

GF22 Gas Fuel Vent Pipes – Single walled construction in Machinery spaces

(Mar 2025)

IGF Code Part A-1, Section 9.6.1, as amended by Resolution MSC.551(108) reads:

9.6.1 Gas fuel piping in gas-safe machinery spaces shall be completely enclosed by a double pipe or duct fulfilling one of the following conditions:

.1 the gas fuel piping shall be a double wall piping system with the gas fuel contained in the inner pipe. The space between the concentric pipes shall be pressurized with inert gas at a pressure greater than the gas fuel pressure. Suitable alarms shall be provided to indicate a loss of inert gas pressure between the pipes.; or

.2 the gas fuel piping shall be installed within a ventilated pipe or duct. The air space between the gas fuel piping and the wall of the outer pipe or duct shall be equipped with mechanical under pressure ventilation having a capacity of at least 30 air changes per hour. This ventilation capacity may be reduced to 10 air changes per hour provided automatic filling of the duct with nitrogen upon detection of gas is arranged for. The fan motors shall comply with the required explosion protection in the installation area. The ventilation outlet shall be covered by a protection screen and placed in a position where no flammable gas-air mixture may be ignited; or

.3 other solutions providing an equivalent safety level may also be accepted by the Administration.

Interpretation

Gas fuel vent pipes, i.e. pipes arranged for purpose of purging, venting, or bleeding fuel gas lines, which are of single-walled construction and are located within gas-safe machinery spaces may be accepted, provided that at minimum the following conditions shall be satisfied:

1 These pipes shall originate from a gas fuel piping system having a design pressure not greater than 1 MPa or the maximum built-up back pressure in the vent piping shall be calculated not to exceed 0.5 MPa;

2 These pipes shall be of fully welded construction. The connection to the consumer, if not connected by welding, as well as any flexible elements, shall comply with paragraph 9.6.1 of the IGF Code;

Note:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 July 2026.
2. The “contracted for construction” date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of “contract for construction”, refer to IACS Procedural Requirement (PR) No. 29.

3 These Pipes shall be open ended;

4 These Pipes shall not contain fuel gas or a gas fuel/air mixture, except for the sole purpose of safely purging, venting and bleeding the gas fuel and/or gas fuel/air mixture when isolating gas fuel to consumers; and

5 The gas-safe machinery space (the spaces in which gas consumers are located) shall be permanently mechanically ventilated.

Vent piping of internal combustion engines shall be of double-walled construction unless single-walled construction is justified in the safety concept of the engine.

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