

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00006WH
Revision no.:
3

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

This is to certify:

that the **Heading control system (HCS)**

with type designation(s)
HLD-SC600

issued to

Jiangsu Highland Integration Technology Co.,Ltd.
No.199 Qingfeng Road Sutong Science & Technology Industrial Park
Nantong
226001 Jiangsu
China,

is found to comply with the Implementing Regulation (EU) 2025/1533 for
Item no. **MED/4.16 (Row 1 of 2)**

according to the following requirements:

**SOLAS 74 Reg. V/19, IMO Res. A.342(IX), IMO Res. A.694(17), IMO Res. MSC.191(79), IMO Res. MSC.64(67)
Annex 3, IMO Res. MSC.302(87), SOLAS 74 Reg. V/18**

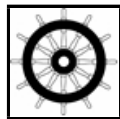
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2026-05-28**

Expiry date: **2031-05-27**

DNV local unit:
Nantong

Approval Engineer:
Kai Möller



Notified Body
no.: **0098**



for **DNV SE**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
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 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 1/2023 dated May 26th, 2023.

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 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.

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

Please see Appendix: Product Description

Application/Limitation

- According to the Commission Implementing Regulation (EU) 2025/1533, the last date for first installation of the product in its functional position on board an EU ship is 2028-09-23.

Type Examination documentation

Document No.	Rev.	Title
DNV-05-31-HLD-TCS600	V01B	Report: Jiangsu HLD, Tests for HLD-TCS600 acc. to IEC 62923-1/-2 and IEC 61162-1 (2016)
HLD0700AZ	2.3	Installation manual for HLD-SC600
HLD0700CZ	1.2	Operation manual for HLD-SC600
A15-070-WT	2016-01-26	Report: SITIIAS, Tests for HLD-SC600 acc. to IEC 60945, 8 to 11 and 12.1
9049 15 66474_HLD-SC600	1	Report: DNV GL, Tests for HLD-SC600 acc. to ISO 11674 (2006) and IEC 61162-1 (2010)
HLD151223	2015-12-22	Report: Beijing HLD, Tests for HLD-SC600 and HLD-SC200 acc. to IEC 62288 (2014)
-	2021-05-19	Report: Beijing HLD, Tests for HLD-SC600 and HLD-SC200 acc. to ISO 11674 (2019), IEC 61162-1 (2016) and IEC 62923-1/-2IEC 62288 (2014)

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Interface testing: IEC 61162-1 (2016) and IEC 61162-2 (1998)
- Presentation testing: IEC 62288 (2021) incl. Amendment 1 (2024)
- Bridge alert management testing: IEC 62923-1 (2018) and IEC 62923-2 (2018)
- Performance testing: ISO 11674 (2019)

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.

APPENDIX

Product Description

Certificate no.:
MEDB00006WH
Revision no.:
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The Heading Control System (HCS) HLD-SC600 consists of the following equipment necessary for the heading control function:

HLD-SC600		
Equipment	Type	Software Version
Automatic Control Unit	HLD-ACU600	2.x
Alarm Display Unit	HLD-ADU600	2.x
Steering Control Unit	HLD-SCU600	2.x
Rudder Feedback Unit	HLD-RFU600 or HLD-RFU200	1.x
Lever Drive System	HLD-LD600 or HLD-LD200	none
Steering Mode Selector Switch	HLD-SW200	none
Steering Connection Terminal Strip	HLD-SCT600	2.x
Signal Connection Terminals	HLD-ACT600	2.x