Clause / prescribed	Observed
Remark: This report is based on EN 60745-2-11: 2010. This report has to be read in conjunction with the test report of EN 60745-1: 2009 + A11:2010 with reports reference numbers 3123562.50A **PARTICULAR REQUIREMENTS FOR HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS- TACKERS**	
2 Normative references Replace the text by: This clause of Part 1 is applicable except as follows: *Addition:* EN 312:2003, Particleboards - Specification	P
6 Void Replace by:	P
6 Environmental requirements This clause of Part 1 is applicable except as follows:	P
6.1.2.4 *Modification:* Reciprocating saws are suspended in such a way as to correspond to normal use.	P
6.1.2.5 *Modification:* Reciprocating saws are tested at no-load.	P
6.2.4.2 Location of the measurement *Addition:* Figures Z101 and Z102 show the positions for different saws.	P
6.2.6.3 Operating conditions *Modification:* Reciprocating saws are tested under load according to the conditions shown in Tables Z101, Z102 and Z103.	P

Clause / prescribed	Observed

Jig saws are tested sawing both board and sheet metal. Sabre saws are tested cutting board and wooden beams. P

Sabre and jig saws with speed setting devices shall be adjusted to the settings to cut the work piece material required in the test. P

Table Z101 - Test conditions for sabre and jig saws cutting board P

Orientation	For jig saws: Cutting a horizontal piece of chipboard (P2 in accordance with EN 312) 38 mm thick with a minimum length of 500 mm and a width of 600 mm. The board shall be supported on resilient material and fixed by screws, clamps, air cylinders or the like to a test rig. For sabre saws: Cutting a vertical piece of chipboard (P2 in accordance with EN 312) 38 mm thick with a minimum length of 500 mm and a width of 600 mm. The board shall be supported on resilient material and fixed vertically by screws, clamps, air cylinders or the like to a test rig. In all cases, the board excess end shall be 250 mm from the clamp and shall be readjusted at the beginning of each series of tests, which consists of five test cycles.
Tool bit/settings	New saw blade as specified for sawing chipboard. Pendulum systems, if any, being set at maximum. For sabre saws, the guide plate shall be fitted.
Feed force	For jig saws: The horizontal feed force (force in direction of the cut) applied to the tool shall be 35 N ± 5 N. Excessive gripping force shall be avoided. The guide plate shall be in contact with the work piece during the cut applying a force just great enough to ensure this. NOTE 1 Methods to determine the feed force are e.g. using a scale, applying a weight on a string parallel to the workpiece surface via a pulley. NOTE 2 Usually, the downward force in addition to the weight of the tool to keep the guide plate of a jig saw in contact with the workpiece is between 50 N and 100 N. For sabre saws: The vertical feed force (force in direction of the cut) applied to the tool in addition to its weight shall be 40 N ± 5 N. The feed force shall be determined e.g. by means of a scale and shall be recorded. Excessive gripping force shall be avoided. The guide plate shall be in contact with the work piece during the cut applying a force just great enough to ensure this. NOTE 3 Usually, the horizontal force to keep the guide plate of a sabre saw in contact with the workpiece is between 50 N and 100 N.
Test cycle	Cutting a 30 mm wide strip across the 600 mm width of the chipboard. Measurement starts when the saw blade enters the chipboard and stops when the saw blade leaves the chipboard.

Clause / prescribed	Observed

Table Z102 — Test conditions for jig saws cutting sheet metal

N/A

Orientation	Cutting a horizontal piece of sheet mild steel with the minimum length of 300 mm, a width of 100 mm and a thickness of 3 mm. The work piece shall be supported on resilient material and fixed by screws, clamps, air cylinders or the like to a test rig. The metal sheet excess shall be 80 mm from the clamped area and shall be readjusted at the beginning of each series of tests, which consists of five test cycles.
Tool bit/settings	New saw blade as specified for sawing mild steel. The pendulum system, if any, shall be in the "off" position.
Feed force	The horizontal feed force (force in direction of the cut) applied to the tool shall be 35 N ± 5 N. Excessive gripping force shall be avoided. The guide plate shall be in contact with the work piece during the cut applying a force just great enough to ensure this. NOTE 1 Methods to determine the feed force are e.g. using a scale, applying a weight on a string parallel to the workpiece surface via a pulley. NOTE 2 Usually, the downward force in addition to the weight of the tool to keep the guide plate of a jig saw in contact with the workpiece is between 50 N and 100 N.
Test cycle	Cutting off an approximately 8 mm wide strip across the 100 mm width of the metal sheet. Measurement starts when the saw blade enters the metal sheet and stops when the saw blade leaves the metal sheet.

Table Z103 — Test conditions for sabre saws cutting wooden beams

P

Orientation	Cutting a horizontal beam of construction wood such as fir with a cross section of 100 mm x 100 mm and minimum length of 500 mm. The beam shall be supported on resilient material and fixed by screws, clamps, air cylinders or the like to a test rig. In all cases, the beam excess end shall be 250 mm from the clamp and shall be readjusted at the beginning of each series of tests, which consists of five test cycles.
Tool bit/settings	New saw blade as specified for sawing large wooden beams. The pendulum system, if any, being set at maximum.
Feed force	The vertical feed force (force in direction of the cut) applied to the tool in addition to its weight shall be 40 N ± 5 N. The feed force shall be determined e.g. by means of a scale and shall be recorded. Excessive gripping force shall be avoided. The guide plate shall be in contact with the work piece during the cut applying a force just great enough to ensure this. NOTE Usually, the horizontal force to keep the guide plate of a sabre saw in contact with the workpiece is between 50 N and 100 N.
Test cycle	Cutting off a 30 mm thick slice. Measurement starts when the saw blade enters the wood and stops when the saw blade leaves the wood.

Clause / prescribed	Observed
6.2.7.1 Reported vibration value	P
Addition:	
For jig saws, the results a_h for two operation modes shall be reported:	
– $a_{h,B}$ = mean vibration "cutting board" in accordance with Table Z101.	N/A
– $a_{h,M}$ = mean vibration "cutting sheet metal" in accordance Table Z102.	N/A
For sabre saws, the results a_h for two operation modes shall be reported:	
– $a_{h,B}$ = mean vibration "cutting board" in accordance with Table Z101	P
– $a_{h,WB}$ = mean vibration "cutting wooden beam" in accordance Table Z103.	P
6.2.7.2 Declaration of the vibration total value	
Addition:	
The vibration total value of the handle with the highest emission and the uncertainty K shall be declared:	
– for jig saws the value of $a_{h,B}$, with the work mode description "cutting boards" and the value of $a_{h,M}$, with the work mode description "cutting sheet metal";	N/A N/A
– for sabre saws the value of $a_{h,B}$, with the work mode description "cutting boards" and the value of $a_{h,WB}$, with the work mode description "cutting wooden beams";	P P
8 Marking and instructions	P
Replace by:	
This clause of Part 1 is applicable except as follows:	
8.12.2 a) *Addition:*	
Z101) Information on the correct use of the dust collection system, if any	N/A
Z102) Advice to wear a dust mask	P
21 Construction	
Replace by:	
This clause of Part 1 is applicable except as follows:	
21.Z1 This subclause of Part 1 is not applicable.	P