



# Lloyd's Register

**APPLICATION** Signalling, communication and data transmission on ships and offshore installations

**RANGE** 2-48 Channels

**OTHER CONDITIONS** Deployment Of this product on LR Classed ships must comply with the Rules and Regulations for the Classification of Ships

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify LR of any modification or changes to the equipment in order to obtain a valid certificate."*

*The Design Appraisal Document No. 06/60157(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

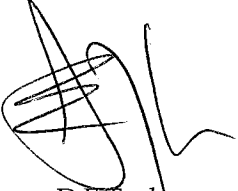
All other details remain as the previous Certificate No. 00/00157(E1) to which this extension should be attached.

**Certificate No.** 00/60157(E2)

**Issue Date** 7 December 2005

**Expiry Date** 6 December 2010

**Sheet** 2 of 2



D.E. Taylor

Lloyd's Register

Lloyd's Register North America, Inc.  
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Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."



# Marine Design Appraisal Document

Lloyd's Register North America, Inc.  
1000, South Pine Island Road,  
Suite #530  
Plantation  
Florida  
33324 USA

Date  
26 May 2006

Quote this reference on all future communications  
PSC/Draka/O-870

## LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2002.

Issued to: DRAKA CABLETEQ USA

for: FLAME RETARDANT, LOW SMOKE, ZERO HALOGEN ARMoured AND UNARMoured MARINE  
FIBER OPTIC CABLE

Types: S611T-NN-XXY and S670T-NN-XXY  
TYPE APPROVAL CERTIFICATE No. 00/60157(E2)

The undernoted documents have been reviewed for compliance with the requirements of Lloyd's Register's Type Approval System, 1996 and this Design Appraisal Document is a supplement to the Certificate.

### APPROVAL DOCUMENTATION

Request for Quotation Form	12 October 2005
LR Inspection & Surveillance of Production Facilities Report, MMI 643017	24 March 2006
ITS Listing report, J20012357	21 April 2005
Specification S611T-NN-XXY, Rev. 2	12 October 2005
Specification S670T-NN-XXY, Rev. 3	12 October 2005

### Supplementary Type Approval Terms and Conditions

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register North America, Inc. reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.*

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FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

Lloyd's Register North America, Inc.  
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Part 1B

Subject: Electrical Equipment (Not Environmentally Tested)

Product: Cables

Producer/Licence No.	Description of Product			Cert. No.	
	Type	Details of Approval	Application		
Draka Cableteq USA 22 Joseph E. Warner Boulevard North Dighton MA 02764 United States of America	S611T-NN <sup>(1)</sup> -XXX <sup>(2)</sup> S670T-NN <sup>(1)</sup> -XXX <sup>(2)</sup> Types <sup>(1)</sup> 2-48 Fiber cables <sup>(2)</sup> 50 micron, 62.5 micron, 200 micron and single mode fibers	Flame retardant, low smoke, zero halogen, armoured and unarmoured marine shipboard fiber optic cable  Range: 2-48 channels	Signalling, communication & data transmission on ships and offshore installations.	Expires 6 December 2010 Standards IEC 60794-1 & 2 IEC 60332-3 Category A IEHE 1202 IEC 60092-350 (armour) IEC 61034-1 & 2 IEC 60754-1 & 2  Deployment of this product on LR Classed ships must comply with LR Rules and Regulations for the Classification of Ships	00/60157(E2)

Handwritten signature and date: 26 May 06