Application Note

Using the T40 II Rattler® with O_2 Sensor

Oxygen is an essential component of air, and is necessary for all living beings. It makes up 21% of the Earth's atmosphere; in workplace settings, an O_2 concentration between 19.5% and 23.5% is considered safe, according to OSHA.

Low oxygen levels, or oxygen depletion, puts workers at risk of asphyxiation. Oxygen depletion has serious effects too, more so in confined spaces, as known as a space large enough for someone to enter and work in but:

- Has limited restriction of entry / exit
- Not designed for continuous occupancy
- Additional hazards such as uneven floors, sloping walls or the risk of engulfment may exist
- No means of ventilation

When oxygen depletes, people will begin with nausea and vomiting, eventually leading to a loss of consciousness. The lack of oxygen will quickly affect the functioning of the brain and reduce one's ability to respond.

On the other hand, too much oxygen also means danger. Excessively high (enriched) oxygen levels make combustion easier and more devastating. At concentrations of 24% of greater, fires start more easily, burn with higher temperatures and a greater heat output, and are more difficult to extinguish.

To ensure a safe working environment and timely monitoring of gas leakage, oxygen gas detectors should be well prepared for a better response to the oxygen deficiency and enrichment hazards.

Where to use oxygen sensor ?

In plants like oil fields and shipyards, oxygen deficiency occurs because of the complex atmospheric conditions. What's more, municipal engineering including gasworks and electrical maintenance require workers into underground sites and pipeline constructions. The gas condition can be unpredictable.

Oxygen enrichment is more common in steel mills and metallurgy plants. High purity oxygen is used in the manufacturing process and brings a hidden risk of oxygen leakage.

The complex and dangerous gas condition makes it very important for you to continuously monitor the oxygen levels with a direct-reading portable gas monitor. We present you the T40 II Rattler® with oxygen sensor to ensure a quick response to the fluctuation of oxygen levels.

Benefits of T40 II Rattler® with oxygen sensor

The T40 II Rattler® Portable Single Gas Monitor is now available with oxygen sensor, which allows users to rely on a compact, lightweight, and robust monitor that can quickly send out the potential danger alarm in hazardous areas.

Equipped with ultra-fast sensor response times and replaceable battery with two-years durability, T40 II Rattler® also ensures reliability during safe operation. Furthermore, T40 II Rattler® monitor is impact, dust, and water resistant with an IP-66 / 68 dual rating. The T40 II Rattler® monitor is safe for use in hazardous locations, classified as intrinsically safe, ATEX/IECEx and by CSA to U.S.A and Canadian standards.

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