



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: W01.01-
HQ000037

工厂认可证书
CERTIFICATE OF WORKS APPROVAL

证书编号/Certificate No. SG12W00001

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 as described in the certificate.

制造厂/Manufacturer

NOV FGS Singapore (Pte.) Ltd. / NOV FGS Malaysia Sdn. Bhd.

No.7A Tuas Avenue 3, Singapore 639407 / PLO 202 Senai Industrial Park, Phase IV, 81400 Senai, Johor, Malaysia

认可产品/Product Approved

NON-METALLIC MATERIAL PIPES
(GLASS FIBRE REINFORCED EPOXY PIPES & FITTINGS)

非金属管

认可标准/Approval Standard

1.CCS《钢质海船入级规范》(2006)第三篇,第二章
Chapter 2,Part 3 of CCS Rules for Classification of Sea-going Steel Ships 2006

证书有效期至/ This Certificate is valid until 2013年4月12日 / Apr. 12, 2013

发证机构 中国船级社新加坡办事处
Issued by CCS Singapore Office

签发日期 2012年9月24日
Date Sep. 24, 2012

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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SG33532931
N: 10339015

产品明细/ Product Description

非金属管
型号/Model : Fibreglass Composite Pipe & Fittings

规格/Specification : Refer to the appendix

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

图纸批准号/ Drawings Approval No. :

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : Witness Report

试验报告日期/Test Report Date :

试验单位/ Laboratory : -
Ameron Malaysia SDN BHD

试验单位地址/ Test Address : -
PLO 202 Seni Industrial Park, Senai, Johor, Malaysia
-81400

产品适用范围/ Application of the Product**认可保持条件/ Maintenance Requirements of Approval**

1. 工厂认可后, 如果图纸、技术文件、工艺规程有较大改变, 应征得本社同意。若改变涉及或影响到产品的设计、主要制造材料、关键工艺或产品的特性、特征, 则与特性有关的图纸和技术文件应经过本社审批, 并在检验机构认为必要时, 经本社检验人员到厂进行检查和见证有关试验, 其结果应能证实仍符合认可条件。

After works approval, if there are any major changes to the drawings, technical documents, specifications, prior consent should be obtained from the survey office of the Society. If the changes involve or affect product design, major construction materials, key workmanship or product characteristics and properties, drawings and technical documents related to properties are to be examined and approved by the Society and, where deemed necessary by the survey office, the surveyor to the Society will go to the manufacturer to inspect or witness relevant tests and the results of the tests should be able to demonstrate compliance with the approval conditions

2. 工厂的专业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 professional 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. 工厂认可证书获得者应接受本社每年一次的年度复查, 年度复查日为认可证书的签发日起的每一周年日, 检查工作可在年度复查日的前后三个月内进行。

Those who have obtained the certificate of works approval shall receive surveillance done by the Society on an annual basis. The date of surveillance shall be each anniversary date of the approval certificate since the date of issuance and the surveillance may be done within a time span of three months before and after the annual surveillance date.

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. 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 certificate, the manufacturer should take corrective actions in a prompt and effective manner.

认可后的产品检验方式/ Module of Product Inspection after Works 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

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

Other Approval Standard:

1. ASTM F1173
2. ISO 14692

Original Works Approval Certificate: SG11W00001

中国船级社新加坡办事处

CCS Singapore Office

*****本证书正文完/ End of Text*****

注：本证书含有附页，共1页

Note: The certificate is attached with 1 additional page(s)



Appendix to the certificate of work approval:

I. Particular of Plastic pipes:

Type		2000M	2000M-FP*4	7000M	7000M-FP*4
Resin		Lined Epoxy	Lined Epoxy	Unlined Epoxy with conductive carbon filaments	Unlined Epoxy with conductive carbon filaments
Max. Working Temperature (°C)		93	93	93	93
Normal Diameter (mm)		25 to 1000	25 to 1000	25 to 1000	25 to 1000
Normal Pressure	Internal(Bar)	16	16	16	16
	External(Bar)	4.3	4.3	4.3	4.3
Category*1		G	G	G, D	G, D
Fire Endurance*2		L3	L3, JF*3	L3	L3, JF*3

*1: Category Symbol "G" means that this material has "low flame spread characteristics" and "D" means that have electrically conductive.

*2: Fire Endurance Level L3: Fire endurance test (IMO Res. A753(18) appendix 2) in wet conditions, 30 min.

*3: 2000M-FP & 7000M-FP pipes and fittings were tested with an impinging jet fire and are able to withstand a jet fire exposure with an initial 5 minutes in dry condition follows by another 25 minutes in a wet condition.

*4: Structural material in both "M" and "M-FP" is similar. Only the difference is exterior surface of pipe and fittings of serial "M" is coated with intumescent coating to get "M-FP".

II. Piping and fittings should be permanently marked with identification. Identification is to include pressure ratings, the design standards that the pipe or fitting is manufactured in accordance with, and the material of which the pipe or fitting is made.

III. Each pipe and fitting should be tested by the manufacturer at a hydrostatic pressure not less than 1.5 times the nominal pressure.

IV. The installation is to be accordance with the CCS rules, the manufacturer's recommendations, and to the satisfaction of the attending surveyor.

***** END*****

