

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Inflatable liferafts

with type designation(s)

SMLR-A-6, -8, -10, -12, -16, -20 & -25 (I), throw-over-board type

Issued to

**Shanghai Star Rubber Products Co., Ltd.
Shanghai, China**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/1.12 and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation III/4, III/13, III/21, III/26, III/31, III/34 & X/3, LSA Code, IMO MSC/Circ.811 and 2000 HSC Code 8

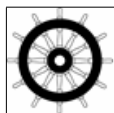
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2020-06-18**.

Issued at **Hamburg** on **2016-10-21**

DNV GL local station:
Shanghai CMC

Approval Engineer:
Michael Oberländer



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

Job Id:
Certificate No: **MEDB00001MK**

Product description

Throw overboard inflatable liferaft: SMLR-A-6, -8, -10, -12, -16, -20 & -25 (I). SOLAS A and B Pack.

Trade names: CSM, OCEAN SOLAS, REVERE

Application/Limitation

Type	Persons (82.5kg)	Weight [kg] SOLAS A / B	Required bollard pull [kN]		Maximum stowage height (m)
			2 kn	3 kn	
SMLR-A-6-(I)	6	72 / 60	0.5	0.8	18
SMLR-A-8-(I)	8	78 / 62	0.7	1.1	18
SMLR-A-10-(I)	10	93 / 73	0.8	1.3	18
SMLR-A-12-(I)	12	106/82 (100/76)*	1.1	1.4	18
SMLR-A-16-(I)	16	130 / 98	1.1	1.6	18
SMLR-A-20-(I)	20	168 / 118	1.5	1.8	18
SMLR-A-25-(I)	25	178 / 124	1.6	2.1	18

(*when fitted into the 10 person container GRP/MQ-80-00)

The liferaft is approved for use with a round container type (GRP/MQ-1-WG, GRP/MQ-1-WG, GRP/MQ-63WG, GRP/MQ-2-WG, GRP/MQ-64-WG, GRP/MQ-3-WG or GRP/MQ-4-WG) and is provided with a single gas-cylinder inflation system.

Alternatively the sizes SMLR-A-6/8/10/12/16-(I) can be used with a square container type (GPR/MQ-7300, GPR/MQ-75-00, GPR/MQ-77-00, GPR/MQ-79-00 or GPR/MQ-80-00).

As a further alternative, the 12 persons liferaft can be fitted into the 10 persons container GRP/MQ-80-00.

The liferafts are to be serviced annually at approved service stations which are authorized by the manufacturer.

Production tests are to be conducted in accordance with IMO Res. MSC.81(70), Part 2 and recorded by the manufacturer in compliance with the approved Production Quality Assurance System for Module D of the Marine Equipment Directive 96/98/EC as amended.

The design assessment is based on IMO Res. MSC.48(66)-(LSA Code) Ch. I and IV, as amended by:

- IMO Res. MSC.207(81),
- IMO Res. MSC.218(82),
- IMO Res. MSC.293(87)

Type Examination documentation

- Test report : MSC/Circ.980 GL SHA dated 2009-08-10, 2011-12-15 and 2014-03-10 (SHA-14-01152), 2014-12-25, 2015-06-04 and 2016-07-23.

The National Supervision and Testing Center of Fishery Machinery and Instrument 2013 YW 004

Approval no. 15-008475.

Tests carried out

The product has been tested in accordance with the Revised Recommendation on Testing of Life-saving Appliances, IMO Res. MSC.81(70), as amended by:

- IMO Res. MSC.226(82)
- IMO Res. MSC.295(87)
- IMO Res. MSC.323(89)

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation and date of



Job Id:
Certificate No: **MEDB00001MK**

manufacture. The marking shall comply with the LSA Code (IMO Res. MSC 48(66) item 4.2.6 and 4.2.7).