

# PosiTest<sup>®</sup> **HHD**

## *High voltage Holiday Detector*

Detects holidays, porosity, pinholes, leaks,  
and other discontinuities using pulse DC



*Optional  
handheld wand  
with insulated  
cable*



**DeFelsko<sup>®</sup>**  
The Measure of Quality

# PosiTest® HHD

## Features...

### Simple

- Easy-to-use with bright, color LCD
- Ready to measure—comes with everything needed for testing
- Audibly and visibly alerts when flaws/holidays are detected
- Lightweight, ergonomic design provides comfortable all-day use, reducing fatigue
- Voltage calculator feature—choose one of 11 international standards, and input the coating thickness to automatically calculate the required test voltage

### Durable

- Rugged, environmentally sealed ABS plastic enclosure
- Weatherproof, dustproof, and shockproof
- Included hard shell case with custom foam inserts for superior protection
- Two year warranty

### Accurate

- Built-in certified voltmeter (crest meter, jeep meter) displays and regulates the voltage at the electrode
- Long Form Certificate of Calibration included with each instrument
- Conforms to national and international standards including ISO, ASTM, and NACE

### Versatile

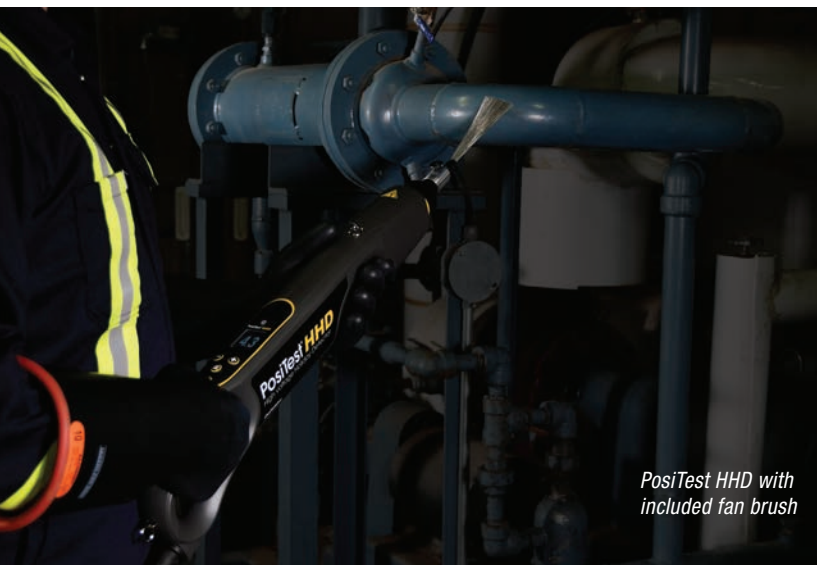
- A wide range of rolling spring electrodes and wire brushes are available. Custom sizes available upon request.
- Optional handheld wand accessory converts the detector into a wand configuration ideal for testing hard-to-reach areas (suitable for voltages < 15 kV)
- Industry-standard connectors and adaptors for compatibility with nearly all existing electrodes
- User adjustable voltage range from 0.5 – 35kV

### Powerful

- Strobe light and loud audible alarms emitted when a holiday is detected. Audio alarm mode can be adjusted for differing environments.
- Removable Smart lithium-ion battery with built-in charge state indicator

### Safe

- Press and hold Safety Trigger helps prevent accidental high voltage generation
- 7.6 m (25') ground (earth) cable with locking connector and spring clamp
- Shock proof/creep proof—internally sealed to minimize creep distance to high voltage components. Designed in accordance with IEC 61010-1.



PosiTest HHD with included fan brush

## Two Kits available

The PosiTest HHD is available in two kit configurations. The PosiTest HHD Kit features a longer electrode rod, increased battery capacity, Pelican Storm case, and shoulder strap. The PosiTest HHD Basic Kit features a shorter electrode rod, lower battery capacity, and a durable hard shell case.

### PosiTest HHD Kit (HHDKIT)

**Includes ALL features as shown on left plus...**

- Pelican Storm hard shell case with custom foam inserts for maximum protection
- 72 Wh Li-ion battery
- Choice of 50 cm (20") or 13 cm (5") electrode rods
- Shoulder strap

### PosiTest HHD Basic Kit (HHDKITB)

**Includes ALL features as shown on left plus...**

- Hard shell case with custom foam inserts
- 36 Wh Li-ion battery
- 13 cm (5") electrode rod

| Specifications   | HHDKIT   | HHDKITB      |         |
|--|--|--------------|---------|
| Output Voltage Range   | 0.5 – 35 kV  |              |         |
| Output Voltage Adjustment                                    | 0.5 kV – 1 kV: 10 Volt Steps<br>1 kV – 35 kV: 100 Volt Steps |              |         |
| Output Accuracy  | ±5%  |              |         |
| Pulse Duration   | 10 µs  |              |         |
| Pulse Repetition Rate  | 30 Hz  |              |         |
| Coating Thickness Range                                      | up to 20 mm (780 mils) <sup>†</sup>                          |              |         |
| Battery Size   | 72 Wh Li-ion   | 36 Wh Li-ion |         |
| Typical Battery Life<br>for selected rolling springs @ 10 kV | Ø 12"  | 40 hrs.      | 16 hrs. |
|  | Ø 40"  | 30 hrs.      | 12 hrs. |
| Operating Temperature  | -20° to 60°C (-4° to 140°F)                                  |              |         |

<sup>†</sup> Based on NACE SP0274-2011 recommendations.

### Ordering Guide

|  |         |
|--|---------|
| PosiTest HHD Kit<br>To substitute a Short Electrode Rod, append '-S' to the product code (i.e. HHDKIT-S) | HHDKIT  |
| PosiTest HHD Basic Kit   | HHDKITB |

**KITS COME COMPLETE** with Holiday detector, 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") or 13 cm (5") electrode rod with thumb screw, instructions, durable hard shell case, Long Form Certificate of Calibration traceable to NIST, two year warranty

#### UNIT SIZE:

64 cm x 6.4 cm x 13 cm  
(25" x 2.5" x 5")

#### UNIT WEIGHT:

1.6 kg (3.6 lbs.)  
with 72 Wh battery (no electrodes)

Conforms to ASTM D4787/D5162/D6747/D7953/G62,  
ISO 29601, NACE SP0188/SP0274/SP0490, AS3894.1

# PosiTest<sup>®</sup> HHD

## High voltage Holiday Detector

### Electrode Options

For a complete list of available electrodes visit [www.defelsko.com/hhd](http://www.defelsko.com/hhd)



Rolling Spring Electrodes

| Rolling Spring Electrodes                    |             |
|--|-------------|
| Rolling Spring Coil for 4" pipe (102 mm) OD  | HHDSPRING4  |
| Rolling Spring Coil for 6" pipe (152 mm) OD  | HHDSPRING6  |
| Rolling Spring Coil for 8" pipe (203 mm) OD  | HHDSPRING8  |
| Rolling Spring Coil for 10" pipe (254 mm) OD | HHDSPRING10 |
| Rolling Spring Coil for 12" pipe (304 mm) OD | HHDSPRING12 |
| Rolling Spring Coil for 14" pipe (356 mm) OD | HHDSPRING14 |
| Rolling Spring Coil for 16" pipe (406 mm) OD | HHDSPRING16 |
| Rolling Spring Coil for 20" pipe (508 mm) OD | HHDSPRING20 |
| Rolling Spring Coil for 24" pipe (610 mm) OD | HHDSPRING24 |
| Rolling Spring Coil for 30" pipe (762 mm) OD | HHDSPRING30 |
| Rolling Spring Coil for 36" pipe (914 mm) OD | HHDSPRING36 |

Custom sizes available upon request

**Please Note:** Each spring includes two pre-installed spring couplers. A spring connector (HHDCONNECT) is required to attach the PosiTest HHD to the spring couplers. Custom sizes and bulk pricing available. Additional couplers (HHDCOUPLER - 2 pack) are available.



Flat Wire Brush Electrodes

| Flat Wire Brush Electrodes |              |
|----------------------------|--------------|
| Flat Brush 51 mm/2"        | HHDFLTBRSH2  |
| Flat Brush 152 mm/6"       | HHDFLTBRSH6  |
| Flat Brush 203 mm/8"       | HHDFLTBRSH8  |
| Flat Brush 305 mm/12"      | HHDFLTBRSH12 |
| Flat Brush 610 mm/24"      | HHDFLTBRSH24 |
| Flat Brush 914 mm/36"      | HHDFLTBRSH36 |
| Flat Brush 1219 mm/48"     | HHDFLTBRSH48 |

Custom sizes available upon request

| Fan Brush Electrodes* |            |
|-----------------------|------------|
| Fan Brush 152 mm/6"   | HHDFANBRSH |

\* PosiTest HHD Kits comes complete with a Fan Brush.

| Conductive Rubber Paddle    |           |
|-----------------------------|-----------|
| Conductive Paddle 102 mm/4" | HHDPADDLE |

Use spring and brush electrodes made by other manufacturers with DeFelsko adaptors.

| Compatibility Chart |                       |
|---------------------|-----------------------|
| Model               | Adaptor Ordering Code |
| SPY                 | not required†         |
| PCWI                | HHDPCWIADPT           |
| Tinker and Razor    | HHDTRADPT             |
| 266 & 280           | HHD266ADPT            |

† The PosiTest HHD is compatible with SPY coils, brushes, and accessories.

# Accessories

**PosiTest HHD Verifier** standalone voltmeter (crest meter, jeep meter) for verifying the accuracy and operation of ALL pulse type holiday detectors

**Handheld Wand** with 1.5 m insulated cable converts the detector to a wand-type instrument (for voltages up to 15 kV)

**Electrode Rods** choose between 13 cm (5") and 50 cm (20") rods

**Spring Connectors** connect the PosiTest HHD to DeFelsko or SPY rolling spring electrodes

**Electrode Adaptors** connect to spring and brush electrodes from other manufacturers—choose between PCWI, T&R, and 266/280 adaptors—not required for SPY electrodes (see table on page 3)



# Features

Control panel with LCD display, strobe alert, and speaker to visibly and audibly detect flaws

Shoulder strap attachment point

Ground (earth) cable socket

Shoulder strap attachment point

Safety trigger

Ergonomic grips for all day comfort

152 mm (6") fan brush

50 cm (20") electrode rod (included with HHDKIT)

**PosiTest HHD** shown with 50 cm electrode rod