



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
BG24PTB00001_01

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Kongsberg Maritime AS (Kongsberg)

地址/Address

Kirkegardsveien 45, P.O. Box 483, NO-3601 Kongsberg, Norway

产品名称/Product

导航设备
Navigation Equipment

认可标准/Approval Standard

- 国际海事组织海安会决议MSC. 466(101)《船载航行显示器有关航行信息显示的性能标准》(MSC. 191(79)决议)修正案
IMO MSC.466(101) Amendments To The Performance Standards For The Presentation Of Navigation-Related Information On Shipborne Navigational Displays (Resolution MSC.191(79))
- 国际海事组织海安会决议MSC. 232(82)《通过经修订的电子海图显示与信息系统(ECDIS)性能标准》
IMO Resolution MSC.232(82) Adoption of the Revised Performance Standards for Electronic Chart Display and Information Systems (ECDIS)
- 国际海事组织大会决议A. 694(17)《作为全球海上遇险和安全系统(遇险和安全系统)组成部分的船载无线电设备和电子助航设备的一般要求》
IMO Resolution A.694(17) General Requirements for Shipborne Radio Equipment Forming Part of The Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids
- 国际海事组织海安会决议MSC. 191(79)《船载航行显示器有关航行信息显示的性能标准》
IMO Resolution MSC.191(79) Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
- 国际海事组织海安会通函 MSC. 1/Circ. 1503/Rev. 2《电子海图显示与信息系统良好实施指南》
IMO MSC.1/Circ.1503/Rev.2 ECDIS – Guidance for Good Practice
- IEC 61174:2015 Maritime Navigation and Radio communication Equipment and Systems - Electronic Chart Display And Information System (ECDIS) - Operational and Performance Requirements, Methods of Testing and Required Test Results
- IEC 60945:2002/COR1:2008 Maritime Navigation and Radiocommunication Equipment and Systems - General Requirements - Methods of Testing and Required Test Results
- IEC 62288:2021 Maritime navigation and radio communication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results

证书有效期至/This Certificate is valid until 2029年07月01日/ Jul. 01,2029

发证机构/中国船级社南京办事处
Issued by CCS Nanjing Office

签发日期 2024年12月20日
Date Dec. 20,2024

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体,必须同时使用。纸质证书每页均须由本社盖章方为有效,电子证书含数字签名方为有效,本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时,可以向本社检验机构咨询。本证书凡是未注明版本的规范,其(发证时)最新版本适用于本证书。
This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices. For Rules with no version indication, their latest version (at the time of issuance of the certificate) applies to the this certificate.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P024-17891202

用于/Intended for

高速船舶/High speed ship, 船舶/Ships

产品明细/Product Description**电子海图显示与信息系统 (ECDIS) /Electronic Chart Display and Information System (ECDIS) (M0001)**

名称/Name	属性(值)/Value	单位/Unit
型号/Type	K-Bridge ECDIS & K-Bridge ECDIS Standalone (SA)	
电源/Power Source	AC100-240, DC 24	V
屏幕尺寸/Screen Size	24, 27, 32, 43, 55	inch
是否可作为后备布置/Whether for Back-Up Arrangements	Yes	
是否具有RCDS 模式功能/Whether Includes Rcds Mode of Operation	Yes	
是否具有雷达图像叠加功能/Whether Includes Radar Overlay Function	Yes	
S-57 版本号/S-57 Edition	3.1	
S-52 版本号/S-52 Edition	4.0	
表示库版本号/Preslib Edition	4.0	
S-63 版本号/S-63 Edition	1.2	
ENC 文本格式/ENC Format	S57, S63 and SENC	
系统组成/System Component	K-Bridge ECDIS: K-Bridge ECDIS Operator Station and Software modules; K-Bridge ECDIS Standalone (SA): K-Bridge ECDIS Standalone (SA) Operator Station and Software modules	
软件版本号/Software Version	9.1. x onwards	
罗经安全距离/Compass Safe Distance	90	cm

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : BG20PPP20002, NP24PPP03655

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : See "Additional page"

试验报告日期/ Test Report Date :

试验单位/ Laboratory: See "Additional page"

试验单位地址/ Test Address: See "Additional page"

认可后的产品检验方式/ Method of Product Inspection after Approval

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:
认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval,

related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内，本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 在本证书有效期内，品牌拥有方和产品制造企业之间的授权协议的失效将自动导致本证书的失效。

During the period of validity, this certificate will automatically be ineffective in case of the invalidity of the authorization agreement between the licensor and the manufacturer(s).

备注/Remarks

1. 本证书由原型式认可证书 (No. BG19PTB00028_01) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. BG19PTB00028_01.

2. Other product description of Kongsberg Maritime ECDIS:

Kongsberg Maritime ECDIS is available in two versions:

1) K-Bridge ECDIS: with support for Multi-Function Display (MFD) in combination with other K-Bridge systems

2) K-Bridge ECDIS Standalone(SA) : intended as standalone ECDIS

Note: Regarding the definition of K-Bridge Operator Station, K-Bridge ECDIS Standalone(SA) Operator Station and Software Modules, please refer to type approval certificate BG24PTB00001_06.

3. The system shall be installed according to manufacturers manuals as attached in this certificate.

4. 本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society.

However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社卑尔根办事处

CCS Bergen Office

注：本证书含有附页，共1页

Note: The certificate is attached with additional 1 page(s)

1. Kongsberg Maritime ECDIS Approval Test Reports

No.	Report No.	Report date	Lab./Test Address	Note
1	6811479	2024.08.20	Kongsberg Maritime/Norway	Renewal testing & FAT report
2	421041/A	2017.06.02	Kongsberg Maritime/Norway	Type Approval test report, K-Bridge & K-Nav ECDIS- IEC61174 Ed.4.0
3	418734/A	2017.01.09	Kongsberg Maritime/Norway	S-64 Edition 3.0.1- PresLib 4.0.1
4	419850/A	2016.11.23	Kongsberg Maritime/Norway	K-Bridge and K-Nav ECDIS IEC 62288 (2014) test report
5	401093/C	2015.05.20	Kongsberg Maritime/Norway	ECDIS Performance tests with Navtor SDK
6	385171(A)	2013.07.09	Kongsberg Maritime/Norway	Type Examination Test Report K-ECDIS sensor interface
7	1106172/C	2010.01.04	Kongsberg Maritime/Norway	K-Bridge ECDIS, System test report
8	309463/A	2007.01.18	Kongsberg Maritime/Norway	K-Bridge ECDIS, General Performance Test
9	110-0004215-A	2023.01.06	Kongsberg Maritime/Norway	Kongsberg Maritime, K-Bridge v9 HMI Test Report
10	110-0052052-A	2023.12.19	Kongsberg Maritime, Norway	Kongsberg Maritime,K-Bridge 9 Test Report
11	480424-A	2021.09.09	Kongsberg Maritime, Norway	K-Bridge / K-Nav VDR Communication IEC 61162-450:2018 Type Approval Report
12	421171-A	2016.06.29	Nemko, Norway	RS422/485 External module, HT 00262 OPT-A1; E13184.01

2.Kongsberg Maritime ECDIS manuals

No.	Document Id.	Rev.	Description
1	110-0054818/D	D	Operator Manual:K-Bridge ECDIS and Planning Station Release 9.1
2	110-0061457/D	D	Operator Manual:K-Bridge ECDIS and Planning Station Standalone Release 9.1
3	110-0061458/D	D	Operator Manual:K-Bridge ECDIS and Planning Station
4	468380	C	Maintenance Manual:K-Bridge ECDIS/Radar/Conning Standalone OS PPC
5	468823	C	Installation Manual:K-Bridge ECDIS/Radar/Conning Standalone OS PPC
6	455906	A	Installation Manual:ECDIS and Radar Display Distances