MATEC® GROUP SRL

QUALITY CERTIFICATES

2023

www.matecgroup.com

Made in Italy

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

INDICE / INDEX

Management system certificate ISO 9001 2015 3
Certificato sistema di gestione ISO 9001 2015 5
2014/68/EU Certificate of conformity 7
Certificate of conformity UK 8
ATEX 2014/34/UE Certification NoDrop® DDC 10
Ricevuta di deposito di fascicolo ATEX NoDrop® 11
ATEX 2014/34/UE Certification Compotec® 12
Enco® Certificato AEO 13
Type approval Compotec® Hoses 14
Type approval Compotec® Hoses Marine OCIMF 17
Type approval Lloyd's Register Enco® Flex. Metal Hoses 18
Type approval Bureau Veritas Enco® Flex. Metal Hoses 19
Type approval DNV Enco® Flex. Metal Hoses 22
Gost Couplings Certificate 25
Gost Certificate Flexible Metal Hoses 26
EAC Flexible Metal Hoses 27
Russian Type Approval Compotec® Hoses 28
EAC Certification NoDrop Dry Break Coupling 30
M.O.C.A. Declaration of Conformity 31
Test report M.O.C.A Compotec® Foodflon 32
Test report M.O.C.A Compotec® Food 500 35
Type approval Twinflex Hose Lloyd's 38
Type approval Twinflex Hose Rina 40
DNV Type approval Twinflex Hose 43
NGA Certificate Compotec® Hoses 47
Declaration ADR Annex IV Bureau Veritas 49
Inspection report ADR Bureau Veritas 50
Type approval Rubber Hoses Roiter® 53
Ispezioni, certificazioni e consulenze Inspections, Certifications, Consultancy Services 55
Type approval Rubber Hoses Roiter® LR2275253DA 58
Type approval Rubber Hoses Roiter® LR2275253TA 59
Type approval Lloyd's Register Enco® Flex. Metal Hose 60

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

MANAGEMENT SYSTEM CERTIFICATE
ISO 9001 2015

Lloyd's Register

Current issue date: 28 May 2021
Expiry date: 27 May 2024
Certificate identity number: 10359098

Original approval(s):
ISO 9001 - 31 December 2020

Certificate of Approval

This is to certify that the Management System of:

MATEC GROUP S.R.L.

VIA 1° Maggio 7, 20068 Peschiera Borromeo - MI, Italy

has been approved by Lloyd's Register to the following standards:

ISO 9001:2015

Approval number(s): ISO 9001 – 00028498

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

The scope of this approval is applicable to:
Manufacture of Compotec ® flexible hoses from ¾" to 12", stainless steel flexible hoses, expansion joint, filters and skid (including parts and accessories). Wholesale and processing of technical industrial products for industrial maintenance (IAF18).
EA: 14 - 17 - 18 - 29

This certificate is a continuation of a previous approval from another certification body as follows:

Previous original ISO 9001 approval on 02 April 1999, DNV GL - Business Assurance certificate number CERT-04193-99-AQ-IND-SINCERT

Daniel Oliva Marcilio de Souza

Area Operations Manager - South Europe

Issued by: Lloyd's Register Quality Assurance Italy Srl

SGQ N° 039A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e **ILAC**

Signatory of EA, IAF and ILAC Mutual Recognition Agreement

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matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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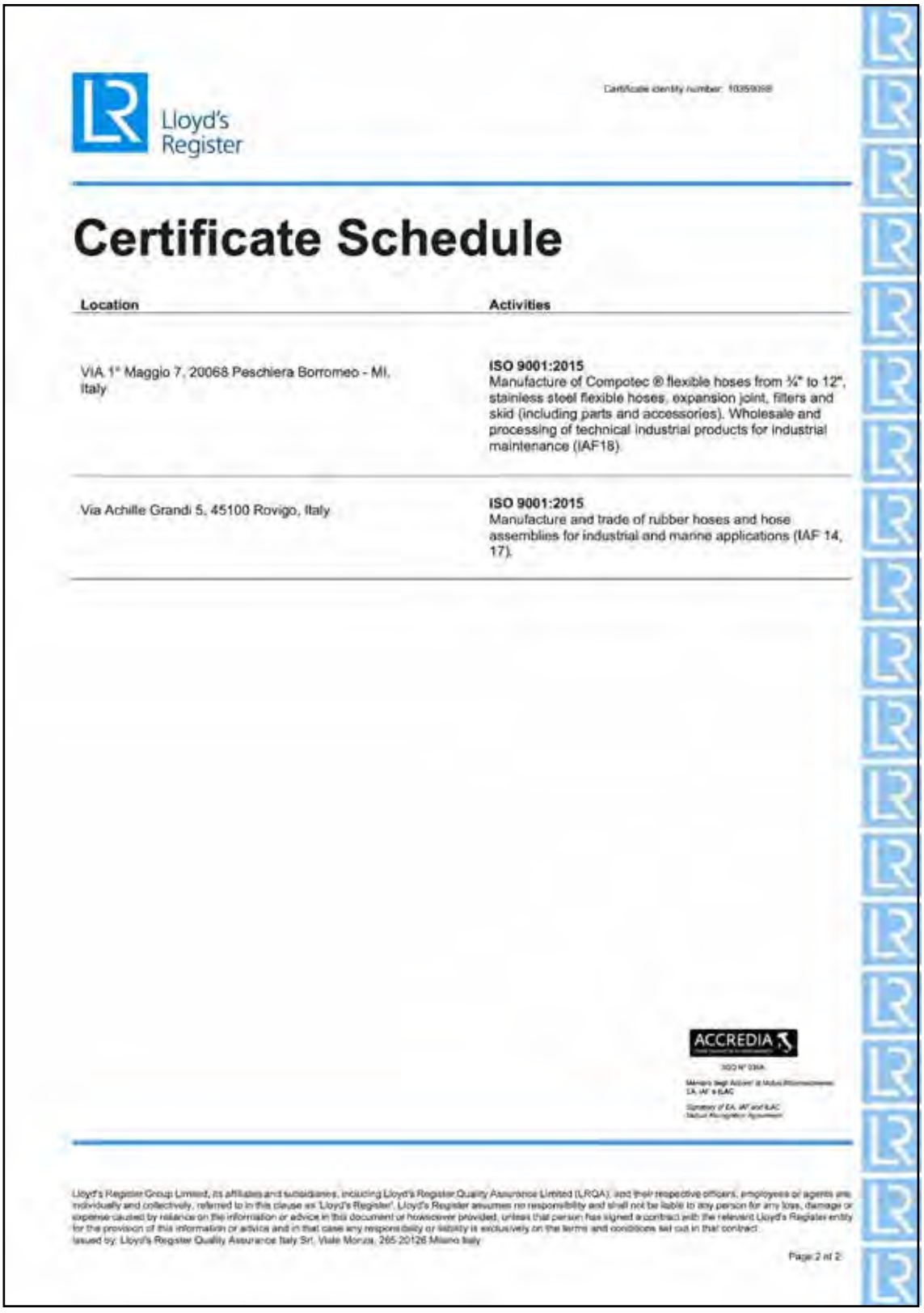
MANAGEMENT SYSTEM CERTIFICATE

ISO 9001 2015



Lloyd's Register

Certificate identity number: 10359068

Certificate Schedule

Location	Activities
VIA 1° Maggio 7, 20068 Peschiera Borromeo - MI, Italy	**ISO 9001:2015** Manufacture of Compotec ® flexible hoses from ¾" to 12", stainless steel flexible hoses, expansion joint, filters and skid (including parts and accessories). Wholesale and processing of technical industrial products for industrial maintenance (IAF18).
Via Achille Grandi 5, 45100 Rovigo, Italy	**ISO 9001:2015** Manufacture and trade of rubber hoses and hose assemblies for industrial and marine applications (IAF 14, 17).

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Page 2 of 2

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www.matecindustriale.it
matec@matecgroup.com

CERTIFICATO SISTEMA DI GESTIONE
ISO 9001 2015

Lloyd's Register

Data di Emissione corrente: 28 Maggio 2021
Data di Scadenza: 27 Maggio 2024
N. Identificativo Certificato: 10359097

Approvazioni Originarie:
ISO 9001 - 31 Dicembre 2020

Certificato di Approvazione

Si certifica che il sistema di gestione di:

MATEC GROUP S.R.L.

VIA 1° Maggio 7, 20068 Peschiera Borromeo - MI, Italia

è stato approvato da Lloyd's Register per conformità alle seguenti norme:

ISO 9001:2015

Numeri di Approvazione: ISO 9001 – 00028498

La validità di questo certificato è vincolata all'allegato dello stesso numero che elenca i siti oggetto dell'approvazione.

Lo scopo di questo certificato si applica a:
Produzione di tubi flessibili Compotec ® da ¾" a 12", tubi flessibili inox, compensatori di dilatazione, filtri e moduli (compresi parti e accessori). Commercializzazione all'ingrosso e trasformazione di articoli tecnici per la manutenzione industriale (IAF 18).
EA: 14 - 17 - 18 - 29

Questo certificato è emesso in continuità con la precedente approvazione rilasciata da altro organismo di certificazione:

Prima emissione ISO 9001 Emesso il: 02 April 1999, DNV GL - Business Assurance Numero di certificato: CERT-04193-99-AQ-IND-SINCERT

Daniel Oliva Marcilio de Souza

Area Operations Manager - South Europe

Emesso da: Lloyd's Register Quality Assurance Italy Srl

SGQ N° 039A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e **ILAC**

Signatory of EA, IAF and ILAC Mutual Recognition Agreement

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matec@matecgroup.com

MATEC GROUP SRL
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+39 0255301788 /F. +39 025472158

CERTIFICATO SISTEMA DI GESTIONE
ISO 9001 2015

Lloyd's Register

N. Identificativo Certificato: 10359097

Certificato di Approvazione

Ubicazione	Attività
VIA 1° Maggio 7, 20068 Peschiera Borromeo - MI, Italia	**ISO 9001:2015** Produzione di tubi flessibili Compotec ® da ¾" a 12", tubi flessibili inox, compensatori di dilatazione, filtri e moduli (compresi parti e accessori). Commercializzazione all'ingrosso e trasformazione di articoli tecnici per la manutenzione industriale (IAF 18).
Via Achille Grandi 5, 45100 Rovigo, Italia	**ISO 9001:2015** Fabbricazione e commercializzazione di tubi in gomma e manichette per usi industriali e marini (IAF 14, 17).

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matec@matecgroup.com

CERTIFICATE OF CONFORMITY
2014/68/EU

Lloyd's Register

EU CERTIFICATE OF CONFORMITY

In accordance with the requirements of the Pressure Equipment Directive 2014/68/EU

This is to certify that the Quality Management System of:

MATEC GROUP SRL
Via 1° Maggio 7
20068 Peschiera Borromeo (MI). Italy

has been assessed against the requirements of Annex III, Module D1 of the Pressure Equipment Directive 2014/68/EU and conforms to the requirements for the products shown below:

Manufacture of COMPOTEC® composite flexible hoses from 1"1/4 to 12" up to a maximum working pressure of 15 Bar type CHEM, OIL, PTFE, FOOD, DRAINTEC, HIGRADE, EXILITE, BIOTEC, BLH HOSE, FRACKHOSE, ABRATEC, CHEMCLOR, EXTRAFLEX, HITEMP; CRYOTEC 660LG up to a maximum working pressure of 25 Bar + CRYOTEC 661N up to a maximum working pressure of 13 Bar.
Manufacture of steel flexible hoses from 1"1/4 to 8" up to a maximum working pressure of 142 Bar type PARNOR, PARRAP, HP, THP.
Manufacture of Expansion Joints from ¾" to 20" up to a maximum working pressure of 25 Bar type AS, ASC, APS, AF, AFC, APF, CS, CF, CS2, CF2, RS, RF, SHS, SDS, SHF, DF, AFT.

Approval is subject to the continued maintenance of the quality system in accordance with the requirements of the above Directive and Regulations for the products listed on the attached schedule.
Authorisation is hereby given to use the LRE Notified Body Identification Number in accordance with the requirements of the specified Directive and Regulations in relation to the products as identified above.

Certificate No:	0094/PED/MAD/11075954/01 ENG (*)
Original Approval:	31 December 2020
Current Certificate:	25 May 2021

Certificate expired 13 May 2021. Renewal audit conducted 12 & 25 May 2021

Certificate Expiry:	13 May 2024
LRE Notified Body Number	0094

Teresa Souto LRE Technical Manager

ENAC

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

CERTIFICATE OF CONFORMITY
2014/68/EU

Lloyd's Register

CERTIFICATE OF CONFORMITY
CERTIFICATE <CERTIFICATE NO.>/<SUFFIX> SCHEDULE

In accordance with the requirements of the Pressure Equipment (Safety) Regulations 2016, UK Statutory Instrument 2016 No. 1105, as amended by the Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019, UK Statutory Instrument 2019 No. 696

MATEC GROUP SRL
Via 1° Maggio 7
20068 Peschiera Borromeo (MI) – Italy

Product(s)

COMPOTEC® composite flexible hoses from 1"1/4 to 12" up to a maximum working pressure of 15 Bar type CHEM, OIL, PTFE, FOOD, DRAINTEC, HIGRADE, EXILITE, BIOTEC, BLH HOSE, FRACKHOSE, ABRATEC, CHEMCLOR, EXTRAFLEX, HITEMP, CRYOTEC 660LG + CRYOTEC 661N.

Steel flexible hoses from 1"1/4 to 8" up to a maximum working pressure of 142 Bar type PARNOR, PARRAP, HP, THP.

Expansion Joints from ¾" to 20" up to a maximum working pressure of 25 Bar type AS, ASC, APS, AF, AFC, APF, CS, CF, CS2, CF2, RS, RF, SHS, SDS, SHF, DF, AFT.

Schedule Issue: 01
Date of Schedule Issue: 16th September 2021
LRV Approved Body Number 0038

G. Gaspani, Decision Maker, on behalf of Lloyd's Register Verification Ltd

Page 1 of 1

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
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matec@matecgroup.com

CERTIFICATE OF CONFORMITY
2021/UK

Lloyd's Register

CERTIFICATE OF CONFORMITY

In accordance with the requirements of the Pressure Equipment (Safety) Regulations 2016, UK Statutory Instrument 2016 No. 1105, as amended by the Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019, UK Statutory Instrument 2019 No. 696

This is to certify that the Quality Management System of:

MATEC GROUP SRL
Via 1° Maggio 7
20068 Peschiera Borromeo (MI) – Italy

has been assessed against the requirements of Module D1 of the above Regulations and conforms to the requirements for the products shown below:

Composite flexible hoses, Steel flexible hoses, Expansion Joints
(see attached schedule)

Approval is subject to the continued maintenance of the quality system in accordance with the requirements of the above Regulations for the products listed on the attached schedule.

Authorisation is hereby given to use the Lloyd's Register Verification Limited Approved Body Identification Number in accordance with the requirements of the specified Regulations in relation to the products as identified above.

Certificate No:	0038/UK/PER/PRJ11100324460/01
Original Approval:	16th September 2021
Current Certificate:	16th September 2021
Certificate Expiry:	15th September 2024

LRV Approved Body Number 0038

G. Gaspani, Decision Maker, on behalf of Lloyd's Register Verification Ltd.

The original certificate is in paper and signed in ink. The hand-written signature on the certificate certifies its validity. Digital versions (if any) are copies. Lloyd's Register Verification Limited, (Reg. no. 4929226) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London EC3M 4BS, United Kingdom. A subsidiary of Lloyd's Register Group Limited.

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LRV/UK/PER/D1/March-2021/Rev.1

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

CERTIFICATE OF CONFORMITY
2021/UK

Lloyd's Register

CERTIFICATE OF CONFORMITY
CERTIFICATE <CERTIFICATE NO.>/<SUFFIX> SCHEDULE

In accordance with the requirements of the Pressure Equipment (Safety) Regulations 2016, UK Statutory Instrument 2016 No. 1105, as amended by the Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019, UK Statutory Instrument 2019 No. 696

MATEC GROUP SRL
Via 1° Maggio 7
20068 Peschiera Borromeo (MI) – Italy

Product(s)

COMPOTEC® composite flexible hoses from 1"1/4 to 12" up to a maximum working pressure of 15 Bar type CHEM, OIL, PTFE, FOOD, DRAINTEC, HIGRADE, EXILITE, BIOTEC, BLH HOSE, FRACKHOSE, ABRATEC, CHEMCLOR, EXTRAFLEX, HITEMP, CRYOTEC 660LG + CRYOTEC 661N.

Steel flexible hoses from 1"1/4 to 8" up to a maximum working pressure of 142 Bar type PARNOR, PARRAP, HP, THP.

Expansion Joints from ¾" to 20" up to a maximum working pressure of 25 Bar type AS, ASC, APS, AF, AFC, APF, CS, CF, CS2, CF2, RS, RF, SHS, SDS, SHF, DF, AFT.

Schedule Issue: 01
Date of Schedule Issue: 16th September 2021
LRV Approved Body Number 0038

G. Gaspani, Decision Maker, on behalf of Lloyd's Register Verification Ltd.

Page 1 of 1

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+39 0255301788 /F. +39 025472158

ATEX CERTIFICATION NODROP® DDC
2014/34/EU

IMQ

(Ex)

[1] **RECEIPT OF DEPOSIT OF TECHNICAL DOCUMENT**

[2] RECEIPT NUMBER: **AT20-0059358-01**

[3] TECHNICAL DOCUMENT No.: **MATEX 2020**
DATE: **12/11/2020 (rev. 0)**

[4] PRODUCT: **NoDrop® DRY DISCONNECT COUPLING**

[5] MANUFACTURER: **MATEC GROUP S.r.l.**
VIA I° MAGGIO, 7 – 20068 PESCHIERA BORROMEO (MI)

[6] IMQ, Notified Body n° 0051, in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, acknowledges receipt of Manufacturer's technical documentation (Technical Document).

[7] The products listed in the article 13, clause 1 b ii) of the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 for which a receipt of deposit of technical document and the internal control has been set out (Annex VIII of Directive), if provided with EU Declaration of conformity and, except for components, of CE marking, are granted free movement in the EU countries.
This RECEIPT OF DEPOSIT certifies that the technical document [3] was sent to IMQ.

[8] IMQ does not verify whether the documentation is correct and complete.

IMQ retains the technical document for at least 10 years from the date of issue of this receipt.

This document is composed of 1 page.

FIRST ISSUE: 2020 - 12 - 14

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER

This Certificate may only be reproduced in its entirety and without any change. It is subject to the general rules for assessing conformity to community Directives for which IMQ operates as Notified Body and to the particular rules for the aforementioned Directive.

ACCREDIA

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

ATEX CERTIFICATION NODROP® DDC
2014/34/EU

IMQ

[1] **RICEVUTA DI DEPOSITO DI FASCICOLO TECNICO**

[2] NUMERO DELLA RICEVUTA: **AT20-0059358-01**

[3] NUMERO DI FASCICOLO TECNICO: **MATEX 2020**
DATA: **12/11/2020 (rev. 0)**

[4] PRODOTTO: **NoDrop® DRY DISCONNECT COUPLING**

[5] FABBRICANTE: **MATEC GROUP S.r.l.**
VIA I° MAGGIO, 7 – 20068 PESCHIERA BORROMEO (MI)

[6] IMQ, organismo notificato n° 0051, in conformità all'articolo 17 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 Febbraio 2014, con la presente, accetta il ricevimento dal Fabbricante della documentazione tecnica (Fascicolo Tecnico).

[7] I prodotti indicati nell'art. 13, comma 1 b ii) della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 Febbraio 2014, per i quali è stato rilasciata una ricevuta di deposito del fascicolo tecnico e applicata la procedura di Controllo interno della produzione (Allegato VIII della Direttiva), se muniti della dichiarazione di conformità UE e, ad eccezione dei componenti, della marcatura CE, godono della libera circolazione nei paesi dell'Unione Europea.
Questa RICEVUTA di DEPOSITO attesta che il fascicolo tecnico [3] è stato trasmesso all'IMQ

[8] L'IMQ non opera alcun controllo sulla completezza e correttezza dei documenti che formano il fascicolo tecnico.

L'IMQ conserva il fascicolo tecnico per dieci anni dalla data di emissione della presente ricevuta.

Questo documento è composto da 1 pagina.

PRIMA EMISSIONE: 2020 - 12 - 14

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER

Questo Certificato può essere riprodotto solo integralmente e senza alcuna variazione. Esso è soggetto al Regolamento Generale per la valutazione della conformità ai sensi delle Direttive e/o Regolamenti Comunitari per le quali IMQ opera come Organismo Notificato e alle Prescrizioni particolari della suddetta Direttiva.

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www.matecindustriale.it
matec@matecgroup.com

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+39 0255301788 /F. +39 025472158

ATEX CERTIFICATION COMPOTEC® ENCO®
2014/34/EU

Lloyd's Register

EU TECHNICAL FILE RECEIPT

This is to certify that Lloyd's Register Verification, a Notified Body under the terms of the 'Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Directive', 2014/34/EU, has, in conformity with the requirements of the Conformity Assessment Procedure as described within Article 13 item 1b(ii) of the Directive, received for retention a Technical File as detailed below;

This receipt is issued to:

APPLICANT:	**MATEC GROUP S.r.l.** **Via I° Maggio 7** **20068 Peschiera Borromeo (MI)** **Italy**
TECHNICAL FILE DESCRIPTION:	**Tubi Flessibili Compositi e Metallici - Compotec®**
TECHNICAL FILE REFERENCE:	**MATEX 2017 rev 1**

The file will be stored for an initial period of ten years from date of receipt. The applicant will be contacted after ten years and the file will be either returned or destroyed, or a new retention agreement established, as applicable.

This receipt must be produced by the manufacturer to reclaim the stored technical file.

Storage No:	0038/ATEX/MLN 1790549/01
Date of Receipt:	30th July 2017
LRV Notified Body Number 0038	

G. Agozzino on behalf of Lloyd's Register Verification

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LRV-DT-ATEX/FILE_RET/March_2016/Rev. 2

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+39 0255301788 /F. +39 025472158

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matec@matecgroup.com

CERTIFICATO AEO

COMUNITÀ EUROPEA

Certificato AEO

IT AEOF 14 0888

1. Titolare del Certificato AEO

MATEC GROUP SRL A SOCIO UNICO
Codice EORI IT03358590960

2. Autorità che rilascia il Certificato

Agenzia delle Dogane e dei Monopoli
Direzione centrale legislazione e procedure doganali - Ufficio AEO, altre semplificazioni e rapporto con l'utenza.

Il Titolare indicato nel riquadro 1 è un

Operatore economico autorizzato

Semplificazioni doganali / Sicurezza (AEOF)

3. Data di validità del certificato **17/06/2014**

Il Direttore dell'Ufficio

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TYPE APPROVAL COMPOTEC® HOSES

Page 1 of 3
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

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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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
COMPOTEC® HOSES

Type Approval Certificate

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: 3/4" to 12"

Standard	COMPOTEC® hoses	Max Work. pressure	Temperature range
UNI EN 13765:2018	TYPE 3 HD	15 bar	-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"

Standard	COMPOTEC® hoses	Max Work. pressure	Temp. range
UNI EN 13766:2020	TYPE 1 CYROTEC TYPE 660 LG	25 bar	-50 to 80°C
UNI EN 13766:2020	TYPE 2 CYROTEC TYPE N 661	13 bar	-175 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.

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

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 '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.

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TYPE APPROVAL
COMPOTEC® HOSES

Page 3 of 3
Certificate No: LR2308101TA
Issue Date: 15/01/2023
Expiry Date: 14/01/2028

Type Approval Certificate

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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www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL COMPOTEC®
HOSES MARINE OCIMF

Lloyd's Register

Page 1 of 1
Certificate No: 18-00037-02
Issue Date: 14/02/2020
Expiry Date: 06/05/2023

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® Roiter MARINE OFFSHORE
Application	Flexible Hoses for the transfer of Crude Oils, Petroleum products, chemicals, vapours, LPG and LNG, Marine and Offshore applications.
Specified Standard	OCIMF "Specification Guidance for dock hoses", August 2016 edition.
Ratings	Bore Diameter: 3/4 to 12" Temperature Range: -175 to 80°C Maximum pressure: 15 barg
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. 18/00037-2 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Mohamed Mohamed Rila
Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, UK

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matec@matecgroup.com

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

Lloyd's Register

Type Approval Certificate

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

This certificate is issued to:

PRODUCER	Matec Group Srl	
PLACE OF PRODUCTION	Via 1° Maggio 7 - 20068 Peschiera Borromeo (MI) Italy	
DESCRIPTION	HP Flexible metal hoses (single braid)	
TYPE AND RATINGS	Type:	Matec HP
	Application:	Cryogenic and non-cryogenic fluids
	Bore Diameter:	DN20 to DN80
	Temperature Range:	-270 to +65°C
	Max Working Pressure:	DN20 85 bar DN25 78 bar DN32 65 bar DN40 61 bar DN50 55 bar DN80 25 bar
	Construction:	Corrugated stainless steel liner with stainless steel outer braid.
STANDARDS/CODES	LR Rules and Regulations for the Classification of Ships; ISO 21012:2018 as adopted by UNI EN ISO 21012:2019.	
APPLICATION	Cryogenic and non-cryogenic fluids.	

Certificate No.	19/00038
Issue Date	01 August 2019
Expiry Date	31 July 2024
Sheet	1 of 2

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

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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

Page 1 / 3

Marine & Offshore

Certificate number: 69652/A0 BV
File number: .
Product code: 2103I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

MATEC GROUP S.R.L.
Peschiera Borromeo (MI) - ITALY

for the type of product

METALLIC HOSES (FLEXIBLE PIPES) ASSEMBLIES
Flexible Hose Type HP

Requirements:
Bureau Veritas Rules for the Classification of Steel Ships
Bureau Veritas Rules for the Classification of Offshore Units
Bureau Veritas Rules for the Classification of Naval Ships
Bureau Veritas Rules for the Classification of Yachts

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 31 May 2027

For Bureau Veritas Marine & Offshore,
At BV VENEZIA, on 31 May 2022,
Sandro BRUSEGAN

This certificate was created electronically and is valid without signature

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: https://www.veristarpm.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=gjkmstnzdi
BV Mod. Ad.E 530 June 2017 This certificate consists of 3 page(s)

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Flexible Hose Type HP

1.1 Ratings

Type of flexible metal hose HP according to EN ISO 21012-2018 & EN ISO 10380-2012

DN (mm)	20	25	32	40	50	80
Max. Working Pressure (bar)	85	78	65	61	55	25

Temperature range: -196°C / 65°C

The maximum working pressure is not to exceed one quarter of the burst pressure at the service temperature.

1.2 Materials

Part	Material
Tube / Hose	ASTM A 240 TP316/316L
Cover / Braiding	AISI-304
Fittings	ASTM A182 F316/316L

2. DOCUMENTS AND DRAWINGS

- Manual of installation, use and maintenance «Libretto uso e manutenzione enco 2017» Rev. 2 dated 06/03/2017
- Drawing N° ISO 21012:2018 Rev. 0 dated 26/10/2018

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

3.1 - Type tests witnessed by a BV Surveyor or an IACS Member including burst test at 4 times the design pressure, pliability test, cycle test, pressure and elongation test.

- Test report N° 03458RP18 Rev. 1 dated 24/04/2019
- Test report N° SPS/0115/22 dated 18/03/2021
- Burst test reports dated 04/02/2022

3.2 - Impulse test not performed.

3.3 - Vibration test not performed.

4. APPLICATION / LIMITATION

4.1 - May be used on the following services on board:

- Fuel oil, lubricating oil, hydraulic oil, thermal oil, fresh water, sea water, compressed air systems, bilge, exhaust gas, Class III steam systems, LNG, liquified petroleum gas (LPG), liquified natural gas (LNG) at the minimum temperature (-196°C).

4.2 - End fittings as per manufacturer's catalogue. The hoses are to be entirely assembled in the manufacturer's workshop.

4.3 - The hoses are to be limited to a length necessary to provide for relative movement between fixed and flexibly mounted items of machine/equipment or systems and are only to be used in length up to 2m. The hoses are to be installed in clearly visible and readily accessible locations at all times.

4.4 - The hoses assemblies are to be installed according to manufacturer's instructions and Bureau Veritas Rules

4.5 - The use of stainless steel is to be restricted as per the requirements of the Bureau Veritas Rules.

4.6 - Tapered threaded end fittings are not to be used in engine rooms, nor in any place containing an ignition source unless otherwise suitably screened at the Society's Surveyor satisfaction.

4.8 - Not to be used as cargo transfer hose.

4.8 - Not to be used in case of high level of vibrations where fitted to engines, pumps, compressors and other sources of high vibrations

4.9 - Not to be used where pressure impulses may occur.

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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **MATEC GROUP S.R.L** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product certificate is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

5.4 - Each hose assembly is to be hydraulically pressure tested to 1.5 times the maximum working pressure and provided with the manufacturer's pressure test report and conformity of production.

5.5 - For information, **MATEC GROUP S.R.L** has declared to Bureau Veritas the following production site(s):

MATEC GROUP S.R.L.
Via 1° Maggio 7
20068
Peschiera Borromeo (MI)
ITALY

6. MARKING OF PRODUCT

Each flexible hose shall at least clearly and indelibly marked with:

- Manufacturer name or logo
- Date of manufacture (month/year)
- Type designation
- Nominal Diameter
- Pressure rating
- Temperature rating
- Society's brand as relevant

7. OTHERS

It is **MATEC GROUP S.R.L**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

DNV

TYPE APPROVAL CERTIFICATE

Certificate No:
TAP00002JH
Revision No:
1

This is to certify:

That the Flexible hoses of metallic material with permanently fitted couplings

with type designation(s)
PARRAP®

Issued to
MATEC GROUP S.R.L.
Peschiera Borromeo, MI, Italy

is found to comply with
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021
DNV class programme DNV-CP-0184 – Type approval – Flexible hoses with permanently fitted couplings

Application :

Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV.

Temperature range:	**-55°C to +550°C (see page 2)**
Max. working press.:	**63 bar (see page 2)**
Sizes:	**DN15 to DN150**

Issued at **Høvik** on **2022-11-16**

This Certificate is valid until **2027-06-15**.
DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Andreas Hansen**

for **DNV**

DNV
Digitally Signed By: Sedlan, Sinisa
Location: DNV Høvik, Norway

Sinisa Sedlan
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Form code: TA 251 Revision: 2022-09 www.dnv.com Page 1 of 3

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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matec@matecgroup.com

TYPE APPROVAL ENCO®
FLEX. METAL HOSES

DNV

Job Id: **262.1-037343-2**
Certificate No: **TAP00002JH**
Revision No: **1**

Product description

Metallic flexible hose assemblies of type PARRAP® with U-formed corrugations, reinforced with one layer of wire braid.

Hose materials:
- AISI 316L (1.4404 according to EN10028-7 or EN 10088-2)
- 316L HMO (1.4435 or 1.4432 according to EN10028-7 or EN 10088-2)

Wire materials:
- AISI 304 (1.4301 according to EN 10088-3)
- AISI 304L (1.4306 or 1.4307 according to EN10088-3)
- AISI 316L (1.4404 according to EN10088-3)
- 316L HMO (1.4435 or 1.4432 according to EN10088-3)

Coupling materials:
- AISI 304 (1.4301 according to EN 10216-5 or EN 10222-5)
- AISI 304L (1.4306 or 1.4307 according to EN 10216-5 or EN 10222-5)
- AISI 316L (1.4404 according to EN 10216-5 or EN 10222-5)

Hose and coupling manufacturing location:
CoreDux France S.A.S
6 avenue du Pré de Barres
Zid de l'Omois 02400 Epaux-Bézu, France

Application/Limitation

This certificate is valid for the specific assembly of hose and coupling type as specified, assembled, and delivered by the holder (named as manufacturer) of this certificate.

Maximum allowable working pressures at 20°C:

DN	PARRAP®		
	ID [mm]	OD [mm]	MAWP [bar]
15	15	24.1	63
20	19.9	29.9	55
25	24.9	36.4	40
32	31.8	45.4	40
40	39.6	54.4	32
50	49.4	67.3	32
65	64	83.4	25
80	78.7	102.6	23
100	101	129.5	15
150	148.2	177	11

The hoses covered by this certificate can be used in hydraulic return, lubricating, fresh water cooling, compressed air, steam (class III) and condensate, CO_2, freon and ammonia.

Maximum design temperature is +550°C, except for below materials:

Material	Maximum design temperature [°C]
1.4547 (EN 10088-2)	500
1.4301 – 1.4404 – 1.4541 (EN 10222-5)	500
1.4307 (EN 10222-5)	350

Welding shall fulfil requirements in governing rules for the intended application, listed on the front page of this certificate.

At elevated temperatures, maximum allowable pressure is to be reduced according to ISO 10380 [Table A4], as below:

Temperature [°C]	20	50	100	150	200	250	300	350	400	450	500	550
1.4301	1	0.88	0.73	0.66	0.60	0.56	0.52	0.50	0.48	0.47	0.46	-
1.4404 / 1.4435	1	0.88	0.74	0.67	0.62	0.58	0.54	0.52	0.50	0.48	0.47	-
1.4432	1	0.88	0.74	0.67	0.62	0.58	0.54	0.52	0.50	0.48	0.47	0.47
1.4306	1	0.87	0.72	0.65	0.59	0.55	0.51	0.48	0.46	0.45	0.44	0.43
1.4307	1	0.87	0.72	0.65	0.59	0.55	0.51	0.48	-	-	-	-

All hoses assemblies delivered under this type approval certificate shall comply with an assembly procedure issued by the certificate holder.

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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

DNV

TYPE APPROVAL CERTIFICATE

Certificate No:
TAP00002JH
Revision No:
1

This is to certify:

That the Flexible hoses of metallic material with permanently fitted couplings

with type designation(s)
PARRAP®

Issued to
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is found to comply with
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DNV class programme DNV-CP-0184 – Type approval – Flexible hoses with permanently fitted couplings

Application :

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Temperature range:	**-55°C to +550°C (see page 2)**
Max. working press.:	**63 bar (see page 2)**
Sizes:	**DN15 to DN150**

Issued at **Høvik** on **2022-11-16**

This Certificate is valid until **2027-06-15**.
DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Andreas Hansen**

for **DNV**

Digitally Signed By: Sedlan, Sinisa
Location: DNV Høvik, Norway

Sinisa Sedlan
Head of Section

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Form code: TA 251 Revision: 2022-09 www.dnv.com Page 1 of 3

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GOST COUPLINGS CERTIFICATE
2021

ДОБРОВОЛЬНАЯ СЕРТИФИКАЦИЯ ПРОДУКЦИИ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ РОСС IT.HB65.H01344/21

Срок действия с 11.05.2021 по 10.05.2024

№ 0051816

ОРГАН ПО СЕРТИФИКАЦИИ рег.№ RA.RU.11HB65, Орган по сертификации Общества с ограниченной ответственностью "Сертификация и качество", 125080, РОССИЯ, город Москва, шоссе Волоколамское, дом 1, строение 1, этаж 5 помещение VI, комната 30А (РМ5), Тел: +7 9956559588, E-mail: sert.quality@gmail.com

ПРОДУКЦИЯ Соединители для шлангов, типы: AIR KING, BOSS COUPLINGS, QUICK RELEASE COUPLING ISO 7241-1B, CAM & GROOVE COUPLINGS
Серийный выпуск

код ОК
Код ОК 034-2014 (КПЕС 2008) 24.20.40.000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ НОРМАТИВНЫХ ДОКУМЕНТОВ
ГОСТ 3124-77 "Соединения шланговые для гибких шлангов гидромониторов. Технические условия" (с Изменениями №1).

код ТН ВЭД
7307 29 100

ИЗГОТОВИТЕЛЬ "Matec Group srl". Место нахождения: Италия, Via 1° Maggio, 7, 20068 - Peschiera Borromeo (MI)

СЕРТИФИКАТ ВЫДАН "Matec Group srl". Место нахождения: Италия, Via 1° Maggio, 7, 20068 - Peschiera Borromeo (MI)

НА ОСНОВАНИИ Протокола испытаний № 05-5247-2021 от 11.05.2021 года, выданного ИСПЫТАТЕЛЬНАЯ ЛАБОРАТОРИЯ «ГЕРЦ» (регистрационный номер аттестата аккредитации РОСС RU.32001.04ИБФ1.ИЛ13)

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Схема сертификации: 1с.

М.П.

Руководитель органа О.В. Кривошеева

Эксперт Д.В. Туркин

Сертификат не применяется при обязательной сертификации

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

GOST CERTIFICATE
FLEXIBLE METAL HOSES

ДОБРОВОЛЬНАЯ СЕРТИФИКАЦИЯ ПРОДУКЦИИ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ РОСС IT.HB65.H01345/21

Срок действия с 11.05.2021 по 10.05.2024

№ 0051817

ОРГАН ПО СЕРТИФИКАЦИИ рег.№ RA.RU.11HB65, Орган по сертификации Общества с ограниченной ответственностью "Сертификация и качество", 125080, РОССИЯ, город Москва, шоссе Волоколамское, дом 1, строение 1, этаж 5 помещение VI, комната 30А (РМ5), Тел: +7 9956559588, E-mail: sert.quality@gmail.com

ПРОДУКЦИЯ Гибкие шланги из нержавеющей стали, типы PARNOR, PARRAP, HP, THP, XHP, MEC-1
Серийный выпуск

код ОК
Код ОК 034-2014 (КПЕС 2008) 24.20.13.110

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ НОРМАТИВНЫХ ДОКУМЕНТОВ
ГОСТ Р 52209-2004 "Соединения для газовых горелок и аппаратов. Общие технические требования и методы испытаний" (с Поправкой).

код ТН ВЭД
8307 10 000

ИЗГОТОВИТЕЛЬ "Matec Group srl". Место нахождения: Италия, Via 1° Maggio, 7, 20068 - Peschiera Borromeo (MI)

СЕРТИФИКАТ ВЫДАН "Matec Group srl". Место нахождения: Италия, Via 1° Maggio, 7, 20068 - Peschiera Borromeo (MI)

НА ОСНОВАНИИ Протокола испытаний № 05-5248-2021 от 11.05.2021 года, выданного ИСПЫТАТЕЛЬНАЯ ЛАБОРАТОРИЯ «ГЕРЦ» (регистрационный номер аттестата аккредитации РОСС RU.32001.04ИБФ1.ИЛ13)

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Схема сертификации: 1с.

М.П.

Руководитель органа О.В. Кривошеева

Эксперт Д.В. Туркин

Сертификат не применяется при обязательной сертификации

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

www.matecindustriale.it
matec@matecgroup.com

EAC FLEXIBLE METAL HOSES

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

EAC

Заявитель Общество с ограниченной ответственностью "ЛАТЕС"

Место нахождения и адрес места осуществления деятельности: Российская Федерация, Москва, 111399, улица Мартеновская, дом 5, помещение I, комната 8, основной государственный регистрационный номер: 1177746776107, номер телефона: +74955096111, адрес электронной почты: info.lates@mail.ru

в лице Генерального директора Ильиновой Ларисы Васильевны

заявляет, что Трубопроводы гибкие гофрированные из нержавеющей стали для рабочая среда: газ группы 1 и 2, жидкость группы 1 и 2 в соответствии с Приложением № 1 ТР ТС 032/2013, типов: PARNOR, от DN32 до DN150, максимальное допустимое рабочее давление от 0,07 МПа до 5,8 МПа; PARRAP, от DN32 до DN150, максимальное допустимое рабочее давление от 0,03 МПа до 5,8 МПа; HP, THP, XHP, от DN32 до DN200, максимальное допустимое рабочее давление от 2.4 МПа до 13,4 МПа; MEC-I, от DN32 до DN300, максимальное допустимое рабочее давление от 0,6 МПа до 4,0 МПа.

изготовитель «MATEC GROUP S.r.l.». Место нахождения и адрес места осуществления деятельности по изготовлению продукции: Via I° Maggio, 7 – 20068, Peschiera Borromeo (MI), Италия.

Продукция изготовлена в соответствии с Директива по оборудованию под давлением 2014/68/UE (PED); Стандарт EN-ISO 10380 – 2003 «Трубопроводы. Гофрированные металлические рукава и рукава в сборе».

Код ТН ВЭД ЕАЭС 8307100009. Серийный выпуск

соответствует требованиям

ТР ТС 032/2013 «О безопасности оборудования, работающего под избыточным давлением»

Декларация о соответствии принята на основании

Протокола испытаний № 182792/931190 от 19.09.2018 года, выданного «MATEC GROUP S.r.l.». Протокола испытаний № 182792/931192 от 19.09.2018 года, выданного «MATEC GROUP S.r.l.», комплекта документов предоставленных заявителем в соответствии с пунктом 45 раздела VI ТР ТС 032/2013.

Схема декларирования 1д

Дополнительная информация

Условия хранения: группа 1 (Л) по ГОСТ 15150-69 «Машины, приборы и другие технические изделия. Исполнения для различных климатических районов. Категории, условия эксплуатации, хранения и транспортирования в части воздействия климатических факторов внешней среды». Назначенный (расчетный) срок службы – 25 лет. Назначенный срок хранения – 12 месяцев.

Декларация о соответствии действительна с даты регистрации по 06.04.2025 включительно

М. П. Ильинова Лариса Васильевна

(Ф.И.О. заявителя)

Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.КА01.В.24399/20

Дата регистрации декларации о соответствии: 07.04.2020

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

RUSSIAN TYPE APPROVAL COMPOTEC® HOSES

РОССИЙСКИЙ МОРСКОЙ РЕГИСТР СУДОХОДСТВА
RUSSIAN MARITIME REGISTER OF SHIPPING

Стр. Page 1 / 2

6.8.3

СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ
TYPE APPROVAL CERTIFICATE

Изготовитель
Manufacturer: *MATEC GROUP S.R.L. (VAT № IT 06358590963)*

Заявитель / Applicant: Smaile-Pluss SIA (VAT № LV 40103131739)

Адрес
Address: *7, Via I Maggio, Peschiera Borromeo (MI), 20068, Italy*

Изделие*
Product*

Рукава для композитных шлангов, Типов 2 (SD) и 3 (HD): SP TECH OIL SD ZZ, SP TECH CHEM SD PZ, SP TECH OIL 800 HD ZZ, SP TECH CHEM 700 HD PZ, SP TECH CHEM 700 HD XZ, SP TECH CHEM 700 XX, SP TECH HITEMP 305 HZZ, SP TECH HITEMP 305 HXX, SP TECH PTFE 300 HD XZ, SP TECH PTFE 300 HD NANOTEC XX, SP TECH CHEMCHLOR 900 FX, SP TECH FOOD 500, SP TECH FOOD 500 HD XX.
Sleeves for composite hoses, 2 (SD) и 3 (HD) Types: SP TECH OIL SD ZZ, SP TECH CHEM SD PZ, SP TECH OIL 800 HD ZZ, SP TECH CHEM 700 HD PZ, SP TECH CHEM 700 HD XZ, SP TECH CHEM 700 XX, SP TECH HITEMP 305 HZZ, SP TECH HITEMP 305 HXX, SP TECH PTFE 300 HD XZ, SP TECH PTFE 300 HD NANOTEC XX, SP TECH CHEMCHLOR 900 FX, SP TECH FOOD 500, SP TECH FOOD 500 HD XX.

Код номенклатуры
Code of nomenclature: *08031300*

На основании освидетельствования и проведенных испытаний удостоверяется, что вышеупомянутое(ые) изделие(я) удовлетворяет(ют) требованиям Российского морского регистра судоходства.
This is to certify that on the basis of the survey and tests carried out the above mentioned item(s) complies(ly) with the requirements of Russian Maritime Register of Shipping.

Изделия отвечают применимым требованиям Раздела 6 Части VIII Правил классификации и постройки морских судов (изд. 2021), Раздела 8 Части IV Правил технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов (изд. 2021), Кодекса МКХ и Кодекса МКГ.
Products meet the applicable requirements of Chapter 6 Part VIII of the Rules for the Classification and Construction of Sea-Going Ships (ed. 2021), Chapter 8 Part IVof the Rules for Technical Supervision during Construction of Ships (ed. 2021), IBC Code, and IGC Code.

Настоящее Свидетельство о типовом одобрении действительно до
This Type Approval Certificate is valid until: *03.08.2026*

Настоящее Свидетельство о типовом одобрении теряет силу в случаях, установленных в Правилах технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов.
This Type Approval Certificate becomes invalid in cases stipulated in Rules for the Technical Supervison during Construction of Ships and Manufacture of Shipboard Materials and Products.

Дата выдачи
Date of issue: *03.08.2021*

№ *21.20531.280*

Российский морской регистр судоходства
Russian Maritime Register of Shipping

(подпись signature)

Лазарев А.А. / O. Lazarev
(фамилия, инициалы name)

*Дополнительную информацию см. на обороте.
Additional information see overleaf.

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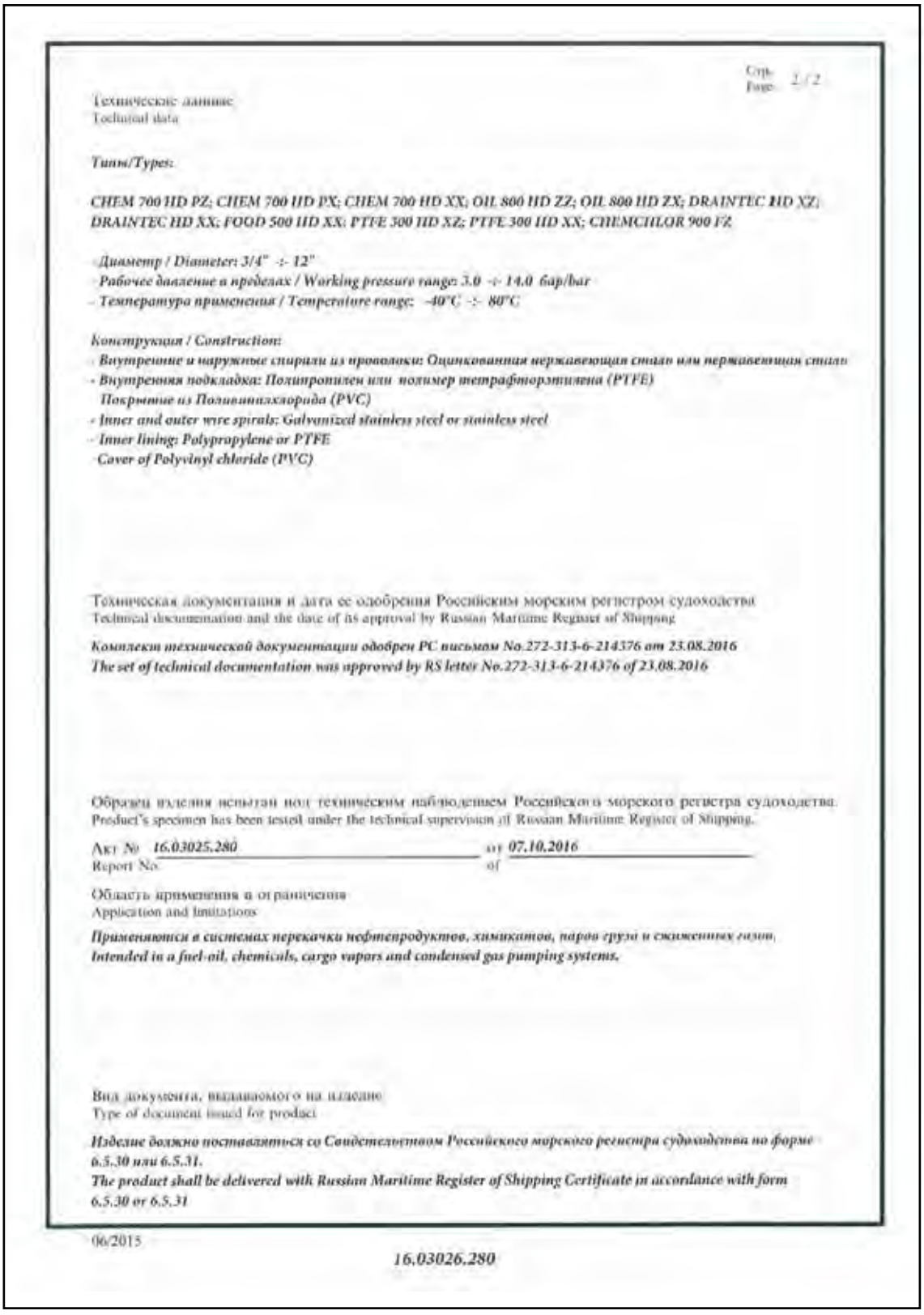
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

RUSSIAN TYPE APPROVAL COMPOTEC® HOSES



Стр. / Page 1 / 2

Технические данные
Technical data

Типы/Types:

CHEM 700 HD PZ; CHEM 700 HD PX; CHEM 700 HD XX; OIL 800 HD ZZ; OIL 800 HD ZX; DRAINTEC HD XZ; DRAINTEC HD XX; FOOD 500 HD XX; PTFE 300 HD XZ; PTFE 300 HD XX; CHEMCHLOR 900 FZ

- *Диаметр / Diameter: 3/4" -:- 12"*
- *Рабочее давление в пределах / Working pressure range: 3.0 -:- 14.0 бар/bar*
- *Температура применения / Temperature range: -40°C -:- 80°C*

Конструкция / Construction:

- *Внутренние и наружные спирали из проволоки: Оцинкованная нержавеющая сталь или нержавеющая сталь*
- *Внутренняя подкладка: Полипропилен или полимер тетрафторэтилена (PTFE)*
- *Покрытие из Поливинилхлорида (PVC)*
- *Inner and outer wire spirals: Galvanized stainless steel or stainless steel*
- *Inner lining: Polypropylene or PTFE*
- *Cover of Polyvinyl chloride (PVC)*

Техническая документация и дата ее одобрения Российским морским регистром судоходства
Technical documentation and the date of its approval by Russian Maritime Register of Shipping

Комплект технической документации одобрен РС письмом No.272-313-6-214376 от 23.08.2016
The set of technical documentation was approved by RS letter No.272-313-6-214376 of 23.08.2016

Образец изделия испытан под техническим наблюдением Российского морского регистра судоходства.
Product's specimen has been tested under the technical supervision of Russian Maritime Register of Shipping.

Акт № *16.03025.280* от *07.10.2016*
Report No. of

Область применения и ограничения
Application and limitations

Применяются в системах перекачки нефтепродуктов, химикатов, паров груза и сжиженных газов.
Intended to a fuel-oil, chemicals, cargo vapors and condensed gas pumping systems.

Вид документа, выдаваемого на изделие
Type of document issued for product

Изделие должно поставляться со Свидетельством Российского морского регистра судоходства по форме 6.5.30 или 6.5.31.
The product shall be delivered with Russian Maritime Register of Shipping Certificate in accordance with form 6.5.30 or 6.5.31

06/2015

16.03026.280

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

EAC CERTIFICATION NODROP DRY BREAK COUPLING

EAC

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

Заявитель, Общество с ограниченной ответственностью «ЛИДЕР» - уполномоченное изготовителем лицо

Место нахождения: 127576, Российская Федерация, Московская область, город Москва, улица Илимская, дом 2, офис 16. Основной государственный регистрационный номер: 1157746685491, телефон: +79264035429, адрес электронной почты: info.ooolider@gmail.com

в лице Генерального директора Некрасова Дмитрия Ивановича

заявляет, что Оборудование, работающее под избыточным давлением 1 и 2-й категории, со средой 1 группы: Муфты сухого разъёма, модели, DRY BREAK COUPLING hose unit, DRY BREAK COUPLING tank unit. с номинальным диаметром свыше 25 мм до 80 мм, с максимально допустимым рабочим давлением 2,5 МПа

изготовитель Matec Group srl

Место нахождения: Via 1° Maggio, 7, 20068 - Peschiera Borromeo (MI), Италия

Продукция изготовлена в соответствии с Директивой 97/23/EG Оборудование, работающее под давлением

Код ТН ВЭД ЕАЭС 7307 29 100

Серийный выпуск

соответствует требованиям

ТР ТС 032/2013 «О безопасности оборудования, работающего под избыточным давлением»

Декларация о соответствии принята на основании

Протоколов испытаний №№ 172050/999999/00021 от 07.09.2017, 172050/999999/00041 от 07.09.2017, выданных испытательной лабораторией завода изготовителя Matec Group srl; документов, представленных заявителем в качестве доказательства соответствия продукции требованиям технического регламента Таможенного союза «О безопасности оборудования, работающего под избыточным давлением» (ТР ТС 032/2013): Обоснования безопасности, Паспорта, Руководства по эксплуатации, Чертежей, Расчета на прочность, Сведений о технологическом процессе, Документов, подтверждающих квалификацию специалистов и персонала изготовителя

Схема декларирования 1д

Дополнительная информация

Перечень стандартов, в результате применения, которых на добровольной основе обеспечивается соблюдение требований ТР ТС 032/2013: ГОСТ Р 53672-2009 «Арматура трубопроводная. Общие требования безопасности» раздел 7. Условия хранения: группа 1 (Л) по ГОСТ 15150-69 «Машины, приборы и другие технические изделия. Исполнения для различных климатических районов. Категории, условия эксплуатации, хранения и транспортирования в части воздействия климатических факторов внешней среды». Срок хранения – 12 месяцев. Срок службы – 20 лет.

Декларация о соответствии действительна с даты регистрации по 17.09.2022 включительно

«ЛИДЕР» (подпись) М.П.

Некрасов Дмитрий Иванович

(Ф.И.О. заявителя)

Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.ПБ98.В.00266

Дата регистрации декларации о соответствии: 18.09.2017

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

M.O.C.A. DECLARATION OF CONFORMITY

Matec ® Group S.r.l
Via I Maggio 7 - 20068 Peschiera Borromeo (MI) - Italy

DECLARATION OF CONFORMITY
ARTICLES INTENDED TO COME INTO CONTACT WITH FOOD PRODUCTS (M.O.C.A.)

THE COMPANY MATEC GROUP SRL DECLARES THAT THE PRODUCTS OF THE COMPOTEC FOOD FAMILY ARE MANUFACTURED WITH THE FOLLOWING MATERIALS:

COMPOTEC ® FOODFLOON PTFE INSIDE TEST REPORT No. 1903335-002

COMPOTEC ® FOOD 500 UHMWPE INSIDE TEST REPORT No. 1903335-003

THE PRODUCTS IN QUESTION SATISFY FOOD SAFETY REQUIREMENTS IN COMPLIANCE WITH THE FOLLOWING EU LEGISLATION AND REGULATIONS:

- REGULATION (EU) 10/2011 CONCERNING PLASTICS IN CONTACT WITH FOOD
- FDA REGULATION 21 CFR 177.1520
- REGULATION (EC) 1935/2004 OF 27TH OCTOBER 2004 CONCERNING MATERIALS AND ARTICLES INTENDED TO COME INTO CONTACT WITH FOOD AND WHICH REPEALS DIRECTIVES 80/590/EEC AND 89/109/EEC;
- REGULATION (EC) N. 2023/2006 OF 22ND DECEMBER 2006 CONCERNING GOOD MANUFACTURING PRACTICES FOR MATERIALS AND ARTICLES INTENDED TO COME INTO CONTACT WITH FOOD;
- EUROPEAN GUIDELINES: METALS AND ALLOYS ARE USED IN FOOD CONTACT MATERIALS AND ARTICLES (2013)

1. MIGRATION LIMITS COMBINED WITH OTHER SPECIFIC RESTRICTIONS INDICATED TO WHICH THE VARIOUS CONSTITUENT MATERIALS OF THE PRODUCTS IN QUESTION MAY BE SUBJECTED ARE SUPPORTED BY TEST REPORTS OF ANALYTICAL TESTS CARRIED OUT IN ACCORDANCE WITH THE LEGISLATIVE REFERENCES CITED IN THIS DECLARATION FOR THE VARIOUS TYPES OF MATERIALS USED.

2. USE IN AN INDUSTRIAL OR COMMERCIAL CONTEXT OF THE PRODUCTS INDICATED IN THIS DECLARATION DOES NOT EXCLUDE THE ASCERTAINMENT OF ITS CONFORMITY TO THE APPLICABLE STANDARDS IN FORCE, AS WELL AS ITS TECHNOLOGICAL SUITABILITY FOR THE SCOPE FOR WHICH IT IS INTENDED. THE ASCERTAINMENT OF ITS CONFORMITY TO APPLICABLE LAWS IN FORCE AS WELL AS THE TECHNOLOGICAL SUITABILITY FOR THE SCOPE FOR WHICH IT IS INTENDED.

3. THE MANUFACTURER HIGHLIGHTS THAT THIS DECLARATION EXCLUSIVELY REFERS TO THE ABOVE-DESCRIBED PRODUCTS, IN THE STATE AND WITH THE INTENDED USES FOR WHICH IT HAS BEEN PLACED ON THE MARKET, EXCLUDING ANY COMPONENTS AND MATERIALS THAT MAY HAVE BEEN ADDED AND/OR OPERATIONS SUBSEQUENTLY CARRIED OUT BY THE END USER WITHOUT THE AUTHORISATION OF THE MANUFACTURER.

4. THIS DECLARATION IS VALID WITH EFFECT FROM THE DATE REPORTED BELOW AND SHALL BE REPLACED IF SUBSTANTIAL CHANGES ARE MADE TO THE PRODUCTION OF THE MATERIAL ABLE TO ALTER ANY ESSENTIAL REQUIREMENTS FOR THE PURPOSES OF CONFORMITY OR WHEN THE LEGISLATIVE REFERENCES CITED IN THIS DECLARATION ARE MODIFIED AND UPDATED IN SUCH A WAY THAT A NEW VERIFICATION IS REQUIRED FOR THE PURPOSES OF CONFORMITY.

Peschiera Borromeo, 16/09/2019

Firma / *Signature*

COMPOTEC®

MATEC GROUP SRL

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TEST REPORT M.O.C.A COMPOTEC® FOODFLON

LabAnalysis
HIGH QUALITY CONTROLS

Casorezzo Lonati, 16/09/2019 — Rapporto di prova / Test report n° 1903335-002/rev.1 — Pag. 1 di 3

Richiedente / Customer: MATEC GROUP SRL – Via I Maggio, 7, 20068 – Peschiera Borromeo (MI)
Prelevato da / Provided by: Richiedente / Customer
Data arrivo campioni / Received: 23/07/2019
Data accettazione / Acceptance: 23/07/2019
Data analisi / Date of testing: inizio 29/07/2019 – fine 13/09/2019 / from 29/07/2019 to 13/09/2019

Tipologia campione / Sample type:
campione materiale plastico PTFE / Plastic material PTFE
Identificazione del campione / Sample Identification :
COMPOTEC ® FOODFLON PTFE INSIDE

Analisi richiesta / Required analysis:
1- Determinazione della migrazione globale nel simulante B, A, D2 ed etanolo 95% / Determination of global migration into simulant B, A and D2
Determinazione della migrazione specifica nel simulante B, A, D2 ed etanolo 95% di: / Determination of specific migration into simulant B, A, and D2 of:
2- Alluminio, bario, cobalto, rame, ferro, litio, manganese, zinco, nichel / Aluminum, barium, cobalt, copper, iron, lithium, manganese, zinc, nickel
3- Ammine aromatiche primarie / Primary aromatic amines
Determinazione di contenuto di ftalati / Determination of phthalate content:
4- Dimetilftalato, Dietilftalato, diisobutilftalato, di-n-butilftalato, bis(2-etilesil)ftalato, butil-benzilftalato, di-n-ottilftalato / Dimethyl phthalate, diethyl phthalate, diisobutyl phthalate, di-n-butyl phthalate, bis (2-ethylhexyl) phthalate, butyl benzyl phthalate, di-n-ocryl phthalate
5- Massima frazione estraibile in esano e xilene / Maximum extractable fraction in hexane and xylene

Condizioni / Conditions:
migrazione globale e specifiche: 2h a 100°C / Global and specific migration: 2h at 100°C
Metodo analitico / Methods:
richiesta 1, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + Dir CEE 82/711 18/10/1982 GU CE L297 23/10/1982
richiesta 2, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + UNI EN 13130-1:2005 + P-FA-4192 rev.0 2018
richiesta 3, MIP-P-PRO-368 rev.0 2016
richiesta 4, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + P-AL-87 rev.0 218
richiesta 5, TEST FDA CFR 21 177.1520

RISULTATI MIGRAZIONE GLOBALE / RESULT OF GLOBAL MIGRATION

Solvente simulante / Simulant		Condizioni di prova / Conditions of test		Migrazione globale / Global migration	Incertezza / Uncertainty	Limite / Limit
Descrizione / Description	Tipo / Type	Tempo / Time	Temperatura / Temperature	mg/dm2	± 2 Uc (IM)	mg/dm2
Acido acetico 3% / Acetic acid 3%	B	2h	100°C	<1	-	10
Etanolo 10% / Ethanol 10%	A	2h	100°C	< 1	-	10
Olio di oliva / Olive oil	D2	2h	100°C	< 2	-	10
Etanolo 95% / Ethanol 95%	-	2h	100°C	< 1	-	10

IM: Incertezza estesa associata alla misura con fattore di copertura K=2 e ad un livello di fiducia del 95% per valori quantificati maggiori del LOQ / Extended uncertainty associated with the coverage factor measure K=2 and a 95% confidence level for quantified values greater than the LOQ

Questo Rapporto di Prova riguarda solo il campione sottoposto a prova così come ricevuto. This Test Report concerns only the analyzed sample, just as received
Il Rapporto non può essere riprodotto parzialmente senza approvazione scritta da parte del Responsabile del laboratorio LabAnalysis srl
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www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TEST REPORT M.O.C.A
COMPOTEC® FOODFLON

LabAnalysis
HIGH QUALITY CONTROLS

RISULTATI MIGRAZIONI SPECIFICHE / RESULT OF SPECIFIC MIGRATION

Parametro/Parameter	U.M.	Risultato in sim. B/Result into sim.B	Risultato in sim. A/Result into sim.A	Risultato in sim. D2/Result into sim. D2	Risultato in sim. etanolo 95%/Result into ethanol 95%	Limite/Limit (1)
Alluminio/Alluminum	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	1
Bario/Barium	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	1
Cobalto/Cobalt	mg/kg	< 0,01	< 0,01	< 0,01	< 0,01	0,05
Rame/Copper	mg/kg	< 1	< 1	< 1	< 1	5
Ferro/Iron	mg/kg	< 1	< 1	< 1	< 1	48
Litio/Lithium	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	0,6
Manganese	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	0,6
Zinco/Zinc	mg/kg	< 1	< 1	< 1	< 1	5
Nichel/Nickel	mg/kg	< 0,01	< 0,01	< 0,01	< 0,01	0,02
Ammine aromatiche primarie/Primary aromatic	mg/kg	< 0,002	< 0,002	< 0,002	< 0,002	0,01

RISULTATO CONTENUTI DI FTALATI / RESULT OF PHTHALATE CONTENT

Parametro/Parameter	U.M.	Risultato/Result	Migrazione massima teorica/Teoric specific migration	Limite/Limit (1)
Dimetilftalato/ Dimethyl phthalate	mg/kg	< 0,5	< 0,01	-
Dietilftalato/ Diethyl phthalate	mg/kg	< 0,5	< 0,01	-
Diisobutilftalato/ Diisobutyl phthalate	mg/kg	< 0,5	< 0,01	-
Di-n-butilftalato/ Di-n-butyl phthalate	mg/kg	< 0,5	< 0,01	0,3
Bis(2-etilesil)ftalato/ Bis(2-ethylhexyl) phthalate	mg/kg	< 0,5	< 0,01	1,5
Butil-benzilftalato/ Butyl benzyl phthalate	mg/kg	< 0,5	< 0,01	30
Di-n-ottilftalato/ Di-n-octyl	mg/kg	< 0,5	< 0,01	-

Grammatura campione/Sample weight: 3.4219 g/dm2
(1) limite secondo Reg. 10/2011 e successive modifiche e aggiornamenti / limit according to Reg. 10/2011 and subsequent changes and updates

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TEST REPORT M.O.C.A COMPOTEC® FOODFLON

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Casanova Lonati, 16/09/2019 Rapporto di prova / Test report n° 1903335-002/rev.1 Pag. 3 di 3

RISULTATO TEST FDA / RESULT OF FDA TEST

Parametro/Parameter	U.M.	Risultato/Result	Limite /Limit(2)
Massima frazione estraibile in esano/ Maximum extractable fraction in hexane	%	0,05	2,6
Massima frazione solubile in xilene/ Maximum extractable fraction in xylene	%	0,10	11,3

(2) limite secondo FDA CFR 21 177.1520 / limit according to FDA CFR 21 177.1520
U.M. = unità di misura / unit of measure

Risultato "<X" = ove non diversamente specificato, indica un valore inferiore al limite di quantificazione del metodo (LOQ).
Nel caso di metodi che prevedono fasi di preconcentrazione e purificazione, ove non espressamente indicato, il recupero è da intendersi compreso all'interno dei limiti di accettabilità specifici previsti dal metodo di prova o dalla normativa vigente. Ove non espressamente indicato, il recupero non è stato utilizzato nei calcoli

Result "<X" = unless otherwise specified, indicates a value that is less than the method quantification limit (LOQ).
In the case of methods involving phases of pre-concentration and purification, if not expressly indicated, recovery is to be understood within the specific acceptableness limits provided by the test method or the current legislation. Where not expressly indicated, recovery has not been used in calculations

Questo rapporto di prova annulla e sostituisce il report 1903335-002_0_0 del 16/09/2019
This test report cancels and replaces the 1903335-002_0_0 report of 16/09/2019

Motivo della revisione / Reason for review
Aggiunta della traduzione in lingua inglese / Adding english translation

Direttore Divisione Ambientale e Alimentare
Ordine dei Chimici della Provincia di Pavia n 439 A
Dott. Guido Premoli

Fine rapporto di prova / End of test report

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www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TEST REPORT M.O.C.A
COMPOTEC® FOOD 500

LabAnalysis
HIGH QUALITY CONTROLS

Casanova Lonati, 16/09/2019 Rapporto di prova / Test report n° 1903335-003/rev.1 Pag. 1 di 3

Richiedente / Customer: MATEC GROUP SRL – Via I Maggio, 7, 20068 – Peschiera Borromeo (MI)
Prelevata da / Provided by: Richiedente / Customer
Data arrivo campioni / Received: 23/07/2019
Data accettazione / Acceptance: 23/07/2019
Data analisi / Date of testing: inizio 29/07/2019 – fine 13/09/2019 / from 29/07/2019 to 13/09/2019

Tipologia campione / Sample type:
campione materiale plastico polietilene / plastic material polyethylene
Identificazione del campione / Sample Identification :
COMPOTEC ® FOOD 500 UHMWPE INSIDE

Analisi richiesta / Required analysis:
1- Determinazione della migrazione globale nel simulante B, A, D2 ed etanolo 95% / Determination of global migration into simulant B, A and D2
Determinazione della migrazione specifica nel simulante B, A, D2 ed etanolo 95% di: / Determination of specific migration into simulant B, A, and D2 of:
2- Alluminio, bario, cobalto, rame, ferro, litio, manganese, zinco, nichel / Aluminum, barium, cobalt, copper, iron, lithium, manganese, zinc, nickel
3- Ammine aromatiche primarie / Primary aromatic amines
Determinazione di contenuto di ftaliti / Determination of phthalate content:
4- Dimetilftalato, Dietilftalato, diisobutilftalato, di-n-butilftalato, bis(2-etilesil)ftalato, butil-benzilftalato, di-n-ottilftalato / Dimethyl phthalate, diethyl phthalate, diisobutyl phthalate, di-n-butyl phthalate, bis (2-ethylhexyl) phthalate, butyl benzyl phthalate, di-n-octyl phthalate
5- Massima frazione estraibile in esano e xilene / Maximum extractable fraction in hexane and xylene

Condizioni / Conditions:
migrazione globale e specifiche: 2h a 100°C / Global and specific migration: 2h at 100°C
Metodo analitico / Methods:
richiesta 1, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + Dir CEE 82/711 18/10/1982 GU CE L297 23/10/1982
richiesta 2, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + UNI EN 13130-1:2005 + P-FA-4192 rev.0 2018
richiesta 3, MIP-P-PRO-368 rev.0 2016
richiesta 4, DM 21/03/1973 SO GU n° 104 20/04/1973 e s.m.i. + Reg. UE 10/2011 14/01/2011 GU UE L12/1 15/01/2011 e s.m.i. + P-AL-87 rev.0 218
richiesta 5, TEST FDA CFR 21 177.1520

RISULTATI MIGRAZIONE GLOBALE / RESULT OF GLOBAL MIGRATION

Solvente simulante / Simulant		Condizioni di prova / Conditions of test		Migrazione globale / Global migration	Incertezza / Uncertainty	Limite / Limit (1)
Descrizione / Description	Tipo / Type	Tempo / Time	Temperatura / Temperature	mg/dm2	± 2 Uc (IM)	mg/dm2
Acido acetico 3% / Acetic acid 3%	B	2h	100°C	1,2	+/-0,3	10
Etanolo 10% / Ethanol 10%	A	2h	100°C	< 1	-	10
Olio di oliva / Olive oil	D2	2h	100°C	< 2	-	10
Etanolo 95% / Ethanol 95%	-	2h	100°C	1,2	+/-0,3	10

IM: Incertezza estesa associata alla misura con fattore di copertura K=2 e ad un livello di fiducia del 95% per valori quantificati maggiori del LOQ./ Extended uncertainty associated with the coverage factor measure K=2 and a 95% confidence level for quantified values greater than the LOQ.

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TEST REPORT M.O.C.A
COMPOTEC® FOOD 500

LabAnalysis
HIGH QUALITY CONTROLS

Casanova Lonati, 16/09/2019 Rapporto di prova / Test report n° 1903335-003/rev.1 Pag. 2 di 3

RISULTATI MIGRAZIONI SPECIFICHE / RESULT OF SPECIFIC MIGRATION

Parametro/Parameter	U.M.	Risultato in sim. B/Result into sim.B	Risultato in sim. A/Result into sim. A	Risultato in sim. D2/Result into sim. D2	Risultato in sim. etanolo 95%/Result into ethanol 95%	Limite/Limit (1)
Alluminio/Alluminum	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	1
Bario/Barium	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	1
Cobalto/Cobalt	mg/kg	< 0,01	< 0,01	< 0,01	< 0,01	0,05
Rame/Copper	mg/kg	< 1	< 1	< 1	< 1	5
Ferro/Iron	mg/kg	< 1	< 1	< 1	< 1	48
Litio/Lithium	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	0,6
Manganese	mg/kg	< 0,1	< 0,1	< 0,1	< 0,1	0,6
Zinco/Zinc	mg/kg	< 1	< 1	< 1	< 1	5
Nichel/Nickel	mg/kg	< 0,01	< 0,01	< 0,01	< 0,01	0,02
Ammine aromatiche primarie/Primary aromatic	mg/kg	< 0,002	< 0,002	< 0,002	< 0,002	0,01

RISULTATO CONTENUTI DI FTALATI / RESULT OF PHTHALATE CONTENT

Parametro/Parameter	U.M.	Risultato/Result	Migrazione massima teorica/Teoric specific migration	Limite/Limit (1)
Dimetilftalato/ Dimethyl phthalate	mg/kg	< 1,4	< 0,01	-
Dietilftalato/ Diethyl phthalate	mg/kg	< 1,1	< 0,01	-
Diisobutilftalato/ Diisobutyl phthalate	mg/kg	< 0,5	< 0,01	-
Di-n-butilftalato/ Di-n-butyl phthalate	mg/kg	< 1,1	< 0,01	0,3
Bis(2-etilesil)ftalato/ Bis(2-ethylhexyl) phthalate	mg/kg	< 1,0	< 0,01	1,5
Butil-benzilftalato/ Butyl benzyl phthalate	mg/kg	< 1,1	< 0,01	30
Di-n-ottilftalato/ Di-n-octyl	mg/kg	< 1,1	< 0,01	-

Grammatura campione/Sample weight: 3.4219 g/dm2
(1) limite secondo Reg. 10/2011 e successive modifiche e aggiornamenti / limit according to Reg. 10/2011 and subsequent changes and updates

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www.matecindustriale.it
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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TEST REPORT M.O.C.A
COMPOTEC® FOOD 500

LabAnalysis
HIGH QUALITY CONTROLS

Casanova Lonati, 16/09/2019 Rapporto di prova / Test report n° 1903335-003/rev.1 Pag. 3 di 3

RISULTATO TEST FDA / RESULT OF FDA TEST

Parametro/Parameter	U.M.	Risultato/Result	Limite/Limit (2)
Massima frazione estraibile in esano/ Maximum extractable fraction in hexane	%	0,64	2,6
Massima frazione solubile in xilene/ Maximum extractable fraction in xylene	%	2,85	11,3

(2) limite secondo FDA CFR 21 177.1520 / limit according to FDA CFR 21 177.1520
U.M. = unità di misura / unit of measure

Risultato "<X" = ove non diversamente specificato, indica un valore inferiore al limite di quantificazione del metodo (LOQ).
Nel caso di metodi che prevedono fasi di preconcentrazione e purificazione, ove non espressamente indicato, il recupero è da intendersi compreso all'interno dei limiti di accettabilità specifici previsti dal metodo di prova o dalla normativa vigente. Ove non espressamente indicato, il recupero non è stato utilizzato nei calcoli.

Result "<X" = unless otherwise specified, indicates a value that is less than the method quantification limit (LOQ).
In the case of methods involving phases of pre-concentration and purification, if not expressly indicated, recovery is to be understood within the specific acceptableness limits provided by the test method or the current legislation. Where not expressly indicated, recovery has not been used in calculations.

Questo rapporto di prova annulla e sostituisce il report 1903335-003_0_0 del 16/09/2019
This test report cancels and replaces the 1903335-003_0_0 report of 16/09/2019

Motivo della revision / Reason for review
Aggiunta della traduzione in lingua inglese / Adding english translation

Direttore Divisione Ambientale e Alimentare
Ordine dei Chimici della Provincia di Pavia n 439 A
Dott. Guido Premoli

Fine rapporto di prova / End of test report

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

www.matecindustriale.it
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TYPE APPROVAL
TWINFLEX HOSE LLOYD'S

Lloyd's Register

Page 1 of 2
Certificate No: LR21126900TA
Issue Date: 01/04/2021
Expiry Date: 31/03/2026

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	**Fire Safe Fuel Hoses Pte Ltd**
Address	29 Tuas Avenue 4, Singapore, 639379, Singapore
Place of Production	Matec Group srl Via I° Maggio 7, Peschiera Borromeo, 20068, Italy
Type	Flexible Hoses
Description	Corrugated and Braided Metal Hose Assembly with permanent fitted couplings
Trade Name	TWINFLEX
Application	Use in Class II and Class III piping systems with flammable liquids, having a flashpoint of 60 C ° or higher, on ships, classed or intended for classification with Lloyd's Register and subject to the other conditions stated on this certificate.
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, July 2020
Ratings	Sizes (Inner/Outer) DN32/DN50, DN50/DN80 and DN65/DN100 Max. operating pressure 16 bar Max. working temperature 150 C°

Matthijs Breel
Lead Specialist Propulsion Systems and Deputy 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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TYPE APPROVAL
TWINFLEX HOSE LLOYD'S

Lloyd's Register

Certificate No: LR21126000TA
Issue Date: 01/04/2021
Expiry Date: 31/03/2026

Type Approval Certificate

Other Conditions

Materials to be in compliance with requirements to Lloyd's Register Tests, Survey and Certification Requirements for Class II Piping systems, as applicable, in accordance with Part 5, Chapter 12, Section 1.6 of the Rules.

TWINFLEX Hose Assemblies to be manufactured in accordance with the conditions and comments given in our General Design Appraisal with Reg. No. ROT.21.M.002, dated 01 April 2021.

Installation of TWINFLEX stainless steel flexible hoses to be in accordance with manufacturer's instructions and limitations of use for both corrugated and braided metal hoses, Type PARRAP®, in this hose assembly. Reference is made to Part 5, Chapter 12, Section 7.1.10 of the Rules.

TWINFLEX flexible hose assembly to be fitted in straight (no bending) connections only.

Flexible hoses are not allowed to be used to compensate for misalignment between sections of piping.

Flexible hose assemblies are not to be subjected to torsional deformation (twisting) under normal operating conditions.

Each TWINFLEX double-wall hose is to be installed with a leak detection system and an alarm is to be provided at relevant control station to indicate that TWINFLEX hose has failed.

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 RTS-TA-PRJ1100226996-3/MB and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
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www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
TWINFLEX HOSE RINA

TYPE APPROVAL CERTIFICATE
No. **MAC131021CS**

This is to certify that the product identified below is in compliance with the regulations herewith specified.

Description	**Metallic flexible hoses**
Type	**TWINFLEX HOSE**
Applicant	**Fire Safe Fuel Hoses Pte Ltd** **29 TUAS AVENUE 4** **639379 SINGAPORE** **SINGAPORE**
Manufacturer *Place of manufacture*	**MATEC GROUP SRL** **VIA 1 MAGGIO 7** **20068 PESCHIERA BORROMEO (MI)** **ITALY**
Reference standards	**Part C, Chapter 1, Section 10 of RINA Rules**

Issued in **Genoa** on **April 12, 2021**. *This Certificate is valid until* **April 12, 2026**

RINA Services S.p.A.
Marco Dardano

This certificate consists of this page and 1 enclosure.
This Certificate annuls and replaces the Certificate MAC309616CS issued on 16/11/2016.

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

Digitally signed by RINA Services S.p.A. on 20 Apr 2021. No handwritten signature is provided.

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TYPE APPROVAL
TWINFLEX HOSE RINA

TYPE APPROVAL CERTIFICATE
No. **MAC131021CS**
Enclosure - Page 1 of 2
TWINFLEX HOSE

Remarks Reference documents

MATEC technical specifications:

- Catalogue TWINFLEX 2015
- Drawing No. 540983-1 / 1W rev. 1 (PPVT-....)
- Drawing No. 540983-2 / 1W rev. 1 (PPVT-....)
- Drawing No. 540983-3 / 1W rev. 1 (PPVT-....)
- Drawing No. TW5080OF100PN16-1 (PPVT-24549)
- Drawing No. TW3250C45-1 (PPVT-24550)
- Drawing No. TW5080C45F65PN16-1 (PPVT-24551)
- Drawing No. TW5080OF100PN40-1 (PPVT-24552)
- Drawing No. TW5080OF100PN16RD32PN16 (PPVT-24510)

Materials/Components

Flexible hoses:	Stainless steel AISI 316L,
Braid	Stainless steel AISI 304,
Collar	Stainless steel AISI 304,
Seamless pipe	Sch.40 Stainless steel AISI316
Fixed flange	Carbon steel / Stainless steel AISI316
Swivel flange	Carbon steel
Stub end AARH	Stainless steel AISI316
External sleeve	Pyrojacket

Technical characteristics

Max. Design Temperature: 150°C
Maximum design pressure 16 bar

Approved hose diameters	
ND Int. hose (mm)	ND Ext. hose (mm)
32	50
50	80
65	100

Fields of application

Fuel oil systems

Tests carried out

Test carried out by SIET, report no. 02419RP14 dated 06/02/2015.
Test carried out at MATEC, as per Report 2016-MI-01-911 of RINA Milan Office.

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
TWINFLEX HOSE RINA

TYPE APPROVAL CERTIFICATE
No. **MAC131021CS**
Enclosure - Page 2 of 2
TWINFLEX HOSE

Acceptance Conditions

The installation on board is to be made in accordance with Manufacturer's instructions .

The acceptance of the a.m. products on board ship and other units classed with RINA is subject to the satisfactory outcome of testings as per the RINA Rules.

Hoses are to be marked with Manufacturer's name or trademark, designation type reference, nominal diameter and maximum design pressure/temperature.

Remarks

The metallic flexible hoses are to be installed on board in accordance with Pt. C, Ch. 1, Sec.10, Para. 5.9.3 of RINA Rules.

Approved welding procedures and authorized welders are to be employed

Non destructive tests are to be carried out at satisfaction of RINA Surveyor.

Genoa April 12, 2021

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

Digitally signed by RINA Services S.p.A. on 20 Apr 2021. No handwritten signature is provided.

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

DNV TYPE APPROVAL TWINFLEX HOSE

DNV·GL

Certificate No:
TAP00001R0

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flexible Hoses of Metallic Material with permanently fitted couplings

with type designation(s)
TWINFLEX

Issued to
Fire Safe Fuel Hoses Pte Ltd
Singapore, Singapore

is found to comply with
DNV GL class programme DNVGL-CP-0184 – Type approval – Flexible hoses with permanently fitted couplings
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems

Application :

Product(s) approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Temperature range: **-55°C up to +150°C**
Max. working press.: **16 bar**
Sizes: **DN32/DN50, DN50/DN80, DN65/DN100**

Issued at **Hamburg** on **2019-05-16**

This Certificate is valid until **2024-05-15**.
DNV GL local station: **Certification of Materials - Singapore**

Approval Engineer: **Hagen Markus**

for **DNV GL**
Digitally Signed By: Drews, Olaf
Location: DNV GL SE Hamburg, Germany
Signing Date: 2019-05-21

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 1 of 4

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

DNV TYPE APPROVAL
TWINFLEX HOSE

Job Id: **262.1-030258-1**
Certificate No: **TAP00001R0**

PRODUCT DESCRIPTION

Stainless steel annular braided corrugated double walled hoses with a fixed flange on one side and a swivel flange on the other side. Ready for installation.

Properties	DN32/DN50	DN50/DN80	DN65/DN100
Nominal size Internal flexible Hose (PARRAP Type 1-50)	DN32	DN50	DN65
External flexible Hose (PARRAP Type 1-50)	DN50	DN80	DN100
Fixed Flange / Swivel Flange (EN 1092-1)	DN32 PN16/PN40	DN50 PN16/PN40	DN65 PN16/PN40
Length	500 mm up to 700 mm		
Design Pressure	16 bar		
Design Temperature	- 55 °C to + 150 °C		
Media	Flammable liquid and other media suitable to internal flexible hose, excluding sea water.		
Materials[1]			
Internal flexible Hose (PARRAP Type 1-50) External flexible Hose (PARRAP Type 1-50)	AISI 316L / 1.4404		
Braid Type "A" - internal and external	AISI 304 / 1.4301		
Collar	AISI 304 / 1.4301		
Seamless Pipe	AISI 316 / 1.4401		
Stub End	AISI 316L / 1.4404		
Fixed Flange / Swivel Flange (EN 1092-1)	Carbon Steel		
Ring	AISI 316 / 1.4401		
Fixed Male	AISI 316 / 1.4401		
PYROJACKET sleeve	Woven high bulk fibre glass, with iron oxide silicone rubber		
Spacer Ring	PTFE		
Anti-Wearing Layer	Aramid "KEVS PR"		

Notes:
[1] Pre-material composition and mechanical properties to be confirmed by material certificate type TR (test report, 2.2 certificate acc. to EN 10204). Refer to DNV GL Rules (RU-SHIP) Pt.1, Ch.3, Sec. 5.

Production place hose assemblies

Company Name	Scope	DNVGL Station
MATEC Group S.R.L. Via I Maggio 7 20068 Peschiera Borromeo MI	Manufacturing of hose assemblies, ready for installation	Milan

Responsibility
The company Fire Safe Fuel Hoses Pte Ltd, Singapore takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 2 of 4

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

DNV TYPE APPROVAL TWINFLEX FLEX. METAL HOSE TYPE APPROVAL

Job Id: **262.1-030258-1**
Certificate No: **TAP00001R0**

APPLICATION/LIMITATION

The double walled hoses (Type TWINFLEX) are type approved for using in piping systems conveying flammable liquids and other media suitable to the inner hose material included in pipe class II and III. Application in sea water systems is excluded.

For selection, the instruction of manufacturer is to be observed.

Selection of materials

It shall be noted that the selection of the materials considers the applicable service condition with respect to type of media, flow velocity, media temperature etc. and installation area of the piping system. In particular, the resistance to corrosion, erosion, oxidation and other deterioration during projected service life are to be taken into account.

Reference is made to DNVGL Rules Pt.4, Ch.6, Section 2 – Materials.

Installation

For installation the valid FSFH "Installation manual Fire Safe Fuel Hoses"and DNVGL Rules Ship: RU-SHIP Pt.4, Ch.6, Section 9 are to be observed.

Production – welding according WPS

Welding process	Type	Kind of weld	WPS
141 - Gas Tungsten Arc Welding (GTAW)	Manual	DW-A	W010, W011
		DW-B	W02, W05, W06, W08
		DW-C	n.a.
		DW-D	W01, W03, W04, W07, W09

Production testing

Each metallic hose assembly is subject to a hydraulic pressure test according to purchase order but at least to 1.5 times the nominal pressure (PN).
Appropriate test report (TR) is to be issued by the manufacturer.
Refer to DNV GL Rules (RU-SHIP) - Pt.4, Ch.6, Section 9.

TYPE APPROVAL DOCUMENTATION

Test reports/procedures

- TEST PROCEDURE_ Pressure test requirements for Hoses_Matec PO1 10.01 Rev.5
- Matec Group S.R.L., Peschiera Borromeo MI (Italy)
- Burst Tests Certificate_DN32-50 + DN65-100_2018-12-20

Documents/technical data for hoses

- Marine Design Appraisal Document (16bar/150°C), 2016-05-09
  issued by Lloyds Register EMEA, Rotterdam
- Confirmation Design Parameter (16bar/150°C) issued by Matec Group S.R.L.,
  Peschiera Borromeo MI (Italy)
- Type Approval Certificate TAP0000030_ Type PARMECA™, PARNOR®, PARRAP®,
  PARRAP® 2 braids, 2017-06-26 issued by DNV GL, Hamburg
- Flange CATALOGUE EN 1092-1,
  Cross sectional drawing incl. part and material lists and welding table for all 3 hoses
  (DN32/DN50, DN50/DN80, DN65/DN100)
- Fire Safe Fuel Hoses Pte Ltd, Singapore
  PARRAP Hose Design Details according EN-ISO 10380
  Product data sheet anti-wearing layer "KEV5 PR"_02-2018, Biscor Limited, Heywood (UK)
  Installation manual Fire Safe Fuel Hoses version 2.5_2018-12-21
  Fire Safe Fuel Hoses Pte Ltd (Singapore)

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 3 of 4

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

DNV TYPE APPROVAL TWINFLEX FLEX. METAL HOSE TYPE APPROVAL

Job Id: **262.1-030258-1**
Certificate No: **TAP00001R0**

Documents welding
- WPS (W01-W011)_2014-10-30
- WPQ (no1*3)_2011-06-22

Miscellaneous documents
- Authorization letter by manufacturer MATEC Group S.R.L.
- Application for Type Approval_2018-09-19
- Type Approval Assessment report of MATEC Group S.R.L._2018-12-20
- MARKING of products (pictures)

TESTS CARRIED OUT

- Burst test > 4 times DP (inner tube) and 1.5 times DP (outer tube)

MARKING OF PRODUCT

For traceability of products, marking shall be legible and indelible.
Products are to be marked at least as follows:

	Marking scope	Example
Marking on fixed flange	Manufacturer name	*(M-Logo for Matec)*
	Nominal size/type	DN50/80
	Production lot	01/2018
	Design pressure	DP: 16 bar
	Design temperature	DT: 150°C
	Art no.	ART. 9600301

PERIODICAL ASSESSMENT

A condition for retention of the type approval certificate in its validity period is that periodical assessments are successfully carried out. The objective of the periodical assessment is to verify that the conditions for the type approval have not been altered. Regulations for the periodical assessment of the type approval certificate are to be find in the DNVGL Class Programme CP-0338.

It is further to be noted that the Society shall be informed of any:
- Modifications to the product which are liable to affect its characteristics and functions, as originally specified and tested;
- Shifting of the production site and additional production site.

If such notifications are not made, the validity of the type approval certificate terminates.

End of certificate

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 4 of 4

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matec@matecgroup.com

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NGA CERTIFICATE COMPOTEC® HOSES

improving life through standards

COTECNA

DZ52KU

Standards Organisation of Nigeria Conformity Assessment Programme

Product Certificate (Registered)

This document is not and does not substitute in any respect the SONCAP Certificate required for Customs Clearance

PC(R) No.: NGA-RFR22-019329-V0
Issuance Date: 16/09/2022
Expiry Date of Certificate: 16/09/2023
Version: 0

Name of Beneficiary:	MATEC GROUP SRL
Address:	VIA I MAGGIO 7 Peschiera Borromeo (MI) 20068 Italy
Phone No.:	025472158
E-mail:	d.viscione@matecgroup.com
Fax No.:	
Tin Number:	
RC/BN Number:	

Item No.	HS Code	Product Description (Description, Brand, Model No.)	Country of Origin	Standard Reference
1	7307.29.10	Couplings /fittings Brand: MATEC Model: COUPLINGS	IT	ISO7241:2014
2	4009.42.00.90	Rubber hose Brand: MATEC Model: OIL AND FUEL RUBBER HOSES	IT	EN1765:2016
3	3917.39	COMPOSITE HOSE Brand: MATEC Model: COMPOSITE FLEXIBLE HOSES, COMPOTEC, OIL 800 HD ZZ	IT	EN13765:2018
4	8462.91	crimping machine Brand: MATEC Model: COMPOPRESS	IT	IEC 60204-1:2016+AMD1:2021
5	8307.10.00	FLEXIBLEM METAL HOSE Brand: MATEC Model: FLEXIBLE METAL HOSES, ENCO	IT	ISO 21012:2018
6	4009.42.00.90	Rubber hose Brand: MATEC Model: LPG RUBBER GAS HOSES	IT	EN1765:2018
7	4009.42.00.90	Rubber hose Brand: MATEC Model: OIL AND FUEL RUBBER HOSES FOR TRUCK DELIVERY	IT	EN1761:1999

	Remarks:		
Authenticated By:	Evangéline DURET COTECNA INSPECTION FRANCE	**Issuing Office:**	Cotecna Inspection SA

This inspection has been performed on the goods for which it was requested according to our professional standards and to the best of our knowledge on the date and at the place it was performed, within the scope of instructions received. This inspection does not release seller(s) and/or supplier(s) and/or shipper(s) and/or other parties involved from their respective contractual obligations and does not prejudice the buyer(s)/receiver(s)' right to claim, under applicable law and contract, compensation from seller(s)/supplier(s)/shipper(s) regarding any defects not detected during our inspection or occurring thereafter. This inspection is also subject to COTECNA Terms and Conditions of Business 2022. (http://www.cotecna.com/en/About-Cotecna/Terms-Conditions). Headings and titles in this certificate/report are for reference only and the findings contained herein prevail as stated.

Page 1 of 2

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

NGA CERTIFICATE COMPOTEC® HOSES

	This document is issued under the authority of the SONCAP for and on behalf of the Standards Organisation of Nigeria (SON)

This inspection has been performed on the goods for which it was requested according to our professional standards and to the best of our knowledge on the date and at the place it was performed, within the scope of instructions received. This inspection does not release seller(s) and/or supplier(s) and/or shipper(s) and/or other parties involved from their respective contractual obligations and does not prejudice the buyer(s)/receiver(s)' right to claim, under applicable law and contract, compensation from seller(s)/supplier(s)/shipper(s) regarding any defects not detected during our inspection or occurring thereafter. This inspection is also subject to COTECNA Terms and Conditions of Business 2022. (http://www.cotecna.com/en/About-Cotecna/Terms-Conditions). Headings and titles in this certificate/report are for reference only and the findings contained herein prevail as stated

Page 2 of 2

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

DECLARATION ADR
ANNEX IV BUREAU VERITAS

Subject :

Declaration according to International Carriage of Dangerous Goods by Road (ADR) Annexe IV

Dear Sir ,
Pls. be informed that the (COMPOTEC ®) hoses manufactured by Matec Group S.r.l Italy bear all the applicable international standards approvals ;

The COMPOTEC ® hoses are frequently inspected by an inspection company.
All of our COMPOTEC ® hoses are Lloyd's registered approved including highest applicable international standards.

The COMPOTEC ® hoses are compliant to the following Annex IV except point 2.3, 2.4 and 2.7

Annexe IV
Modifié par Arrêté du 24 avril 2019 - art.
Modifié par Arrêté du 24 avril 2019 - art. 5
Cette annexe comporte les appendices suivants :

APPENDICE IV.1 : DISPOSITIONS RELATIVES AUX FLEXIBLES

International Carriage of Dangerous Goods by Road (ADR).

Quality Control / Timbro - Firma	MATEC GROUP S.r.l. Via I° Maggio, 7 20068 PESCHIERA BORROMEO (MI) Partita I.V.A. N° 06358690960
Quality Control / Stamp - Signature	
Matec Group srl	

Ispettore Esterno / Timbro – Firma	BUREAU VERITAS ITALY INTERESSED NOTED REVIEWED SURVEYOR M. FUMAGALLI DATE 18 OCT 2019
Inspection company / Stamp – Signature	
Compania Inspectora / Sello – Firma	
Compagnie inspectrice / Timbre – Signature	
Inspecteur externe/ Timbre – Signature	

MATEC GROUP SRL – VIA I° MAGGIO, 7 – 20068 PESCHIERA BORROMEO (MI) – ITALY
CODICE FISCALE E PARTITA IVA 06299060159
TELEFONO: (++39) 02/55.30.17.88 (6 LINEE R.A.) - FAX: (++39) 02/54.72.158 (2 LINEE R.A.)-
WEBSITE HTTP:// WWW.MATECGROUP.COM-

www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

INSPECTION REPORT
ADR BUREAU VERITAS

Industry & Facilities Division

Page: 1/3

☐ Interim
☒ Final

INSPECTION REPORT Nr. 16-MF-MATEC

BV Job nr: GB-19.11.3706/20.139

PROJECT: ADR Annex IV	**Ref:// Composite hoses**
End User: General	**Ref Client P.O.: N.A.**
BV Client: MATEC Group Srl **Zip code: 20068**	**Ref.: Composite hoses** **Contract ZIG #:7321729** **1-4UF61WT**
Address: Via 1° Maggio, 7	
Zip code: 20068	
City: Peschiera Borromeo(MI)	
Manufacturer: MATEC Group Srl	**P/o nr: N.A.**
**Owner:// **	**Ref: N.A.**
Inspection requested by: MATEC Group Srl	**Ref: //**

SUPPLY/ SUBJECT OF INSPECTION	ITEM/TAG Nr	
Please refer to page 2		

DOCUMENTS OF REFERENCE : *See continuation sheet for additional documents:* ☐ *Yes* ☒ *No*

Title	Reference n°	Rev.	Approved by	Date
See on narrative				

INSPECTIONS :

Inspection place & Date or Period:
Peschiera Borromeo, November 07, 2018

Stage of inspection :
Stage of inspection :
- ☐ Before manufacturing
- ☐ During manufacturing
- ☒ Final
- ☐ Packing

Type of inspection:
- ☐ Pre-inspection meeting
- ☒ Document and QC record review
- ☐ Visual examination, checks
- ☐ Witnessing tests
- ☐ Manufacturing progress status
- ☐ Vendor assessment
- ☒ Final inspection
- ☐ Packing

(for details see continuation sheet)

Stamping :
☒ No

Results of inspection : ☒ Satisfactory ☐ Unsatisfactory

Non Conformities Reports (NCR):

o NCR's issued during reported period :
None.

o List of outstanding NCR's :
None.

Main Conclusions & Remarks:
The inspection gave satisfactory results.

Next visit scheduled: None.

BUREAU VERITAS SURVEYORS AT ITALY

INSP 002 En
GM SI 101

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

INSPECTION REPORT
ADR BUREAU VERITAS

Industry & Facilities Division

Page: 2/3

☐ Interim
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INSPECTION REPORT Nr. 13-MF-MATEC

(continued)

BV Job nr: GB-19.IT.3706720.139

Material Inspected

ITEM N°	Qty.	Description
N.A.	//	//

Description of the inspections carried out:

➢ **Introduction (BV scope of work)**

Attendees:
Mr. Danilo Viscione: MATEC QA/QC Dept.
Mr. Mario Fumagalli: BUREAU VERITAS Inspector

Scope of inspection:
Following to NFI BV dated October 14th, 2019 an inspection visit as Third Part, was carried out to:
-MATEC Group Srl premises, in order to confirm the conformity to the following:

That the (COMPOTEC ®) hoses manufactured by Matec Group S.r.l Italy bear all the applicable international standards approvals ;
The COMPOTEC ® hoses are frequently inspected by an inspection company.
All of COMPOTEC ® hoses produced by MATEC are Lloyd's registered approved including highest applicable international standards.
The COMPOTEC ® hoses are compliant to the following Annex IV.

Annexe IV
Modifié par Arrêté du 24 avril 2019 - art. Modifié par Arrêté du 24 avril 2019 - art. 5 Cette annexe comporte les appendices suivants :
APPENDICE IV.1 : DISPOSITIONS RELATIVES AUX FLEXIBLES International Carriage of Dangerous Goods by Road (ADR).
The points 2.3, 2.4 and 2.7 of the a.m. Annexe IVare not applicable.

➢ **Applicable Documents & Status of Approval:**
-LLOYD's type approval N° 13/00002(E1)

Review of certification:
The above mentioned were reviewed, stamped and signed for endorsement, and here attached.

➢ **Result of inspection:**
The above mentioned inspection, gave satisfactory results.

➢ **Problems pending**

None.

BUREAU VERITAS SURVEYOR PAVIA ITALY

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GM Si 101

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+39 0255301788 /F. +39 025472158

INSPECTION REPORT
ADR BUREAU VERITAS

Industry & Facilities Division

Page: 2/3

☐ Interim
☒ Final

INSPECTION REPORT Nr. 13-MF-MATEC

(continued)

BV Job nr: **GB-19.IT.3706720.139**

ANNEXES ☐ *No* ☒ *Yes (Total number of sheets: 2)*

- Declaration according to International Carriage of dangerous Goods by road (ADR) Annexe' IV.

Inspected by:	***Checked by:***
Name: Mario Fumagalli	Name: Matteo Nicoletti
Signature :	Signature :
Date of issue: October 18th 2019	
Inspection centre: BV Milan – Italy	
Distribution: ☒ BV CLIENT	

INSP 002 En
GM SI 101

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
RUBBER HOSES ROITER®

APPROVAL CERTIFICATE
M63062/20/MN/mn
IT FILE 20.IT.3798307.139

TYPE APPROVAL CERTIFICATE

1. General:

Name and address of the factory:

Roiter S.R.L. Via A. Grandi 5 45100 Rovigo Italia
Roiter S.R.L a division of Matec Group s.r.l

Type(s) of product and component manufactured: **Oil hose assemblies**

Type Tests witnessed on July 9th, 2020 by Mario Fumagalli

2. Type description:

CA410 MARINE (S10) cod. 21 & CA415 MARINE (S15) cod. 19

Nominal bore (mm) 50 – 75 – 100 - 150 – 200 – 250 – 300 – 400 – 500

UNI EN 1765:2016-European Standard specification of the characteristics of four types of oil suction and discharge hose assemblies used for the conveyance of petroleum.

3. Conclusion:

After examination of the following documents:

- Inspection report n° 01-MF-ROITER dated 09/07/2020

the undersigned, Inspector to Bureau Veritas, certifies that the above type meets the applicable requirements

This entire approval cycle remains valid as long as no significant changes are made to the audited facility, its production rate and its quality system. These conditions shall be assessed and certified once per year by means of a Factory Approval Audit.

This approval is an integral and indissociable part of the certification process managed by Bureau Veritas as defined in BV procedure GM SI 210.

Attachments:

- *all the examined documents with BV "Reviewed" stamp,*
- *BV Report references*

Inspected by:
Name: Mario Fumagalli
Signature…
Date of issue: July 31st, 2020
Inspection centre: BV Milan

Checked by:
Name: Matteo Nicoletti
Signature…

GM SI 210 – Type Approval Certificate

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www.matecindustriale.it
matec@matecgroup.com

MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158

TYPE APPROVAL
RUBBER HOSES ROITER®

APPROVAL CERTIFICATE
M63539/20/MN/mn
IT FILE 20.IT.3798307.139

TYPE APPROVAL CERTIFICATE

1. General:

Name and address of the factory:

Roiter S.R.L. Via A. Grandi 5 45100 Rovigo Italia
Roiter S.R.L a division of Matec Group s.r.l

Type(s) of product and component manufactured: **Oil hose assemblies**

Type Tests witnessed on October 7th, 2020 by Mario Fumagalli

2. Type description:

CA 416 25X37 – TIPO SD	UNI EN 1761:2000 European Standard specification for Rubber hoses and hose assemblies for fuel truck delivery – Specification
CA 116 25X39 – TIPO D	
CA 225 25X38 – TIPO D-LT	UNI EN 1762:2019 European Standard specification for Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) – Specification
CA 425 25X48 – TIPO SD-LTS	

3. Conclusion:

After examination of the following documents:

- Inspection report n° 02-MF-ROITER dated 07/10/2020

the undersigned, Inspector to Bureau Veritas, certifies that the above type meets the applicable requirements

This entire approval cycle remains valid as long as no significant changes are made to the audited facility, its production rate and its quality system. These conditions shall be assessed and certified once per year by means of a Factory Approval Audit.

This approval is an integral and indissociable part of the certification process managed by Bureau Veritas as defined in BV procedure GM SI 210.

Attachments:

- *all the examined documents with BV "Reviewed" stamp,*
- *BV Report references*

Inspected by:
Name: Mario Fumagalli
Signature…
Date of issue: December 16th, 2020
Inspection centre: BV Milan

Checked by:
Name: Matteo Nicoletti
Signature…

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Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
RUBBER HOSES ROITER®

Lloyd's Register

Page 1 of 1
Document No: LR2275253DA
Issue Date: 09/03/2022
Expiry Date: 08/03/2027
Reference: PRJ1110005765

LLOYD'S REGISTER TYPE APPROVAL SYSTEM

Issue by: Trieste Technical Support Office
Issued to: ROITER Srl a member of MATEC® GROUP Srl
For: Rubber Hose – Types: S10, S15, L15

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System September 2020 and this Design Appraisal Document forms part of the Certificate LR2275253TA.

APPROVAL DOCUMENTATION

Application Checklist	*04 Sep 2020*
Production Quality Assessment (PQA)	*10 May 2019*
Request for Services	*06 May 2019*
EN1765 S15_L15 (datasheets)	
CA 415 Marine EN 1765-S10 (datasheets)	

TEST REPORTS

Technical Report Type Approval Certificate UNI EN 1765:2016 (L15: size 4" and size 8")	*09 Jul 2020*
Technical Report Type Approval Certificate UNI EN 1765:2016 (S10 and S15: from size 2" to size 20")	*09 Jul 2020*
Technical Report Type Approval Certificate UNI EN 1765:2016 (S10 and S15: size 6")	*10 May 2019*

PLACE OF PRODUCTION

MATEC GROUP Srl – Via I Maggio n° 7, 20068 Peschiera Borromeo (MI), Itlay

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

Fabrizio Cadenaro
Lead Specialist Engineering Systems
Trieste Technical Support Office
Lloyd's Register EMEA
Galleria Protti 1 34121 – Trieste Italy
E-mail: fabrizio.cadenaro@lr.org

Fabrizio Cadenaro
Lloyd's Register EMEA

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia T.
+39 0255301788 /F. +39 025472158
www.matecindustriale.it
matec@matecgroup.com

TYPE APPROVAL
RUBBER HOSES ROITER®

Lloyd's Register

Page 1 of 1
Document No: LR2275253DA
Issue Date: 09/03/2022
Expiry Date: 08/03/2027
Reference: PRJ1110005765

LLOYD'S REGISTER TYPE APPROVAL SYSTEM

Issue by: Trieste Technical Support Office
Issued to: ROITER Srl a member of MATEC® GROUP Srl
For: Rubber Hose – Types: S10, S15, L15

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System September 2020 and this Design Appraisal Document forms part of the Certificate LR2275253TA.

APPROVAL DOCUMENTATION

Application Checklist	*04 Sep 2020*
Production Quality Assessment (PQA)	*10 May 2019*
Request for Services	*06 May 2019*
EN1765 S15_L15 (datasheets)	
CA 415 Marine EN 1765-S10 (datasheets)	

TEST REPORTS

Technical Report Type Approval Certificate UNI EN 1765:2016 (L15: size 4" and size 8")	*09 Jul 2020*
Technical Report Type Approval Certificate UNI EN 1765:2016 (S10 and S15: from size 2" to size 20")	*09 Jul 2020*
Technical Report Type Approval Certificate UNI EN 1765:2016 (S10 and S15: size 6")	*10 May 2019*

PLACE OF PRODUCTION

MATEC GROUP Srl – Via I Maggio n° 7, 20068 Peschiera Borromeo (MI), Itlay

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

Fabrizio Cadenaro
Lead Specialist Engineering Systems
Trieste Technical Support Office
Lloyd's Register EMEA
Galleria Protti 1 34121 – Trieste Italy
E-mail: fabrizio.cadenaro@lr.org

Lloyd's Register EMEA

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TYPE APPROVAL
RUBBER HOSES ROITER®

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Page 2 of 2
Certificate No: LR2275253TA
Issue Date: 09/03/2022
Expiry Date: 08/03/2027

Type Approval Certificate

Ratings

Type L15:
Size: 2" (51 mm), 3" (76 mm), 4" (102 mm), 6" (152 mm), 8" (203 mm)
Maximum working pressure = 15 bar
Temperature range: -40°C /+ 100°C

Type S15:
Size: 4" (102 mm), 6" (152 mm), 8" (203 mm), 10" (254 mm), 12" (305 mm), 14" (355 mm), 16" (405 mm), 20" (500 mm)
Maximum working pressure = 15 bar
Temperature range: -40°C /+ 100°C

Type S10:
Size: 4" (102 mm), 6" (152 mm), 8" (203 mm), 10" (254 mm), 12" (305 mm), 14" (355 mm), 16" (405 mm)
Maximum working pressure = 10 bar
Temperature range: -40°C /+ 100°C

Other Conditions The Manufacturer Roiter Srl is a member of Matec Group Srl

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 LR2275253DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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

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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

Page 1 of 2
Certificate No: LR2248260TA
Issue Date: 23/11/2022
Expiry Date: 22/11/2027

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 S.R.L.**
Address	VIA 1° MAGGIO 7, Peschiera Borromeo MI, 20068, Italy
Type	Flexible Hoses
Description	PARRAP Type 1-50
Trade Name	Flexible metal hose type PARRAP
Application	Marine / Offshore
Specified Standard	LR Rules and Regulations for the Classification of Ships UNI EN ISO 10380

Fabrizio Cadenaro

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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TYPE APPROVAL ENCO®
FLEX. METAL HOSES

Certificate No: LR22482607TA
Issue Date: 23/11/2022
Expiry Date: 22/11/2027

Type Approval Certificate

Ratings

Nominal diameter (mm)	Nr. of Braids (/)	Design Pressure* (bar)
12	1	80
	2	125
15	1	63
	2	97
20	1	55
	2	77
25	1	40
	2	62
32	1	40
	2	58
40	1	32
	2	44
50	1	32
	2	47
65	1	25
	2	41
80	1	23
	2	40
100	1	15
	2	27
125	1	13
150	1	11

*Design pressure as define in LR Rules and Regulations for the Classification of Ships Part 5 Ch 12 Sec 1.4

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 LR22482607DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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ISPEZIONI, CERTIFICAZIONI E CONSULENZE

- **METODI DI CONTROLLI SECONDO LE NORME SNT-TC-1A ED. 2016 E ISO 9712** (1)
  - **Metodo VT** "Visivo / Dimensionale"
  - **Metodo PT** "Liquidi penetranti"
  - **Metodo MT** "Controllo Magnetico"
  - **Metodo RT** "Controllo radiografico"
  - **Metodo UT** "Controllo ad ultrasuoni"

- **PMI - ANALISI CHIMICHE IN CAMPO** (2)
  - Con Niton
  - Con Spectroport "F", per % Carbonio

- **CERTIFICAZIONI AZIENDALI IN AMBITO SALDATURA** (3)

- **MARCATURA CE, EN 1090 CARPENTERIA METALLICA** (4)

- **VERIFICHE ISPETTIVE CON DRONI IDENTIFICATIVO ENAC** (5)

- **VERIFICA PERIODICA DI ATTREZZATURE A PRESSIONE 2014/68/EU** (6)

- **COLLAUDI FIDUCIARI** (7)

- **DIRETTIVA ATEX 2014/34/UE** (8)

- **MOCA – MATERIALI A CONTATTO CON GLI ALIMENTI"** (9)

- **INNOVAZIONE DIGITALE 4.0:** (10)
  1. Blockchain
  2. Data driven solution
  3. Cyber Security
  4. Change Management
  5. Robotics
  6. Artificial Intelligience

1. NDT
2.

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ISPEZIONI, CERTIFICAZIONI E CONSULENZE

- **MONITORING METHODS AND TRAINING COURSES FOR QUALIFICATION AND CERTIFICATION ACCORDING TO THE SNT-TC-1A - 2016 EDITION - AND ISO 9712 STANDARDS** (1)
  - Method VT "Visual / Dimensional"
  - Method PT "Liquid penetrant"
  - Method MT "Magnetic Testing"
  - Method RT "Radiographic Testing"
  - Method UT "Ultrasonic Testing"
- **PMI - ON-SITE CHEMICAL ANALYSIS** (2)
  - With Niton
  - With Spectroport "F", for % Carbon
- **COMPANY CERTIFICATIONS AND WELDING QUALIFICATIONS - UNI EN 9606 - ASME IX** (3)
- **CE MARKING, EN 1090 STRUCTURAL METAL WORK** (4)
- **INSPECTION ACTIVITIES WITH ENAC APR05 DRONES** (5)
- **PERIODIC VERIFICATION OF PRESSURE EQUIPMENT 2014/68/EU** (6)
- **FIDUCIARY TESTING** (7)
- **ATEX DIRECTIVE 2014/34/EU** (8)
- **MOCA - MATERIALS IN CONTACT WITH FOOD** (9)
- **DIGITAL INNOVATION 4.0:** (10)
  1. Blockchain
  2. Data driven solution
  3. Cyber Security
  4. Change Management
  5. Robotics
  6. Articial Intelligience

1. NDT

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MATEC GROUP SRL
Via I Maggio, 7 - Peschiera Borromeo (Milano) - Italia
T. +39 0255301788 / F. +39 025472158
www.matecgroup.com matec@matecgroup.com