

Watching Brief

Working with a robotic systems and camera manufacturer to provide a flexible Exp solution for cameras in automotive painting applications



Project Brief

Provide a flexible Purge & Pressurization (Exp) solution for a range of multi-camera systems that are installed alongside automotive painting robots to monitor paint quality and detect defects.

Challenges

Flexibility to protect multiple cameras with a single purge & pressurization system, to reduce footprint and complexity

Ensure that series purging would be effective, and meet code requirements, when the system was expanded from 2 to 4 cameras for larger vehicle applications

Careful attention to air flow, especially from system relief valves, to ensure that there would be no interference with paint application

Class I Div 1 solution required due to the continuous presence of solvent-based paints

Outcome

Type X purge & pressurization system - suitably sized for purging and pressurizing up to 4 cameras in series.

Custom elements to allow series purging and remote location of the relief valves. For more details on series purging of multiple enclosures, read our application note [here](#)

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 5.4m³ volume.

[Click here](#) for more information.

Design and Consultancy services

Expo Technologies' team of consultants and certification engineers have the experience and knowledge to support our customers through the certification process for equipment to be used in Hazardous Areas.

From concept design through to maintenance, Expo Technologies works with you to reduce the risks and accelerate your entry into global markets.

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