Material Quality Tester - MRP29HY
Measure the surface quality of sheet metal and plates
due to international regulations as DVS 2929

The surface quality and the efficiency in surface conditions of sheet metal / plates can measure with the resistance measurement system MRP29HY.

The MRP29HY consists of a micro-ohmmeter and a hydraulic press, the engineering principle is based on the 'DEUTSCHEN VEREINIGUNG FÜR SCHWEISSTECHNIK e.V.' data sheet for quality evaluation on sheet metal.

It is important for every application where the reliability is dependent from the surface quality. On top priority is welding of sheet metal (e.g. after etching, and brushing) in the automotive and aircraft industry, but also surface treatment as for example lacquer and splicing.

You can measure the contact resistance on single sheet metal or overlap sheet metal e.g. aluminum or corresponding alloy. But it is also possible to measure other material. One can set all important parameter for another metal or measuring procedure (e.g. pressure).

Especially aluminum has the property to react with oxygen in the ambient air, these results in an oxide film. The oxide has a high effect on the regularity and repeatability of welded connections or the homogeneity of coatings. But oil and other pollutions have the same effect.

The measuring method measures the contact/surface resistance of the sheet metal under high pressure (typ. 7.5 kN) with a standardized convex electrode and a measurement current of 10 A.

The test sequence depends on the selected DVS2929-method with different waiting times under high pressure and result averaging with the required number of measurements.

The initial resistance of the system is determined before and after each test series. This leads to very accurate results and a good detection of the quality of sheet surfaces represented by the contact resistance.

Specifications

- Microohmmeter: special, integrated
- Autom. Ranges: 100.0 μΩ / 1000 μΩ
- Effective range: up to 1800 μΩ
- Uncertainty: 0.05% of reading +/- 2d
- Displayed Resolution: 0.1 μΩ, internal 0.01 μΩ (10 nΩ)
- Display: Color, numerical, graphically
- Current: 10 A pure DC (selectable*)
- DVS 2929-1 v2007, DVS 2929-0
- Thickness of sheet metal: 0.10 mm to 4 mm
- Electrode distance: 5 mm, electrode radius 300 mm
- Sheet metal dimension: typ. 150 mm width unlimited length 300 mm width by wheeling it 180°
- Laminating pressure: 7.5 kN (adjustable 1 ... 10 kN*)
- Resistance control: by calib. external shunt*
- Force control: by 4-20mA strain gauge sensor
- Interfaces: LAN, 3 x USB (Printer, Barcode reader, XY-Positioning table**)
- Div. Safety directives e.g.: EG:2006/42/05-17
- EG:2004/108/-12-15
- EG:2006/95/-12-15
- EG:2007/42/-03-16
- Weight: ca. 45 kg
- Dimensions: ca.385x500x530 mm (WxHxD)
- Power Supply (Mains): 90 ... 264VAC, 6.5A PFC
- Pressure generation: Closed hydraulic system

DVS 2929

Questions?
phone: +49 (0)3328 / 3179 - 0
fax: +49 (0)3328 / 3179 - 10
e-mail: sales@schuetz-messtechnik.com
Here you will get technical assistance as well as complete information regarding features, prices, shipment and reselling.

www.ohmmeter.de

Made in Germany