



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	Williams Jet Tenders
Address	Vouge Business Park, Berinsfield, OX10 7LN, United Kingdom
Type	Rigid/Inflatable Rescue Boats
Description	Davit launched rigid /inflated rescue boat- Type: "Williams DieselJet 505"
Trade Name	Williams DieselJet 505
Specified Standard	IMO Resolution MSC.81 (70), Part 1 as amended by as amended IMO MSC./Circular 1006 ISO 15372:2000 + A1:2021

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.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lijo Thomas

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register 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 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.

**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR22414900SS**

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.

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APPROVAL DOCUMENTATION

Operations & Maintenance Manual for SOLAS DieselJet 505 2023MY, Document No WI.153, (Rev 1)

<u>Drawing No.</u>	<u>Rev No</u>	<u>Date</u>	<u>Drawing Title</u>
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 1 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 2 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 3 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 4 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 5 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 6 OF 7)
PO67-505DJ-GA-dwg1	C	23/08/21	RD1822 DIESELJET 505 (SHEET 7 OF 7)

TEST REPORTS

Prototype Test Report as per MSC.1/Circ.1631 for Diesel Jet 505 rescue boat, dated 04/04/2022, 05/04/2022, 10/05/2022, 11/05/2022 as witnessed by Lloyd's Register Surveyor.

MSC/Circ1006, Fire test report for acceptance of Fire Retardant Materials for the construction of Lifeboats – Section 3- Fire Retardant test , test report No :503686, dated 21th May 2021.

MSC/Circ1006, Fire test report for acceptance of Fire Retardant Materials for the construction of Lifeboats – Section 4- Flame Resistance Test , test report No :503688, dated 21th May 2021.

CONDITIONS OF CERTIFICATION

- Dimensions (LxBxD):** 5.03 x 2.01 x 1.17 metres
- Maximum weights:-**

Unloaded Boat weight	1080 kg
Equipment and fuel:	78 Kg
Crew weight: @82.5 kg	495 kg (6 persons max)
Fully laden weight:	1653 kg

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3. **Approved engine and water jet details:-**

Engine Manufacturer:	Yanmar
Type:	4JH110-
Maximum Towing Power:	590 Kg
Propulsion	Water Jet

4. **Materials of GRP hull construction:**

	<u>Type</u>	<u>Manufacturer</u>
Gel coat:	Maxguard NP HTRL H/S	Ineos Composites
Resin:	F2 207 TPB	Ineos Composites
Chopped Strand Mat:	E6CRMC 450	Jushi Group Co Ltd
Woven Roving:	XM936/100	Jushi Group Co Ltd
	E05B-45/45BX	
	EG-50-1270 MM	
Buoyancy chamber fabric	ORCA-866	Pannel and Flipo

- Maximum number of persons the rescue boat is certified to carry is 6.
- Maximum allowed speed of the rescue boat is 20 knots.
- The fully laden weight including fuel, equipments and persons shall be lower than the certified SWL of the launching device.
- The rescue boat is to be kept in a state of continuous readiness for launching in not more than 5 minutes when the host vessel is at sea.
- 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.
- 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 his 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. All loose lifting gear is to be tested in accordance with the requirements of chapter 12 of the LR code for lifting appliances as appropriate, to the attending surveyor's satisfaction.
- 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.
- This rescue boat is capable of being righted by manual initiation of an installed righting system comprising an inflatable bag and a compressed gas system. The gas cylinder is to be manufactured and tested to an appropriate recognised international standard and all pressure system shall be periodically inspected in service according to the manufacturer instructions and tested at intervals not exceeding five years and/or to the satisfaction of the Administration.



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13. 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.
14. The rescue boat's launching appliance 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. Each boat is to be marked with the information required by the LSA Code, Regulations 1.2.2.9 and 4.4.9. 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. Detailed instructions for use, maintenance and installation of the rescue boat complying with SOLAS Regulations III/35 and 36 and also instructions for use and maintenance of all machinery and equipment shall be provided to each purchaser and be available on board. The equipment shall be kept in good working order at all times and checked at regular intervals according to the manufacturer's instructions and SOLAS requirements.
17. Water-resistant instructions for starting and operating the engine shall be provided and mounted in a conspicuous place near the engine starting controls. Each marking of control, gage or display shall be permanent and weatherproof.
18. Any inspection, maintenance, thorough examination, operational testing, overhaul and repair shall be carried out according to requirements of resolution MSC.402(96).
19. **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.
20. Alternations/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 equipment requires alternation/modifications, these are only to be carried out with the agreement/approval of the Flag State Administration (of the vessel on which the Rescue Boat is installed) on an installation-by-installation basis. This certificate may be suspended or cancelled if manufacturer deviates from any of the conditions described herein.
21. 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.
22. 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 a Certificate of SOLAS Production Testing issued by the attending 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.
23. 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.
24. 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 to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.



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PLACE OF PRODUCTION

Williams Jet Tenders
Vogue Business Park
Berinsfield
OX10 7LN
United Kingdom

Lijo Thomas
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)