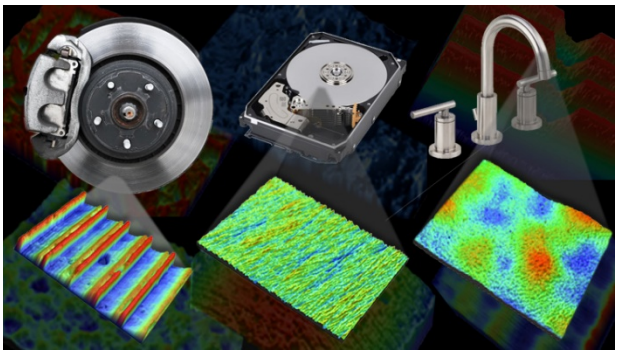
Michigan Metrology, LLC ®
3D Surface Roughness and Wear
Measurement, Analysis and Inspection

Call toll free
866-953-5030
or email us at
info@michmet.com

3D Surface Roughness Inspection, Consulting and Training Services



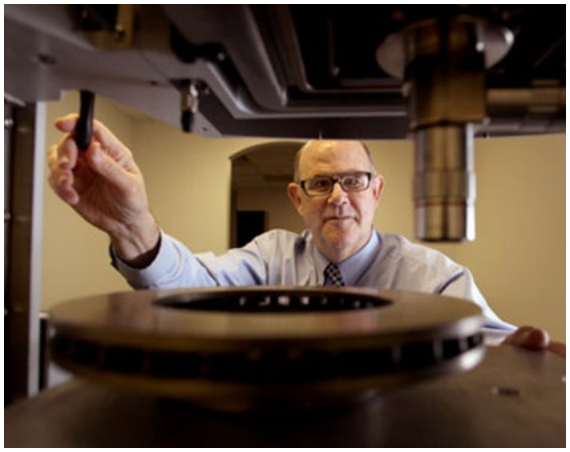
Since 1994, Michigan Metrology, LLC has been solving problems related to friction, wear, adhesion, appearance, vibration and other challenges. Using 3D surface texture measurement and analysis we have helped companies solve thousands of difficult production, quality and warranty issues, in industries from aerospace and automotive to medical devices and machining.

Measurement Services

We offer three key types of services to address your particular requirements:

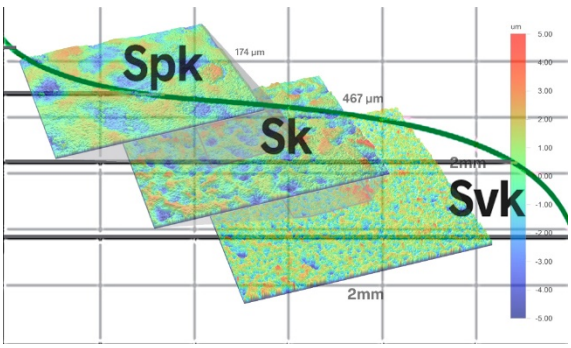
Investigate a production challenge

Most of our client projects begin with a difficult problem: some parts exhibit high friction while others do not, some components chatter while others do not, as examples. Why the differences? We can help figure out the issue and develop methods to track and eliminate the trouble as well. By measuring multiple locations on multiple parts we try to reveal key information to differentiate "bad" from "good."



Verify and validate a process

Once measurement protocols are established, we can provide measurements to validate a process or to track it over time. 3D surface texture measurements give you traceable parameter values, but also valuable visual feedback regarding the surfaces of your components. Companies with limited in-house metrology capability may also benefit from these services as an inexpensive method for verifying production processes and quality.



Volume inspection

Michigan Metrology provides high volume inspection, as one-time projects or on an ongoing basis. Our expertise includes 3D surface roughness, texture, finish and wear measurements. Our measurement lab is equipped to measure to your production schedule, whether it's hundreds of parts or just a few parts per batch—with automation capabilities for larger jobs.

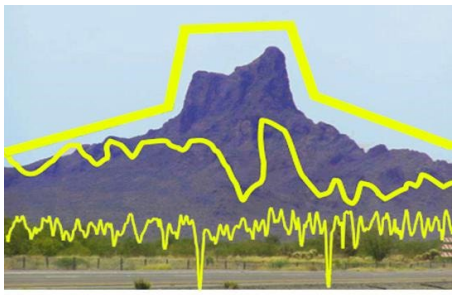
Michigan Metrology, LLC®

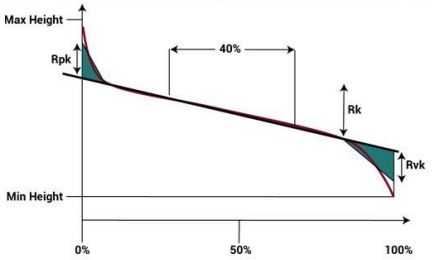
Consulting Services

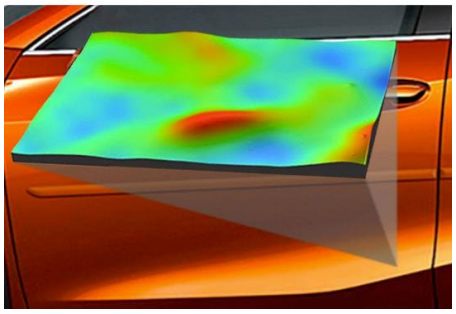
A critical development or warranty issue may be related to some fundamental characteristic of a component's surface texture. Michigan Metrology's measurement consulting services provide the expert advice to understand the causes of wear, vibration, squeaks, leaks, etc. We provide the surface measurement data to quantify issues, isolate their causes and develop specifications to control and eliminate the root issues.

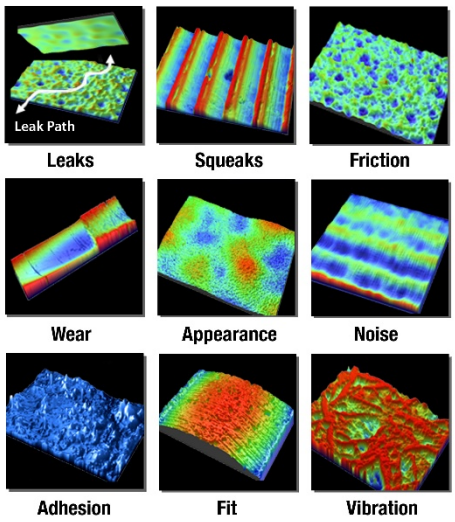
We start by acquiring sufficient 3D surface roughness measurements to characterize the surface. From that data we can compile parameters that describe and distinguish the critical aspects of the surface, such as height distributions, peak heights/valley depths or spatial information.

Finally, we work with production teams and quality personnel to define, specify and control processes, in order to address the issue. We can also provide ongoing measurement services to audit the process and maintain control over time.









Training

Michigan Metrology offers training workshops and online classes in all aspects of surface texture and tribology. Dr. Don Cohen, one of the country's foremost experts in surface roughness, leads regular, two-day Surface Texture and Tribology short courses. The workshops focus on surface texture analysis and how texture relates to component function, as well as the basics of wear, friction and lubrication. The training is designed for scientists, engineers and technicians working in the fields of automotive, aerospace, materials, polymers, and others.

In addition to classroom workshops we also offer classes in online formats. Our online classes provides a broad introduction to texture/roughness and tribology, in a series of modules that you can download and watch at your own pace. The class material is designed for anyone working in the fields of automotive, medical devices, aerospace, materials, polymers, and others.

Customized classes are also available for individual companies, with the information tailored to your company's specific needs and interests. It's a highly cost-effective way to train your team in critical surface texture/roughness and tribology that is focused on your particular applications.

Learn more about Michigan Metrology's services:

Call toll free 866-953-5030

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Visit www.michmet.com