Lloyd's Register

Type Approval Certificate

This is to certify that Certificate No. 13/00002(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Matec Group Srl	
PLACE OF PRODUCTION	Via 1° Maggio 7 - 20068 Peschiera Borromeo (MI) Italy	
DESCRIPTION	COMPOTEC® Composite Flexible Hoses	
TYPE AND RATINGS	Description:	Compotec® hoses EN 13765:2018 Type 2 (SD) & 3 (HD)
	Type:	CHEM, OIL, PTFE, FOOD, DRAINTEC, HIGRADE, EXILITE, BIOTEC, BLH HOSE, FRACKHOSE, ABRATEC, CHEMCHLOR, EXTRAFLEX, HITEMP
	Application:	Oil, Chemical, Hydrocarbons
	Bore Diameter:	¾" to 12"
	Temperature Range:	-40 to 80°C -40 to 125°C PTFE Type -40 to 200°C HITEMP Type
	Max Working Pressure:	Type 2 (SD): 10 bar Type 3 (HD): 15 bar
	Type of wire:	Galvanized steel (Z), Stainless steel (X), Aluminium (A), Polypropylene (P), PVDF (F)
	Description:	Compotec® hoses EN 13766:2010 Type 1 and 2
Certificate No.	13/00002 (E2)	
Issue Date	21 February 2019	
Expiry Date	14 January 2023	
Sheet	1 of 2	

Fabrizio Cadenaro
Trieste Technical Support Office
Lloyd's Register EMEA
UK031.1.2016.06

Fabrizio Cadenaro
Trieste Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Lloyd's Register

	Type:	CYROTEC 660 LG, CYROTEC 661 N
	Application:	LPG and LNG system
	Bore Diameter:	¾" to 12"
	Temperature Range:	-50 to 80°C (Type 1) -175 to 80°C (Type 2)
Max Working Pressure:	Type 1 LPG 25 bar Type 2 LNG 13 bar 10 bar when used for IBC and IGC cargoes and for diameters 10" to 12"	
Type of wire	Stainless steel (X), Galvanized steel (Z)	

STANDARDS/CODES

LR Rules and Regulations for the Classification of Ships;
LR Rules and Regulations for the Classification of Fixed Offshore Installations;
EN 13765:2018;
EN 13766:2010;
IMO IGC Code;
IMO IBC Code.

APPLICATION

Flexible hoses for Oil, chemical and Hydrocarbon Systems in LNG/LPG carriers, marine and offshore applications.

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.

"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 Design Appraisal Document No. 13/00002 (E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	13/00002 (E2)
Issue Date	21 February 2019
Expiry Date	14 January 2023
Sheet	2 of 2

Fabrizio Cadenaro
Trieste Technical Support Office
Lloyd's Register EMEA
LR031.1.2016.06

Fabrizio Cadenaro
Trieste Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.