

Certificate of Type Approval

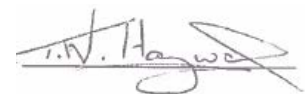
This is to certify that the product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	Castoldi S.r.L
Address	STRADA PROVINCIALE 114, n.10 20080, ALBAIRATE, Italia,
Type	Rigid Inflated Rescue Boat
Description	Rigid Inflated Rescue Boat with Jet Drive propulsion
Trade Name	Jet Tender 14 RB
Specified Standard	IMO Resolution MSC.81 (70), Part 1 as amended IMO MSC.Circular 1006 ISO 15372 (2000)

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.



Terry Hayward

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR22129268SS

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Castoldi Jet Tender 14 RB Owner's manual revision 5, dated 8th September 2020

Castoldi Jet Tender 14 RB Quick instruction manual revision 2

Drawing Title	Drawing Number	Rev No.	Date
Reflective strips layout	PJD 3986	00	20/01/2020
Lamination Structural Arrangement	PJD-3996	00	06/07/2020
General Arrangement	PJD-4001	00	07/07/2020
Hull lifting attachment points	PJD-4006	00	09/07/2020
Layout Painter Release	PJD-4002	00	08/07/2020
Exhaust System Layout	PJD-4005	00	09/07/2020
Bilge System Layout	PJD-4003	00	08/07/2020
Seating Arrangement (5 persons + Stretcher)	PJD-3995	00	06/07/2020
Righting System (manual)	PJD-4000	00	07/07/2020
Lifting strop angles	PJD-3987	00	20/01/2020
Lifting points	PJD-3988	00	17/02/2020
Fuel System Layout	PJD-4004	00	08/07/2020
Inflatable Tube Arrangement	PJD-3997	00	06/07/2020
Inflatable Tube Compartments and volumes	PJD-3998	00	06/07/2020
Navigation Lights Arrangement	PJD-3999	00	17/02/2020
Emergency Steering tiller	592.21259	00	13/07/2020

TEST REPORTS

MSC/Circ. 980 Prototype Test Report for Rigid/Inflated Rescue Boat, report No. 376349, dated 26th October 2020 and witnessed by Istituto Giordano.

Flame Resistance Test according to the MSC/Circ. 1006, Section 4, report No. 2012CS012295/1, dated 16th January 2013 conducted at Test laboratory of RINA Spa.

Fire Retardant Test to ISO 5660-1 in accordance with MSC/Circ. 1006, Section 3 report No. 0117/DC/REA/13, dated 26th February 2013 conducted at Test laboratory of CSI Spa

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CONDITIONS OF CERTIFICATION

1. Rescue Boat weights: -

Lightweight: -	903 kg
Equipment	50 kg
Fuel Oil	67 kg
Fully equipped weight	1070 kg
Complement weight: -	495 kg (with 6 persons)
Recovery weight (fully laden)	1565 kg (with 6 persons)

2. Dimensions (L x B x D): - 4.28 x 2.0 x 1.14 meters

3. Approved Equipment Details:-

Engine:

Manufacturer:	Yanmar
Type:	4JH110
Power:	80.9 kW
Max. bollard pull:	5850 N

4. Approved hook release gear details:

Manufacturer:	Cranston-Eagle
Type:	APR-356-CB/CBH single fall off-load rescue boat release hook
SWL:	3500 kg

5. Material Details:

Materials	Type	Manufacturer
Gel coat	Norpol NGA X2	Reichhold
Polyester resin	Dion FR 850-800	Reichhold
Glass reinforcement	KEBX600 hybrid biaxial +/-45	Selcom SRL
Glass reinforcement	M501-450 chopped strand mat	Ahlstrom
Glass reinforcement	M123-225 chopped strand mat	Owens Corning
Inflatable tube	Orca 866 proofed fabric	Pennel & Flipo

6. This boat is righted manually by 2 persons.

7. Maximum allowed speed of the rescue boat is 20 knots.

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8. The rescue boat is to be kept in a state of continuous readiness for launching in not more than 5 minutes when the vessel is at sea.
9. Portable orange covers fitted with retro-reflective material are to be attached to the boat when used as a rescue boat to assist with detection at sea.
10. The launch and recovery appliance is to be capable of raising the rescue boat from the water, with its full complement of persons and equipment at a rate of not less than 0.3m/s.
11. For compliance with SOLAS Regulation III/35 and III/36 fully detailed operations and maintenance manuals shall be supplied with each Rescue boat.
12. The rescue boat is provided with a four-point suspension arrangement for launching from a ship at sea, the release gear used in conjunction with this boat shall be an approved release mechanism certified for a maximum safe working load (SWL) of not less than the boat's maximum fully laden weight.
13. It is to be demonstrated to the attending surveyor's satisfaction that the rescue boat can be raised/lowered without interference with the occupants of the boat.
14. The rescue boat is to be provided with a 'foul weather recovery strop(s)' of Safe Working Load equivalent to at least the maximum laden weight of the boat where heavy blocks (more than 7 Kgs) constitute a danger.
15. The rescue boat is to be marked in block capitals of the Roman alphabet with the number of persons it is approved to carry, the name and port of registry of the ship to which the boat belongs; and means of identifying from above the ship to which the boat belongs along with the number of the boat.
16. The rescue boat is approved for up to a maximum of 5 persons plus 1 person in a stretcher provided the seating arrangement is to the satisfaction of the attending surveyor.
17. Each rescue boat is to be marked with the information required by LSA Code, Paragraph 1.2.2.9 and 4.4.1.2.
18. Installation on board: The on-board arrangements and installation of the rescue boat are not part of this design appraisal or certificate. All such arrangements are to be to the satisfaction of the Surveyors attending on board.
19. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
20. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.
21. All equipment installed on board should be of an approved type as required by SOLAS and the LSA Code.
22. In accordance with LSA Code Paragraph 4.4.7.6.9 all components of the lifting arrangement and the fixed structural connections in a boat shall be of material corrosion resistant in the marine environment without the need for coatings or galvanizing. This does not preclude any additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration. The arrangements should be to the satisfaction of the attending Surveyor.

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23. Alteration / modifications of the Type Approved Rescue Boat will invalidate the Type Approval Certificate which, in turn, will affect the validity of the related Statutory Certificate (of the vessel on which the rescue boat is installed). In such cases, where the equipment requires alterations/modifications, these are only to be carried out with agreement/approval of the Flag State Administration (of the vessel on which the rescue boat is installed) on an installation-by-installation basis.
24. Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81 (70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.
25. Should a change of Place of Production from that stated below be required, i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised by us prior the change taking place. This Certificate will require to be updated for Approval to be maintained.

PLACE OF PRODUCTION

Strada Provinciale 114, n. 10
20080, Albairate,
Italia,



Terry Hayward
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) 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 products designed or manufactured otherwise than in strict conformity with the said prototype(s).