

Suitable for Ex p, Ex e, Ex nR & Ex t



Advantages

- Fully custom enclosure project service for more challenging applications.
- Solutions for low and high-temperature duty, internal source of release, high thermal loads.
- Full flexibility in enclosure configuration and dimensions to suit exact project requirements.
- Depending on the final design, Expo may certify under its populated certificate or work with a Notified Body.
- Robust stainless or mild steel construction, IP54, IP66 and Type 4X ingress protection.
- Wide range of options and accessories.

Overview

Expo designs and manufactures fully customised hazardous area enclosures for the installation of customers' instrumentation and electrical equipment that can be certified for use in both gas and dust environments. Enclosures are fabricated from 316L stainless steel or painted mild steel and can be supplied with IP54, IP66 or 4X levels of ingress protection.

Depending on the hazardous area and the equipment installed, the completed enclosure can be certified Ex p, EX e, Ex nR or Ex t.

Typical Applications

Expo has designed, manufactured and certified hundreds of enclosures for applications such as:

- Complex electrical control panels
- Drillers control panels
- Hazardous gas and liquid analysers
- Motor control / VFD panels
- Extra large / multi-section panels

Expo's Fully Custom Service

Expo's Fully Custom Service is designed to navigate you through the most complex enclosure projects. For example, if your application calls for extremes of ambient temperature, installation of components requiring significant thermal management, or is classified as having an internal source of release, then standard enclosure solutions are often unsuitable.

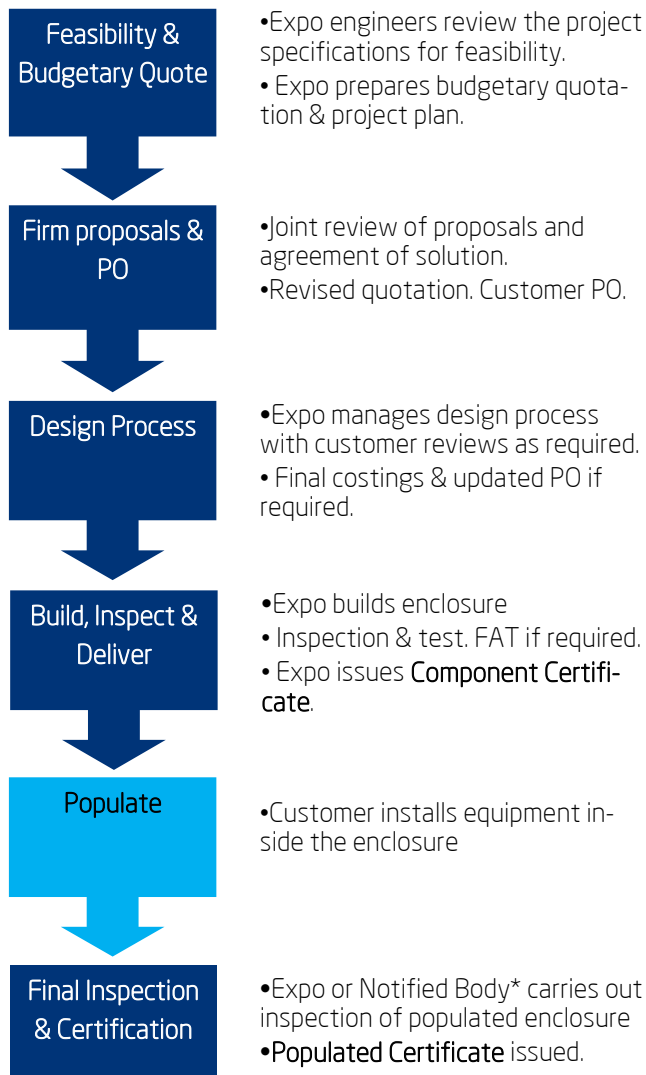
With decades of experience in custom projects, Expo's engineers work with you to review the application and components to be used and evaluate options for both the enclosure design and the most appropriate certification path.

We then build the enclosure to the agreed specifications and deliver it **component certified**. If this is an Ex p enclosure, then the purge system and any other Expo equipment, such as cooling systems, will already be installed and tested. The enclosure can then be populated at your facility. In some cases, Expo can work with you to populate the enclosure at our factory.

Depending on the final design, Expo will certify under its populated certificate or work with a Notified Body.

Expo's Fully Custom Process

The most effective way to solve challenging enclosure design, build and certification projects.



* Certification path dependent on scope and configuration.

Expo Zone 1 populated certificates for Ex p & Ex t:
ATEX: EXV 19ATEX0469X
IECEX: EXV 19.0024X

Expo Zone 2 populated certificates for Ex p & Ex t:
ATEX: EXV 19ATEX0470X

Typical Enclosure Specifications

Material of construction (body)	316L stainless steel or painted mild steel (Expo standard RAL7035)
Material thickness	1.5 to 3mm depending on overall enclosure dimensions.
Maximum dimensions¹	2100H x 1800W x 1000D (mm) 82H x 70W x 39D (inches)
Form factor	Multi-compartment, complex
Window material	Polycarbonate or laminated glass depending on specification, region or certification.
Ingress protection²	IP54, IP66. UL50E Type 4X
Temperature range	-20°C to +55°C
Seal & gasket material	Elastomer type compliant with certification
Door fasteners	Tool operated ¼ turn, stainless steel
Available features	Multiple doors Gland and access plates Windows Equipment backplates & custom mounting arrangements. 19" rack facility Swing frame Custom plinth HMI mounting facility (through door, pocket, lockable cover) Sun-shade / rain hood Insulation, cooling & heating solutions Keyboard & Trackball Purge system & accessories

Note 1: Larger enclosures are possible but may require a purge gas test or Notified Body certification.

Note 2: 4X certificates: USA: UL CY1V E477372 / CAN: UL CY1V7. E477372