

# Selectionofequipment

Stepsforsafechoosing

#### **INTENDED PURPOSE** OF EOUIPMENT

- In case the equipment is used as portable, the certificate should state this in the description of equipment.
- If not mentioned it is likely that the unit is not tested or accepted for portable use.
- Portable Ex-luminaire and non-portable Ex-luminaire have different requirements.





### **CLASSIFICATION** 2 CLASSIFICATION OF EX-AREA

- · Compare the equipment certificate with the area classification.
- Equipment category 2 = Zone 1 and 2
- EPL marking Gb = Zone 1 and 2

Make sure that the equipment CATEGORY is suitable for the particular Ex-area classification.

#### SUBSTANCE **EXPLOSION GROUP**

- · Compare the equipment certification to the explosion group of the substance that is creating the danger of
- Examples: Hydrogen → Explosion group IIC Ethylene 

  Explosion group IIB Naphtha -> Explosion group IIA

Make sure that the equipment EXPLOSION GROUP is suitable for the particular Ex-area classification.







- Compare the equipment certification to the highest acceptable temperature of substance that is creating the danger of explosion.
- Examples:

FSE SAFE

- Hydrogen → Ignition temp 560 °C = T1
- Ethylene → Ignition temp 425 °C = T1
- Diesel → Ignition temp 230 °C = T3
- Diethyl ether  $\rightarrow$  Ignition temp 195 °C = T4

Make sure the equipment's HIGHEST TEMPERATURE POINT is suitable for the particular Ex-area classification.

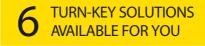




## **TEMPERATURE**

- Notice the ambient temperature of the application of use.
- Notice also other criteria e.g. heavy mechanical stress and effect of chemicals.

The Ex-certificate is valid between ambient temperatures of -20 °C to +40°C if not otherwise mentioned in the certificate.



- Further questions?
- · Atexor is at your disposal

Wearethereforyou

