

ISOTEST 4S - Porosity Testing of Coatings

Application

ISOTEST 4S is indispensable in the area of passive corrosion protection.

Non-destructive high voltage testing of the most diverse coatings and corrosion protection materials has proved itself again and again over long periods of time. The test, prescribed by many works' specifications and Standards, has made a successful contribution, within the framework of quality control to reducing stoppage times and avoiding interruptions to production and subsequent repair costs.

Coating thicknesses from a few hundred micrometres to several millimetres can be tested for pores, cracks or scarcely discernible transport damage by means of short high voltage impulses. The short action time of the impulses, which treats the material gently, makes it possible to test with reserves of energy, which, in turn, guarantees the stability of the selected test voltage even with dirty or damp surfaces.

Defective areas can be clearly distinguished, whether it be with externally or internally coated tubes, rubber coated containers, seams in plastic, fully coated fittings or machine parts ... everywhere where non conductive coatings are overlaid on conductive materials (e.g. metal, wet concrete) or where non conductive coatings have an underlay of conductive materials (e.g. plastic seams in tubing or containers).

Benefits at a glance

- Microprocessor controlled test instrument
- Fully adjustable test voltage
- Patented automatic regulation
- Power reserves for the highest requirements
- Graduated voltage adjustment
- Adjustable sensitivity (switch)
- Separate high voltage pushbutton



ISOTEST 4S stands for:

- Robust construction for using at construction sites
- Testing of dirty, damp and even slightly conductive surfaces
- Rapid battery change - on site
- Three earthing possibilities, including capacitance
- Testing of fully insulated objects
- Emergency off safety mode via switch
- No static charge when testing
- Automatic earth monitoring
- Minimal loading on material by using short test impulses
- Can be carried with shoulder strap and abdominal belt



MEASURING EQUIPMENT
Holiday (Pin Hole) Detector ISOTEST 4S

Document No.: 11-630-R0

Sheet: 2 of 2

German Cathodic Protection



Accessories

A large number of accessories are available for a wide range of applications. Test electrodes for the most diverse shapes of object and coatings are complemented by components for the using of different earthing possibilities including capacitance earthing.



The full-trimmed brush electrodes and the spiral electrodes are impressively robust and hard wearing. All electrodes can be easily swapped even with older versions of ISOTEST.

Our expert service personnel are always available to advise you on the choice of the right accessory for your application - especially for less common uses of the equipment.



Whether testing internally, in manholes, with completely coated components or on oversized tubing, the ISOTEST accessory programme has the right tool.

Service - Calibration

ISOTEST instruments will be delivered with a traceable calibration together with a certificate. A clearly visible seal make keeping to the recommended inspection easier. The data can also be accessed through the menu.



Revisions in the course of technical progress reserved.

Technical data

Voltage range	10-25 kV, 5 kV steps
Voltage selection	graduated switch
Voltage form	unipolar impulses
Impulse duration	< 10 µs
Voltage supply	rechargeable battery 6 V, 4.5 Ah, separate compartment
Size and weight of battery	(90 x 45 x 120) mm, 0,9 kg
Operating time	up to 9 hours
Size and weight w/o battery	(220 x 256 x 88) mm, < 3 kg
Alarm signal	approx. 86 dB, 3.5 kHz
Connecting cable to test probe	1.5 m
Relevant standards and DVGW process sheets	DIN (55670, 28055, 30670) DIN (4681, 28063) DIN EN 14330 (iV) DVGW 462/I, W400-2