

Investigation of noise – Questionnaire S8

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| <p>Dear respondent,</p> <p>Unwanted noise can be a contributing factor in problems in indoor workplaces. This questionnaire is intended to help narrow down the causes of health complaints possibly caused by noise. If the situations are different in the different workrooms, this questionnaire should be completed separately for each workroom. Please provide as much detail as possible.</p> | |
| Place of work (name, address): | |
| Department: | |
| Specific workplace: | |
| Questionnaire completed by: | Date completed: |
| 1 Preliminary information <p>1.1 What noise sources are there at the workplace?</p> <p><input type="checkbox"/> Computers (please specify number) <input type="checkbox"/> Printers (please specify number) <input type="checkbox"/> Copiers (please specify number) <input type="checkbox"/> Dictation machine without noise limiting <input type="checkbox"/> Ventilation and air conditioning systems (please specify) <input type="checkbox"/> Other (please specify type/number of noise sources)</p> <p>1.2 Are there any sound absorbing or sound insulating devices/installations at the workplace?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> | |
| 2 Determination of the noise rating level in accordance with the Arbeitsstättenverordnung (Ordinance on Workplaces) <p>2.1 Which class of meter used?</p> <p><input type="checkbox"/> Class 1 <input type="checkbox"/> Class 2</p> <p>2.2 How is the meter positioned during measurement?</p> <p><input type="checkbox"/> 155 cm above the standing surface (ear height of a standing person) <input type="checkbox"/> 80 cm above the sitting surface (ear height of a seated person) <input type="checkbox"/> Microphone facing in direction of vision <input type="checkbox"/> Microphone's exposure to the sound is unimpeded <input type="checkbox"/> In absence of employee <input type="checkbox"/> In presence of employee <input type="checkbox"/> Distance to ear 0.1 to 0.4 m</p> <p>2.3 Which values are measured?</p> <p>Where the impulse adjustment is $K_I \geq 3$ dB, the degree of impulse of the sound must be taken into account. However, if the adjustment calculated for the degree of impulse is more than 6 dB, a maximum of $K_I = 6$ dB may be applied. Consequently, the impulse adjustment must always be determined by measuring L_{pAeq} and L_{pAeq}.</p> <p><input type="checkbox"/> L_{pAeq} <input type="checkbox"/> L_{pAeq}</p> | |

2.4 Please enter the values measured.

| Equivalent impulse-weighted continuous sound pressure level $L_{pAeq,m}$ in dB(A) | Equivalent continuous sound exposure level $L_{pAeq,m}$ in dB(A) | Impulse adjustment $K_{I,m}$ in dB(A) | Adjustment for tonality $K_{T,m}$ in dB(A) | $L_m = L_{pAeq,m} + K_{I,m} + K_{T,m}$ in dB(A) | Exposure times t_m per day in min |
|---|--|---------------------------------------|--|---|-------------------------------------|
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2.5 Please calculate the rating level.

$$t_1 \cdot 10^{0.1L_1} = \quad t_2 \cdot 10^{0.1L_2} = \quad t_3 \cdot 10^{0.1L_3} = \quad t_4 \cdot 10^{0.1L_4} =$$

$$\Sigma =$$

$$L_r = 10 \lg \frac{\Sigma}{480 \text{ min}} = \quad \text{dB(A)}$$

2.6 Please calculate the maximum value, taking into account the measurement uncertainty (accuracy class) resulting from the meter class and/or the measurement uncertainty for the representative sound exposure.

The maximum value is calculated as $L_r(\max) = L_r + \Delta L_r$.

- Accuracy class 1: $\Delta L_r = 0$ dB(A)
- Accuracy class 2: $\Delta L_r = \pm 3$ dB(A)

$$L_r(\max) = \quad \text{dB(A)}$$

2.7 Please determine the reference value applicable to the workplace.

- 55 dB(A) because
- 70 dB(A) because
- > 70 dB(A) because

2.8 Is the reference value adhered to?

- Yes
- Uncertain (Maximum value equal to or higher than reference value)
- No