
STATUTORY INSTRUMENTS

1998 No. 2515

**The Merchant Shipping (Passenger Ship Construction:
Ships of Classes III to VI(A)) Regulations 1998**

PART VII

ELECTRICAL EQUIPMENT AND INSTALLATIONS

Electrical equipment in hazardous areas and spaces

48.—(1) Electrical equipment shall not be installed in any hazardous area unless such equipment is—

- (a) essential for operational or safety purposes;
- (b) of a type that is certified for use in the flammable dusts, gases or vapours to which it may be subjected; and
- (c) appropriate to the space concerned.

Additional requirements for ships constructed on or after 1st September 1984

(2) Cables passing through any hazardous areas or serving electrical equipment in such areas shall—

- (a) be appropriate having regard to the dusts, gases or vapours to which they may be subjected; and
- (b) unless they form part of intrinsically safe circuits be enclosed in a gas-tight steel conduit or include a metallic sheath braid or wire armour for earth leakage detection or be protected in some other satisfactory manner. Additional protection against mechanical damage shall be provided in locations where such damage may occur.

(3) In special category spaces the electrical equipment shall be certified for use in explosive petrol and air mixtures and the cables shall be appropriate for use in such mixtures provided that in such spaces above the bulkhead deck, electrical equipment that is enclosed and protected to prevent discharge of sparks may be installed more than 450 millimetres above any deck on which vapours may accumulate if the atmosphere within the special category space is changed at least ten times per hour based upon the gross volume of the space.

(4) In cargo spaces, other than special category spaces, intended for the carriage of motor vehicles with fuel in their tanks for their propulsion the electrical equipment shall be certified for use in explosive petrol and air mixtures and the cables shall be appropriate for use in such mixtures.

(5) In any ventilation trunk connected to any enclosed space for the carriage of motor vehicles with fuel in their tanks for their propulsion, including a special category space, electrical equipment shall be certified for use in explosive petrol and air mixtures and the cables shall be appropriate for use in such mixtures.

- (a) (6) (a) Electrical equipment and cables shall not be installed in enclosed cargo spaces, special category spaces or open ro-ro cargo spaces intended for the carriage of dangerous

goods which are flammable liquids with a flash point below 23°C (Closed Cup Test) or flammable gases unless the Secretary of State considers the location therein essential.

- (b) If permitted, any electrical equipment installed in such spaces shall be certified for, and cables shall be appropriate for, use with flammable dusts, gases or vapours to which it may be exposed.
- (c) Cable penetrations of the decks and bulkheads of such spaces shall be sealed against the passage of gas or vapour.
- (d) The Secretary of State may permit the installation of electrical equipment and cables which do not comply with the foregoing for particular applications provided such equipment and cables are capable of being electrically isolated by the removal of links or the operation of lockable switches.