

U.S. Department of
Homeland Security

United States
Coast Guard



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16703/46 CFR 56
2020-3706 Rev. 1
August 24, 2024

Mr. Robert Mackay
Tube-Mac Piping Technologies Ltd.
853 Arvin Ave.
Stoney Creek, Ontario
L8E 5N8 CANADA

Dear Mr. Mackay:

This letter is in response to your recent email, requesting a revision of the USCG acceptance letter 2020-3706 of March 26, 2021. Specifically, you requested the revised letter to include the material Copper Nickel C70600 (CuNi 90/10) to applicable piping sizes. The original correspondence included a Type Approval Certificate from DNV GL, indicating compliance with DNV GL classification Rules. Correspondence from June 2024 also included an ABS Design Assessment reflecting the material C70600. Accordingly, Table 1 of the acceptance letter is modified here to include material C70600, while all other provisions of the original letter 2020-3706 remain in effect.

Based on our evaluation of the information provided, and in consideration of previous submissions of pressure and fire testing results, we consider the PYPLOK mechanical fittings, as listed in Table 1, acceptable for use in the following shipboard applications as afforded by the provisions of 46 CFR 50.20-50(b):

- a) potable cold and hot water
- b) machinery sea water cooling inboard of the sea valve
- c) hot and chilled water for air conditioning
- d) bilge and ballast systems
- e) cargo oil systems
- f) fire main/sprinkler/foam systems
- g) fuel and /lubricating oil systems
- h) domestic sanitary drains and deck scuppers
- i) compressed air
- j) hydraulic systems

Table 1

PYPLOK Series	Size Range	Material
DM20 - NPS	1/4" thru 2"	Carbon Steel A105/A350 LF2 Stainless Steel 316/316L Duplex 2205/UNS31803 Super Duplex 2507/UNS32750 Copper Nickel C71500, C70600
DM60 - OD Tube	1/4" thru 2"	
DM80 - Metric Tube	6mm thru 60mm	
DP40N - NPS	2 1/2" (DN65) thru 4" (DN100)	
DP40M - Metric Tube	44.5mm (DN40) thru 57mm (DN50)	

The fittings in these systems may not be used in spaces where undetected leakage may occur, except for ballast or fuel oil piping in their respective tanks. The use of these fittings in voids or other spaces which are not readily accessible must include provisions for the detection of leaks which, in addition to liquid leakage, may also include the detection of gases as a potential fire or explosion hazard. The use of these fittings in systems not mentioned above will be considered on a case-by-case basis.

It is the manufacturer's responsibility to maintain qualification test reports during the life cycle of the products. The fittings must be used within the limits of the nominal pressure ratings and materials appropriate to the piping systems listed in 46 CFR Part 56 and the manufacturer's catalog.

Anyone desiring to install the fittings on board a Coast Guard certificated vessel must be prepared to demonstrate, to the satisfaction of the attending marine inspector, that they have the proper equipment, procedures and trained personnel to install the PYPLOK mechanical fittings. The user of the connecting system must adhere to all manufacturer recommendations. Installation pressure tests may be required for certain systems in accordance with 46 CFR 56.97-40.

Each application of these fittings will be checked during plan review and installation on the vessel to ensure that pressure/temperature ratings and other service restrictions, as recommended by the manufacturer, are not exceeded.

Sincerely,



C. P. RABALAIS,
Commander, U.S. Coast Guard
Chief, Systems Engineering Division
Office of Design and Engineering Standards
By direction

Copy: Commanding Officer, Coast Guard Marine Safety Center (MSC-2)