elcometer®

User Guide

Elcometer 122

Testex® Replica Tape

1 OVERVIEW

Elcometer 122 Testex® Tape consists of foam with a non-compressible backing. The foam side is rubbed into the surface providing a permanent mould of the peak-to-valley profile. The profile of the surface can then be measured using a micrometer such as the Elcometer 124 Foil Thickness Gauge[a].

Available in four profile ranges, it is important that the tape grade chosen is reflective of the profile being measured.

For Surface Profiles Between	Tape Grade	Part Number
12 - 25µm (0.5 - 1.0mils)	Coarse Minus	E122----A*
20 - 38µm (0.8 - 1.5mils)	Coarse	E122----B*
38 - 64µm (1.5 - 2.5mils)	Average of Coarse and X-Coarse	E122----B* E122----C*
64 - 115µm (2.5 - 4.5mils)	X-Coarse	E122----C*
>115µm (4.5mils)	X-Coarse Plus	E122----F*
Can be used in accordance with: ASTM D 4417-C, BS 7079-C5 (superseded), ISO 8503-5, NACE RP0287, US Navy NSI 009-32, US Navy PPI 63101-000		

Replace the '*' at the end of the part number with:
1 = Single Roll, 10 = Pack of 10, 50 = Pack of 50, 100 = Pack of 100

2 TAKING A READING

1 Tear off one section of tape from the roll, peel off the backing tape and retain the backing for future use.
2 Stick the tape on to the test surface, and rub the central portion using a swizzle stick[b], or the end of a pen, pencil or similar rounded object until dark spots appear. This gives a surface profile replica.
3 Using a micrometer such as the Elcometer 124 Foil Thickness Gauge[a], measure the thickness of the central portion of the tape replica and subtract 50µm (2mils) from the reading. This result is the peak-to-valley profile height. Write the value on the tape.
4 Replace the backing tape to preserve the imprinted profile for future reference.

[a] The Elcometer 124 Foil Thickness Gauge is available to purchase from Elcometer or your local Elcometer supplier, see Section 4.
[b] Swizzle sticks are available to purchase from Elcometer or your local Elcometer supplier using part number T12222498.

3 ADDITIONAL INFORMATION

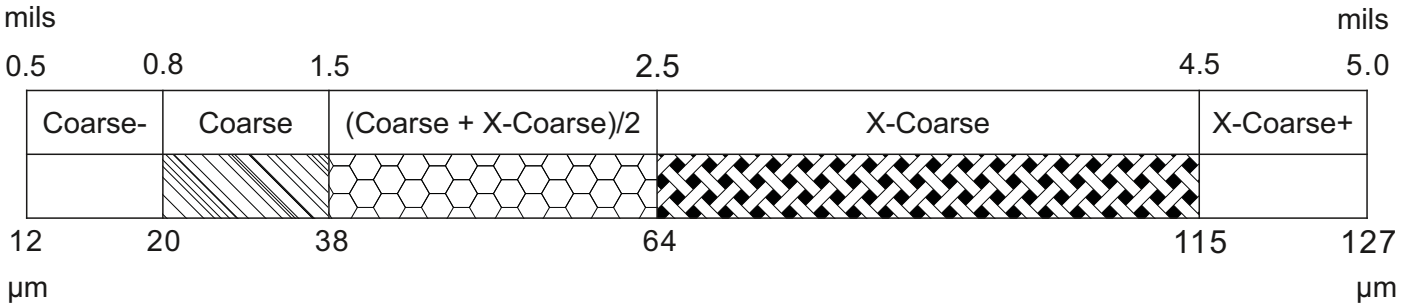
Elcometer 122 Coarse and X-Coarse tape grades have been redesigned to improve performance in temperatures above 60°C (140°F).

This redesign has affected the overlap between the ranges of the two grades, resulting in a change in the measurement procedure.

If a measurement made with either tape grade is between 38 and 64µm (1.5 and 2.5mils), a second measurement should be taken at the same spot, with the **OTHER** grade.

If **BOTH** values are between 38 and 64µm (1.5 and 2.5mils) then the peak-to-valley height is the average of the two values. If the second value is outside this range, this should be used and the initial value discarded.

The effect of these changes is to make the Coarse and X-Coarse grade tape measurements more comparable with other means of determining profile over testex tape's primary range of 20 to 115µm (0.8 to 4.5mils).



The shaded segments mark the primary range for Coarse and X-Coarse grades. The white segment indicates the range of X-Coarse Plus.

elcometer®

4 ELCOMETER 124 FOIL THICKNESS GAUGE

Available to purchase from Elcometer or your local Elcometer supplier, the Elcometer 124 Foil Thickness Gauge is used to measure the peak-to-valley height of a surface profile moulded in Elcometer 122 Testex® Replica Tape.

Contact Elcometer, your local Elcometer supplier or visit www.elcometer.com for further product information.

For the avoidance of doubt, please refer to the original English language version.

The Elcometer 122 is packed in a cardboard package. Please ensure that this packaging is disposed of in an environmentally sensitive manner. Consult your local Environmental Authority for further guidance.