



Savvy Optics Corp Seminar

Modern Optics Drawings

Summary

Since the late 1990's, the optics community has gradually been converting optics drawings from a free-form, notes-based method to a standardized, international pictographic method. In 2015, the United States joined the international community by adopting a version of ISO 10110 as the American National Standard for optics drawings. This new method is a great boon for an industry in need of standardization, but can be very confusing to the uninitiated.

This course provides attendees with an introduction of OP1.0110, the American National Standard for optics drawing notations. The course begins with the context of optics drawings and the fundamentals of the ISO 10110 drawing layout. Next we will go through each of the tolerance notations for glass parameters, surface wave front, wedge, and surface texture and coating. We will go in depth into the different methods of specifying surface imperfections. Throughout the course, attendees are also informed about the changes that are likely for ISO 10110 in the future and how the American version differs from the current international standard. Practical and useful examples are included throughout.

Learning outcomes

This course will enable you to:

- Read and interpret an optical drawing prepared to ISO 10110 or OP1.0110
- Understand the difference between the American standard and the ISO standard
- Describe which symbol corresponds to each of the fundamental optical parameters
- Identify the meaning of the specifications of the tolerances for materials imperfections, surface form, wedge, surface imperfections, and surface texture
- Compose and interpret a basic OP1.0110-compliant optical element drawing

Notes

The course price includes course notes for all attendees.

Course Length

Full day (7.5 hours)

Instructor

Dave Aikens is President and founder of Savvy Optics Corp., and has been involved in optics drawings and specifications for over 30 years. He is the head of the American delegation to ISO TC 172 SC1, and is the Secretary of the American Standards Council for Optics, ASC OP. He was chairman of the project to adopt ISO 10110 as the American National Standard for optics drawings