

# **DeFelsko Coating Thickness Standards**

Certified coating thickness standards are ideal for verifying the accuracy and operation of coating thickness gages and are an important component in fulfilling both ISO and in-house quality control requirements.

Many organizations require verification of gage accuracy at the test site each time a coating thickness gage is put into service and at frequent intervals during use. Ideal for this purpose, DeFelsko certified coating thickness standards have measured values traceable to a National Metrology Institution.

### **Certified Coated Metal Plates** and Polystyrene Blocks

- Used to verify the accuracy and operation of any Type 1 (mechanical) and Type 2 (electronic) magnetic, eddy-current or ultrasonic coating thickness gage
- Ideal for use in the calibration lab, in the field or on the factory floor
- Standards with steel or aluminum substrates consist of 4 plates mounted in a protective binder
- Polystyrene thickness standards consist of 4 blocks supplied in a rugged acrylic storage box
- Individually serialized for traceability to NIST or PTB includes a Certificate of Calibration
- Certified and labeled in both Metric and Imperial units

Plate Diameter: 38 mm (1.5") Measurement Diameter: 25 mm (1")

Polystyrene Blocks: 38 x 70 mm (1.5" x 2.75")







| Order | Ideal for                                                       | Approximate Thickness |                    |                    |                    | Coating/                         |                              |
|-------|-----------------------------------------------------------------|-----------------------|--------------------|--------------------|--------------------|----------------------------------|------------------------------|
| Code  |                                                                 | Plate 1               | Plate 2            | Plate 3            | Plate 4            | Substrate                        | Accuracy                     |
| S1    | PosiTector 6000 F, FS, FRS, FN, FNS, FNRS<br>PosiTest F & FM    | 0                     | 75 µm<br>3 mils    | 250 µm<br>10 mils  | 1500 µm<br>60 mils | Enovy on                         |                              |
| S2    | PosiTector 6000 F0S, F45S, F90S<br>PosiTest DFT Ferrous & Combo | 0                     | 75 µm<br>3 mils    | 250 µm<br>10 mils  | 1000 µm<br>40 mils | Epoxy on<br>Steel<br>(Ferrous)   | +/- 0.43 µm<br>+/- 0.017 mil |
| S3    | PosiTest G & GM<br>PosiPen A, B & C                             | 0                     | 15 µm<br>0.6 mils  | 40 µm<br>1.6 mils  | 100 µm<br>4 mils   | (i enous)                        |                              |
| A1    | PosiTector 6000 N, NS, NRS, FN, FNS, FNRS                       | 0                     | 75 µm<br>3 mils    | 250 µm<br>10 mils  | 1500 µm<br>60 mils | Epoxy on Aluminum (Non- Ferrous) | +/- 0.43 µm<br>+/- 0.017 mil |
| A2    | PosiTector 6000 NAS, N0S, N45S, N90S<br>PosiTest DFT Combo      | 0                     | 75 µm<br>3 mils    | 250 µm<br>10 mils  | 500 μm<br>20 mils  |                                  |                              |
| А3    | PosiTector 100B, 200, 200B                                      | 75 µm<br>3 mils       | 125 µm<br>5 mils   | 250 µm<br>10 mils  | 500 μm<br>20 mils  |                                  |                              |
| P1    | PosiTector 6000 FT, FTS, NTS, FNTS                              | 375 µm<br>15 mils     | 2 mm<br>80 mils    | 4.5 mm<br>185 mils | 6.5 mm<br>250 mils |                                  |                              |
| P2    | PosiTector 6000 FHS, NHS, EOC                                   | 2.5 mm<br>100 mils    | 6.5 mm<br>250 mils | 13 mm<br>500 mils  | 19 mm<br>750 mils  |                                  | +/- (2.5 µm +                |
| P3    | PosiTector 100C                                                 | 375 μm<br>15 mils     | 1.5 mm<br>60 mils  | 2.5 mm<br>100 mils | 4.5 mm<br>185 mils | Polystyrene                      | 0.05% of thickness)          |
| P4    | PosiTector 100D                                                 | 1.5 mm<br>60 mils     | 2.5 mm<br>100 mils | 4.5 mm<br>185 mils | 6.5 mm<br>250 mils | Blocks                           | +/- (0.1 mil + 0.05% of      |
| P5    | PosiTector 6000 FKS, NKS                                        | 1.5 mm<br>60 mils     | 2.5 mm<br>100 mils | 6.5 mm<br>250 mils | 12 mm<br>480 mils  |                                  | thickness)                   |
| P6    | PosiTector 200C                                                 | 375 µm<br>15 mils     | 1.5 mm<br>60 mils  | 2.5 mm<br>100 mils | 3 mm<br>125 mils   |                                  |                              |





## **DeFelsko Plastic Shims**

- Simulate a coating over a particular substrate material or shape.
   Gage performance can be conveniently verified on a regular basis as required by some international test methods
- For use with all Type 2, electronic coating thickness gages
- Protects the probe from damage or premature wear when placed over hot or abrasive surfaces
- Can be placed on top of soft or tacky coating films to obtain thickness measurements without the gage probe depressing the coating film

#### **Certified Plastic Shims**

- Certified shims provide an economical alternative to Coated Metal Plates but have a reduced accuracy
- Each shim is packaged in its own protective plastic pouch
- Certificate of Calibration showing traceability to NIST is included with each shim or set of shims
- Certified and labeled in both Metric and Imperial units



### **Non-Certified Plastic Shims**

- Provide a quick operational check of the instrument by allowing the user to perform practice measurements
- Can be used to protect the probe when measuring on tacky, rough or hot surfaces
- Labeled in both Metric and Imperial units
- Available as a set of 5 (below)

| Approximate Thickness | Color  | Accuracy |  |
|-----------------------|--------|----------|--|
| 25 μm<br>(1 mil)      | Orange | +/- 20%  |  |
| 50 μm<br>(2 mils)     | Red    | +/- 10%  |  |
| 125 μm<br>(5 mils)    | Blue   | +/- 5%   |  |
| 250 μm<br>(10 mils)   | Brown  | +/- 5%   |  |
| 500 μm<br>(20 mils)   | Yellow | +/- 5%   |  |



Steel and aluminum zero plates are available

| Order<br>Code | Approximate Thickness  | Color  | Accuracy                    |  |
|---------------|------------------------|--------|-----------------------------|--|
| CS1           | 25 μm<br>(1 mil)       | Orange |                             |  |
| CS2           | 50 μm<br>(2 mils)      | Red    |                             |  |
| CS3           | 75 μm<br>(3 mils)      | Green  |                             |  |
| CS5           | 125 μm<br>(5 mils)     | Blue   |                             |  |
| CS10          | 250 μm<br>(10 mils)    | Brown  | +/- 2 µm<br>(+/- 0.08 mils) |  |
| CS20          | 500 μm<br>(20 mils)    | Yellow |                             |  |
| CS40          | CS40 1000 μm (40 mils) |        |                             |  |
| CS60          | 1500 µm<br>(60 mils)   | Black  |                             |  |
| CSS           | Complete               |        |                             |  |



A package of 5 non-certified shims is included with all DeFelsko electronic coating thickness gages (Type 2).

Note: Shims are generally not acceptable for use with Type 1, magnetic pull-off gages such as the PosiTest FM/GM and PosiPen.

