Air Filter Performance Evaluation System

Features

- Provide reliability of measurement results by optimizing air velocity uniformity, particle concentration, and space uniformity for each systems
- Emergency stop button is available in case emergency situation occurs
- Easily place and remove test filter for user convenience
- Prevent user operated errors in measurement results and test procedures by automating data collection, storage, and statistical processing during system operation
- Provide timely updates to meet changes in related regulations and/or test standards
- Chemically resistant sealants are used to connect in between ducts to prevent damage by the test material specified in the related standards / applied to corrosion resistance material product (Cabin air filter for Gas)

Medium Performance Air Filter Particle Efficiency Performance Evaluation Tester (MF-1712W)

Classification	Specification	Classification	Specification
Surface speed	0.5 ~ 3.8 m/s	Testing filter cross sectional areas	610 × 610 mm
Test particles	KCl, ASHRAE DUST		
Flow rate uniformity	CV 10 %	Particle uniformity	CV 15 %
Transfer system size	2,249 x 12,000 x 2,600 mm		
Related regulations	ANSI/ASHRAE 52.2, ISO 16890		

Cabin Air Filter Gas Efficiency Performance Evaluation Tester (CF-1916W)

Classification	Specification	Classification	Specification
Flow range	150 ~ 680 CMH	Testing filter cross sectional areas	300 x 600 mm
Flow rate uniformity	± 10 %	Gas concentration uniformity	± 5 %
Test gas	N-butane, Toluene, SO_2 (Option: NO_2, Acetaldehyde)		
Transfer system size	3,102 x 1,630 x 3,450 mm		
Related regulations	KS R ISO 11155-2, ISO/TS 11155-2, DIN 71460-2, SPS-KACA014-144		

Cabin Air Filter Particle Efficiency Performance Evaluation Tester (CF-2010W)

Classification	Specification	Classification	Specification
Flow range	150 ~ 680 CMH	Testing filter cross sectional areas	300 x 600 mm
Flow rate uniformity	± 10 %	Particle uniformity	± 10 % (@ 0.3 ~ 5.0 ㎛), ± 20 % (@ 5.0 ~ 10 ㎛)
Upstream and downstream correlation ratio	0.7 ~ 1.6	Pressure loss measurement range	~1,000 Pa
Test particles	ISO A2 Fine Dust, KCl	Transfer system size	2,100 x 1,700 x 3,600 mm
Related regulations	KS R ISO 11155-1, ISO/TS 11155-1, DIN 71460-1, SPS KACA014-144		

High Performance Air Filter Leak Rate Performance Evaluation Tester (HF-1710W)

Classification	Specification	Classification	Specification
Surface speed	0.485 m/s	Test particles	NaCl, KCl, PSL, DOP, DEHS
Particle uniformity	CV 15 %	Flow rate uniformity	CV 10 %
Scanning probe	• Area : 9 ± 1 cm^2 (30 x 30 mm) • Accuracy : 1 mm • Position : 10 ~ 50 mm • Movement speed(X,Y,Z) : 10 cm/s or less		
Transfer system size	4,000 x 8,000 x 2,000 mm		
Related regulations	EN 1822-4, KS B6740 : 2015		

High Performance Air Filter Particle Efficiency Performance Evaluation Tester (HF-1711W)

Classification	Specification	Classification	Specification
Surface speed	0.5 ~ 3.0 m/s	Testing filter cross sectional areas	610 × 610 mm
Test particles	KCl or DOP		
Particle uniformity	CV 15 %	Flow rate uniformity	CV 10 %
Transfer system size	1,584 x 11,500 x 1,780 mm		
Related regulations	KS B 6740 : 2015, KS B 6141 : 2020, KS B 9325 : 2011(Type 1)		

Air Filter Bacterial Filtration Efficiency Performance Evaluation Tester (BF-1713W)

Classification	Specification	Classification	Specification
Surface speed	0.5 ~ 3.0 m/s	Testing filter cross sectional areas	610 × 610 mm
Flow rate uniformity	CV 10 %	Particle uniformity	CV 15%
Test particles	Staphylococcus aureus		
Transfer system size	1,854 x 11,500 x 1,780 mm		
Related regulations	ASTM F2101-14		

IPA Conditioner (Elimination of electrostatic effect of air filter, AIC-1998)

Classification	Specification
Internal volume	Approx. 0.98 m^3
IPA generation type	Evaporative in chamber Dualization of IPA generation chamber and filter mount chamber (Space separation using dampers)
Airtightness	< 15 Pa within 1 min
Size(WDH)	1,668 X 805 X 1,724 mm
Related regulations	ISO 16890-4, SPS-KACA002-132:2021