



CERTIFICATE NUMBER BA-0010

CERTIFICATE OF TYPE TEST FOR OIL CONTENT METERS

THIS IS TO CERTIFY THAT THE SYSTEM COMPRISING THE EQUIPMENT LISTED HAS BEEN EXAMINED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATION CONTAINED IN PART III OF THE ANNEX TO THE RECOMMENDATION CONTAINED IN IMO RESOLUTION NO. A. 393 (X). THIS CERTIFICATE IS VALID ONLY FOR SUCH A SYSTEM.

• SYSTEM MANUFACTURED BY OPM 1 BILGE ALARM
BABCOCK-BRISTOL LTD., CROYDON, ENGLAND INCLUDING

OIL CONTENT METER MANUFACTURED BY BABCOCK-BRISTOL LTD.

TO DRAWING NUMBERS A107 715(17/5/85); C107 674(9/5/85); C0 14753(17/5/85)

• RECORDING DEVICE MANUFACTURED BY -

TO DRAWING NUMBERS -

• ALARM MANUFACTURED BY BABCOCK-BRISTOL LTD.

TO DRAWING NUMBERS C0 14802(2/9/85)

• METER SUPPLY MANUFACTURED BY -

TO DRAWING NUMBERS -

• HOMOGENISER (MIXER) MANUFACTURED BY -

TO DRAWING NUMBERS -

CONTROL SYSTEM MANUFACTURED BY BABCOCK-BRISTOL LTD.

TO DRAWING NUMBERS C0 14802(2/9/85)

THE SYSTEM IS ACCEPTABLE FOR THE FOLLOWING APPLICATION (* DELETE AS APPROPRIATE)

- * -- ~~ORCUTTING~~
- * -- ~~WATER EXPOSURE~~
- * -- ~~15 PPM BILGE OR FUEL TANK BALLAST ALARM~~
- * -- ~~WATER EXPOSURE~~
- * -- ~~BILGE OR FUEL TANK BALLAST WATER MIXING~~
- * -- ~~OTHER PRODUCTS EXHAUSTION~~

TEST DATA AND RESULTS TO BE PROVIDED AS APPENDIX AS PER DEPT. OF TRANSPORT, UNITED KINGDOM, CERTIFICATE OF TYPE TEST, DATED 13 SEPTEMBER, 1985.

A COPY OF THIS TEST CERTIFICATE SHOULD BE CARRIED ABOARD A VESSEL FITTED WITH THIS EQUIPMENT AT ALL TIMES



P.J. Strain
 P.J. STRAIN,
 SENIOR SURVEYOR,
 POLLUTION PREVENTION.
 (SIGNATURE OF AUTHORIZED INSPECTOR)

DATED THIS 14th DAY OF July 19 87



Canadian Coast Guard / Garde côtière canadienne

Canada



U.S. Department of Transportation

United States Coast Guard

Certificate of Approval

COAST GUARD APPROVAL NO: 162.050/3007/2 EXPIRES: JUNE 9, 2005
Certificate of Type Test for Oil Content Meter
per IMO Resolution MEPC.60(33)

OIL POLLUTION PREVENTION EQUIPMENT

BRISTOL-BABCOCK LTD
VALE INDUSTRIAL ESTATE
STOURPORT ROAD
KIDDERMINSTER DY117QU, WORCESTERSHIRE
UNITED KINGDOM CRO 4XG

Model OPM 1 bilge alarm.

Consists of a ten bar light-emitting-diode indicator and control box with alarm unit. The system operates by measuring the scattered light properties of oil particles.

Identifying Data: UL Test Report MQ36680TA955 dated 13 Nov. 1980, Marine Safety Agency (was UK DOT) test report dated 20 Oct. 1994, and Sira Test & Certification LTD test report dated 17 Oct. 1994.

Systems mfd. by Bristol Babcock Ltd. to dwgs. A107715 issue B dtd 11 Sept. 85, C107674 issue B dtd 11 Sept. 85, C014753 issue A dtd 17 May 85, and C014802 issue A dtd 2 Sept. 85.

The system is accepted for use as a 15 ppm Bilge or Fuel Tank Ballast Alarm.

A copy of this certificate should be carried aboard a vessel fitted with this equipment at all times. The expiration date shown is for USCG approval only. IMO Certificate of Type Test does not expire.

Test data and results attached as appendix.

This alarm is also approved by Hyde Products, Inc. under 162.050/3011/1.

This certificate supersedes approval number 162.050/3007/1 dated 12 June 1991 to show compliance with IMO Resolution MEPC.60(33).

*** 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 9TH DAY OF
JUNE 2000, AT WASHINGTON D.C.

RAYMOND W. MARTIN, CDR
CHIEF, SYSTEMS ENGINEERING DIVISION
BY DIRECTION OF THE COMMANDANT, U.S.C.G.

**CERTIFICATE OF TYPE APPROVAL FOR OIL CONTENT METERS
INTENDED FOR BILGE ALARMS
(15 ppm alarm)**

This is to certify that the oil content meter, comprising the equipment listed below, has been examined and tested in accordance with the requirements of the Specifications contained in part 2 of the annex to the Guidelines and Specifications contained in IMO resolution MEPC 60(33). This Certificate is valid only for an oil content meter referred to below.

Oil content meter supplied by BRISTOL BABCOCK LTD, CROYDON, ENGLAND
OPM 1 BILGE ALARM
under type and model designation
and incorporating:

Oil content meter analysing unit manufactured by BRISTOL BABCOCK LTD
A107715 (17/5/85), C107674 (9/5/85),
to specification/assembly drawing No.
C014753 (17/5/85)

Electronic section of oil content meter manufactured by BRISTOL BABCOCK LTD
C014802 2/9/85
to specification/assembly drawing No. date

The oil content meter is acceptable for use with a 15 ppm bilge alarm in accordance with regulation 16(5).

A copy of this Certificate should be carried aboard a vessel fitted with this equipment at all times.

Test data and results attached as appendix.



Signed *M S Hunter*
.....
M S HUNTER
PRINCIPAL MARINE SURVEYOR

Administration of the United Kingdom of
Great Britain and Northern Ireland

Dated this 20th day of October 1994

This certificate replaces one to IMO Resolution A.393(X) and dated 13 September 1985. Additional tests to IMO Resolution MEPC 60(33) were carried out in October 1994.