

中国船级社 CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No. HB24PTB00046

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

EXMAR GmbH

地址/Address

Am Taubenbaum 6, D-61231 Bad Nauheim, Germany

产品名称/Product

机械接头 **Mechanical Joints**

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》第3篇第2章 Chapter 2, Part Three of China Classification Society Rules for Classification of Sea-Going Steel Ships

用于/Intended for

船舶/Ships

产品明细/Product Description

机械接头/Mechanical Joint (M0001)

名称/Name	属性(值)/Value	单位/Unit
产品名称/Product Name	24° Compression Fittings, L-and S-series,	
) 開石柳/IIoduct Name	made of stainless steel.	
型号/Type	Refer to the addtional page	
型式/Model	Refer to the addtional page	
壳体材料/Casing Material	Refer to the addtional page	
公称直径/Nominal Diameter	Refer to the addtional page	
最大允许工作压力/Maximum Allowable	Pefer to the additional rage	
Working Pressure	Refer to the addtional page	
设计温度/Design Temperature	Refer to the addtional page	$^{\circ}$ C

his Gertificate is valid until

2029年09月14日/Sep. 14,2029

2024年11月18日

Nov. 18,2024

签发日期 LASSISICATION IN Date

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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 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.



UTN:P024-41103549

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: HB16A00020

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.: IMA No.: C080/11 试验报告日期/ Test Report Date: 2011-10-27

试验单位/Laboratory: IMA DRESDEN

试验单位地址/ Test Address: Wilhelmine-Reichard-Ring 4, D-01109 Dresden, Germany

试验报告编号/ Test Report No.: 15-010240 试验报告日期/ Test Report Date: 2012-06-27

试验单位/Laboratory: DNV-GL

试验单位地址/ Test Address: Langfeldstr. 117, D-8500 Frauenfeld, Switzerland

试验报告编号/ Test Report No.: C70/04 试验报告日期/ Test Report Date: 2005-02-03

试验单位/Laboratory: IMA DRESDEN

试验单位地址/ Test Address: Wilhelmine-Reichard-Ring 4, D-01109 Dresden, Germany

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

按规范只认可不进行产品检验的产品/The product approved only in term of the rules: 认可后的产品由制造厂检验合格后签发合格证明,并连同该产品的本社认可证书复印件一并交付用户,制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。

After approval, product inspection should be carried out by the Manufacturer. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

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. 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 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.

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. HB20PTB00057)换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. ${\tt HB20PTB00057}.$

- 1. The approved mechanical joints may be used in the system as specified in Table 2.5.3.1(2) and Table 2.5.3.1(3) of Section 5, Chapter 2, Part Three of China Classification Society Rules for Classification of Sea-Going Steel Ships.
- 2. The approved material of mechanical joints is to be compatible with piping material, internal media and external media.
- 3. The installation of mechanical joints is to be in accordance with the manufacturer's assembly instructions;
- 4. All assemblies must be made with machines/special tools/gauges that are approved by manufacturer;
- $5.\,\mathrm{Tube}$ preparation and final installation must be conducted by personal which is trained and currently certified by manufacturer.
- 6. Place of Production: SERTO AG Langfeldstrasse 117, 8500 Frauenfeld Switzerland

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)

Product Description:

24° Compression Fittings, L-and S-series, made of stainless steel.

Type:

Component:	Type Designation:	
Stud couplings	Type Designation.	
GEV	Straight male adaptor fittings	
WEV	Male adaptor elbow fittings	
TEV	Male adaptor T-fittings	
LEV	Male adaptor L-fittings	
GEV-D	Straight fittings for temperature sensors	
GAV	Straight female adaptor fittings	
MAV	Manometer fittings	
EMAS	Adjustable manometer fittings	
Tube to tube couplings	,	
GV	Straight fittings	
wv	Elbow fittings	
TV	T-fittings	
KV	Cross fittings	
VSA	Locking fittings	
GSV*	Bulkhead fittings	
WSV*	Bulkhead elbow fittings	
Adjustable couplings		
ESS	Male adaptor standpipe union	
EWV	Adjustable elbow fittings	
WEE	Adjustable male adaptor elbow fittings	
ETV	Adjustable T-fittings	
ELV	Adjustable L-fittings	
VKO	Straight unions with taper and O-ring	
VKOR	Straight reducing unions with taper and O-ring	
GKO	Straight fittings with taper and O-ring	
EGKO	Straight male adaptor unions with taper and O-ring	
EWKO	Adjustable elbow fittings with taper and O-ring	
ETKO	Adjustable T-fittings with taper and O-ring	
ELKO	Adjustable L-fittings with taper and O-ring	
EMAKO	Adjustable manometer fittings with taper and O-ring	
GRKO	Reducing fittings with taper and O-ring	
Welding couplings		
GAS	Straight weld-on fittings	
GASK	Straight weld-on fittings with weldable cone and O-ring	
WAS	Elbow weld-on fittings	
ESV**	Weld-in bulkhead fitting	

SKO	Weldable cones		
SKR	Weldable reducing cones		
Reduction couplings			
RS	Reducing adaptor		
RS-WD	Reducing adaptor		
GR	Straight reducing fittings		
KR	Reducing taper standpipe fittings		
TR	Reducing T-fittings		

Model	Pipe O.D.(mm)	Nom. Press.(PN)	Standard	Design Temperature(°C)	
	6 - 10	500	Material Stainless steel:	Stainless steel fittings: -55 °C to 400 °C	
Series L (light)	12 - 18	400	1.4571(316Ti) & NBR: -35 according to DIN EN 10216-5 Design: according to DIN 200 °C	NBR: -35 °C to 100 °C	
	22 - 42	250		Temperature Sealing): -50°C to +100 °C	
Series S (heavy)	6 - 10	800		FPM (FKM) : -20 ℃ to	
	12 - 14	630			200 °C PTFE: -60 °C to 200 °C
	16 - 25	420			
	30-38	320			

- *Not accepted through fire-resisting divisions and watertight bulkheads and decks;
- ** Where "A" class division are penetrated, such penetration shall be tested in accordance with the Fire Test Procedure Code of the IMO A. 754 (18). However, where a pipe penetration is made of steel or equivalent material having a thickness of 3 mm or greater and a length of not less than 900 mm(preferably 450 mm on each side of the division), and there are no openings, testing is not required. Such penetrations shall be suitable insulated by extension of the insulation at the same level of the division. This means that the welding couplings are to be fitted at least with pipes of 450 mm length on each end having a wall thickness of 3 mm or greater;
- The nominal pressure ratings PN represent the max. allowable working pressure inclusive of pressure peaks. Pressure reductions are required for temperatures 20 °C and above according to the instructions of the manufacturer.

/ **END**