



TYPE APPROVAL CERTIFICATE

Certificate No:
TAP00001AX
Revision No:
1

This is to certify:

That the Bulk Loading Hoses with Permanently Fitted Couplings

with type designation(s)
Danchem, Danoil, Danflon

Issued to
DANTEC Ltd
Wirral, Merseyside, United Kingdom

is found to comply with
DNV class programme DNV-CP-0183 – Type approval – Flexible non-metallic hoses

Application :

Product(s) approved by this certificate are accepted for the non-class scope services and are not evaluated against the DNV classification requirement.

Temperature range: -30°C to +100°C
Max. working press.: 14 bar
Sizes: 25, 38, 50, 65, 75, 80, 100, 150, 200 and 250 mm

Issued at **Høvik** on **2023-04-28**

for **DNV**

This Certificate is valid until **2027-12-30**.
DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Maheshraja Venkatesan**

.....
Zeinab Sharifi
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.



Product description

Composite hoses with permanently end fittings or standard flanges based on following description:

Hoses designation : Danchem, Danoil, Danflon
End fittings : Part No's DAN-FF-25 to Dan-FF-250
End flanges : ASA 300, ASA 150, PN10/16 or PN10 PN16

Material of construction

Inner and outer helix material : Stainless steel 316/Galvanized mild steel/Coated steel
Inner thermoplastic layer : Polypropylene/Nylon/ECTFE/PTFE
Outer thermoplastic cover : Nylon/Polyester/Polypropylene
Fittings & Flanges : ASTM/ASME A105N (Carbon steel) or
ASTM/ASME A182 F304/L, F316/L (Stainless Steel)

Manufacturer of hoses : Dantec Ltd, UK
Manufacturer of couplings : Elaflex GmbH, Germany
Hose assembling location : Dantec Ltd, UK

Application/Limitation

Hose assemblies covered by this certificate are designed as a "Bulk loading hose" and intended to be used for transfer of hydrocarbons, solvents and chemicals.

The hoses are only approved for 200 pressure cycle test and burst test as per IBC Code Ch.4 [5.7.3], no other test has been evaluated by this certificate. Fluid compatibility, electrical resistance and vacuum test have not been performed on these hoses.

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.

Hose assemblies are not fire tested and shall not be used in applications where fire resistance is required.

Hose assemblies are not allowed to be used in the following applications:

- as cargo hoses in LNG/LPG systems
- Systems related to drilling units (applications covered by DNV-OS-E101).
- wherever they might be subject to axial load during operation

Production testing

Each hose assembly is to be hydraulic pressure tested to 1.5 times the maximum working pressure before delivery and shall be delivered with a pressure test report with reference to this certificate.

Type Approval documentation

Manufacturer's datasheet.

Burst, pressure cycle test reports 2009-01-24, 2009-01-26, 2009-01-30, 2009-02-02 and 2009-02-03.

Drawings:

DAN1002-2 dated September 2008
DAN5004-1 dated January 2007
DAN5004-2 dated November 2009
DAN5005-1 dated November 2009
DAN4003-1 dated February 2006
D0794-1 dated June 2004
DAN-CF-25-S4 dated 23.04.2015
DANFF-ASA300 dated 12.03.2018

Renewal burst test reports witnessed by DNV dated 12/12/2022

Tests carried out

200 pressure cycle test and burst test.

Marking of product

For traceability to this Type Approval, the products are at least to be marked with:

- Hose manufacturer's name or trademark
- Date of manufacture (month/year)
- Designation type reference
- Nominal diameter
- Pressure rating
- Temperature rating

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.