

## Type Approval Certificate Amendment

This is to certify that Certificate No. 04/00045(E2) for the undernoted products is amended and renumbered as shown.

This certificate is issued to:

**PRODUCER** SFZ S.A.S

**PLACE OF** 8. rue des freres Lumiere

**PRODUCTION** 69680 Chassieu

France

**DESCRIPTION** Metallic expansion bellows

Single or multiple layers

TYPE OMEGA ZH (WZH)

RATINGS Diameter (inches): 2 to 32

Design temperature (°C): -196 to +125

Design pressure (bar): 10

**APPLICATION** LNG systems on ships and LNG terminals

SPECIFIED STANDARDS Lloyd's Register's Rules and Regulations for the Construction

and Classification of Ships for the Carriage of Liquefied Gases in

Bulk;

IMO IGC Code

OTHER CONDITIONS

1. Bellows pieces are to be selected and installed in accordance with the manufacturer's instructions and recommendations.

2. The materials and suitability of the end pieces does not required a Design review, it can be verified by the attending

Lloyd's Register Surveyor prior to installation.

**Certificate No.** 04/ 00045(E3)

Issue Date 09 August 2016

Expiry Date 26 May 2019

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

The attached Design Appraisal Document No. 04/00045(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 04/ 00045(E2) to which this extension should be attached.

**Certificate No.** 04/ 00045(E3)

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Sheet 2 of 2

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