

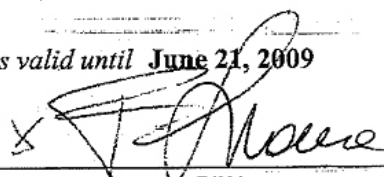
TYPE APPROVAL CERTIFICATE
No. MAC158303CS/1



This is to certify that the product identified below is in compliance with the applicable requirements of the RINA type approval system.

<i>Description</i> <i>Type</i>	Filters Fuel oil filter type SEPAR 2000 SWK-2000/5 SWK-2000/5/50 SWK-2000/10 SWK-2000/18 SWK-2000/40 SWK-2000/130
<i>Applicant</i>	(M OR MK OR UM OR UMK) VULKAN ITALIA SRL VIA DELL'AGRICOLTURA, 2 15067 NOVI LIGURE (AL) ITALY
<i>Manufacturer</i> <i>Place of manufacture</i>	WILLIBRORD LOESING FILTERTECHNIK ESSENER STRASSE 108 45529 HATTINGEN GERMANY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules

Issued in **Genoa** on **December 21, 2004**. This Certificate is valid until **June 21, 2009**


RINA

Giusto Migliardi

This certificate consists of this page and 1 enclosure



TYPE APPROVAL CERTIFICATE

No. **MAC158303CS/1**

Enclosure - Page 1 of 1

Fuel oil filter type **SEPAR 2000**

Reference documents

Drawings Nos. : 06 2991 Rev. C, 06 2992 Rev. A, 06 2993 Rev. B, 06 2996 Rev. E, 06 2731 Rev. D,
06 2409 Rev. C, 06 2604 Rev. C, 06 2413 Rev. E, 06 2417 Rev. D, 06 2419 Rev. E and 06 2729 Rev. C
Fire endurance test report, MPA NRW 12 0371 9 93 dated 02.11.1993

Materials

Casing material : GK-AISi12 (Aluminium casting alloy)
Other components, see part list on the a.m drawings

Fields of application

Water separator and diesel fuel oil or lubricating oil filters, installed on the oil suction pipe lines, between fuel or lubricating oil storage tanks and delivery pumps, of ships Classed with RINA.

Remarks

The selection of the filters for the corresponding application and the proper installation and maintenance are to be in accordance with the Manufacturer's instructions.

The acceptance of the a.m. products on board of ship and other units classed with RINA is subject to the satisfactory outcome of testing as per the applicable RINA Rules.

This Certificate annuls and replaces the previous one N. MAC158303CS dated 22 June 2004.

Genoa June 22, 2004



Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. 36 661 - 85 HH

Company Willibrord Lösing
Essener Straße 108
D-45529 Hattingen

Product Description SEPAR FILTER FOR DIESEL OIL

Type KWA-20-M, KWA-50-M, KWA-90-M, KWA-100-M
SWK-2000 / 5M(UM)_5-50M(UM)_10M(UM)_18M(UM)_40M(UM)_130M(UM)

Environmental Category None

Technical Data / TECHNICAL DATA

Range of Application

Materials

Housing: GK-ALSi 12
Sealings Synth. rubber
Pipe connections: GL type tested pipe unions or flanges

RANGE OF APPLICATION

The a.m. filters are approved and can be used in fuel and oil suction pipe lines arranged between fuel or lubricating oil storage tanks and fuel or lubricating oil transferpumps.

Test Standard Regulations for the Performance of Type Tests on Mechanical Components and Equipment, D.15 of Germanischer Lloyd.

Documents - MPA Test certificate No.: 120371993
- Drawings: KWA-20-M, KWA-50-M, KWA-90-M, KWA-100-M, 062988, 062433, 062989, 062990, 062994, 062435, 062408, 062434, 062412, 062416, 062418, 062436, Material lists, Data sheets, Mounting and service instructions

Remarks None

Valid until 2008-12-14

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Type Approval Symbol



File No. II.G.03

Hamburg, 2003-08-08

Germanischer Lloyd

Dr. D. Sideris

H. Markus