Hazardous Area Enclosures - Fast-Track Service

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

IEC IECEx ATEX Ex CE UL ISO 9001

Advantages

- Fast and flexible solutions for hazardous area enclosures through quickly configurable designs.
- Fast certification process with Expo's populated enclosure certificates for Zone 1 & 2 environments (ATEX & IECEx)
- Wide certification suitability for gas and dust, including Ex p, Ex e, Ex nR, Ex t protection methods.
- Robust stainless or mild steel construction.
- IP54, 66 and Type 4X ingress protection
- Wide range of options and accessories.

Overview

Expo designs and manufactures a wide range of 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 and can be supplied with IP54, IP66 or 4X levels of ingress protection.

Depending on the hazardous area and the equipment installed, Expo can certify the completed enclosure Ex p, Ex e, Ex nR or Ex t.

Typical Applications

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

- Electrical control panels
- PCs, monitors & printers
- Remote I/O panels
- Non-hazardous analysers

Expo's Fast-Track Service

Using standardised building blocks and automated configuration and design tools, Expo's Fast-Track service can deliver you tailor-made enclosures within weeks.

Expo manufactures the enclosure to your specifications and delivers to you **component certified**. If this is an Ex p enclosure, then the purge system will already be installed and tested. The enclosure can then be populated at your facility.

The hazardous area classification, construction, and power dissipation of the internal components to be installed will impact the choice of protection method and suitability for certification. Expo recommends an early review of your component selection to identify any potential issues, such as enclosed volumes and thermal management.

For systems using purge & pressurisation, Expo holds **populated enclosure certificates** for ATEX & IECEx, so it can offer a full certification service on the finished system, giving significant time and cost benefits. For most projects, provided we have received all the required documentation, the final inspection process is quick and straightforward.
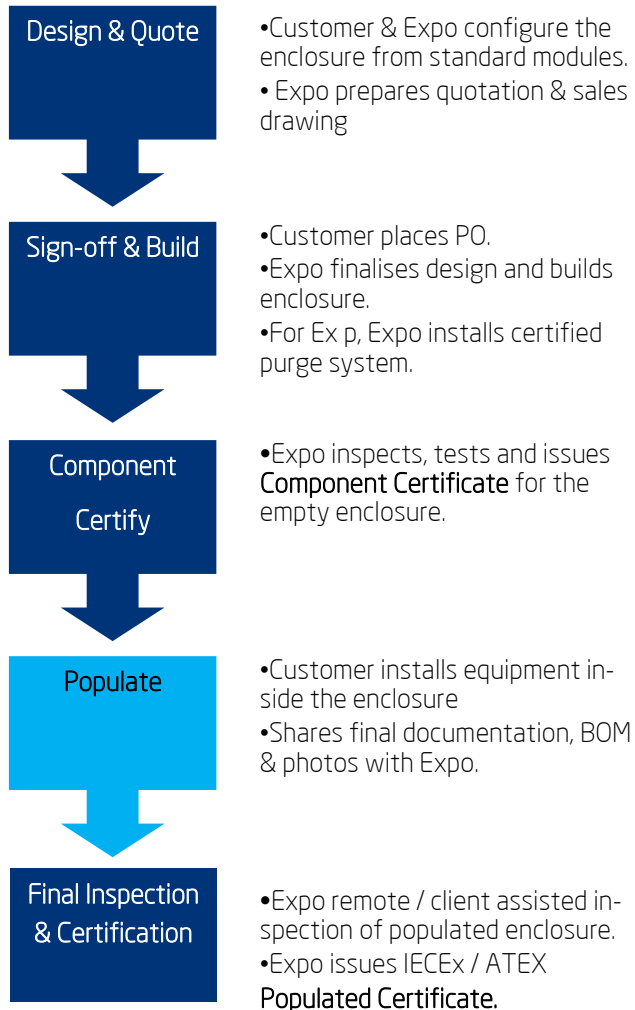
Simplifying Complexity. Delivering Safety.

Expo's Fast-Track Process

The fastest and most straightforward way to deliver a fully certified system on time and budget.

Design & Quote
- Customer & Expo configure the enclosure from standard modules.
- Expo prepares quotation & sales drawing

Sign-off & Build
- Customer places PO.
- Expo finalises design and builds enclosure.
- For Ex p, Expo installs certified purge system.

Component Certify
- Expo inspects, tests and issues **Component Certificate** for the empty enclosure.

Populate
- Customer installs equipment inside the enclosure
- Shares final documentation, BOM & photos with Expo.

Final Inspection & Certification
- Expo remote / client assisted inspection of populated enclosure.
- Expo issues IECEx / ATEX **Populated Certificate.**

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
IECEx: EXV 19.0025X

Typical Enclosure Specifications

Material of construction (body)	316L stainless steel
Material thickness	1.5 to 3mm depending on overall enclosure dimensions.
Maximum dimensions	2100H x 1800W x 1000D (mm) 82H x 70W x 39D (inches)
Form factor	Standard rectangular
Window material	Polycarbonate or laminated glass depending on specification, region or certification.
Ingress protection[1]	IP54, IP66. UL50E Type 4X
Temperature range	-20^{0}C to $+55^{0}$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 19" rack facility Standard plinth HMI mounting (through door) Sun-shade / rain hood Vortex cooler Purge system & accessories

Note 1: 4X certificates:
USA: UL CY1V. E477372
CAN: UL CY1V7. E477372

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