



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.01-
HQ001094

型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. GB13T00025

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

弹性橡胶软管

FIEXIBLE RUBBER HOSE

弹性橡胶软管组合件

FIEXIBLE RUBBER HOSE ASSEMBLIES

制造厂/ Manufacturer

Dunlop Hiflex AB

Dunlop Hiflex AB

Seldonsvagen 2, Halmstad

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**

2018年9月7日 / Sep. 7, 2018

发证机构
Issued by

中国船级社哥德堡办事处
CCS Gothenburg Office

签发日期
Date

2014年9月8日
Sep. 8, 2014

本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书背面的说明。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章方为有效。证书复印件无效。任何单位和个人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。有关各方对所持证书的真实性有疑问时，可以向本社检验机构咨询。
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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GB34839518
No. 14135576

产品明细/ Product Description

弹性橡胶软管组合件/FIEXIBLE RUBBER HOSE ASSEMBLIES
型号/Model

: SP33, DH122/DH Greenline Plus
122, DH222/DH Greenline Plus
222, DH241, DH713, DH790 series,
Refer to the attachment for
detail.

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

图纸批准号/ Drawings Approval No. : GB13T00025

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : 525/527/528/530/531.0IS0110/04
试验报告日期/Test Report Date : 2004-06-18
试验单位/ Laboratory : LAPI
试验单位地址/ Test Address : I-59100 Prato, Italy

试验报告编号/Test Report No. : 156/158/159.0IS0110/05
试验报告日期/Test Report Date : 2005-02-16
试验单位/ Laboratory : LAPI
试验单位地址/ Test Address : I-59100 Prato, Italy

试验报告编号/Test Report No. : 216/218/222.0IS0110/05
试验报告日期/Test Report Date : 2005-03-07
试验单位/ Laboratory : LAPI
试验单位地址/ Test Address : I-59100 Prato, Italy

试验报告编号/Test Report No. : 270/271/274/276/277.0IS0110/05
试验报告日期/Test Report Date : 2005-03-08
试验单位/ Laboratory : LAPI
试验单位地址/ Test Address : I-59100 Prato, Italy

试验报告编号/Test Report No. : 1666/1667/1668/1669/1670/1671.0IS0110/10
试验报告日期/Test Report Date : 2010-11-26
试验单位/ Laboratory : LAPI
试验单位地址/ Test Address : I-59100 Prato, Italy

试验报告编号/Test Report No. : 33/34/35/36/37/38/2010
试验报告日期/Test Report Date : 2010-12-16
试验单位/ Laboratory : Alfagomma Hydraulic S.p.A
试验单位地址/ Test Address : Castelnuovo Vomano(TE), Italy

试验报告编号/Test Report No. : 436/2010
试验报告日期/Test Report Date : 2010-02-15
试验单位/ Laboratory : Alfagomma Hydraulic S.p.A
试验单位地址/ Test Address : Castelnuovo Vomano(TE), Italy

试验报告编号/Test Report No. : 191/10, 192/10, 427~435/2010, 437~444/2010
试验报告日期/Test Report Date : 2010-11-15
试验单位/ Laboratory : Alfagomma Hydraulic S.p.A
试验单位地址/ Test Address : Castelnuovo Vomano(TE), Italy

试验报告编号/Test Report No. : 001/2014, 002/2014, 003/2014
试验报告日期/Test Report Date : 2014-08-01
试验单位/ Laboratory : Alfagomma Hydraulic S.p.A
试验单位地址/ Test Address : Castelnuovo Vomano(TE), Italy

产品适用范围/ Application of the Product

Marine piping system, refer to the attached for detail.

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.

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

按照规范逐件检验的产品/The product inspected one by one 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逐件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产品证书。

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

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:

-Coupling Manufacturer

Alfatechnology SRL
Via dell' Industria 12
200040 Bellusco (MI) - Italy

Alfatechnology SRL
Area industriale Piano Lago
87050 Mangone (CS)

-Hose Manufacturer

Alfagomma Hydraulic SPA
Via E Mattei 6
64020 Castelnuovo Vomano (TE)

Alfagomma Hydraulic SPA
Area Industriale Piano Lago
87050 Figline V. (CS)

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

1. 本证书由原GB09T00014-02证书换证更新
This certificate is renewed and updated base on previous type approval certificate with No. GB09T00014-02.
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.

中国船级社哥德堡办事处

CCS Gothenburg Office



*****本证书正文完/ End of Text*****

注：本证书含有附页，共3页

Note: The certificate is attached with 3 additional page(s)

1. Type Designation: Dunlop Hiflex SP33 Series

Application	Hyd. Systems with petroleum or water/glycol based fluids, fuel, lubricating oils	
Tube	Oil resistant synthetic rubber	
Reinforcement	3 High tensile steel braids	
Cover	Weather, oil, abrasion and ozone resistant synthetic rubber	
Working temp. range(°C)	Ambient: -40 ~ +80, Fluid: -40 ~ +100	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
10	500	120
12	470	160
16	410	210
20	375	260
25	327	310
32	240	410

2. Type Designation:

1) Dunlop Hiflex DH122 Series,

2) Dunlop Hiflex Greenline Plus 122 Series(DN5~DN51, Halogen Free),
EN853 1SN (up to 2") – SAE 100 R1AT

Application	High pressure hydraulic lines, fuel oil, antifreeze solutions, air and water. The sizes from 1/4 ~3/4 inches maybe used as connection between valves and manifolds on high pressure CO ₂ systems.	
Tube	Oil resistant synthetic rubber	
Reinforcement	1 High tensile steel braid (1B)	
Cover	Abrasion, ozone and hydrocarbon resistant synthetic rubber	
Working temp. range(°C)	Ambient: -40 ~ +80 , Fluid: -40 ~ +100 (T max air = +70)	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
5	250	90
6	225	100
8	215	115
10	180	130
12	160	180
16	130	200
20	105	240
25	88	300
32	63	420
38	50	500
51	40	630
63	50	760
76	35	900



3. Type Designation:

- 1) Dunlop Hiflex DH222 Series,
- 2)) Dunlop Hiflex Greenline Plus 222 Series(Halogen Free),
EN853 2SN – SAE 100 R2AT

Application	High pressure hydraulic lines, fuel oil, antifreeze solutions, air and water	
Tube	Oil resistant synthetic rubber	
Reinforcement	2 High tensile steel braids (2B)	
Cover	Abrasion, ozone and hydrocarbon resistant synthetic rubber	
Working temp. range(⁰ C)	Ambient: -40 ~ +80 , Fluid: -40 ~ +100 (T max air = +70)	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
5	420	90
6	400	100
8	350	115
10	330	125
12	275	175
16	250	200
20	215	240
25	165	300
32	125	420
38	90	500
51	80	630

4. Type Designation: Dunlop Hiflex DH241 Series, EN 857 2SC – SAE 100 R16

Application	High pressure hydraulic lines, fuel oil, antifreeze solutions, air and water	
Tube	Oil resistant synthetic rubber	
Reinforcement	2 High tensile steel braids (2B)	
Cover	Abrasion, ozone and hydrocarbon resistant synthetic rubber	
Working temp. range(⁰ C)	Ambient: -40 ~ +80 , Fluid: -40 ~ +100 (T max air = +70)	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
6	420	51
8	375	57
10	350	64
12	310	90
16	280	101
20	240	121
25	210	152
32	145	360
38	125	430
51	100	550
63	75	720
76	70	880



5. Type Designation: Dunlop Hiflex DH713 Series, EN 856 R13 – SAE 100 R13

Application	Very high pressure hydraulic lines, fuel oil, antifreeze solutions	
Tube	Oil resistant synthetic rubber	
Reinforcement	4/6 High tensile steel spirals (4S/6S)	
Cover	Abrasion, ozone and hydrocarbon resistant synthetic rubber	
Working temp. range(°C)	Ambient: -40 ~ +80, Fluid: -40 ~ +121	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
20	350	241
25	380	305
32	350	419
38	350	500
51	350	630
63	350	895

6. Type Designation: Dunlop Hiflex DH790 Series, EN856 4SH

Application	Very high pressure hydraulic lines, fuel oil, antifreeze solutions	
Tube	Oil resistant synthetic rubber	
Reinforcement	4 High tensile steel spirals (4S)	
Cover	Abrasion, ozone and hydrocarbon resistant synthetic rubber	
Working temp. range(°C)	Ambient: -40 ~ +80, Fluid: -40 ~ +100	
Nominal Diameter (mm), Working Pressure (bar), and Bend Radius (mm)		
DN (mm)	Max. WP (bar)	Min. Bend Radius(mm)
20	420	280
25	380	340
32	350	460
38	290	560
51	250	700

*All flexible hose assemblies are able to withstand not less than four times its design pressure without indication of failure or leakage during prototype burst testing.

