



中国船级社  
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.  
HB25PTB00055

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

HEROSE GMBH ARMATUREN UND METALLE

地址/Address

Elly-Heuss-Knapp-Str.12,23843,Bad Oldesloe

产品名称/Product

阀  
Valve

认可标准/Approval Standard

- 中国船级社《散装运输液化气体船舶构造与设备规范》（2022）及其变更通告 第3篇第5章  
Chapter 5, Part Three of China Classification Society Rules for construction and equipment of ships carrying liquefied gases in bulk 2022 and its Change Notices
- 中国船级社《钢质海船入级规范》（2024）及其变更通告 第3篇第2章  
Chapter 2, Part Three of China Classification Society Rules for Classification of Sea-Going Steel Ships 2024 and its Change Notices
- 中国船级社《船舶应用天然气燃料规范》（2024）及其变更通告 第3, 4, 13章  
Chapter 3,4,13 of China Classification Society Rules for Ships Using Natural Gas Fuels 2024 and its Change Notices.
- 中国船级社《船舶应用氨燃料指南》（2022）  
Chapter 3,6 of China Classification Society Guidelines for Ships Using Ammonia fuel 2022
- 中国船级社《船舶应用甲醇乙醇燃料指南》（2022）  
Chapter 3,6 of China Classification Society Guidelines for Ships Using Methanol/Ethanol fuel

用于/Intended for

船舶/Ships

产品明细/Product Description

低温阀/Cryogenic Valve (M0001)

名称/Name	属性(值)/Value	单位/Unit
产品名称/Product Name	Cryogenic Check Valves	
型号/Type	See attachment	
公称压力/Working Pressure	See attachment	bar

证书有效期至/This Certificate is valid until 2029年06月20日/ Jun. 20,2029

发证机构/Issued by 中国船级社汉堡分社  
China Classification Society Hamburg Branch

签发日期/Date 2026年02月20日  
Feb. 20,2026

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 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:P026-28242467

公称直径/Nominal Diameter	See attachment	mm
适用温度/Applicable Temperature	See attachment	
阀体材质/Valve Body Material	See attachment	
适用介质/Applicable Medium	Cryogenic gases, Argon, Krypton, Oxygen, Nitrogen, Air, Carbon dioxide, Gases and vapours, Ammonia, Methanol, Ethanol, Cryogenic gases, LNG	

**低温阀/Cryogenic Valve (M0002)**

名称/Name	属性(值)/Value	单位/Unit
产品名称/Product Name	Cryogenic Globe Valves	
型号/Type	See attachment	
公称压力/Nominal Pressure	See attachment	bar
公称直径/Nominal Diameter	See attachment	mm
适用温度/Applicable Temperature	See attachment	
阀体材质/Valve Body Material	See attachment	
适用介质/Applicable Medium	Cryogenic gases, Argon, Krypton, Oxygen, Nitrogen, Air, Carbon dioxide, Gases and vapours, Ammonia, Methanol, Ethanol, Cryogenic gases, LNG	

**低温阀/Cryogenic Valve (M0003)**

名称/Name	属性(值)/Value	单位/Unit
产品名称/Product Name	Cryogenic Safety Valves	
型号/Type	See attachment	
公称压力/Nominal Pressure	See attachment	bar
公称直径/Nominal Diameter	See attachment	mm
适用温度/Applicable Temperature	See attachment	
阀体材质/Valve Body Material	See attachment	
适用介质/Applicable Medium	Cryogenic gases, Argon, Krypton, Oxygen, Nitrogen, Air, Carbon dioxide, Gases and vapours, Ammonia, Methanol, Ethanol, Cryogenic gases, LNG	

**低温阀/Cryogenic Valve (M0004)**

名称/Name	属性(值)/Value	单位/Unit
产品名称/Product Name	Cryogenic Strainer	
型号/Type	See attachment	
公称压力/Nominal Pressure	See attachment	bar
公称直径/Nominal Diameter	See attachment	mm
适用温度/Applicable Temperature	See attachment	
阀体材质/Valve Body Material	See attachment	
适用介质/Applicable Medium	Cryogenic gases, Argon, Krypton, Oxygen, Nitrogen, Air, Carbon dioxide, Gases and vapours, Ammonia, Methanol, Ethanol, Cryogenic gases, LNG	

**批准的图纸/Approved Drawings**

图纸批准号/ Drawings Approval No. : NP24PPP03546, NP25PPP01366

**产品认可试验报告/ Approval Test Report**

试验报告编号/ Test Report No. : HPC1461042  
 试验报告日期/ Test Report Date : 2015-02-28

试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: Herose test plan for cryogenic valves witnessed by LR dated 2015-06-03  
试验报告日期/ Test Report Date: 2015-06-03  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: Herose test plan for cryogenic safety valves witnessed by LR dated 2015-07-25  
试验报告日期/ Test Report Date: 2015-07-05  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: HEROSE-Ref-No. 592393 Pos. 10  
试验报告日期/ Test Report Date: 2016-01-19  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: 2018-16944  
试验报告日期/ Test Report Date: 2018-09-28  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: Herose test plan for cryogenic valves witnessed by LR dated 2019-10-08  
试验报告日期/ Test Report Date: 2019-10-08  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: CCS-20-01, 02, 03  
试验报告日期/ Test Report Date: 2020-08-17  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

试验报告编号/ Test Report No.: Herose test plan for cryogenic valves witnessed by NK dated 2023-06-21+27  
试验报告日期/ Test Report Date: 2023-06-27  
试验单位/ Laboratory: HEROS GMBH Armaturen und Metalle  
试验单位地址/ Test Address: Elly-Heuss-Knapp-Strasse 12, 23843, Bad Oldesloe, Germany

## 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.

#### 备注/Remarks

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.

本证书由原型式认可证书（No. HB24PTB00028）变更并替代原证书。

This Certificate is modified from and supersedes the previous Type Approval Certificate

No. HB24PTB00028

**中国船级社汉堡分社**

**CCS Hamburg Branch**

注：本证书含有附页，共2页

Note: The certificate is attached with additional 2 page(s)

**Production Descriptions**

## Cryogenic Globe Valves:

型号 /Type	公称直径 /Nominal Diameter	公称压力 /Nominal Pressure	阀体材质/Valve Body Material	适用温度/Applicable Temperature	Drawing approval No.	
01272	DN10 - DN50	PN50	1. 4409 / CF3M	-255° C up to 120° C	NP24PPP03546	
01341	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C		
01341	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
01341	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C		
01343	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C		
01343	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
01343	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C		
01641	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C		
01641	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
01641	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C		
01643	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C		
01643	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
01643	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C		
01651	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C		
01741	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C		
01741	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
01741	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C		
01743	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C		
01743	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
01743	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C		
01841	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C		
01841	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
01841	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C		
01851	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C		
03641	DN15 - DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
03641	DN200	PN20	1. 4308 / CF8	-196° C up to 120° C		
03651	DN15 - DN150	PN40	1. 4308 / CF8	-196° C up to 120° C		
03841	DN15 - DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
03841	DN200	PN20	1. 4409 / CF3M	-255° C up to 120° C		
03843	DN15 - DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
03843	DN200	PN20	1. 4409 / CF3M	-255° C up to 120° C		
03851	DN15 - DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
11C01	DN10 - DN50	PN63	1. 4571/316Ti	-269° C up to 80° C		
01843	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C		
01843	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C		
01843	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C		
01845	DN10 - DN50	PN50	1. 4409 / CF3M	-255° C up to 120° C		NP25PPP01366

**Cryogenic Strainer:**

型号 /Type	公称直径/Nominal Diameter	公称压力 /Nominal Pressure	阀体材质/Valve Body Material	适用温度/Applicable Temperature	Drawing approval No.
08417	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C	NP24PPP03546
08417	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C	
08417	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C	
08717	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C	
08717	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C	
08717	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C	
08732	DN15 - DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C	

**Cryogenic Safety Valves:**

型号 /Type	d0	公称压力/Nominal Pressure	Material (inlet body)	适用温度/Applicable Temperature	Drawing approval No.
06383	7-23	PN50	1. 4301 / 1. 4404 / 1. 4571	-255° C up to 185° C	NP24PPP03546
06388	7-23	PN50	1. 4301 / 1. 4404 / 1. 4571	-196° C up to 185° C	NP24PPP03546
06801	12. 5-23	PN40	1. 4571 / 316Ti	-270° C up to 225° C	NP24PPP03546

**Cryogenic Check Valves:**

型号 /Type	公称直径/Nominal Diameter	公称压力/Nominal Pressure	阀体材质/Valve Body Material	适用温度/Applicable Temperature	updated drawing approval
05414	DN10 - DN100	PN50	1. 4308 / CF8	-196° C up to 120° C	NP24PPP03546
05414	DN150	PN40	1. 4308 / CF8	-196° C up to 120° C	
05414	DN200	PN25	1. 4308 / CF8	-196° C up to 120° C	
05714	DN10 - DN100	PN50	1. 4409 / CF3M	-255° C up to 120° C	
05714	DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C	
05714	DN200	PN25	1. 4409 / CF3M	-255° C up to 120° C	
05719	DN15 - DN150	PN40	1. 4409 / CF3M	-255° C up to 120° C	
05719	DN200	PN20	1. 4409 / CF3M	-255° C up to 120° C	