ISO 5371:2025-07 (E)

Containment high efficiency filtration unit (CHEFU) in ventilation system of biosafety facilities

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Design and construction 3

5 Requirements 3
5.1 Appearance 3
5.2 Resistance to air flow 3
5.3 Vacuum deformation test 4
5.4 Air tightness 4
5.5 Leakage test of the installed HEPA filter 4
5.6 Decontamination 4
5.7 Leakage identification 4

6 Test methods 4
6.1 Appearance 4
6.2 Resistance to air flow 5
6.3 Vacuum deformation test 5
6.4 Air tightness 5
6.5 Leakage test of the installed HEPA filter 5
6.5.1 Test aerosol 5
6.5.2 Test apparatus 6
6.5.3 Scanning leak test 6
6.5.4 Total penetration leakage test 7
6.6 Decontamination 9
6.7 Leakage identification 9

7 Recommended test timeline 9
7.1 General 9
7.2 Design verification test 9
7.3 Factory test 10
7.4 In situ test 10
7.5 Evaluation of the test results 10

8 Marking 10

Annex A (normative) Air tightness test method 12

Annex B (normative) Method for aerosol concentration uniformity test 15

Annex C (informative) Method and examples for CHEFU decontamination methodology verification 17

Bibliography 21