ISO 13332:2026-01 (E)

Reciprocating internal combustion engines - Test code for the measurement of structure-borne noise emitted from high-speed and medium-speed reciprocating internal combustion engines measured at the engine feet

Contents

Page

Foreword iv

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Measure environment 3
4.1 Acoustic environment 3
4.2 Meteorological conditions 4

5 Measuring instruments 4
5.1 General rule 4
5.2 Verification 4

6 Installation and operating conditions 4
6.1 General rule 4
6.2 Installation conditions 4
6.3 Mounting Requirements 4
6.4 Operating conditions 5

7 Acceleration measurement 5
7.1 General rule 5
7.2 Uncertainty 5
7.3 Mount selection 6
7.4 Accelerometer Position 6
7.4.1 Recommended Position 6
7.4.2 Alternative arrangement 8
7.5 Accelerometer Installation 10
7.6 Preliminary Test 10
7.7 Formal Test 11

8 Calculation 11
8.1 Calculation of Velocity and Angular Velocity 11
8.2 Calculation of time-averaged velocity levels and time-averaged angular velocity levels in each measurement direction 12

9 Recorded Information 12

10 Test Report 13

Annex A (normative) Other connections between the engine and test surroundings 14

Annex B (normative) Corrections if the accelerometers are not in the contact plane between the machinery foot and isolator 15

Annex C (normative) Determination of Frequency range of measurement 17

Annex D (normative) Test record 20

Bibliography 22