

# 4S

Safe and sure – ISOTEST®

## ISOTEST 4S

Porosity Testing of Coatings



### Benefits at a glance

- Microprocessor controlled test instrument
- Highly accurate test voltage
- Patented automatic regulation
- Power reserves for the highest requirements
- Self-calibrating instrument
- Testing of dirty, damp and therefore slightly conductive surfaces
- Three grounding possibilities, including capacitance

**ELMED**  
MEASUREMENT TECHNOLOGY

# 4S

## ISOTEST 4S stands for:

- Robust construction (can be used on building sites)
- Adjustable sensitivity (switch)
- Rapid battery change – on site
- Separate high voltage push button
- Emergency off safety mode via switch (optional)
- No static charge when testing
- Automatic ground monitoring
- Minimal loading on material by using short test impulses
- Self-calibrating instrument – no extra voltmeter required

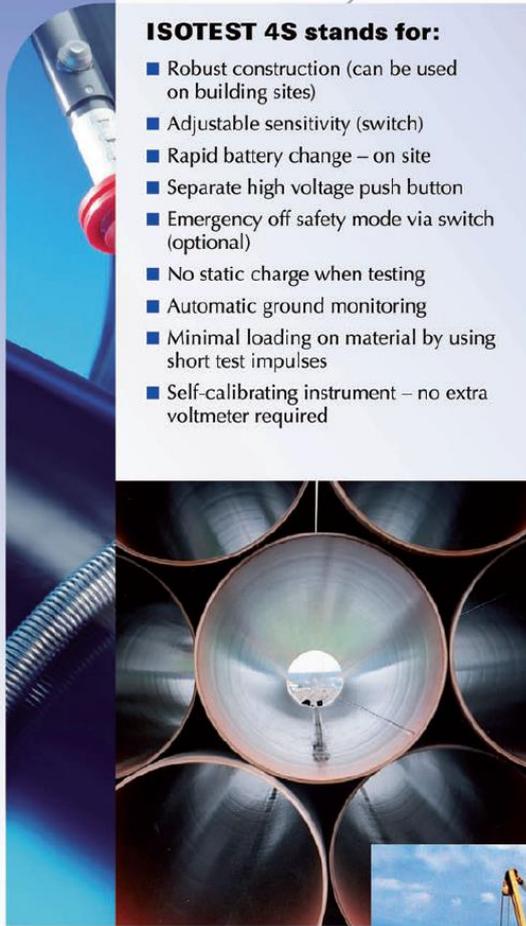
## Application

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 sheathed 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).



(Picture: Denso GmbH)

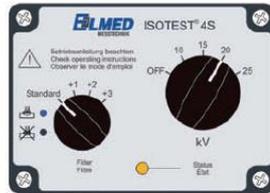


(Picture: Canusa CPS)

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## ISOTEST 4S



### ISOTEST 4S

Test voltage 10-25 kV, 5 kV steps

Sufficient reserves of energy for the most demanding requirements by means of impulse voltage technology.

The patented automatic regulation guarantees a precise test voltage. Its robust, hardwearing technology makes the ISOTEST 4S suitable for the rough and tumble of everyday testing. Its ease of use bears witness to the years of experience built into the instrument.

### Delivery includes:

- ISOTEST 4S test instrument complete with high voltage inspection probe including safety button.
  - Lead acid 6 V rechargeable battery – easy to change in its own compartment
  - Charger 230 V / 50Hz
  - Ground cable 10 m with a robust clip and instrument plug with ground monitoring
  - Strong plastic housing in a robust instrument bag complete with carrying strap
  - Full operating instructions and quick start guide
  - Spare battery for safety button / fuses for rechargeable battery
  - Works and calibration certificate
- Article - No.: 014100010  
Optional with emergency off safety mode  
Article - No.: 014100001



A selection of the wide range of accessories

# 4S



## Safe and sure – ISOTEST® ISOTEST 4S

### Accessories



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



The full-trimmed brush electrodes and the spiral electrodes are impressively robust and hard wearing. All electrodes can easily be 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, with completely sheathed components or large diameter pipes, the ISOTEST accessory programme has the right tool.

### Service – Calibration

ISOTEST instruments have a traceable calibration and come with a works certificate. A clearly visible test seal makes keeping to the recommended inspection dates easier. The data can also be accessed through the menu.



More up to date information at  
[www.isotest.de](http://www.isotest.de)

### Technical Data

Voltage range	10-25 kV, 5 kV steps
Voltage selection	graduated switch
Voltage form	unipolar impulses
Impulse duration	< 10 µs
Voltage supply	Lead acid 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, 3500 Hz frequency
Connecting cable to test probe	1.5 m
Relevant standards and DVGW process sheets	DIN 55670, DIN 28055, DIN 30670, DIN 4681, DIN 28063, DIN EN 14330, DVGW462/I, W400-2



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# HV

Safe and sure – ISOTEST®

## ISOTEST HV

High-Voltage Voltmeter



### Benefits at a glance

- Accurate measurement of high-voltages
- Testing of portable ISOTEST® holiday detectors and stationary ISOTEST act holiday detector systems according to general rules and standards
- Easy handling / easy to operate
- PTB traceable calibration

**ELMED**  
MESSTECHNIK

# HV



Safe and sure – ISOTEST®

## ISOTEST HV

### Application

The compact and robust measuring device allows a precise measuring of the impulse test voltages of ISOTEST® holiday detectors.

Apart from portable ISOTEST® holiday detectors stationary ISOTEST act testing systems can also be checked according to general rules and standards.

The result can be read easily on the large display with an accuracy of 0.1 kV.

The battery-powered device comes with a PTB-traceable calibration that is recognised by all accredited certification bodies.

### Service – Calibration

The high-voltage voltmeter ISOTEST HV has a traceable calibration and comes with a works certificate.

A clearly visible test seal makes it easier to keep to the recommended inspection dates.



More up to date information at  
[www.isotest.de](http://www.isotest.de)



Transport box within the scope of supply



### Technical data

Testing range:	5 - 35 kV impulse voltage measurement*
Resolution:	0.1 kV
Power source:	4 mignon standard batteries (AA / LR6)
Current:	approx. 50 mA
Ambient temperature:	0 ... 40°C
Weight:	1.7 kg
Dimensions (W x H x D):	200 x 70 x 191 mm

\*Condition of the pulses:

Predominantly unipolar pulses, post-pulse oscillation up to 5 ms is permissible.

### Scope of supply

- High-voltage voltmeter ISOTEST HV
- Measuring accessories (measuring adapter, grounding cable set)
- Transport box
- Battery set (4 x AA / LR6 mignon standard batteries)

Art.-no.: 0190000140



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