

# 中国船级社

CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-HQ002115

# 型式认可证书

# CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. LD15T00002

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/Product Approved

# 机械接头

**Mechanical Joints** 

制造厂/Manufacturer

# Parker Hannifin Corporation

Riverside Road, Pottington Business Park, Pottington, Barnstaple, UK

附加标志/ Notations

无/Nil.

认可标准/Approval Standard

1.中国船级社《钢质海船入级规范》(2012)及其修改通报第3篇 第2章 Chapter 2, Part Three of CCS Rules for the Classification of Sea-going Steel Ships 2012 and its Amendments

证书有效期至/ This Certificate is valid until

2019年1月5日 / Jan. 5, 2019

发证机构

中国船级社伦敦办事处

Issued by CCS London Office 签发日期

2015年3月2日

Date

本证书根据中国船级社《钢质海船入级规范》及有关程序规定察发。关于证书的有关规定见本证书页背面的说明。当本证书包括多页纸张时,则所有证书页为一个整体,必须同时使用。每一页证书均须由本社盖靠方为有效。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。本认可证书不代表本社对个体产 品质量的检验。有关各方对所特证书的真实性有疑问时,可以向我社检验机构咨询。

This Certificate is issued pursuant to the Rules for Classification of Sea-going Steel Ships and related procedures of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate consists of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society 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. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices





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本地檢验机构/CCS Local Office:

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CCS London Office

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### 产品明细/ Product Description

机械接头/Mechanical Joints 型号/Modle

: A-LOK Tube Fittings in Catalog 4230/4233, Refer to attached pages for details.

# 批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No.

LD10T00011

### 产品认可试验报告/Approval Test Report

试验报告编号/Test Report No. 试验报告日期/Test Report Date

试验单位/ Laboratory 试验单位地址/ Test Address 试验报告编号/Test Report No. 试验报告日期/Test Report Date 试验单位/Laboratory

试验单位地址/ Test Address 试验报告编号/Test Report No. 试验报告日期/Test Report Date

试验单位/Laboratory 试验单位地址/ Test Address 试验报告编号/Test Report No. 试验报告日期/Test Report Date

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试验单位/ Laboratory 试验单位地址/ Test Address

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试验单位地址/ Test Address

PR1875 1982-07-01

British Hydromechanics Research Association

Cranfield, Bedfordshire, MK43 OAJ, UK G342/85

1985-07-01

SIRA Test and Certification Ltd.

Rake Lane, Eccleston, Chester, Cheshire, CH4 9JN, UK

C690 1989-08-01

SIRA Test and Certification Ltd.

Rake Lane, Eccleston, Chester, Cheshire, CH4 9JN, UK :

: C1068 1994-06-01

SIRA Test and Certification Ltd. :

Rake Lane, Eccleston, Chester, Cheshire, CH4 9JN, UK

: CCS-20101217 : 2010-12-16 :

Parker Hannifin Corporation :

Riverside Road, Devon, Barnstaple, UK

Engineering Performance Report EPR 4230/4233.1 2005-04-01 .

Parker Hannifin test facilities/Wyle Labs :

Alabama / Huntsville Alabama

# 产品适用范围/Application of the Product

1. Ships and Offshore Installations, and, 2. See attached pages.

# 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,则有关图实机个体应经检验机构审批。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.

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

按照规范只认可不进行产品检验的产品/The product approved only in term of the rules:

认可后的产品检验由制造厂按本社批准的产品检验计划进行检验,经检验合格后由制造厂签发合格证明,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 in accordance with the product inspection scheme approved by the Society. 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.

## 对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:无/Nil

产品如下原材料和零部件应经本社检验,持有本社产品证书/The following materials and components of the product should be inspected and certificated by the Society:无/Nil

产品如下原材料和零部件的制造厂清单,经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:无/Nil

## 责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证,并且不对与本社授权或检验无关的各方负责,不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。

The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

#### 其他/Others

本证书由原型式认可证书(No.LD10T00011)换新并替代原证书。 This certificate is renewed from and supersedes the previous Type Approval Certificate No. LD10T00011.

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.

1. The wall thickness and material of the tubes to be in accordance with the current CCS Rules.
2. The approval is only valid when the couplings are assembled with tuding of correct temperature and tolerances as recommended by the manufacturer.

#### 中国船级社伦敦办事处

CCS London Office

\*\*\*\*\*本证书正文完/ End of Text\*\*\*\*

#### 注:本证书含有附页,共2页

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



# Type Designations

Tube to male pipe	FBZ,MSCN, MSCK,MSCR Male Connector	
	FH2BZ, MBCN Male Bulkhead Connector	
	FH4BZ, MTCN Thermocouple Connector	
	CBZ, MSELN, MSELK Male Elbow	
	VBZ, MVELN NPT Male 45° Elbow	*
	RBZ, MRTN NPT Male Run Tee	
	SBZ, MBTN NPT Male Branch Tee	
Tube to Female Pipe	GBZ, FSCN, FSCK Female Connector	
	GH2BZ, FBCN Female Bulkhead Connector	
	GBZ, FSC GC Gauge Connector	
	DBZ, FELN Female Elbow	
	MBZ FRTN Female Run Tee	
	OBZ, FBTN Female Branch Tee	
Tube to Tube Unions	HBZ, SC,SCM Union	
	HBZ, CU Conversion Union	
	HBZ, RU RUM Reducing Union	
	WBZ, BC, BCM Bulkhead Union	
	DEBTA, DELTA Dielectric Union Adapter, Dielectric Assembly	
	EBZ, EE, EEM,ELZ Union Elbow	
	JBZ, ET, ETM Union Tee	
	JBZ, JLZ Drop Size Tee	
	KBZ, ECR,ECRM Union Cross	
Port Connectors	TRBZ, TUR, TUCM, TURM Tube End Reducer	
	T2H2B2, TUBC Tube End Bulkhead Adapter	
	ZPC, PC,PCM Port Connector	
	T2HF, MAN, MAR, MAK Tube End Male Adapter	
	T2HOA, TUHA Tube End to SAE Straight Thread Adapter	
	T2HG, FAN, FAK, FAR Tube End Female Adapter	
	P2T2, P2TU Push-Lok to Tube Adapter	
	P2HF Push-Lok to Male Adapter	
	P2BZ6, P2LZ6 Push-Lok to CPI/A-LOK	
	ZPB2, ZPC2 Push-Lok to Port Connector	
	LJFBZ, LJF Lapped Joint Tube Adaptors	
	ZH2BZ, ZH2LX DP Transmitter Calibration Adapters	
37° Flare (AN) to	X6HBZ6, X6TU 37°Flare(AN) to CPI/A-LOK	
CPI/A-LOK	XHBZ, XASC 37°Flare Connector to CPI/A-LOK	
	XH2BZ, XABC 37° Flare Bulkhead Connector to CPI/A-LOK	
Tube to Welded Systems  Analytical Fittings	ZEBW, ZELW Socket Weld Elbow	
	ZEBW2, ZELW2 Buttweld Elbow	
	ZHBW, ZHLW Socket Weld Connector	
	ZHBW2, ZHLW2 Buttweld Connector	
	Z2HCZ7, Z2HLZ7 Column End Fitting	
	Z3HCZ7, Z3HLZ7 Column End Fitting	700
	ZHCZ7, ZHLZ7 Column End Fitting(without Frit)	•
	Z2HCZ, Z2HLZ Column End Fitting	

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	ZHCZ, ZHLZ Column End Fitting (without Frit)
D UUT	Z7HBZ7, Z7HLZ7 Union Connector
	FBZ7, FLZ7 Male Connector
	ZHBS, ZHLS Sanitary Flange Fitting
Barbed Fitting	B2HF Barbed Connector to Male Pipe
	B2HT2, B2TU Barbed Connector to Tube Adapter
	HCS Hose Connector Sleeve
Components	TIZ Insert
	BZ,NU,NUM Tube Nut
	TZ Ferrules
	BZI Inverted Tube Nut
	BZP Knurled Nut
	FF, FFM Front Ferrules
	BF, BFM Back Ferrules
	Ferrule Holder
	FNZ, BLP, BLPM Plug
	PNBZ, BLEN, BLENM Cap
	MDF Vent Protector
	Sealing Washers
	WLZ, WLN Bulkhead Locknut
	BN Bulkhead Locknut
	L5N Accessory Locknut

Note: All the above-mentioned are of steel to steel contact compressed type, nominal tube diameters from 2 to 25mm (from 1/16 to 1 inch), maximum working pressures from 85 to 865 bar type dependant, temperature range from -20°C to 100°C, for details please refer to CPI/A-LOK Tube Fittings Catalog 4230/4233 in April 2005 edition.

Tube to O-Ring Seal	ZHBA, M1SC Male Connector SAE Straight Thread
	C5BZ, M5SEL Male SAE Straight Thread Elbow
	CBZ(R), MSEL(R) Male BSPP Straight Thread Elbow
	R5BZ, M5RT Male Run Tee SAE Straight Thread
	RBZ(R). MRT(R) Male BSPP Run Tee Straight Thread
	S5BZ, M5BT Male Branch Tee SAE Straight Thread
	SBZ(R), MBT(R) Male BSPP Branch Tee Straight Thread
	ZH3BA, ZH3LA Long Male Connector SAE Straight Thread
	V5BZ, M5VEL 45° Positionable Male Elbow
	ZHBA5, M2SC Male Connector to O-Ring Straight Thread
	ZHBF5,M3SC Male Connector to O-Ring Pipe Thread
	T2HOA5, M2TU Tube End to O-Ring Straight Thread
	T2HOF5, M3TU Tube End to O-Ring Pipe Thread
	FHOA Pipe Thread to SAE Straight Thread Adapter
	AH2BZ, AH2LZ Bulkhead to Conversion Adapter

Note: All the Tube to O-Ring Seal are of compressed non fire-resistance type, the usage of this type is strictly limited, details please refer to the last column of the table 2.5.3.1(2) of Chapter 2 of Part 3 of CCS Rules, nominal tube diameters from 2 to 25mm (from 1/16 to 1 inch), maximum working pressures from 85 to 865 bar type dependant, temperature range from -20°C to 100°C, for details please refer to CPI/A-LOK Tube Fittings Catalog 4230/4233 in April 2005 edition.

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1. 证书适用条件

- 经本社设计认可、型式认可或工厂认可的产品及其生产厂,本社将颁发产品设计认可、 1.1. 型式认可或工厂认可证书。当 CCS 规范要求产品证书的情况下,认可证书不能替代
- LLL 设计认可系指 CCS 准予设计在特定条件下适用于规定用途的认定过程,一般包括 图纸审查和原型/型式试验(如适用时)。
- 型式认可系指 CCS 通过产品的设计认可和制造管理体系市核,以确认申请认可的 1.1.2. 制造厂具备持续生产符合 CCS 规范要求的产品的能力的评定过程,根据产品制造 管理体系的证实程度, 为型式认可 A 和 B 两级, 其中申请型式认可 B 的制造厂 应具有申请认可产品的生产和测试能力,并具有有效的质量控制制度;申请型式认 可 A 的制造厂除具备型式认可 B 的条件外,还应建立并保持一个至少符合 ISO9000 标准的质量保证体系, 使其产品的质量保持持续稳定。
- 工厂认可系指 CCS 通过制造厂的资料审查、认可试验和产品制造过程的审核,对 1.1.3, 产品制造厂的产品生产条件和能力予以确认的评定过程。
- 12 入级和法定产品经本社单件/单批检验完成后,本社将颁发产品证书或签署等效证明 文件。
- 产品证书是由 CCS 验船师签发的文件以证明 a) 产品符合规范要求; b)产品已进行 1.2.1. 规定的检验和试验: c) 检验样品収自检验产品本身; d) 产品的试验在验船师参加 或根据特别商定的情况下进行。
- 1.2.2. 等效证明文件是由制造厂出具并经 CCS 盖章和验船师签署的文件以证明 a)产品符 合规范要求; b)产品已进行规定的检验和试验; c)检验样品取自检验产品本身; d) 品的试验在验船师参加或根据特别商定的情况下进行。
- 1.3. 对于要求型式认可和/或工厂认可而不要求持有产品证书的入级和法定产品,可由制 造厂证明形式予以证明:
- 1.3.1. 制造厂证明由制造厂签发,以证明: a)该产品经 CCS 型式认可或工厂认可: b)产品 符合规范要求; c)产品已进行规定的检验和试验; d)检验样品取自检验产品本身; e)产品的试验在制造厂授权的部门在场的情况下进行。
- 规范和法定要求以外的产品经本社单件/单批检验完成后,由检验证书或试验证书予 1.4. 以记录和证明。
- 检验证书是由 CCS 验船师签署的文件,以证明 a)符合申请方确定的产品标准;b)检 1.4.1. 验和试验经验船师见证和/或试验报告经验船师审查: c)试验样品取自现有产品生产
- 试验证书是由 CCS 验船师签署的文件,以证明 a)产品的试验在验船师在场下进行; 1.4.2 b)试验样品取自现有产品生产中。

证书的自动失效

- 本社通过认可、检验工作所签发的证书或相关的证明文件。在发生下列情况时即自动 朱敬.
- 2.1. 证书或证明文件严重破损,内容无法辨认,或证书页缺失;

2.2 证书或证明文件的内容被涂改:

- 申请方、制造厂、提供服务方或其他相关各方,在取得本社签发的证书或证明文件的 2.3. 过程中使用欺诈、作假、故意隐瞒事实等不道德手段或存在违法行为, 致使本社在认 证工作中无法客观、全面了解必要的认可信息;
- 由于发证依据变化,经本社或国家主管机关认定并公布予以废止的。(例如:相关证 2.4. 书或证明文件的发证依据发生重大改变, 且原使用的发证依据被证实为对产品或服务 的使用安全性存在重大影响);
- 由于其他原因, 经本社认定并通知相关方予以废止的; 2.5.
- 有关认可证书的保持和失效见本社规范: 2.6.

- 本社承担的认可/检验服务是在所涉及的产品设计方、制造方、拥有方、销售方、供应 3.1 方、修理方、使用方以及其他方履行各自职责的基础上进行的。无论本社及所属验船 师采用何种认可/检验方式,也不论在本社名义下颁发、签署的任何报告、文件和证书 在内容上如何,均不意味着可减轻或解除上述任何方应承担的任何责任。
- 本社签发的与认可/检验有关的任何文件, 只反映检验当时的技术状况, 并不表明被认 3.2 可的工厂和产品的所有权和知识产权归属。与被认可的工厂和产品的所有权和知识产 权有关的任何争议,与本社无关。
- 本社的认可检验不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发 3.3 证,非且不对与本社授权或检验无关的各方负责,不承担其未经应允而承认、接受本 社认可/检验所导致的法律和经济责任。
- 本社仅对由于自身疏忽行为而直接造成的合同关系方的损失或损害承担责任, 在任何 3.4 情况下,本社均不对合同关系方的间接损失或随后引发的附加损失或损害承担责任。 也不对非合同关系方的任何损失承担责任。
- 尽管有上述规定。如依法判定合同关系方所遭受的损失或损害,仅仅是由于本社或其 3.5 雇员、代理人或本社其他代表方的载忽行为造成的。本社将承担责任、并将支付赔偿。 但此赔偿的数额不超过该项服务收费的5倍。且最大不超过人民币200万元。但如该 损失或损害系由如下行为造成,本社将不承担任何责任:
  - 1) 本社雇员超越其受雇权限的行为;
  - 2) 本社代理人或其他代表方,超越本社对其书面授权范围的行为。
- 3.6 对本社承担责任的损失或损害的索赔,应以书而形式,在损害最初发现或损失形成的6 个月内提出, 否则将被视为彻底放弃索赔权。

适用法律和仲裁

- 本证书条款的生效、解释、执行、争议的解决均适用中华人民共和国法律。 4.1
- 除与本社另有约定外,凡因与本社提供的服务有关的任何争议,均应提交中国海事仲 4.2 裁委员会,按照申请仲裁时该会现行有效的仲裁规则进行仲裁。仲裁裁决是最终的, 对争议当事双方均有约束力。

THE APPLICATION OF CERTIFICATES

- 1.1. After Approval, Certificate of Design Approval, Certificate of Type Approval or Certificate of Works Approval will be issued by the Society for the products and manufacturers. Where a products certificate is required by CCS' rules, the Approval Certificate cannot replace it.
- 1.1.1. Design approval means the process whereby permission is granted by CCS for the design to be used for a stated purpose under specific conditions, generally comprising
- drawing approval and prototype/type test (if applicable).

  Type approval means the evaluation process whereby the requesting manufacturer's ability to produce consistent products in compliance with CCS' rules is confirmed by 1.1.2. CCS through Design Approval of products and audit of manufacturing management system. Depending on the validation of the manufacturing management system, the type approval is to be classified as A or B. A manufacturer requesting type approval B is to be capable of producing and testing the products to be approved and have an effective quality control system. A manufacturer requesting type approval A is to be qualified for type approval B and in addition, to establish and maintain a quality assurance system complying at least with ISO 9000 so as to meet the specified level of product quality

- Works approval means the evaluation process whereby the manufacturer's production conditions and ability is confirmed by CCS through document review, approval testing 1.1.3. and verification of manufacturing process.
- A unit/batch inspection of classed or statutory products is to be documented as Certificate 1.2. of Product or Equivalent document:
- Certificate of Product issued by the Surveyor to show that: i) the product complies 1.2.1. with rules; ii) required inspection and test have been carried out; iii) the sample is taken from the product to be inspected; iv) the product has been tested in the presence of the Surveyor or in a specially agreed condition.
- Equivalent document issued by the manufacturer and endorsed by the Surveyor to 1.2.2 show that: i) the product complies with rules; ii) required inspection and test have been carried out; iii) the sample is taken from the product to be inspected; iv) the product has been tested in the presence of the Surveyor or in a specially agreed condition.
- The classed and statutory products of which the type approval and/or works approval is required but the products certificate is not required, may be certified as Manufacturer's 1.3.
- The manufacturer's document is issued by the manufacturer to show that: i) the product is type approved or works approved by CCS; ii) the product complies with rules; 1.3.1. iii) required inspection and test have been carried out; iv) the sample is taken from the product to be inspected; v) the product has been tested in the presence of the department authorized by the manufacturer.
- A unit/batch inspection Products other than those specified in rules or statutory requirements is to be documented as Inspection Certificate or Test Certificate:

  Inspection Certificate issued by the Surveyor to show that: i) the product standards as 1.4.
- 1.4.1. determined by the applicant has been complied with; ii) the inspection and test has been witnessed by the Surveyor and/or the test report has been reviewed by him; iii) the test sample has been taken from the existing products.
- Test Certificate issued by the Surveyor to show that: i) the product has been tested in 1.4.2. the presence of the Surveyor; ii) the test sample has been taken from the existing products.

AUTOMATIC INVALIDATION OF CERTIFICATE 2.

- The certificates or equivalent documents issued by the Society by means of approval or certification will be invalidated automatically under the following circumstances: 2.1.
  - The certificate or equivalent document is severely damaged and illegible or with missing

The certificate or equivalent document is altered. 2.2.

- 2.3. The applicant, manufacturer, service supplier or other interested parties deceive, swindle and hide facts or even dare to violate the laws in the process of obtaining the certificate or equivalent document issued by the Society, so that the Society can not get hold of the certification information fully and objectively.
- 2.4. Due to the change of the certification basis, the certificate or equivalent document is back to the change of the extrements basis, the elements of equivalent declinion to basis for relevant certification basis for relevant certificate or equivalent document are significantly changed and the original certification basis are substantiated to badly affect the safety of the product or service used).
- Due to other reasons, the certificate or equivalent document is revoked as confirmed and 2.5. advised by the Society to relevant parties.

  Please refer to CCS' Rules for the maintenance and invalidation of Approval Certificate
- 2.6.

LIABILITY

- 3.1 The service of approval / inspection undertaken by the Society is carried out on the basis that the designers, manufacturers, owners, sellers, suppliers, repairers, operators and other parties fulfill their respective responsibilities. The contents of any reports, documents and certificates issued by the Society do not mean to diminish any liability of any party mentioned above or absolve it therefrom, whatever the module of approval/inspection adopted by this Society and its surveyors.
- Any approval/inspection-related documents issued by the Society only reflect the status at 3.2 the time when the approval/inspection is carried out. They do not constitute the description for ownership and intellectual property rights of the approved/inspected factory and product. This Society should not be affected by any dispute over ownership and intellectual property rights of the approved/inspected factory and product.
- The approval/inspection of the Society does not affect and replace any approval and 3.3 certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.
- The Society will be liable only for the loss or damage of contract parties resulting directly from its negligent act. In no event shall the Society be liable for any indirect or consequential losses or damage, and any loss of non-contract parties.
- Notwithstanding the previous paragraph, the Society will be liable for the loss or damage 3.5 due to negligent act judicially attributed exclusively to the Society and its employees, agents or other parties acting on behalf of the Society. And in no case shall the amount of this liability exceed five times the fee(s) charged by the Society in respect of the service(s) in question or 2,000,000 RMB in maximum. The Society liability for the loss or damage is specially excluded when such loss or damage arises out of an act:
  - by an employee of the Society acting outside the terms or scope of his/her employment; or
  - by any agent or other parties acting on behalf of the Society, when such act exceeds the authority granted in writing by the Society to such agent or parties.
- Any claim for any loss or damage set forth above is to be made in writing within six months of the date the damage first discovered or the loss occurred; failure of doing so will be deemed as an absolute waiver of this right. 3.6

APPLICABLE LAWS AND ARBITRATION

- The laws of the People's Republic of China shall apply to the coming into force, explanation, implementing, and resolution of dispute of the clause of the certificate. 4.1
- 4.2 Unless otherwise agreed with the Society, any dispute of whatsoever nature in respect to the service(s) provided shall be referred to China Maritime Arbitration Commission and arbitrated in accordance with its arbitration rules effective at the time of request for arbitration. The arbitration award shall be final and binding upon both interested parties.

## Appendix 9



# CHINA CLASSIFICATION SOCIETY

# Letter of Issuance of Approval Certificate of Marine Products

Work control no. LD15T00002

## Parker Hannifin Corporation,

At the request of your Company, China Classification Society carried out audit of the quality system related to the design, purchasing, production and inspection of products for which application was submitted, in accordance with CCS rules and relevant procedures from 4th January, 2015 to 2nd March, 2015; at the same time, CCS carried out review of technical documents and type test of marine products Mechanical Joints. The results of the review and test demonstrate that your Company's quality management system complies with CCS requirements for quality management system, your Company has the capability and conditions to produce the above mentioned products and the products comply with the relevant requirements of Chapter 2, Part Three of CCS Rules For the Classification of Sea-going Steel Ships (2012) and its Amendments. It is granted to issue the type approval certificate. Please acknowledge one copy of approval certificates (No.LD15T00002) issued by CCS and a approved products inspection plan, attached to this letter.

Your company shall comply with the following requirements or the approval certificate will be suspended or withdrawn:

- 1. Within the period of validity of the approval certificate, CCS will designate surveyors to carry out audit without prior notification of products for which product certificates are not required after approval in accordance with Chapter 3, PART ONE of CCS Rules for Classification of Sea-going Steel Ships, in order to verify whether the manufacturing process is in compliance with the drawings and technical documents approved by CCS. Please cooperate.
- 2. Your company shall ensure the continual and effective implementation of the quality system, maintain records of important nodes involved in the implementation of system and be responsible for the quality of approved products.
- 3. Purchasing and subcontracting of raw material, components and parts, as well as other important links shall be effectively controlled. The records of acceptance of purchasing and subcontracting of raw material, components and parts shall be kept for review by CCS surveyors.
- 4. Your Company shall ensure that the products produced after approval are consistent with production technology, raw material, components and parts in the type test. Any change shall be notified to CCS for confirmation. CCS will carry out type test again as necessary.
- 5. For any significant change to product technical documents, technological specifications or quality system, the agreement of CCS shall be sought. In case of any change affecting product design, main manufacturing materials, key technologies or characteristics and features of products, the associated technical documents shall be approved by CCS. When deemed necessary by CCS, surveyors shall carry out inspection and witness relevant tests at the manufacturer, the results of which shall demonstrate compliance with approval condition.
- 6. Your Company shall actively assist clients in solving any dispute over the product quality, inform CCS in time, analyze causes, put forward improvement measures and cooperate with CCS in investigation.
- 7. After the approval, CCS will carry out inspection of your Company's products in

Form: RWPMP704-H

accordance with approved inspection plan.

8. The approval certificate is valid from <u>2nd March</u>, <u>2015</u> to <u>5th January</u>, <u>2019</u>. During this period, relevant requirements of CCS Rules for Classification of Sea-going Steel Ships shall be complied with.

The approval does not affect or replace any approval, inspection and certification of the manufacturer carried out by other parties irrelevant to authorization and inspection by CCS. CCS carries out approval and inspection of the product in accordance with requirements of the rules, relevant standards and quality systems. CCS shall not be responsible for any party irrelevant to authorization and inspection carried out by CCS and shall not undertake any legal and economic responsibility due to acceptance of CCS approval and inspection without prior agreement and recognition from CCS.



Annexes: 1. Approval Certificate

2. Products Inspection Plan

Form: RWPMP704-I

## Appendix 11



#### CHINA CLASSIFICATION SOCIETY

## PRODUCTS INSPECTION PLAN

In accordance with the relevant requirements of the Rules for Classification of Sea-going Steel Ships of China Classification Society, the marine products of the Applicant mentioned below have been approved by CCS. CCS will implement the inspections of products and certification according to the rules and standards of products and the product quality system of the Applicant and on basis of the following products inspection

- plan. Applicant: Parker Hannifin Corporation 2. No. of the approval certificate: LD15T00002 Approved marine products: Mechanical Joints Basis for inspections of products: Chapter 2, Part Three of CCS Rules For the Classification of Sea-going Steel Ships (2012) and its Amendments 5. Products inspection items: 5.1.1 Test items to be witnessed by CCS  $\Box$ 5.1.2 Test items in test report submitted to CCS for examination H 5.1.3 Main components and parts necessary to be submitted to CCS for inspection (in case of external cooperation, the product certificate is necessary to be submitted)  $\Box$ 5.1.4 Control points necessary to be witnessed by CCS during manufacturing (when required)  $\boxtimes$ 5.2 Quality system audit items 5.2.1 The effective implementation of the quality system, control records of important nodes  $\Box$ 5.2.2 The effective control of purchasing and subcontracting of raw material, components and parts
- The type, specification, and source of raw material, components and parts consistent with documents approved by CCS  $\Box$
- 5.2.4 Acceptance records of purchasing and subcontracting of raw material, components and parts
- Type of products certificates
- 6.1 Marine products certificate
- 6.2 Equivalent document  $\Box$

Form: RWPMP704-I

6.3 Manufacturer's document (products of which the type approval is required but the products certificate is not required) with copy of approval certificate attached

- 7. Procedure for application for inspections of marine products: Nil
- 8. Liability, disagreement and arbitration

Liability, disagreement and arbitration of both parties are specified in Section 14, Chapter

- 2, PART ONE of CCS Rules for Classification of Sea-going Steel Ships
- 9. Other explanations: The applicant could apply CCS London for inspection of marine product if they want.
- 10. Implementation and invalidity of products inspection plan
- 10.1 The plan is valid until 5th January, 2019.
- 10.2 Where the approval certificate of the Applicant is invalid, the inspection plan will automatically cease to be in force.
- 10.3 The products inspection plan shall be modified where any serious defects found by CCS in the product quality system of the Applicant affecting the product quality, and the Applicant shall be informed of it in writing.

CHINA CLASSIFICATION SOCIETY London Branch

C2

Date: 2nd March, 2015

Note: Mark □ with × for "Applicable", with - for "Not applicable" or with "O" for any problem or further confirmation.