

Ex p solutions for industrial label printing

A custom Ex p enclosure for label printers in a hazardous area

Application

Printers for bar code and batch number labels are found in many industrial locations. If the printer is to be located in a hazardous area, then a certified solution is required to ensure safe operation.

Due to operational requirements & constraints, many of the possible Ex p protection concepts are not suitable. Ex p (Purge & Pressurization) provides the most flexible and cost-effective solution.



Expo Solution

The printer is installed inside a custom designed Ex p stainless steel enclosure fitted with a certified purge and pressurization system. The enclosure design incorporates two unique features:

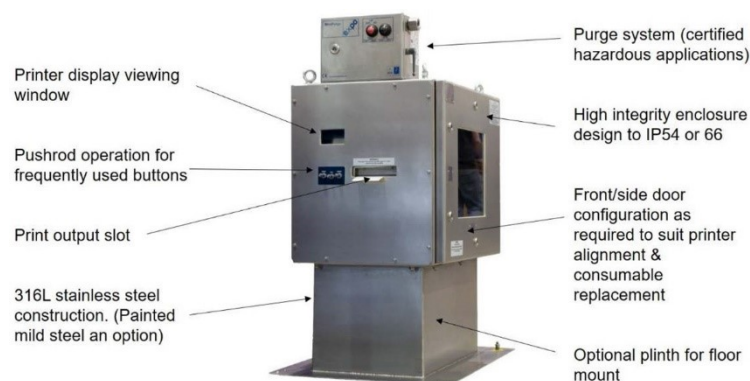
Through-the-enclosure-wall pushbuttons to actuate the printer membrane switches for label feed control

A low leakage label slot to permit label exit while maintaining positive pressure inside the enclosure.

The enclosure dimensions are tailor-made for the printer to be used, which sits on an adjustable internal shelf allowing accurate alignment for the label feed and pushbuttons. Additionally, an access door is provided for media roll change.

The enclosure can be supplied on a plinth or for table-top use.

Typical System



Solution

Certification: suitable for ATEX/IECEx: Zone 1 & 2; NEC Class 1 Div 1 & 2 depending on configuration.

T4 (135°C) typical

Tamb -20 to +55°C

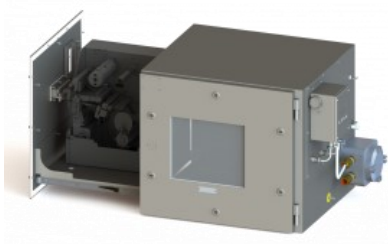
For Zone 1 / Class 1 Div 1 applications, in addition to the use of an X purge, a mini purge interface unit (MIU) may be required to provide local isolation of both the power supply to the printer as well as the incoming ethernet cable.

Expo Products and Services

Hazardous Area Label Printers

Gas & Dust certified, packaged solutions for Zebra ZT 411 (4") and ZT 421 (6") industrial label printers.

Features



- Hazardous area solution for industry standard label printing – systems for 4" and 6" label sizes available
- ATEX / IECEx Zone 1/21 and 2/22, North American Class I & II Div. 1 & 2
- Power and signal safety interlocked for full code compliance
- 316L stainless steel enclosure for industrial & ultra-clean environments

Printers for bar code and batch number labels are found in many manufacturing facilities. If the printer is to be located in a hazardous area, for instance within a pharmaceutical production line, then a certified solution is required to ensure safe operation.

[Click here](#) for more information.