

本证书由中华人民共和国政府授权发给

This Certificate is Issued Under the Authority of the Government of the People's Republic of China

中国船级社

证书格式号/Form: T01.01-  
DB000039

CHINA CLASSIFICATION SOCIETY

# 型式认可证书 CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. DL10T00028

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

电子海图系统

Electronic Chart System

## 制造厂/ Manufacturer

大连海事大学科技开发总公司

Science and Technology Development Corporation, Dalian Maritime University

大连市凌海路1号 大连海事大学

Dalian Maritime University. 1 Linghai Road.Dalian

## 认可标准/ Approval Standard

- 1.《国内航行海船法定检验技术规则》第4篇第5章及其修改通报  
Chapter 5 of Part 4 of ~"Technical Regulations for Statutory Surveys of Sea-going Ships Engaged on Domestic Voyages~"and its amendments
- 2.中国海事局(MSA)《电子海图系统(ECS)功能、性能和测试要求》  
MSA, Electronic chart system (ECS) - Operational, performance and test requirements
- 3.IEC 60945 {Ed.4.0} 2002 海上导航和无线电通信设备及系统.一般要求.试验方法和要求的试验结果  
IEC 60945 {Ed.4.0} 2002 Maritime navigation and radiocommunication equipment and systems-General requirements-Methods of testing and required test results

证书有效期至/ This Certificate is valid until

2014年6月22日 / Jun. 22, 2014

发证机构 中国船级社大连分社

Issued by CCS Dalian Branch

签发日期

2010年9月7日

Date

Sep. 7, 2010

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.



DL80437116

中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦

邮编: 100007

电话/Tel: +86(10)58112288 传真/Fax: +86(10)58112811

CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China

网址/Web Site: <http://www.ccs.org.cn>

本地检验机构/CCS Local Office: 中国船级社大连分社

CCS Dalian Branch

电话/Tel: +86(411)39819842 传真/Fax: +86(411)39819848

**产品明细/ Product Description**

电子海图系统/Electronic Chart System	
型号/Type	: 详见附页/See attachment
电源/Power Supply	: 详见附页/See attachment
软件版本号/Software Version	: 详见附页/See attachment
主要功能/Main function	: 详见附页/See attachment
系统组成/System components	: 详见附页/See attachment

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

图纸批准号/ Drawings Approval No. : NP10A02036

**产品认可试验报告/ Approval Test Report**

试验报告编号/Test Report No. : DMU/EH-HS-01  
试验报告日期/Test Report Date : 2010-09-02  
试验单位/ Laboratory : 渤海轮渡股份有限公司  
BOHAI FERRY CO., LTD.  
试验单位地址/ Test Address : 烟台市环海路 2 号  
No. 2, HUANHAI ROAD, YANTAI, CHINA

**产品适用范围/ Application of the Product**

国内航行船舶/Ships engaged in domestic voyages  
设备安装处所能适应HP Compaq 8000与HP LA1951g计算机对环境条件的要求/The environment of equipment installation should be able to apply HP Compaq 8000 and HP LA1951g computer requirements on the environmental conditions.

**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. 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:控制单元/Control Unit:HP Compaq 8000;显示单元/Display Unit:HP LA1951g

**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DL09T00026证书变更

This certificate is changed from the original certificate DL09T00026.

注意/Notes:

认可标准中的《电子海图系统（ECS）功能、性能和测试要求》是指暂行版，于2010年2月9日生效。

The version of “Electronic chart system(ECS)-Operation, performance and test requirements” in the Approval Standard is the Interim Version, Effecting on February 9, 2010.

中国船级社大连分社

CCS Dalian Branch

\*\*\*\*\*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)

## 产品明细/Products Description

型号/Type	eHigh-A-I
电源/Power Supply	AC 100V-240V
软件版本号/Software Version	eHighECS V1.0
主要功能/Main Function	航路监视/Route monitoring 航线设计/ Route planning
系统组成/System Components	控制单元/Control Unit: HP Compaq 8000 显示单元/Display Unit: HP LA1951g 19-inch TFT Monitor