

# DIN EN ISO 11148-4:2011-03 (E)

## Hand-held non-electric power tools - Safety requirements - Part 4: Non-rotary percussive power tools (ISO 11148-4:2010 )

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
1	Scope .....	5
2	Normative references .....	6
3	Terms and definitions .....	7
3.1	General definitions .....	7
3.2	Definitions related to non-rotary percussive power tools .....	8
4	Safety requirements and/or protective measures .....	8
4.1	General .....	8
4.2	Mechanical safety .....	9
4.3	Thermal safety .....	9
4.4	Noise .....	9
4.5	Vibration .....	10
4.6	Materials and substances processed, used or exhausted .....	10
4.7	Ergonomics and design of the handle .....	11
4.8	Controls .....	11
5	Verification .....	12
5.1	General conditions for tests .....	12
5.2	Noise .....	12
5.3	Vibration .....	12
5.4	Unintentional start .....	12
5.5	Power tool construction .....	13
5.6	Structure of verification of safety requirements .....	13
6	Information for use .....	14
6.1	Marking, signs and written warnings .....	14
6.2	Instruction handbook .....	14
6.3	Operating instructions .....	20
6.4	Data .....	20
6.5	Maintenance instructions .....	21
Annex A (informative)	List of significant hazards .....	22
Annex B (informative)	Examples of non-rotary percussive power tools covered by this part of ISO 11148 .....	23
Annex C (normative)	Symbols for labels and signs .....	27
Annex D (normative)	Additional safety requirements related to internal combustion engine power tools .....	28
Bibliography .....		33
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC .....	32