

Amended Guidance for Noise and Vibration (Other Rules/Guidances)



2018.

HULL RULE DEVELOPMENT TEAM

Background and contents of revision

1. Reason for Amendments

To reflect the ISO 21984 which is released on April 2018.

2. Amendments

- (1) From the aspect of habitability on board, vibration level limit of existing NVH-V1 reflecting IACS Rec.2013(No.132) is adjusted to ISO 21984 as follows.
 - vibration level limit for machinery control room(5 mm/s<-6 mm/s)
 - vibration level limit for offices and open deck recreation areas (4.5 mm/s<-5 mm/s)
- (2) Due to the cancelation of standard (ISO 6954) cited in guidance, this citation has been replaced with its original reference (ISO 2631-2).

Present	Amendment
<p style="text-align: center;">CHAPTER 1. GENERAL</p> <p style="text-align: center;">Section 1 General</p> <p>101. <omitted></p> <p>102. Definition</p> <p>1. ~ 9. <omitted></p> <p>10. Frequency weighted is the quantity measured by a <u>sound</u> level meter in which the frequency response is weighted according to the frequency-weighting curve</p> <p>(1) In human response to vibration, various frequency weighting have been defined in order to reflect known or hypothesized relationships between vibration frequency and human response.</p> <p>(2) The frequency weighting used to evaluate vibration in this Guidance is for 3 directions(x, y, and z), in accordance with <u>ISO 6954</u>.</p> <p style="text-align: center;"><omitted></p> <p style="text-align: center;">CHAPTER 4 VIBRATION</p> <p style="text-align: center;"><omitted></p> <p style="text-align: center;">Section 5 Criteria</p> <p>501. General</p> <p>1. ~ 3. <omitted></p> <p>4. The result of each measurement is to be the overall frequency weighted r.m.s value for acceleration or velocity in accordance with <u>ISO 6954</u>.</p> <p>5. The maximum value taken from the measurement data of 3 directions is to be used. ↓</p>	<p style="text-align: center;">CHAPTER 1. GENERAL</p> <p style="text-align: center;">Section 1 General</p> <p>101. <omitted></p> <p>102. Definition</p> <p>1. ~ 9. <omitted></p> <p>10. Frequency weighted is the quantity measured by a <u>vibration</u> sound level meter in which the frequency response is weighted according to the frequency-weighting curve <u>(2018)</u></p> <p>(1) In human response to vibration, various frequency weighting have been defined in order to reflect known or hypothesized relationships between vibration frequency and human response.</p> <p>(2) The frequency weighting used to evaluate vibration in this Guidance is for 3 directions(x, y, and z), in accordance with <u>ISO 2631-2</u> ISO 6954 <u>(2018)</u></p> <p style="text-align: center;"><omitted></p> <p style="text-align: center;">CHAPTER 4 VIBRATION</p> <p style="text-align: center;"><omitted></p> <p style="text-align: center;">Section 5 Criteria</p> <p>501. General</p> <p>1. ~ 3. <omitted></p> <p>4. The result of each measurement is to be the overall frequency weighted r.m.s value for acceleration or velocity in accordance with <u>ISO 2631-2</u> ISO 6954 <u>(2018)</u></p> <p>5. The maximum value taken from the measurement data of 3 directions is to be used. ↓</p>

Present

Table 4.2 Vibration level limits(velocity: mm/s, acceleration: mm/s²)

Location	V1		V2		V3	
	veloc- ity	a c c e l- eration	veloc- ity	a c c e l- eration	veloc- ity	a c c e l- eration
Navigation spaces <u>and</u> control stations	6	214	5	179	4	143
Cabin and hospitals	5	179	3.5	125	2.5	89.5
Messroom, offices, recreation rooms, pub- lic rooms	<u>5</u>	<u>179</u>	4.5	161	3.5	125
Open deck recreation areas	<u>5</u>	<u>179</u>	4.5	161	3.5	125
Work spaces <u>and</u> serv- ice spaces	6	214	6	214	5	179

<END>.

Amendment

Table 4.2 Vibration level limits(velocity: mm/s, acceleration: mm/s²) (2018)

Location	V1		V2		V3	
	veloc- ity	a c c e l- eration	veloc- ity	a c c e l- eration	veloc- ity	a c c e l- eration
Navigation spaces and control stations	6	214	5	179	4	143
<u>Accommodation spaces</u> Cabin and hospitals	5	179	3.5	125	2.5	89.5
Messroom, offices, - recreation rooms, public rooms	<u>4.5</u>	<u>161</u> 179	4.5	161	3.5	125
Open deck recreation areas	<u>4.5</u>	<u>161</u> 179	4.5	161	3.5	125
Work spaces and service spaces	6	214	6	214	5	179
<u>Engine control rooms</u>	<u>5</u>	<u>179</u>	<u>5</u>	<u>179</u>	<u>4</u>	<u>143</u>

<END>.