

“Elcometer” 456 Series Digital Coating Thickness Gauge

- Working principle: -(F) version is measured by electromagnetic induction ➤ Standard
 - (NF) version is measured by Eddy current modules
 - Languages – menus in 26 languages
 - Multi-function such as statistic, backlight, different unit(metric and imperial)
 - Accuracy: 1-3% or ±2.5µm (F1, N1 probe)
 - Minimum substrate thickness: 300µm
- Ferrous (F): BS 5411(11), BS 3900(C5), ISO 2178, ISO 2808, BS EN ISO 1461, DIN 50981, ASTM B 499, BS EN ISO 19840
- Non-Ferrous (NF): BS 5411(3), BS 3900(C5), ISO 2360, ISO 2808, DIN 50984, ASTM D1400

Integral Gauge Model with Built-in Sensor Range 0~1500µm:

Integral Gauge Model – economical and can be controlled by one hand

Model	Version	Part No	Range	Properties
Basic	F	A456FBI1	0~1500µm	➤ User definable on-screen statistics – number of readings, mean, standard deviation, coefficient of variation, minimum, maximum ➤ Backlight – user selectable ideal for dark environments ➤ Switchable metric/ imperial units (mm, µm, mils, inches)
		A456FBI2	0~5mm	
		A456FBI3	0~13mm	
	NF	A456NBI1	0~1500µm	
	FNF	A456FNBI1	0~1500µm	
Standard	F	A456FSI1	0~1500µm	➤ Including functions of basic functionality ➤ Memory sizes: 250 readings in one batch ➤ With ElcoMaster™ & ElcoMaster™ Mobile Software (Not included computer connecting wire)
		A456FSI2	0~5mm	
	NF	A456NSI1	0~1500µm	
	FNF	A456FNFSI1	0~1500µm	
Top	F	A456FT1	0~1500µm	➤ Including functions of basic functionality ➤ Memory size: 40000 in up to 999 batches ➤ With ElcoMaster™ & ElcoMaster™ Mobile software (Not included computer connecting wire)
	NF	A456NT1	0~1500µm	
	FNF	A456FNFT1	0~1500µm	



Remark: 1). Standard and Top model contain “Bluetooth” function,
2). For information of other measuring range, please contact our company.

Separate Gauge Model, Not included Probe:

Separate gauge model – changeable probe for different measure range, can be used separate type miniature probe as well

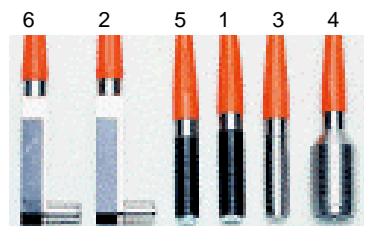
Model	Version	Model	Properties
Basic	F	A456FBS	➤ User definable on-screen statistics – number of readings, means, standard deviation, coefficient of variation, minimum, maximum ➤ Backlight – user selectable ideal for dark environments ➤ Switchable metric/imperial units (mm, µm, mils, inches)
	NF	A456NBS	
	FNF	A456FNBS	
Standard	F	A456FSS	➤ Including functions of basic functionality ➤ Memory sizes: 250 readings in one batch ➤ With ElcoMaster™ & ElcoMaster™ Mobile software (Not included computer connecting wire)
	NF	A456NSS	
	FNF	A456FNSS	
Top	F	A456FTS	➤ Including functions of basic functionality ➤ Memory size: 40000 in up to 999 batches ➤ With ElcoMaster™ & ElcoMaster™ Mobile software (Not included computer connecting wire)
	NF	A456NTS	
	FNF	A456FNFTS	



Remark: Standard and top model contain “bluetooth” function

Separate Type Probe Model (For Separate Gauge Only):

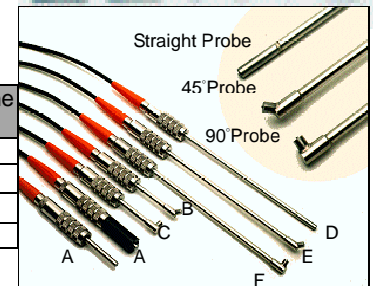
Probe Type	Model	Range	As shown in the picture	
F	F1 Standard	T456F1S	0~1500µm	1
	F1 Right Angle	T456F1R	0~1500µm	2
	F2 Standard	T456F2S	0~5mm	3
	F3 Standard	T456F3S	0~13mm	4
NF	N1 Standard	T456N1S	0~1500µm	5
FNF	FNF1 Standard	T456FN1S	0~1500µm	1



Remark: For information of other model, please contact our company

Separate Type Miniature Probe Mode (Range: 0~500µm)

Probe type	Min. Convex Surface Diameter	Min. Concave Surface Radius	Min. Sample Diameter	As shown in the picture	
F	T456FM3---A, Straight Probe	1.5mm	6.5mm	3mm	A
	T456FM3R45A, 45° Probe	1.5mm	6.5mm	3mm	B
	T456FM3R90A, 90° Probe	1.5mm	6.5mm	3mm	C
FNF	T456NM3---A, Straight Probe	3mm	25mm	4mm	A



Remark: For information of other model, please contact our company

“Elcometer” 355 Series Digital Coating Thickness Gauge

Elcometer 355 equipped with microprocessor, the main units contain memory and digital display

Features:

- With a wide range of interchangeable probe
- Versatility and flexibility and wide measuring range
- ±1% accuracy
- RS232 Printer/ PC Output – Serial and Parallel
- Can be used in accordance with BS, ISO, ASTM, SSPC Standard
- EDTS+ Excel Link and EDCS WIN Software supplied
- Provided with protective case

Working Principle

Ferrous metal substrates (F)	Non-ferrous metals (N)
F probe: is measured by principle of electromagnetic induction	N probe: is measured by principle of Eddy current modules.

Gauge Model:

Model	A355-S (standard)	A355-T (top)
Memory Size:	5000 reading	10000 reading
Statistic	Mean, standard deviation, number of readings, highest and lowest value	Mean, Standard deviation, number of readings, highest and lowest value, average and counted average mode



Probe Model:

Version	Part No	Probe type	Measuring range	Picture	Accuracy	Minimum reading (range)
F	T35511952	F1 standard	0~1500µm	A	±1 or ±1µm	0.1µm (0~200µm) 0.5µm (200~500Um) 1.0µm (500~1500µm)
	T35511953	F1 right angle	0~1500µm	B		
	T35511954	F2 standard	0~5mm	A		±1% or ±5µm
	T35511956	F3 standard	0~13mm	C	±2% or ±30µm	5µm (0~1.0mm) 10µm (1~13mm)
	T35511950	F4 right angle	0~250µm	A	±1% or ±1µm	0.1µm (0~250µm) minimum convex diameter: 1.5mm
	T35511962	F5 Rebar	0~800µm	D	±1% or ±2µm	1µm (0~800µm) minimum convex diameter:4mm
N	T35511982	N1 standard	0~1500µm	E	±1% or ±2µm	0.1µm(0~200µm) 0.5µm (200~500µm) 1.0µm (500~1500µm)
	T35511983	N1 right angle	0~1500µm	F	±1% or ±1µm	
	T35511984	N2 standard	0~5mm	G	±1% or ±15µm	
	T35511980	N4 standard (anodisers)	0~250µm	H	±1% or ±1µm	0.1µm(0~250µm)



香港科學儀器社有限公司
Che Scientific Co. (Hong Kong) Ltd.

Hong Kong Head office:

Unit D, 18/F, Roxy Industrial Centre, 58-66 Tai Lin Pai Road, Kwai Chung, Hong Kong

TEL: (852) 2481 1323 FAX: (852) 2418 1302

E-mail: sales@chescientific.com Website: www.chescientific.com



浙江科通儀器有限公司
Zhejiang Fortune Scientific Co. Ltd.

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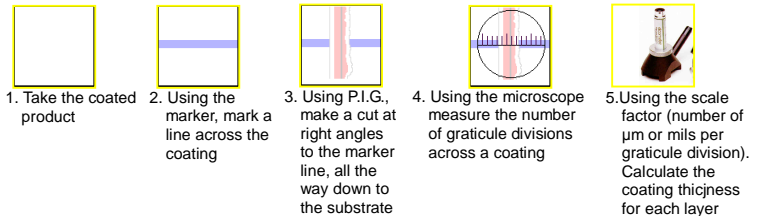
“ELCOMETER” 141 P.I.G. Paint Inspection Gauge (Destructive)

Test method: Cutter with known cutting angle is used to cut the sample. The graduation in the microscope is used to measure the width of the cut. Finally, the thickness of the coating can be calculated.

- Ideal for measure the thickness of paint applied to concrete, wood, plaster, plastic, etc.
- Can be converted into the Elcometer 107 Cross Hatch Cutter
- Can be used in accordance with BS EN 3900-CS-5B, ISO 2808-5B, ASTM D4138

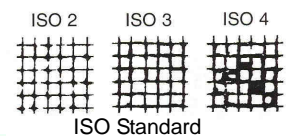
Model	A141-M		
Microscope	50X		
Cutter	No. 1	No. 4	No. 6
Cutting angle	45	26.6	5.7
Graticule scale factor (µm per division)	20µm	10µm	2µm
Measuring range	20~2000µm	10~1000µm	2~200µm

Test method of A141-M



Elcometer 107 Cross Hatch Cutter

- Cross Hatch Method: After making cut, brush the coating slightly with a soft brush or tissue to remove any detached flakes or ribbons of coating, then check the resulting cross-hatch pattern according to the Classification of Adhesion Test results. An adhesive type can be used prior to checking the result.
- Can be used in accordance with ASTM D 3359-B, ASTM D 3302, BS 3900-E6, BS EN ISO2409, DIN 53151, ISO 2409, NF T 30-038



Basic Kit and Full Kit:

Basic Kit: Cross Hatch Cutter handle, Cutter blade, Hexagonal wrench, Carrying case & Operating instructions
 Full Kit: Cross Hatch Cutter handle, Cutter blade, Hexagonal wrench, Adhesive Tape (ISO or ASTM), Eye Glass, Brush, Carry case & Operating instructions



Selecting the appropriate test kit

Cutter	Number of Teeth	Part Number		
		Full Kit with ISO Tape	Full Kit with ASTM Tape	Basic Kit
1mm	6	F10713348-6	F10713348-1	F10713222-1
1mm	11	-	F10713348-2	F10713222-2
1.5mm	11	-	-	F10713222-3
2mm	6	F10713348-9	F10713348-4	F10713222-4
3mm	6	-	-	F10713222-5

Elcometer 106 Adhesion Tester

- Applications include: paint or plasma spray decking, coatings on steel, aluminium or concrete, etc
- Test method: A test dolly is bonded to the coating using an adhesive. The 106 houses a spring arrangement which applies a lift force to the dolly. When the dolly is pulled off the surface, an indicator on the scale shows the numerical value of adhesion expressed in terms of the force required to remove the dolly.
- Used in accordance with ASTM D4541, ISO 4624 and BS EN 24624 test method. Elcometer 106 Adhesion



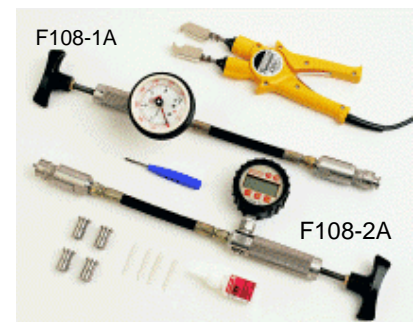
Elcometer 106 adhesion Tester with 5 measuring range

Model	F106-1	F106-2	F106-3	F106-4	F106-5
Measuring range	0-3.5N/mm ² (MPa) or 0-5lb/in ² x 100	0-7N/mm ² (MPa) or 0-10lb/in ² x 100	0-15N/mm ² (MPa) or 0-20lb/in ² x 100	0-22N/mm ² (MPa) or 0-3.2lb/in ² x 100	0-0.2N/mm ² (MPa) or 0-30lb/in ²
Dolly size:	Diameter: 20mm			Area: 314mm ²	
Optional accessories	Spare dollies			T1062895-	

Elcometer 108 Hydraulic Adhesion Tester

- Application included: tanks, Pipelines, area susceptible to explosion (e.g. inflammable areas)
- Reusable stainless steel dolly
- Used in accordance with ASTM C 633, BS EN 24624, ISO 2063 test method

Model	F108-1A	F108-2A
Pressure gauge	Dial	Digital
Pressure gauge accuracy	±0.5MPa (Metric Scale); ±50PSI (Imperial Scale)	±1%
Dial Adhesion Gauge Range	Operating:	0~18MPa (0-2600PSI)
	Full Scale	0~25MPa (0~3500PSI) 0~34MPa (0~5000PSI)



Hong Kong Head office:

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Climate Testing Instrument

Elcometer 319 dew point meter



Model: G319

- Range: -20~50 C (air temperature), -60~300 C (surface temperature),
- Dew temperature,
- 0~100%RH (relative humidity)

Elcometer 116 Whirling and Sling Hygrometer



Model: G116C-1
Range: -5~35 C

Coating Thickness Gauge

Elcometer 415 Paint & Power Coating Thickness Gauge



- Model: Elcometer 415
- Range: 0 to 1000µm
 - Resolution: 1µm
 - Accuracy: ±3% or ±3µm

Glossmeter

Elcometer 406, 407 Series



Geometries	Model
60	J406L-60S
20, 60	J406L-2060S
20, 60, 85	J407-1

Inspector

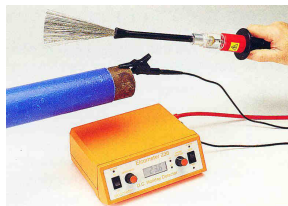
Elcometer 131 inspector



Model	Description
H131-1A	Telescopic Inspection Mirror
H131-2A	Illuminated inspection mirror
H131-1B	Telescopic Inspection Mirror
H131-1C	Telescopic Inspection Mirror

Holiday Detector

Elcometer 236 Holiday detector



Power supply: NiMH 12V internal rechargeable battery

Model	Voltage Output
D236-15A	0.5~15kV DC
D236-30A	0.5~30kV DC

Pinhole Detector

Elcometer 270 Pinhole Detector



D270-4

- Max measure range: 500µm
- Setting: 9V, 67.5V, 90V
- Battery type: 3 X (LR1600) 1.5V Alkaline (NiMH rechargeable batteries can also be used, battery life will reduce by up to 75%).

Wet Film Thickness Gauge

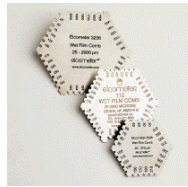
Elcometer 3220 Series Wet film



Formed in stainless steel

Model	Range(µm)
K0003230M001	0~25
K0003230M002	0~50

Elcometer 112/3236 Hexagonal Wet Film Combs



Formed in stainless steel

Model	Range (µm)
B112-1	25~3000
K0003236M001	20~370
K0003236M002	25~2000

Elcometer 115 Series Wet Film Combs



Formed in stainless steel

Model	Range 1	Range(µm)
B1152951	Range 1	25~330
B1152952	Range 2	51~457
B1152953	Range 3	51~762
B1152954	Range 4	127~1270
B1152959W	Set of 4	

Surface Profile Gauge

Elcometer 123 Surface profile gauge



Model: **E123A-M**
Range: 0~1000µm
Minimum reading: 2µm

Elcometer 223 Digital surface profile gauge



Model: **E223-2**
Interface: RS-232
Range: 0~1000µm Resolution: 1µm

Elcometer 124 thickness gauge



Model: **E124-3M**
Range: 0~1000µm
Can be used with Elcometer 122

Elcometer 122 Testex Replica Tape



Used with Elcometer 124

Model	Range
E112-C	40~115µm



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Temperature Data Recorder

Elcometer 215 Oven Temperature Data Recorder

The Elcometer 215 is ideal for measuring the temperature profiles of both the sample and the oven during the curing process.

The Elcometer 215 identifies the achieved “Temperature Profile” and provides the User with information to ensure consistent quality. Suitable for powder coating, batch and conveyor ovens,



Feature:

- with a large display for easy menu-driven operation a
- Choice of five languages: English, French, German, Spanish and Italian
- Minimize energy loss: Avoid running the ovens at unnecessarily high temperature or with long through-put times

- Maximize productivity: Reduce rejects and reworks due to poor oven performance
- Power supply: 2 x AA Batteries
- Optimise finishing quality: Logging temperature profiles provides the information required to ensure consistent quality
- Datalogger software: Comprehensive Calculations and fully customized reports are easily produced with the Elcometer 215 Software supplied as standard with each gauge.
- Choice of kits available: Standard and Top models available

Specification:

- Accuracy: 5 C to 500 C: ± 0.5 C; >500 C: ± 1 C
- Resolution: 0.1 C
- No. of channel: 6K-type
- Memory: 260000 readings or 8 production runs

Model	Description
G215-2S	Elcometer 215 standard kit
G215-2T	Elcometer 215 top kit
T21521275	1.5m Clamp Air Probe
T21521287	1.5m Magnetic Air Probe
T21521278	1.5m Clamp Surface Probe
T21521281	1.5m Magnetic Surface Probe
T21521279	3m Clamp Surface Probe
T21521282	3m Magnetic Surface Probe

Surface coating tester

Elcometer 128 Pictorial Surface Standard



Model: E128-1, Elcometer’s range of Surface Standards (ISO 8501, SIS 055900)

Elcometer 1720 Abrasion, Scrubbing & Washability Tester



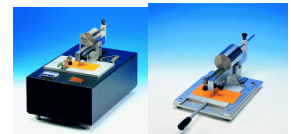
- These robust, reliable and extremely versatile machines have been designed for testing the abrasion, washability, brushability and resistance of a wide range of materials including paint, lacquers, inks, coatings, leather, wood, plastics, printed material, fabrics, etc

Elcometer 3025 Scratch/Shear Tester



- A motorized device to test the resistance of many materials to scratching (ISO). A conical diamond tip is fixed beneath a beam holding a sliding weight. The tip leaves a trace and the extent of this, in relation to the load used, indicates the degree of hardness.

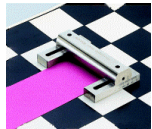
Elcometer 3000 Clemens Unit



- Designed to evaluate resistance to scratching. A tool is lowered gradually onto the surface of the sample and moved 6 cm. Depend on the purpose of the test and the load applied, varying degrees of penetration of the tool into the coating are observed, from a superficial trace to total destruction.

Coating Tester

Elcometer 3530 Adjustable Baker Film Applicator



- The gap can be adjusted from 0~250µm
- Can be used in accordance with ASTM D 3022, ASTM D 823, FTMS 141a M2161, FTMS 141 M6226 standard

Elcometer 3520 Baker Film Applicator



- There are 4 fixed gap size can be set to produce either a uniform film or a film wedge
- Can be used in accordance with ASTM D 3022, ASTM D823, FTMS 141a M2161, FTMS 141a 4122.1 standard

Elcometer 5500 Drying Time Tester



- A rod with a ball tip is brought into contact with a test piece if fresh paint and traces a circumference of 50mm. The drying time is evaluated from the condition of the trace and measured with a template with time markings

Elcometer 1615 Impact Tester



- This gauge is ideal for evaluating the resistance of a coating to impact (elongation, cracking or peeling) either by a weight with a hemispherical punch attached falls on a coated metal sheet or a weight falls on to a hemispherical punch which is resting on the coated metal sheet

Salt Testing equipment

Elcometer 134S Salt Detection Kit



- Model: E134-1
- Range: 1~50ppm (µg/cm²)
 - Standard: ISO 8502-6, SIO DIS 8502-9

Elcometer 134A Chloride Ion Test Kit



- Model: E134-2
- Range: 1~50ppm (µg./cm²)
 - Standard: BS EN ISO 11127-6, ISO11127-7, BS 7079-F16

Elcometer 138 Bresle Kit



- Model: E138-1
- Standard: ISO 8502-6, ISO DIS 8502-9

Elcometer 130 Salt Contamination Meter



- Model: E130-1
- Range: 0.1-20µg/cm²
 - Resolution: 0.1µg/cm²



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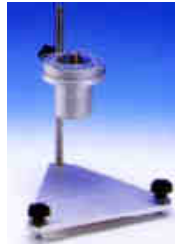
2210 Series Zahn-cup ASTM D 4212



- Can be used in accordance with ASTM D 4212, ASTM D 1084, ASTM D3794
- Formed in Stainless steel
- Ideal for measuring the consistency of paints, varnishes and similar products

Cup no.	Range	Model
1	5-56	K0002210<001
2	21-231	K0002210M002
3	146-848	K0002210M003
4	222-1110	K0002210M004
5	460-1840	K0002210M005

2351 Series Ford Cup ASTM D 1200



- Can be used in accordance with ASTM D 1200
- Made of anodized aluminium, with a stainless steel orifice
- Ideal for measuring the consistency of paints, varnishes and similar products

Cup no.	Range(cSt)	Model
1	10-35	K0002351M001
2	25-120	K0002351M002
3	49-220	K0002351M003
4	70-370	K0002351M004
5	200-1200	K0002351M005

*Elcometer 2400 Viscosity Concersion Disc for unit conversion from seconds to cSt

501 Series Pencil Hardness Tester



- Model: **H501-1**
- Can be used in accordance with ASTM D 3363, ECCA T4, EN 4.45.1, BS3900 E19, ISO 15184
- To evaluate the hardness of the coating of the pencil.
- Fixed angle testing ensure increasing the reproducibility of the rest
- Constant force of 7.5N
- With a set of pencils in each of the 14 hardnesses from 6B to 6H, 2 pencil sharpeners and a sandpaper block

3086 Series Motorized Pencil Hardness Tester



- Model: **K0003086M001**
- Can be used in accordance with ASTM D 3363, BS3900 E19, ISO 15184
- To evaluate the hardness of the coating of the pencil
- Fixed angle for testing
- The load on the lead is adjustable from 0 to 10N
- The motorized device in anodized aluminium can travel forwards or backwards at a uniform speed - further increasing the reproducibility of the test
- Supplied with a lead holder and a set of 12 leads in each of the 14 hardnesses

2050 Series High Precision Grindometer

2041/2020 Series Fineness of Grind Gauges – Hegman, North & PCU



2050 Series



2041/2020 Series

- Can be used in accordance with ASTM D1210, ASTM D 1316, DIN 53203, DIN EN ISO NF 21524, FTMS 141a M.4411.1, ISO 1524, NFT 30 046
- Made of hardened stainless steeland
- With one or two grooves with a graded slope for determine particle size and fineness of grind of many materials including paints, pigments, inks, coatings, chocolates or other similar products
- 2020Series shows graduations in microns, NS and PCU indicated on top of the gauge

Series	Range			Number of Grooves	Groove Width	Groove Length	Accuracy	Graduation	Model
	Mm	Hegman(NS)	North (PCU)						
2050 Series High Precision Grindometer	0-25µm	--	--	1	12mm	200mm	±1µm	1µm	K0002050M001
	0-50µm	--	--					2µm	K0002050M002
	0-100µm	--	--					5µm	K0002050M005
	0-250µm	--	--					12.5µm	K0002050M008
2041 Series Fineness of Grind Gauges	0-15µm	--	--	2	12mm	127mm	±2µm	1µm	K0002041M001
	0-25µm	--	--					2.5µm	K0002041M002
	0-50µm	--	--					5µm	K0002041M003
	0-100µm	--	--					10µm	K0002041M004
2020 Series Fineness of Grind Gauges	0-15µm	8-7	10-9	2	12mm	127mm	±2µm	1µm	K0002020M003
	0-25µm	8-6	10-8					2.5µm	K0002020M004
	0-50µm	8-4	10-5					5µm	K0002020M001
	0-100µm	8-0	10-0					10µm	K0002020M002



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Website: www.fortunescientific.com.cn

Guangzhou Branch:

TEL: (86 20) 8130 7388 FAX: (86 20) 8108 4925

E-mail: guangzhou@fortunescientific.com.cn