Overview

Explosion Protection Conform to 2014/34/EU

Basic for the Selection of the Equipment

- Zoning
- Classification of permanently explosive areas
- Preconditions for an Explosion
- Marking of Explosion-Protected Equipment

Equipment Categories

- Gas 20-area (IIG)
- Dust 20-area (IIC)
- Dust 20-area (IID)

Dust Groups

- Dust Group I
- Dust Group II
- Dust Group III

IEC resp. EN 60079-31 The enclosure is so dense that no combustible dust can enter it.

ATEX Directive

- EU type examination certificate
- Construction certificate
- Marking of the EU type examination certificate acc. to ATEX:

- Zone Symbol
- Category
- Protection

- Gas
- Duration
- Occasional hazard
- Temporary hazard

Marking of a associated apparatus for application in zone 2

- Gas Ex ia Ga IIC T6 Ga
- Dust Ex ia Ga IIC T6 Ga

Overview of Ignition Protection Classes

- Ignition temperature classification
- Fuels (flammable substances):
- Fuels (flammable substances):
- Fires and hot gases
- Static electricity
- Electrical installations

Ignition Temperature and Classification of Combustible Materials According to Groups and Temperature Classes

- Ignition sources susceptible to (except for cold atmospheres)
- Maximum surface temperature of apparatus

Preconditions for an Explosion

- Explosion triangle
- Explosion triangle
- Explosion triangle

Equipment Categories

- Classification of permanently explosive areas
- Zoning
- Preconditions for an Explosion
- Marking of Explosion-Protected Equipment

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