Invention & Innovation
NITTA

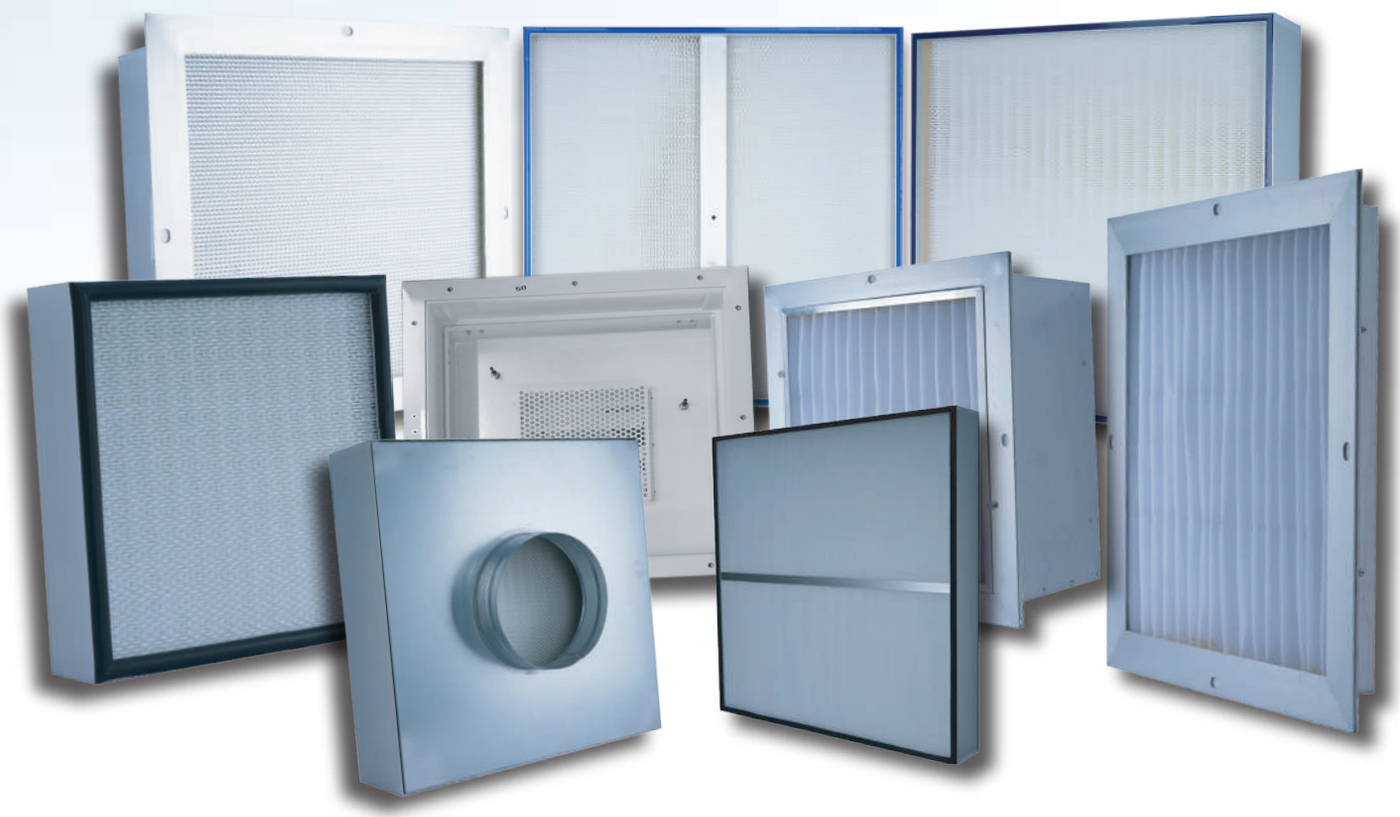
www.nittafilters.com

NITTA : Clean Air Systems

NITTA started its operations in the year 1885 in Osaka, Japan with a mission is to work closely with customers and suppliers based on the spirit of "Invention & Innovation." NITTA is the leading provider of air filtration solutions that help companies create superior air quality and better manage their HVAC systems.

As a manufacturer, the Nitta Group works to save energy, conserve resources, and reduce waste in its production activities. We also develop and provide Energy Efficient Filters and Products that will help our customers to save energy and conserve resources.

We have developed and provided products that meet the needs of the times for over decades and have gained strong trust from our many stakeholders. Driving positive change through the relentless pursuit of excellence and creating products that are useful for customers and society.



By creating products that lead us into the future, we continue to enhance our corporate value while evolving as manufacturing focused innovators

NITTA : Japanese Technology..... Make in India.....

Nitta Filters India Pvt Ltd, an ISO 9001:2015 certified company is a Joint Venture of NITTA Corporation , Japan. We strive to provide products that meet our customers' needs and expectations. We are proud to be a part of the culture of quality developed at Nitta Corporation since 1885.

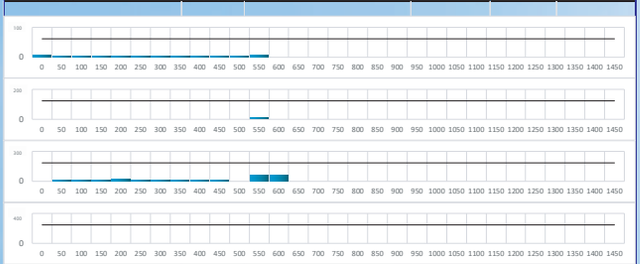
Nitta is committed to achieve customer satisfaction through adherence to quality system and continual improvement activities for delivering timely cost effective and Quality Products & Services. In its pursuit of excellence Nitta shall strive for achievement of an Eco-friendly environment.

HEPA filters are designed for use in cleanrooms, Dry rooms, Laminar Flow units, biohazard units and other clean environments. They are classified as H13, H14 & U15 - U17 in accordance with ISO 29463 and EN1822 standards. These filters ensure contamination control in cleanroom environments as per the standards. They are Compact, light weight and easy to install in very less space either in open plenum area, as terminal HEPA or other housing systems.

All the HEPA Filters are manufactured inside Cleanroom environment and each individual Filter is Auto Scan tested to meet the stringent quality requirements

FILTER TEST REPORT

Test standard	準拠規格	ISO 29463	Test Date	検査日	15 June 2023
Filter model no	製品型式	45H61061069	Test Time	検査時間	12:41:44
Serial No	製造番号	10046	Operator	検査員	
Filter Class	フィルタクラス	45H	Temp in Deg C	温度	0
Size:LxWxH(mm)	寸法	610x610x69	RH %	相対湿度	0
SCANNING TEST RESULTS 検査結果					
Description	項目	Unit 単位	Design 規格値	Actual 実測	Result 結果
Minimum Test air volume	検査風量	m3/min	10.1	10.1	-
Pressure drop	圧力損失	Pa	120 ー 140	132	Pass
Efficiency	捕集率	%	99.9950%	99.9993%	Pass
Upstream Concentration	上流側濃度	n/CFM	-	9.6E+07	-
Leakage judgement value	リーク判定値	n/Judgment time	-	59	Pass



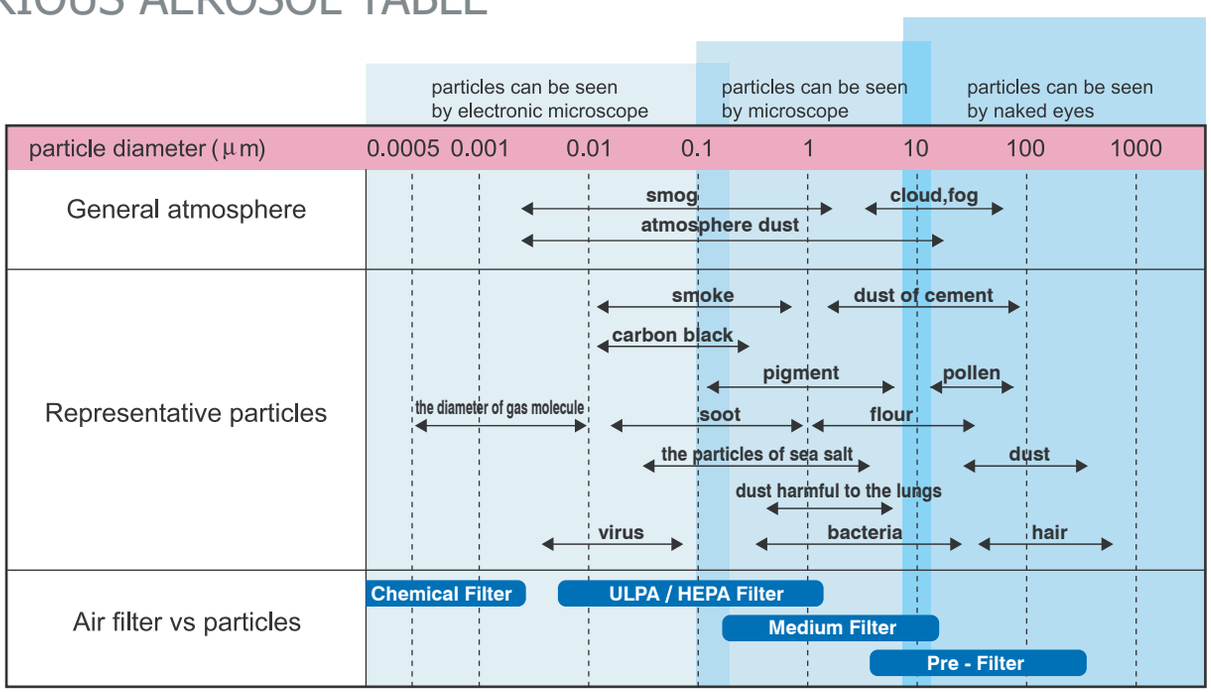
Test result (Fail/ Pass)	結果(不合格/合格)				
Prepared By		Checked By			Date 試験日

APPLICATION GUIDELINES

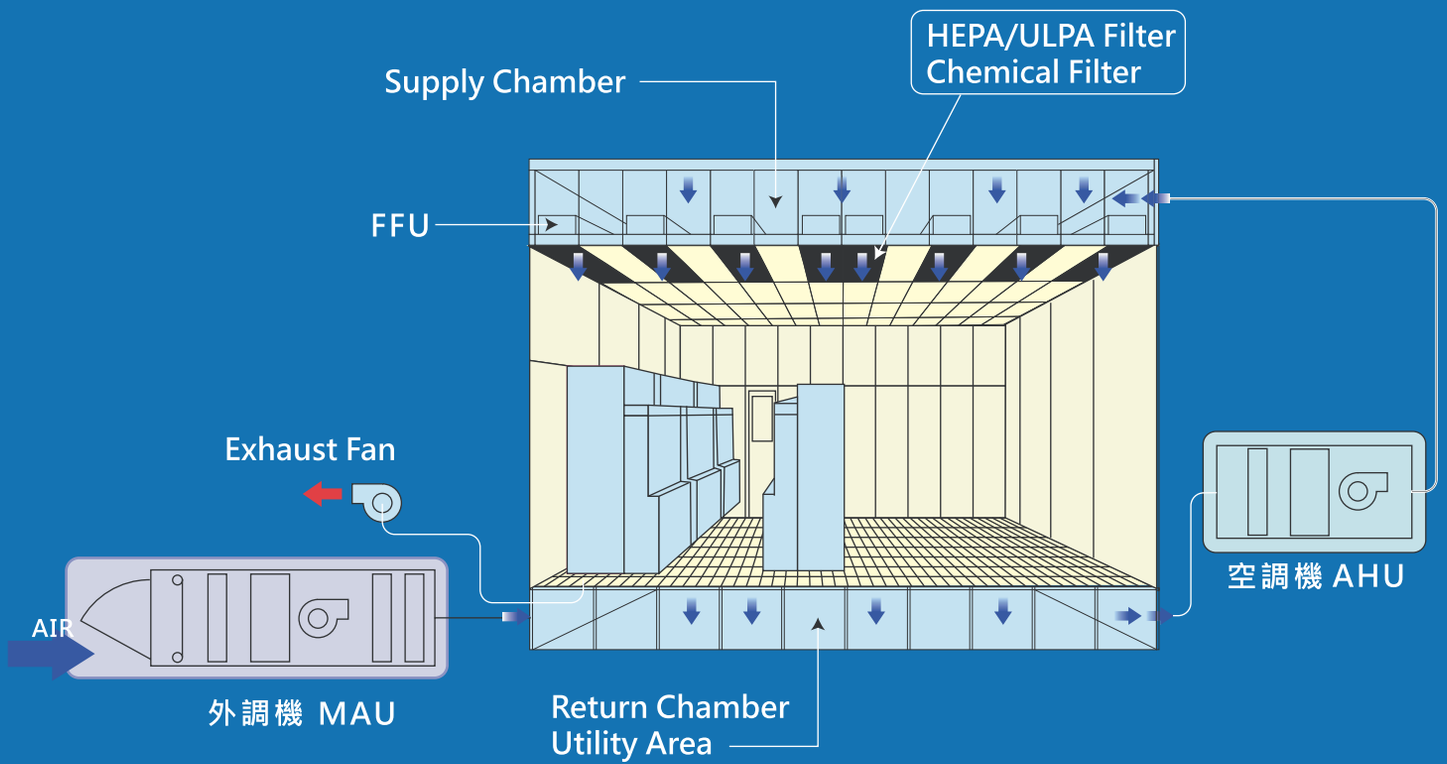
EN Std.			Ashrae Std.52		IES-RP-CC001.3 Std.		TNF Product
FILTER CLASS	Efficiency	MERV	Dust Spot Efficiency	Arrestance	Performance Levels	Efficiency	
U17	99.999995%(MPPS)	----	----	----	----	----	Panel Type Filter / PTFE
U16	99.99995%(MPPS)	----	----	----	----	----	Panel Type Filter / PTFE
U15	99.9995%(MPPS)	20	----	----	Type F	99.999%(0.1-0.2μm)	Panel / Cell Type Filter
H14	99.995%(MPPS)	19	----	----	Type D	99.999%(0.3μm)	Panel / Cell Type Filter
H13	99.95%(MPPS)	18	----	----	Type C	99.99%(0.3μm)	Panel / Cell Type Filter
E12	99.5%(MPPS)	17	----	----	Type A	99.97%(0.3μm)	Panel / Cell Type Filter
E11	95%(MPPS)	16	----	----	----	----	Cell Type J HEPA Filter
E10	85%(MPPS)	16	----	----	----	----	----
F9	95≤Em	15	>95%	----	----	----	----
F8	90≤Em<95%	14	90 - 95%	>98%	----	----	Cell Type / eSP EMILENT™
F7	80≤Em<90%	13	80 - 90%	>98%	----	----	Bag Filter
M6	60≤Em<80%	12	70 - 75%	>95%	----	----	----
		11	60 - 65%	>95%	----	----	Bag Filter
M5	40≤Em<60%	10	50 - 55%	>95%	----	----	----
		9	40 - 45%	>90%	----	----	----
G4	90≤Am	8	30 - 35%	>90%	----	----	Pre Filter
		7	25 - 30%	>90%	----	----	----
G3	80≤Am<90%	6	<20%	85 - 90%	----	----	----
		5	<20%	80 - 85%	----	----	Pre Filter
G2	65≤Am<80%	4	<20%	75 - 80%	----	----	----
		3	<20%	70 - 75%	----	----	----
		2	<20%	65 - 70%	----	----	----
G1	Am<65%	1	<20%	<65%	----	----	----

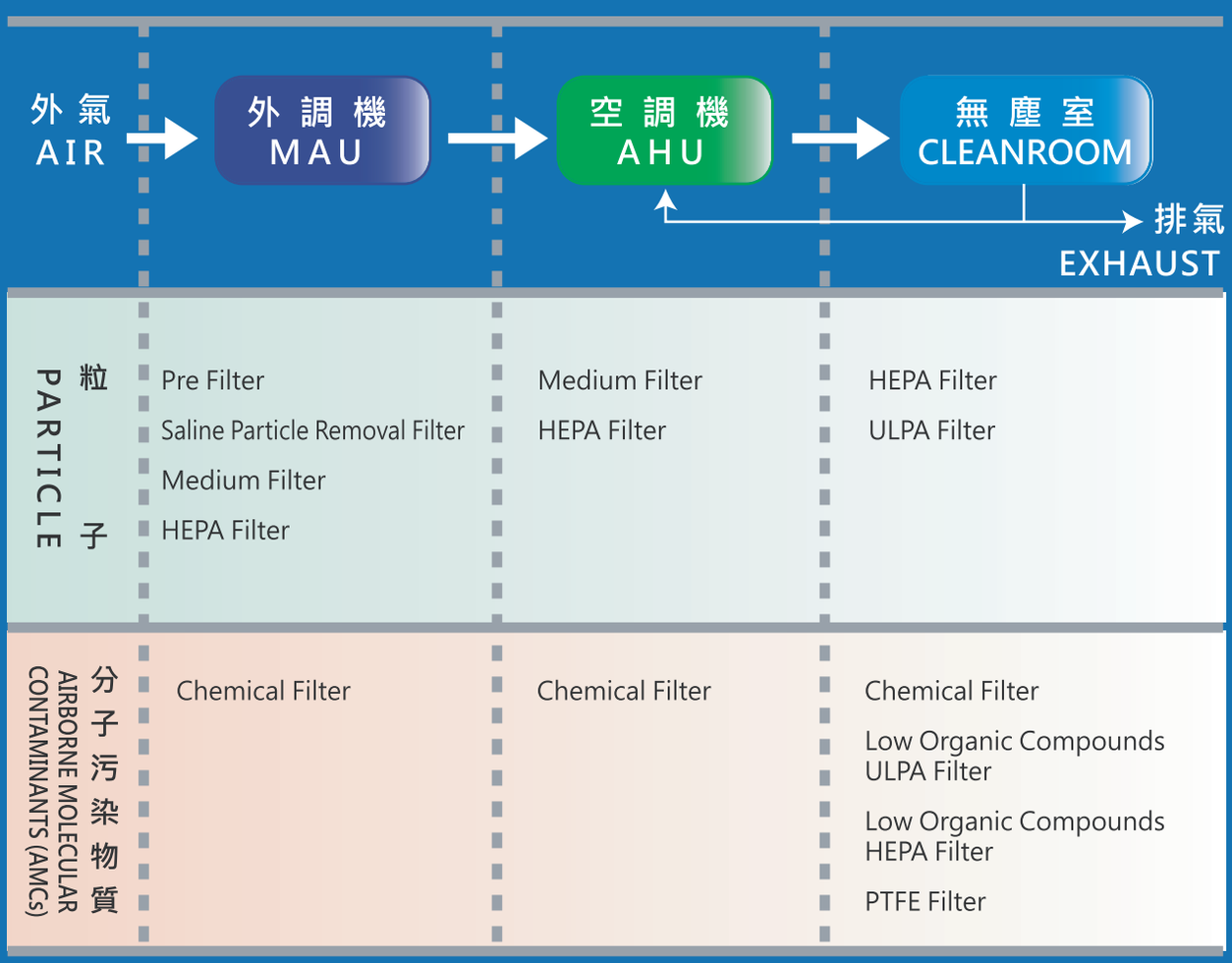
U : ULPA Filter
H : HEPA Filter
E10~U17 : CEN EN1822
G1~F9 : CEN EN779
MPPS = Most Penetrating Particle Size
Em : Average Efficiency Em on atmospheric Dust
Am : Average arrestance Am on Synthetic Dust

VARIOUS AEROSOL TABLE



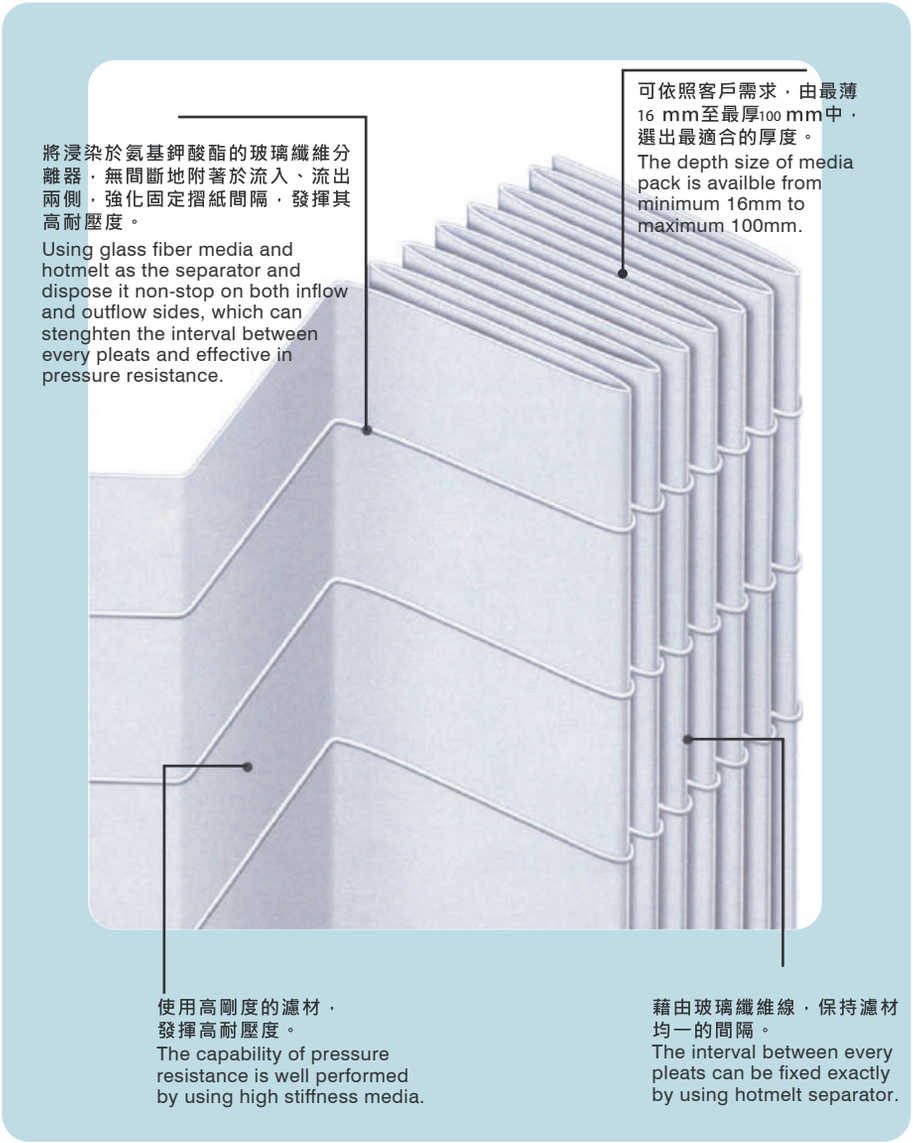
AIR FILTER APPLICATION GUIDELINE

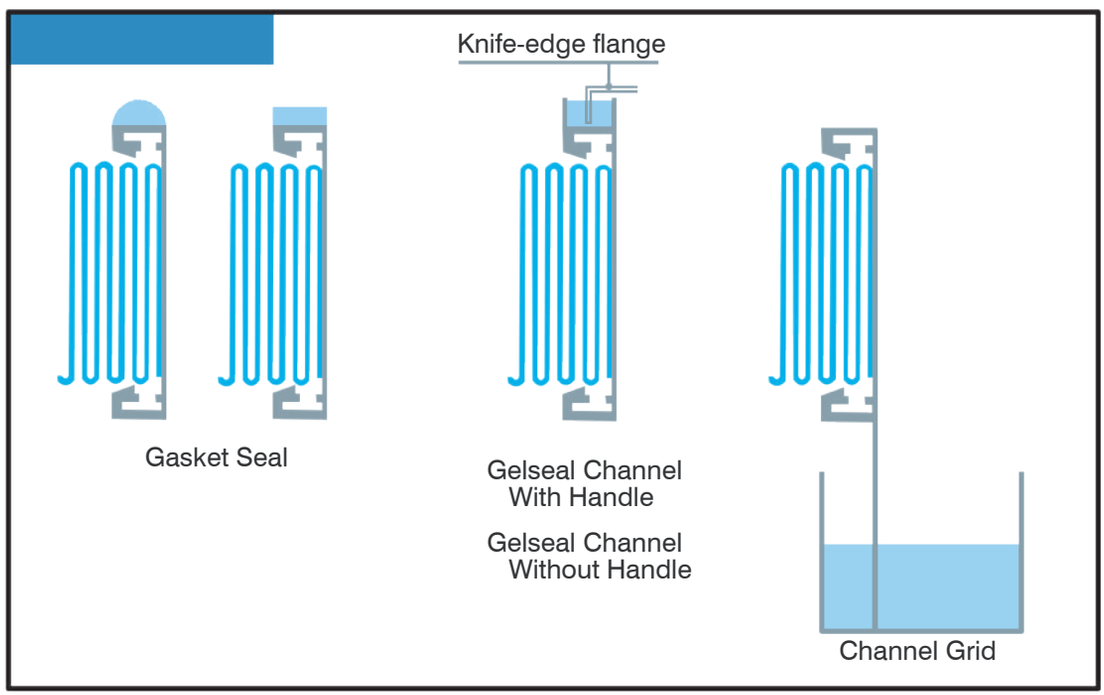




	外調機 MAU	空調機 AHU	無塵室 CLEANROOM
粒子 PARTICLE	Pre Filter Saline Particle Removal Filter Medium Filter HEPA Filter	Medium Filter HEPA Filter	HEPA Filter ULPA Filter
分子污染物質 AIRBORNE MOLECULAR CONTAMINANTS (AMCs)	Chemical Filter	Chemical Filter	Chemical Filter Low Organic Compounds ULPA Filter Low Organic Compounds HEPA Filter PTFE Filter

CONSTRUCTION OF SPLEATS





Pleated Filter

Pre Filter

Pleating type panel construction with High efficiency synthetic media in metal frame.

Specification

ASHRAE 52.2	MERV 5,7,8
EN779	G3, G4
Media	Synthetic
Filter Class	ISO Coarse
Application	Industrial, coarse pre-filtration
Filter Depth	2",4"
Frame	Aluminium , SS 304, GIPC
Recomm. Final Pressure drop	250 Pa
Operating Temp	Ambient Temp

Pre Filter

ROD Type Design with High efficiency synthetic media in metal frame.

Specification

ASHRAE 52.2	MERV 5,7,8
EN779	G3, G4
Media	Synthetic
Filter Class	ISO Coarse
Application	Industrial, coarse pre-filtration
Filter Depth	2",4"
Frame	Aluminium , SS 304, GIPC
Recomm. Final Pressure drop	250 Pa
Operating Temp	Ambient Temp

Pre Filter

Pleating type panel construction with High efficiency synthetic media in Cardboard Frame

Specification

ASHRAE 52.2	MERV 8
EN779	G4
Media	Synthetic Cotton Blend
Filter Class	ISO Coarse
Application	Industrial, coarse pre-filtration
Filter Depth	2",4"
Frame	Moisture Resistant Beverage Board
Recomm. Final Pressure drop	250 Pa
Operating Temp	Ambient Temp

Pre Filter

Pleating type panel construction with High efficiency synthetic media in Cardboard Frame.

Specification

ASHRAE 52.2	MERV 5
EN779	G3
Media	FiberGlass
Filter Class	ISO Coarse
Application	Industrial, coarse pre-filtration
Filter Depth	2",4"
Frame	Moisture Resistant Beverage Board
Recomm. Final Pressure drop	250 Pa
Operating Temp	Ambient Temp

Bag Filter

Pocket Pre Filter

Pocket filter Design with Melt Blown Synthetic, Water resistant media, it is suitable for IAQ, and Variable Air Volume

Specification

ASHRAE 52.2	MERV 7,8
EN779	G4
Media	Synthetic
Filter Class	ISO Coarse
Application	General Ventilation
Header Thickness	20mm, 25mm
Filter Depth	12" , 24"
Frame	Galvanized steel, Aluminium
Recomm. Final Pressure drop	250 Pa
Operating Temp	60°C

Pocket Fine Filter

Pocket filter Design with Melt Blown Synthetic, Water resistant media, it is suitable for IAQ, and Variable Air Volume

Specification

ASHRAE 52.2	MERV 10
EN779	M5
Media	Synthetic
Filter Class	ISO ePM10
Application	General Ventilation
Header Thickness	20mm, 25mm
Filter Depth	12" , 24"
Frame	Galvanized steel, Aluminium
Recomm. Final Pressure drop	450 Pa
Operating Temp	60°C

Pocket Fine Filter

Pocket filter Design with Synthetic, with High Dust holding capacity with Low Initial Pressure drop

Specification

ASHRAE 52.2	MERV 10 -14
EN779	M5-F8
Media	Synthetic
Filter Class	ISO ePM2.5,- ISO ePM1
Application	General Ventilation and air Conditioning equipment
Filter Depth	12",24"
Frame	Galvanized steel, Aluminium
Recomm. Final Pressure drop	450 Pa
Operating Temp	60°C

Pocket filter with Plastic Frame

Pocket filter Design with Synthetic media, with High Dust holding capacity with Low Initial Pressure Drop Rigid self supporting Pocket filter

Specification

ASHRAE 52.2	MERV 10-12
EN779	M5 - F8
Media	Synthetic
Filter Class	ISO ePM10- ISO ePM1
Application	Automotive Industry, General ventilation Gas Turbine air intake system, Food Processing facilities
Filter Depth	12",24",15",30"
Frame	Galvanized steel, Aluminium
Recomm. Final Pressure drop	450 Pa
Operating Temp	60°C

Fine Filter

Fine Filter

Pleated media of Non-woven
supplied with GI Mesh duly Sandwiched in
Metal Frame. High dust holding capacity
and reusable nature

Specification

ASHRAE 52.2	MERV 9-14
EN779	M5- F8
Media	Non - woven Synthetic
Filter Class	ISO ePM10/ ISO ePM1
Application	HVAC
Filter Depth	4",6", 12"
Frame	Aluminium , SS 304
Recomm. Final Pressure drop	450 Pa
Operating Temp	Ambient Temp

Fine Filter in Cardboard

High efficiency Micro fine glass
Fiber with Pleated Design,
Compact and Rigid,
Low Energy use High Surface area

Specification

ASHRAE 52.2	MERV 9-14
EN779	M5- F8
Media	Micro Glass fiber
Filter Class	ISO ePM10/ ISO ePM1
Application	HVAC
Filter Depth	4"
Frame	Beverage Board
Recomm. Final Pressure drop	450 Pa
Operating Temp	70°C

Fine Filter in ABS Frame

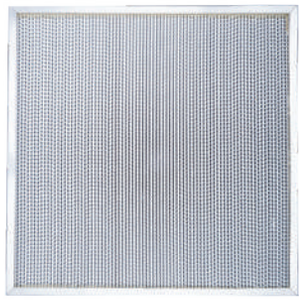
Micro fine glass Fiber in Mini
pleat Design with High Efficiency
Compact and Rigid, Low Energy use
Easy Handling

Specification

ASHRAE 52.2	MERV 11-15
EN779	M6- F9
Media	Micro Glass fiber
Filter Class	ISO ePM10/ ISO ePM1
Application	HVAC
Filter Depth	4"
Frame	ABS
Recomm. Final Pressure drop	450 Pa
Operating Temp	60°C

DEEP PLEAT Fine Filter

Micro fine glass Fiber in Deep
pleat Design with High Efficiency
with Low IPD



Specification

ASHRAE 52.2	MERV 11-15
EN779	M6- F9
Media	Micro Glass fiber
Filter Class	ISO ePM10/ ISO ePM1
Application	HVAC
Filter Depth	6", 12"
Frame	Aluminium, SS casing
Recomm. Final Pressure drop	450 Pa
Operating Temp	90°C

HEPA Filter

DEEP PLEAT HEPA FILTER

HEPA Filter use in Cleanroom, Hospital, Pharmaceutical Plants,Pleat Spacing is maintained by aluminium separators Available in a wide range of sizes

Specification

EN1822	H13, H14
Media	Micro Glass fiber
Separator	Aluminium
Application	HVAC
Filter Depth	6", 12"
Frame	Aluminium , SS 304
Recomm. Final Pressure drop	750 Pa
Operating Temp	90°C

MINI PLEAT GEL SEAL HEPA FILTER

Mini Pleat HEPA and ULPA filters specifically designed for Cleanroom application, Available with a variety of Media pak, Frame available in Gel seal

Specification

EN1822	H13 - U16
Media	Micro Glass fiber
Separator	Hot melt
Sealent	Silicon / PU Gel
Protection Grid	Powder coated metal on Both side
Frame	Aluminium Extrusion
Recomm. Final Pressure drop	500 Pa
Operating Temp	70°C

HOODED TYPE GEL SEAL HEPA FILTER

HEPA Celing module is Suitable for Gel seal Hepa filter for Class 1000 to 1,00,000 controlled area

Specification

EN1822	H13 - U16
Media	Micro Glass fiber
Separator	Hot melt
Sealent	Silicon / PU Gel
Protection Grid	Powder coated metal on Both side
Frame	Extruded Anodized Aluminium
Collar Design	Round , Square, Damper , Bevel Gear arrangement
Recomm. Final Pressure drop	500 Pa
Operating Temp	70°C

MINI PLEAT HEPA FILTER

Mini Pleat HEPA and ULPA filters specifically designed for Cleanroom application, Available with a variety of Media pack and wide range of sizes

Specification

EN1822	H13 - U16
Media	Micro Glass fiber
Separator	Hot melt
Gasket	Neoprene, EPDM
Protection Grid	Powder coated metal on Both side
Frame	Aluminium Extrusion
Recomm. Final Pressure drop	500 Pa
Operating Temp	70°C

HOODED HEPA FILTER

Mini Pleat with Optimum filter performance with an individual Duct

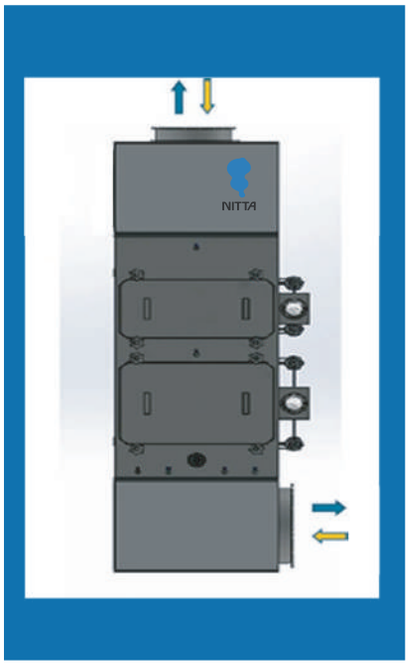
Specification

EN1822	H13 - U16
Media	Micro Glass fiber
Separator	Hot melt
Gasket	Neoprene, EPDM
Protection Grid	Powder coated metal
Frame	Extruded Anodized Aluminium
Collar Design	Round , Square
Recomm. Final Pressure drop	500 Pa
Operating Temp	70°C

BIBO (Bag In Bag Out) is a device designed to change the filter with the purpose of protecting the environment, ensuring the safety of the operator. This device is commonly used in cleanrooms where personnel work with hazardous Biological, Radiational and Carcinogenic components. BIBO can remove harmful substances in the air, biological, radioactive, pollutants contained in the filter of the BIBO box through the system until the filter is changed and incinerated.

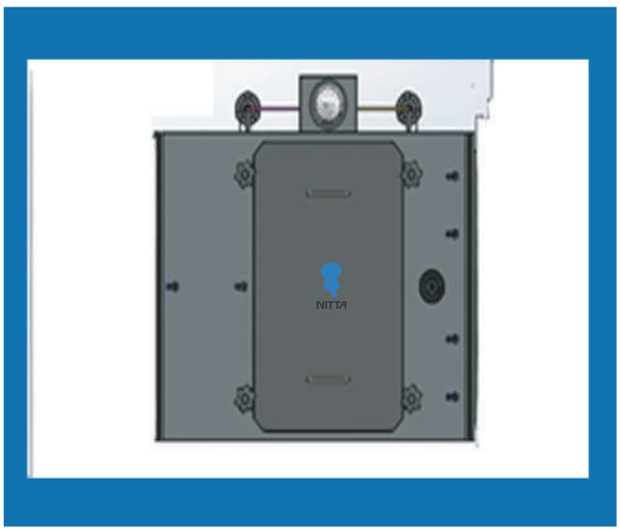
BIBO System Structure Body:

The air inlet and outlet ports of the body are connected to the pipelines through closing valves, bio-sealed valves are provided according to customer requirements. The body of BIBO system is manufactured by laser cutting and numerically controlled bending to ensure accuracy during the production process.



PVC Bag :

PVC bags are used to prevent replacement and maintenance personnel from coming into contact with the filter when replacing filter. PVC bags have the characteristics of high strength and are not easily broken.



At NITTA, we understand the importance of Clean air and
are committed to provide clean air systems across
the globe to improve the quality of life.
Nitta strives to move the world
with innovative and meaningful ideas that
provide the vision for a more advanced society
and a more harmonious way of life.

NITTA India :

Nitta Filters India Pvt Ltd,
Sy No 64, 5-99/1, Gundlapochampally
Medchal Mandal, Medchal-Malkajgiri Dist,
Telangana, India 500100
Phone: +91-9000661861
Email: info@nittafilters.com
www.nittafilters.com

NITTA Japan :

Nitta Corporation
4-4-26 Sakuragawa,
Osaka 556-0022,
Osaka Prefecture, Japan.
Phone: +81-6-6563-1211
Fax :- +81-6-6563-1212
www.nitta.co.jp

Nara Plant :

Nitta Corporation
172 Ikezawa-cho,
Yamatokoriyama,
Nara, 639-1085
Phone : +81-743-56-581
Fax : +81-743-56-5119
www.nitta.co.jp