

TYPE EXAMINATION CERTIFICATE

Certificate No:
341.1-J-6063

This is to certify that the product
Thermoplastic multi-layer (non-vulcanized) hoses and hose assemblies for the transfer of liquid petroleum gas and liquefied natural gas

with respect to the requirement(s)
EN 13766

with name and/or type designation(s)
Danchem PA

Manufactured by
Dantec Limited
Tarran Way South, Moreton, Wirral, Merseyside, CH46 4TL
United Kingdom

has been assessed, on voluntary basis, with respect to
the conformity assessment procedure described in the standard(s) as amended, and found to comply.

The scope of verification carried out by DNV GL is given overleaf.

This Certificate is valid until **2030-04-02**.

Issued at Høvik, on **2020-04-03**

for
DNV GL AS

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. Except for any liability caused by DNV GL's gross negligence or wilful misconduct, DNV GL's maximum cumulative liability arising out of or related to the use of or reliance on this document shall be limited to USD 300 000. The digitally signed and electronically distributed document is the original and valid certificate. Ref.: www.dnv.com/digitalsignatures

Certificate history

Revision	Description	Issue Date
-	Original certificate	2020-04-03

Products covered by this Certificate

Product Name	Product Description	Material type	Product Std.
Hose assembly	Multi-layer (non-vulcanized) hoses and hose assemblies for the transfer of liquid petroleum gas and liquefied natural gas	Thermoplastics	EN 13766:2019

Verification scope

DNV GL has verified the assessment carried out by the manufacturer on the following aspects:

- The design was verified by burst testing and test reports.
- The manufacturing was checked spotwise.
- Relevant material certificates were verified.
- Final assessment and pressure tests were witnessed.

Design Data

Product Name	DN	Max. working Pressure (PS)	Max. allowable Temp. (TS)	Test Pressure	Min. Burst Pressure
Type 1, Class A	25-250	25 bar	-50/+45°C	37.5 bar	100 bar
Type 1, Class B	25-250	20 bar	-50/+45°C	30.0 bar	100 bar
Type 2, Class A	25-250	13 bar	-196/+45°C	19.5 bar	52 bar
Type 2, Class B	25-250	10.5 bar	-196/+45°C	15.8 bar	52.5 bar

Class A is for use onshore

Class B is for use offshore

Inspections reference

Site Name	Site Address	Inspected by	Date	Report ID
Dantec Limited	Tarran Way South, Moreton, Wirral, Merseyside, CH46 4TL United Kingdom	DNV GL OSL	2020-03-03	A0799696

Documents Reviewed

Document No.	Rev.	Date	Title	Status ¹
P29.1	22	2020-03-09	HOSE ASSEMBLY & TESTING PROCEDURES	A
Composite Hose ITP	03	2020-02-27	ITP composite hose EN 13765/13766	A

¹ A = Approved, AC = Approved with comments, FI = For information

Applications/Limitations

- This Certificate only relates to directives described above. Other directives, covering other phenomena, and also having requirements related to CE marking, might also apply. The welding of the piping nozzles was not subject to this assessment.

Terms and conditions

The certificate is subject to the following terms and conditions:

- In case of damages caused by defective products, directive 85/374/EEC, as amended, will apply
- The Certificate is only valid for the product(s) listed above

The following may render this Certificate invalid:

- Changes in the design or construction of the product(s)

Conformity declaration and marking of product

This Certificate does not give the Manufacturer the right to CE mark the product(s) listed on this Certificate.