

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008EB

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 Lifeboats: (b) Free-fall lifeboats

with type designation(s)
GFF8.1C21 / GFF8.1C21-T / GFF8.1C24

Issued to

Hatecke GmbH
Drochtersen, Niedersachsen, Germany

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

Regulation (EU) 2023/1667,
item No. MED/1.17b. SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34 & X/3, LSA Code, IMO Res.
MSC.481(102), IMO MSC.1/Circ.1423, IMO MSC.1/Circ.1630, IMO MSC/Circ.1006 and 2000 HSC Code 8

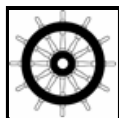
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-02-12**.

Issued at **Hamburg** on **2024-02-13**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Michael Oberländer



Notified Body
No.: **0098**

for **DNV GL SE**

Mydlak-Röder, Christine
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

GFF8.1C21, GFF8.1C21-T and GFF8.1C24 are totally enclosed GRP free-fall lifeboats, available as a dry-cargo version for 40 persons (GFF8.1C21) and 36 persons (GFF8.1C24) and a tanker version for 40 persons (GFF8.1C21-T) with a self-contained air support system and special fire-protection (water-spray system).

Materials: (for details see SPC-GFF81C21-24-0 Material specification GRP Rev.1, dated 2022-04-01)

Hull material: Glass fibre Reinforced Plastic (GRP)

Buoyant material: Polyurethane hard foam

Length over all	8.22 m
Breadth over all:	2.84 m
Height over all:	3.29 m

GFF8.1C21 / GFF8.1C21-T

Weight of boat, fully equipped: 4025 kg / 4275 kg (cargo / tanker version)

Max. launching weight, fully manned (82.5 kg/person): 7325 kg / 7575 kg (cargo / tanker version)

GFF8.1C24

Weight of boat, fully equipped: 4300 kg

Max. launching weight, fully manned (82.5 kg/person): 7270 kg

Release mechanism: Hatecke GFF-R8 (MEDB00001HX Rev.2)

Propulsion system: Single inboard engine

Engine Manufacturer and type: Bukh A/S, DV24RME 21.3 kW (cargo) or DV36RME 26.5 kW (tanker)
(MEDB00003FK Rev.2)

Bollard pull: 3.0 kN (DV24RME) / 3.2 kN (DV36RME)

Application/Limitation

Approved engine power: 17.6 kW / 26.5 kW

Maximum number of persons (82.5 kg/person): 40 (GFF8.1C21 and GFF8.1C21-T)

Maximum number of persons (82.5 kg/person): 36 (GFF8.1C24)

Maximum free-fall certification height:	GFF8.1C21 or GFF8.1C21-T	21.0 m
	GFF8.1C24	24.0 m

Minimum launching ramp length: 8.91 m

Launching ramp angle: 35°

Heel angle: 20°

- Unless the free-fall lifeboat lashing can be released from inside, it shall be arranged to preclude boarding until it is removed.
- For free-fall lifeboats inflatable lifejackets are recommended.
- Lifeboat equipment and marking/instructions to be inspected after installation onboard the ship. Equipment shall comply with LSA Code and IMO Res. MSC.81(70).
- The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81), IMO Res. MSC.218(82) and IMO Res. MSC.272(85) and IMO Res. MSC.320(89).
- Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2 with each lifeboat model.

Type Examination documentation

This approval is replacing the previous MED-B Certificate 400.060 issued by Notified Body DGUV Test on 2017-04-27

Basis for approval:

Technical documentation as listed in LIS-GFF81C21-24-0-Drawing list DNV-REV.0	2023-03-23
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Main drawings:

General Arrangement Plan GFF8.1C21(Cargo) GGF81C-001	2009-09-15
General Arrangement Plan GFF8.1C21-T(Tanker) GGF81C-T-001	2011-01-01
General Arrangement Plan GFF8.1C24 (Cargo) GFF81C24-001	2012-03-19
General Arrangement Plan GFF8.1C24 (Tanker) GFF81C24-T-001	2012-03-19
Seating Plan / Interior plan PGFC81-011	2010-05-31
Seating Plan / Interior plan GFF8.1C24 PGFC8124-011	2011-12-13
Lines Plan PGFC81-033	2011-05-03
Hoisting Arrangement PGFM8-12 Rev.5	2015-12-03
Construction plan seat (480mm) GFF-C DBC-09	2010-01-25
Air Supply System Type ASS 3010 PGFC81-17	2011-08-15
Water Spray System PGFC81-16 Rev.1	2011-09-29
GRP-Plan II (CFH=21m) PGFM8-07_2 Rev.2	2011-07-19
GRP-Plan III (canopy) (CFH=21m) PGFM8-06 Rev.3	2011-07-19
GRP-Plan IV (hull) (CFH=21m) PGFM8-05_2 Rev.2	2011-07-19
GRP-Plan V (assembly / foaming) (CFH=21m) PCFM8-07_3 Rev.1	2011-19-07
GRP-Plan II (CFH=24m) PGFC8124-007	2012-03-14
GRP-Plan III (canopy) (CFH=24m) PGFC8124-006	2012-03-12
GRP-Plan IV (hull) (CFH=24m) PGFC8124-005	2012-03-01
Manual for operation, maintenance and training (acc. MSC.1/Circ.1205, 1206)	2023-01-27
MAN-GFF-C-0-Manual Rev.7	

Prototype test reports:

Report. No.	Dated
PTC-GFF81M-1993-01	1993-08-31
PTC-GFF81M-T-2001-01	2001-04-11
PTC-GFF81M-2009-01	2009-05-06
PTC-GFF81C-2011-01	2011-05-04
PTC-GFF81C21-T-2011-01	2011-10-14
PTC-GFF81C24-2012-01	2012-05-08
Acceleration Test report for GFF8.1C21 CECS-2011-01	2011-05-06
Acceleration Test report for GFF8.1C24 CECS-2012-01	2012-05-07
Fire testing of lifeboat laminate acc. to IMO MSC/Circ. 1006, SINTEF, Trondheim, Norway 102010.80/10.086 Rev.1	2010-11-08
Fire Test STB-1529-1987 witnessed by Germanischer Lloyd	1987-05-12

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70), Part 1, as amended by IMO Res. MSC.226(82), IMO Res. MSC.274(85), IMO Res. MSC.323(89) and IMO MSC/Circ.1006.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, boat model and serial number, month and year of manufacture, number of persons approved for and operational restrictions, if any, according to LSA code item 4.4.1.2 and the mark of conformity (see page 1).

Further it shall be marked with the max. number of persons, the name and port of registry of the mother ship and means of identifying according to LSA Code (IMO Res. MSC.48(66)) 4.4.9.

List of lifeboat equipment to be posted inside the boat.