

Voluntary standards work yields dividends

As the following anecdotes illustrate, volunteering to work on optical standards could be in your company's own best interests.

At a recent conference on high speed photography, someone noted that there once had been seven manufacturers of photographic camera systems for tracking missiles, etc. on various U.S. military ranges. The cameras on these systems have been changed to electronic imaging systems, but each manufacturer adopted a different camera. When the various ranges wanted to compare data, they could no longer trade photographs, but rather had to send magnetic tapes, each having different methods of encoding the data.

This impossible situation was recti-

fied by a standard for the data encoding. However, only two of the original seven firms took an active role in the standards writing and subsequently modified their equipment to comply. After several years of shakeout, there are only two major players in the range camera business—the two that worked on and adopted the standard. The same scenario will be played out many times as the European market strives for homogeneity internally and externally.

It is just as important that the trading partners of the Europeans take part in this as it is for the Europeans. This big hiccup in standardization will not be repeated simply because some countries were not aware of what was going on. This is all the more true for

the systems aspect of standardization. Not only is the end product many times more expensive than the component parts, but it is generally easier to comply with reasonable—well thought out and planned for—changes in systems than in the components.

The second story illustrates why action is required now. At the first meeting of ISO/TC172/SC9/WG6, lasers and components, there was a proposal to standardize the diameters of optical windows used in lasers at 6.3, 12.5, 25, and 50 mm. During the discussion, a U.S. manufacturer was thinking how his firm's products used elliptical windows and the laser housing just fit around those windows. A change to round windows would mean extensive modifications to hardware.

As the discussion was drawing to a close, the U.S. representative said, "We use 9 by 12 mm windows and we are going to have a problem with circular ones." The chairman of the session looked a little shocked and then said, "We were unaware you used elliptical windows, but if you do, we'll just include 9 by 12 mm windows, as well." End of discussion, and all went away happy, but it could easily have happened otherwise if all points of view had not been represented. In this current round of international optical standards writing, there will be many satisfactory outcomes, but only if there are active representatives from all materially affected countries and industries.

There is an urgent need for help in ISO/TC172/SC9/WG7, Electro-optical systems not using lasers, which meets in Heidelberg this month. If you feel your industry may not be fully represented, contact your national standards body. In the U.S., interested parties may contact me at 4149 E. Holmes, Tucson, Ariz. 85711.

—Robert E. Parks



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