



Certificate no.:
TAS00003WN

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Watertight Hatch

with type designation(s)
SPMS-WT-A-60-HATCH

issued to
Spectoms Engineering Pvt Ltd
Baroda, Gujarat, India

is found to comply with
DNV rules for classification – Ships
DNV rules for classification – High speed and light craft
DNV-OS-C301 – Stability and watertight integrity, Edition July 2020 (Amended August 2021)

Application:

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

Issued at **Høvik** on **2025-08-04**

This Certificate is valid until **2030-08-03**.

for **DNV**

DNV local unit: **India CMC MES**

Approval Engineer: **Grzegorz Wolski**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

SPMS-WT-A-60-HATCH

Is a hatch fabricated from 5.0 mm thick steel plate. Plate is reinforced by four vertical and four horizontal stiffeners 32 x 32 x 3 mm welded to main plate by staggered weld.

Edge of hatch is stiffened by gasket rim welded at 90-degree angle to the main plate.

Hatch is of single acting type with up to eight linked toggles and wheel mounted centrally on hatch.

For further details see the drawings listed under Type Approval documentation below.

Application/Limitation

The application is limited to vessels built to DNV rules and for a design pressure as per table below.

Light opening (W)	Light opening (L)	Stiffener Quantity	Max distance between stiffener	Gasket Rim (H x W)	Profile of Stiffener (H x W)	Toggle Quantity	Hinge Quantity	Pressure Water [kN/m ²]
600	600	4V + 4H	200	35x37	30x30	8	2	120
700	700	4V + 4H	200	35x37	30x30	8	2	120
800	800	4V + 4H	200	35x37	30x30	8	2	120

Watertight appliances are subject to hydrostatic pressure test that can be done before installation on board of the vessel and shall be witnessed by a DNV surveyor. This test is to be made from the side that is most prone to leakage.

Watertight appliances are subject for hose and function testing after installation onboard the vessel, witnessed by a DNV surveyor, except in cases where plan approval of the hatch arrangement determines that tests are not required.

Hatches are calculated with respect to water pressure only, any other loading pattern is to be assessed on a case-by-case basis.

Hatches cannot be used as emergency exit type.

Dimensions of the light opening of the hatch can be smaller than shown on the drawings, if scantlings, maximum distance between the cleats and fabrication method and material are maintained.

Consideration shall be given if located in highly stressed areas or in areas critical to fatigue from global hull loads.

Type Approval documentation

Drawing No. HD-10013 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. HD-10014 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. HD-10015 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. HD-10016 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61427 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61430 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61421 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61428 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61422 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61429 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61446 Rev. 01 dated 07 March 2025 from manufacturer.

Drawing No. SEPL-DW-61447 Rev. 01 dated 07 March 2025 from manufacturer.

Tests carried out

According to DNV rules for classification: Class Programme DNV-CP-0338, September 2022.

Marking of product

The product is to be marked with the following info:

- Manufacturer's name or brand Spectoms Marine Systems
- DNV Type Approval Certificate No. TAS00003WN
- The specific type designation: SPMS-WT-A-60-HATCH

Periodical assessment

DNV surveyor has the permission to perform Certification Retention Survey at any time during the validity period of this certificate. Periodical assessment will be required 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 DNV-CP-0338.

Manufactured by:

Spectoms Marine Systems PVT. LTD., Vadodara, India.

Manufacturers/production sites not listed here shall be assessed by DNV in accordance with DNV CP-0338 prior to manufacturing of products to this TA certificate, and a request for update of the TA certificate shall be submitted to DNV for addition/change of production sites as relevant.