

TYPE APPROVAL CERTIFICATE

This is to certify:

That the 5 ppm Bilge Water Separator

with type designation(s)
JOWA 3SEP OWS 5ppm

Issued to

Jowa AB
Kållerød, Sweden

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: 0.5 - 10 m³/hr

This Certificate is valid until **2017-06-30**.

Issued at **Høvik** on **2015-08-28**

DNV GL local station: **Gothenburg**

Approval Engineer: **Pål Evang Nundal**

for **DNV GL**

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 5 ppm Bilge Water Separators System JOWA 3SEP OWS is intended for installation onboard ships 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 TAP771.60.

Application/Limitation

Max. throughput capacity; 0.5, 1.0, 2.5, 5.0 & 10.0 m3/hr, respectively for type/ model.

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

Type Approval documentation

Model/ Type:	Dwg.No.:	Date:	Title:
0.5 m3/h :	24-0005-01-01	2008-02-14	Arr.mt. drwg. JOWA 3SEP OWS 0.5 m3/h
	24-0005-01-02	2008-02-14	ISO GA, Connection points, OWS 0.5 m3/h
	24-0005-01-03	2008-02-14	ISO GA, Parts List, OWS 0.5 m3/h
1 m3/h :	24-0010-01-01	2004-05-06	Arr.mt. drwg. JOWA 3SEP OWS 1 m3/h
	24-0010-01-02	2004-05-06	Arr.mt. drwg. JOWA 3SEP OWS 1 m3/h
	24-0010-01-50	2004-09-16	Gravity Separator Tank
	50-0075-01-01	2001-05-16	JOWA Filter & Separator Tank
2.5 m3/h :	24-0025-01-01	2004-07-06	Arr.mt. drwg. JOWA 3SEP OWS 2.5 m3/h
	24-0025-01-02	2004-07-06	Arr.mt. drwg. JOWA 3SEP OWS 2.5 m3/h
	24-0025-01-50	2004-09-09	Gravity Separator Tank
	50-0150-01-01	2001-06-14	JOWA Filter & Separator Tank
5 m3/h :	24-0050-01-01	2004-06-30	Arr.mt. drwg. JOWA 3SEP OWS 5 m3/h
	24-0050-01-02	2004-06-30	Arr.mt. drwg. JOWA 3SEP OWS 5 m3/h
	24-0050-01-50	2004-05-24	Gravity Separator Tank
	50-0300-01-01	2001-07-17	JOWA Filter & Separator Tank
10 m3/h :	24-0100-01-01	2004-07-12	Arr.mt. drwg. JOWA 3SEP OWS 10 m3/h
	24-0100-01-02	2004-07-12	Arr.mt. drwg. JOWA 3SEP OWS 10 m3/h
	24-0100-01-50	2004-07-09	Gravity Separator Tank
	50-0750-01-01	2001-07-26	JOWA Filter & Separator Tank

Common drawings;

24-0000-03-01	Rev. 11 P&I Diagram
24-0010-02-01 04.03.29	Component Layout
24-0010-02-02 04.03.29	Main Circuit Diagram
24-0010-02-03 04.03.29	Circuit Diagram
24-0010-02-04 04.03.29	Circuit Diagram
24-0010-02-10 04.03.29	Circuit Diagram – Components List
24-0010-01-03 04.09.17	Iso GA, Parts List (typical)

General System Description – JOWA 3SEP OWS, dated 2004-07-09.
Technical data for JOWA 3SEP OWS.

Job Id: **262.1-012563-2**
Certificate No: **TAP0000036**

Tests carried out

Test Reports;

Test Results and Test Procedures for JOWA 3SEP OWS 1 m3/h, signed by DNV Gothenburg, 2004-07-13, incl. Certificates of Analysis from AnalyCen, dt. 2004-06/-07.

Test Results and test Procedures for JOWA 3SEP OWS 5 m3/h, signed by DNV Gothenburg, 2004-09-06, incl. Certificates of Analysis from AnalyCen, dt. 2004-08/-09.

Semcon AB, Test Report No. 85-036-002/Edt 2, dated 2004-09-03; Vibration and climate test of control cabinet JOWA 3SEP OWS-C1.

Marking of product

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

- Manufacturers name or trade mark
- Type designation
- Serial No.

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 Standard for certification No. 1.2 Type Approval Item 4.