



Air Cleaner Performance Test Standard

KES T – A103

(EST)1988-12-06

Contents

1. Purpose
2. Scope of Application
3. Meaning of terms and Units
4. Test Items
5. Test Device
6. Dust for test
7. Atmospheric Condition in Test Room
8. Test Method



1. Purpose

This standard shall specify the standard establishment for the performance test method of car air cleaner.

2. Scope of Application

This standard shall be applicable for the performance test method and standard of moist and dry air cleaner.

3. Meaning of terms and Units

3.1 Rated airflow rate

(1) The amount that is converted from the maximum airflow rate (assembly state) of indicated air cleaner to the standard state. (temperature, 20℃, pressure, 760mmHg, humidity,65%)

(2) Unit : m³/6min

3.2 Ventilation resistance

(1) The absolute value of static pressure at the outlet of air cleaner.

(2) Unit : mmAq or Kpa

3.3 Cleanness efficiency

(1) The percentage of the ratio of the dust amount that air cleaner contain and the dust amount supplied.

(2) Unit : %

3.4 Initial cleanness efficiency

(1) The measured cleanness efficiency with supplying a regulating amount of dust to air cleaner.

(2) Unit : %

3.5 Full life cleanness efficiency

(1) The measured cleanness efficiency with supplying dust until the ventilation resistance comes to reach the indicated value.

(2) Unit : %

3.6 Dust holding capacity

(1) The dust amount that air cleaner contains until the ventilation resistance comes to reach the indicated value.

(2) Unit : g

3.7 Restoration

The percentage of ratio of two ventilation resistances, one is that of air cleaner after cleaning and the other is that of air cleaner before cleaning.

4. Test Items

(1) Ventilation resistance test

(2) Cleanness efficiency test

Initial cleanness efficiency

Full life cleanness efficiency

(3) Dust holding capacity test

(4) Restoration test

(5) Leakage test

(6) Breaking and distortion test

5. Test Device

Figure1 represents the basis of test device.

(1) The model of blower should be the one that has the capacity more than 125% of the rated airflow rate of the air cleaner on testing, and that should be able to control the airflow rate properly.