



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 03/10023(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Tofle Co., Inc. 886-1, Aza-Shiragami, Kawakami, Hagi City, Yamaguchi, 758-0141, Japan	
PLACE OF PRODUCTION	Tofle Co., Inc. 886-1, Aza-Shiragami, Kawakami, Hagi City, Yamaguchi, 758-0141, Japan	
DESCRIPTION	TF-type stainless steel flexible hoses	
TYPE	MWN800001-A, MWN800002-A, MWN800003-A, and MWN800004-A	
APPLICATION	Marine use for cargo piping systems in ships for the carriage of liquefied gases in bulk, and for onboard temporarily connection	
DESIGN CODE STANDARD	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 2017), Chapter 5 incorporating the IMO IGC Code	
RATINGS	Nominal pipe diameters	: 6A, 25A, 32A, 40A, 200A, 250A
	Design pressure	: 1.0 MPa
	Design temperature range	: -163 ~ +80 °C

Certificate No. 03/10023(E4)

Issue Date 10 April 2018

Expiry Date 9 April 2023

Sheet 1 of 2



N. Terashita
Yokohama Technical Support Office
Lloyd's Register Group Limited

Lloyd's Register Group Limited
QTA 10F, 2-3-1, Minatomirai, Nishi-ku, Yokohama, JAPAN

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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 Part 5, 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.

"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 Limited of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 03/10023(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/10023(E3) to which this extension should be attached.

Certificate No.	03/10023(E4)
Issue Date	10 April 2018
Expiry Date	9 April 2023
Sheet	2 of 2



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