

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)

with type designation(s)

PPT-BWS/MESB-100,-250,-500,-1000,-2500,-5000,-7500,-10000

Issued to

**Filtration Group GmbH
Hamburg, Germany**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/2.1. Marpol 73/78 as amended, Annex I Regulation 14, IMO Res.
MEPC.107(49), IMO MEPC.1/Circ. 643

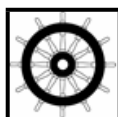
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2019-06-30**.

Issued at **Hamburg** on **2017-12-07**

DNV GL local station:
Hamburg

Approval Engineer:
Hagen Markus



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
Head of Notified Body

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

1st stage PPT-BWS module

Multiphase separation profiles for separation of water, oil, and solids
Oil drainage via oil dome without back flushing

2nd stage MESB

Separation of small sized oil droplets by coalescence elements
Oil drainage via oil dome without back flushing
Contamination monitoring of coalescence elements by differential pressure sensor

Drawings

Type	Size [m ³ /h]	Equipment	Drawing number / Type	Issue
PPT-BWS/ MESB - 100	0,1	Assembly drawing	0-NM-04 6814	2004-06-28
		Coalescer	4-NI-04 6835	2004-06-16
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 250	0,25	Assembly drawing	0-NM-04 6815	2004-06-24
		Coalescer	4-NI-04 6802	2004-06-16
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 500	0,5	Assembly drawing	0-NM-04 6816	2004-06-28
		Coalescer	4-NI-04 6802	2004-06-16
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 1000	1,0	Assembly drawing	0-NM-04 6817	2004-06-24
		Coalescer	4-NI-04 6807	2004-06-16
		Electrical heating coil	ERCT 1250W	
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 2500	2,5	Assembly drawing	0-NM-04 6818	2004-06-24
		Coalescer	4-NI-04 6808	2004-06-16
		Electrical heating coil	ERCT 1250W	
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 5000	5,0	Assembly drawing	0-NM-04 6819	2004-06-24
		Coalescer	4-NI-04 6808	2004-06-16
		Electrical heating coil	ERCT 1250W	
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 7500	7,5	Assembly drawing	0-NM-04 6837	2004-06-24
		Coalescer	4-NI-04 6808	2004-06-16
		Electrical heating coil	ERCT 1250W	
		Control equipment	4-NE-95 6113.0	1995-05-20
PPT-BWS/ MESB - 10000	10,0	Assembly drawing	0-NM-04 6820	2004-06-24
		Coalescer	4-NI-04 6808	2004-06-16
		Electrical heating coil	ERCT 1250W	
		Control equipment	4-NE-95 6113.0	1995-05-20

Application/Limitation

Job Id: **344.1-007547-4**
Certificate No: **MEDB00003CB**

The oil filtering systems PPT-BWS/MESB-100,-250,-500,-1000,-2500,-5000,-7500,-10000 are designed and tested according to IMO Resolution MEPC.107(49).

Field of application is oily bilge water separation with maximum oil content at overboard discharge of 15 ppm.

Installation is not permitted in spaces subject to explosion hazard.

The oil filtering system is to be equipped with an IMO type approved oil content meter and helical pump of type Seepex BN or a pump with the same speed-delivery characteristic curve.

Refer to IMO Type Approval Certificates specified in the Appendix of this certificate.

Type Examination documentation

Tests carried out

Test data and results of tests conducted on 15ppm Bilge Separators in accordance with part 1 of the annex to the Guidelines and Specifications contained in IMO Resolution MEPC.107(49).

Marking of product

Each separator stage and filter is provided with a name plate as follows:

First and second stage

- Manufacturer name
- Separator type
- Maximum flow rate m³/h
- IMO Type Approval Certificate number
- MED Mark of conformity
- Design pressure, test pressure and capacity of pressure vessel
- Design temperature
- Differential pressure
- Serial number
- Year built

Remarks

This certificate replaces the MED-B certificate no. 95 423-14HH

APPENDIX

IMO Test Data and Results

Test data and results of tests conducted on a 15 ppm Bilge Separator in accordance with Part 1 of the Annex to the Guidelines and Specifications contained in IMO Resolution MEPC.107(49) are published in the following Certificate of Type Approval Certificates issued under the authority of the Government of the FEDERAL REPUBLIC OF GERMANY by Berufsgenossenschaft für Transport und Verkehrswirtschaft (BG Verkehr).

Type	BG Verkehr IMO Certificate
PPT-BWS/MESB -100	330191
PPT-BWS/MESB -250	330192
PPT-BWS/MESB -500	330193
PPT-BWS/MESB -1000	330184
PPT-BWS/MESB -2500	330185
PPT-BWS/MESB -5000	330186
PPT-BWS/MESB -10000	330187

End of certificate