

Published in: Foodmanufacturing.com (November 11)
ChemInfo (February 12 online)



Case Study: Start-Up Microbrewer Has a Taste for Washdown Safety

MADISON, WI – *House of Brews*, a microbrewer start up company, specified Meltric DECONTACTOR™ Series switch-rated plugs and receptacles for its portable pump carts and keg washer during its build-out phase for the benefits of their plug-n-play capability, watertightness rating, and total arc-flash protection. Since the company went into operation one year ago, it is convinced that Meltric is the best solution for connecting portable equipment in a washdown environment. It plans on using Meltric connecting devices for new equipment when it expands in the future.

By using the Meltric DECONTACTOR™ Series combination plug/receptacle and disconnect switches, *House of Brews*'s workers can save time connecting and disconnecting its portable pumps with an immeasurable amount of safety. *House of Brews* owner Page Buchanan says of Meltric Decontactors, "I constantly have to washdown all my tanks, pumps and fermenters. I have total confidence that the plug can handle me spraying them. Plus, I have interns who work for me and Meltric plugs offer me peace of mind that they can fully comply with safety standards. Meltric plugs are perfect for all my connection needs."

Even though the *House of Brews*, 4539 Helgesen Drive, Madison WI, has only been in operation for a year, Mr. Buchanan developed the company over a 5-year period as he completed his business plan, obtained a Small Business Administration (SBA) loan, attracted private investors and purchased used dairy and brewing equipment that he modified with Meltric connecting devices to provide an additional level of electrical safety. Presently, he has several volunteers assisting him. In the first year of operation, he is projecting to produce 1,000 barrels of small batches of house brand and custom beer. Mr. Buchanan currently has a novel distribution system that he calls the Community Supported Brewery (CSB) model where customers subscribe or pre-pay for beer annually and get whatever specialty beers the *House of Brews* makes. In addition, he is currently distributing to bars, liquor stores and restaurants.

Safety, Inspections and the Build-Out Phase

During the build-out phase, Mr. Buchanan began the process of designing his microbrewery and selecting equipment suppliers with an eye on both quality and passing building safety inspections. Since he would be using portable equipment in a wet, washdown environment, specifying power devices that could easily be connected or disconnected was extremely important to him.



Washing down equipment is a frequent activity at the House of Brews. The Meltric Decontactor Plugs and receptacles are automatically NEMA 4X watertight whenever they are mated together.

While sourcing brewery equipment, Mr. Buchanan made contact with Mr. Chris Murphy of Paleotronics, a portable pump cart supplier, who recommended Meltric's DECONTACTOR™ Series switch rated plugs and receptacles to Page because he thought they were the best since their watertightness rating of up to NEMA 4X was ideal for working around condensation and microbrewery equipment. "They are better than pin-and-sleeve devices when parts start arcing and melting, especially overhead. You'll have no worries with Meltric," said Mr. Murphy.

Mr. Buchanan attributes Meltric connecting devices as one of the reasons he passed the building safety inspections easily. He knew that if the building inspector saw potential electrical safety hazards or deficiencies, he might not be approved. "My building inspector had great things to say about Meltric," Mr. Buchanan said. "When you're doing the build-out and the inspector sees you've taken initiative, they know a guy like me is trying to do things right."

The Washdown Safety Factor

Microbreweries are essentially a part of the food & beverage industry, which Meltric Corporation has decades of experience supplying connecting devices designed to withstand the harsh environments found in this industry. Meltric's plugs and receptacles all feature a dead front construction with an enclosed arc chamber, which simplifies compliance with NFPA 70E (Risk Category "0" operation), and butt-style, spring-loaded, silver-nickel contacts with a self-cleaning action to maintain excellent contact over thousands of operations. Their plastic/poly chemical resistant housing can withstand corrosion caused by frequent washdowns.

At a microbrewery, such as the *House of Brews*, brewing machinery, pumps and equipment are frequently moved and cleaned. So, fitting the equipment with a connecting device that could be plugged and unplugged safely in a wet environment was decisive in Mr. Buchanan's choice to specify Meltric Deconnectors. "The plugs don't have to be dried out of the way of the brew house," says Page. Presently, he uses the DSN Series switch rated plugs and receptacles, (208V 3 phase 20A and 30A) to connect portable pump carts and keg washers. "It's the safety factor," says Mr. Buchanan. "I don't have to worry about employees getting arced."

Plug-n-Play Connection Convenience

With a small staff and the need to move equipment regularly, Mr. Buchanan has learned that Meltric plug-n-play capability gives the *House of Brews* a timesaving feature that provides a fast and convenient way to connect and disconnect equipment. "Sometimes a pump is 10 yards away from me while I'm in the brew house doing something else," Page remarked. "I don't have to go back to the pump to shut it off. That is convenience!" The other option was to plug the pump in above a washer. "My worker would have to stand on a ladder to plug it in. With Meltric connecting devices, you can plug it in right at floor level," Mr. Buchanan added.

Peace of Mind

While the Decontactor Series plugs and receptacles make life easier, save time and maximize safety at the *House of Brews*, Mr. Buchanan enjoys the "peace of mind" they give him as an owner. Since Meltric Decontactor receptacles have a dead front safety shutter, arc flash hazards are eliminated. He plans on buying more Meltric plugs and receptacles in the future when he expands his operation with a bottling machine.



Portable pump carts are connected with Meltric Deconnectors for their immeasurable amount of safety and plug-n-play capability, which reduces time spent connecting and disconnecting frequently moved equipment.



Meltric's Decontactor plugs and receptacles are an approved 'line of sight' disconnect. Pressing the pawl on the receptacle (red dot) breaks the load and ensures that the plug can be safely removed.