DNV·GL

Certificate No:
TAP0000187

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Vent Head for Tank

with type designation(s)
HXFAP

Issued to
Taixing Haixing Marine Machinery Co.Ltd.
TAIXING JIANGSU, China

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV GL class programme DNVGL-CP-0187 – Type approval – Air vent heads

Application :

Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.
Sizes: DN65/DN200/DN250/DN300

Issued at **Høvik** on **2018-01-25**
This Certificate is valid until **2022-12-31**.
DNV GL local station: **Nanjing**

Approval Engineer: **Adel Samiei**

for **DNV GL**

Marianne Spæren Marveng
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.

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Job Id: **262.1-006690-3**
Certificate No: **TAP0000187**

Product description

Air Vent Head with non-metallic ball float (PE).

Side Cover & body:	Q235-A
Screen:	X2CrNiMoN22-5-3 (S31803 or SAF 2205)
Seat:	Neoprene - NBR

Application/Limitation

The certificate covers design assessment of air vent heads. Installation and other additional requirements related to installation are out of scope of this certificate.

The body and side cover shall be hot dip galvanized (The zinc layer shall be 70 to 100 microns.)
The inner chamber should be coated with epoxy aluminium paint.

The air vent heads are not considered as devices to prevent the passage of flame into cargo tanks. They shall not be installed on oil tanks (flash point<60°C).

Product certificate is not required for air vent heads installed in ship class vessels.

Maximal air velocities (80% of air flow and air velocity at blocking condition) resulted from vacuum test reports are as follows:

Size	Result of Discharge test		Result of flow test	
	Flow rate at blocking condition (m^3/h)	80% of blocking velocity (m/s)	ΔP (mbar)	Dynamic coefficient
DN65	664.8	44.545	221,8	11,99
DN200	1307.9	9.257	219,6	10,35
DN250	3154.3	17.293	254,2	6,40
DN300	6872.2	21.616	137,7	6,50

Type Approval documentation

Tests carried out

Hydraulic test for determination of flow characteristics, Tightness test, Discharge/reverse test, Compression loading test & impact test on non-metallic float

Marking of product

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

- Manufacturer's name or trade mark
- Type designation
- Size

Periodical assessment

For retention of the Type Approval, a DNV GL 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 DNVGL-CP-0338.