

# Torrance Casting

## INTRODUCTION

For Torrance Casting, safety is about more than just compliance. The metal casting facility located in La Crosse, WI has a marvelous history of 145-plus years of a family-owned business that is now transitioning into the sixth generation, and potentially continuing. They describe their commitment and concern for the community, being a good neighbor, a good employer within their geography, and servicing their customers beyond expectations. Part of the culture they have established as a family-owned business has led Torrance Casting to implementing initiatives in terms of electrical safety that go beyond compliance in order to achieve maximum safety.



The guidelines within NFPA 70E standard point to what companies are required to do, and some only are willing to achieve minimum compliance (others fall short of even that). Torrance Casting understands that because they can improve worker safety, create a more reliable and safer electrical program, they can protect their employees and become more efficient at the same time.

Unique to the metal casting facility's environment is a furnace that is one of their most critical assets. The furnace is directly connected to a medium voltage transformer and is unique because it goes from that medium voltage transformer directly to a motor control cabinet operating at 575V in the process. Upon analyzing the safety concerns for their workers operating within this cabinet, they enlisted the help of a reputable electrical contractor and their expertise to devise a safer solution.

## THE SOLUTION

In association with ASG Electric, the company conducted an arc flash calculation. Given how close it is to medium voltage and the type of fusing, the calculated incident energy was 119 calories. The cabinet configuration proved to be quite a challenge and from there. The question from the facility manager at that time was, "How do I open the door and do inspection when it's 119 calories?" ASG Electric surmised that the best-case scenario is that they shouldn't have people in that cabinet at all unless they can absolutely be assured that they are within an electrically safe work condition, as defined by NFPA 70E standards. This led ASG and Torrance to investigate Absence of Voltage Testing devices.

As ASG Electric did their data collections, their TEGG Services protocol gave them all the pictures, images, and details they needed. After attending an electrical safety webinar on the topic of absence of voltage testing, ASG's owner and operator, Chuck Fox, reached out to the presenter, Bhanu Srilla, Director of Technical Marketing at Grace Technologies, to help develop a permanent electrical safety solution. Having this hazardous piece of equipment identified and having learned of Grace's absence of voltage testing solutions, Torrance was able to move forward and enhance their safety program with Grace's Permanent Electrical Safety Devices (PESDs).

Grace presented the Voltage Test Station as a viable solution for this application. The Voltage Test Station makes electrical safety simple by allowing users to perform Lockout/Tagout (LOTO) and absence of voltage testing the same way you do today, only without having to open the cabinet door and create exposure to high incident energy. This PESD empowers qualified personnel to go beyond the minimum compliance set forth by the NFPA 70E and OSHA standards. The verification of voltage presence is illuminated by LED lights with the built-in voltage indicator, while the second component, the Safe-Test Point, provides the ability to test for absence of voltage with their trusted metered devices.



With the solution of installing GracePESDs®, Torrance Casting has eliminated the exposure to the worker by incorporating the Voltage Test Station as an absence of voltage testing device. From the perspective of the risk control hierarchy, the methodologies therein account for the risk associated with human interaction. Going down the hierarchy indicates less control that requires more correct interaction from the human side to be able to handle that level of risk assessment and risk control. The results and benefits that Torrance, ASG, and Grace implemented enabled true testing to still be in the hands of the qualified worker, but it's brought to the front door of the cabinet with the installation of the Voltage Test Station.

**ABOUT TORRANCE CASTING**

Torrance Casting is a state-of-the-art metal casting facility in La Crosse, WI. They utilize high-tech systems such as MasterCam, NovaFlow and Solid, NovaCast ATAS, and SolidWorks computer software. With over a century of operation, they're able to work more closely with the design and production engineers of their customers to meet their precise dimensional, metallurgical, and physical specifications.

**ABOUT ASG ELECTRIC**

ASG Electric is located in Milwaukee, WI and is owned and operated by Chuck Fox, CESP. They work with plant and facility directors to manage all aspects of the electrical system, which include managing change with new electrical projects, electrical system testing and reliability with their TEGG Services program, and managing the electrical safety program using the standards and practices of NFPA 70E Electrical Safety in the Workplace. ASG delivers services that manage all these electrical system responsibilities into one strategic plan.

***Burnie & Les***



"Hold on Burnie, don't try that yet. I think I figured it out."

For more information on the entire line of GracePESDs™, visit [www.gracesense.com](http://www.gracesense.com) or call 1.800.280.9517