



**CERTIFICATION APPLICATION and TEST REPORT**  
**SMALL CRAFT - Measurement of Airborne Sound emitted by**  
**Powered Recreational Craft**  
**Ref.: ISO 14509**

FOR IMCI USE ONLY

Certificate No.: **SD**

Manufacturer applying for certificate

Type: Boat manufacturer (**BM**) or Engine manufacturer (**EM**)

Address:

ZIP Code:

City:

Country:

VAT # (for EU only):

Signatory, Name:

Signatory, Title:

Head of Engineering, Name:

Phone:

Fax:

Email:

WWW:

Model year

Boat Manufacturer:

Address:

City:

Country:

Engine Manufacturer:

Address:

City:

Country:

Drive Manufacturer:

Address:

City:

Country:

Exhaust Muffler Manufacturer:

Address:

City:

Country:

Boat Model Name:

Watercraft Identification Number:

Engine Model Name:

Engine Serial Number:

Drive Model Name:

Muffler Model Name:



Page 2 for Engine Model: \_\_\_\_\_

Page 2 for Drive Model: \_\_\_\_\_

Page 2 for Boat with Craft Identification Number: \_\_\_\_\_

	<b>Reference</b>	<b>Unit</b>	<b>As tested</b>
1 Boat type ( <u>P</u> ower, <u>S</u> ail, <u>PWC</u> )		[P, S, PWC]	
2 Length of the hull (Lh)	ISO 8666	[m]	
3 Beam of the hull (Bh)	ISO 8666	[m]	
4 Loaded displacement mass ( $m_{LDC}$ )	ISO 8666	[kg]	
5 Primary hull material ( <u>W</u> ood, <u>S</u> teel, <u>A</u> luminium, <u>FRP</u> , others)		[W, S, A, FRP, ?]	
6 Bottom type configuration ( <u>V</u> , <u>F</u> lat, <u>R</u> ound, <u>M</u> ulti, others)		[V, F, R, M, ?]	
7 Boat type ( <u>P</u> laning, <u>N</u> on-planing, other)		[P, N, ?]	
8 Deck configuration ( <u>O</u> pen bow, <u>C</u> losed <u>D</u> eck, <u>C</u> abin, other)		[O, CD, C, ?]	
9 Integral Swim Platform ( <u>F</u> illed, <u>H</u> ollow, <u>N</u> one)		[F, H, N]	
10 Engine type ( <u>S</u> park ignition, <u>C</u> ompression ignition)		[S, C]	
11 Number of engines			
12 Number of cylinders per engines			
13 Declared engine power at crankshaft (n.a., if next line used)	ISO 8665	[kW]	
14 Declared engine power at propeller-shaft (n.a., if previous line used)	ISO 8665	[kW]	
14 Declared engine speed	ISO 8665	[min <sup>-1</sup> ]	
15 Recommended engine speed range if applicable	ISO 8665	[min <sup>-1</sup> ]	
16 Aspiration type ( <u>N</u> aturally, <u>T</u> urbocharged, <u>T</u> urbocharged <u>A</u> fter cooled, <u>S</u> upercharged)	ISO 15550	[N, T, TA, S]	
17 Engine displacement		[cm <sup>3</sup> ]	
18 Drive type ( <u>S</u> terndrive, <u>S</u> ail <u>D</u> rive, <u>S</u> haftdrive, <u>J</u> etdrive, <u>O</u> ut <u>B</u> oard)		[S, SD, SH, J, OB]	
19 Drive ratio			
20 Drive gear teeth (only, if needed for sound spectrogram analysis)			
21 Propeller/impeller pitch			
22 Propeller/impeller diameter		[mm]	
23 Number of propeller/impeller blades		[#]	
24 Primary exhaust outlet location related to water line ( <u>A</u> bove, <u>A</u> T, <u>B</u> elow)		[A, AT, B]	
25 Primary exhaust outlet cross section		[mm <sup>2</sup> ]	
26 Secondary exhaust outlet location related to water line ( <u>A</u> bove, <u>A</u> T, <u>B</u> elow)		[A, AT, B]	
27 Secondary exhaust outlet cross section		[mm <sup>2</sup> ]	
28 Exhaust muffler type ( <u>W</u> ater-lift, re <u>A</u> ctive, re <u>S</u> istive, <u>U</u> nderwater)		[W, A, S, U]	
29 Notes			

As the boat / engine manufacturer or his authorised representative,  
I declare under sole responsibility that the above product to which this declaration relates  
is in conformity with the referenced requirements. This application has not been lodged with any other notified body.

Date, Place and Signature: \_\_\_\_\_

I declare under our sole responsibility that the above product(s) has (have) been developed without my involvement.  
The content of this form has been checked.

Stamp, Date and Signature of Inspector: \_\_\_\_\_

Stamp, Date and Signature of Certification Manager: \_\_\_\_\_



**TEST REPORT**

**Results of Sound Emission Measurements of Small Craft according to ISO 14509**

Page 3 for Engine Model: \_\_\_\_\_

Page 3 for Drive Model: \_\_\_\_\_

Page 3 for Boat with Craft Identification Number: \_\_\_\_\_

- 1 Test number: \_\_\_\_\_
- 2 Test site location: \_\_\_\_\_
- 3 Test site specification: \_\_\_\_\_
- 4 Date of test \_\_\_\_\_

	<u>Unit</u>	<u>As tested</u>
5 Environmental conditions - Wind speed	[m/s]	_____
6 Environmental conditions - Wind direction	[°]	_____
7 Environmental conditions - Wave height	[mm]	_____
8 Environmental conditions - Test course direction (& relative position of microphor	[°]	_____
9 Nature of test ( <u>T</u> ype Test/ <u>M</u> onitoring Test)	[T, M]	_____
10 Sound level meter manufactured by		_____
11 Sound level meter model #		_____
12 Sound level meter serial #		_____
13 Sound level meter, calibration date	[dd/mm/yy]	_____
14 Sound calibrator meter manufactured by		_____
15 Sound calibrator meter model #		_____
16 Sound calibrator meter serial #		_____
17 Sound calibrator meter, calibration date	[dd/mm/yy]	_____
18 Microphone position ( <u>S</u> hore, <u>W</u> ater (i.e.on a post), <u>B</u> oat)	[S, W, B]	_____
19 Exhaust outlet location during the measurements related to water line ( <u>A</u> bove, <u>A</u> T, <u>B</u> elow)	[A, AT, B]	_____
20 Test operating mass acc. ISO 14509-1, cl. 10.2	[kg]	_____
21 Fuel load as a percentage of tank capacity	%	_____
22 Notes		_____
		_____
		_____

23 Port side average $L_{pASmaxPort}$ (See page 4)	[dB]	_____
24 Related boat speed, port side (See page 4)	[km/h]	_____
25 Starboard side average $L_{pASmaxStarboard}$ (See page 4)	[dB]	_____
26 Related boat speed, starboard side (See page 4)	[km/h]	_____
27 Maximum AS-weighted sound pressure level $L_{pASmax}$	[dB]	
28 Related boat speed, $L_{pASmax}$	[km/h]	_____

Herewith I declare that all requirements set by ISO 14509 Part 1 are met.

- 29 Person responsible for test (Name) \_\_\_\_\_
- 30 Person responsible for test (Title) \_\_\_\_\_
- 31 Date and Place of test \_\_\_\_\_

Signature: \_\_\_\_\_



Page 4 for Engine Model \_\_\_\_\_

Page 4 for Drive Model \_\_\_\_\_

Page 4 for Boat with Craft Identification Number: \_\_\_\_\_

Test number: \_\_\_\_\_

Run	Side	File #	Craft Speed	Engine Speed	Measurement Distance	L' pASmax	L'' pAS	Background noise correction	Distance correction	LpASmax	Notes
No.	Port/Starboard	ID-1	[km/h]	[min <sup>-1</sup> ]	[m]	[dB]	[dB]	[dB]	[dB]	[dB]	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											

Pre-test calibration result \_\_\_\_\_ dB  
 Post-test calibration result \_\_\_\_\_ dB

Performed before test # \_\_\_\_\_  
 Performed after test # \_\_\_\_\_

Difference ≤ 0,4 db (YES) (NO)  
 please tick as appropriate

L' pASmax is the measured maximum AS-weighted sound pressure level during the passage of the craft

L'' pAS is the AS-weighted background sound pressure level measured according immediately before and immediately after the passage of the craft

LpASmax is the maximum AS-weighted sound pressure level after applying background noise correction and distance correction, if applicable