DeFelsko®
The Measure of Quality

Coating Thickness and Inspection Instruments

Coating Thickness ♦ **Environmental Conditions** ♦ **Surface Profile**
Dust/Salt Contamination ♦ **Hardness** ♦ **Gloss** ♦ **Ultrasonic Wall Thickness**
Adhesion ♦ **Pinhole/Holiday** ♦ **Oven Profile** ♦ **Concrete Moisture**

www.defelsko.com

Coatings on Metals

PosiTector®6000

Coating Thickness Gages measure on all metal substrates. Select from a variety of measurement ranges and probe styles including cabled probes, microprobes, and the *Xtreme Series* for measuring on hot or rough surfaces.

All Gages Feature:

- Fast measurement speed—60+ readings per minute. Enhanced FAST mode—90+ readings per minute for quick inspection.
- Large 2.8" impact resistant color touchscreen with redesigned keypad for quick menu navigation
- Weatherproof, dustproof, and water-resistant—IP65-rated enclosure
- Ready to measure—no adjustment required for most applications
- Certificate of Calibration showing traceability to NIST or PTB included
- Continually displays/updates average, standard deviation, min/max, and number of readings while measuring
- Conforms to national and international standards including ISO and ASTM
- Includes PosiSoft suite of software for viewing and reporting data

Variety of Measurement Ranges and Probe Styles:

- Interchangeable probes can be detached and replaced with any one of our wide variety of probes
- Ferrous, Non-Ferrous, and Combination probes available as integral and/or cabled versions with a wide variety of measurement ranges and styles
- Extended cables available (up to 75 m/250 ft) for underwater or remote measuring

Select Standard or Advanced Gage Body:

Standard Models Feature:

- Storage of 1,000 readings per probe—stored readings can be viewed or downloaded

Advanced Models Feature:

- Storage of 250,000 readings from multiple probes in up to 1,000 batches and sub-batches
- 3 Scan Modes—increase measurement speed to 180+ readings per minute
- Touchscreen keyboard for quickly renaming batches, adding notes, and more
- SSPC-PA 2, ISO 19840, and IMO PSPC 90/10 modes determine if film thickness conforms to min/max specs
- Bluetooth and WiFi data transfer options
- Connect a Bluetooth barcode scanner or keyboard to instantly annotate readings and batches

Integral Probe Style

Duplex Probe measures individual layer thicknesses of zinc and paint in a duplex coating system

Xtreme Probes with Alumina wear faces and braided cables for hot/rough surfaces

Thick Probe series for thick protective coatings: epoxy, rubber, fireproofing, and more

Microprobe series for small parts and hard-to-reach areas

PosiTest® DFT

Measures coatings on metal substrates. It is the economical choice that retains the uncompromising quality of DeFelsko coating thickness and inspection instruments.

- 2 models available:
  PosiTest DFT *Ferrous*—measures non-magnetic coatings on steel
  PosiTest DFT *Combo*—measures both non-magnetic coatings on steel AND non-conductive coatings on aluminum, brass, etc. Automatically recognizes the substrate and takes a measurement.

PosiTest® PG

Paint Inspection Gage measures the thickness of one or multiple layers of coating on any rigid substrate using a proven destructive technique.

- Ideal for coatings up to 1,250 μm (50 mils) depending on cutting tip
- Powerful 50x microscope with precision optics and rotating scale in Imperial and Metric Units
- Durable anodized aluminum housing with rotating cutting tip holder

PosiTest *PG*
Large field of view provides a comfortable eye distance with or without glasses

Coatings on Steel

PosiTest®

Magnetic Pull-off Gages for the non-destructive measurement of non-magnetic coatings on steel. No batteries or electronics.

PosiPen®

Magnetic Pull-off Gage has a very small, unique magnet which can be placed with pinpoint accuracy. Ideal for measuring on small, hot, or hard to reach surfaces.

PosiTest®

PosiPen®

Wet Film Thickness on All Substrates

Wet Film Gages measure the thickness of paint, enamels, and other wet films quickly and accurately

Coatings on Non-Metals

PosiTector® 200

Ultrasonic Coating Thickness Gages measure up to 7,600 µm (300 mils) of protective coatings over wood, concrete, plastics, and more.

- 3 models available:
  PosiTector 200 B—for measuring coatings on wood, plastic, etc.
  PosiTector 200 C—for measuring coatings on concrete, fiberglass, etc.
  PosiTector 200 D—for measuring thick, soft coatings such as polyurea
- Proven non-destructive ultrasonic technique conforms to ASTM D6132 and ISO 2808
- Advanced models measure up to 3 individual layer thicknesses in a multi-layer system
- Provides a graphic readout for detailed analysis of the coating system

Uncured Powder Thickness

PosiTest® PC☑

Powder Checker Thickness Gages affordably measure uncured powder coatings using non-contact ultrasonic technology to automatically calculate and display a predicted cured thickness. Help control powder consumption to ensure adequate coverage and reduce waste.

- Improved sensor technology allows easier measurement on small tubes, odd shapes and moving parts
- Dedicated stand-alone unit is ready to measure right out of the box
- Up to 4x faster measurement speed*—ideal for moving lines and swinging parts
- Storage of 999 readings with onscreen averaging. Stored readings can be downloaded to PosiSoft Desktop Software
- Scan Mode continuously takes measurements— ideal for analyzing large areas

Powder Inspection Kits offer complete solutions for measuring powder coating before and after cure. Each kit contains the PosiTest PC, two DeFelsko Powder Combs, and your choice of dry film thickness gage.

* Versus the previous generation PosiTector PC Powder Checker

PosiTector® UTG

Ultrasonic Thickness Gages measure the wall thickness of materials such as steel, plastic and more. Choose from corrosion, multiple-echo, low frequency, and precision probes.

Corrosion—PosiTector UTG C, PosiTector UTG CA, PosiTector UTG CX—Ideal for measuring the effects of corrosion or erosion on tanks, pipes, or any structure where access is limited to one side.

Multiple-Echo—PosiTector UTG M—Features Thru-Paint capability to quickly and accurately measure the metal thickness of a painted structure without having to remove the coating.

Low Frequency—PosiTector UTG CLF—Designed for measuring attenuative materials such as cast iron.

Precision—PosiTector UTG P—Designed for high resolution measurements and materials as thin as 0.125 mm (0.005").

Testex®

Testex Replica Tape and Digital Micrometer measure surface profile by creating a replica of the surface which can be measured using a micrometer.

Testex Press-O-Film® Replica Tape
- Select from a wide variety of conventional and optical grade tapes

Testex Digital Micrometer
- Custom-designed to be the optimal tool for measuring replica tape
- Built-in memory for up to 250 readings with on-screen statistics
- New Averaging and Conversion modes simplify data analysis
- Fully compatible with powerful PosiSoft Software for archiving and reporting measurement data
- Traceable Certificate of Calibration is included with each digital micrometer
- Available separately or as a kit with three cartons of replica tape (Coarse, X-Coarse, X-Coarse Plus), and a High Accuracy Burnishing Tool

High Accuracy Burnishing Tool
- Includes a spring-loaded burnishing ball exerting the perfect amount of pressure to burnish (create) a replica.

Testex Digital Micrometer Kit
includes everything required to measure surface profile using replica tape

PosiTector® RTR H

Digital Spring Micrometers measure and record surface profile parameters using Testex Press-O-Film® replica tape.

- Simply select the appropriate replica tape grade to automatically apply the appropriate conversion factor and subtract the 50 μm (2 mils) backing thickness
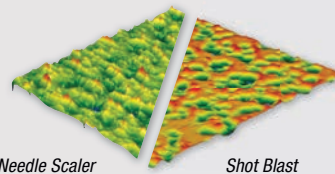- Rugged indoor/outdoor instrument— ideal for field and shop use

PosiTector RTR H

PosiTector® RTR 3D

3D Digital Spring Micrometers use imaging sensors to measure peak height (H_L) and fourteen common 2D/3D profile parameters such as R_a, R_z, S_q, S_{pd}, and more.

- Advanced models generate high resolution Surface Data Files and 2D/3D thumbnails for detailed analysis of surface profiles

PosiTector RTR 3D

Air Needle Scaler   *Shot Blast*

PosiTector® SPG

Surface Profile Gages measure and record peak-to-valley surface profile height on blasted metal, concrete, and textured coatings with a depth micrometer fitted with a fine pointed probe. Includes an alumina wear face and tungsten carbide tip for long life and continuous accuracy.

PosiTector SPG - *Integral Probe*

- Probes available for measuring blasted steel, textured coatings,and concrete profile
- **PosiTector SPG OS** probe features a v-groove and proprietary OD mode for measuring on convex surfaces
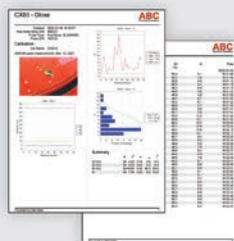
PosiTector SPG S - *Cabled Probe*

PosiTector® GLS

Gloss Meters measure Gloss, Reflectance, and Haze. Select up to 3 measurement angles to suit any application. Save readings into memory and transfer them to PosiSoft Software to quickly archive data and generate professional reports.

- 3 models available:
  GLS 60°—suitable for most gloss applications, preferred angle for semi-gloss
  GLS 20°/60°—suitable for high- to semi-gloss applications. Calculates Haze (Haze Index)
  GLS 20°/60°/85°—suitable for high-, semi-, and matte-gloss applications and also calculates Haze (Haze Index)

- Automatic Diagnosis and Auto Calibration upon power-on using the protective base plate with integrated calibration standard (tile)
- 2 Powerful Scan modes for quantifying large surfaces (Advanced models only)
- Compatible with PosiSoft Software Solutions for managing measurement data and creating professional custom reports
- Store multiple calibration standards (tiles) for quick calibration adjustment

PosiTector® *SST*

Soluble Salt Testers measure the concentration of soluble salts (salt contamination) on metal surfaces in accordance with ISO 8502-6 and 8502-9.
Features include:

- An intuitive step-by-step interface that guides users through the Bresle method with automatic computation of the surface density of salt
  - Displays test duration, sample temperature, conductivity (μS/cm), and surface density (mg/m^2 or μg/cm^2)

Innovative PosiPatch™
A non-adhesive, flexible, and reusable patch that adheres to steel surfaces using a magnetic ring.

- No adhesive residue
- No sharps, no needles!

Available with Standard or Flexible magnetic rings

PosiTector® *SHD*

Shore Hardness Durometers measure the hardness of plastics, rubbers, thick coatings, and other non-metallic materials. Two models—Shore A and Shore D.
Features include:

- User adjustable measurement time with on-screen countdown to conform to international standards
- Auto Ignore mode disregards hardness readings below 20 and above 90

PosiTector® *BHI*

Barcol Hardness Impressors measure the hardness of soft metals such as aluminum, aluminum alloys, copper, brass, and other materials such as harder plastics and fiber-reinforced plastic. Comparable to 934-1 Barcol Hardness Testers, this electronic impressor offers a number of advantages over conventional analog instruments.

PosiTector® *DPM*

Dew Point Meters measure and record climatic conditions including relative humidity, air temperature, surface temperature, dew point temperature, and the difference between surface and dew point temperatures—ideal for surface preparation as required by ISO 8502-4.

- Fast response precision sensors provide accurate, repeatable readings
- Automatically records environmental parameters at user selected time intervals
- **SmartTrend™ Indicators** identify rising, falling, or stable readings
- Select from integral, cabled, infrared, 1/2" NPT threads, and anemometer probes
- USB, WiFi, and Bluetooth connectivity to PosiSoft PC, Mac, and Smartphone software

PosiTector *DPM IR*
Integral Probe with Infrared Surface Temperature Sensor

PosiTector *DPM A*
Integral Probe with Wind Speed Sensor

PosiTector *DPM D*
Cabled Probe with 1/2" NPT Threads

PosiTector *DPM S*
Integral Probe with Cabled Surface Temperature Sensor

PosiTector *DPM*
Integral Probe with Direct Contact Surface Temperature Sensor

PosiTector® *DPM L* Series

Dew Point Meter Loggers measure and record environmental parameters independently for up to 200 days (DPM L) or 600 days (DPM L+).

- Automatically record datasets at user-selected time intervals
- Internal memory storage of 10,000 datasets (60,000 readings)
- Connect to the PosiTector App using Bluetooth Technology to download all logged readings for review, analysis, and reporting
- Environmentally sealed enclosure—IP65 rated
- Kensington Security Slot for anti-theft protection

Additional PosiTector DPM L+ Features
- Automatically upload readings to PosiSoft.net at user-specified intervals to remotely monitor environmental conditions (WiFi connection required)
- Receive email alarms when any environmental parameter exceeds user-defined limits (WiFi connection required)
- USB port to supply continuous power

|← 50 mm (2") →|
PosiTector *DPM L*

|← 73 mm (2.87") →|
PosiTector *DPM L+*

PosiTector® *IRT*

Infrared Thermometers measure surface temperature from a distance using non-contact infrared technology–ideal for applications where conventional sensors will not work, including hard to reach areas, moving parts, and objects too hot for direct contact sensors.

- Selectable emissivity levels
- Button-activated laser pointer for accurate targeting

ADHESION TESTING

PosiTest AT

Pull-off Adhesion Testers measure the adhesion of coatings to metal, wood, concrete, and other rigid substrates. Featuring a revolutionary self-alignment feature and pull rate indicator. Available in Automatic (**PosiTest AT-A**) or Manual (**PosiTest AT-M**) models.

- **Automatic models** feature an impact resistant color touch screen, and the ability to record the results as Pass/Fail and the nature of fracture: cohesion, adhesion, and glue failure
- **Manual models** feature a high-contrast, easy-to-read color display, and field replaceable AAA alkaline batteries

Select from four kits:

- **20 mm kit** for higher bond strength coatings on metals
- **50 mm kit** for lower bond strength coatings on concrete, wood, and plastics
- **50 x 50 mm tile kit** for measuring the tensile strength of ceramic tile cementitious adhesives
- **50 mm C1583 kit** for measuring the tensile strength of concrete repairs and cementitious overlays

PosiTest AT-A
PosiTest AT-M

PosiTest CH

Cross Hatch Testers determine a coating's ability to resist separation from a substrate when a lattice pattern is cut into the coating. Features include:

- All tools and accessories required for cross hatch testing
- Wide range of 4-in-1 cutting blades available for different Standards, coating thicknesses, and substrates. Each blade features 4 cutting edges for longer testing.
- Conforms to ISO 2409 and ASTM D3359

PINHOLE/HOLIDAY DETECTION

PosiTest HHD

Optional hand-held wand accessory

High voltage Holiday Detector uses pulse DC technology to detect holidays, pinholes, and other discontinuities on metal and concrete substrates. Features include:

- User-adjustable voltage range from 0.5 to 35 kV
- Built-in certified volt meter
- Voltage calculator for conforming to 11 international standards
- Conforms to national and international standards including ISO, ASTM, and NACE

Select from a wide range of quality electrodes including rolling springs and flat wire brushes—custom sizes are available upon request.

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

PosiTest HHD C

High voltage Holiday Detectors use continuous DC technology in a convenient wand format to detect holidays, pinholes, and other discontinuities on metal and concrete substrates. Features include:

- User-adjustable voltage range from 0.5 to 30 kV
- Powerful Li-ion batteries fit neatly within the compact wand handle eliminating the need for a separate battery box— reducing weight and operator fatigue
- 43 cm (17") extension rod available for detection on floors and hard-to-reach areas

PosiTest LPD

Low voltage Pinhole Detectors use a wet sponge to detect holidays, pinholes, and other discontinuities on metal and concrete substrates.

- 4 regulated voltage output options for coatings up to 500 µm (20 mils)
- Choose from Basic or Complete kits: Complete kits feature adaptable sponge hardware including rectangle (flat), roller, ID, and custom sponges

LPDKITC

PosiTest® CMM

Concrete Moisture Meters non-destructively measure the moisture conditions in concrete slabs in accordance with ASTM F2659.

- Easy-to-read digital display takes the guesswork out of analog scales
- Storage of 200 readings—stored readings can be viewed or downloaded
- Innovative Hold Max and Save mode waits for the reading to stabilize, then automatically saves it into memory
- Threaded mounting point for the optional Telescopic Extender to measure without bending or kneeling

PosiTector® CMM IS

Concrete Moisture Meters In-Situ measure relative humidity and temperature in concrete floor slabs in conformance with ASTM F2170, *Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.*

- Wirelessly connect to the PosiTector App (iOS/Android) and **PosiTector *DPM Advanced*** models via Bluetooth
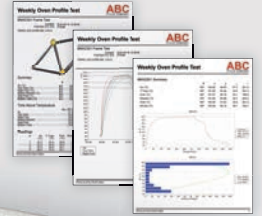
PosiTest® OTL

Oven Temperature Loggers simultaneously measure up to 6 different temperatures with a variety of air and surface temperature probes (sold separately). Featuring a thermally insulated stainless steel barrier box, the **PosiTest *OTL*** is ideal for measuring and recording oven temperature profiles during curing.

- 6 K-type thermocouple ports (channels)
- Cure Index compares supplier's cure specifications to actual oven and part temperatures to ensure a proper cure
- High temperature stainless steel barrier box for long run times
- Download, view, and analyze data using PosiSoft Desktop Software or export to .CSV
- Wide variety of spring clamp and magnetic temperature probes available

PosiTest® DT

Dust Tape Tests assess the quantity and size of dust particles on blast cleaned surfaces in accordance with ISO 8502-3.

- Includes all report forms and accessories required for dust tape testing in accordance with ISO 8502-3
- Can be used as a pass/fail test or to provide a permanent record of dust present on a surface
- Dust Test Comparator includes pictorial references to determine dust size and dust quantity rating

PosiTest® PT

Pencil Hardness Tests, also known as Wolff-Wilborn Tests, determine the scratch resistance and relative hardness of coatings.

- Includes 14 quality graphite pencils—6B to 6H
- Custom aluminum pencil sharpener includes 5 and 6 mm reference marks for precision graphite length
- Comes complete with everything needed for testing
  - Optional Pencil Cart exerts a constant force of 7.35 N at the specified 45° angle (included with Complete Kit)
- Conforms to ISO 15184 and ASTM D3363

PosiTector® SmartLink™

Made for
iPad iPhone

Wirelessly connects PosiTector probes to your Apple iOS or Android smart devices using the free mobile app. Turn your cell phone or tablet into a virtual **PosiTector** gage.

- Accepts **PosiTector *6000, SPG, RTR-H,*** and ***DPM*** probes
- Take full advantage of the simplicity and utility of your **Android** or **Apple** smart device including touch screen, keyboard, camera, email, WiFi, Bluetooth, cellular, dictation tools, and more.
- Every reading is instantly transmitted to your smart device
- Real time graphing and statistical analysis with the swipe of a finger
- Share professional PDF reports and CSV data instantly via email, Dropbox, AirPrint™ or other applications on your device

PosiTector SmartLink accepts PosiTector 6000, SPG, RTR-H, and DPM probes easily converting to a coating thickness gage, surface profile gage, replica tape reader, or dew point meter.

Quick Connect

| Coating Thickness | Environmental Conditions | Replica Tape Reader | Surface Profile |

POSITECTOR INSPECTION

Inspection Kits

PosiTector Inspection Kits contain a PosiTector gage body (Standard or Advanced) with 1 or more probes and accessories in a convenient hard shell carrying case.

- Select from **12 Pre-Configured Kits** or build your own **Custom Kit** from our wide variety of gage bodies and probes
- **Award Winning Probe Interchangeability** Gage body (Standard or Advanced) accepts ALL PosiTector probes including coating thickness, (6000/200), surface profile (SPG/RTR), environmental (DPM/IRT), salt contamination (SST), hardness (BHI/SHD), gloss (GLS), and ultrasonic wall thickness probes (UTG)
- Each pre-configured kit contains a PosiTector gage body (Standard or Advanced), choice of PosiTector 6000 coating thickness probe, PosiTector DPM environmental probe, and PosiTector SPG surface profile probe
- Certificate of Calibration showing traceability to NIST or PTB included (Long Form)

VERIFICATION STANDARDS

Verification Standards are used to verify the accuracy and operation of inspection instruments and are an important component in fulfilling both ISO/QS-9000 and in-house quality control requirements. **Choose from a variety of standards:**

Coating Thickness
- Certified Coated Metal Plates
- Certified Polystyrene Blocks
- Certified Plastic Shims
- Non-Certified Plastic Shims
- Zero Plates

Ultrasonic Wall Thickness
- Certified Step Block—Metric, Inch, Precision

Surface Profile
- PosiTector SPG Certified Standards
- PosiTector SPG Certified Shim Set
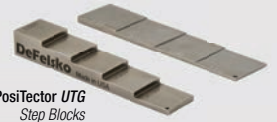- Testex Certified Shim Set

Pinhole/Porosity
- PosiTest HHD Verifier
- PosiTest HHD C Verifier

Pull-Off Adhesion
- PosiTest AT Verifier

Certified Coated Metal Plates

PosiTector UTG Step Blocks

PosiTest HHD Verifier Series

POSISOFT SOLUTIONS

PosiSoft®—Powerful ways to view and report your data

PosiSoft Desktop—PC/Mac
Powerful desktop software for downloading, viewing, printing, and archiving measurement data with no internet connection required. Import measurement data via USB, and categorize batches into Jobs for creation of multi-batch reports. Import PDF forms and overlay Custom Fields for automatic population of measurement data.

PosiTector App—Mobile
An easy-to-use mobile app (iOS/Android) that connects to your **PosiTector** *Advanced*, **PosiTector** *SmartLink*, **PosiTest** *AT-A*, **PosiTector** *DPM L,* and **PosiTector** *CMM IS*. Capture, view, and report measurement data all from one device.

PosiSoft USB Drive—Gage Based
A simple gage interface to retrieve data in a manner similar to USB flash drives or cameras. No software to install or internet connection required.

PosiSoft.net—Web Based
Compatible with PosiSoft Desktop and the PosiTector App, PosiSoft.net is a secure way to store and share data using the cloud. Synchronize data from your gage without the need for a computer when connected via WiFi (*Advanced models only*).

PosiTector Developer Resources
Integrate PosiTector and PosiTest AT-A instruments with third-party software, drones, ROVs, PLCs, and robotic devices using several industry-standard communication protocols including: Bluetooth 4.0, WiFi, and USB serial.

PosiSoft Custom PDF Report Generator
Easily create reports from your measurement data in seconds. Featured on:
PosiSoft Desktop ▪ PosiTector App

- Include inspection information such as on-site pictures, screen captures, notes, and more to communicate important details
- Create and save multiple custom layouts as templates—insert cover pages, add logos/images, and select font and point size
- Save readings as comma separated value (.CSV) files which can easily be imported into Excel and other applications

Prompted Batch Mode
Create pre-defined batches in PosiSoft Desktop with on-screen text and image prompts for each reading, then upload to **PosiTector 6000, 200, and UTG** gages (*Advanced models only*).

Made in USA