

Case Study

INEOS Battleground Manufacturing Complex

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Improved Reliability and Reduced Costs is the Right Formula for INEOS

INEOS Battleground Manufacturing Complex, located in Houston, Texas, uses MELTRIC Switch-Rated and Hazardous Location plugs and receptacles to protect workers while drastically cutting down on their motor changeout downtime. INEOS is a global chemical company with this particular Houston site housing eight polyethylene lines, one polypropylene line, a 20 MW cogen facility, and a state-of-the-art polyolefin technical center for R&D.

INEOS Battleground's Electrical Supervisor, Gregg Kennedy, shared that their driving decision to choose MELTRIC was the time-saving benefits of their plugs and receptacles paired with the built-in safety features to protect their operators.

4 Hours to 15 Minutes - Motor Changeout

INEOS Battleground Complex has a unique automated process where they add an engineered dosage of a catalyst to their products to make them more stable (varies depending on the product they're working with). This process frequently requires a motor to run for short bursts of time. This is a hard service for their motors because of how often it starts and stops. Gregg described how "over time the heat will kill the motor so we keep motors in stores in the warehouse with [MELTRIC] cords already put on them, [so] if one goes bad in the middle of the night operations can just do a swap-out without contacting maintenance."

Before installing MELTRIC, when one of their motors went down in the middle of the night, they would have to call an electrician. Gregg explained that by the time they'd call somebody to come out, get them on the scene, get them permitted to get into the facility, go to the location of the motor, and do the work, it would take up to 4 hours to complete the changeout. Now, the INEOS Battleground operators keep some pre-wired motors with MELTRIC receptacles in the control room and use their own lockout/tagout tags for the changeout, drastically trimming down their change-out time from 4 hours to 15 minutes.

Unconditional Efficiency

For their latest project, they are gradually installing 100 HVAC units for climate control and ventilation applications. Instead of using disconnect switches for the A/C units, they attached MELTRIC Switch-Rated devices. This allows their HVAC contractor to do their job without requiring an electrician to be present to verify zero energy. Gregg illustrates that "with a MELTRIC plug



MELTRIC simplifies maintenance.



MELTRIC DXN Hazardous Location plugs and receptacles being used on critical equipment.

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they can unplug [the unit] and as long they don't install it with the plug [plugged] in, they've got a verified zero-dead instead of calling an electrical group in [to verify]."

The HVAC worker can handle the connections on their own without fear of drawing an arc because Switch-Rated plugs and receptacles meet NEC 'line-of-sight' disconnect and NFPA 70E compliance. Switch-Rated devices are designed with a dead-front and safety shutter that minimize access to live parts and eliminate any potential for arc flash exposure. Thanks to these built-in safety features, INEOS' electrical engineers can focus on critical maintenance within their plant, and HVAC workers don't have to rely on an electrical engineer partner to complete the task at hand.

Built Better

We asked Gregg what other benefits he values from MELTRIC plugs and receptacles, in addition to the time-saving advantages. He mentioned the engineering and design of the plug, he said, "MELTRIC is built better. There is no water intrusion and 4X is important for us. They are intrinsically safe and do not arc, which is always a concern in an industrial facility."

Previously they were using cannon plugs that used soldered pins, every now and again they'd get roughed up from use and would require a very labor-intensive plug changeout because each pin had to be soldered in individually. With the switch to MELTRIC devices, it is now a 15-minute job for plug replacement vs. a 3-4-hour job to get the cannon plug pins swapped and soldered.

The Battleground complex also has several motors used in water applications and plugs and receptacles being used outdoors for their ponds making watertightness crucial for smooth and safe operation. MELTRIC Switch-Rated plugs and receptacles achieve their rated watertightness simply by connecting the plug and receptacle providing up to Type 4X and IP69K/IP69 protection.

Overall, INEOS Battleground is operating safer and more efficiently than ever before on account of MELTRIC Switch-Rated and Hazardous Location plugs and receptacles. Switch-Rated devices deliver NEC 'line-of-sight' disconnect and NFPA 70E compliance resulting in safe and quick motor changeout, up to Type 4X and IP69K/IP69 ratings for automatic watertightness connections for safe use in water-related applications, and a built-in arc chamber to assure safe disconnects eliminating the need for a qualified worker to be present for zero-energy verification.



HVAC equipment installed with a MELTRIC Switch-Rated plug and receptacle.



MELTRIC Switch-Rated plugs and receptacles are designed to be dependable in the harshest conditions.