

elcomete 125 Surface Comparator

Comparators allow the estimation of surface roughness, by both touch and sight.



- Available in both Grit and Shot
- The ISO 8503 Parts 1 and 2 standard specifies the roughness in metric units only.
- Can be used in accordance with
 - o ASTM D4417 Method A
 - o ISO 8503 Parts 1 and 2
- The Elcometer 125 is the only comparator to conform to ISO 8503 Parts 1 and 2.

Technical Specifications - Elcometer 125 Comparator

Section Profiles: 25, 60, 100, 150 mic 25, 40, 70, 100 mic Part Numbers : E125----1 E125----2

Test Method - ASTM D4417 Method A

In Summary, this test method requires that the appropriate comparator is selected and compared with the surface by sight - with or without magnification, or touch. The closest match to the actual surface indicates the surface roughness. Comparisons should be made at an agreed series of locations, which characterise the surface.

Operation

The appropriate comparator (G for Grit and S for Shot) are placed against the test surface. A visual or tactile comparison between the comparator and the test surface can be carried out by means of a lens or by passing a finger, nail or wooden stylus over the surface. Each of the three grades of finish can be assessed by establishing the next smoothest and next roughest segments. The grades can then be recorded.

Packing List

Grit or Shot Blast Comparator, Operating Instructions, Leather Case

Profile Range for Shot and Grit

The comparator has been manufactured from a specifically prepared and certified mild steel Master Coupon submitted from Hodge Clemco Limited, Sheffield, England.

| Seg | ISO8503/1 Spec | Data from Microscope Method | | | Data from Stylus Method | | | |
|---------------------------|----------------|-----------------------------|-----------------|-----------|-------------------------|-----------------|-----------|--|
| no | | | ISO 8503/3 | | | ISO 8503/4 | | |
| | mic, Hy or Ry5 | mic, Hy | Actual Mean Dev | Max Mean | mic, Ry5 | Actual Mean Dev | Max Mean | |
| | | | of 20 Readings | Deviation | | of 10 Readings | Deviation | |
| Master Coupon - Shot S101 | | | | | | | | |
| 1 | 23-28 | 26.15 | 21.80% | 33% | 24.90 | 9.07% | 20% | |
| 2 | 35-45 | 35.65 | 16.10% | 33% | 39.06 | 8.16% | 20% | |
| 3 | 60-80 | 63.20 | 14.92% | 33% | 75.19 | 8.00% | 20% | |
| 4 | 85-115 | 96.45 | 17.03% | 33% | 98.28 | 11.62% | 20% | |
| Master Coupon - Grit G201 | | | | | | | | |
| 1 | 23-28 | 24.95 | 20.76% | 33% | 26.46 | 11.45% | 20% | |
| 2 | 35-45 | 64.30 | 13.14% | 33% | 62.70 | 7.91% | 20% | |
| 3 | 60-80 | 103.95 | 17.80% | 33% | 90.80 | 7.09% | 20% | |
| 4 | 85-115 | 153.10 | 16.63% | 33% | 147.71 | 11.42% | 20% | |

All measurements were as defined in ISO 8503 Parts 3 and 4 with no deviations. The measurements were performed and certified by RW Green Consultants, Beaconsfield, England on 29/3/84 and were authenticated by Paint Research Association, Teddington, UK