

FROM THE TRENCHES... APPLICATION: OUTCOME

IS THERE VOLTAGE?

Electrical safety demands we know the correct answer to one question: Is there voltage? Since a wrong answer can have life-threatening consequences, like arc flash, for example - many companies spend time and money making sure they can answer that important question with unerring certainty.

When the NFPA published their Standard for Electrical Safety in the Workplace in the year 2000, that document generated essential changes in the way both electrical and mechanical maintenance is performed in today's industrial and commercial facilities. There is no doubt these changes are positive because injuries and deaths caused by electrical accidents have been significantly reduced. Yet, as with any new regulation, employee productivity has been adversely affected because of the Standard and some in the industry are asking an important question. Can we retain the reduction in injuries and deaths we witnessed because of NFPA 70E while regaining the level of productivity we experienced prior to NFPA 70E? The answer is yes.

As one paper mill in Arkansas discovered, pre-verifying electrical isolation is an excellent way to safely have your cake and eat it too. In an effort to boost employee safety during their Lock-out Tag-out procedures (LOTO), the paper mill ordered several R-1A003 Non-Contact Voltage Portals from their local electrical distributor. When installed in the door of an electrical panel, the SafeSide™ R-1A003 voltage portal provides their maintenance personnel a no-touch voltage portal on the outside of a grounded metallic electrical enclosure. The SafeSide™ R-1A003 voltage portal interface allows for the use a non-contact voltage detector pen to pre-verify electrical isolation before opening an electrical panel. This pre-verifying ability provides the paper mill an additional safety barrier between their maintenance person and hazardous voltage. But, as the Arkansas paper mill discovered, it significantly increased their productivity.

Prior to installing the voltage portals, the paper mill's mechanical LOTO procedures took 45 minutes for each MCC room. After installing the voltage portals in each bucket of two MCC rooms they were able to reduce their "Lock-out Tag-out procedure from 45 minutes to 12 minutes in the first MCC Room [and] from 45 minutes to 15 minutes in the second MCC Room." This 70% reduction was possible because, with voltage portals, they were able to combine and even eliminate some procedures. Normally, when maintenance work was performed on an electrical enclosure, an electrician would have to be called to verify from where power was coming. Next, the electrician would have to throw the disconnect switch, put on PPE, and open the panel door to verify electrical isolation with a voltmeter. By pre-verifying electrical isolation with SafeSide™ R-1A003 voltage portal, those steps are preformed in seconds rather than minutes and the panel door is never opened.

The time-saving benefits of pre-verifying electrical isolation with voltage portals can be experienced by any company that must routinely perform mechanical LOTO procedures. This cost-effective device allows companies to correctly answer that all-important question - is there voltage - without sacrificing safety for productivity, or vice versa. That's something everyone can live with.*



**ANSWERING THIS
ALL-IMPORTANT
QUESTION IS
EASY WITH
VOLTAGE PORTALS!**

Do you have a product application story "from the trenches"? If so, we would love to hear from you.

Just email your story to sales@grace-eng.com. If we use your story you will win a free bungee rocket!