

Elcometer 501 Pencil Hardness Tester

The pencil hardness test, also referred to as the Wolff-Wilborn test, uses the varying hardness values of graphite pencils to evaluate a coating's hardness.

The Elcometer 501 has been designed to ensure that the cylindrical pencil lead is maintained at a constant angle of 45° and exerts a force of 7.5N (1.68lbF).

The pencil lead, prepared beforehand using the special sharpener and abrasive paper, is inserted into the Elcometer 501 and pushed over the smooth, flat coated surface.

The lowest hardness value of the pencil which marks the coating determines the coating's hardness rating.


STANDARDS:

ASTM D 3363, ECCA T4, EN 13523-4, ISO 15184:2012, JIS K 5600-5-4

Technical Specification

| Part Number | Description | Certificate |
|---------------------------|--|-------------|
| H501----1 | Elcometer 501 Pencil Hardness Tester | ○ |
| Dimensions (with Pencils) | 130 x 130 x 50mm (5 x 5 x 2") | |
| Weight | 2.1kg (4lb) | |
| Packing List | Elcometer 501 Pencil Hardness Tester, pencil set (14 pencils, grades 6B - 6H), positioning block, 2 x pencil sharpeners, abrasive paper block, carry case and operating instructions | |

Accessories

| Part Number | Description | Part Number | Description |
|-------------|------------------------------|--------------|--------------------------|
| T99923042-1 | 12 Hardness Pencils (6B) | T99923042-8 | 12 Hardness Pencils (F) |
| T99923042-2 | 12 Hardness Pencils (5B) | T99923042-9 | 12 Hardness Pencils (H) |
| T99923042-3 | 12 Hardness Pencils (4B) | T99923042-10 | 12 Hardness Pencils (2H) |
| T99923042-4 | 12 Hardness Pencils (3B) | T99923042-11 | 12 Hardness Pencils (3H) |
| T99923042-5 | 12 Hardness Pencils (2B) | T99923042-12 | 12 Hardness Pencils (4H) |
| T99923042-6 | 12 Hardness Pencils (B) | T99923042-13 | 12 Hardness Pencils (5H) |
| T99923042-7 | 12 Hardness Pencils (HB) | T99923042-14 | 12 Hardness Pencils (6H) |
| T99923039 | Set of 14 Pencils (6B to 6H) | | |
| T501190451 | Pencil Sharpener (6H to 2B) | | |
| T501190452 | Pencil Sharpener (3B to 6B) | | |