

# **Purged & Pressurized solution for TOC analysers**

# Working with a world leading integrator of analysers to develop an Ex p solution for TOC analysis

### **Overview & Project Brief**

The client is a multi-national integrator of gas and liquid analysers. This case study describes a project to develop custom purged & pressurized (Ex p) enclosures for a number of Total Organic Carbon (TOC) analysers. After the analysers were installed, and the systems inspected and certified, they were shipped to a petrochemical facility in the Middle East for integration into a water treatment facility.



## **Challenges**

- Thermal management of the enclosures to ensure that the analysers remained in their operating temperature range once installed in a high ambient temperature environment
- Modification of the analysers to ensure compliance with Ex p standard IEC60079-2
- Specific project requirements on paint finish

### **Solution**

- The resulting enclosures incorporated a range of thermal management features, including Armaflex insulation, a vortex cooler, as well as anti-condensation heating.
- Our engineers used their knowledge and experience to advise the integrator on the modifications needed for the analyser to comply with Exp requirements
- We worked with a specialist paint shop to meet the paint specification

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# **Expo Products and Services**

#### **Custom Enclosure Service**



Some projects call for special shapes and sizes of enclosures, non-standard features, or very special applications, and may also require input from a Notified Body during the design phase or final certification.

With Expo's fully custom process, a dedicated engineer will work with you to develop exactly what you need and agree on a detailed budget and project timeline with milestones. As this is a highly flexible service, we can adapt the plan if your project requirements change.

Click here for more information.

### Type Z Purge

IECEx, ATEX & UL certified purge and pressurization systems for Zone 2, Class I Div 2 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 Z range provides a full purge and pressurization solution for electrical enclosures and other equipment installed in Zone 2 or Class I Div 2 hazardous environments. Physically the same, Y purge systems are for use in Zone 1 / Class I Div 1 hazardous environments where the equipment to be protected already carries Zone 2 or Class I Div 2 certification.

Click here for more information.

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# **Design & 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.

Click <u>here</u> for more information.



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