

Product Brief:

Hazardous Environment

INDUSTRY: HAZARDOUS ENVIRONMENT — EXPLOSION AND FLAME

APPLICATION: EXPLOSION-PROOF ENCLOSURE

SUMMARY: There are many recognized types of protection for hazardous area electrical instruments, each type of protection achieving its safety from ignition in different ways. Virtually any industry utilizing flammable substances is affected—mining, energy, chemical, materials storage, and the pharmaceutical industries all process flammable liquids and gases. Special consideration must be given to design and construction in hazardous areas as a precaution to eliminate

Overview

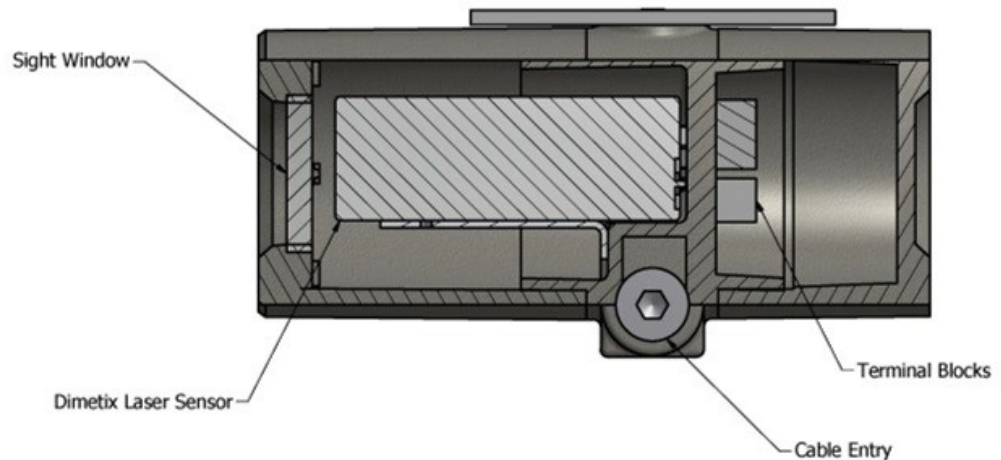
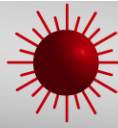
Challenge

As a rule, explosions are possible whenever three factors are present:

- flammable substance
- oxygen (air)
- ignition source

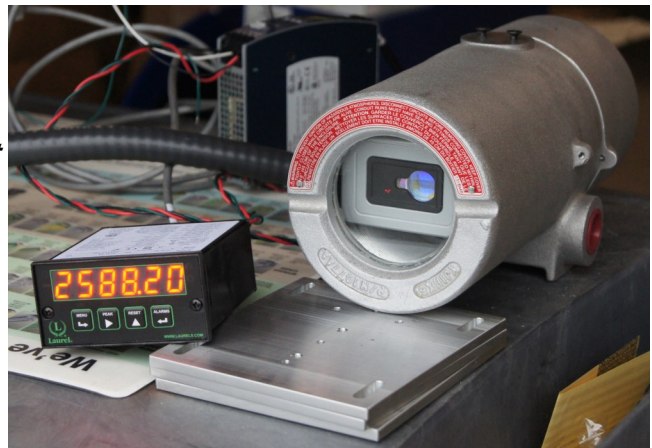
Virtually any industry processing flammable liquids or gases are affected—mining, energy, chemical, materials storage, and the pharmaceutical industries. Although there are many recognized types of protection for equipment in hazardous areas, and many applications require explosion proof equipment, special consideration must be given to design and construction in hazardous areas as a precaution to eliminate sources of ignition.





Solution

Laser-View Technologies explosion proof enclosures are custom designed for Dimetix laser distance sensors, but *it is important to note the approvals, compliances, and certifications discussed here apply to the enclosure itself, rather than the laser unit.* The container is NEMA 4X



rated and engineered as a two-chamber enclosure to segregate laser and power/control components. Lightweight, corrosion resistant copper-free aluminum construction features ½-inch barrier wall with drilling /tapping capability and a neoprene gasket between compartments for watertight applications.

KEY NOTES:

- NEMA 4X standard for outdoor / washdown applications
- Dual-sided instrument enclosure keeps power supply and laser in separate chambers
- Maintains certification while machining wall between chambers
- Attractive stainless steel sandblast finish Technology
- **Approvals, Compliances, & Certifications**
 - **Approvals:** UL, CSA (Canada), and FM ATEX
 - **Compliances:** NEC Class 1, Div 1&2 (Groups B,C, &D), Class II, Div 1&2 (Groups E,F, &G); NEMA 7&9 (Optional 3, 4X), ATEX
 - **Certifications:** ATEX certificate number: FM09ATEX0073U