ISO 23766:2022-03 (E)

Thermal insulating products for industrial installations - Determination of the coefficient of linear thermal expansion at sub-ambient temperatures

Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Method A — Optical method ... **1**
4.1 Principle ... 1
4.2 Apparatus ... 2
4.2.1 Light source system ... 2
4.2.2 Light detector system ... 2
4.2.3 Test chamber and cooling system ... 2
4.2.4 Temperature-measuring instruments ... 3
4.2.5 Equipment to prepare the test specimen ... 3
4.3 Test specimen ... 3
4.3.1 Dimensions of test specimens ... 3
4.3.2 Preparation of test specimens ... 3
4.3.3 Number of test specimens ... 3
4.4 Conditioning of test specimens ... 3
4.5 Procedure ... 4

5 Method B — Displacement method ... **4**
5.1 Principle ... 4
5.2 Apparatus ... 5
5.2.1 Sensor for distance ... 5
5.2.2 Test chamber and cooling system ... 5
5.2.3 Temperature-measuring instruments ... 5
5.2.4 Equipment to prepare the test specimen ... 5
5.3 Test specimen ... 5
5.3.1 Dimensions of test specimens ... 5
5.3.2 Preparation of test specimens ... 5
5.3.3 Number of test specimens ... 6
5.4 Conditioning of test specimens ... 6
5.5 Procedure ... 6

6 Calculation and expression of results ... **6**

7 Accuracy of measurement ... **7**

8 Test report ... **7**

Bibliography ... **9**