



SOLAR SOLVE MARINE

SOLASOLV™ SUNSCREENS ARE THE ONLY SUNSCREENS IN THE WORLD TO BE TYPE APPROVED BY LLOYDS, ABS AND DNV

CLASSIFICATION

LR Type Approval Certificate

This is to certify that the underwater profile(s) hereafter have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER: Solar Solve Marine
PLACE OF PRODUCTION: 7 St. Hilda Industrial Estate, South Shields, Tyne and Wear, NE33 1RA
DESCRIPTION: Navigation bridge retractable solar blinds
TYPE: SOLASAFE™, SOLAROLA™
APPLICATION: Solar blinds for marine vessels
SPECIFIED STANDARDS: Solar Solve Marine specifications, as listed on the attached Design Approval Document

RATINGS

(S)	Filter Colour			
	Silver BS10G	Grey BS10G/G	Gold BS10G/GCO	Bronze BS10B/B
Solar energy rejected	77	65	87	67
Glare reduction	<2	<1	95	94
Visible light transmission	6.0	8	6.1	14.2
UV light transmission	<5	<2	<1	<2

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

The Design Approval Document No. D100000 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 01/0000
 Issue Date 21 May 2001
 Expiry Date 20 May 2006
 Sheet 1 of 1

Lloyd's Register of Shipping
 71 Fenchurch Street, London EC3A 4BS

CERTIFICATE OF Manufacturing Assessment

This is to Certify that a representative of this Bureau did, at the request of **Solar Solve Marine** attend their facilities on the date and location stated, in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing a product which meets the designated standards. The product listed on the Attachment is eligible to be placed on this Bureau's List of Type Approved Products, subject to annual facility surveys by a representative of this Bureau and renewal of this Certificate after five (5) years.

PRODUCT DESCRIPTION: Navigation Bridge Retractable Solar Blinds
ISSUE DATE: 3-Sep-01 **EXPIRES DATE:** 3-Sep-06
SURVEYOR'S SIGNATURE: [Signature]
FIRST ANNUAL REASSESSMENT: [Blank]
SECOND ANNUAL REASSESSMENT: [Blank]

CERTIFICATE NUMBER: 01-NC0718-X
 PLANT LOCATION: Station Rd, South Shields, UK
 PORT OFFICE: Newcastle

DET NORSKE VERITAS TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-8428
 This Certificate consists of 3 pages

This is to certify that the **Antiglare Sunscreens** with type designations **SOLASAFE™, SOLAROLA™** as listed on page 2

Manufactured by **Solar Solve Ltd.**
 South Shields, Tyne & Wear NE33 1RA, United Kingdom

is found to comply with
 Det Norske Veritas' Rules for Classification of Ships Pt. 6 Ch. 8 and Pt. 4 Ch. 11
 ISO 8468

Place and date
 Havik, 2002-07-11
 For DET NORSKE VERITAS AS
 [Signature]
 Managing B. Karlsen
 Manager, MTP/NEU
 Department Systems & Components

This Certificate is valid until
 2004-06-30
 [Signature]
 Knut Svein Ording
 Surveyor

Local Office
 DNV Newcastle

Note: This Certificate is subject to terms and conditions attached. Any significant change in design or construction may render this Certificate invalid. The validity also relates to the Type Approval Certificate and not to the approval of equipment/structure installed.

DET NORSKE VERITAS AS
 VERITASVEIEN 1, 1302 SANDVÅG, NORWAY
 TEL: +47 02 27 00 00 FAX: +47 02 27 00 11
 Page No. 20.004 Issue January 98 Page 1 of 3

Doc Ref:Classification3p19a



SOLAR SOLVE MARINE
 7 St Hilda Industrial Estate, South Shields,
 Tyne & Wear, NE33 1RA, UK
 Tel: +44 (0) 191 454 8595, Fax: +44 (0) 191 454 8692
 E-mail: info@solasolv.com Web: www.solasolv.com