ATEX EXPLAINED

HAZARDOUS AREAS

WHAT IS ATEX?

ATEX is an acronym for ATmospheres EXplosible, which is French for explosive atmosphere. ATEX is the name given to laws for controlling explosive atmospheres, standards of equipment and the protective systems used in them, based on the requirements of two European directives.

The first is ATEX 13 Directive 1999/92/EC. This makes it a legal requirement to assess for an explosion risk and classify the area accordingly. The second is ATEX Directive 94/9/EC. This makes it a legal requirement that once an area has been formally classified as potentially explosive, only mechanical and electrical equipment that has been formally certified can be used there.

Common explosive atmospheres are caused by flammable gases, mists, vapours or combustible dusts. If there is enough of the substance mixed with air, then all it needs is a source of ignition to cause an explosion. Under the ATEX directive there are three zonal classifications which refer to both the level of threat in that environment and the suitable equipment that you can use in it.

THE THREE ATEX/HAZARDOUS ZONES CLASSIFICATIONS ARE:
The single digit numbers relate to hazardous 'gases' and the 2 digit numbers relate to hazardous 'dust'.

ZONE 0 / 20

VERY HIGH RISK

Permanent or frequent presence of a gas/dust explosive atmosphere

ZONE 1 / 21

HIGH RISK

An explosive atmosphere is expected to occasionally occur during normal operation

ZONE 2 / 22

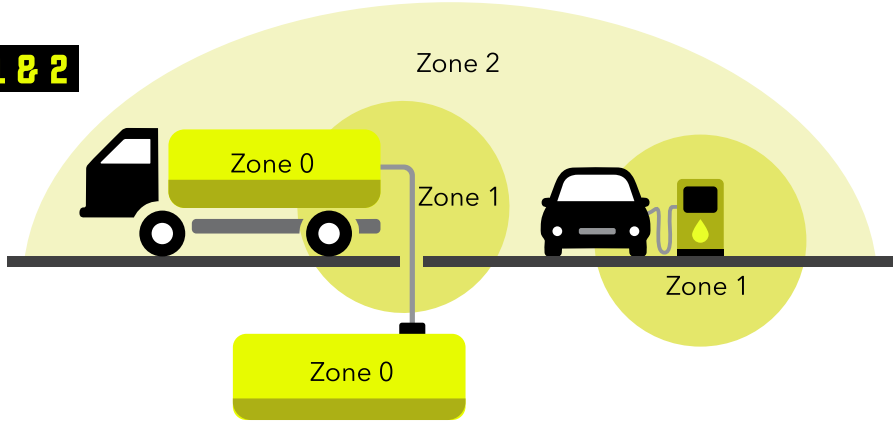
MEDIUM RISK

Explosive atmosphere are only of short duration and not likely to occur during regular operation

In atmospheres and workplaces where there is potential for explosions, care must be taken with the type of tools and flashlights you use. If you were to use a regular flashlight in these environments, it may have the potential to cause an explosion, putting yourself and others at great risk. In these hazardous zones you will need an ATEX, or intrinsically safe torch.

Unilites ATEX range to date, features only zone 0 products, providing the maximum level of protection against explosive gases, mist and vapours. This diagram shows how ATEX zones work in practice and that some zones require a higher level of protection than others:

GAS ZONES 0, 1 & 2



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