Catalog 2019

Paint Laboratory, Industrial Finishing and Protective Coatings Industry







TQC Sheen designs and produces field measuring instruments and lab equipment for testing paint and coatings and general surface treatment.

TQC is a Dutch manufacturer of paint test equipment renowned for their innovative approach and ground breaking developments. Late 2017 British company Sheen Instruments was acquired by TQC BV of The Netherlands. Sheen Instruments has a history of over 70 years being manufacturers of laboratory equipment for the paint industry.

Joining Forces

Both companies are joining forces now. The brands are merged in the TQC Sheen label which represents perhaps the most extensive range of paint test equipment. From a vast range of viscosity meters, automatic film applicators, scrub/scratch testers to gloss & colour meters, thickness gauges, drying time testers etc..

In February 2019 C&W Specialist Equipment Ltd became part of TQC Sheen B.V. Established in 1978, C&W Specialist Equipment Ltd. is a global leader in the development and manufacture of corrosion test chambers which provide controlled environments to test and simulate how components will perform when exposed to natural weathering elements.

Playing Field

The paint and coatings market is the main playing field of TQC Sheen and their agents. TQC Sheen therefore feels obliged to contribute to the market with its expertise.

TQC Sheen is an active member of ISO, NEN, DIN and ASTM. Together with representatives from other major market players TQC Sheen tries to assist in keeping the paint related standards up-to-date, relevant and objective. In many occasions TQC Sheen plays a leading role. Mr Nico Frankhuizen for example is chairman of the Dutch ISO-Paint and Varnishes group (NEN).

For more information please visit: www.tqcsheen.com



TQC Sheen's production facility is located in The Netherlands



TQC Sheen has distributors in more than 60 countries

Instrum	ent per Industry	È	3	1
AB3075	Grindometer Tool	•		
AB3600	Drying Time Recorder	•		
AB3650	AFA Compact	•		
AB4120	Automatic Film Applicator Standard	•		
AB6000	Srub Abrasion and Washability Test	•		
AB8000	Cureview	•		
CWXXXX	Corrosion Test Cabinets	•	•	
CX3005	CurveX 3 - Basic Oven Logger		•	
CX3015	CurveX 3 - Standard Oven Logger		•	
DC7100	Dewcheck		•	•
DC9000	Hull Roughness Gauge			•
DI0080	Inspector Flashlight	•		•
DV1401	Rotational Viscometer	•	•	
DV2000	Rothothinner		•	
GL0010	Glossmeter	•	•	
LD2051	KTA-Keane-Tator			•
LD3020	ISO 8501-1:2007			•
LD5850	PowderTAG		•	•
LD5900	Conveyor		•	
LD6058	Positector 6000		•	•
LD6515	Bresle Kit			•
LD7015	Paint & Varnishes			•
LD8100	Low Voltage Pinhole Detector		•	
LD9330	PosiTest Adhesion Tester			•
SH0530	Mechanised Scratch Tester	•		
SH0581	Automatic Panel Sprayer	•		
SH1693	Cone and Plate	•		
SP0010	Hardness Test Standard	•		•
SP0500	Pendulum Hardness Tester	•		
SP1100	Paint Inspection Gauge			•
SP1700	Cross Cut Adhesion Test	•	•	•
SP1822	Cylindrical Bend Test	•	•	
SP1880	Impact Tester	•		
SP3000	Cross Cut Adhesion Test Kit	•	•	•
SP3200	Dust Test Kit		•	•
SP4000	Wet Film Thickness Gauge WG		•	•
SP7316	Pretreatment Test Kit 'Full''			•
TB5270	Comprehensive Abrasion Test	•		
TM0081	Sling Psychrometer			•
VF2095	Pressure Density Cup	•		
VF2097	Pyknometer	•		
VF2378	Pencil Hardness Test acc. Wolff Wilborn	•		
VF6606	RAL K7		•	•

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Paint Laboratory For research and control of lacquers,

For research and control of lacquers, paints and coatings.



Cylindrical **Bend Test**



SP1822

Determine the elasticity adhesion and elongation of paint on sheet metal in accordance with ISO 1519.



Impact Test



SP1880

Determine the impact resistivity and flexibility of coatings.



Pycnometer



VF2097

Specific Gravity Cup for determining the specific gravity or density (or weight per gallon wpg) of coatings, pastes or similar



Pencil Hardness Test acc. 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-

VF2378

grade are used.



Pressure **Density Cup**



Grindometer Tool



VF2095

Allows for a density or specific gravity measurement in a defined volume and pressure thus eliminating interference by air bubbles during the measurement.





AB3075

Grindometer tool to be used as an optional test tool for the TQC Sheen Automatic Film Applicators.



Automatic **Panel Sprayers**



Pendulum Hardness Tester





A lot of unique features that ease defining hardness by the König and/or Persoz method as described in ISO 1522.



Mechanised Scratch Tester



SH0530

Dedicated to coatings hardness evaluation based on the scratching resistance method.

SH0581

Panel Sprayers remove the inconsistency of application experienced when using hand held spray guns, thus offering a means to set optimum and repeatable conditions to achieve consistent results.



Automatic Film Applicator Standard



Produce consistent films for research into different coating or slurry formulations. Evaluate parameters such as opacity, spreading rate, color & hiding power. Apply coating films to test charts, panels or foils in a uniform and reproducible way. Eliminate variations caused by human factors.

Optional tools are available to measure fineness of grind, drying time & scratch resistance. Choose the heated model for any thermal applications and research.

★ Features

- ✓ Increased stroke length for larger type test charts
- More choices of vacuum areas for different chart
- Store more personal settings with its larger memory capacity
- ✓ Heated model for thermal research applications

Standards

ASTM D823



Computer Controlable by LinQ

Control the equipment by computer using your own software and LinQ as a communication tool.



Adjustable Tool Carrier

Adjustable tool carrier for a variety of different applicator tools and test substrates.



Drying Time Tool

Optional drying time tool to determine the different drying stages of coatings.

Technical Specifications

Traverse Speed	0.1 – 500 mm/s
Stroke Length	50 – 430 mm / 1.97 – 16.34 in
Automatic Vacuum Area	DIN A5, DIN A4, DIN A3, Scrub
Controls	5-key Navigation Switch, Mouse and Keyboard Optional

(i) Ordering Information

Art. Nr.	Description
AB4120	AFA Standard (Glass Bed)
AB4220	AFA Standard (Perforated Vacuum Bed)
AB4320	AFA Standard (Double Channel Vacuum Bed)
AB4420	AFA Standard (Combined, without Bed)
AB4400	AFA Standard (Perforated Heated Vacuum Bed – 230VAC)
AB4405	AFA Standard (Perforated Heated Vacuum Bed – 115VAC)

Scope of supply

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Automatic Film Applicator Standard, 24V Adapter, Manual, Wire Bar Weight, Bed (depending on model)

Art. Nr.	Description
AB3090	Hardness Pen Tool
AB3500	Drying Time Recorder Option
AB3075	Grindometer Tool
AB4510	LinQ, PC Communication Tool





Scrub Abrasion and **Washability Tester**

The Scrub Abrasion and Washability Tester is used to test the resistence of paint, varnish or coatings to scratching, wearing, and color loss due to wet or dry abrasion, by simulating everyday wear from cleaning actions or general use. The test is either used as a "pass or 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.

- **★** Features
- Easy intuitive operating interface with Triple i Control (Intelligent Illumination Interface)
- Full color display
- Easy to update software
- Standards

ASTM D2486, ASTM D3450, ASTM D4213, ASTM D4828, ASTM F1319, ISO 11998



Fully Programmable

Test length and speed are fully adjustable.



Save Time

Able to perform four tests and use two different liquids at the same time.



Configurability

Compatible with a large range of tools.

Technical Specifications

Traverse Speed	1 - 60 cycles per minute
Stroke Length	20 - 300 mm / 0.39 - 11.81in
Pump Flow Rate	0.0 - 3.0 ml per minute / 0.0 - 0.79 GPH
Max. Panel Length	Max. panel length: 350 mm / 13.78 in
Max. Panel Thickness	35 mm / 1.38 in
Max. Panel Width	70 mm / 2.76 in
Power	100 – 240VAC / 50 – 60Hz

(i) Ordering Information

Art. Nr.	Description
AB6000	Scrub Abrasion and Washability Tester
AB6010	Scrub Abrasion and Washability Tester - Basic



Scope of supply

Scrub Abrasion and Washability Tester, 24V adapter + Power Cable, Manual, Tubing*, Fluid containers*. *Only supplied with AB6000

Accessories

Art. Nr.	Description
AB4510	LinQ, PC Communication Tool

Choose your parts with the Ordering Matrix and the Standards Configuration Table on www.tgcsheen.com



Drying Time Recorder



The Drying Time Recorder is a fully digitally controlled machine to define the different stages in the drying process of paints and coatings. The Drying Time Recorder operates conform the BK (Beck Koller) method. Defining the final result or checking intermediate stages is very easy by means of the clear digital display and the intuitive interface. The compact machine meets ASTM D5895, ISO 9117-4 and DIN EN 14022. The Drying Time Recorder has six tracks, and comes with two robust and reusable glass beds of 100 X 350 X 3 mm. Optional are six narrow glass beds in special adapters.

- **★** Features
- Digitally adjustable travel times from 1min to 200
- Heated display enhances menu visibility at lower temperatures
- Lubricant free drive system
- Standards

DIN EN 14022, ASTM D5895, ISO 9117-4



Intermediate and **Final Results**

Intermediate and final results can be checked on the display.



Six Tracks

The machine has six tracks, and comes with two robust and reusable glass



Glass Front Panel

The hardened glass front panel is easy to clean and protects the display underneath it.

Technical Specifications

Operating Temperature -20°C to 70°C / -4°F to 158°F (non-condensing) **Drying Time Range** 1 min - 200 hours Max. Track Length 300 mm Max. Number of Tracks Time Accuracy < 1% of set time Diameter Needle 2 mm Radius Needle 1 mm

(i) Ordering Information

Art. Nr. Description TQC Drying Time Recorder 230 / 115 VAC AB3600



Scope of supply

Prying Time Recorder, 2x Glass Tespanels 350x100x3mm, 6 needles, 6 weights of 5g, 1,5mm Hexagon wrench, Power Cord + Adapter



Art. Nr. Description AB3602 Narrow glass beds, 305x25x3mm, set of 12 pcs

Multiple cube applicators are available. For more information visit https://www.tqcsheen.com/en/product/cube-applicators/



CureView



The CureView Gradient Oven is a flexible oven that allows the user to heat up test panels on a glass bed to a variety of temperature profiles, varying from ambient +5°C to 350°C / ambient +41°F to 662°F. Elevated temperatures are instantly generated by 32 spectral filtered IR halogen heaters, which can be controlled individually and allow the setting of any form of temperature gradient, varying from a parabolic shaped gradient, an ascending or descending slope or a number of temperature blocks. The CureView Gradient Oven allows importing of gradient profiles, measured by the TQC CurveX oven logger system in order to simulate the production process on laboratory scale.

- **★** Features
- Computer controlled operation
- Real time logging of all runs
- Endless memory acces
- No preheating required
- Pre and post panel cooling



ISO 2812-5



Transparant Cover

The test panel is visible during run due to protective glass/ceramic cover.



32 IR Heaters

32 individually controlled Quartz IR



Data Import

Upload a genuine production cycle measured and logged with a CurveX oven-tracking system and duplicate it in the lab.

Panel Clamp Speed	3 mm/s / 0.12 inch/s
Panel Carrier Speed	13 mm/s / 0.53 inch/s
Max. Panel Width	98 mm / 3.86 inch
Max. Panel Length	570 mm / 22.44 inch
Max. Panel Thickness	1,25 mm / 0.05 inch
Power	220 - 240VAC / 50 - 60Hz
Range	Ambient +5 °C tot 350 °C max. / Ambient +9 °F to 662 °F max.

application)

Max. 3°C/heater

 ≈ 0.5 °C/s (depending on sample and

(i) Ordering Information

Technical Specifications

Art. Nr. Description AB8000 CureView Gradient Oven



Ramp

Gradient

Scope of supply

CureView, Power Cord, Lamp Replacement Tool (AB8012), Allen Key 2,5 mm, Allen Key 3 mm, Allen Key 4 mm, 3 x Spare Lamps, Lamp Replacement Gloves, Pre-Installed Laptop, GOC and Ideal Finish Software, Manual.

Art. Nr.	Description
AB8025	Oven Test Panels, Set of 50 pcs.
AB8026	Panel Adapter for Panels Size 500 mm x 100 mm



Digital Krebs Viscometer (4) (480)



Based on the popular traditional KREBS method, using a weight-driven rotating paddle to sense the paint viscosity at a constant 200 rpm, this modern Digital Krebs Viscometer (480) provides automated motor operation, without weights & pulley, allowing accurate direct reading in KU (Krebs units), mPa.s (cP) or g (gram). The conversion between these units is automatically calculated by the microprocessor and displayed on request. Sturdy construction allows for use either in a production environment or in the laboratory.

★ Features

- Single or continuous reading in KU, mPa.s (cP), gram
- Over-range indication
- Possibility of multi-point calibration by user with optional key

Standards

ASTM D1131, ASTM D562, ASTM D856



Interchangeable Cones

Simple to install with quick release chuck for easy cleaning.



Can Sentering

Place the can in the right spot due to the can sentering base plate.



Safety Height Sensor

Preventing the rotor from rotating above the can.

Technical Specification:

Range	37 - 141 Krebs units, 200 - 5000 Cp, 70 - 1100 gms
Resolution	0.1 Kreb unit, 10 cP, 1 gm
Accuracy	±2% of full scale
Repeatability	±1% of full scale
Operating temperature	15°C − 35°C (59°F − 95°F)
Motor speed	200 r.p.m. ±1%
Sample container	500mL (standard)
Power consumption	30 watts (max)
Electrical supply	200/250V - 100/120VAC (switchable)

(i) Ordering Information

Art. Nr. Description SH1349 Digital Krebs Viscometer with RS 232 cable and rotor

Scope of supply

Digital Krebs Viscometer, Power Cable, Manual

Calibration Certificate Included

Accessories

Art. Nr. Description Calibration key (required for instrument calibration)





Cone and Plate

The Cone Plate Viscometer is a versatile and robust viscosity meter to the Cone / Plate principle. The microprocessor controlled plate temperature allows for accurate temperature controlled measurement. The precision Titanium nitrate cone and plate allow accurate control of the Shear force to 10.0005⁻¹ or to 12.0005⁻¹.

★ Features

- Pre-selected or adjustable runtimes 5–59 seconds, with manual or automatic start
- ✓ Adjustable pre-heating time 0–59 seconds
- ✓ Adjustable limit/tolerances setting with warning

Standards

ASTM D4287, ISO 2884, BS 3900-A7



Interchangeable Cones

Simple to install with quick release chuck for easy cleaning.



Change Reading Unit

Reading in P, cP, Pa.s or mPas.s



Selectable Modes

Fully functional or simplified routine, security protected.

Technical Specifications

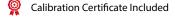
Function Description Dual Speed (Standard)	750rpm = 10,000 s ⁻¹ 900 rpm = 12,000 s ⁻¹
Viscosity 5 Cone/ Measuring Ranges	0-5, 0-10, 0-20, 5-50, 10-100 P
Resolution	0.01°
Accuracy	<+/- 2%
Repeatability	<+/- 0.5%
Temperature Control	Built in 5° to 65°C
Electrical Supply	90-240V 50/60 Hz

(i) Ordering Information

Art. Nr.	Description
SH1693	Cone and Plate Viscometer
_	

Scope of supply

Cone and Plate, Power Cable, PC Cable, Manual



Art. Nr.	Description	
SH1432	Cone 0-10 poise + 5 certified oils	
SH1428	Cone 0-20 poise + 5 certified oils	
SH1427	Cone 5-50 poise + 5 certified oils	
SH1434	Cone 10-100 poise + 5 certified oils	
SH1429	Cone 0-5 poise + 5 certified oils	



Comprehensive Abrasion Test



The Comprehensive Abrasion Test, in short CAT, mimics road transports of beverage cans. Beverage cans suffer from scuff and friction during transport, damaging its coating or even causing leaks in cans. The reciprocating motion mimics in-thefield transportation abrasion damage of coatings equivalent to the Gavarti Associates "GV-CAT" system. The instrument simulates a truck transport of cans. Setting different speeds and stroke lengths allows you to mimic any type of road surface.

♠ Features

- Simulates truck transports of cans and flat objects.
- Set different speeds and stroke lengths to mimic any type of road surface.
- Suitable for testing printed cartons and book covers.

Standards

Equivalent to GV-CAT



'GV-CAT' System

Equivalent to the Gavarti Associates System.



Can Inserts

Function as filler.



Computer Controlled

Supplied with laptop* and CAT software.

Technical Specifications

Can Size	150 – 1000 ml / 5.07 – 33.8 fl. oz. (US) / 5.28 – 35.2 fl. oz. (UK)
Min. Can Diameter	53 mm / 2.1 inch
Max. Can Diameter	84 mm / 3.3 inch
Min. Can Height	88 mm / 3.5 inch
Max. Can Height	205 mm / 8.1 inch

(i) Ordering Information

Art. Nr.	Description
TB5000	Comprehensive Abrasion Test 230 VAC
TB5005	Comprehensive Abrasion Test 115 VAC



Scope of supply

Comprehensive Abrasion Test, Power Cord, Manual, Laptop* with Windows 10, Control Application, USB Cable, Three Sets of Side Plate Assembly, Top Pressure Plate Assembly, Bottom Can Carrier Plate, Air Tube, Hexagonal Wrench, Can Positioning Bar

* Optional

Art. Nr.	Description
TB5270	Can Inserts Set of 6
AB5500	Set of Flat Blocks to test Flat Sheet Material



Corrosion Test Cabinets



C&W cabinets by TQC Sheen are widely used to test both components and coated test panels across the whole spectrum of industry. The design ensures that they meet or exceed the requirements laid down in all major national, international and corporate standards. Pioneering designs have made C&W the UK leader in the manufacture of accelerated corrosion and environmental test cabinets.

With the inclusion of C&W in TQC Sheen in 2019 it is our goal to enhance this leading position and extend the product range with all necessary tools for performing corrosion tests.

- **★** Features
- ✓ Robust design
- ✓ Wide range of sizes
- ✓ Simple maintenance



Cyclic Corrosion Cabinets

Deliver the precise environmental test conditions demanded by modern industry. Their reliability, ease of operation and robust construction has led to their use worldwide in all major sectors of automotive manufacture, as well as the paint, plastics, packaging, electronics, aerospace, military and offshore industries.



Humidity Cabinets

C&W humidity cabinets are designed to reproduce test conditions of high humidity at constant or cycling temperatures.



Humidity Conditioning Cabinets

The units function as variable humidity, temperature humidity, environmental, climatic or conditioning cabinets. Temperature and humidity testing and product conditioning is of vital importance to the research chemist, development engineer and quality assurance manager to ensure the product is researched, developed and manufactured to a standard guaranteed to survive the environment for which it is designed.



Salt Spray Cabinets

Deliver the precise environmental test conditions demanded by industry today. Through their reliability, ease of operation and robust construction, C&W salt spray cabinets have gained worldwide acceptance with applications in all major sectors of automotive manufacture as well as the paint, surface and coatings, chemical, electronics, aerospace, military and offshore industries.

Technical Specifications

Dimensions 100 litre (LxWxH)	1000 mm x 600 mm x 645 mm / 39.4 inch x 23,6 inch x 25.4 inch
Dimensions 200 litre (LxWxH)	1030 mm x 700 mm x 1050 mm / 40.5 inch x 27.5 inch x 41.3 inch
Dimensions 450 litre (LxWxH)	1370 mm x 930 mm x 1130 mm / 53.9 inch x 36.6 inch x 44.5 inch
Dimensions 750 litre (LxWxH)	1740 mm x 1230 mm x 1380 mm / 68.5 inch x 48.4 inch x 54.3 inch
Dimensions 1000 litre (LxWxH)	1960 mm x 1335 mm x 1410 mm / 77.1 inch x 52.6 inch x 55.5 inch
Dimensions 2000 litre (LxWxH)	2750 mm x 1220 mm x 1645 mm / 108.2 inch x 48 inch x 64.8 inch
Power Supply	230 V 50/60 Hz single phase, other voltages on request
Water Type	De-ionised or mains water below 50 mg / litre TDS
Water Pressure	2 to 4 bar (30 to 60 psi)

(i) Ordering Information

Visit www.tqcsheen.com for ordering information



Scope of supply Cabinet



Calibration Certificate Included

Accessories

Art. Nr. Description

VF7600 Sodium Chloride - 25 kg





Industrial Finishing For quality control of powder coatings and

surface finishing applications.



Cross Cut Adhesion Test



SP1700

Test the adhesion of dry coats of paint on their substrate by means of a series of cuts through the coating.



Cross Cut Adhesion Test KIT



SP3000

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.



CurveX 3 Standard Logger



CX3015

Offers easy-to-use, high quality temperature data logging for paint curing ovens



CurveX 3 Basic Oven Logger



CX3005

An oven recorder designed for everyday use in powder coating lines.



Rotothinner™

Offers a two in one instrument for

create supply or RFU viscosity.

material testing. It offers easy continuous

the addition of solvents and thinners to

monitoring of the material viscosity during

DV2000







DV1401

Portable rotary viscometer acc. to Brookfield Method suitable for production process and for laboratories and research centres any time when quick and reliable determination of viscosity are required.



Dust Test Kit



SP3200

Allows assessment of the quantity and size of dust particles on surfaces prepared for painting according to ISO 8502-3.



RAL K7



VF6606

Colour fan deck containing all 213 RAL CLASSIC colours.



Conveyor Ground tester



LD5900

Informs you whether items to be painted are sufficiently grounded.





Positector 6000

The Coating Thickness Gauge Positector 6000 from Defelsko is a rugged, fully electronic coating thickness gauge that uses magnetic and eddy current principles to measure, accurately and quickly, coating thickness on both ferrous and non-ferrous metals.

The positector 6000 is used in various branches of industry.

★ Features

- No calibration adjustment required for most applications
- Hi/Lo alarm audibly and visibly alerts when measurements exceed user-specified limits
- ✓ Calibration stored in sensor module

Standards

ISO 2808, FOCT P 51694



Durable

Solvent, acid, oil, water and dust resistant.



Fast Mode

Faster measurement speed for quick inspection. Up to 60+ reading per minute.



Probe Interchangeability

Easily transforms from a Coating

Thickness Gage to a Surface Profile Gage, Ultrasonic Wall Thickness Gage or Replica Tape Reader.

Technical Specifications Advanced

Display	Hi contrast reversible color display
Memory	100.000 reading
Data Transfer	USB, Wifi, Bluetooth

Technical Specifications Standard

Display	Monochrome display	
Memory	250 readings	
Data Transfer	USB	

(i) Ordering Information

Art. Nr.	Description
LD6058	Positector 6000 – Advanced Model (without probe)
LD6057	Positector 6000 – Standard Model (without probe)



Scope of supply

Protective Rubber Body, Wrist Strap, Quick Guide, Nylon Carrying Case, USB Cable.



Calibration Certificate Included

Accessories

Art. Nr.	Description
LD6099	FS Probe, Ferrous std.
LD6109	FNS Probe, Ferrous/Non-Ferrous std.

Multiple probes are available. Visit our website for more information.



Low Voltage Pinhole Detector



The Low Voltage Pinhole detector enables the user to inspect coatings on conductive substrates for small defects such as holidays and pinholes using the 'wet sponge technique'.

The grounding clamp is connected to an untreated piece of the substrate (which is electrically connected with the measurement area), where the wet sponge will be used to probe the entirety of the coating with the selected voltage applied. When current flows from the sponge wand to the grounding clamp, this indicates a defect in the coating. The user will be notified using the selected feedback method(s). (Buzzer, vibration, headphones and/or display.

♠ Features

- Smart power saving features (screen dimming, standby, auto power-off)
- Return cable connectivity detection
- Detected pinhole counter
- ✓ Automated self-diagnostics

Standards

ISO 8289-A, ISO 14654:1999, BS 7793-2:1996, ASTM D 5162-A, JIS K 6766:2008, TM0384-2002



Color Display

 ...with battery indicator and menu based user interface.



Easy Control

Intuitive single button control



Feedback

Visual, audible and tactile feedback

Technical Specifications

Voltage LD8100	9, 90 V
Voltage LD8105	9, 24, 67.5, 90 V
Measuring Range	max 500µm coating thickness
Voltage Accuracy	+/- 5%
Sensitivity	100kΩ for all voltages
Feedback	Visual, Audio*, Haptic (* with optional headphones)
Security	Return Cable connection detection

(i) Ordering Information

Art. Nr.	Description
LD8100	Low voltage detector basic, 9V / 90V
LD8105	Low Voltage detector Advanced, 9V, 24V, 67.5V, 90V



Scope of supply

 ${\it Low \, Voltage \, Detector, Sponge \, Wand, Grounding \, Cable \, with \, Clamp, \, Calibration \, Certificate, \, Manual.}$



Calibration Certificate Included

Art. Nr.	Description
LD8155	Expansion Kit for the Low Voltage Pinhole Detector





Glossmeter

The TQC Sheen Glossmeter is a true powerhouse in the measurement of Gloss. The latest release in Glossmeters meets the highest level of Gloss analysis technology. Its unique calibration on primary standards sets it on a new level of certainty and traceability. The TQC Sheen Glossmeters are the only Glossmeters that are calibrated on primary samples. This unique feature allows for the highest level of accuracy. The all new design not only allows for the measurement of Gloss but also % reflection. ASTM Haze and Hŋ Making this the first Glossmeter to pack a wide range of applications. Hŋ is uniquely developed at TQC Sheen to meet the highest requirements for diffuse reflection analysis.

- **★** Features
- Sublime traceability
- ✓ Stable and reproducible LED light source
- ✓ Large memory
- USB-C for data transfer
- ✓ Rechargeable AA batteries



ISO 2813, ASTM D523



Memory & Batch

Statistics for easy averaging and such.



Protected Menu's and Functions

Protect selected functions to prevent unauthorised adjustments.



Primary Standards

Calibrated on primary tiles.

Technical Specifications

Range	20° 0 - 2000 GU - 0-100 %ref 60° 0- 1000 GU - 0-100 %ref 85° 0 - 165 GU - 0-100 %ref Haze / astm
Resolution	0.1 GU.
Angle	SoloGloss 60° PolyGloss 20°, 60°, 85°
Display	320 x 240 pixels, full color
Protection	Password
Dimensions (HxWxD)	91 mm x 140 mm x 45 mm

(i) Ordering Information

Art. Nr.	Description
GL0010	Sologloss 60°
GL0030	Polygloss 20°, 60° & 85°

Scope of supply

Meter, Tile, USB Cable, Manual

Calibration Certificate Included

Art. Nr.	Description
GL0040	Calibration tile TOC Sheen Glossmeter





PowderTAG

PowderTAG measures powder coating thickness before and after cure, non-contact and non-destructive.

A sophisticated combination of ultraviolet and infrared techniques measures the thickness of powder coatings in precured and cured status, precise and reproducible.

★ Features

- Measures on any metal substrate such as steel and aluminium
- ✓ Large measuring range, up to 300 μm
- Save on rework and reject
- Perfect for corners that are difficult to approach



DIN-EN 15042-2



Easy Operation

Just point the probe at the surface at the right distance (LED-Pointers will indicate the correct distance / location) and press the "measure" button.



Versatile

Measures any form, shape and dimension. Including wire frames or edges.



Cured and Uncured

Suitable for uncured and cured powder coatings.

Technical Specifications

Measuring Range	1 - 300 μm
Accuracy	+/- 3%
Resolution	+/- 1%
Measuring Distance	≈ 35 mm / 1.38 inch
Measuring Spot	ø 1 mm / ø 0,04 inch
Measuring Speed	64 - 1024 ms
Main Unit Mass	700 g / 24.7 oz
Battery lifetime	10 hours of continuous use

(i) Ordering Information

Art. Nr.	Description
LD5860	PowderTAG Thickness Analysing Gauge



Sensor with Cable, Display Unit, 8x Li-Ion Batteries Type 14500, Quad Charger, Rubber Harness, Verification Tool, Manual

Art. Nr.	Description
LD5852	Distance-cap
LD5851	Height adjustable stand pro
LD5853	Height adjustable stand basic





Protective Coatings For quality control and warranty during

sandblasting and painting processes.



PosiTest Adhesion Tester



LD9330

Measures adhesion of coatings applied on metal, wood, concrete and similar substrates. There is a manual and an automatic model available.



Sling **Psychrometer**



TM0081

Bacharach type sling Psychrometer for indicating percent relative humidity on the basis of the wet bulb-dry bulb thermometer principle.



Ultrasonic Thickness Gauge "Pro"



LD7016

Specifically designed to measure the thickness of metallic and non-metallic materials e.g. aluminium, titanium, plastics, ceramics, glass and plastics.



KTA Keane-Tator Surface Profile Comparator

Comparators for determining surface

roughness by touch and sight. Conforms

LD2051

to ASTM D4417.



ISO 8501-1:2007

LD3020





Thickness Gauge WG



Corrosion protection of steel structures by painting. Contains high-quality colour photographs for estimating the rust levels and purity levels after cleaning manually or by machine (also with blasting).



A hexagonal/octagonal precision measuring comb. The high-grade stainless steel will not be affected by acid or base elements. Models available for several different applications.





Inspector Flashlight



DI0080

1

A robust and handy flashlight with extremely powerful Power LED. The adjustable light beam makes this flashlight very suitable for most kinds of inspections.



Pretreatment Test Kit "Full"



SP7316

The TQC Sheen Pretreatment Test Kit is especially composed to control all relevant parameters during the pretreatment of steel prior to painting.

Hardness **Test Standard**



A pocket instrument for testing the hardness and wear/scratch resistance of materials such as coatings, lacquers, plastics or related products.



Bresle Kit



The Bresle Kit – Sodium 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 Bresle patch or Bresle sampler, 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 Bresle Kit – Sodium Chloride Test Kit is a conductivity gauge used for the assessment of soluble salt ions as chlorides, sulphates and nitrates.

★ Features

- ✓ ISO 8502-6 and ISO 8502-9 conform
- Certificate included with Patches
- ✓ Residue free patches

Standards

ISO 11127-6, ISO 11127-7, ISO 1769, ISO 2574, ISO 32, ISO 8502-6, ISO 8502-9



Easily Removable Patch

A special tab eases the removal of the patch. The adhesive is silicon-free and leaves no residue. No power tooling required to clean test area afterwards.



Direct Results

No conversion factor required.



Auto-hold Reading

Measurement results can be viewed at a later stage.

Technical Specifications

Range	0.1 – 20 000 mg/m² soluble salt measured as Sodium Chloride
Resolution	$0.1 \mu \text{S/cm} = 0.1 \text{mg/m}^2$
Gauge Accuracy	1%
Temperature range	0 − 50 °C
Patch type	A-1250'

(i) Ordering Information

Art. Nr.	Description
SP7310	Bresle Kit - Sodium Chloride Test



Scope of supply

Case, Digital Conductivity Gauge, 25 Bresle Patches, Distilled water, Calibration and Cleansing Solution, Cup, Syringe, Manual



Calibrate Certificate Included

Art. Nr.	Description
LD6515	Bresle Patches, 25 pieces + needle
SP7320	Calibration Solution 84 μS, bottle of 50ml
SP7321	Maintenance Cleaning Solution, bottle of 50ml





Hull Roughness Gauge

Controlling the roughness of a ship's hull plays an important role in the operating costs of a vessel. The roughness of a ship's hull increases mainly due to corrosion, pitting, plate undulation, mechanical damage, dry spray and above all bio fouling. Proper maintenance and the correct application of high-end anti-fouling coatings reduce the hydrodynamic effects and will lead to significant savings on fuel consumption and CO² emissions. The hull roughness is measured during in-docking and out-docking. The Hull Roughness Gauge measures the AHR value (Average Hull Roughness) of sea going vessels. AHR is the 'mean' of all the vessel's hull roughness readings and is the measure against which ship's performance is correlated.

★ Features

- Can be operated with just one hand due to the 4-way directional push button
- ✓ AA Battery operated
- Fits into a small sized waterproof rugged casing that is allowed as carry on travel luggage and benefits your overseas travel plans.
- Supplied with a neck strap to keep the users' hands free when required.
- A set of LED's indicate the status of the instrument so operation is possible without observing the control unit.

Accuracy:	+/- 5μm / <2%
Speed:	50 mm/s , with speed indication led in sensor unit
Memory:	Enough for 4 complete surveys, (Totally over 10.000 readings)
Interface:	USB serial to PC interface
Power:	4xAA
Battery lifetime:	20 hours with Backlight ON, 200 hours with backlight OFF



Graphical Representations

Simply point and click the hull location in the displayed graphical representation of the ship's hull.



Speed Indicator

A measurement must be performed at the correct speed. The speed indicator LED monitors the speed and prevents too fast measurements being made.



Survey Reports

Using the supplied USB-cable and software you instantly create inspection reports in Microsoft Excel. Your company logo and or -details can be incorporated to restyle your reports.

i Ordering Information

Art. Nr. Description
DC9000 Hull Roughness Gauge



Hull Roughness Control Unit with Neck Strap, Sensor, Sensor Cable, Calibration Plate (DC9015), USB Thumb Drive with Software, USB Connection Cable to PC, 4x AA Batteries.

Calibration Certificate Included

Art. Nr.	Description
DC9025	Protective Pouch
DC9015	Calibration plate





Paint Inspection Gauge

The 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 reticle. The SP1100 is a very stable instrument, also the integrated microscope has an excellent focus. The microscope is provided with a double scale (mm and inch) which allows you to calculate to micrometers and mils. Reduce of ambient light because of a rubber end cap on the microscope so when observing through the microscope you will have a better focus upon the specimen.

- **★** Features
- ✓ Made of Titanium anodised aluminum
- Three knife sizes and one crosscut knife in one holder
- ✓ The small size eases use in corners
- Standards

DIN 50986, ISO 2808



Clear Vision

Bright white LED lights ensure clear vision through the microscope.



Ergonomic DesignRevolving-system to change knives.



Easy Calculations

Engraved scaling (D-factor) for easy calculations.

Technical Specifications

Range	2 to 1800 μm / 0,1 to 70 mils	
Microscope	Magnification 50x (with graduation scale)	
Scale range	0,00 – 1,8 mm / 0,00 – 0,07 inch (rectilinear measured)	
Range Cutter 1	20-1800 μm / 1-70 mil	
Range Cutter 2	10-900 μm / 0.5-35 mil	
Range Cutter 4	2-180 μm / 0.1-7 mil	

(i) Ordering Information

Art. Nr.	Description
SP1100	Super PIG Paint Inspection Gauge III



Scope of supply

Super Pig III Destructive Paint Inspection Gauge, Black Marker, Cutter 1 (SP1111), Cutter 2(SP1112), Cutter 4 (SP1114), Hex Diagonal Wrench, Black Leather Case with Belt Clip.

Art. Nr.	Description
SP1113	Cutter No. 3, 5-450 μm / 0.25-17.5 mils
SP1702	1 mm Cutter, acc. to ISO 2409 & ASTM D3359
SP1703	2 mm Cutter, acc. to ISO 2409 & ASTM D3359
SP1704	3 mm Cutter, acc. to ISO 2409





DewCheck

The TQC DewCheck 4 – Dewpoint Meter (DPM)/ Dewmeter is an extremely versatile dewpoint meter to measure and record all climate parameters required to treat surfaces. This easy to use and robust dewmeter conforms to ISO 8502-4 & ASTM D3276-07 and measures the relative humidity (%RH), ambient temperature (Ta) and surface temperature (Ts) and calculates the dewpoint temperature (Td) and the difference between the dewpoint temperature and the surface temperature (ÄT). The difference between the surface temperature and dewpoint temperature indicates the optimal climate conditions for painting.

★ Features

- All build-in probes
- ✓ Wrist strap prevents dropping the Dew Check 4
- Double contact push buttons for secure navigation through DewCheck 4 menu

Standards

ISO 8502-4, ASTM D3276-05, BS 7079-B4, NACE RP prop 97



Display

Large illuminated graphic display.



Rugged Gauge

Designed for use in harsh industrial environments. Rubber injected case for protection and firm grip.



One-hand Operation

The one hand operation of DewCheck4, keeps one hand free for the operator.

Technical Specifications

Humidity

Temperature Ta (Air)

 $\begin{array}{ll} \mbox{Accuracy} & \pm~0.5~\mbox{°C}, \pm~1~\mbox{°F} \\ \mbox{Measurement Resolution} & 0.1~\mbox{°C}, 0.1~\mbox{°F} \\ \end{array}$

Measurement Range - 20...+ 80 °C, - 4...+ 176 °F

Temperature Ts (Surface)

 $\begin{array}{ll} \mbox{Accuracy} & \pm~0.5~\mbox{°C}, \pm~1~\mbox{°F} \\ \mbox{Measurement Resolution} & 0.1~\mbox{°C}, 0.1~\mbox{°F} \\ \end{array}$

Measurement Range - 30...+ 60 °C, - 22...+ 140 °F

Batches 8 Batches max.

Operating Temperature 20 °C...60 °C, - 4...+ 140 °F

Range

(i) Ordering Information

Art. Nr. Description

DC7100 Dewcheck 4 Dewpoint Gauge – Series 2

Scope of supply

Dewcheck 4, Leather Pouch, Wrist Strap, USB Cable

Calibration Certificate Included

Art. Nr.	Description
DC7520	Docking Station for DewCheck Series 2
DC7510	USB Communication Cable
DC7010	Spare Leather Pouch



Your local contact:

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