

Pulse Holiday Detector NOVOTEST SPARK-1



◀Description of Pulse Holiday Detector NOVOTEST SPARK-1▶

Pulse Holiday Detector NOVOTEST SPARK-1 is a device for detecting defects (thinning, micro holes, cracks, etc.) in dielectric coatings on metals. Pulse Holiday Detector NOVOTEST SPARK-1 is used to testing the integrity of insulating coatings which are based on polymer materials or bituminous mastics. The pulse Holiday Detector can be used during the building and using the metal oil and gas pipelines with thickness of coatings up to 12 mm. Testing the quality of insulation coatings is used to evaluate the effectiveness of corrosion protection of oil and gas pipelines.

The principle of operation of the device is based on the electro spark method. A probe with electrode connected to one pole of the voltage source scans the surface of the tested object directly along the coating. The second pole of the voltage source from the ground connector is connected directly to the metal structure. The electronic unit fixes the gaps by voltage between the electrode and the conductive base.

Device is corresponded with the ASTM G62-07, NACE RP0274-2004, NACE RP0490-2007, NACE SP0188-2006, ASTM D4787-08, ANSI/AWWA C214-07, ANSI/AWWA C213-07, ISO 2746:1998 & AS3894.1-2002.

The operation principle of device is based on the fixation the breakdown of locations between the first electrode which is connected to the high-voltage source and the second electrode, which is connected to the pipe (or other testing objects).

The device operates with replaceable electrodes with different shapes, materials, and can be used for solving different tasks.



◀ Advantages of Pulse Holiday Detector NOVOTEST SPARK-1 ▶

- ☐ Automatic defect signaling mode
- ☐ Small size and lightweight
- ☐ High-capacity batteries
- ☐ Long battery life with enhanced battery
- ☐ Accurate digital voltage and sensitivity settings
- ☐ Indicator of batteries charge
- ☐ Various type of electrodes
- ☐ Shockproof case

◀ Specifications of Pulse Holiday Detector NOVOTEST SPARK-1 ▶

Measurement thickness range of tested coatings, no more, mm	12
Measurement diameter range of the detected defects, not less, mm ²	0,1
Operation speed of electrode, not more, cm/sec	25
Output voltage, kV	0 – 40
Output voltage resolution, kV	0.1
Pulse frequency, Hz	30 – 35
Batteries life, up to, h	15
Weight of high-voltage transformer, kg	1,6
Weight of electronic unit, kg	1,1
Operating conditions	- 40 ... + 50°C, Humidity up to 95%
Total weight with kit and package, kg	4
Measurement thickness range of tested coatings, no more, mm	12

**◀ Available options of Pulse Holiday Detector
NOVOTEST SPARK-1 ▶**

- ☐ T-type Rod Electrode
- ☐ C-type Wire Brush Electrode
- ☐ Band-Brush Electrode
- ☐ Rolling Springs Electrode
- ☐ Manufacturing electrodes for customer requirements or user tasks

**◀ Standard set of Pulse Holiday Detector
NOVOTEST SPARK-1 ▶**

- ☐ Pulse Holiday Detector NOVOTEST SPARK-1
- ☐ Probe
- ☐ Ground wire with crocodile clip
- ☐ T-type Rod Electrode
- ☐ Charger
- ☐ Calibration certificate
- ☐ Operating manual
- ☐ Package

