



ISClass

**GUIDELINES FOR CONTROL AND MEASUREMENT OF
NOISES FOR SHIPS AND MARINE PRODUCTS**

Corrigendum

Version: August, 2016 No.1

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Chapter 4 NOISE SOURCES ON BOARD SHIPS

The formula in 4.3.3 is replaced by $L_a = 10\lg(MN) + 40\lg D + 30\lg n_e + 30$

The formula in 4.4.2(2) is replaced by $L_a = -20\lg m + 20\lg P_e + 30\lg \frac{n}{n_e} + 140 + C_a$

The formula concerning radiation sound power level L_w of diesel engine air intake in 4.4.2(3) is replaced by

$$L_w = 10\lg P_e + 58 + C_w$$

Table 4.4.2(3) is revised as follows:

Octave band correction for airborne noise of diesel engine								Table 4.4.2(3)	
Octave bandcenter frequency (Hz)	Blower	63	125	250	500	1000	2000	4000	8000
below 600r/min	Yes	21	27	28	26	24	20	13	4
below 600r/min	No	18	24	25	23	21	17	10	1
between 600 and 1500 r/min	Yes	20	17	22	33	31	25	20	9
between 600 and 1500 r/min	No	24	26	24	26	25	23	19	13
at or above 1500 r/min	Yes	24	31	31	30	32	30	23	16
at or above 1500 r/min	No	21	28	28	27	29	27	20	13

The formula in 4.5.2 is replaced by $L_a = 5.5\lg P_e + 10\lg \frac{P}{F_e} + 96 + C_a$

The formula in 4.8.2(1) is replaced by $L_a = 10\lg P_e + 7\lg n_e + 62 + C_a$

Table 4.8.2(1) is revised as follows:

Octave band correction for vibration of electric machines								Table 4.8.2(1)	
Octave bandcenter frequency(Hz)	63	125	250	500	1000	2000	4000	8000	
Correction (dB)	11	14	14	16	17	18	18	18	

The estimation formula of radiated sound power level of electric machines in 4.8.2(2) is replaced by:

$$L_w = 13\lg P_e + 15\lg n_e + 6.6 + C_w$$

Table 4.8.2(2) is revised as follows:

Octave band correction for airborne noise of electric machines								Table 4.8.2(2)	
Octave bandcenter frequency(Hz)	63	125	250	500	1000	2000	4000	8000	
AC electric machines	6	10	14	15	15	14	8	1	
DC electric machines	0	5	10	15	15	14	8	1	

The formula in 4.9.2(1) is replaced by $L_a = 10\lg P_e + 81 + C_a$

The formula in 4.9.2(2) is replaced by $L_a = 10\lg P_e + 30\lg \frac{P_p}{3000} - 34 + C_a$

The formula in 4.9.2(3) is replaced by $L_w = 10\lg P_e + 15\lg n_e + 16 + C_w$

The formula in 4.9.2(4) is replaced by $L_w = 30\lg \frac{P_p}{3000} - 40 + C_w$

The formula in 4.10.2(1) is replaced by $L_a = 10\lg P_e + 102 + C_a$

Table 4.10.2(3) is revised as follows:

Radiated sound power level of centrifugal air compressor Table 4.10.2(3)

Octave bandcenter frequency(Hz)	63	125	250	500	1000	2000	4000	8000
below 7.5kW	95	98	102	102	93	92	85	82
between 7.5 and 75kW	100	102	107	107	98	97	90	87
above 75kW	105	108	112	112	108	102	95	92

The formula in 4.11.2(1) is replaced by $L_w = 10 \lg Q + 20 \lg T_p - 32 + C_w$

Table 4.11.2(1) is revised as follows:

Octave band correction for airborne noise of ventilation fan Table 4.11.2(1)

Octave bandcenter frequency(Hz)	63	125	250	500	1000	2000	4000	8000
Centrifugal ventilation fan	39	38	36	30	27	24	19	15
Axial-flow ventilation fan	46	47	48	48	48	46	42	41