

Pinhole / Holiday

EMIN

Testing & Measuring Everything

DeFelsko®
The Measure of Quality

Why Check for Porosity?

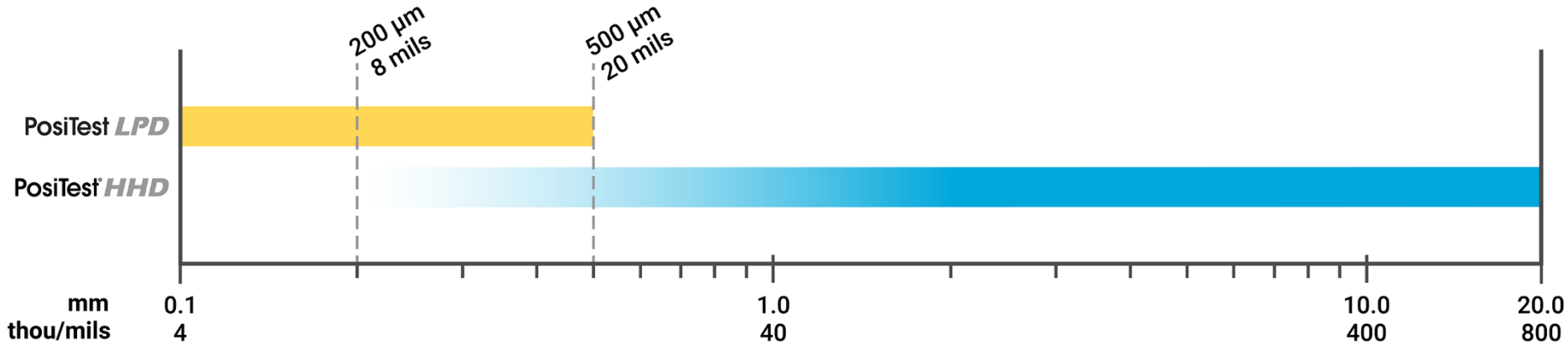
Even in areas where the dry film thickness is sufficient, air bubbles or voids can leave small areas with little or no coating coverage

- These uncovered areas can be very small-invisible to the naked eye

If not repaired, these pores (also known as pinholes or holidays) can become a starting point for corrosion, and cause premature coating and substrate failure

PosiTest LPD vs PosiTest HHD

The instrument used to detect pinholes or holidays depends on the thickness of the applied coating.



Low range of PosiTest HHD
varies with standards



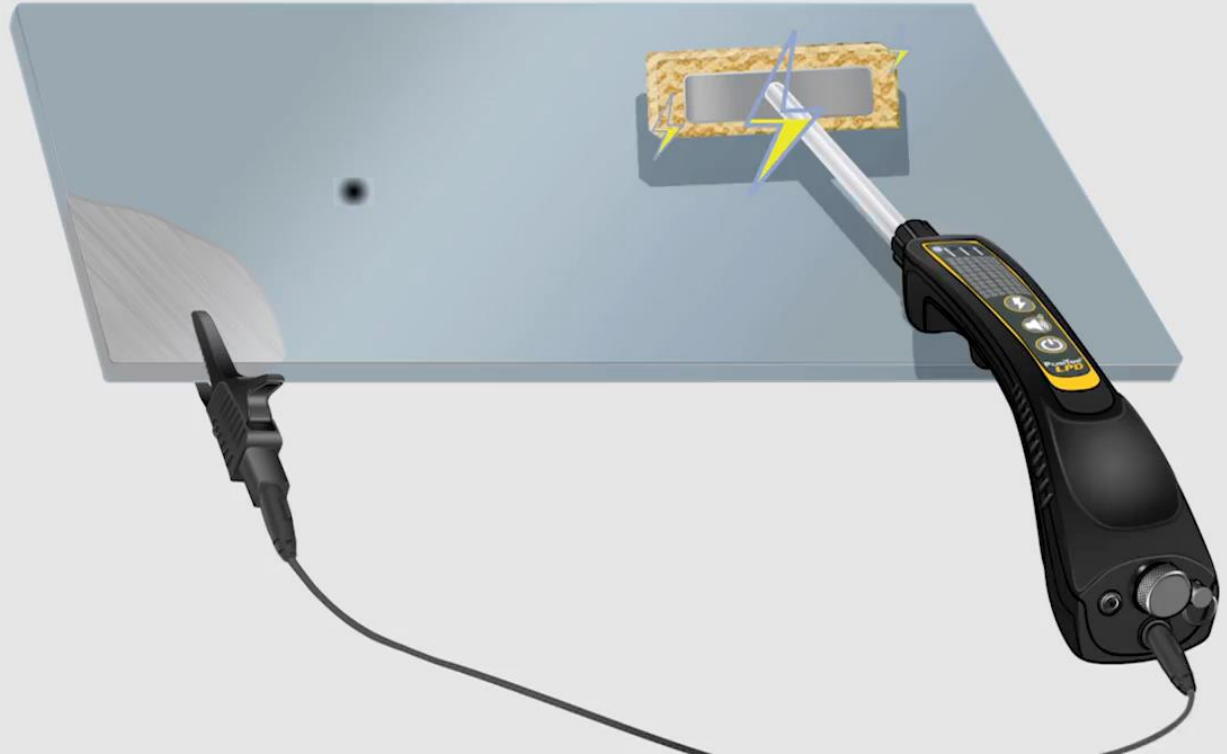
PosiTest LPD

Low voltage Pinhole Detector

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Principle of Operation

In use, an operator moves the moistened sponge over the coated surface. When a pinhole is encountered, current flows from the sponge into the substrate below. The current returns to the detector through the attached ground wire, completing the circuit and triggering audible and visible alarms.




Overview

Simple, three button interface

Voltage Selector

Alarm Enable

Power/ Battery Status

	Four calibrated voltage/sensitivity selections, conforming to a wide variety of standards and specifications	
	Voltage Setting	Sensitivity
	9 V	90 KΩ
	67.5 V	80 KΩ
	67.5 V	90 KΩ
	90 V	400 KΩ

Key Feature: *GroundSense*™

If the connection to ground, or earth, is lost while testing, all low-voltage pinhole detectors will fail to detect pinholes

GroundSense visibly reassures the user that the instrument is properly grounded

- When a connection to ground is detected, the indicator light for the selected voltage will change from blinking to steady



Models



Complete Kit

Includes the contents of the Basic Kit, adaptable sponge hardware and extension accessories



Basic Kit

Includes everything necessary to inspect, in a hard shell carrying case

Versatility- Extension Accessories

- In addition to the rectangle sponge included with the basic kit, the Complete Kit contains adaptable sponge hardware and extension accessories.
 - Use any of the sponge hardware options with any of the extension options

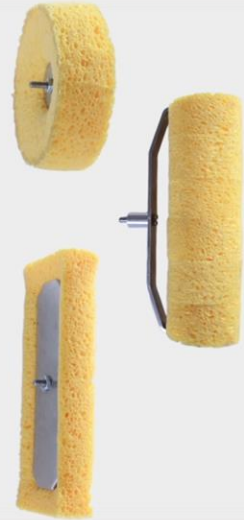
Threaded pole adapter (fits common paint roller thread)



Two extension rods- adds 0.6m of reach

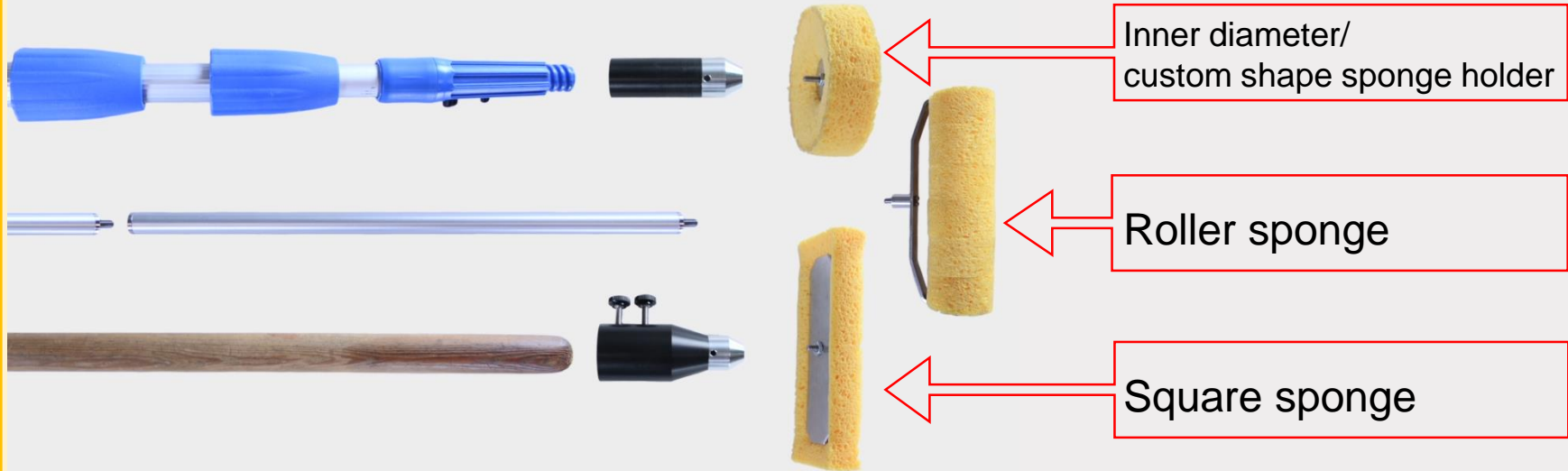


Universal adapter (connects to any pole < 3cm)



Versatility- Extension Accessories

- In addition to the rectangle sponge included with the basic kit, the Complete Kit contains adaptable sponge hardware and extension accessories.
 - Use any of the sponge hardware options with any of the extension options

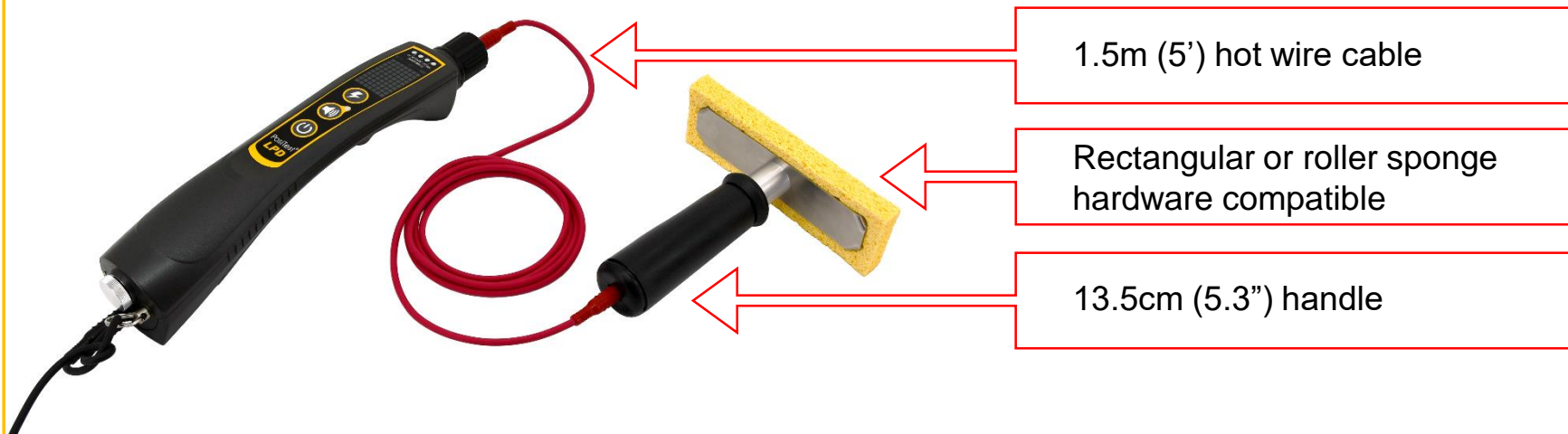


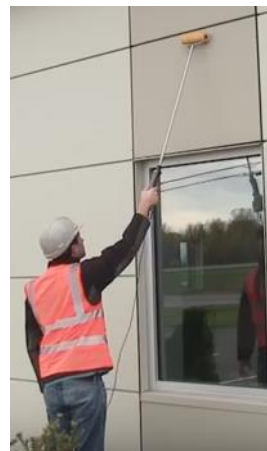
Versatility- Extension Accessories

PosiTest LPD Cabled Wand

Converts the PosiTest LPD Low-voltage Pinhole Detector into a cabled-wand style unit

NEW





Competitive Advantages



Weatherproof, dustproof, and shockproof- meets or exceeds IP65

Lightweight, balanced, ergonomic design

Uses 3 AAA batteries

Long form Certificate of Calibration included with each instrument

- Most competitive instruments do not meet published specifications

GroundSense visibly reassures user that the instrument is properly grounded

Versatile attachments, with common threads and connectors

Two year warranty

Regulated voltage outputs will not drop under load

Calibration

Low-voltage porosity detectors should be calibrated

- It is vital to ensure that any porosity detector alarms at the sensitivity (resistance) specified by standards
- It is equally important to ensure the porosity detector maintains its voltage setting at the specified sensitivity

To ensure proper calibration, use the LPD Verifier (pictured) to simulate a defect, and check voltage using a certified voltmeter.

If a porosity detector is out of tolerance, pinholes and defects may be missed!

Our testing found that most competitive porosity detectors will not pass calibration



NEW



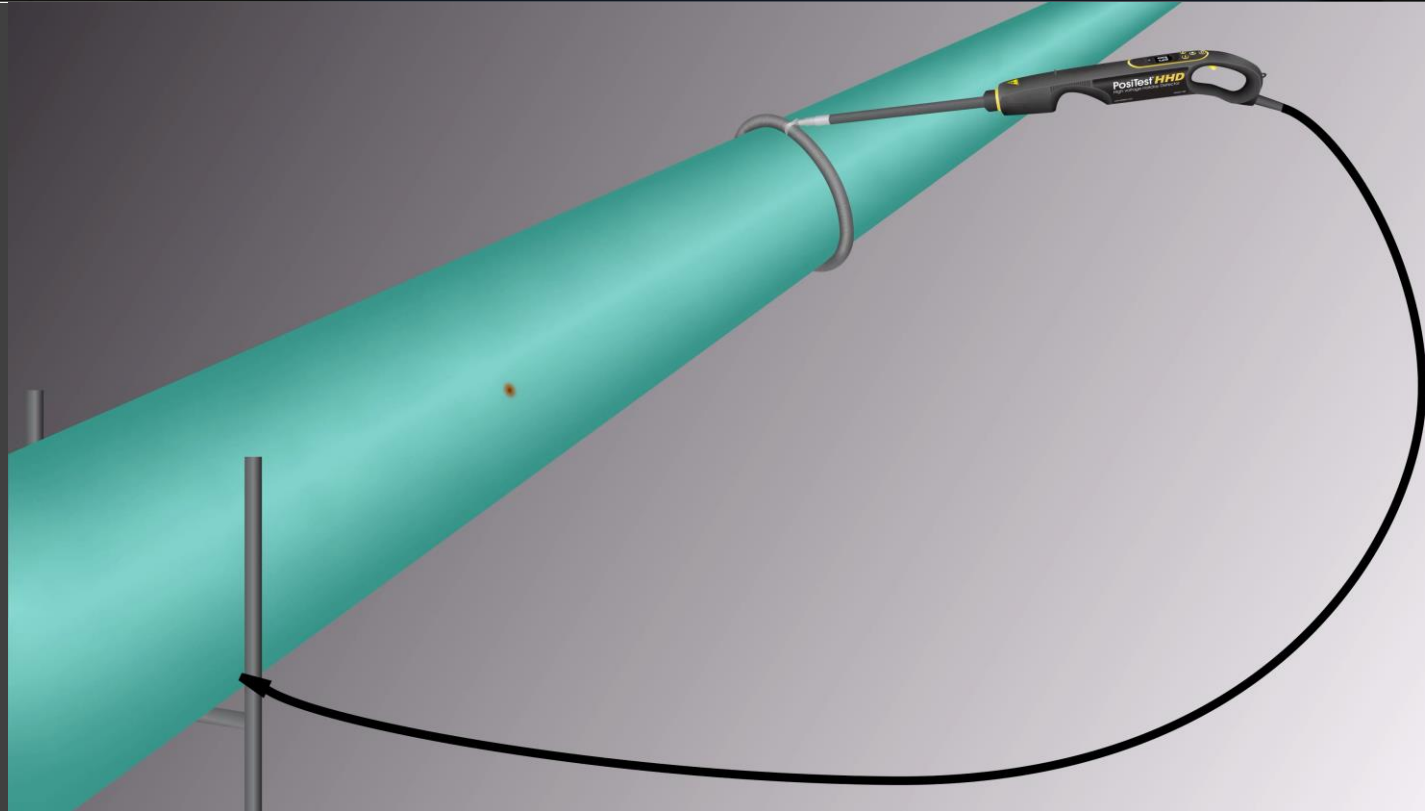
PosiTest HHD

High voltage Holiday Detector

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Principle of Operation

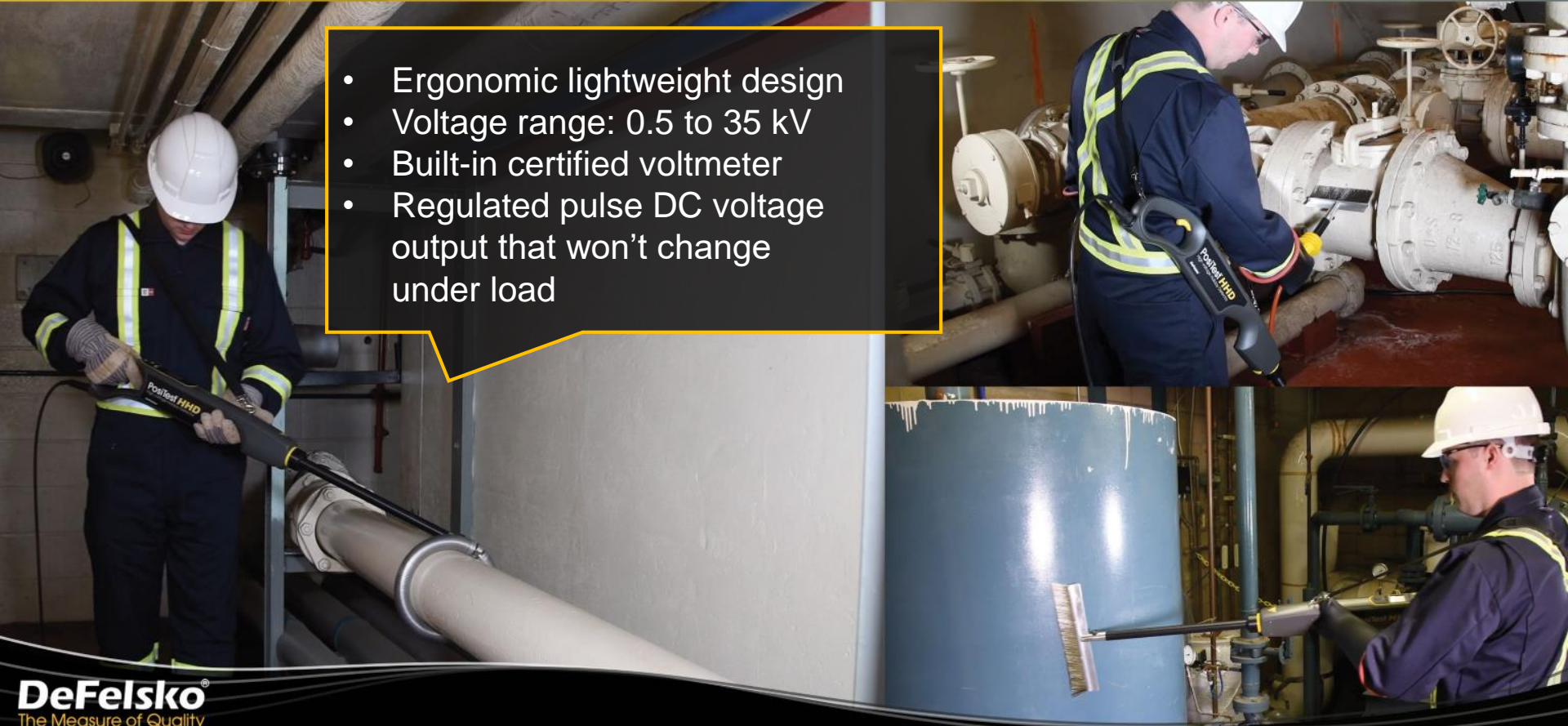
The charged electrode is passed over the coating, and when a holiday is encountered current flows from the electrode into the substrate below. The current returns to the detector through the ground wire, completing the circuit and triggering audible and visible alarm.



Features

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- Ergonomic lightweight design
- Voltage range: 0.5 to 35 kV
- Built-in certified voltmeter
- Regulated pulse DC voltage output that won't change under load



PosiTest *HHD* Kit



Kit Comes Complete

- PosiTest HHD
- 7.6 m (25') ground (earth) cable with ground clip
- Li-ion battery pack with built-in charge state indicator
- Smart charger with universal AC voltage input
- Stainless steel fan brush
- 50 cm (20") extension rod with thumb screw
- Shoulder strap
- Instruction Manual
- Durable Pelican Storm case
- Long Form Certificate of Calibration traceable to NIST
- Two year warranty

Electrode Options

Rolling Spring Electrodes



Custom sizes available!

Flat Wire Brush Electrodes



Adaptors for PCWI and
Tinker & Rasor



Also compatible with SPY electrodes.

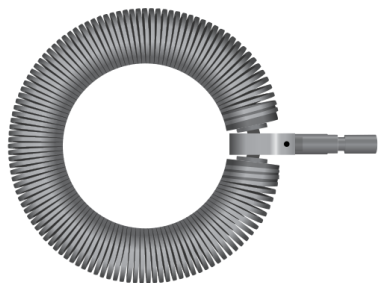
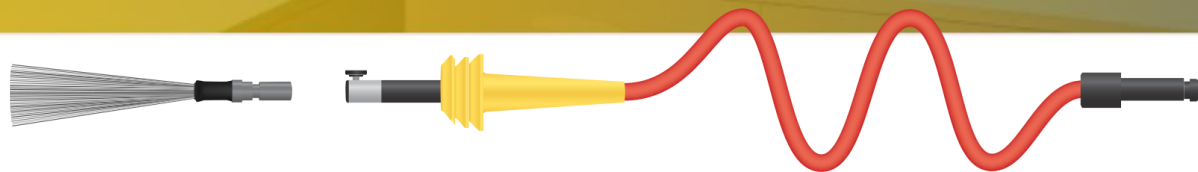
Fan Brush Electrode



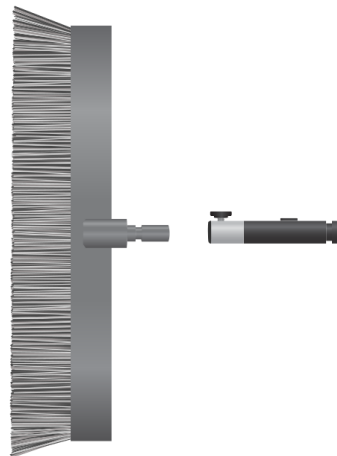
Conductive Rubber Paddle



Versatile

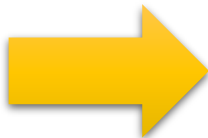


Choose between 50 cm (20")
(included) and 13 cm (5") rods or
the handheld wand accessory



Handheld Wand Accessory

Optional handheld wand accessory converts the detector into a wand configuration ideal for testing hard-to-reach areas (suitable for voltages < 15 kV)



2 Ways to Set Voltage

Voltage Calculator

Choose one of 11 international standards then simply input the coating thickness to automatically calculate the required test voltage

Manually Adjust Voltage

Simply choose the voltage selection option from the menu, then use the plus and minus buttons to adjust

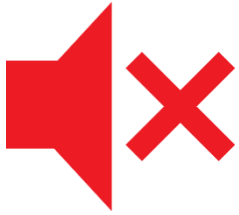
PosiTest **HHD**

AS 3894 F1	AS 3894 F2	AS 3894 F3
AS 3894 F4	ASTM D4787 -18	ASTM D5162 -15
ASTM G62 -14	ISO 29601 2011	NACE SP0274 2011
NACE SP0188 2006	NACE SP0490 2007	←

PosiTest **HHD**

-/+
2.5
- +
OK kV

Alarm Modes



Audio alarm is OFF



The detector emits a continuous tone when high voltage is on and a loud alarm tone when a holiday is detected. This is the default audio alarm mode.



The detector emits a loud, continuous tone when high voltage is on and is silent when a holiday is detected.



Strobe Alarm

The PosiTest HHD uses a high-intensity white Led to alert the operator when a holiday is detected. The strobe alarm can be turned **ON** or **OFF**.

Removable Smart Lithium-Ion Battery

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Provides power for up to 40 hours of continuous measurement – fully rechargeable in 3 hours



Built-in charge indicator



PosiTest HHD Verifier

Standalone volt meter (crest meter, jeep meter) for verifying the accuracy and operation of ALL pulse type and DC holiday detectors

- Ideal for field/laboratory verification of pulse and continuous DC holiday detectors
- Wide measurement range: 0.5 – 35 kV
- Simple two step operation
- Lightweight/Portable – requires no external power source

Voltage Range	0.5 – 35 kV
Resolution	0.5 kV – 1 kV: 10 Volt Steps 1 kV – 35 kV: 100 Volt Steps
Accuracy	±5%
Operating Temperature	-20° to 60°C (-4° to 140°F)



Competitive Advantages



Lightweight,
ergonomic design
provides comfortable
all-day use

Built-in certified
voltmeter displays and
regulates voltage at
electrode

Long Form
Certificate of
Calibration

Regulated pulse
DC voltage output
– that won't
change under load

Available
handheld wand
accessory

Voltage
calculator
feature

Included Pelican
Storm Case

Removable
Smart lithium-
ion batteries