Australian Standard™

Cleanrooms, workstations, safety cabinets and pharmaceutical isolators—Methods of test

Method 2: Determination of performance of clean workstations, laminar flow safety cabinets and pharmaceutical isolators under loaded filter conditions

1 SCOPE This Standard sets out the method of determining air velocity, pressure drop across the filter, and motor blower current under loaded filter conditions in clean workstations, laminar flow safety cabinets and pharmaceutical isolators.

2 APPLICATION This method is used to determine whether the motor blower(s) of a clean workstation, laminar flow safety cabinet or pharmaceutical isolator has sufficient capacity to maintain the specified air velocity as the filters are loaded to a predetermined increase in system pressure drop.

This test should be performed by the manufacturer at the motor blower-filter combination selection stage as a type test.

3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
1386 Cleanrooms and clean workstations
1386.1 Part 1: Principles of clean space control
1807 Cleanrooms, workstations, safety cabinets and pharmaceutical isolators—Methods of test
1807.0 Part 0: List of methods and apparatus
1807.1 Method 1: Determination of air velocity and uniformity of air velocity in clean workstations, laminar flow safety cabinets and pharmaceutical isolators

4 DEFINITIONS For the purpose of this Standard the definitions given in AS 1386.1 and AS 1807.0 apply.

5 PRINCIPLE Clean final filters are loaded to simulate a specified increase in system pressure drop. The air velocity and current drawn by the motor blower(s) are then measured.

6 APPARATUS The following apparatus as specified in AS 1807.0 is required:

(a) Restrictive device.

(b) Freestanding anemometer.

(c) Manometer with suitable range.

(d) Moving-iron ammeter.