

Regulatory Bodies and Certifications

The different regulatory bodies and certifications for industrial process equipment can create confusion. The main difference is the geographical locations where the certification is recognized and accepted. With this poster we help you navigate through the different certification systems. Together, Armadex, Cobic-Ex and Ex-Machinery can provide you with every product you need within each certification system.

ATEX equipment group	ATEX equipment category and environment type	Zone classification ATEX / IECEx	Required equipment protection level (EPL)	Class / Zone classification US / Canada	Class / Division classification US / Canada
I	M1	N/A	Ma	N/A	Mining
	M2		Mb		
II	1G	Zone 0	Ga	Class I, Zone 0	Class I, Division 1
	2G	Zone 1	Gb	Class I, Zone 1	
	3G	Zone 2	Gc	Class I, Zone 2	
	1D	Zone 20	Da	Class II, Zone 20	Class II, Division 1
	2D	Zone 21	Db	Class II, Zone 21	
	3D	Zone 22	Dc	Class II, Zone 22	Class II, Division 2, Class III



- ATEX Cameras
- Mobile Devices



- ATEX Airconditioners
- ATEX Wi-Fi
- Cooling Containers
- Custom Machinery



Explosion Proof Equipment (ATEX, IECEx, UL)



Cobic-EX Explosion Proof Flashlight



EX-Machinery ATEX Airconditioner

Hazardous Areas Definitions

Hazardous Areas according to ATEX and IECEx Zones

Zones - Define the type of explosive atmosphere as well as the likelihood of an explosive atmosphere being present:

- 0 Explosive gas atmosphere present continuously or for long periods
- 1 Explosive gas atmosphere likely to occur in normal operation
- 2 Explosive gas atmosphere not likely to occur in normal operation but may be present for short periods
- 20 Explosive dust atmosphere present continuously or for long periods
- 21 Explosive dust atmosphere likely to occur in normal operation
- 22 Explosive dust atmosphere not likely to occur in normal operation but may be present for short periods

In Europe, ATEX is the leading directive, new installations must use the Zones system.

IECEx is a global directive and commonly used offshore and in countries that do not have their own directive. It uses the same zones as ATEX.

In Canada new installations must now use the ATEX / IECEx system of Zones instead of Divisions. Existing installations may use either system.



Cobic-EX Explosion Proof Tablet

Hazardous Locations according to North American Classes and Divisions

Classes - Define the type of explosive atmosphere:

- I A location made hazardous by the presence of flammable gas or vapor that may be present in the air in quantities sufficient to produce an explosive or ignitable mixture
- II A location made hazardous by the presence of combustible or electrically conductive dust
- III A location made hazardous by the presence of easily ignitable fibers or flyings in the air, but not likely to be in suspension in quantities sufficient to produce ignitable mixtures

Divisions - Define the likelihood of an explosive atmosphere being present

- 1 A location where a classified hazard exists or is likely to exist under normal conditions
- 2 A location where a classified hazard does not normally exist but is possible to appear under abnormal conditions

In the USA, all installations can use either the Class / Zone or the Class / Division system.



Armadex OZC 2 ATEX Camera

Cobic-EX Explosion Proof Worklight

