

Daily vibration exposure assessment

Determination of daily hand-arm vibration exposure A(8) per ISO 5349-1:2001 / ISO 5349-2:2001; assessed against Directive 2002/44/EC (Article 3).

Company:	Example forestry contractor	Operator / worker:	Forestry worker (right hand)
Workplace:	Managed woodland, plot 12	Date of assessment:	2026-07-20
Instrumentation:	Hand-arm vibration meter (ISO 8041-1), s/n 0042	Calibration:	Field calibrator (ISO 8041-1) verified before/after the series within tolerance

Exposure analysis

Operation	a_{HV} [m/s ²]	T_i [h]	$A_i(8)$ [m/s ²]
Brush-saw clearance	4.60	2	2.30
Chain-saw felling	6.00	1	2.12
Chain-saw branch stripping	3.60	2	1.80
Daily total		5	3.61



Daily vibration exposure A(8) = 3.61 m/s² (at or above the exposure action value)

Assessment against Directive 2002/44/EC exposure values

Directive 2002/44/EC value	Threshold	Measured	Result
Exposure action value (EAV)	2.50 m/s ²	A(8) = 3.61 m/s ²	● Exceeded
Exposure limit value (ELV)	5.00 m/s ²	A(8) = 3.61 m/s ²	● Not exceeded

Result vs requirement: A(8) = 3.61 m/s² below the exposure limit value 5.00 m/s² → **PASS**

The exposure action value (EAV) and exposure limit value (ELV) are daily exposures A(8) (Directive 2002/44/EC, Article 3). Reaching the EAV triggers the employer's programme of control measures and the workers' entitlement to health surveillance (Articles 5 and 8); the ELV shall not be exceeded (Article 5).

ISO 5349-1:2001 defines no safe exposure limit; the daily exposure A(8) is the recommended basis for any exposure criterion, and its informative Annex C relates A(8) to the lifetime exposure that produces vibration-white-finger in 10 % of an exposed group.

Laboratory: Phonometry reference example

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Notes: Reproduces the ISO 5349-2:2001 Annex E.3 worked example.

Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

Generated by phonometry.