

See-Berufsgenossenschaft Prüf- und Zertifizierungsstelle im BG-PRÜFZERT

European notified body Identification number 0736

Deutsche Gesetzliche Unfallversicherung





EC-Type Examination (Module B) Certificate

Certificate-No.

320.028

Name and address of the

manufacturer:

DECKMA Hamburg GmbH, Kieler Straße 316, 22525 Hamburg, Germany

Date of issue:

01.10.2009

Annex A.1 Item No & Item designation

A.1/2.3 – Oil-content meter

Product designation:

Oil-in-water monitor

Product Type:

OMD - 2005

Intended purpose:

Oil content meter (15-ppm alarm) for oily water separating equipment on

sea going vessels acc. MARPOL 73/78, Annex I

Testing based on (Specific standard):

IMO Resolution MEPC.107(49) for oil content meters and oily water

separating equipment in acc. with MARPOL 73/78. Annex I

Remarks:

The type tested was found to be in compliance with the Marine-pollution prevention requirements of Marine Equipment Directive (MED) 96/98/EC as amended by Directive 2009/26/EC subject to any conditions in the schedule (part of this certified und Lerunizierunger

This certificate may only be used in connection with module(s) **D or F or E** of this directive.

Expiry date:

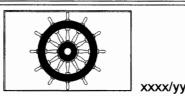
30.09.2014

The approval of the installed equipment will be in force beyond the validity date until it is revoked!

Note 1: This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.

Note 2: Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply.

Note 3: The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.



Note 4:

"Wheelmark" Format

Last two digits of year mark affixed.

XXXX Notified Body number undertaking surveillance module

Postal address: Postfach 11 04 89 20404 Hamburg

Office: Reimerstwiete 2 20457 Hamburg Tel: 0.40/3.61.37-0 Fax: 0 40/3 61 37 2 04

In any case, the German original shall prevail.



TYPENZULASSUNGSZEUGNIS für 15 ppm Bilge Alarm

Certificate of Type Approval for 15 ppm Bilge Alarm

Ausgestellt im Namen der Regierung der BUNDESREPUBLIK DEUTSCHLAND durch die SEE-BERUFSGENOSSENSCHAFT

Issued under the authority
of the Government of the FEDERAL REPUBLIC OF GERMANY
by See-Berufsgenossenschaft

Hiermit wird bescheinigt, dass der 15 ppm Bilge Alarm, die nachstehend aufgeführten Anlageteile umfasst, einer Prüfung unterzogen und gemäß den Anforderungen der technischen Beschreibung, enthalten in Teil 2 der Anlage zur Empfehlung der IMO-Entschließung MEPC.107(49), erprobt wurde.

This is to certify that the 15 ppm Bilge Alarm, 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.107(49).

Dieses Zeugnis ist nur für nachstehendes Ölgehaltsmessgerät gültig.

This certificate is valid only for the 15 ppm Bilge Alarm referred to below.

15 ppm Bilge Alarm geliefert durch: 15 ppm Bilge Alarm supplied by:	DECKM	IA HAMBURG GmbH, Kieler	Straße 316	s, D-22525 Hamburg,
Typbezeichnung: under type and model designation and incorpor	rating:	OMD 200	5	
Die Analyse-Einheit des 15 ppm Bilge Awurde hergestellt durch: 15 ppm Bilge Alarm analysing unit manufacture	Marms	DECKMA HAMBURG GmbH		
Zusammenstellungszeichnung Nr.: to specification/assembly drawing No.:	10750-10. DH75500	, 10750-50 7 DH75600, DH75610	Datum:	13.09.2004 24.06.2004/09.09.2004
Der elektronische Teil des 15 ppm Bilge wurde hergestellt durch: Electronic section of 15 ppm Bilge Alarm manus	e Alarms	DECKMA HAMBURG GmbH		
Zusammenstellungszeichnung Nr.: to specification/assembly drawing No.:	10750-10, DH75100	10750-50 / DH75200, DH75300	Datum:	13.09.2004 24.06.2004/09.09.2004
Versorgungspumpe hergestellt durch: Sample feed pump manufactured by:				
Zusammenstellungszeichnung Nr.: to specification/assembly drawing No.:			Datui date:	m:
Probenaufbereitungseinheit hergestellt Sample conditioning unit manufactured by:	durch:			
Zusammenstellungszeichnung Nr.: to specification/assembly drawing No.:			Datur	m:
Der 15 ppm Bilge Alarm ist für die Ver The 15 ppm Bilge Alarm is acceptable for use in	wendung g	emäß Regel 16(5) geeignet. with regulation 16(5).		
Eine Kopie dieses Zeugnisses soll jede Alarm ausgerüstet ist. A copy of this Certificate should be carried about	•	J		t diesem 15 ppm Bilge
Dieses Typenzulassungszeugnis bleibt ü Ein Widerruf für auf einem Schiff e und/oder nicht gewartet und/oder nicht zukünftige Bestimmungen angepasst we This certificate of type approval is in force beyo A revocation of the equipment installed aboard good working order and/or the equipment can in	eingebaute t funktionsl erden könne nd the below I the ship can	Einrichtungen kann z.B. erfo bereit sind und/oder nicht inner en. mentioned date unless it is revoked. follow, but is not limited to, if the equ	lgen, wen rhalb einer	n diese nicht gefahren rangemessenen Frist an at maintained and/or is not in
Daten und Ergebnisse der Erprobunger Test data and results attached as Appendix.	ı siehe Anh	ang.		
Dieses Typenzulassungszeugnis ist gülti This certificate of type approval is valid until:	g bis:	30.09	2014	
Ausgestellt in Hamburg am: 01.10.20)Úð	SEE-BERUFSG		
Issued at Hamburg on:	220	- SCHIFFSSICHE	RHEITSA	ABTEILUNG -
Zulassungs-Nr.: 320 028 SSCENOSSE Certificate-No.:				
E I			Untersehri Signature	ift

Anhang zum Typenzulassungszeugnis für 15 ppm Bilge Alarm

Appendix to the certificate of type approval for an 15 ppm Bilge Alarm

Daten und Ergebnisse der Erprobungen, durchgeführt an einem 15 ppm Bilge Alarm gemäß Teil 2 der Anlage zu den Richtlinien und Anforderungen der IMO-Entschließung MEPC.107(49).

Test data and results of tests conducted on a 15 ppm Bilge Alarm in accordance with Part 2 of the Annex to the guidelines and specifications contained in IMO-Resolution MEPC.107(49). 15 ppm Bilge Alarm vorgestellt durch: DECKMA HAMBURG GmbH 15 ppm Bilge Alarm submitted by: Ort der Erprobungen: DECKMA HAMBURG GmbH, Kieler Straße 316, D 22525 Hamburg, Test location: Stelle, die die Prüfung durchgeführt hat: See-Berufsgenossenschaft Hamburg Organization conducting the test: Verfahren der Probenanalysen: IMO-Verfahren gemäß Entschließung MEPC.107(49) (ISO 9377-2) IMO-method acc. to resolution MEPC.107(49) (ISO 9377-2) Method of sample analysis: Analysen der Proben durch: Institut Fresenius GmbH, Im Maisel 14, D-65232 Taunusstein-Neuhof Samples analysed by: Die Erprobung des elektronischen Teils des 15 ppm Bilge Alarms ist unter Umweltbedingungen gemäß Teil 3 der Anlage zu den Richtlinien und Anforderungen der IMO-Entschließung MEPC.107(49) durchgeführt worden. Die Anlage arbeitete bei Beendigung der jeweiligen Erprobung, die im Bericht über die Prüfung bei Umgebungsbedingungen festgelegt ist, zufriedenstellend. Environmental testing of the electronic section of the 15 ppm Bilge Alarm has been carried out in accordance with part 3 of the annex to the Guidelines and Specifications contained in IMO resolution MEPC.107(49). The equipment functioned satisfactorily on completion of each test specified on the environmental test protocol. Empfehlungen und Informationen des Herstellers über den Gebrauch von Reinigungsmitteln. Manufactures 'recommendations and information concerning the use of cleansing agents entspricht dem geprüften Typ. Der 15 ppm Bilge Alarm Serien-Nr.: The 15 ppm Bilge Alarm serial No.: complies with the tested type. Firmenstempel -Ort Datum Unterschrift Company Place date stamp Signature

Technical data/approved drawings and additional conditions and remarks:

The Prüf- und Zertifizierungsstelle der See-Berufsgenossenschaft verifies and certifies the conformity of the a.m. product with the Directive 96/98/EC of the Council, as amended by Directive 2009/26/EC, Annex B, Module F (Product Verification), section 5, Statistical Verification.

All products will be divided into identical lots of 200 pieces each, starting with serial number 1001001. Three (3) random samples will be drawn from each lot and individually examined.



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

Coast Guard Approval Number: 162.050/9021/0 Expires: 12 March 2015

OIL POLLUTION PREVENTION EQUIPMENT
The following device has been tested in accordance with
IMO Resolution MEPC.107(49)

DECKMA HAMBURG GmbH Kieler Strabe 316 HAMBURG D-22525 GERMANY

Model OMD - 2005; 15 ppm bilge alarm

This is to certify that the 15 ppm bilge alarm, 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.107(49).

Equipment manufactured by DECKMA HAMBURG GmbH to specification/assembly drawing no. 10750-10 and 10750-50 dated 09/13/2004; DH 75500, DH 75600, and DH 75610 dated 06/24/2004 and 09/09/2004. Control equipment manufactured by DECKMA HAMBURG GmbH to specification/assembly drawing no. 10750-10 and 10750-50 dated 09/13/2004, and DH 75100, DH 75200, DH 75300 dated 06/24/2004 and 09/09/2004.

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.

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 12th DAY OF MARCH 2010, AT WASHINGTON D.C.

S. J. KELLY

Chief, Engineering Division U.S. Coast Guard Marine Safety Center





中国船级社

CHINA CLASSIFICATION SOCIETY

编号	HD0#T00027
No.	HB05T00037

15 PPM 舱底水报警装置型式认可证书 CERTIFICATE OF TYPE APPROVAL FOR 15 PPM BILGE ALARM

This is to certify that the 15 ppm Bilge Alarm, 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.107(49).

This Certificate is valid only for the 15 ppm Bilge Alarm referred to below.

15 ppm Bilge Alarm supplied by DECKMA Hamburg GmbH, Hamburg Germany under type and model designation and incorporating:

OMD 2005

DECKMA Hamburg GmbH

DECKMA Hamburg GmbH

15 ppm Bilge Alarm analysing unit manufactured by DECKMA Hamburg GmbH
to specification/assembly drawing No. 10750-10, 10750-50 date 13.09.2004
DH75500,DH75600, 24.06.2004
DH75610 09.09.2004

DH75610 09.09.2004

Electronic section of 15 ppm Bilge Alarm manufactured by **DECKMA Hamburg GmbH**

to specification/assembly drawing No.

10750-10, 10750-50

date 13.09.2004

DH75100, DH75200,

24.06.2004

DH75300

09.09.2004

The 15 ppm Bilge Alarm is acceptable for use in accordance with Regulation 16 (5).

A copy of this Certificate should be carried aboard a vessel fitted with this 15 ppm Bilge Alarm at all times.

Test data and results attached as appendix.



*Delete as appropriate

Signed _	-WAR		(Hu Kefeng)
_	China Classification	on Society	

Dated this Oct. 27 day of 2005

РОССИЙСКИЙ МОРСКОЙ РЕГИСТР СУДОХОДСТВА RUSSIAN MARITIME REGISTER OF SHIPPING

2.4.11.1

СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ ДЛЯ СИГНАЛИЗАТОРА О СОДЕРЖАНИИ НЕФТИ В СБРОСЕ (15 МЛН-1)

CERTIFICATE OF TYPE APPROVAL FOR 15 PPM BILGE ALARM

Настоящим удостоверяется, что сигнализатор, включающий перечисленное ниже оборудование, проверен и испытан в соответствии с требованиями части 2 Приложения к Руководству и техническим требованиям, содержащимся в резолюции ИМО МЕРС.107(49). Настоящее Свидетельство действительно только для сигнализатора, указанного ниже.

This is to certify that the 15 ppm bilge alarm, 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.107(49). This Certificate is valid only for the 15 ppm bilge alarm referred to below.

Сигнализатор типа и модели 15 ppm bilge alarm under type and model designation	MD-2005		
поставляется Deckma Hamburg GmbH, Keler StraBe 3 supplied by	16, D-22525 Hamburg	Germany	
и включает and incorporating			
анализатор содержания нефти, изготовленный DE 15 ppm bilge alarm analysing unit manufactured by	CKMA HAMBURG G	nbH	
по техническим условиям/сборочному чертежу № to specification/assembly drawing No.	10750-10, 10751-50	, DH75500,DH75600, DH7561	0
to specification assembly drawing 140.		дата 13.09.2004, 24.06.	2004, 09.09.2004
электронную секцию сигнализатора, изготовленную electronic section of 15 ppm bilge alarm manufactured by	DECKMA HAMBU	date URG GmbH	
по техническим условиям/сборочному чертежу № _ to specification/assembly drawing No.	10750-10, 1075050, Di	H75100, DH75200, DH75300	
		дата13.09.2004, 24.6	06.2004, 09.09.2004
*пробоотборный насос, изготовленный *sampling pump manufactured by			
по техническим условиям/сборочному чертежу № — to specification/assembly drawing No.			
13.09.2004, 24.06.2004, 09.09.2004		дата	
*пробоотборное устройство, изготовленное *sampling unit manufactured by		date	
*Ненужное зачеркнуть.			

Delete as appropriate.

	дата
	date
Сигнализатор приемлем для использования в соответс The 15 ppm bilge alarm is acceptable for use in accordance wit	
Копия настоящего Свидетельства должна постоянно н A copy of this Certificate is to be carried aboard a vessel fitted	находиться на борту судна, оснащенного данным сигнализатором. with this 15 ppm bilge alarm at all times.
Исходные данные и результаты испытаний приведены Test data and results attached as Appendix.	в Дополнении.
№ 04.02901.009	17 December 2004
	(дата выдачи) date of issue
Российский морской регистр судол Russian Maritime Register of Shippi	кодства
The state of Simple Register of	подпись уполномоченного лица, выдавшего Свидетельство signature of authorized official issuing the Certificate



Certificate number CBA-016
Certificat numéro

CERTIFICATE OF TYPE TEST FOR OIL CONTENT METERS INTENDED FOR BILGE ALARMS CERTIFICAT D'AGRÉMENT PAR TYPE DES DÉTECTEURS D'HYDROCARBURES DESTINES AUX ALARMES POUR EAUX DE CALE 5 - 15 ppm alarme 5 - 15 ppm alarme

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 Specification contained in Part II of the Annex to the Guidelines and Specifications contained in IMO resolution MEPC 107(49). This Certificate is valid only for an oil content meter referred to below.

Il est certifié que le détecteur d'hydrocarbures comprenant les éléments ci-après a été examiné et soumis à des essais conformément aux dispositions des spécifications qui font l'objet de la Partie II de l'annexe aux Directives et spécifications contenue dans la résolution 107(49) de l'OMI. Le présent certificat n'est valable que pour un détecteur d'hydrocarbures du type décrit ci-dessous:.

	Oil content meter supplied by Détecteur d'hydrocarbures fourni par	DECKMA HAMBURG GMbH				-
	under type and model designation type et désignation du modèle:	OMD-2005				_
	and incorporating: comprenant:					
	Oil content meter analysing unit manufactured by Dispositif d'analyse du détecteur d'hydrocarbures fabriqué par	DECKMA HAMBURG GmbH				=
	to specification/drawing numbers	10750-10, 10750-50	date:	09/13/2004		
	conformément à la spécification/au schéma na	DH 75500/DH 75600, DH 75610		06/24/2004	09/09/2004	
	Electronic section of oil content meter manufactured by Éléments électronique du détecteur d'hydrocarbures fabriqué par	DECKMA HAMBURG GmbH				- 1
	to specification/drawing numbers	10750-10, 10750-50	date:	09/13/2004		
	conformément à la spécification/au schéma n°	DH 75100/DH 75200, DH 75300		06/24/2004	09/09/2004	_
e).	Sample feed pump-manufactured by Pompe d'échantillonnage fabriqué par	<u>*</u>				_
	to specification/drawing numbers conformément à la spécification/au schéma n°			-		_
1	Sample conditioning unit manufactured by Dispositif do conditionnement de l'échantillon fabriqué par	-				_
	to specification/drawing numbers					_

THE SYSTEM IS ACCEPTABLE FOR THE FOLLOWING APPLICATION: LE DISPOSITIF EST CONCUPOUR LES UTILISATIONS SUIVANTES:

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

Le détecteur d'hydrocarbures est acceptable et peut être utilisé avec une alarme à 15 ppm pour eaux de cale conformément à la règle 16(5).

- * This Bilge Alarm meets the specification for a 5 ppm unit, as contained in the "Standard for Performance and Test Specifications for Bilge Alarms for Use in Canadian Inland Waters," in accordance with the Oil Pollution Prevention Regulations.
- * Cette alarme pour eaux de cale satisfait aux spécifications pour une unité à 5 ppm, selon la "Norme de rendement est spécifications d'essais de dispositifs d'alarme pour eaux de cale utilisés sur les navires naviguant dans les eaux intérieures canadiennes", conformément au Règlement sur la Prévention de la pollution par les hydrocarbures.

Test date and results:

15 ppm tests: as per paconsult test report Nr. 436/04 dated August 20th, 2004

Les données et résultats des essais

: as per Test Protocol Report INSTITUT FRESENIUS dated October 28, 2004

A COPY OF THIS TEST CERTIFICATE SHOULD BE CARRIED ABOARD A VESSEL FITTED WITH THIS EQUIPMENT AT ALL TIMES UN EXEMPLAIRE DU PRÉSENT CERTIFICAT D'ESSAIS DEVRAIT SE TROUVER EN PERMANENCE A BORD D'UN NAVIRE ÉQUIPÉ DE CE MATÉRIEL

AMSE - C030(06-94)

Matt Cook, Senior Marine Inspector, Environmental Protection

(SIGNATURE OF AUTHORIZED INSPECTOR / SIGNATURE DE L'INSPECTEUR AUTORISE)

DATED THIS 29th

DAY OF November

2005

Canadä



DNV order no. **14885363**

STATEMENT

This is to confirm that the bilge alarm "OMD-2005", 5 ppm version, manufactured by Deckma Hamburg GmbH, Hamburg / Germany, fulfil the requirements in DNV Rules for Ships Pt. 6 Ch. 12 Sec. 3 C600 for 5 ppm alarm in connection with the Class Notation "Clean Design".

If required in terms of delivery, the set point of 5 ppm will be presetted by the manufacturer, a label 'Alarm Point set to 5 ppm' will be attached on top of the control box.

Alarm setting can be checked by following the Instruction Manual issued by Deckma.

The bilge alarm "OMD-2005" complies with relevant regulations in accordance with IMO resolution MEPC.107(49) and MED, and is certified in accordance with these regulations. In addition, it fulfils the stricter requirements as stated above. This has been tested and certified by Transport Canada, see certificate no. CBA-016, dated 2005-11-29.

Questions related to this statement can be addressed to the undersigned or directly to the manufacturer.

Hamburg, 2008-10-08

Hahn, Karstein V Surveyor HAMBURG DNV Hamburg



TEST REPORT FOR 15 PPM BILGE ALARM ACCORDING TO MEPC.107(49) (15 ppm equipment)

This is to certify that 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.107(49). This test report is valid only for 15 ppm Bilge Alarm referred to below.

15 ppm Bilge Alarm supplied by	Deckma Hamburg GmbH		
Under type and model designation and incorporating	OMD 2005		3m
*15 ppm Bilge Alarm analysing unit manufactured by	Deckma Hamburg GmbH		
to specification/assembly drawing Nos.	10750-10, 10750-50	date	13 Sept. 2004
	DH75500	date	24 June 2004
	DH75600, DH75610	date	09 Sept. 2004
* Electronic section of 15 ppm Bilge Alarm manufactured by	Deckma Hamburg GmbH		
to specification/assembly drawing Nos.	10750-10, 10750-50	date	13 Sept. 2004
	DH75100	date	24 June 2004
	DH75200, DH75300	date	09 Sept.2004
* Sample feed pump manufactured by	Not applicable		
to specification/assembly drawing No.		date	
* Sample conditioning unit manufactured by	Not applicable		
to specification/assembly drawing No.		date	

The 15 ppm Bilge Alarm is acceptable for use in accordance with regulation 16(5) of Marpol 73/78 Annex I.

Test data and results attached in the appendix.

Issued at Hamburg on 28th September 2004

Germanischer Lloyd

H. Dölling

^{*} Delete as appropriate.



DECKMA HAMBURG GmbH

DECKMA Decksmaschinen und Automation Vertriebsgesellschaft in Hamburg mbH

DECKMA HAMBURG GmbH • Kieler Straße 316 • 22525 Hamburg • Germany

TO WHOM IT MAY CONCERN

Works/Office/Delivery Address:

Kieler Straße 316 22525 Hamburg

Germany

Telephone: +49 (0)40 54 88 76 - 0

Telefax: +49 (0)40 54 88 76 - 10

E-Mail: post@deckma.com
Internet: www.deckma.com

VAT-Registration No.: DE 118 540 659

Your Ref.: Your letter dated: Our Ref.: Date: 28.09.2004

DECLARATION OF CONFORMITY

We, DECKMA HAMBURG GmbH, declare under our own responsibility that the product

15 ppm Bilge Alarm, Type: OMD-2005

is in accordance to

MARPOL 73/78, Annex I, Reg. 16, IMO- Resolution MEPC.107 (49) and the Maritime Equipment Directive 96/98 EC of the council, Annex B, Module F, Section 5, of 20. December 1996 (MED).

DECKMA HAMBURG GmbH

ppa. Wolfgang Rathien