



U. S. Department of Homeland Security
United States Coast Guard
Certificate of Approval

Coast Guard Approval Number: 162.050/9040/0

Expires: 26 October 2020

OIL POLLUTION PREVENTION EQUIPMENT

The following device has been tested in accordance with IMO Resolution MEPC.108(49)

RIVERTRACE ENGINEERING LTD.
UNIT P KINGSFIELD BUSINESS CENTRE
PHILANTHROPIC ROAD
REDHILL SURREY RH1 4DP UNITED KINGDOM

SMART-ODME; Cargo Monitor.

Equipment manufactured by Rivertrace Engineering Limited to drawing no. 109390 dated 2/5/2005. Control equipment manufactured by Rivertrace Engineering Limited to drawing no. 10 913 dated 1/5/2005. Sample feed pump manufactured by Walter Speck GMBH & CO. KG, Germany to specification/assembly drawing no. Type 295.0123 with electric motor Speck Type ATB3-MOT63, or equivalent. Sample Conditioning Unit Assembled by Rivertrace Engineering Limited to drawing no. 10 9201 dated 8/5/2005 with pressure transmitter tecsis GmbH, Type E11/12/13 DMT02ATEXE114X or equivalent.

This cargo monitor is acceptable for the following applications: Crude Oils; "Black" products and "White" products.

An integral pump is fitted with this equipment. A copy of this certificate should be carried aboard a vessel fitted with this equipment at all times. IMO Certificates of Type Approval do not expire and are valid for equipment manufactured at any time during the period of validity of this certificate. The electrical components of a monitor that that is to be installed in an explosive atmosphere must be approved by an independent laboratory as components that Underwriters Laboratories Standard 913 defines as intrinsically safe for use in a Class I, Group D hazardous location. Test data and results attached in the appendix.

This certificate documents compliance with 46 CFR 162.050.

*** End ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.

GIVEN UNDER MY HAND THIS 26th DAY OF
OCTOBER 2015, AT WASHINGTON D.C.



S. T. BRADY
Chief Engineering Division
BY DIRECTION OF THE COMMANDANT

TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*) and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."