



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
HB22PTA00015

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.

品牌拥有方/ Licensor

Northrop Grumman Sperry Marine B.V.
Woltmanstrasse 19, D-20097 Hamburg, Germany

授权制造企业/Authorized Manufacturer

Hein & Oetting Feinwerktechnik GmbH
Merkurring 86,22143 Hamburg-Germany

产品名称/Product

磁罗经
Magnetic Compass

认可标准/Approval Standard

- 国际海事组织大会决议IMO A. 382 (X) 《磁罗经的配置和性能标准》
IMO A.382(X) Magnetic Compasses Carriage and Performance Standards
- ISO 25862:2019 《航海磁罗经技术要求——航海磁罗经、罗经柜和方位读数仪》
ISO 25862:2019 Ships and Marine Technology -- Marine Magnetic Compasses, Binnacles and Azimuth Reading Devices

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

磁罗经/Magnetic Compass (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	JUPITER	
等级/Grade	A class	
指向误差/Directional Error	< 0.5°	
摩擦误差/Friction Error	< 0.5°	

批准的图纸/Approved Drawings

图纸批准号/Drawings Approval No.: NP22PPP03081, NP09A00739

证书有效期至/This Certificate is valid until 2026年01月16日/Jan. 16,2026

发证机构/Issued by 中国船级社汉堡分社
Date 2022年11月30日
Nov. 30,2022

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Form No: T02.

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:P022-17310065

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : 21DE-00285
 试验报告日期/ Test Report Date : 2021-07-09
 试验单位/ Laboratory: PAConsult GmbH
 试验单位地址/ Test Address: Birkenau 3, 22087 Hamburg, Germany

试验报告编号/ Test Report No. : 2022/01 Rev. 1.1
 试验报告日期/ Test Report Date : 2022-04-26
 试验单位/ Laboratory: Cassens & Plath GmbH
 试验单位地址/ Test Address: Am Lunedeich 131, 27572 Bremerhaven, Germany

试验报告编号/ Test Report No. : 2021/03 Rev. 1.1
 试验报告日期/ Test Report Date : 2021-05-31
 试验单位/ Laboratory: Cassens & Plath GmbH
 试验单位地址/ Test Address: Am Lunedeich 131, 27572 Bremerhaven, Germany

试验报告编号/ Test Report No. : 454.MC/NGC Jupiter/4
 试验报告日期/ Test Report Date : 2020-10-09
 试验单位/ Laboratory: Federal Maritime and Hydrographic Agency
 试验单位地址/ Test Address: Bernhard-Nocht-str. 78, 20359 Hamburg, Germany

试验报告编号/ Test Report No. : 256-21 issue1
 试验报告日期/ Test Report Date : 2021-08-02
 试验单位/ Laboratory: TRE0 Labor fuer Umweltsimulation
 试验单位地址/ Test Address: Tempowerkring 19, 21079 Hamburg, Germany

试验报告编号/ Test Report No. : 9049 15 48909 157
 试验报告日期/ Test Report Date : 2016-03-02
 试验单位/ Laboratory: Hein & Oetting Feinwerktechnik GmbH
 试验单位地址/ Test Address: Merkurring 86, 22143 Hamburg-Germany

试验报告编号/ Test Report No. : 313-21 issue1
 试验报告日期/ Test Report Date : 2021-09-09
 试验单位/ Laboratory: TRE0 Labor fuer Umweltsimulation
 试验单位地址/ Test Address: Tempowerkring 19, 21079 Hamburg, Germany

试验报告编号/ Test Report No. : BSH6211/003/04
 试验报告日期/ Test Report Date : 2004-09-20
 试验单位/ Laboratory: Bundesamt fuer Seeschifffahrt und Hydrographie
 试验单位地址/ Test Address: Bernhard-Nocht-str. 78, 20359 Hamburg, Germany

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

认可后的产品检验由制造厂按本社批准的产品检验计划进行，本社在文件审核合格后颁发船用产品证书。
 After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society, and the Marine Product Certificate is issued by the Society upon satisfactory documents review.

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. 型式认可A证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进行。

Those who have obtained the certificate of type approval A should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

6. 本认可证书的有效性与品牌拥有方和产品制造企业之间的授权协议保持一致，但不得超过4年。

The period of validity of this certificate is consistent with that of the agreement between the licensor and the manufacturer(s), but in no case it can over 4 years.

7. 在本证书有效期间，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. HB22PTA00004_04) 变更并替代原证书。

This Certificate is modified from and supersedes the previous Type Approval Certificate No. HB22PTA00004_04.

2. 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.

3. 刻度盘直径 / Card Diameter: 180mm

系统组成 / System consisting of :

Product	Type	Manufacturer
Magnetic compass JUPITER	2060/2059	Hein & Oetting Feinwerktechnik GmbH
Magnetic compass Binnacle NAVIPOL I	4054	Hein & Oetting Feinwerktechnik GmbH
Magnetic compass Binnacle NAVIPOL II	4085	Hein & Oetting Feinwerktechnik GmbH
Magnetic compass Binnacle NAVIPOL III	4105	Hein & Oetting Feinwerktechnik GmbH
Azimuth device PV24	2695	Hein & Oetting Feinwerktechnik GmbH
Magnetic compass Binnacle NAVIPOL CP1	5041	Cassens & Plath GmbH
Reflexion Tube NAVIPOL CP1	5041-1000	Cassens & Plath GmbH
By-pass Arrangement NAVIPOL CP1	5041-2000	Cassens & Plath GmbH
Azimuth device PV25	5042	Cassens & Plath GmbH

4. It is Northrop Grumman Sperry Marine B. V's responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

中国船级社汉堡分社
CCS Hamburg Branch