

Screen Time

Making a non-certified HMI suitable for use in a hazardous area



Overview

Working with a client specializing in the manufacture of pump and air compressor packages for oilfield and industrial applications who needed a hazardous area solution for an existing system design.

Project Brief

To design and engineer a custom operator interface adaptor for specified non-rated HMI (Human Machine Interface). Using the HMI replaced the function of most of the pilot devices (buttons and lamps) on the compressor control panel. This was desirable as the client's packaged skid was required to meet hazardous area requirements (generally Class I, Division 2).

Challenges

Customer specified HMI is not hazardous area rated and minimal environmental or ingress protection rating

Limited envelope or space in the control enclosure to fit HMI and operator interface adaptor.

Complete membrane key functionality required, as well as being able to view of small, two-line LED display on HMI.

Solution

Custom operator interface adaptor to fit specified HMI.

Environmental and Ingress protection compliant to maintain integrity of customer's control enclosure

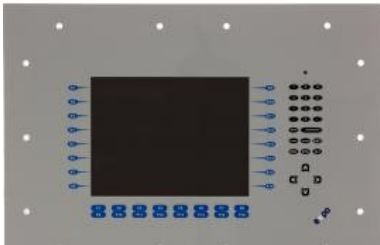
Compatible operation for use with type Z purge and pressurization system.

Client now has a solution to pursue more business opportunities with Class I, Division 2 hazardous area requirements

Expo Products and Services

Operator Interface Adaptor

Allows standard uncertified operator panels to be used in hazardous areas



Features

- Mounts into the wall of a standard Ex p (Purged & Pressurized) enclosure
- Increases the classification on non-certified operator interfaces to Class I&II Div.1&2
- ATEX & IECEx Zones 1 & 2, 21 & 22

The Expo Technologies Operator Interface Adaptor is used to allow regular operator interfaces to be used in hazardous locations.

It is used with Expo Technologies purging systems and suitable pressurized enclosures. The Adapter increases the classification of operator interfaces from non-classified to Class I, II, Div. 1, 2, Group A through G; IECEx/ATEX Zone 1, 2 (21 or 22) IIC, when used with an approved Purge and Pressurization system.

[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.

[Click here](#) for more information.

