

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Magnetic Liquid Level Indicator**with type designation(s)
HhC1, HhC2, HhC3

Issued to

Nantong Huhang Ship Mechanical Fittings Co., Ltd.
Tongzhou, China

is found to comply with

DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL. Magnetic Level Gauges are type approved for application in pipe class III.****Design: Magnetic level gauge**Issued at **Hamburg** on **2017-02-28**This Certificate is valid until **2022-02-27**.DNV GL local station: **Nantong CMC**for **DNV GL**Approval Engineer: **Christian Kaemmer**

Olaf Drews
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.



Job Id: **262.1-024560-1**
Certificate No: **TAP00000VH**

Product description

The magnetic level gauge allows to see the level of liquids in tanks. The level is indicated by non-contact magnetic flaps in the instrument.

Application/Limitation

The magnetic level gauge is approved for water, lubricating oil, flammable liquids and fuel-oil of flash point over 65°C for tanks above double bottom. The magnetic level gauge is not to be used on fuel-and oil tanks on passenger ships. For the use on tanks containing flammable liquids the magnetic level gauge is to be provided with self-closing shut-off devices at each end and is to be protected against mechanical damage.

Temperature range:

0°C up to +120°C

Maximal working pressure:

2 bar

Materials:

Body, Flange	:	1Cr18Ni9Ti
Float	:	1Cr18Ni9Ti
Bed plate	:	Q235A

Type Approval documentation

Tests carried out

Visual inspection, Function test, Pressure and tightness test, Burst pressure test, Vibration test, Inclination test

Marking of product

For traceability to this type approval, each level gauge is to be marked with:

- manufacturer's name or trade mark
- Type
- Nominal pressure

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Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, components and/or materials used comply with type approved documents and/or referenced system, component and material specifications
- Review of possible changes in design of systems, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE