

- ◀ The column-climbing competition.
- ▼ Working on the RealWeld trainer.

Games of STEEL

BY WILL PICKERING

A SteelDay event showcases the construction of steel buildings with a display of ironworker skills.



FOR THE PAST SEVEN YEARS, AISC's annual SteelDay has given the construction industry and the general public a closer look at the wonders of structural steel

Erector LPR Construction, Inc., decided to go both routes for its first SteelDay event in September 2015.

The sales staff provided tours of our Loveland, Colo., campus, including our large training room, where apprentice classes are held, and the welding laboratory, which houses the RealWeld welding trainer, a computer-assisted welding aid. Visitors also got to visit the training tower, a 22-ton structure used for testing and training applications.

When it came to presentations, three LPR experts held one-hour breakout sessions, highlighting topics such as the importance of AISC's erector Certification program, challenging picks that demonstrate the difficulties of engineering hoisting operations, and the fact that not all safety is created equal—e.g., poorly implemented anchorages for fall protection are the equivalent of no fall protection at all.

But then we decided to take things a step further. Not only did we want to introduce visitors to our facilities and our expertise, we also wanted to show them how we get our hands dirty and give them a taste of what ironworking looks like, live and in person. Thus, we held the Ironworker Games, a series of contests that let our employees—16 in all—demonstrate their prowess in areas such as bolting up, torch cutting, the RealWeld welding test, spud-wrench throwing and column climbing.

Bolting, a staple of apprentice ironworker tasks, requires fast and accurate installation to keep production flowing. For this challenge, all participants had to select the correct bolts and install them quickly for the highest score possible. Attention to detail and preparation led the winner to victory.

Torch cutting is another necessary skill for working with steel. The task was to cut a very specific shape as cleanly and quickly as possible after setting up the oxygen/acetylene torch. Smooth motion and amazingly steady hands helped win the event. (A fellow competitor even noted that the winner's cut was so perfect, it looked as if someone had used a grinder to clean the cuts.)

LPR's RealWeld trainer rates a person based upon parameters set in a welding procedures specification—e.g., work angle,

Will Pickering (wpickering@lprconstruction.com) is a craft instructor with LPR Construction, Inc., an AISC Member erector and Advanced Certified Steel Erector.





◀ Winning the Bronze!

travel angle, etc. The trainer has an audio coach that directs the welder to correct the positioning of their electrode while welding. Upon completing the weld, the RealWeld rates the welder

on several factors. To score a perfect 100, the welder must not have the audio coach correct them even once. For this event each competitor would run three passes, and the best average would win. The winner scored an average of 97.5% for the win, but a close second place saw the company's first individual 100% for one pass while welding with stick.

Spud throwing, though not a practical example of an ironworker's skill, was added purely for entertainment value. For those who don't know, a spud is a wrench with a pointed end used to align structural members. A target, roughly 30 ft away, was made on bales of hay, and the competitors let the wrenches fly. Throwing techniques varied from underhand, similar to throwing horseshoes, to an overhand axe-style throw. The final victor defeated fellow competitors twice in tie-breaking rounds.

Last but not least was column climbing, a method of accessing upper elevations that has been performed since steel columns have stood upright. Judging for this event was easy: The fastest climb time resulted in first place. The best time saw a first-year apprentice climbing the 20-ft W12x45 column in 5.75 seconds, setting a new LPR record.

Throughout the day, it was good to see family, friends and other visitors show up to support the competitors and get a closer look at our methods and facilities. It may be as close to seeing the daily work of an ironworker as many of them will ever. And in the end, that is what the SteelDay is meant for: helping others understand how our industry works.

For more on SteelDay, taking place September 30, visit www.steelday.org. ■