# SELECTION OF EQUIPMENT

STEPS FOR SAFE CHOOSING

#### **INTENDED PURPOSE OF EQUIPMENT**

- 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.





## CLASSIFICATI OF EX-AREA CLASSIFICATION

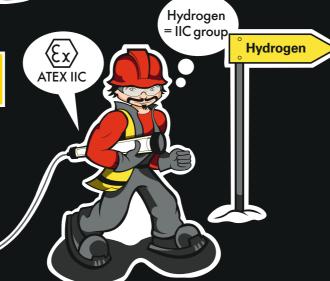
- Compare the equipment certificate with the area classification.
- Examples:
- Equipment category 2 = Zone 1 and 2 EPL marking Gb = Zone 1 and 2

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.





# TEMPERATURE RATING **OF EQUIPMENT**

- Compare the equipment certification to the highest acceptable temperature of substance that is creating the danger of explosion.
- Examples:
- Hydrogen → Ignition temp 560 °C = T1
- Ethylene → Ignition temp 425 °C = T1
- Diesel → Ignition temp 230 °C = T3
- Diethyl ether → Ignition temp 195 °C = T4

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





#### 5 AMBIENT TEMPERATURE **AMBIENT**

- 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

**WE ARE THERE FOR YOU** 

