DNV·GL

Certificate No:
MEDB00005MB

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 Integrated navigation system (INS)

with type designation(s)
NACOS Platinum INS

Issued to
Wärtsilä SAM Electronics GmbH
Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/4.59. SOLAS 74 as amended, Regulations V/15, V/18, V/19 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.252(83), IMO Res. MSC.302(87)

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

This Certificate is valid until **2021-04-27**.

Issued at **Hamburg** on **2019-10-07**

DNV GL local station:
Hamburg

Approval Engineer:
Jörg Rebel

Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **344.1-009538-1**
Certificate No: **MEDB00005MB**

Product description

A NACOS Platinum INS comprises the following equipment necessary for functioning:

No.	Designation	Type Designation
1	**Transceiver Units**	**One or more units**
	Radar Scanner	as defined in separate certificate*)
	Radar Transceiver	as defined in separate certificate*)
	Turning Units	as defined in separate certificate*)
2	**Main Processing Unit** Display Electronics Platinum (alternatively)	as defined in separate certificate*)
		including Mariner Kit for a) horizontal b) vertical installation as defined in separate certificate*)
3	**Display Units 250mm** (for Radar CAT 2 & ECDIS, alternatively)	as defined in separate certificate*)
4	**Display Units 320mm** (for Radar CAT 1 & ECDIS alternatively)	as defined in separate certificate*)
5	**Operator Units** (alternatively)	as defined in separate certificate*)
6	**Sensor Interfaces** (alternatively)	as defined in separate certificate*)
7	**Network Switches** (alternatively)	as defined in separate certificate*)
8	**Optional Components**	as defined in separate certificate*)

Software:

No.	Designation	Version no.
1	Application software	2.1.x with x ≥ 03.30
2	Operating system of Display Electronics	Microsoft Windows 7 SP1 and Microsoft Windows 10 Pro (version numbers as defined in separate certificate*))

Application/Limitation

- The Integrated Navigation System NACOS Platinum including alert management and operation and monitoring of Centralized Alert Management HMI (CAM-HMI) is accepted according to IMO MSC.252(83), Module C – Alert Management and IMO SN.1/Circ.288.
- At least the tasks collision avoidance and route monitoring shall be integrated in one of the multifunctional workstations. Minimum configuration consists of at least 3 (three) multifunctional workstations.
- IMO SN.1/Circ.MSC.1/Circ.1503: ECDIS that is not updated for the latest version of IMO Standards may not meet the chart carriage requirements as set out in SOLAS regulation V/19.2.1.4.
- Chart data formats: as defined in separate certificate*)
- System interfaces (undisturbed operation): as defined in separate certificate*)
- Backup arrangements (ECDIS): as defined in separate certificate*)

*) The Type Approval certificate TAA00002D3 for NACOS Platinum system platforms in its latest revision at the date of placing the system on the market is part of this certificate, for the relevant revision see also https://approvalfinder.dnvgl.com/.

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Iterface testing: IEC 61162-1 (2016) and IEC 61162-2 (1998)
- Presentation testing: IEC 62288 (2014)
- Performance testing: IEC 61924-2 (2012)

Type Examination documentation

DNV GL No	Document ID	Rev.	Description
3	390 008 807	31 (2019-08)	Operating Instructions NAVIGATION Platinum
2	ANC-D-0000-0146	01B	List of performance test reports for NACOS Platinum
1	TAA00002D3	Latest rev.	Certificate: DNVGL, NACOS Platinum system platforms

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

According to Article 10 of the Council Directive (MED):

- Wheel mark to be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- Wheel mark to be affixed at the end of the production phase.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE