

Micro-Metrics Co.

OG202 Tooke Paint Inspection Gauge

The original Tooke Gage is made of machined aluminum.

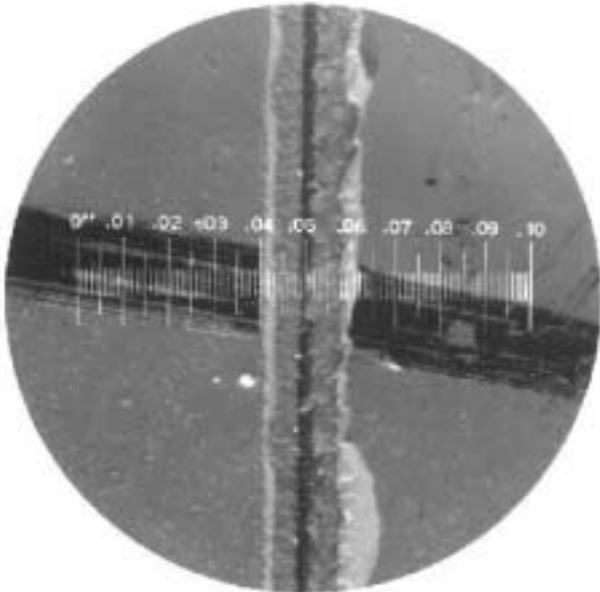


The Tooke Paint Inspection Gauge is a precision tool for inspection and thickness measurement of single or multiple coats on any substrate, and for microscopic observation and measurement of substrate and film defects. The gauge uses an illuminated 50-power microscope with measuring reticule, and mounts tungsten carbide cutting tips for precise incision of the work surface.

Direct measurement of total coating thickness and thickness of individual coats of paint is a unique capability of the Tooke Paint Inspection Gauge. Thus, in addition to routine use, it often serves as a “referee” instrument to calibrate indirect or non-destructive thickness measuring instruments. Other uses include assessment of substrate conditions and coating adhesion, and observation of microscopic cracking, tendency for brittleness, cratering, or other microscopic film symptoms.

The machined aluminum Tooke Gauge comes in a case with strap, spare batteries and bulb, marking pen, hex wrench and a technical data sheet. Standard cutting tips are 1×, 2×, and 10×. An optional 5× tip is available. Also, the gauge can be ordered with three tips of the same size.

Principle: A special cutting tool that is integral to the gauge is used to incise a small precision V-groove through the paint film and into the substrate. This V-groove is observed vertically with an illuminated microscope bearing a measuring reticle (scale).



Special applications: The Tooke Gauge has been used to assess sandblast cleaning work, to measure plating and paint thickness on ceramics, metal, wood, and concrete, and even to measure protective backing thickness on mirrors. It is virtually the only tool for measuring paint on plastics. The quality of the incision in the film discloses much about the characteristics of the brittleness and adhesion of the material.

Cutting tip	Maximum Coating Thickness	Precision of thickness determinations	One division on the reticle scale represents
1x	50 mils	± 0.25 mils	1.0 mil
2x	20 mils	0.13 mils	0.5 mil
10x	3 mils	0.025 mils	0.1 mil

A metric version of the gauge, with the reticle marked in micrometers, is available.



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