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STARLINE[®] PLUG-IN RACEWAY

Case Study: Ecolab selects Starline Plug-In Raceway for work cell power distribution in one of its main plants

Ecolab, a Fortune 200 company based in St. Paul, Minnesota, is the global leader in water, hygiene and energy technologies and services. The company focuses on four main areas: clean water, safe food, abundant energy and healthy environments.

In 2017, one of the largest main plants in Ecolab, based in Roscoe, Illinois, chose to reevaluate its power distribution methods for work cells. The plant focuses on safe foods and healthy environments through the creation of soap dispensers for hotels, hospitals, restaurants, etc. and employs more than 300 people.

Problem

At the time, Ecolab was faced with the following issues:

- Forced to daisy chain power down to its cells from an overhead power source; the dangling cords became a safety hazard
- Adding more power was a complicated process that involved shutting down a portion of production

- Work cells typically contained a maximum of 8 outlets per station, but some stations required more
- Work cells were constantly needing more power strips on certain lines, and only a few of them were GFCI capable- raising further safety concerns

Ecolab needed a distribution system that provided enough power for the plant to use all of its tools and equipment without the risk of overloading the system.

The Ecolab plant also wanted the freedom to easily reorient its work cells and processes, which required a flexible power distribution product in order to accomplish this.

Solution

Ecolab ultimately chose Starline Plug-In Raceway as the power distribution system of choice for its plant's work cells. The Plug-In Raceway design consists of a backplane with insulated copper conductors which utilize

snap-on cover pieces and plug-in modules that can be rearranged for convenient access to power.

Starline Plug-In Raceway solved Ecolab's issues in the following ways:

- Eliminated the daisy chaining safety hazard
- Increased the number of outlets at each station for the plant
- Provided localized breaker protection in each Plug-In Raceway module, ensuring issues are contained and downtime avoided
- Made what used to be required—placing GFI units in every cell—now optional for the plant

Regarding the breaker protection, Total Productive Maintenance (TPM) Engineer Olufemi Bada remarked “That was really awesome. Our safety manager said ‘this is what we need on every cell.’” In his role, Bada is responsible for evaluating various factors in order to increase efficiency in the plant's work cells, among other things.

“It (Plug-In Raceway) was specifically chosen for the universal cells—the new route our facility is going toward,” said Bada. “We're taking away the old and bringing in the new. The idea is to be flexible enough to meet customer demands, and the raceway system was the only thing that could be flexible with our cells.”



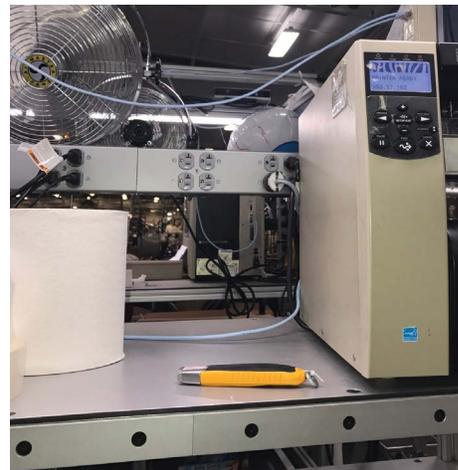
Result

By choosing Starline Plug-In Raceway for its work cell power distribution, Ecolab's plant was able to provide more power in a safer way, while also increasing production efficiency.

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-Olufemi Bada, TPM Engineer
Ecolab

The plant's previous process was complicated—involving attaching specific brackets, draping a line down from the above busbar and shutting down an entire production line in order to make a change. With Plug-In Raceway, the plant now has up to 12 outlets per cell—depending on if it runs on a normal or



GFI module—and is able to make power changes on the fly.

The plant is looking forward to utilizing the raceway system's flexibility in the future, by possibly changing its layout from being straight to an 'L' or 'U' shape. Currently, the curiosity of other Ecolab plants is peaked, and they are closely following the success that Bada's plant has had so far with the Plug-In Raceway product.

“If your plant is trying to become flexible and meet the demands that are going up in today's environment, you should go with the raceway,” said Bada.

About Universal Electric Corporation

Universal Electric Corporation (UEC), the manufacturer of Starline, is a global leader in power distribution equipment. For more than 25

years, Starline has provided laboratory, data center, retail, health care, higher education and industrial facilities with the most flexible, reliable and customizable power distribution systems on the market today.

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