

# PROTOCOL

THE JOURNAL OF THE ENTERTAINMENT TECHNOLOGY INDUSTRY

## The changing face of entertainment safety

*plus:*

How do LEDs work? **22**  
– Slice of lime with that?

Theatre construction in China **26**

What is a portable structure? **38**  
Fall arrest requirements you need to  
know about from *ANSI E1.39-2015*



## Tools of the trade, Part 22: From the simple to the complex at Stage Expo



THE WINTER ISSUE'S COLUMN FOCUSED ON TOOLS I found while wandering the aisles at LDI 2014. This column is another look at tools found at an industry trade show. This time the show is in Cincinnati: USITT Stage Expo 2015. Many of the exhibits are identical to those found at LDI. There are more costume, makeup, and theatre companies here, with a concurrent dearth of trussing and concert/club lighting exhibits. As for tool companies? The same ones I saw at LDI, plus a few more that we'll get to in a bit.

“ [The Cam Wrench] earns a place in the entertainment electrician's toolbag. ”

I don't get a chance to walk a show floor on the first couple of days because I'm in my own booth being a salesman and trying to appear as though I know something about our products. My research on new items usually occurs on the third day of a show. This year was a little different—a brand new tool was brought to me in my booth. The bearer was someone I've known for years, and who embodies the phrase “tool junkie:” Roger Lattin. If you don't know Roger, but have attended an LDI or USITT in the past 20 years, you've probably seen him. He's hard to miss—big guy with a braided pony tail, huge walrus moustache, booming voice, tool pockets full of gear, and usually towing a briefcase full of tools and swag. Roger works out of IA Local 728 in “Hollyweird,” as he is fond of saying. He is their training coordinator, Executive Board Member, and PLASA rep, while still finding time to be a working lighting technician. His ETCP credentials include Certified Entertainment Electrician and ETCP Recognized Trainer. We have known each other for years, having worked in ESTA/PLASA working groups together. The most recent collaboration was a “Tools for Technicians” workshop Roger organized at LDI 2014. I brought a 45 lb bag of tools to the workshop, assuming it would have enough gear in it to contribute to the discussion. Roger brought several rolling work boxes and a few toolboxes—and that wasn't even all the tools he has to use when he's working on a

feature film. The guy is a serious tool junkie. So when he pulls out a plastic bag with “Cam Wrench” displayed on it and says: “Here's the tool I told you about at LDI,” he definitely has my attention.

The Cam Wrench is a simple cast aluminum plier-type tool that has a gripping section that is designed to grasp a cam-type wiring device. The grip handles are insulated and have a ring for attachment of a lanyard. The tool jaws are 2.5" x 2" and are supposed to fit around the molded insulator jacket of all major



The rugged and lightweight Cam Wrench is designed to remove the pressure on the wrist and elbow when twisting cams on multiple cable runs.

brands of cam connectors common to our industry (Series 16, E1016, etc.). According to KRE Electric (the manufacturer): “The ‘KRE’ Cam Lok Wrench, or Cam Wrench, is designed to remove the pressure on your wrist and elbow to delay or avoid the on-set of tennis elbow (lateral epicondylitis). This is caused by the repetitive motion of tightening (adding pressure) of the cam lok devices and golfer's elbow (medial epicondylitis), which is caused by the release of pressure (un-tightening) of the cam lok devices.” Quite a mouthful. But I appreciate the concept, as will anyone else who has spent time fighting with and twisting cams on multiple runs of cable. The tool is simple, as is often the case with really useful tools. It earns a place in the entertainment electrician's toolbag. In fact, I can see one of these tools hanging on a lanyard at every company switch that has cam devices for output. The cost is somewhere around \$40. The manufacturer is Canadian, so I'm not sure of the price in US dollars. Contact them directly or give Roger a call.

So there's the simple tool. And now the complex ones.

The first is the ShopBot CNC machine. I reviewed the ShopBot in this column several years ago and the company has since added





ShopBot's full-size PRSalpha CNC machine

more models to their product line. There are now 5-axis machines for under \$40K, but even more interesting are the desktop and ShopBot Buddy machines that are designed for small spaces and prototype/short run machining. The cost is very low for this type of machine (\$5K – \$10K),

and it would be the perfect addition to a scene/carpentry shop that fabricates wood, foam, light metal, or composite materials for props and scenery. We had one at Union Connector several years ago and I can attest to the quality of the machines ShopBot builds.

“ Thank you for taking the time to read my reviews and tips and ramblings. ”

The second tool/machine is a 3D printer that was being demonstrated at the Griffin 3D booth. This particular model was just one of the many that are being marketed today. The technology is such that now just about anyone with a couple of grand and some creative ability can manufacture a plastic replica of something they see in their mind's-eye. There are limitations, of course, but the concept is one that is revolutionary in terms of small-run manufacturing. There is a danger in adopting new technology like this before it matures in the marketplace, though. There are no real standards for material and programming, and the time required to manufacture is a bit long. Price is an issue, even as these printers become more affordable. If anyone has seen the *Big Bang Theory* episode where Raj and Howard spend \$5K for a 3D printer to make a \$25 plastic doll, you know what I mean. But for prosthetics, masks, small props, and other hard to fabricate items, this technology has a place in the entertainment world. Griffin 3D is the first company I've seen demonstrating this technology in one of our industry's trade shows, so they are first out the gate and may be poised to own this niche market. However, they are a very young company, having funded themselves via a Kickstarter Campaign. According to their website: "We are accepting pre-orders for the Griffin Pro Series Printers while we work on sending out our backer rewards from our recent Kickstarter Campaign. Once all backer rewards from the

KRE Electric Cam Wrench – <http://kreelectric.com/cam-wrench/>  
 ShopBot – <http://www.shopbottools.com/>  
 Griffin 3D printers – <http://griffin-3d.myshopify.com/>


Kickstarter have shipped we will begin production on pre-orders. Current lead time is 4 – 6 weeks." Caveat emptor.

This will be my final column for PLASA's journal, *Protocol*. I've been doing this for five years and I'm ready to move on to some new challenges. I'll still be writing, but it will be as editor for my woodturning club's monthly newsletter and editor for Union Connector's new newsletter. I'll still be dealing with tools and the entertainment industry, but my focus will shift a bit. Shift happens, right?

Thank you for taking the time to read my reviews and tips and ramblings. I hope somewhere there is a tech out there who has learned something from this column and is now working safer as a result. ~ Rich Wolpert ■


**Rich Wolpert** is Co-Owner and Director of Union Connector. He received his first set of tools—a Handy Andy set—when he was six. The tool set disappeared into the Union Connector shop a few years later, never to be seen again. Don't even think about asking to borrow any of his tools. You can contact Rich at [richw@unionconnector.com](mailto:richw@unionconnector.com) or Union Connector Midwest, 2733 E. Battlefield Road, #102, Springfield, MO 65804.

Special thanks to Rich Wolpert for his love of tools and willingness to share his time and knowledge with *Protocol's* readers in his Tech Tips column over the years. ~ The Editor




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