

## Chemical Engineering

**Supporting a specialised engineering and construction firm on the upgrade of a processing & packaging line for specialty chemicals.**



### Project Brief

The nature of the customer's plant and products meant that the speciality chemical packaging equipment would be installed in a classified hazardous environment. The control & monitoring systems functioned most effectively when located close to the packaging line, so there was a need to protect these systems, with a few modifications as possible.

The customer viewed purge and pressurization (Ex p) as the most cost-effective solution and, additionally, permitted easier access for system maintenance, compared to using flame-proof/explosion-proof (Ex d) protection. The environment was classified as Class I, Division 1.

### Solution

A Purge and pressurization system that was able to protect the controls equipment and meet the Class I, Division 1 hazardous area requirements, including power isolation, while permitting periodic maintenance. Thus, the electronics could easily be installed close to the process.

## Expo Products and Services

### MiniPurge Type X

IECEX, ATEX & UL certified purge and pressurization systems for Zone 1, Class I Div 1 applications



#### Features

- Global approvals
- Purge flow capacity up to 900 NI/min
- Leakage Compensation or Continuous Flow
- Stainless steel enclosure construction

Expo's Minipurge type X range provides a full purge and pressurization solution for electrical enclosures and other equipment installed in Zone 1 or Class I Div 1 hazardous environments. With a range of flow capacities up to 900 NI/min, the systems are suitable for large enclosures up to 5.4m<sup>3</sup> volume.

[Click here](#) for more information.

### MiniPurge interface unit (MIU)

IECEX, ATEX & INMETRO Ex d certified solutions for enclosure power and signal isolation.



#### Features

- Global Ex d approvals
- Isolates low power signals and up to 32 A power
- Compatible with MiniPurge & SmartPurge II
- Aluminium construction

Expo's Interface Units provide switching of power and signals to the pressurized enclosure, using a control signal from the purge system. This capability is required for enclosures installed in Zone 1/21 or Class I/II Div 1 hazardous locations.

[Click here](#) for more information.