MOVING TOWARD A UNIFORM SYSTEM OF HAZARD RECOGNITION

By Geoffrey Peckham

This month in our series exploring the latest industry insight on effective product safety label design and symbol usage, we'll focus on the importance of consistency in the use of symbols and formats for both product safety labels and facility safety signs.

For many years, the U.S. Occupational Safety and Health Administration's (OSHA) regulations for workplace safety signs were based on outdated 1941-era formats. That changed about two and a half years ago. In October 2013, OSHA incorporated the latest versions of the ANSI Z535 safety sign, tag and color standards into its safety regulations, aligning them with today's best practices. Let's look at how this change, which allows for consistent sign and label formats using the latest standards, is impacting our products and our workplaces.

THE IMPORTANCE OF CONSISTENCY

The reason OSHA's change was and still is significant – and why I chose to lead the effort to make this revision to OSHA's standards – is because such a change gives safety engineers the ability to employ systems of signs and labels that more effectively communicate risk. The OSHA change allows the safety signs and tags in workplaces to match the ANSI Z535-formatted product safety labels now found on most machinery, component parts, tools, and consumer products that have potential hazards related to their use. Uniformity between the safety signs and tags in facilities and labels found on products has an important benefit: consistency. When it comes to warnings, consistency breeds familiarity and increased comprehension, all of which are part of effective safety communication.

The OSHA change described above allows consistency of safety sign, label and tag formats in U.S. workplaces. But just as important as this harmonization was between our "national" ANSI and OSHA standards is the large degree of harmonization that's taken place between the ANSI and the international (ISO) standards regarding formats and symbols. This is key, especially when it comes to using symbols to establish a *global* language of safety. Figure 1 illustrates a "harmonized' label that employs both ISO symbols and ANSI/ISO formatting. Again, consistent use of such formats worldwide should lead to increased recognition and understanding – and, ultimately, fewer accidents.

THE RIGHT LEVEL OF CONTENT IS KEY

One of the primary reasons OSHA made its change to add the newer standards-based safety sign and tag standards to their regulations is so those responsible for communicating risk can use the more advanced ANSI Z535 warnings technology – a technology that manufacturers have been using for their

Figure 1: Best practice product safety labels and signs require complete content

product safety labels for the past two decades. It's important to note that intelligently-designed ANSI Z535 signs, tags and labels most often give viewers a significantly higher level of content. They do this by including symbols, words, translated text (when necessary), and well-defined color-coded severity level panels to accurately communicate a risk-reduction message. Compare the sign in Figure 2 (a sign designed to the old OSHA format) to the format of an ANSI Z535 sign shown in Figure 3. Clearly the newer ANSI sign conveys a more substantial safety message.

Your use of best practice sign and label design principles has a secondary benefit to your company. Should an accident occur and your warnings are at issue, use of the latest best practices should speak well for your company in terms of its efforts to use the best risk communication methods available.

BEST PRACTICE STILL MEANS CUSTOMIZATION

While the main elements (shape, color and symbols) should be consistent across your company's system of up-to-date signs, labels and tags, customization is often still needed. My experience in implementing best practices over the last 25 years has shown that customization is often necessary to accurately identify hazards and how to avoid them. To illustrate this, look again at the 1941-era sign shown in Figure 2 that says, "Only authorized personnel beyond this point." This sign is often interpreted by every employee to mean that *they* are "authorized." Instead, the new sign, as shown in Figure 3, uses a customized message to give the viewer tangible, useful information that better defines both the need for PPE and prior authorization before entry. Such a sign could even call out specific ANSI-approved eye protection or a certain level of hearing protection.

The goal of every safety sign and label system is to provide accurate, concise information that enables viewers to understand risks and take actions to avoid harm. Such systems of risk communication are an essential part of both a product manufacturer's safety label program and a facility owner's occupational health and safety management system. Both types of safety communication have, as their common objective, the most valuable goal: to make the world a safer place.

Stay tuned for the next article in this series which will focus on some of the new symbols making their way through the registration process in ISO/TC 145, the committee in charge of international standards for safety signs, colors, and symbols.

Figure 2: Outdated, 1941-era OSHA-style safety sign

Figure 3: New, best practice safety sign
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