DNV·GL

Certificate No:
TAP00002AG

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Air Separator

with type designation(s)
STYQT-0.12-00

Issued to
Jiangsu Nantong Shentong Machinery Co., Ltd.
Nantong, Jiangsu, China

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.7 Pressure equipment

Application :

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

Max. working temp.:	**150°C**
Working media:	**Oil and Air**
Design pressure:	**15.8 bar**

Issued at **Hamburg** on **2021-07-16**
This Certificate is valid until **2026-07-15**.
DNV GL local station: **Nantong**

Approval Engineer: **Le Loi Nguyen**

for **DNV GL**

Jonathan Struwe
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.

Product description

A single type of oil separator tank build in a tubular shape with one flat end (top) and one curved end (bottom) with the overall dimensions of 1320mm*412mm (Height*Diameter).
For technical details of the oil separator tank (e.g. design data, materials, etc.) see section Application/Limitation and approved technical documentation.

Application/Limitation

Applied rules and design code is DNVGL-RU-SHIP Pt.4 Ch.7 'Pressure Equipment' (Edition July 2020, amended August 2020). The pressure vessel is graded in pressure equipment class II according to DNVGL-RU-SHIP Pt.4 Ch.7 Sec.1 [Table 2]. The corrosion allowance is 1 mm (for carbon steel).

All material used for pressurized parts shall be delivered with material certificates according to DNVGL-RU-SHIP Pt.4 Ch.7 Sec.1 Tab. 6 "Compliance documents for pressure equipment class II". The material shall be delivered by a manufacturer holding a valid certificate acc. to DNVGL-CP-0346 'DNV GL approval of manufacturing scheme'.

The manufacturer shall maintain a valid certificate as approved manufacturer for welded pressure equipment in accordance with DNVGL-CP-0261 (Edition December 2018).

For the air inlet, three separate pipe components have been confirmed to be connected with fully penetration butt welds (elbow, transition & flat pipe). No welding work at any pressure parts shall be performed after pressure test and final inspection has been conducted.

Manufacturing, workmanship and testing shall be done according to DNVGL-RU-SHIP Pt.4 Ch.7 Sec.7.

Each pressure vessel is to be:
- subjected to visual and constructional inspection (visual, dimensional, NDT etc.) as well as hydrostatic pressure test with a test pressure of 23.7 bar (= 1.5 times the design pressure) upon completion in the presence of a DNV surveyor,
- certified by DNV and to be delivered with a product certificate.

Type Approval documentation

Marking of product

For traceability to this type approval the products are at least to be marked with:

- the name and domicile of the manufacturer,
- the manufacturer's type designation and serial number,
- the year of manufacture,
- the design pressure,
- the design temperature in °C,
- the hydraulic test pressure, and
- DNV´s identifying mark.

Periodical assessment

The objective of the periodical assessment is to verify that the conditions for the type approval (TA) have not been altered.
The main scope of the periodical assessment will normally include:

- verification of the TA applicant's production and quality system w.r.t. ensuring continued consistent production of the TA products at the TA applicant's own premises and at other companies that are given the responsibility for manufacturing of the products,
- review of TA documentation and that this is still used as basis for the production,
- review of possible changes in the design, the materials, and the performance of the product, and
- verification of the product marking.

For retention of the TA certificate in its validity period the periodical assessments will be carried out every two years.
Unscheduled assessments for retention of the certificate may be carried out when there is reason to believe that the type approval applicant has not adhered to the obligations stipulated in the type approval certificate.

END OF CERTIFICATE