

Summary of the Equipment and Protective Systems (EPS) Intended for Use in Potentially Explosive Atmospheres Regulations 1996

These regulations relate to the supply of equipment and protective systems intended for use in potentially explosive atmospheres and include both electrical and non-electrical equipment. The EPS regulations apply both onshore and to fixed offshore installations but not to mobile offshore units.

The Regulations state that equipment and protective systems intended for use in explosive atmospheres must be designed from the point of view of integrated explosion safety. The manufacturer must take measures to

- a) prevent the formation of explosive atmosphere which may be produced by equipment and by protective systems,
- b) prevent ignition of explosive atmospheres,
- c) halt and/or limit range of explosion pressures to a sufficient level of safety should an explosion nevertheless occur.

The Regulations allocate equipment to groups and categories. Group I equipment is intended for use in underground parts of mines and surface installations of mines endangered by firedamp and/or combustible dust. Group II equipment is divided in three categories namely:

Category 1 – Intended for use where explosive atmospheres caused by mixtures of gases, vapours or mists or by air/dust mixtures are present continuously, for long periods or frequently.

Category 2 - Intended for use where explosive atmospheres caused by mixtures of gases, vapours or mists or by air/dust mixtures are likely to occur.

Category 3 - Intended for use where explosive atmospheres caused by mixtures of gases, vapours or mists or by air/dust mixtures are unlikely to occur or occur infrequently and for a short period only.