

DIN EN ISO 28927-9:2010-05 (E)

Hand-held portable power tools - Test methods for evaluation of vibration emission - Part 9: Scaling hammers and needle scalars (ISO 28927-9:2009)

Contents		Page
Foreword		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms, definitions and symbols	6
3.1	Terms and definitions	6
3.2	Symbols	6
4	Basic standards and vibration test codes	7
5	Description of the family of machines	7
6	Characterization of vibration	9
6.1	Direction of measurement	9
6.2	Location of measurements	9
6.3	Magnitude of vibration	11
6.4	Combination of vibration directions	11
7	Instrumentation requirements	12
7.1	General	12
7.2	Mounting of transducers	12
7.2.1	Specification of transducer	12
7.2.2	Fastening of transducers	12
7.3	Frequency weighting filter	12
7.4	Integration time	12
7.5	Auxiliary equipment	13
7.6	Calibration	13
8	Testing and operating conditions of the machinery	13
8.1	General	13
8.2	Operating conditions	13
8.2.1	Pneumatic machines	13
8.2.2	Hydraulic machines	14
8.2.3	Electrical machines	14
8.3	Other quantities to be specified	14
8.4	Attached equipment, work piece and task	14
8.4.1	Test set-up and procedure	14
8.4.2	Feed force	15
8.5	Operators	15
9	Measurement procedure and validity	15
9.1	Reported vibration values	15
9.2	Declaration and verification of the vibration emission value	16
10	Measurement report	16

Annex A (informative) Model test report for vibration emission at handles of scaling hammers and needle scalars	17
Annex B (normative) Determination of uncertainty	19
Bibliography	21
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/EC	22
Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	23