



Equipment groups, categories and zone classification 設備組，類別和區域分類

Group	Risk zone 風險區	Level of Protection 防護等級	Formerly known 先前已知
I Mining	M(1)	Mechanical equipment - Energised 機械設備 - 結予電力 Very high level of protection Equipment must continue to operate in an explosive atmosphere. 非常高保護設備的等級在易燃易爆的環境下必須繼續進行操作。	0, 1, 2 (Gases) 20, 21, 22 (Dust)
I Mining	M(2)	Mechanical equipment - De-energised 機械設備-去電力 High level of protection Equipment must shut down if an explosive atmosphere occurs. 如果出現爆炸性環境高的保護設備等級必須關閉	1, 2 (Gases) 21, 22 (Dust)
II Non-mining	1	Very high level of protection Where gas, dust or vapour mixtures are present continuously or for long periods. 非常高的保護等級其中氣體，灰塵和蒸氣的混合物連續或長時間存在。	0, 1, 2 (Gases) 20, 21, 22 (Dust)
II Non-mining	2	High level of protection Where gas, dust or vapour mixtures are likely to occur occasionally. 高的保護等級其中，氣體，塵埃和氣體混合物可能偶爾會出現。	1, 2 (Gases) 21, 22 (Dust)
II Non mining	3	Normal protection Where gas, dust or vapour mixtures are unlikely to occur and only for short periods. 普通保護其中，氣體，塵埃和氣體混合物不太可能發生，並且僅短時間	2 (Gases) 22 (Dust)

Explosion zone classification

防爆區分類

Category	Formerly known 先前已知	Description 介紹
1G	ZONE 0 (Gas/vapours)	An area in which an explosive mixture is continuously present or present for long periods. 一個區域，其中爆炸性混合物是連續地存在或長時間存在。
2G	ZONE 1 (Gas/vapours)	An area in which an explosive mixture is likely to occur in normal operation. 一個區域，其中爆炸性混合物很可能在正常操作發生。
3G	ZONE 2 (Gas/vapours)	An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short time. 一個區域，其中爆炸性混合物不太可能在正常操作中發生並且如果發生將只存在很短的時間
1D	ZONE 20 (Dust)	An area in which an explosive mixture is continuously present or present for long periods 一個區域，其中爆炸性混合物是連續地存在或長時間的存在
2D	ZONE 21 (Dust)	An area in which an explosive mixture is likely to occur in normal operation. 一個區域，其中爆炸性混合物很可能在正常操作發生。
3D	ZONE 22 (Dust)	An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short time. 一個區域其中爆炸性混合物不太可能在正常操作中發生並且如果發生將只存在很短的時間

Gas groups

Gases are divided into two groups: 氣體被分為兩組：

Group I: For mines susceptible to Methane 對於礦區易受沼氣入侵

Group II: For gases in locations other than mines, which are divided into three sub groups: 在其他礦區外位置，氣體分成三個子(副)組：

IIA: For atmospheres containing propane or gases of an equivalent hazard 對於環境含有丙烷或瓦斯氣同等危險

IIB: For atmospheres containing ethylene or gases of an equivalent hazard 對於環境含有乙烯或瓦斯氣同等危險

IIC: For atmospheres containing hydrogen or gases of an equivalent hazard 對於環境包含氫或瓦斯氣同等危險

Equipment for Group II used in an explosive area is also classified by the gas group. 使用在爆炸區域中第二組的設備也由燃氣組來分類。

Gas group of the explosive atmosphere 爆炸性環境的瓦斯氣組	Equipment with the same or higher gas group marking can be used in the area 設備具有相同或更高的瓦斯氣組標記可以在該地區使用
IIA	IIA, IIB, IIC
IIB	IIB, IIC
IIC	IIC

Temperature classes 溫度等級

The auto ignition temperature is the temperature in °C at which a gas will spontaneously ignite without another source of ignition.

自動點火溫度為°C的溫度在該氣體會自發的引燃而不引燃的另一個來源。

Temperature Classes 溫度等級	Max Surface Temperature 最大表面溫度	Ignition Temperature range of mixture 混合物點燃溫度範圍
T1	450°C	> 450°C
T2	300°C	>300 to 450°C
T3	200°C	>200 to 300°C
T4	135°C	>135 to 200°C
T5	100°C	>100 to 135°C
T6	85°C	>85 to 100°C