DIN EN ISO 11205:2009-12 (E)

Ac oustics - Noise emitted by machinery and equipment - Engineering method for the determination of emission sound pressure levels in situ at the work station and at other specified positions using sound intensity (ISO 11205:2003)

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Measurement uncertainty 6

5 Principle 7

6 Instrumentation 7
6.1 General 7
6.2 Calibration 7

7 Installation and operation of the source 8
7.1 General 8
7.2 Location of the machine 8
7.3 Mounting of the machine 8
7.4 Auxiliary equipment 9
7.5 Operation of the machine under test 9

8 Test procedure 10
8.1 Applicability 10
8.2 Measurement time interval 10
8.3 Measurements 11
8.4 Wind and gas flows 12
8.5 Criteria for qualification of the measurement 12
8.6 Criterion for background noise 12
8.7 Frequency range of measurements 12
8.8 Evaluation of the measurement result 12

9 Information to be recorded 13
9.1 General 13
9.2 Machine under test 13
9.3 Test conditions 13
9.4 Acoustic environment 13
9.5 Instrumentation 13
9.6 Location of specified positions 14
9.7 Noise data 14

10 Information to be reported 14

Annex A (normative) Criterion for the adequacy of the direction of the sound intensity vector 15

Annex B (normative) Procedure for frequencies higher than 5 000 Hz 17

Annex C (normative) Procedure in case the measurement fails to qualify 18

Annex D (informative) Example of a test table 19

Bibliography 20

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC 22

Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 23