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Certificate No: LR2308101TA Issue Date: 15/01/2023 Expiry Date: 14/01/2028

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.

Manufacturer Matec Group srl

Address Via I° Maggio 7, Peschiera Borromeo, 20068, Italy

Type Flexible Hoses

Trade Name COMPOTEC® Composite Flexible Hoses

Application Flexible hoses for oil, chemical and hydrocarbon systems in LNG/LPG carriers,

marine and offshore applications.

Specified Standard LR Rules and Regulations for the Classification of Ships;

LR Rules and regulations for the Classification of Fixed Offshore Installations;

EN 13765:2018, EN 13766:2020; IMO IGC Code, IMO IBC Code.

Fabrizio Cadenaro

Lead Technical Specialist - Alternative Fuels to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Ratings Description: COMPOTEC® hoses EN 13765:2018 Type 2 (SD) & 3 (HD)

 ${\sf Type: CHEM, OIL, PTFE, FOOD, DRAINTEC, HIGRADE, EXILITE, BIOTEC, BLH}$

 ${\tt HOSE, FRACKHOSE, ABRATEC, CHEMCHLOR, EXTRAFLEX, HITEMP}$

Application: Oil, Chemical, Hydrocarbons

Bore diameter: 3/4" to 12"

COMPOTEC® hoses

Max Work. pressure

-40 to 80°C

-40 to 125°C PTFE NANOTEC

-40 to 200°C HITEMP

UNI EN 13765:2018

TYPE 2 SD

10 bar

-40 to 80°C

Type of wire: Galvanized steel (Z), Stainless steel (X), Aluminium (A), Polypropylene (P), PVDF (F)

Description: COMPOTEC® hoses EN 13766:2020 Type 1 and 2

Type: CYROTEC 660 LG, CYROTEC 661 N Application: LPG and LNG system

Bore diameter: 3/4" to 12"

StandardCOMPOTEC®
hosesMax Work.Temp.UNI EN 13766:2020TYPE 1 CYROTEC TYPE 660 LG
TYPE 2 CYROTEC TYPE N 66125 bar
13 bar-50 to 80°C

Type of wire: Stainless steel (X), Galvanized steel (Z)

Other Conditions The hose types are to be suitable for the service conditions.

The hose assemblies are to be installed and tested to the satisfaction of the

attending surveyor.

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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.

Previous Version: 13/00002 (E2)

The Design Appraisal Document LR2308101DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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