

- supply lines to each distribution station are to include, at the station inlet:
 - a stop valve to be kept shut when the station is not working
 - devices to protect the supply lines from back flow of gas or flame passage.
- d) Safety valves are to be provided on the low pressure side of the pressure reducing devices and led to the open air at least 3 m above the deck in a safe location where no source of ignition is present.

19.4 Arrangement of oxyacetylene welding systems

19.4.1 Gas bottle rooms

- a) The gas bottle room is to be located in an independent space over the highest continuous deck and provided with direct access from outside. The limiting bulkheads and decks are to be gas-tight and made of steel.
- b) When the total number of gas bottles, including possible spare bottles which are not connected to the plant, does not exceed 8, acetylene and oxygen bottles may be installed in the same room. Otherwise, acetylene and oxygen bottles are to be separated by a gas-tight bulkhead.
- c) The bottle room is to be adequately insulated and ventilated so that the temperature inside does not exceed 40°C. If the temperature cannot be controlled by means of natural ventilation, mechanical and independent ventilation is to be provided. Air outlets are to be led at least 3 m away from ignition sources and ventilation intakes and are to be equipped with flameproof wire gauze.
- d) The gas bottle room is not to be used for other services on board. Flammable oil or gas piping, except that related to the oxyacetylene welding plant, is not to be led through this room.

Note 1: On pontoons and service working ships, gas bottles may be installed on open deck in a safe position to the satisfaction of the Society. In such case, appropriate protection is to be provided:

- for gas bottles, against sunrays and atmospheric agents, by means of watertight covers,
- for the associated valves, piping and fittings, by means of steel covers, metal grids or similar devices.

Such means of protection are to be easily removable to allow bottle removal, when necessary.

When the total number of bottles exceeds 8, acetylene bottles are to be separated from oxygen bottles.

19.4.2 Distribution stations

Distribution stations are to be located in the engine room or in the workshop, in a well-ventilated position and protected against possible mechanical damage.

Note 1: On pontoons and service working ships, distribution stations may be installed in the open air, enclosed in a cabinet with a locked door, or in controlled access areas, to the satisfaction of the Society.

19.4.3 Piping

- a) Piping is not to be led through accommodation or service spaces.
- b) Piping is to be protected against any possible mechanical damage.
- c) In way of deck or bulkhead penetrations, piping is to be suitably enclosed in sleeves so arranged as to prevent any fretting of the pipe with the sleeve.

19.4.4 Signboards

Signboards are to be posted on board the ship in accordance with Tab 33.

Table 33 : Signboards

Location of the signboard	Signboard to be posted
in the gas bottle room	diagram of the oxyacetylene plant
	"no smoking"
in way of: <ul style="list-style-type: none"> • bottle stop valves • distribution station stop valves 	"to be kept shut when distribution stations are not working"
in way of the pressure reducing devices	indication of the maximum allowable pressure at the pressure reducing device outlet
in way of the safety valve discharge outlet	"no smoking"

20 Certification, inspection and testing of piping systems

20.1 Application

20.1.1 This Article defines the certification and workshop inspection and testing programme to be performed on:

- the various components of piping systems
- the materials used for their manufacture.

On board testing is dealt with in Ch 1, Sec 15.

20.2 Type tests

20.2.1 Type tests of flexible hoses and expansion joints

- a) Type approval tests are to be carried out on a flexible hose or an expansion joint of each type and each size, in accordance with Tab 34.
- b) The flexible pipes or expansion joints subjected to the tests are to be fitted with their connections.

20.2.2 Type tests of air pipe closing appliances

Type approval tests are to be carried out on each type and size of air pipe closing device, in accordance with Tab 35.