPC's most widely used visual reference features over 50 full-color photos of previously coated and uncoated, rusted steel surfaces before and after dry abrasive blast cleaning. Similar to the Swedish and British standards, but the pictures of the required final appearances match the written descriptions in the USA standards. Cleanliness requirements for conditions depicted are defined by the SSPC surface preparation specifications for white metal (SP 5), near-white (SP 10), commercial (SP 6), industrial (SP 14), and brush-off (SP 7) blast finishes. Appendix photographs show variations in white metal surfaces caused by different metallic and non-metallic abrasives, profile depth, angle of view, and lighting. Now with guides in both English and Spanish!

LD3055 SSPC-VIS 1 American photographic performance of the Swedish Cleanliness by Dry Blasting

SSPC-VIS 2 - PICTORIAL RUST STANDARD

VISUAL INSPECTION

Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces.
SSPC's popular rust standard features a series of 27 full color images and 27 black and white diagrams representing various degrees of spot, general, and pinpoint rusting on painted steel surfaces. Text and tables provide a guide to the use of the reference photographs; a scale and description of standard rust grades; a comparison of SSPC, ASTM, ISO, and other rust grade scales; and other useful information.

LD3056 SSPC-VIS 2 Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces.

SSPC-VIS 3 - PICTORIAL SURFACE

VISUAL INSPECTION

Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning. Contains a series of 43 full-color reference photographs to be used as a supplement to the SSPC standards for hand and power tool cleaned steel. Shows a total of seven different steel surfaces (four uncoated and three previously coated) before and after hand tool cleaning (SP 2), power tool cleaning with power wire brushes and sanding discs (SP 3), power tool cleaning to bare metal (SP 11), and commercial grade power tool cleaning (SP 15). Also contains photos of SP 11 surfaces with a restored profile, a revised guide to the use of reference photographs, a new table of standards and conditions depicted, and additional explanatory notes.

LD3057 SSPC-VIS 3 Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning

SSPC-VIS 4 - NACE VIS 7

VISUAL INSPECTION

Pictorial standard waterjetting. Guide and Reference Photographs for Steel Surfaces Prepared by Waterjetting

Shows a total of six different steel surfaces (two uncoated and four previously coated) before and after waterjetting. Photographs illustrate four separate degrees of cleaning (WJ 1, WJ 2, WJ 3, and WJ 4) for each initial condition, with additional photos that depict the appearance light, moderate, and heavy flash rust after cleaning. Also contains a written guide to the use of reference photographs and additional explanatory notes. Cleanliness requirements for conditions depicted are defined by the joint SSPC/NACE surface preparation specification for high- and ultrahigh-pressure water jetting (SP 12/NACE 5).

LD3058 SSPC-VIS 4/NACE VIS 7 Guide and Reference Photographs for Steel Surfaces Prepared by Waterjetting

SSPC-VIS 5 - NACE VIS 9

VISUAL INSPECTION

Guide and Reference Photographs for Steel Surfaces Prepared by Wet Abrasive Blast Cleaning. Shows two uncoated, rusted steel surfaces (Conditions C and D) before and after wet abrasive blast cleaning. Photographs illustrate two degrees of cleaning (WAB 6 and WAB 10) for each initial condition, with additional photos that depict the appearance of light, moderate, and heavy flash rust after cleaning. Also contains a written guide to the use of reference photographs and additional explanatory notes. Cleanliness requirements for conditions depicted are defined by the joint SSPC/NACE surface preparation specifications for commercial (SP 6/NACE 3) and near-white blast cleaning (SP 10/NACE 2). Photos of commercial and near-white surfaces achieved by dry abrasive blast cleaning can be found in SSPC-VIS 1.

LD3059 Guide and Reference Photographs for Steel Surfaces Prepared by Wet Abrasive Blast Cleaning.

ISO 8501-1 2007 - PREPARATION GRADES

VISUAL INSPECTION

In 2007 updated version of the standard measure for the visual evaluation of rust and purity levels of non-coated steel. Also known as the "Swedish steel blasting grades" SS 05 59 00 (Sa). Contains high-quality colour photographs for estimating the rust levels and purity levels after cleaning manually or by machine (also with blasting).

Target audience: Blasting and painting companies and their clients, paint technicians, advice bureaux and industrial coating businesses.

LD3020 Illustrated book ISO 8501-1

ISO 8501-2 1998 - SPOT REPAIR GRADES

VISUAL INSPECTION

Purity levels of painted steel surfaces from which the paint layer has been weathered in places. Indispensable when repairing damage to corrosion-resistant paint systems and in the conservation or, for example, welding joints after construction.

LD3027 Spot repair grades ISO 8501-2

ISO 8501-3 2006 - PREP. GRADES OF WELDS

VISUAL INSPECTION

Grades of removal previous coatings 8501-3:2006 describes preparation grades of welds, cut edges and other areas, on steel surfaces with imperfections. Such imperfections can become visible before and/or after an abrasive blast-cleaning process.

The preparation grades given are to make steel surfaces with imperfections, including welded and fabricated surfaces, suitable for the application of paints and related products.

LD3044 ISO 8501-3:2006 illustrated edition

ISO 8501-4 2006 - WATER JETTING STANDARD

PUBLICATIONS

Illustrated edition iso 8501-4:2006 is a hardback A5-format book in three languages (English, French and German) which specifies a series of preparation grades for steel surfaces after removal/partial removal of water-soluble contaminants, rust, previous paint coatings and foreign matter by high-pressure water jetting.
The various grades are defined by written descriptions together with photographs that are representative examples within the tolerances for each grade as described in words. In addition, this part of ISO 8501 specifies both initial surface conditions and after-cleaning flash rust grades, also defined by written descriptions together with representative photographic examples.

LD3045 ISO 8501-4: 2006 illustrated edition

FITZ S ATLAS 2 OF COATING DEFECTS

MISCELLANEOUS

The Fitz's Atlas 2 of coating defects is a reference manual with over 300 colour images, providing a clear and concise description of all problems that could occur, as well as their possible causes.The book is divided into the following sections: Welding faults, Presurface conditions, Coating defects, Microscopy, Marine fouling.

LD3061 Fitz's Atlas 2 of coating defects.

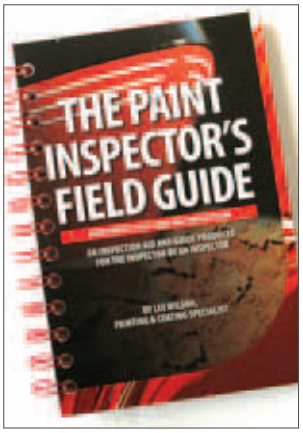
THE PAINT INSPECTOR'S FIELD GUIDE

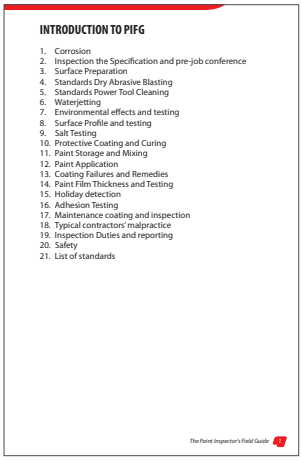
The Inspection of protective coating systems for corrosion control involves a wide range of test methods and techniques. In the Paint Inspector's Field Guide these inspection methods are described in an effort to aid individuals with the basic fundamentals of protective coating inspection whilst in the field.

Lee Wilson, who is a highly qualified and well respected inspector with many years of field experience, provides an excellent description of the actions performed by an inspector and the tools they use. The book covers all aspects from specification review and surface inspection works all the way through to applications and final reporting.

The book is complemented with a wide range of inspection and experience notes making it easy to solve those special problems which are commonly encountered in the field. Besides the textual support, the rich graphics provide clear visual reference to inspection techniques, standards and defects. The years of experience and the editing by Brian Goldie makes the book a pleasure to read and one of the best reference book available.

This is a must have tool for any individual involved or interested in corrosion control by protective coatings and the inspections required to achieve this. All is supplied in a handy compact size.





INTRODUCTION TO PIFG

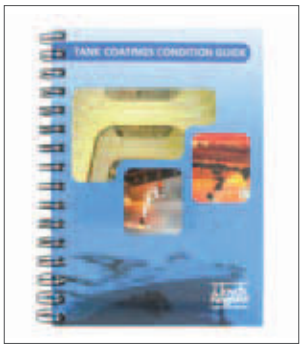
1. Corrosion
2. Inspection the Specification and pre-job conference
3. Surface Preparation
4. Standards Dry Abrasive Blasting
5. Standards Power Tool Cleaning
6. Waterjetting
7. Environmental effects and testing
8. Surface Profile and testing
9. Salt Testing
10. Protective Coating and Curing
11. Paint Storage and Mixing
12. Paint Application
13. Coating Failures and Remedies
14. Paint Film Thickness and Testing
15. Holiday detection
16. Adhesion Testing
17. Maintenance coating and inspection
18. Typical contractors' malpractice
19. Inspection Duties and reporting
20. Safety
21. List of standards

LD3080 TQC Paint Inspectors Field Guide
Papersize: 120 x 180 mm
No pages: 198
Binding: wire-o-binding.

TANK COATINGS CONDITION GUIDE

A guide to assist ship's staff in the assessment of tank, hold and space coatings of existing ships for the purpose of determining compliance with the Rules and Regulations for the Classification of Ships. The guide handles the definition of the tank coating condition in Good / Fair / Poor classification. It also contains the IACS methodology to divide tanks into a number of smaller "areas under consideration" which can easily be identified. Further are included schematics to help defining area determination, percentage of coatings breakdown for specific ship structures and a comparison of common rust scales. A series of full color pictures of tank coatings in various conditions and a section that describes and shows the hotspots for corrosion and other common defects is also part of the guide.

The last section contains sketched indicating common nomenclature and terminology applied to typical structure of major ship types. Year of publication: 2008, Size: 95 x 135 mm, Page's: 120



LD3075 Tank Coating Condition Guide, Publisher : Lloyd's Register, Language : English
Material : Laminated paper in binder, Dimensions : 135 X 95 mm., Pages : 110

ISO HANDBOOKS PAINTS & VARNISHES

ISO-STANDARDS

Collection of more than 280 ISO International Standards covering the best methods for performance of paints and varnishes, as well as for the main groups of raw materials used in their manufacture. Standards for terminology and preparation and protection of steel substrates. Bound into four volumes. All standards are written in English language. Pictures are printed in black and white.

LD3015 Paint & Varnishes part 1. General test methods part 1
LD3016 Paint & Varnishes part 2. General test methods part 2
LD3017 Paint & Varnishes part 3. Raw materials
LD3018 Paint & Varnishes part 4. Preparation and protection of steel substrates

DEWCHECK 4 SERIES 2

CLIMATE

Climatic conditions are of high importance during professional coating jobs. The air temperature and relative humidity affect the curing of paint and coatings but also the surface- and dew point temperature are required in order to detect condensation. Frequent or even continuous measurement of the climatic parameters is a must to ensure high quality coating work and to guarantee the coatings performance. The DewCheck 4 has been the first instrument especially designed for this application.

The DewCheck 4 is simple

- The one hand operation of DewCheck4, keeps one hand free for the operator.
- DewCheck 4 has an easy menu-driven user interface in the language of your choice.
- Clear illuminated display of DewCheck4 shows all 5 parameters in one glance including battery status.
- Trend indicator shows when DewCheck 4 is acclimatized and reads the correct values.

The DewCheck 4 is accurate

- High-end industrial sensors combined with sophisticated calibration procedures guarantee the highest accuracy stability for long terms.
- DewCheck 4 complies with ISO 8502-4.
- Each DewCheck 4 comes with a traceable calibration certificate.
- RH-probe is equipped with an integrated filter to protect the sensor from airborne contaminations.

IDEAL FINISH ANALYSIS Ready

SOFTWARE INCLUDED

The DewCheck 4 software is included

In combination with the USB cable and free of charge TQC Ideal Finish Analysis software (both included) it is easy to generate comprehensive custom reports.

Once the measured data has been stored in memory in one of the eight custom pre-named batches, the climate conditions can be downloaded and analyzed within TQC Ideal Finish Analysis.

Reports can include the measured ambient, surface and dew point temperature that in combination with the relative humidity parameter prove the coatings have been applied according to their specifications.

DC7100 DewCheck 4 Series 2

DEWPOINT DETERMINATION

The TQC DewCheck is over 15 years the ideal solution to determine dewpoint and climatic conditions during paint jobs.However in certain situations the costs of a sophisticated electronic instrument like DewCheck create budget problems. For those situations we introduce a lo-tech solution with a set of products.

With this trio of products the relevant climate conditions can be measured with just a low investment. They also offer a solution for situations where an electronic instrument may not be used because of explosion hazards.

TM0081 Sling Psychrometer measures air temperature and humidity with alcohol filled glass thermometers.

TM0040 Dewpoint calculator is a handy tool to determine dewpoint temperature based upon the measurements from the sling psychrometer.

TM0015 Magnetic surface thermometer indicates the surface temperature of carbon steel.

THERMO-HYGROMETER

The TQC Thermo hygrometer is a simple hand-held digital thermo/hygrometer. Temperature and air humidity are displayed simultaneously. Equipped with MIN/MAX memory, °C/°F selection, HOLD function and dewpoint indication.

The TQC Thermo hygrometer operates 10.000(!) hours on 3 batteries type AAA and switches itself off after 10 min.

RV2100 TQC Thermo-hygrometer

DIGITAL THERMO HYGROMETER

Digital thermo hygrometer for indoor use, to be used as benchtop or wall model.

Very large display (56 x 40 mm / 2.2 x 1.57 inch) , readable up to a distance of approximately 10 mtr. Memory for minimum and maximum values and humidity readings, toggle between °C/ °F; time display; alarm function.

RV1610 TQC Digital Thermo Hygrometer

CONCRETE MOISTURE METER

LI9200 meter is a non-destructive moisture meter for concrete. By means of measuring the electrical impedance the moisture content of concrete can easily be determined by just pressing the instrument against the concrete surface. The electrical impedance is measured through generating a low frequency electric field between 8 electrodes at the bottom of the instrument. Depending on the moisture content the measurements are made to a depth of several centimeters.

This system is not suitable to measure through electrically conductive materials like metal or rubber linings or wet surfaces.

TQC Concrete Moisture meters are ideal to quickly test large concrete floors or constructions which have to be painted or where (wooden) floorings are being installed. Four scales allow flexible use of the instrument as an accurate measuring device or just as a detector to find moisture traces or leakage.

1.		Concrete	0-6% H2O
2.	~	Carbide Method	0-6% H2O
3.		Relative Scale	0-100%
4.	~	15. Scale 0.3-15.3m	

Convenient features such as a "max-hold for hard to reach places and "auto-switch off" are integrated.

SPECIFICATIONS

Dimensions: 147x89x33mm, Power supply: 2xAA battery, Average working time on one battery set : 20 hours, Display: monochrome 128x64 pixels, size 61x33mm with backlight, Operating temperature range: 5°C to 40°C, Accuracy: ±0.5%

SCOPE OF SUPPLY

Concrete moisture meter, soft pouch, manual

LI9200 TQC Concrete Moisture Meter

CARBIDE - METHOD MOISTUREMETER

High precision destructive S2000 measuring system for detecting moisture in concrete, sand cement and other bricky material. The water present in the sample reacts (chemically) with calcium carbide. This produces pressure in the vessel, which is proportional to the residual moisture content. Insensitive to external influences, always displays the right value. Complete set in carrying case with balance, pressure cylinder, calcium carbide and cleaning tools.

LI0055 CM Carbide method Moisturemeter, Model "Classic"

KARSTEN TUBE PENETRATION TEST

The TQC Karsten Tube Penetration Test is a simple test for measuring the degree or water penetration into building materials such as concrete, stone and plaster. The test consists or a glass tube filled with water, bonded to the test material with plastiline. Water pressure is then exerted on the surface. A graduated scale indicates, over time, the amount or water penetrated into the surface.

The TQC Karsten Tube Penetration Test contains 3 tubes for horizontal surfaces, 3 tubes for vertical surfaces (or at choice any other combination of total 6 tubes), a water bottle, market and putty to place the tubes leak-tight on the surface. Additional vertical or horizontal tubes are available on request.

LI7500 TQC Karsten Tube Penetration Test

SURFACE MICROSCOPES

Surface cleanliness, marks, pinholes, fish-eyes, delaminating, cracks and many other coating defects require further investigation to find their cause. A portable microscope allows the inspector to examine coating defects right on the spot. Some microscopes are equipped with a reticle so direct measurements can be made.

Article no.:	**LD6169**	**LD6170**	**LD6172**
	Surface Microscope	Surface Microscope	Surface Microscope
Magnification	10x	20x	60x
Field of view (mm)	20	10	2
Measuring scale/reticle	Yes 0.1 mm	Yes 0.1 mm	Yes 0.02 mm
Illuminated	No	Yes	Yes
Focusable	Yes	Yes	Yes
Optical material	Glass	Glass	Glass
Body material	Plastic	Aluminum	Aluminum
Dimensions (mm) / (inch)	45 x 45 x 45 / 1.8 x 1.8 x1.8	175 x 90 x 55 / 6.9 x 3.5 x 2.2	175 x 90 x 55 / 6.9 x 3.5 x 2.2
Weight (gr) / (LBS)	100 / 0.22	370 / 0.82	370 / 0.82
Accessories	Soft cover	Hardcase	Hardcase
Options	-	-	-

LD6170
LD6172
LD6174

LD6205

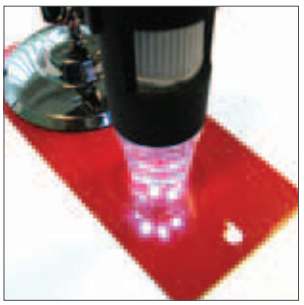
LD6169

LD6152
LD6154

Article no.:	**LD6174**	**LD6205**	**LD6152**	**LD6154**
	Surface Microscope	Surface Microscope	Surface Microscope	Surface Microscope
Magnification	100x	4x	20x	50x
Field of view (mm)	0.6	2	9	3.6
Measuring scale/reticle	Yes 0.01 mm	Yes 0.05 mm	Yes 0.05 mm	Yes 0.02 mm
Illuminated	Yes	Yes	Yes	Yes
Focusable	Yes	Yes	Yes	Yes
Optical material	Glass	Plastic	Glass	Glass
Body material	Aluminum	Plastic	Plastic / Aluminum	Plastic / Aluminum
Dimensions (mm) / (inch)	175 x 90 x 55 / 6.9 x 3.5 x 2.2	135 x 50 x 25 / 5.3 x 2 x 1	194 x 60 x 40 / 7.6 x 2.4 x 1.6	180 x 60 x 40 / 7.1 x 2.4 x 1.6
Weight (gr) / (LBS)	370 / 0.82	110 / 0.24	300 / 0.66	300 / 0.66
Accessories	Hardcase	Soft cover	Soft cover	Soft cover
Options	-	-	Digital camera adapter (LD6155)	Digital camera adapter (LD6155)

DIGITAL USB MICROSCOPE

Small, portable, inexpensive and easy microscope that can be connected directly to a PC. Supplied with software for immediate inspection and measuring.
The unique optical design combines the advantages of a USB-microscope digital camera to the precision optics of a microscope illuminated with LED lights. With the 20-200-times magnification, you can determine the fine structure of surfaces or each other very visible object. This compact digital microscope is ideal for analyzing coating failures, imperfections, pre-treatment quality etc. The microscope can be used in direct contact to the surface or at larger distances. The 8 integrated White Light LED's are adjustable in strength guaranteeing a clear view without causing reflections. Special software for editing and making videos comes with this USB microscope. With this software, you can determine the length, width, height and angle to the radius of the objects.



SPECIFICATIONS

Resolution:	2.0 Mega Pixel (1600 X 1280) Interpolated to 5.0 Mega Pixel (2560x2048)
Photo format:	JPG, BMP
Video format:	AVI
Magnification:	20X ~ 200X
Lightsource:	8 LED (adjustable by control wheel)
Dimensions:	110 X 33 X 33 mm
System requirements:	Windows 2000/XP/Vista/Win7/Mac 10.5 and up
OSD language:	English, German, Spanish, Korean, French, Russian

LD6182 USB Measuring microscope - Model 2012

FLASHLIGHTS

TQC-inspections in the surface treatment and protective coatings industry are often performed with accurate and sophisticated measuring instruments. In many cases however, a profound visual inspection carried out by an experienced inspector is crucial. TQC supplies a comprehensive range of inspection tools and instruments for these kind of inspections.

Visual inspections demand proper lighting. Dependent on the circumstances the need for light can vary from extremely bright or just moderate direct light, floodlight, white light or UV etc.

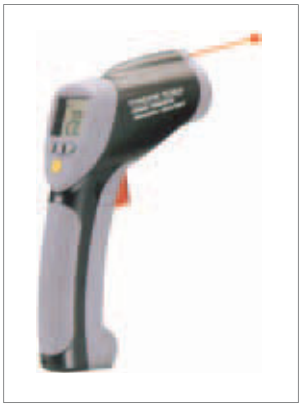
General Inspections: Standard LED or halogen illumination
Surface cleanliness or pinhole detection: UV-LED illumination
Color testing: Artificial daylight

DI0065

LD7215

Article no.:	LD7215	DI0065
	X5 UV flashlight	power LED
	System	flashlight
Bulb type	5x LED	Power LED
Light color	Ultraviolet 395 NM	white
Dimensions (mm) / (inch)	120 x 20 / 4.7 x 0.8	147 x 37 x 21 / 5.8 x 1.5 x 0.8
Weight / LBS	100 / 0.22	135 / 0.3
Power	Battery pack of 2,	Li-ion
	CR123A (3V)	rechargeable battery 3.7V
Accessories	Hard case, wrist	AC/DC switchpower, charger, DC vehicle charger,
	strap	charger barrel, battery, compartment,
		holster and lanyard

INFRARED THERMOMETER



A user-friendly TQC Infrared Thermometer Standard designed to measure surface temperature without making contact under harsh industrial circumstances. The laser pointer identifies the target area while rubber parts on the housing protect the instrument against mechanical damage. An illuminated display allows working in dark or poorly lit environments.

Fast and simple operation, just point and shoot and the surface temperature is shown on the display within 500 mSec. Typical applications are with surfaces that are hard to reach, moving objects or electrical parts. It is used to measure parts in curing ovens, bearings, electrical junctions boxes, coolants, engines, plastic moulding, asphalt etc..

Measuring range: -50 to +750°C / -58°F TO +1382°F, Resolution: 0.1°C / 32.2°F up to 200°C / 392°F, 1°C / 33.8°F over 200°C / 392°F, Basic Accuracy: ± 1.5% of reading or +/- 2°C / 35.6°F (whichever is greater), Optical resolution: 12:1 Distance to spot size. Emissivity Fixed at: 0.95,
Power supply : 9V battery type 1604A or IEC 6LR61, Weight & Dimensions: 290 g. 100 X 56 X 230 mm.

TE1005 TQC Infrared Thermometer Standard

TEMPERATURE PROBES

Probe can be connected to instruments suited for changeable probes (type 'K') using a plug connection. The probe is provided with a firm hand-grip and a one meter curled cable. Can also be manufactured according to customer specifications. Contact us for further details.

TE5104 Liquid probe, Dimensions: 130 x 3 mm, Temperature range: max. 1100ºC / 2012°F

TE5105 Liquid probe, Dimensions: 130 x 1.5 mm, Temperature range: max. 900ºC / 1652°F

TE5106 Needle probe with sharp point, Dimensions: 130 x 3 mm,
Temperature range: max.600ºC / 1112°F

TE5107 Needle probe with sharp point, Dimensions: 130 x 1.5 mm,
Temperature range: max.600ºC / 1112°F

TE5108 Air and gas probe, Dimensions: 130 x 6 mm, Temperature range: max. 600ºC / 1112°F

TE5110 Surface probe, Dimensions 130 x 8 mm, Temperature range: max. 900 °C / 1652°F

TE5120 Deep freeze probe, Dimensions: 160 x 8mm,
Temperature range max. 260ºC / 500°F min. -180ºC / -292°F

TE5125 Heavy Duty asphalt probe with sturdy T-shaped hand-grip, Dimensions 500 x 8 mm,
Temperature Range: max. 300 °C / 572°F

THERMOMETER TE1000

TEMPERATURE

A tough, high-quality thermometer suitable for use with the interchangeable type 'K' thermocouple probes. The practical design, robust casing, large push buttons and the protective holster supplied with the instrument make the TE1000 suitable for use in heavy-duty conditions. The large display panel enables readability at a distance. Equipped with functions for holding the current value as well as the maximum value.

TE1000 TQC thermomter TE1000, ST-610B thermometer, type K,
Range : -50° to +1300°C / -58 to +2000°F,
Resolution : 0,1°C or 0,1°F, Accuracy : ±(0,5%±1°C), ±(0,5%±2°F),
Dimensions : 165mm x 76mm x 43mm / 6.5 X 3 X 1.7 inch

MACHU TEST BATH

CORROSION

Machu test, accelerated corrosion test on test panels and construction parts according to Qualicoat specifications.

The test is made in a warm environment. To create this environment the test panels are placed in the plastic container, which is placed in the Machu Test Bath.

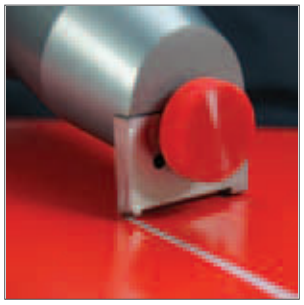
The test panels need to be scratched crosswise with a 1mm cutting tool before placing them in the warm moisture test chamber. The fluid content, temperature and remain time are specified.

VF8700 Machu Test Bath (11 liter) with plastic container (4 liter)

MACHU SCRATCHING TOOL

CORROSION

TQC Machu Scratching Tool to perform a Machu test (corrosion test) with. Each tool is provided with a 1mm width cutter to cut the coating down to the metal, complying with ISO 17872.



Two models are available:
The TQC Machu Scratching Tool Basic is based on the CC2000 model. with a self positioning knife bracket to expose the substrate with a perpendicular cut through the coating.

The TQC Machu Scratching Tool Professional is based on the CC3000 model with adjustable cutting depth and two ball bearings to guide the cut. This guarantees reproducible results.

Mandatory test in Qualicoat and QIB accredited laboratories.

VF8600 TQC Machu Scratching Tool Basic (type CC2000)
VF8605 TQC Machu Scratching Tool Professional (CC3000)

COATING DEFECT IDENTIFICATION LABEL

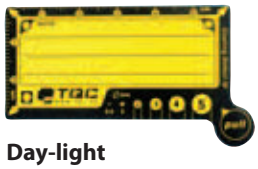
OPTICAL INSPECTION

Imperfections or problems found during inspections of coating work usually require attention of second or third parties after they have been found.
A second opinion of the paint supplier, witnessing of counter parties or just the attention of a repair crew. In each case it is important the above mentioned spots are easily found back, also when the original inspector is not around anymore.
Large structures such a ships, bridges and steel construction but also poorly lit area's such as tanks can cause problems in that respect. How, for example, would you describe the exact location of a number of small pinholes, hardly visible (or even non-visible) with the naked eye in a 5000 square meter tank bottom?

For recordkeeping often pictures of the problems found are being taken. Including the TQC CDI label in the photograph retrieves immediately the dimensions of the defects and the writable area on the label offers the possibility to add extra information to the photograph.

In a serial production environment the CDI labels can be used to identify parts for rework or scrap.

SP0050 TQC Coating Defect Identification label, 250 pieces, Material: Fluorescerent yellow semipermanent adhesive with non-stick pulltab, Dimensions sticker:30 x 63 mm, Dimensions box:: 50 x 105 x 105 mm, Stickers in box: 250 pieces



Day-light

UV-light

CONVEYOR GROUND TEST

POWDER COATING

New conveyor ground test with five steps which informs you whether items to be painted are sufficiently grounded. Especially designed for electrostatic coating applications. A poor ground of the pieces to be coated may result in a poor quality of the electrostatic coating work. Coating thickness may not be sufficient or the pieces may not be even covered.
Consult your paint manufacturer or the supplier of your spray equipment for correct values.
The LD5900 is a low cost, easy to use ground check that is battery operated.

LD5900 Conveyor Ground tester

NORDSON KV METER

POWDER COATING

The Nordson non-loading kV meter is designed for ease of use and safe operation. The lightweight high-voltage probe has a securely grounded ergonomic handle and connects to a precision digital multi-meter through a flexible cable. With two different attachments, the probe can be used for measuring voltage on the tip of a spray gun, high-voltage cable, or inside a high-voltage power supply.

SP5910 Nordson KV Meter

PORTABLE CONDUCTIVITY GAUGE

Conductivity gauge ecoscan cond 6plus kit. Powerful portable conductivity gauge with large measuring range. Equipped with cable electrode and integrated temperature probe for automatic temperature compensation. The high accuracy and robust protective casing make this gauge ideal for use in the field and laboratory.

HI0040 Ecoscan Cond 6+ Conductivity gauge, Conductivity range: 0 to 20, 200, 2000 µS/cm ; 0 to 20, 200 mS/cm, Resolution: 0.01, 0.1, 1 µS/cm; 0.01. 0.1 mS/cm
Accuracy +/- 1% full scale, Temperature range: -10°C to 110°C, Resolution 0.1 °C
Accuracy: +/- 0.5°C, Temperature compensation: automatic and manual(from 0 -to 50°C)
Calibration points: 5(max. 1 per range)

PH-METER PH 5PLUS

Easy to use, robust pH meters. Equipped with automatic temperature compensation, buffer recognition and calibration memory. Splashproor key pad. Rubber protecting case included as standard.

FEATURES

Temperature compensation:	ATC/MTC (0 ºC to 100 ºC)
IP Rating:	IP54
Hold Function:	Yes
Auto-off:	20 mins after last key press
Average/Stability:	Yes
Inputs:	BNC, 2.5 mm phono socket
Power Requirements:	4x 1.5 V 'AAA' alkaline batteries ; >200 hours
Dimensions (LxWxH);	Meter 15.7 x 8.5 x 4.2 cm
Weight	255 g

HI0045 PH502PLUSK pH 5+ pH meter

CONDUCTIVITY METER

The TQC Conductivity Meter now measures a wider conductivity range from pure water to waste water and and comes with simultaneous temperature display, auto-ranging capabilities. Signature designs such as automatic temperature compensation and manual calibrations are retained, giving you accurate, reliable readings over a broad conductivity range every time you measure.

The TQC Conductivity Meter is rugged and waterproof to IP67 standards and is standard supplied with the TQC Bresle KIT.

SPECIFICATIONS

Temperature Display: Yes, Operating Temperature: 0 to 50 °C, ATC: 0 to 50 °C, Temperature Coefficient: 2% per °C, Normalization Temperature: 25.0 °C, Auto-Off: 8.5 Minutes after last key pressed
Non-Volatile Memory: Yes, Power 4 x 1.5 V - "A76" Micro alkaline battery - > 150 Hours
LCD Display: Custom dual display, 2.7 cm (H) x 2.1 cm (W), Dimensions /
Weight Tester: 16.5 cm x 3.8 cm ; 90 g

HI0017 TQC Conductivity Meter waterproof Multi Range Tester

PH-METER PH TESTR 10 (WATERPROOF)

PH-CONDUCTIVITY

Easy-to-use, fully waterproof, pH meter with large display. Floats. The modular design makes it extremely easy to change electrodes. The PH meter is equipped with automatic calibration with buffer recognition. The accuracy of the meter is 0,1 Ph. With automatic temperature compensation.

SPECIFICATIONS

Temperature Display: Yes, Operating Temperature: 0 to 50 °C, ATC: 0 to 50 °C, Temperature Coefficient: 2% per °C, Normalization Temperature: 25.0 °C, Auto-Off: 8.5 Minutes after last key pressed
Non-Volatile Memory: Yes, Power 4 x 1.5 V - "A76" Micro alkaline battery - > 150 Hours
LCD Display: Custom dual display, 2.7 cm (H) x 2.1 cm (W), Dimensions /
Weight Tester: 16.5 cm x 3.8 cm ; 90 g

HI0019 PHTEST10 Waterproof pHTestr10

PH INDICATOR PAPER UNIVERSAL - PH 1-14

PH-CONDUCTIVITY

Indicator paper on a roll for acid and base (alkaline) test.

- fast response time within a minute
- easy to read, accurate color charts
- high contrast for easy color chart comparisons

SP2000 Universal PH indicator paper, Range: 1-14 PH, Length: 5 m

3M HOODS

MISCELLANEOUS

These lightweight, loose-fitting hoods and headcovers are designed for professional users that need both comfort and protection. They provide excellent airflow distribution, improved visibility, and quick breathing tube connection. Developed from a computer model of worldwide head sizes and combined with new sizing and adjustment options the S-Series hoods and headcovers can be comfortably worn by workers all over the world.

DI8000 3M Hoods

3M PAINT SUITS/POWERED

MISCELLANEOUS

Air Supplies 3M Occupational Health & Environmental Safety
3M™ S-Series Headcovers and Hoods for Powered and Supplied Air Respirators

DI8001 3M Paint Suits/Powered

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