

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Tank Washing Machine

with type designation(s)
SC50T and SC75T

Issued to

SCANJET MARINE AB
SJÖBO, Sweden

is found to comply with

MARPOL 73/78 Annex 1, Reg. 13 B (2) and IMO Revised Spec. Res. A. 446 (XI) 4.2
Det Norske Veritas' Rules for Classification of Ships

Application :

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

Design: Multi stage media driven, single nozzle, fixed deck mounted, programmable tank washing machine.
Performance data: Flow & Jet lengths; See certificate page 2 and 3 for details

This Certificate is valid until **2019-06-29**.

Issued at **Høvik** on **2015-06-30**

for **DNV GL**

DNV GL local station: **Gothenburg**

Approval Engineer: **Jens Rogge**

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

TANK WASHING MACHINE

Materials:

Main parts are made of austenitic stainless steel AISI 316. Bearings and sealings are made of Teflon and Viton rubber.

Downpipe dimension:

Scanjet 50T: Ø60.3 mm

Scanjet 75T: Ø76.7 mm

Nozzles at 3 different levels.

Nozzle sizes:

8, 10, 11, 12, 14, 15, 16, 18, 20, 22, 24 and 26 mm

Application/Limitation

Performance data at different supply pressures:*

Types SC 50T / SC 75T:

Nozzle diameter [mm]	Pressure [bar]	Flow [m³/h]	Max. effective jetlength [m]
1 x Ø8	6	7	13
	8	8	14
	10	9	15
	12	10	16
1 x Ø10	6	10,5	15
	8	11,5	16
	10	13	17
	12	14	18
1 x Ø11	6	12	18
	8	14	19
	10	15	20
	12	17	21
1 x Ø12	6	14	19
	8	16	21
	10	18	22
	12	19,5	23
1 x Ø14	6	18	19
	8	20,5	22
	10	23	23
	12	25	25

Nozzle diameter [mm]	Pressure [bar]	Flow [m³/h]	Max. effective jetlength [m]
1 x Ø15	6	19	21
	8	22	23
	10	25	24
	12	27	25
1 x Ø16	6	22	22
	8	25	24
	10	27,5	25
	12	30	26
1 x Ø18	6	27	24
	8	31,5	26
	10	35	28
	12	39	30
1 x Ø20	6	x	x
	8	38	27
	10	43	31
	12	47,5	33
1 x Ø22	6	x	x
	8	44	28
	10	50	31
	12	54,5	33
1 x Ø24	6	x	x
	8	50	27
	10	55	29
	12	60	32
1 x Ø26	6	x	x
	8	54	25
	10	60	27
	12	67	30

* = The above data are based on testing with one single nozzle. With additional nozzles, the influence of additional pressure loss should be considered.

Performance is based upon test requirements that meet DNV TA-Program 785.70, item 3.2.

This Type Approval is based on examination of drawings and reports from prototype tests. Drawings showing number, location and supporting arrangement of the tank washing machines are to be submitted for each installation on board.

No product certificate is required.

Job Id: **262.1-010755-2**
Certificate No: **TAP000001V**

Type Approval documentation

Tests carried out

Performance of prototype testing in presence of DNV-surveyor.

Marking of product

For identification to this certificate the products are to be marked with:

- Manufacturers name or trade mark.
- Type designation.

Certificate Retention Survey

For retention of the Type Approval, a DNV Surveyor shall perform a survey very second year and before the expiry date of this certificate - to verify that the conditions for the type approval are complied with.

This certificate replaces previous Type Approval Certificate No. P-13751

END OF CERTIFICATE