



# Savvy Optics Corp Seminar Understanding Scratch and Dig

## Summary

Surface imperfection specifications (i.e. Scratch-Dig) are among the most misunderstood, misinterpreted, and ambiguous of all optics component specifications. In 2017, both the ISO and ANSI standards were revised, and the addition of scratch and dig to the ISO 10110-7 system is a potential game-changer for the industry.

This latest edition of our most popular course includes the details and application of the 2017 version of the American National Standard for surface imperfections as well as the all-new ISO scratch and dig specification added to ISO 10110-7. The course provides attendees with an understanding of the source of ambiguity in surface imperfection specifications, and provides the context needed to properly specify surface imperfections using a variety of specification standards, and to evaluate a given optic to a particular level of surface imperfection specification. The course will focus on the differences and application of the MIL-PRF-13830, ISO 10110-7, and ANSI/OEOSC OP1.002. Many practical and useful specification examples are included throughout, as well as demonstration of visual comparison evaluation techniques and artifacts.

## Learning outcomes

This course will enable you to:

- describe the various surface imperfection specifications that exist today
- compose a meaningful surface imperfection specification for cosmetic imperfections using ISO, ANSI, or MIL standards
- understand the subtle differences between the various national and international versions of the scratch and dig specification
- identify the different illumination methods and comparison standards for evaluation
- demonstrate a surface imperfection visual inspection
- understand the options available for controlling surface imperfections in a vendor/supplier relationship

## Notes

The course price includes course notes for all attendees, and one copy of the latest ANSI approved surface imperfection specification standard OP1.002 and the equivalent ISO standards ISO 10110-7 and ISO 14997.

## Course Length

Half-day (4 hours)

## Instructor

Dave Aikens is known throughout the industry as the foremost expert on scratch and dig specifications and their interpretation. He has been involved in surface quality specifications for more than 30 years.

Dave is President and founder of Savvy Optics Corp., is the head of the American delegation to ISO TC 172 SC1, and continues to serve in multiple roles as expert and project leader for national and international standards for optics and photonics.