
**Hand-held portable power tools —
Test methods for evaluation of
vibration emission —**

Part 8:

**Saws, polishing and filing machines
with reciprocating action and small
saws with oscillating or rotating action**

**AMENDMENT 2: Oscillating knives
(vibrating screen removal tools)**

*Machines à moteur portatives — Méthodes d'essai pour l'évaluation
de l'émission de vibrations —*

*Partie 8: Scies, polisseuses et limes alternatives, et petites scies
oscillantes ou circulaires*

*AMENDEMENT 2: Couteaux oscillants (outils d'enlèvement de tamis
vibrant)*





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This document was prepared by Technical Committee ISO/TC 118, *Compressors and pneumatic tools, machines and equipment*, Subcommittee SC 3, *Pneumatic tools and machines*.

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Hand-held portable power tools — Test methods for evaluation of vibration emission —

Part 8:

Saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action

AMENDMENT 2: Oscillating knives (vibrating screen removal tools)

Clause 3

Add the following new definition after 3.1.5

“3.1.6

oscillating knife

machine with a rotary motor equipped with a blade that moves with an angular reciprocating movement

Note 1 to entry Oscillating knives are typically used for separating the rubber strips from car windows.”

Clause 5, second paragraph

Replace the text with the following:

“Figures 1 to 13 show examples of typical saws, files, polishing machines and oscillating knives covered by this document.”

Add a new Figure 13 after Figure 12 as follows:

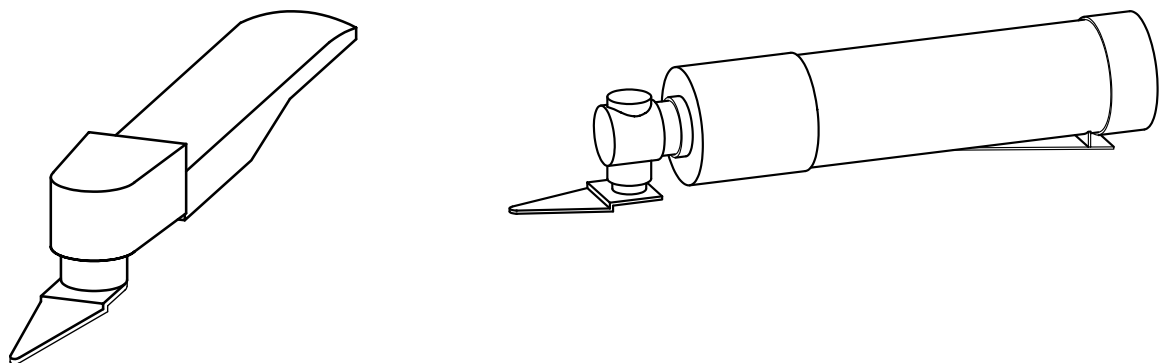


Figure 13 — Example for oscillating knife

6.1, second sentence

Update reference to figure numbers to "Figures 14 to 25".

6.2, sixth paragraph

Update reference to figure numbers from "Figures 13 to 24" to "Figures 14 to 25".

Add a new Figure 26 as follows:

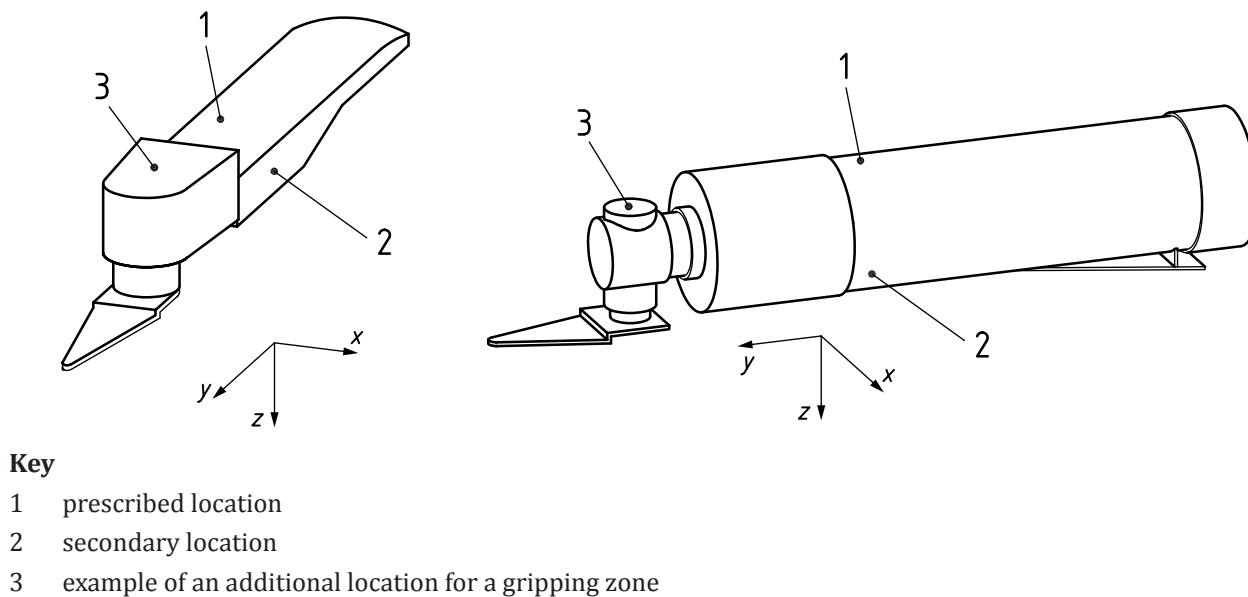


Figure 26 — Measurement locations — Straight oscillating knife

8.4.1, first paragraph 1, fourth sentence

Update reference to figure numbers to "(see Figures 27 to 31 for examples)".

8.4.1, sixth paragraph, second sentence

Update to "Figure 32 shows an example of a test rig for saws."

Add the following new paragraph after the last paragraph of 8.4.1:

"For oscillating knives the inserted tools (knives) are typically of great diversity. The vibration values are therefore strongly depending on the particular combination of the machine and a specific inserted tool (knife)."

8.4.2.4, Figures 25 to 30

Renumber to "Figure 27" to "Figure 32".

Add the following new subclause after 8.4.2.4:

8.4.2.5 Oscillating knives

Two different hard rubber square profiles, 20 mm thick and 35 mm thick, shall be cut in horizontal direction. The horizontal feed force (force in direction of the cut) applied to the tool shall be (120 ± 12) N. The hard rubber shall have a shore Hardness of (57 ± 5) Shore A, according to ISO 868.

One of the following test set-ups shall be used for the cutting test. Either

- a) a fixed jig (clamping tool) according to [Figure 33](#). The feed force shall be constantly measured by a measuring platform on which the user stands. The actual value of the feed force with the limit deviations is constantly displayed to the user, or
- b) a jig (clamping tool) according to [Figure 34](#) in which the feed force is measured directly. The actual value of the feed force with the limit deviations is constantly displayed to the user.

Tools (knives) of good condition specified for cutting rubber shall be used.

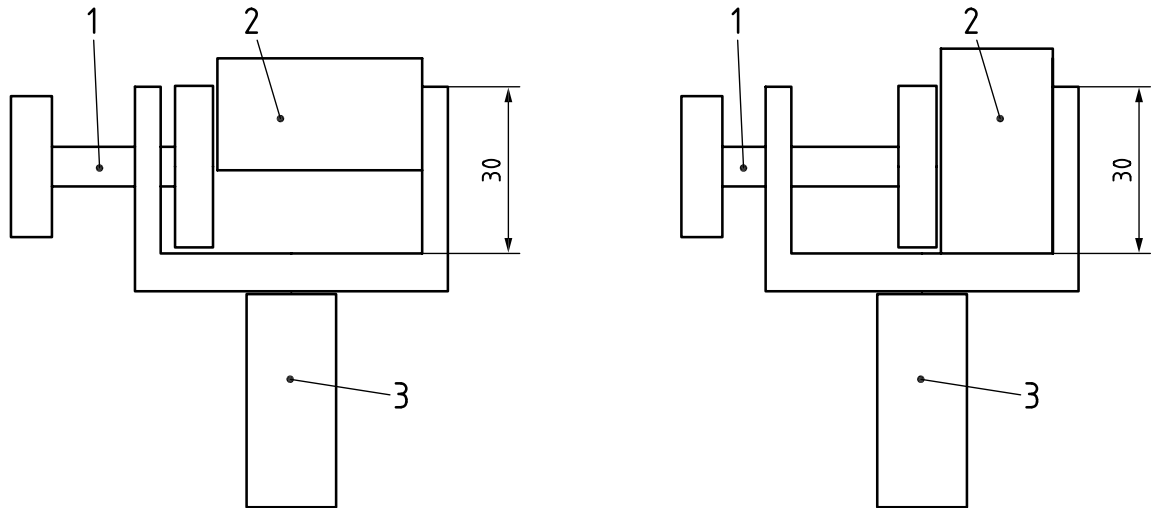
The duration of measurement shall be at least 8 s.

The mounted work piece shall have no resonances within the frequency range for the hand–arm system.

The rubber and the room ambient temperature should be from 23 °C to 26 °C.

The vibration measuring value shall be identified separately for each combination of machine and inserted tool (knife) specified for the typical application.

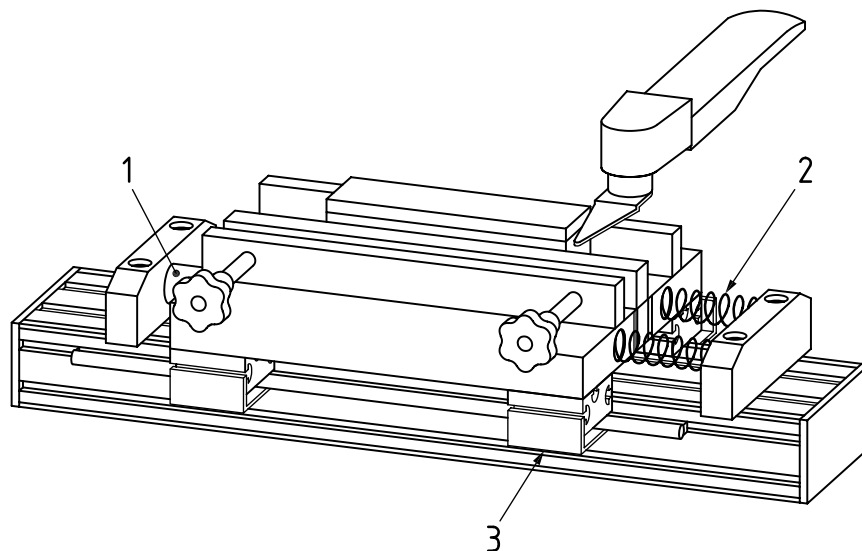
As smoke emission from the cut material (rubber) may occur during the test, ventilation or fume extraction is recommended.



Key

- 1 clamping fixture
- 2 hard rubber square profile
- 3 bench vice fixation

Figure 33 — Test set-up for oscillating knives according to 8.4.2.5 a)



Key

- 1 force measurement sensor
- 2 spring prestress
- 3 frictionless bearing

Figure 34 — Test set-up for oscillating knives according to 8.4.2.5 b)

