

TYPE APPROVAL CERTIFICATE

This is to certify:

That the 5 ppm Bilge Water Separator

with type designation(s)

Victor Marine Ltd; CS250, CS500, CS500AL, CS1000, CS2000, CS3000, CS4000, CS5000

Issued to

Victor Marine Ltd.

West Thurrock Essex, United Kingdom

is found to comply with

Det Norske Veritas' Type Approval Programme 771.60 5 ppm Bilge Water Separators

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Capacity: 0.25, 0.5, 1.0, 2.0, 3.0, 4.0, 5.0 m3/h

This Certificate is valid until **2017-12-31**.

Issued at **Høvik** on **2016-10-28**

DNV GL local station: **London**

for **DNV GL**

Approval Engineer: **Pål Evang Nundal**

Dag Sæle-Nilsen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

The CS series of 5 ppm Bilge Water Separators manufactured by Victor Marine Ltd. are intended for installation onboard ships and offshore units for oily bilge water separation – max.5 ppm at discharge overboard. The equipment is designed and tested to meet the requirements of the IMO Resolution MEPC.107(49), and DNV Type approval program CP0208 TAP771.60.

Application/Limitation

Maximum throughput capacity :

Model :	Max. Flow:
CS250	0.25 m ³ /h
CS500	0.5 m ³ /h
CS500AL	0.5 m ³ /h
CS1000	1.0 m ³ /h
CS2000	2.0 m ³ /h
CS3000	3.0 m ³ /h
CS4000	4.0 m ³ /h
CS5000	5.0 m ³ /h

The equipment is not permitted to be installed in spaces subject to explosion hazards.

Type Approval documentation

Model/Type :	Dwg. No.:	Revision/date :	Title :
0.25/0.5 m ³ /h	CS0250-001	20-Dec-06	General Arrangement CS0250/0500
	CS0250-001_AA	02-Feb-16	General Arrangement OWS CS0250/0500 Non Magnetic
1.0/2.0 m ³ /h	CS1000-001	03-Jun-05	General Arrangement CS1000/CS2000
3.0/4.0 m ³ /h	CS3000-001	03-Jun-05	General Arrangement CS3000/CS4000
5.0m ³ /h :	CS5000-001	03-Jun-05	General Arrangement CS5000
Common drawings ;	-	Issue11	Installation, Operating and Maintenance Manual
	CS1000-002/1	05-Jun-05	CS Series Flow Diagram
	CS1000-100-1	23-Sep-05	CS Series Oil/Water Separator Automatic Controls – Wiring Diagram
	CS1000-100-2	9-Oct-00	CS Series Oil/Water Separator Circuit Diagram – External Connections
	CS1000-100-3	13-Jan-99	CS Series Oil/Water Separator D.O.L Starter Wiring Diagram 3 Phase – Low Voltage Control Circuit
	-	Rev A / 09-Jul-13	CS Series Material List

Tests carried out

Job Id: **262.1-015379-4**
Certificate No: **TAP00000GE**

Tested in accordance with the requirements of the specification contained in Part 1 of the Annex to the revised Guidelines and Specification contained in IMO resolution MEPC.107(49) and the DNV Standard for certification 2.9 Type approval program TA 771.61 ;

Type Test Protocols;
Institut Fresenius, Dr. Ulrich Hilverkus;
Test results and test procedures for Type Victor CS1000 performed 12th July 2005 and stamped 12th August 2005
Test results and test procedures for Type Victor CS4000 performed 12th July 2005 and stamped 12th August 2005

Environmental Testing;
Product Assessment & Reliability Centre Ltd
Test report no. 5155, Issue no. 1, 23. July 2013 – “Environmental Test”

Sira instrument Test and Calibration,
Test report no. N 0525, August 2005 – “Environmental (Climatic) Tests on an Ashridge Engineering Capacitance Probe”
Test report no. N 0527, August 2005 – “Environmental (Climatic) Tests on a Moeller Isolator Switch”
Test report no. N 0530, August 2005 – “Environmental (Climatic) Tests on an Ashridge Engineering Capacitance Probe”
Test report no. N 0532, August 2005 – “Environmental (Climatic) Tests on a Moeller Isolator Switch”

Marking of product

For traceability to this type approval, each unit to be marked with:

- Manufacturers name or trade mark
- Type designation
- Serial No.
- Maximum throughput
- Maximum influent pressure

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Program DNVGL-CP-0338, Section 4.