



LIST-MAGNETIK

## COATING THICKNESS MEASUREMENT SURFACE TESTING DEVICES



### PAINT INSPECTION GAUGE P.I.G.

Coating Thickness Gauge according to DIN 50 986 (wedge cutting principle) suitable for measuring all coatings on any base material (steel, non-ferrous metals, plastics, wood, concrete, ceramics, reflective coatings etc.). In addition the structure of multiple coating systems can be analyzed. A special cutting tool supplied with the gauge is used to incise a small precision V-groove through the paint film and into the substrate. This V-groove is observed vertically with an illuminated microscope bearing a measuring scale.

The instrument includes three cutters:

- Cutter No. 1 range 20 - 2000 microns (graduation 20 microns)
- Cutter No. 2 range 10 - 1000 microns (graduation 10 microns)
- Cutter No. 3 range 2 - 200 microns (graduation 2 microns)



### WET FILM THICKNESS GAUGES

#### Measuring Combs

for determining wet coatings on flat surfaces

#### Models:

Stainless steel	Measuring ranges	5 - 150 microns	No. KB- 150
		25 - 2000 microns	No. KB-2000
Aluminium	Measuring range	25 - 2000 microns	No. KL-2000



### MULTICROSS CUTTERS FOR THE GRID CUTTING TEST

(DIN 53 151)

The grid cutting test is applied for the evaluation of the adhesion of coatings on the base material as well as of layers on top of one another. A defined pattern of cross cuts at right angles to each other is cut into the coating down to the base, thus producing a grid with 25 squares. Cracking of the cutting edges and peeling-off of particles is evaluated visually by comparison with a scale pattern.

#### Models

- GS-201 **Multi-blade cutter**  
(6 cutting edges at 1 mm distance)  
up to 60 microns
- GS-202 **Multi-blade cutter**  
(6 cutting edges at 2 mm distance)  
up to 120 microns
- GS-202 **Folding ruler**  
(1 mm bars) with NT cutter over  
120 microns

The devices include a brush, magnifier and plastic case.



*The human eye - symbol of our job:  
Guaranteeing quality through surveillance. Perfect in function  
and technology. Open to everything new,  
recognizing changes in due time and responding to  
them shrewdly. Success is visible.*



#### SURFACE ROUGHNESS METER SURF-CHECK Ra + Rz

This pocket-size electronic scanning instrument measures surface roughness at the press of a button. SURF-CHECK features high accuracy, simple operation and stable performance. It is widely applicable in testing surfaces of all kinds of metals and non-metals and suitable for use in production, workshop and in quality control. The sensor moves over a surface of 6 mm. Its motion is converted into electric signals which are amplified and processed into Ra and Rz values before being displayed.

##### Technical Data

Measuring Range: .....Ra: 0.05 - 10.0 microns  
.....Rz: 0.1 - 50 microns  
Accuracy: .....± 15 %  
Feed Length: .....6 mm  
Feed Speed: .....2 mm/s  
Sensor: .....piezo electric  
Stylus needle: .....diamond  
Power Supply: .....2 x 3.6 V batteries rechargeable  
Temperature Range: .....0 - 40° C  
Dimensions: .....125 x 73 x 26 mm  
Weight: .....200 g



#### HARDNESS TEST ROD HP

This practical instrument enables fast and reproducible hardness measurements of protective surface coatings such as varnish, paint and plastic coverings. Using a clamping slider it is possible to set the force required to make a faintly visible scratch or scar on the surface with a defined, spherical tool. The force ranges are engraved in different colours on the Hardness Test Rod (3, 10, 20 N). For each range the appropriate spring is marked with the corresponding colour.

The standard model HP is supplied with three springs and one engraving needle (0.75 mm). If required, a scratch needle 1 mm is available. The instrument is protected by a vinyl case.

#### SURFACE TEMPERATURE DEVICE OS 681 C

Hand-held, battery-operated sensor measures accurately temperature using non contact infrared technology. Simple operation with one button.

##### Technical Data

Temperature Range: .....-18° up to +315°C  
Resolution: .....1°C  
Accuracy: .....± 2 % of reading  
Response Time: .....1 second  
Power Supply: .....9V battery  
Dimensions: .....184 x 43 x 19 mm  
Weight: .....110 g



**LIST-MAGNETIK**  
Dipl.-Ing. Heinrich List GmbH

D-70771 Leinfelden-Echterdingen  
Max-Lang-Straße 56/2  
Phone (+49) 7 11 90 36 31-0 · Fax (+49) 7 11 90 36 31-10  
E-Mail: list-magnetik@t-online.de · Internet: www.list-magnetik.de

