



TYPE APPROVAL CERTIFICATE

Certificate No.

: TKY00267-HS001

Initial Approval: 29th August, 2000.

Product

: Flexible Metal Hose

Manufacturer

: Tofle Co., Inc.

886-1, Aza-Shiragami, Kawakami, Hagi-city, Yamaguchi-pref., Japan

Product Description: Type: TF-3000, TF-NW, TF-NW (MONEL), TF-UFO, TF-TYPE

" See Appendix 1 "

Approval Condition: "See Appendix 1"

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 5, Ch. 6, Sec. 1 of the Rules for Classification, Steel Ships.

This Certificate is valid until 28th August, 2020. Issued at Tokyo, Japan on 4th September, 2015.

KOREAN REGISTER OF SHIPPING

General Manager of Tokyo Branch Office

Note :1 : The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2: The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.

Product Description and/or Approval Condition

Certificate No: TKY00267-HS001

Date of Issue: 4th September, 2015.

Product Description;

Type	Kind of Fluid	 Nominal Dia.(A)	Design Press.(MPa)	Drawing No.
TF-3000 (Flange Type)	Fuel oil Lub. oil Fresh water Sea water Compressed air	10 15 20 25 32 40 50	6. 37 4. 41 3. 92 3. 92 2. 94 2. 45 1. 96	FFD-1400-A FFD-1410-A LPD-0150-A JJD-0070-A
TF-3000 (Thread Type)	Fuel oil	10, 15	2. 74	GSL-70080-A
TF-NW (Flange Type)	Fuel oil Lub. oil Fresh water Sea water Compressed air	20 25 32 40 50 65 80 100 125 150 200 250 300	4. 18 3. 76 2. 70 2. 04 1. 46 2. 00 1. 30 1. 08 1. 38 1. 10 1. 12 1. 12 0. 84	AAB-1410-A AAB-1420-A
TF-NW (MONEL) (Flange Type)	Sea water	50 65 80 100	1. 46 2. 00 1. 30 1. 08	EFR-70561-A
TF-UFO (Flange Type)	Fuel oil Lub. oil Fresh water Compressed air	8 ~ 50	3. 92	FFD-0170-A SL-86X28-32
TF-TYPE (Flange Type)	Fuel oil Lub. oil Fresh water Compressed air	65	2. 94	NFR-70006-A
	Air	65	0. 98	DFR-70203-A

2. Approval Conditions;

- 1) Individual Product Certification is required in case of the hoses belonging to Class I or II piping system.
- 2) The hoses are to be used as short as possible in the length of the permanent piping system where flexibility is required.
- 3) Flexible Hoses should be marked with the following items.
 - Hose manufacturer's name of trademark
 - Date of manufacture (Month/Year)
 - Designation Type
 - Nominal diameter, Pressure rating, Temperature rating