



ASTM B-487

Test Method for Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of Cross Section

This test method covers measurement of the local thickness of metal and oxide coatings by the microscopical examination of cross sections using an optical microscope. Under good conditions, when using an optical microscope, the method is capable of giving an absolute measuring accuracy of 0.8 μ m. This will determine the suitability of the method for measuring the thickness of thin coatings.

The method consists of cutting out a portion of the test specimen, mounting it, and preparing the mounted cross section by suitable techniques of grinding, polishing, and etching. The thickness of the cross section is then measured with an optical microscope. Coating thickness is an important factor in the performance of a coating in service and is usually specified in a coating specification. This test method is applicable for multi-layer coatings and allows an examination of the interface between layers.

If you have any questions concerning this particular ASTM method, please feel free to give our office a call at (800) 334-5432 or email us your inquiry at info@nhml.com.

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New Hampshire Materials Laboratory, Inc
www.nhml.com • info@nhml.com
Tel: 800-334-5432 or 603-692-4110 • Fax: 603-692-4008