

## FirePro in potentially explosive atmospheres (ATEX)

FirePro ATEX Condensed Aerosol Generators are designed to operate in potentially explosive atmospheres. Local authorities have the responsibility for defining a Class, Zone, and Group classification for specific areas. The classification given to a particular zone, and its size and location, depends on the likelihood of an explosive atmosphere occurring and its persistence if it does. Areas classified into zones (0, 1, 2 for gas-vapor-mist and 20, 21, 22 for dust) must be protected from effective sources of ignition.

**Approved to the ATEX directive 2014/34/EU (Ref Chapter III, art. 10)**



Model	Weight		Dimensions	Approvals
	Net (g)	Gross (g)		
FPX-0100EX	100	1,830	170 x 84mm diam	Ex MASC
FPX-0200EX	200	2,315	200 x 84mm diam.	Ex MASC
FPX-0500EX	500	3,770	310 x 88mm diam.	Ex MASC
FPX-1200EX	1,200	17,050	365 x 450 x 310mm	Ex
FPX-2000EX	2,000	21,650	365 x 450 x 310mm	Ex
FPX-3000EX	3,000	22,450	365 x 450 x 310mm	Ex
FPX-5700EX	5,700	33,710	365 x 450 x 420mm	Ex

## FirePro Certified for potentially explosive atmospheres (ATEX)

FirePro has also been specifically certified under ATEX guidelines for hazardous environments. FirePro aerosol generators can be used in:

**Ex I M1 Ex s T450°C Ma**

**Ex II 1G Ex s IIC T3 Ga**

**Ex II 1D Ex IIIC T200°C Da**

The local authority has the responsibility for defining a Class, Zone, and Group classification for specific areas.

Equipment Group	Equipment Category	Protection Level	Presence or Duration of Explosive Atmosphere	Hazardous Area Zones
I	Underground Mines and Associated surface installations	M1	Very High	Constant Risk or Presence
		M2	High	Constant Risk or Presence
II	All Other Surface Installations	1	Very High	Continuous Presence
		2	High	Likely to Occur
		3	Normal	Unlikely to Occur

  

Dusts	Category M1, M2 & 1 Equipment		Gases, Vapours and Mists
Place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods or frequently.	Zone 20:	Zone 0:	The part of a hazardous area in which a flammable atmosphere is continuously present or for long periods.
Category 2 Equipment			
Place in which an explosive atmosphere in the form of a cloud of combustible dust in air occurs occasionally. <b>Group III IIIA Combustible flyings</b> <b>Group III IIIB Non-conductive dust</b> <b>Group III IIIC Electrically conductive dusts</b>	Zone 21	Zone 1	That part of a hazardous area in which a flammable atmosphere is likely to occur in normal operation <b>Group II IIA (Propane, Methane)</b> <b>Group II IIB (Ethylene)</b> <b>Group II IIC (Hydrogen)</b>
Category 3 Equipment			
A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation or will persist for a short period only. <b>Group III IIIA Combustible flyings</b> <b>Group III IIIB Non-conductive dust</b> <b>Group III IIIC Electrically conductive dusts</b>	Zone 22	Zone 2	That part of a hazardous area in which a flammable atmosphere is not likely to occur in normal operation, and if it occurs, it will only exist for a short period <b>Group II IIA (Propane, Methane)</b> <b>Group II IIB (Ethylene)</b> <b>Group II IIC (Hydrogen).</b>

## Mining and Surface Certification (MASC)

FPX-0100EX / 0200EX / 0500EX aerosol units have additional certification



Location	Hazard Frequency	Environment	Limiting Temperature
Zone 1 & 2 Zone 21 & 22	Mining: Underground & Surface (Gas) Surface (Dust)	Intermittent could under normal operating conditions in hazardous area	Group I Group IIC Group IIIC
		Methane / Coal Dust Hydrogen / Acetylene Conductive Dusts	150°C T3 T200 °C
			Enclosure surface limitation Enclosure surface limitation Enclosure surface limitation

## The Technology

FirePro systems use the latest generation of our patented FPC solid compound. When activated the FPC undergoes a transformation into a rapidly expanding extremely effective and efficient fire extinguishing condensed aerosol. The generated

aerosol is propagated and evenly distributed in the enclosure under protection using its own momentum. Fire extinguishing is accomplished by the interruption of the chemical chain reactions occurring in the flame, without oxygen depletion.