Electronically published by ABS London.
Reference T2246110, dated 26-MAY-2022.

CERTIFICATE NUMBER	22-2246110-PDA
EFFECTIVE DATE	25-May-2022
EXPIRY DATE	24-May-2027
ABS TECHNICAL OFFICE	Gdynia Engineering Department

CERTIFICATE OF
Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

COLTRACO ULTRASONICS LTD

located at

NETPARK RESEARCH INSTITUTE, JOSEPH SWAN ROAD, , SEDGEFIELD, United Kingdom, TS21 3FB

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product:	**Tightness Detection System**
Model:	**Portascanner (509004-0311)**
Endorsements:	
Tier:	**2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 24/May/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Arkadiusz Pytkowski,Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

Sensitivity: Internal & Restricted

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Terms & Conditions of
ABS Design Assessment

1. Agreement

Unless otherwise agreed in writing, all services rendered and certificates issued are governed by the terms and conditions of the "Request for Product Type Approval and Agreement" (the "Agreement") which are hereby incorporated by reference.

2. Representations as to Design Assessment

A certificate of design assessment represents that the product design meets the ABS, statutory, industrial or manufacturer's standard described on the reverse hereof and that the manufacturer has established a systematic quality monitoring system sufficient to show its capacity to consistently manufacture a product which meets the designated standards. ABS is not a substitute for the independent judgment of professional designers or engineers nor a substitute for the quality control procedures of constructors, steel makers, suppliers, manufacturers and vendors of marine structures, materials, machinery or equipment. ABS represents solely to the manufacturer or other client of ABS that it will use due diligence in developing Rules, Guides and standards and in surveying the plant as called for by ABS criteria for type approval.

3. Suspension of Certification

Any of the following events will cause immediate suspension of the certificate of design assessment unless the change is submitted to ABS for a new review and audit.

a) Redesign of the product or products covered by this certificate;

b) Change in production methods;

c) Substantial change in management organization;

d) Substantial change in frequency or curriculum for personnel training;

e) Refusing access to ABS personnel for periodic or annual audits;

f) Failure to correct a non-compliance identified during an audit or in service;

g) Failure to pay ABS fees.

4. Validity

The validity, applicability and interpretation of a certificate issued under the terms of or in contemplation of ABS Type Approval are governed by the Rules, Guides and standards of American Bureau of Shipping which shall remain the sole judge thereof. Nothing contained in this certificate or in any report issued in contemplation of this certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied, nor create any interest, right, claim or benefit in any third party. It is understood and agreed that nothing expressed herein is intended or shall be construed to give any person, firm or corporation other than the parties hereto, any right, remedy, or claim hereunder or under any of the provisions herein contained; all of the provisions hereof are for the sole and exclusive benefit of the parties hereto.

5. Limitation

ABS makes no representations beyond those contained herein and in the provisions of the Agreement regarding its reports, statements, plan review, surveys, certificates or other services.

6. Hold Harmless

The party to whom this certificate is issued, and his assignee and successor in interest, agree to indemnify and hold harmless ABS from and against any and all claims, demands, lawsuits, or actions for damages, including legal fees, to persons or other legal entities and property, tangible, intangible, or otherwise which may be brought against ABS incidental to, arising out of or in connection with the work done, services performed or material to be furnished under this certificate, except for those claims caused solely and completely by the negligence of ABS, its agents, employees, officers, directors or subcontractors.

7. Arbitration

Any and all differences and disputes of whatsoever nature arising out of this agreement shall be put to arbitration in the City of New York pursuant to the laws relating to the arbitration there in force, before a board of three persons, consisting of one arbitrator to be appointed by ABS, one by Client, and one by the two so chosen. The decision of any two of the three on any point or points shall be final. Until such time as the arbitrators finally close the hearings either party shall have the right by written notice served on the arbitrators and on an officer of the other party to specify further disputes or difference under this Agreement for hearing and determination. The arbitration is tobe conducted in accordance with the rules of the Society of Maritime Arbitrators, Inc. The arbitrators may grant any relief, other than punitive damages, which they, or a majority of them, deem just and equitable and within the scope of the agreement of the parties, including, but not limited to, specific performance. Awards made in pursuance to this clause may include costs including a reasonable allowance for attorney's fees and judgment may be entered upon any award made hereunder in any court having jurisdiction. ABS and client hereby mutually waive any and all claims to punitive damages in any forum.

Client shall be required to notify ABS within thirty (30) days of the commencement of any arbitration between it and third parties which may concern ABS's work in connection with this Agreement and shall afford ABS an opportunity, at ABS's sole option, to participate in the arbitration.

8. Time Bar to Legal Action

Any statutes of limitation notwithstanding, Client expressly agrees for itself and its affiliated companies that its right to bring or to assert against ABS any and all claims, demands or proceedings whether in arbitration or otherwise shall be waived unless (a) notice is received by ABS within thirty (30) days after Client or its affiliates had notice of or should reasonably have been expected to have had notice of the basis for such claims; and (b) arbitration or legal proceedings, if any, based on such claims or demands of whatever nature are commenced within one (1) year of the date of such notice to ABS.

9. Limitation of Liability

The combined liability of American Bureau of Shipping, its officers, employees, agents or subcontractors for any loss, claim, or damage arising from negligent performance or non-performance of any services under this Agreement, of from breach of any implied or express warranty of workmanlike performance in connection with the services, or from any other reason, to any person, corporation, partnership, business entity, sovereign, country or nation, shall be limited to the greater of a) $100,000 or b) an amount equal to ten times the sum actually paid for the services alleged to be deficient.

The limitation of liability may be increased up to an amount twenty-five times that sum paid for services upon receipt of Client's written request at or before the time of performance of service and upon payment by Client of an additional fee of $10.00 for every $1,000.00 increase in the limitation.

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Tier: 2 - PDA Issued

Product: **Tightness Detection System**
Model: **Portascanner (509004-0311)**
Endorsements:

Intended Service:
ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.

Description:
Ultrasonic watertight integrity tester for testing watertightness of watertight structures including hatch covers, watertight doors, deck areas.
System is composed of a receiver, sensor, generator & headphones.
Generator transmits the ultrasound frequency (40 kHz).
Sensor: detects ultrasonic signal and directs it to the receiver.
Receiver indicates if leaks are detected through a digital display or audio signal through the headphones.

Rating:
-Receiver: IP 67, 9 Volt PP3 battery.
-Generator: 9 Volt PP3 battery, frequency emission up to 40kHz.
-Headphones:
frequency response: 20 Hz to 18 KHz.
Impedance: 32 ohms.
Sensitivity: 105dB SPL at 1kHz
Adaptor Plug: 3.5mm to 6.3mm type

Service Restriction:
1. Unit Certification is not required for this product.
2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
3. Functionality is not covered on this certificate, only hardware is covered.
4. Tester is not to be used in Ex hazardous areas.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
Drawing No. 1-C33-10-01, Parts List, Revision: 01, Pages: -
Drawing No. 16357_sheet 1, Coltraco LTD. new portable ultrasound instruments HF input, rectifier and DC buffer, Revision: 1.1, Pages: 1
Drawing No. 16357sheet 2, Coltraco LTD. New portable ultrasound instruments portascanner front end, Revision: 1.1, Pages: 2
Drawing No. 16357sheet 3, Coltraco LTD. New portable ultrasound instruments portascanner mux and gain stage, Revision: 1.1, Pages: 3
Drawing No. 16357sheet 4, Coltraco LTD. New portable ultrasound instruments comms and eeprom, Revision: 1.1, Pages: 4
Drawing No. 16357sheet 5, Coltraco LTD. New portable ultrasound instruments user controls and power, Revision: 1.1, Pages: 5
Drawing No. 16357sheet 6, Coltraco LTD. New portable ultrasound instruments main processor, Revision: 1.1, Pages: 6
Drawing No. 16358iss2_, Portascanner and portalevel PCB, Revision: 2, Pages: 1
Drawing No. 64128, PCB adapter for 64128 LCD module, Revision: 1.1, Pages: 1
Drawing No. 64128LCD_BOT_SS, PCB compoent side, Revision: 2, Pages: 1

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Tier: 2 - PDA Issued

Drawing No. 64128LCD_TOP_SS, PCB LCD OR TOP SIDE COLTRACO LCB SUB-BOARD, Revision: 2, Pages: 1
Drawing No. 8-C33-0532-024A, Machining details for end caps used on assembly 1-C33-08-01, Revision: A, Pages: 1
Drawing No. Portascanner Receiver Parts List, Revision: -, Pages: -
Drawing No. Pre_Amp_Iss2_SS, transducer mounted pre-amp, Revision: 2, Pages: 1
Drawing No. Pre_Amp_Iss2_Sch, Coltraco LTD ultrasound probe head pre-amp, Revision: 1.0, Pages: 1
Drawing No. Test Instruction Portascanner Receiver, Revision: -, Pages: -
Drawing No. B509TR1 EMC Services Ltd., UK, Test Report dated 7 Dec. 2009, Revision: -, Pages: -
Drawing No. Declaration of conformity 11 Apr. 2022, Revision: -, Pages: -

Terms of Validity:
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STANDARDS

ABS Rules:
2022 Rules for Conditions of Classification - Part 1, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2022 Rules for Building and Classing Marine Vessel Rules: 4-1-1/3.3, 4-8-3/1.11.1

2022 Rules for Conditions of Classification - Light and High Speed Craft (Part 1), 1-1-4/11.9, 1-1-A2, 1-1-A3, which covers the following:
2022 Rules for Building and Classing High Speed Craft: 4-1-1/3.3, 4-6-1/15

2022 Rules for Conditions of Classification, Offshore Units and Structures (Part 1), 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:
2022 Rules for Building and Classing Mobile Offshore Units: 4-3-1/15
2022 Rules for Building and Classing Facilities on Offshore Installation: 1-6-3, 3-6/Table 1A & 1B

National:
NA

International:
NA

Government:
NA

EUMED:
NA

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OTHERS:
NA