ISO 4678:2024-01 (E)

Ships and marine technology - Noise measurement method for HVAC system in accommodation spaces

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Instrumentation **2**
- 4.1 Microphone with sound level meter or other microphone amplifier 2
- 4.2 Microphone cable 2
- 4.3 Frequency analyser 2
- 4.4 Nose cone and windshield 3
- 4.5 Sound level recorder or other data sampling devices 3
- 4.6 Calibration of instruments 3

5 General requirements **3**

6 Measurement procedure **3**
- 6.1 Outlet noise measurement 3
- 6.2 Background noise measurement and outlet noise correction 4
- 6.3 Reverberation time measurement 5
- 6.4 Result processing 5
  - 6.4.1 Exhaust outlet noise level 5
  - 6.4.2 Calculation of the cabin sound absorption 6
  - 6.4.3 Determination of the vent noise levels 6
- 6.5 Measurement uncertainties 7

7 Measurement report **7**
- 7.1 Measurement company and personnel 7
- 7.2 Ship particulars 7
- 7.3 HVAC particulars 7
- 7.4 Measuring instruments 8
- 7.5 Measuring conditions 8
- 7.6 Measurement data 8

Bibliography **9**