

Cable Entry Systems Case Study



About OneStop Control Systems

As a leading industrial control panel specialist, OneStop Control Systems, a subsidiary of Stokes Electrical Supply, is dedicated to crafting customized control panels that cater to a diverse range of needs.

Whether it's terminal enclosures, hazardous area panels, or motor control cabinets, their extensive experience working with system integrators, equipment manufacturers, machine builders and industrial end users ensures they meet their customer's needs.

With over 60 years of experience in the industry, they have perfected their approach to designing, assembling, and producing control panels. Their attention to detail, combined with expertise of skilled personnel, guarantees that each project receives thorough and top-notch craftsmanship. Every control panel undergoes rigorous testing to ensure flawless performance before leaving their shop. OneStop Control strives to build long-lasting partnerships by delivering exceptional quality and service.



PANDUIT[®]
infrastructure for a connected world



Company

OneStop Control Systems

Country

United States

Industry

Panel Assembly

Business Challenges

Finding an efficient cable management solution to accommodate small cables entering and exiting a non-metallic enclosure while maintaining a NEMA 4X rating.

Panduit Solution

Cable Entry Systems

Business Benefits

Cable Entry Systems require only a single hole to be drilled instead of multiple holes. As a result, OneStop Controls not only saved time on installation, but also significantly reduced the space occupied by cables on the enclosure while maintaining all required specifications.

Optimizing and Simplifying Cable Management

Panduit Cable Entry Systems helps OneStop Controls achieve simplified cable management and enhanced enclosure functionality.

Business Challenges

Managing cables exiting and entering an enclosure is one of the challenges that can face many customers as they build out custom enclosures. OneStop Controls was tasked with building 500 temperature controllers. These controllers play a critical role in regulating freezing and cooling processes within environments such as schools, hospitals, convenience stores and government facilities.

OneStop Controls faced the challenge of finding an efficient cable management solution for the enclosure. They needed something that would allow small cables to enter and exit a non-metallic enclosure, while maintaining a NEMA 4X rating.

The initial approach was to drill multiple holes in the enclosure but that was quickly deemed to be too labor-intensive and would take up too much space on the enclosure.

Panduit Solution

OneStop Controls Operations Manager Hadi Youwakim said that they were familiar with Panduit from previous projects that implemented Panduit solutions, so they decided to reach out once again to Ed Luecke, OEM/Industrial Account Manager with Synergy Electrical Sales.

“OneStop Controls has had a positive relation with Panduit and Ed has been a mainstay integrating possible solutions and strategies,” said Youwakim. “Timing was key! We were in the infant stages of prototyping when Ed visited. We discussed our intent and Ed quickly provided samples to test.”

During the visit, OneStop Controls was shown a sample kit highlighting the various Cable Entry Systems Panduit had to offer. Cable Entry Systems offer a safe, organized method to transition cable through enclosures and electrical equipment.

Out of the various options shown to OneStop Controls, the CESUM3-R406 seemed to make the most sense. This round Cable Entry System offered good strain relief, was well suited for the application and featured a wide range of hole dimensions to accommodate various cable sizes. Most importantly, the Panduit Cable Entry System met all required specifications for the project and maintained an IP66 NEMA 4X rating.

Business Benefits

The Cable Entry Systems helped OneStop Controls achieve the desired results of their project while also saving them install time and space on the enclosures.

“The Cable Entry System simplified the machining process and improved the ability for customers to conduct field modifications swiftly and easily,” said Youwakim. “The product met all of the requirements for cable entry sizing, environmental conditions, and UL certification.”

OneStop Controls has since built over 100 enclosures using the Cable Entry Systems and the projected annual usage could exceed over 1,000 units within the first year. Furthermore, there are plans to install these controllers at several large box retailer locations as well as convenience stores.

As a result of OneStop Controls selecting Panduit Cable Entry Systems for their project, they were able to realize multiple business benefits including:

1. **Enhanced Efficiency:** OneStop Controls streamlined their installation process by drilling a single hole into each enclosure instead of multiple holes that would have been needed with traditional cable entry solutions. This not only helped reduce labor and time, but also improved overall efficiency.
2. **Space Optimization:** The Panduit Cable Entry System occupied minimal space on the enclosure (less than 3 square inches to be exact), allowing OneStop Controls to maximize the available real estate on the enclosure. This space-saving feature was crucial for the project, ensuring that the enclosure remained compact and efficient.
3. **Regulatory Compliance:** The NEMA 4X rating of the Cable Entry Systems met the strict regulatory requirements set by the industry. This compliance assured OneStop Controls that their temperature controllers would operate reliably and securely within multiple environments.
4. **Cost-Effectiveness:** The competitive price point of the Cable Entry Systems made it an attractive choice for OneStop Controls. With no need for a SPA, the solutions provided excellent value while aligning with the company's cost-saving objectives.

Thanks to their partnership with Panduit and implementing their Cable Entry System solution, OneStop Controls successfully found a cable management solution that fit the needs of their temperature controllers.

The adoption of the round Cable Entry System met all specifications and provided a streamline, timesaving, and cost-effective alternative to drilling multiple holes in the enclosures.

This partnership has not only benefited OneStop Controls, but has also positioned Panduit to be a trusted provider for cable entry solutions within the industry.



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