

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000081T

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fire restricting materials (except furniture) for high speed craft

with type designation(s)
WCW3.5FTP10-1

Issued to

Windcat Workboats B.V.
IJmuiden, Netherlands

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2021/1158,
item No. MED/3.32. SOLAS 74 as amended, Regulation X/3, 2000 HSC Code 7, IMO MSC.1/Circ.1457 and IMO
2010 FTP Code

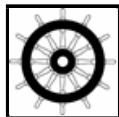
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-06-28**.

Issued at **Høvik** on **2022-06-29**

DNV local station:
Netherlands FIS

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 300,000 USD.



Product description

WCW3.5FTP10-1,

is a carbon sandwich panel composed of a 50 mm core (density 70 g/m²) with a 1.8 mm thick layer of carbon multi axial fibres (1800 g/m²) on both sides. The carbon sandwich panel is insulated with 25 mm FireMaster Marine Plus Alu Blanket (manufactured by Thermal Ceramics with density 64 kg/m³) with a layer of aluminium foil on surface, followed by an air gap of 5 mm and covered by a 15 mm Kuipertec B15 panel (manufactured by Kuiper Holland with density 200 kg/m³).

Total thickness: 98.6 mm

The joints between the FireMaster Marine Plus Blanket are realized with two layers of Kuipertec B15 strips (2 x 15 mm).

The anchoring is by self-drilling stainless steel anchors (3 mm with 25 mm thread) and Ø38 mm friction fit washers. Total length of anchoring 80 mm. For details of the anchor pins pattern for the wall and ceiling please see side 11 and side 13 of Test report No. 17/0660 dated 16 May 2017 by Currenta.

For more details see the document listed under Type Examination documentation.

Application/Limitation

Approved for use as a fire-restricting material in High Speed Craft.

Fire hazard shall be on the insulated side (restricted application).

Only the combined product (composite panels, wall and ceiling, air gap and insulation material) is approved as a fire restricting material. The product is to be installed as tested, with the above details considered being the main issues. See the installation manual for more details.

Application of other FRP materials:

The systems are in general only approved for composite with same exposed laminate as tested. On a case by case basis other equivalent composites may be applied when confirmed acceptable and documented by the maker and found to be acceptable by the Flag administration. The following issues are to be addressed:

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Test report No. 17/0660 dated 16 May 2017 from Currenta GmbH & Co. OHG, Leverkusen, Germany.

Tests carried out

The system is tested according to IMO 2010 FTP Code Part 10.

Marking of product

The installation is to be marked with name and address of manufacturer, type designation, fire-technical rating and MED Mark of Conformity and the USCG number if applicable (see first page).