Certificate No:

DNV·GL

MEDB00006RB

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Surface materials and floor coverings with low flame-spread characteristics: floor coverings

with type designation(s) Artemis 1050 M, 1250 M, 1400 M and 1550 M

Issued to Halbmond Teppichwerke GmbH Oelsnitz/Vogtl., Sachsen, Germany

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2019/1397, item No. MED/3.18c. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

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

This Certificate is valid until 2025-05-11.

Issued at Hamburg on 2020-05-12

DNV GL local station: Magdeburg

Approval Engineer: Timo Linn



Notified Body No.: 0098 for DNV GL SE

Gerhard Aulbert Head of Notified Body

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



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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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004, and amended by Decision No 1/2018 dated February 18th, 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 GL SE 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.

Product description

"Artemis 1050 M, 1250 M, 1400 M and 1550 M" carpets with expandable graphite consisting of:

- Pile layer: 80% wool and 20% polyamide
- Primary backing: 75% polyester, 25% polyamide -_
- Secondary backing: woven polypropylene Coating: styrene butadiene latex

Product name	Nominal	Nominal	Nominal area
	thickness	density	density
	(mm)	(kg/m3)	(kg/m2)
Artemis 1050 M	7.5± 0,75	290 ± 50	2,2
Artemis 1250 M	7.5 ± 0,75	312 ± 50	2,3
Artemis 1400 M	8.0 ± 0,8	305 ± 50	2,4
Artemis 1550 M	9.0 ± 0,9	290 ± 50	2,6

For further details see documents under Type Examination documentation below.

Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

Approved for use as floor covering on any low flame-spread floor covering, steel or non-combustible material.

Approved for all colour variations.

Several layers of floor coverings are acceptable provided that each layer is approved according to the Marine Equipment Directive and bear the mark of Conformity.

The product may also be used as primary deck covering and fulfilles the requirement for surface materials for bulkheads, walls, ceilings and panels.

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

Type Examination documentation

Test report no. 2009-1642 of 2009-07-08 issued by Bodycote Warrington Brandhaus (Industriepark Höchst), Frankfurt am Main, Germany.

Test report no. 2009-1655 of 2009-07-17 issued by Bodycote Warrington Brandhaus (Industriepark Höchst), Frankfurt am Main, Germany.

Certificate has been renewed based on the MED B Certificate 94650-10 HH

Tests carried out

Tested according to IMO Res. MSC.61(67) – FTP Code Annex 1, Part 5 and Part 2 in compliance with IMO Res. MSC.307(88) - 2010 FTP Code clause 8

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.117/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th, 2004 and amended by Decision No.1/2018 dated February 18th, 2019.

Marking of product

Job Id: **344.1-010640-1** Certificate No: **MEDB00006RB**

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval number (see page 1).