

Draft Minutes

ASC OP/TF 1 –Committee for Optics and Electro-Optical Instruments – Optical Glass
November 7, 2014 14:00 EDT

Teleconference

1. Welcome and Introductions

Hal Johnson called the meeting to order at 14:04. In attendance were Dave Aikens, Bill Royall, Walt Czajkowski, Donna Howland, and Allen Krisiloff. Quorum was established.

2. Approval of the agenda v2

Allen Krisiloff motioned to accept the agenda modified to put the glass analysis spreadsheet first, the motion was seconded by Bill Royall and the motion passed.

3. Approval of the minutes for the June meeting

Allen Krisiloff moved to accept the minutes from the June 2014 meeting, Walt Czajkowski seconded and the motion carried.

4. Group discussions

a. Review Glass Analysis Spreadsheet

Walt Czajkowski did an outstanding job of pulling together all the different ways that the glass companies have standardized the many glass parameters, and compared them to the current ISO definitions of grades.

We reviewed the spreadsheet again, and observed that there was no clear consensus on any of the parameters for glass. Walt mentioned that, while the grades were at least clear for the kinds of parameters that an optical engineer might specify, other properties of importance like mechanical properties, hardness, abrasion, chemical properties, etc. have very little information or guidance on how to specify or control them. Dave Aikens asked if it made sense to try and have standards for these things. Walt felt that this could be a time to do something in this area. Walt will look more into the various parameters, if people send him areas they are interested.

We will review this item again at the next meeting, and discuss whether we should be looking at methods to standardize some of the various parameters that are not currently covered by ISO 10110.

b. Review “Straw dog” standard OP1.2123

Allen Krisiloff started us off with a discussion of the grade labels that have been added to the ISO 12123 in Hal’s draft standard. He expressed concern that perhaps we would alienate the glass manufacturers who use a different kinds of grades or go in opposite directions for quality.

Allen proposed we define the grades according to the actual values for the grade; e.g., the grades for Homogeneity would be H100, H40, H10, H4, H2, H1. For the identifier, we can leave them in for now, but in the long-term, when OP1.0110-18 is published, we can use the 00/, 01/ etc., identifiers and the letter identifiers are no longer required.

Bill Royall expressed concern that if these grades or definitions are problematic, are we just propagating these problems by publishing this standard? This is a concern, and we should survey the glass manufacturers more.

Dave Aikens pointed out that the index would be described as Nd, but that is not currently defined clearly in OP1.2123. There are also two items for tolerance of the index that are defined in ISO 12123; absolute index (now called RI) and lot index variation (now called RIV). Some thought needs to go into how to define these, or provide a moniker for them.

Donna Howland moved Hal Johnson revise the standard to incorporate this new thinking and re-propose a draft based on this new grade system. Allen Krisiloff seconded, and the motion carried.

c. Review Draft of OP1.0110-18

Allen Krisiloff said that he has revised NWIP ISO 10110-18 again, stripping out anything that might be controversial, as well as all the informative stuff in each section. So all that remains is the basic specification of tolerances consistent with the existing parts 2, 3, and 4, but has an additional section allowing the specification of 00/, 01/, and 02/, for specifying these same tolerances. He also has an informative section which references ISO 12123 for material tolerances and properties.

Key to the specification of glasses, according to Allen, is the specification of bubbles, which is often done incorrectly. He has paid particular attention to the definition of very small bubbles.

Allen Krisiloff will send out the draft (via the website) for comment of the TF1, to attempt to streamline the adoption of the ISO as an American National Standard. We will discuss this further at the next meeting.

5. Time and place for next meeting

Allen Krisiloff moved that we next meet on Sunday, February 8th for 1 ½ hours in San Francisco in conjunction with Photonics West. Bill Royall seconded, and the motion carried.

6. Adjourn

At 15:26, Bill Royall moved we adjourn. Donna Howland seconded, and the motion carried.