

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Blind Flange Valve**with type designation(s)
2080

Issued to

Haitima China Corporation
Zhongshan, China

is found to comply with

DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018****DNV GL class programme DNVGL-CP-0186 – Type approval – Valves****Application :****Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.****Max. working temp.:** -50°C to +200°C**Max. working press.:** 25 bar at 20°C**Sizes:** DN50,65,80,100,125,150,200Issued at **Høvik** on **2019-03-04**This Certificate is valid until **2023-12-31**.for **DNV GL**DNV GL local station: **Oslo Pressure Equipment**Approval Engineer: **Adel Samiei**

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.



Product description

Blind flange valves with end connections as per EN1092-1 (PN10/16/25)
Body thickness according to EN12516-1
Body material: ASTM A351-CF8M, ASTM A216-WCB
Disc material: A351 Gr.CF8M, AISI 304, AISI 316
Disc seal material: PTFE

Application/Limitation

Valves covered by this certificate are approved to be use in ship piping, machinery piping and cargo piping systems.

Pressure/temperature rating is according to EN12516-1 (PN10/16/25). The effect of seat material as per manufacturer document «Pressure-temperature rating» of seats shall be considered.

The valve may not be used where fire safe application is required.

The approval does not include any operating gear for remote control of the valves.

This certificate does not cover valves to be installed in LNG/LPG applications.

Stainless steel grades 304, 316, 316L & 316Ti are not seawater resistant materials and products with the mentioned material grades shall not be used in seawater applications.

Type Approval documentation

Production Testing

All valve bodies shall be subjected by the manufacturer to a hydrostatic test at a pressure equal to 1.5 times the nominal pressure (The nominal pressure is the maximum allowable working pressure at room temperature). The test pressure need not be more than 70 bar in excess of the nominal pressure.

All valves assembly shall be subjected to seat leakage test at 1.1 times maximum working pressure at closed position - Production Testing and acceptance criteria in accordance with API EN12266-1, Rate A.

Certification

The Society's product certificates are required for valves with DN>100 mm having a design pressure, P>16 bar and for ship side valves with DN>100 mm regardless of pressure rating. For other valves, works certificate will be accepted.

Valve bodies shall be delivered with material certificates in accordance with DNVGL-RU-SHIP Pt.4 Ch.6 Sec.2 Table 3. Approval of manufactuer is required for VL and W material certificates.

Marking of product

For traceability to this type approval the valves are to be marked as a minimum with:

- manufacturer's name or trade mark
- valve type designation
- size
- maximum design pressure and temperature
- arrow to indicate direction of flow

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.