



## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>Tofle Co., Inc.</b>
<b>Address</b>	886-1, Aza Shiragami, Kawakami, Hagi-shi, Yamaguchi, 758-0141, Japan
<b>Type</b>	Flexible Hoses
<b>Description</b>	TF-type stainless steel flexible hoses  TYPE MWN800001-A, MWN800002-A, MWN800003-A, and MWN800004-A
<b>Trade Name</b>	MWN800001-A, MWN800002-A, MWN800003-A, and MWN800004-A
<b>Application</b>	Marine use for cargo piping systems in ships for the carriage of liquefied gases in bulk, and for onboard temporary connection
<b>Specified Standard</b>	IMO MSC Resolution 103(73) Lloyd's Register (LR) Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk (July 2022), Chapter 5 incorporating the IMO IGC Code
<b>Ratings</b>	Nominal pipe diameters : 6A, 25A, 32A, 40A, 200A, 250A Design pressure : 1.0 MPa Design temperature range : -163 ~ +80 °C

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### Other Conditions

Where the hoses are intended to be fitted in cargo piping systems in ships for the carriage of liquefied gasses in bulk, classed with Lloyd's Register (LR), the following conditions are applicable:-

1. The materials used in the construction of hoses are to be in accordance with Chapter 6 of LR Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk and Part5, Chapter 12, Section 9 of LR Rules and Regulations for the Classification of Ships.
2. The hoses are to be examined and tested to the satisfaction of LR's Surveyors.
3. The hoses are to be installed in accordance with the manufacturer's instructions.

The valid report of the audit assessment of the Production Quality Assurance system(PQA) is to be retained for each place of production.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Group Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 03/10023(E4)

The Design Appraisal Document LR23316890TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.