



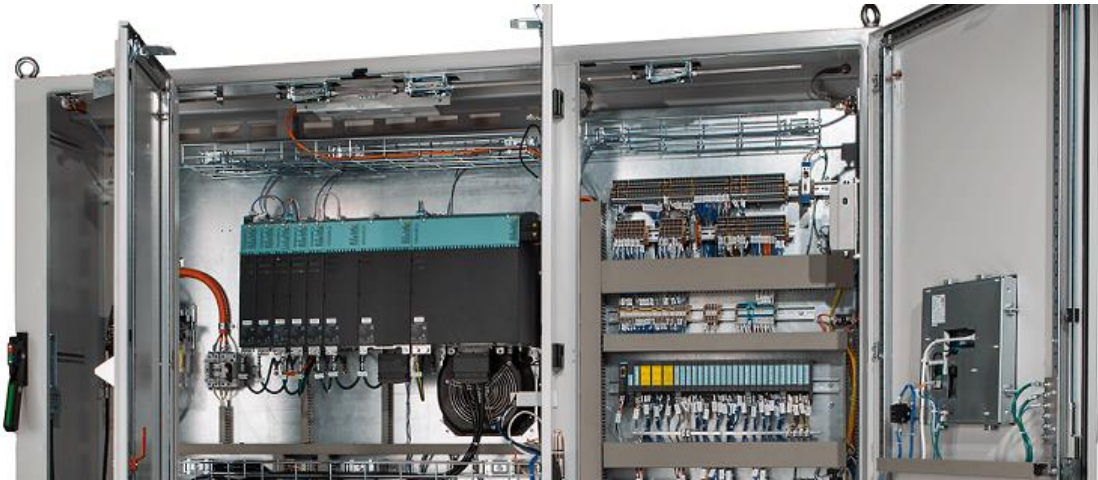
Hazardous area update from Expo - February 2023

Welcome to this update from Expo Technologies - your hazardous area partner.

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1. Featured Article - IP Ratings & NEMA



In manufacturing, there are two standards used to measure the different grades of electrical enclosures and how resistant they are to the ingress of certain materials. NEMA ratings and IP ratings both define degrees of protection against substances such as water and dust but use different test methods and parameters to define their enclosure.

NEMA, refers to the [National Electrical Manufacturers Association](#), a trade association whose membership is comprised of electrical equipment manufacturers in the United States.

IP ratings are a part of the [International Electrotechnical Commission \(IEC\)](#). "IP" stands for "international protection" but is commonly referred to as "ingress protection."

Read more [here](#).

2. Featured Application - Robotic Arms



Robotics are a vital part of the modern engineering industry. They are used to automate processes and increase productivity, and they are becoming increasingly sophisticated. Industrial robots are capable of performing complex tasks with precision and accuracy and may be used in hazardous environments, with suitable protection. Purge & pressurization is the most appropriate protection method, and Expo has developed a range of purged & pressurized solutions for robot arms. See our [Case Studies](#) area for more details - select "Robotics" from the drop-down menu.

3. Featured Case Study - Surface Treatment



The client manufactures a range of robotic surface preparation systems that are used to prepare large surfaces prior to the application of special paint and coatings. Due to the requirements of a particular end-user, they needed to develop a hazardous area solution for use in a Class I Division 1 (CID1) environment. **Read the full case [here](#)**

4. Featured Project - Gas Analysers



The Expo UK projects team recently completed this large pressurized enclosure order, comprising eight large, complex systems, along with eight smaller, series purged enclosures.

Our client is a specialised gas analyser manufacturer, and these enclosures are designed and certified for a particularly challenging application, trace contaminant analysis in natural gas. After fit-out, test, and final certification at the client's site, they will be shipped to a project in the Middle East.

Read more about our analyser capabilities [here](#)

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