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16703/46 CFR 56 2014-3298 September 17, 2014

Mr. Dan Hewson Engineering Manager Tube-Mac Industries Ltd. 853 Arvin Ave. Stoney Creek, Ontario L8E 5N8 CANADA

Dear Mr. Hewson:

We have reviewed your request of August 23, 2012, for U.S. Coast Guard acceptance as a compression fitting as described in 46 CFR 56.30-25. Your request includes successful pressure and fire test results based on recognized national and international standards. The initial request was supplemented in 2014 with specific fire test results conducted by Southwest Research Institute.

Based on our evaluation of the information provided, we consider the PYPLOK mechanical fittings, of carbon steel, stainless steel and copper nickel, acceptable for use in the following shipboard applications as afforded by 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

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 if in compliance with Part 4 Section 6 of ABS Rules.

It is the manufacturer's responsibility to maintain qualification test reports during the life cycle of the products.

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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,

R. W. MARTIN U.S. Coast Guard

Acting Chief, Systems Engineering Division Office of Design and Engineering Standards By direction of the Commandant

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



Washington, DC 20593 Staff Symbol: G-MTH-2 Phone: (202) 267-2206

16703/46 CFR 56.30

AUG 3 991986

Deutsch Metal Components Division Attn: Mr. Dave Kelly 14800 South Figueroa St. Gardena, California 90248

Subj: "PYPLOK" Mechanically Attached Fittings

Ref:

(a) Your letter dated August 21, 1986

(b) Meeting of Deutsch and USCG representatives on August 21, 1986

Gentlemen:

In response to reference (a) and as discussed during reference (b), your "PYPLOK" mechanically applied fittings are considered compression fittings of the non-bite type and may be used in Class I, I-L, II and II-L piping systems in accordance with 46 CFR 56.30-25 and the table below:

Series	MAWP	Material	Configurations
10,000	6000 psi	CuNi, CRES	1, 3, 4, 17, 18, 19,
50,000			20, 40, & 41
70,000			
20,000	3750 psi	CuNi, CRES and	1, 3, 4, 17, 18, 19,
60,000		Carbon Steel*	20, 40, & 41
80,000			
30,000	1000 psi	CuNi, CRES and	1, 3, 4, 17, 18, 19,
40,000		Carbon Steel*	20, 40, & 41
90,000			

* Carbon steel is not acceptable for Class I-L & II-L Systems

Each activity desiring to install the fittings shall demonstrate to a marine inspector that they have the proper equipment, procedures, and trained personnel to produce an acceptable end product. The user of the swaging machine must adhere to all recommendations of the manufacturer.

This acceptance shall not be used in advertising purporting approval by the Coast Guard. Specific approval for each installation must be obtained, usually by the ship owner or builder. A review by the Coast Guard is conducted to determine suitability for the intended service. This review is accomplished by the Marine Safety Center or the Officer in Charge, Marine Inspection, having jurisdiction over the geographic area of installation.

Sincerely,

CE Bills

C. E. BILLS

Commander, U.S. Coast Guard Chief, Engineering Branch Marine Technical and Hazardous Materials Division By direction of the Commandant