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System solution integrator with core filtration technology



工业除尘 综合解决方案

Industrial Dust Collection Comprehensive Solutions

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ABOUT MAYAIR

MayAir Group, a global leading manufacturer, developer and service provider of air purification equipment and clean air solutions, was established since 2001. The company specializes in air filtration research and development, design and construction, production, distribution, installation and service maintenance of clean air solutions for industrial, commercial and residential sectors.

Historically, the group's core business has been focused in providing HVAC filters, fan filter units (FFUs) and air filtering equipment for the uses in industrial cleanrooms, making it one of the global leading providers in this field. With a team of a few hundreds world-class engineers, MayAir has established as one of the pioneers in air filtration product manufacturing, operating multiple manufacturing plants across the globe. With strong foundations and successful achievements in the air filtration industry across Asia, the company is rapidly expanding into the United States, Europe, Middle East, and other parts of the world.

With over 20 years of experience and continuous breakthroughs, MayAir has proven itself as a highly reliable air filtration company and developer of effective air filtration equipment and clean air solutions. It possesses the capability to offer a full spectrum of clean air solutions to various business segments, particularly in cleanrooms for the semiconductor, pharmaceutical, data centre, power plant, electrical and electronic and biomedical industries, and others.



**COMPANY
EMPLOYEES**
900+



**SALES
OFFICES**
30+



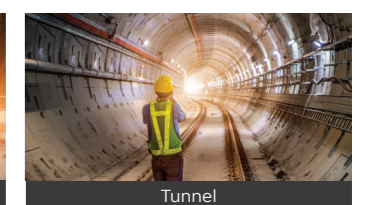
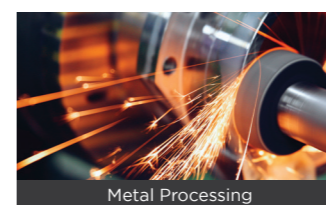
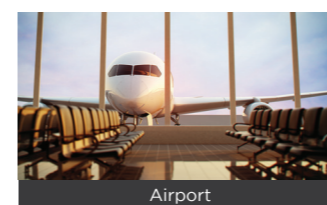
**MANUFACTURING
BASES**
9



**R&D
CENTERS**
4

DIVERSIFIED PRODUCT RANGES & COMPREHENSIVE SOLUTIONS

APPLICATIONS



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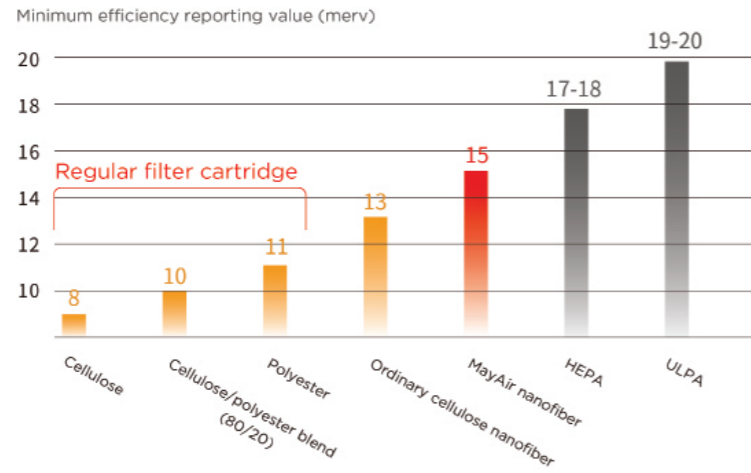
DUST REMOVAL FILTER CARTRIDGE

MERV FILTER RATING STANDARD

The filter cartridge is the filter unit of the dust removal equipment, determining the filtration precision and efficiency of the filtration system.

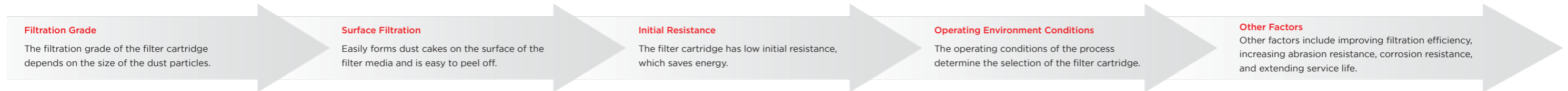
MayAir, as a global clean technology solutions integrated supplier, has developed and produced filter cartridges suitable for different industries and different filter requirements based on a large number of practical applications in different industries.

In the field of industrial dust removal, the filtration precision of the filter cartridge adopts the MERV (Minimum Efficiency Reporting Value) filtration rating standard of the American standard, namely ASHRAE52.2. This standard is the most authoritative standard for testing the dust removal efficiency of all ventilation dust removal equipment according to the particle size of dust particles. The higher the MERV rating, the higher the efficiency of filtering fine particle dust.



HOW TO CHOOSE THE RIGHT FILTER MEDIA

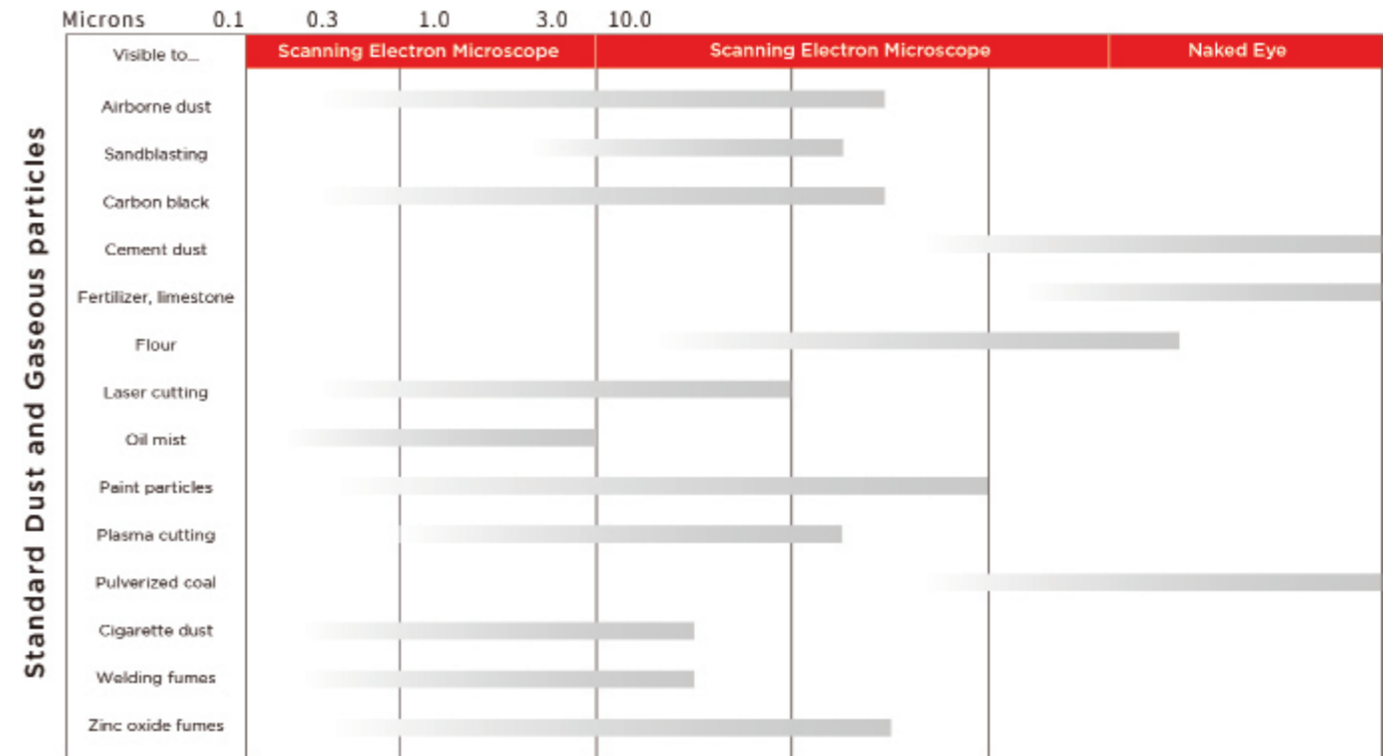
Consider these factors to choose the best filter media according to your process flow.



FILTER CARTRIDGE SELECTION GUIDE

Filter Material	Characteristics	Minimum Efficiency Reporting Value (MERV)	European Filter Efficiency Rating	Surface Filtration capability	Pressure Drop	Water Washing	Maximum Operating Temperature	Wear Resistance	Chemical Resistance	Operating Conditions	Industry / Application Category / Dust Type
Nanofiber	MayAir nanofiber demonstrates excellent filtration capability for ultrafine dust particles smaller than 1 micron.	15	BIA M EM779-F9	Excellent	Low	Not washable	180°F/82 °C	Good	Moderate	Suitable for most fine dust and non-fibrous dust conditions.	Sandblasting, carbon black, dry chemical processing, general industry, metallurgical powders, pharmaceutical compounds, powder coating.
Flame-retardant nanofiber	It features added flame-retardant properties, similar to MayAir nanofiber.	15	BIA M EM779-F9	Excellent	Low	Not washable	180°F/82 °C	Good	Moderate	Suitable for conditions that generate sparks which may enter the dust collector.	Dry welding fumes, flame cutting, plasma cutting, metal grinding dust, metal fumes, laser cutting, thermal spraying.
Cellulose/polyester flame-retardant	The high-strength filter material with wide pleat design offers good dust release performance.	10	BIA L EM779-F5	Poor	Moderate	Not washable	180°F/82 °C	Good	Moderate	Recommended for applications requiring high strength, moisture-resistant filter material, and good dust cake release performance.	Cardboard, cement, ceramics, cotton, fiberglass, gypsum, lime, paper, polishing, powder coating, rubber grinding, shot blasting, tobacco.
Spunbonded polyester	It outperforms regular cellulose filter material, incorporating polyester fibers and enhanced flame-retardant properties.	11	BIA M EM779-F6	Moderate	High	Washable	180°F/82°C or 275°F/135°C	Excellent	Excellent	Suitable for dry dust, coarse dust, and large particle hot dust conditions, as well as conditions where sparks may enter the dust removal equipment.	Cocoa powder, coffee, cleaning fluids, general industry, metal polishing, metal sanding, dairy powder, salt, stearates, sugar, textiles.
Polyester composite PTFE membrane	The high-strength filter with PTFE membrane ensures excellent dust release and blocks liquids when air and water vapor pass through the small apertures.	16	BIA M EM779-F9	Excellent	Very High	Washable	180°F/82°C or 275°F/135°C	Excellent	Excellent	Highly recommended for applications requiring extremely high filtration efficiency and excellent dust cake release capability, especially for handling humid, hygroscopic, and agglomerative dust.	Sintered materials, asbestos, chemical processing, fluidized bed dryers, food processing (flour, starch, sugar, whey protein), pesticides.

COMMON DUST PARTICLE SIZES



IDC CARTRIDGE DUST COLLECTOR

The IDC series dust collector utilizes gravity and downward airflow for self-cleaning. Dust-laden air enters from the top and exits from another top side, following the principle of "inertial settling" for downward dust flow. This design ensures that dust settles downward without being carried back to the cartridge. During operation, dust-laden air enters the gravity settling dust collector from the top inlet, passes through the cartridge, capturing dust on the outer surface. Clean air is released through the center of the cartridge into the clean air chamber and discharged through the outlet. For cleaning, a solid control timer selects a pair of cartridges for high-pressure compressed air cleaning. Dust is dislodged and falls into the dust hopper, eliminating "secondary dusting" and improving efficiency.



PRODUCT FEATURES



- The series adopts advanced filtration technology and high-pressure pulse automatic ash cleaning technology to maximize the service life of the filter elements
- Modular design, compact structure, and reduced footprint
- Simple equipment installation, easy maintenance, and quick replacement of filter elements
- Verified by CFD fluid analysis software, the equipment effectively suppresses industrial dust, protecting the filter core and extending the filter element's service life
- Professionally customized dust removal fans to ensure safe and reliable operation of the equipment

APPLICATION FIELDS



Dust control in industries such as electronics, lithium batteries, shipbuilding, smelting, non-ferrous metal processing, chemical industry, grain, food processing, pharmaceuticals, textiles, and fiberglass, among others

PRODUCT PARAMETERS TABLE

Product Model	W(mm)	L(mm)	H(mm)	Number of Pulse Valves	Filtration Area (m ²)	Recommended Air Volume (CMH)
IDC2-4	1,023	1,618	2,295	4	80	2400-3200
IDC2-8	1,023	2,140	2,820	4	160	4800-6400
IDC2-12	1,532	2,140	2,820	6	240	7200-9600
IDC3-6	1,023	1,618	2,768	6	120	3600-4800
IDC3-12	1,023	2,140	3,294	6	240	7200-9600
IDC3-18	1,532	2,140	3,294	9	360	10800-14400
IDC4-16	1,023	2,140	3,767	8	320	9600-12800
IDC4-24	1,532	2,140	3,294	12	480	14400-19200
IDC3-24	2,040	2,140	3,294	12	480	14400-19200
IDC3-36	3,055	2,140	3,294	18	720	21600-28800
IDC3-48	4,071	2,410	3,294	24	960	28800-38400
IDC3-60	5,088	2,140	3,294	30	1,200	43200-57600
IDC3-72	6,105	2,140	3,294	36	1,400	43200-57600
IDC4-32	2,040	2,410	3,767	16	640	19200-25600
IDC4-48	3,060	2,140	3,767	24	960	28800-38400
IDC4-64	4,080	2,140	3,767	32	1,280	38400-51200
IDC4-80	5,100	2,140	3,767	40	1,600	48000-64000
IDC4-96	6,120	2,140	3,767	48	1,920	57600-76800
IDC4-112	7,140	2,140	3,767	56	2,240	67200-89600
IDC4-128	8,160	2,140	3,767	64	2,560	76800-102400

Note: The above are standard configurations.

IDP-P LONG TUBULAR DUST COLLECTOR

The IDP-P long tubular dust collector works similarly to a baghouse dust collector. Dust-laden air enters and passes through a distribution plate, where larger particles settle at the bottom. Finer dust is captured on the outer surface of circular cloth filter bags.

An automatic cleaning system removes dust accumulation on the filter bag surface. Compressed air is blown through a blowpipe onto the filter material, causing vibration. This dislodges dust, which falls into a collection hopper. After cleaning, the filter material is regenerated, restoring its dust-capturing function. This process repeats as needed.

The filter bags use advanced membrane technology for higher filtration efficiency. They have the same diameter and length as pleated filter bags but offer a larger filtration area, reducing the amount of steel required and lowering the initial cost.



PRODUCT FEATURES



- Flexible modular design
- Rapid processing, efficient installation, easy maintenance, highly efficient filtration unit
- Compared with baghouse dust collectors, the filtration area of the filter unit is increased by 3-5 times
- Shallow pleat distance design, easy ash removal, multiple installation methods

APPLICATION FIELDS



Dust control for industries such as steel, cement, casting, non-ferrous metal smelting, electronics, welding fumes, robotic welding, shipbuilding, chemical, grain, pharmaceutical, smelting, food processing, textile, fiberglass, and others

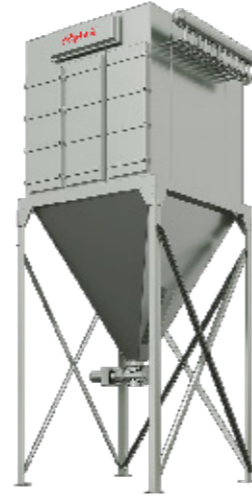
PRODUCT PARAMETERS TABLE

Product Model	W(mm)	L(mm)	H(mm)	Valve Quantity	Filter Element Quantity	Filter Element Length	Module Quantity	Filter Area (m ²)
IDP-P1	1,630	1,910	4,847	7	56	2,000	1	142
IDP-P2	2,832	1,910	4,847	14	112	2,000	2	284
IDP-P3	2,832	1,910	4,847	21	168	2,000	3	427
IDP-P4	2,832	1,910	4,847	28	224	2,000	4	571
IDP-P5	2,832	1,910	4,847	35	280	2,000	5	715

Note: The above are standard configurations.

DC-IDS SINTER PLATE DUST COLLECTOR

The sinter plate dust collector uses PE sintered filter cores as the filtering material, which is an environmentally friendly choice. The sintered plate filter cores have a rigid, wavy, multi-porous structure formed by sintering various high-molecular compounds. The wavy shape increases the surface area by 3 to 8 times, significantly enhancing the filtering area. The internal cavities serve as passageways for clean air and cleaning airflow. The performance of the sintered plate directly affects the dust removal efficiency of the sintered plate dust collector, transforming the traditional deep filtration mechanism of cloth bags into a surface filtration mechanism, marking an innovative change. In this new era, the new type of sintered plate filter material is increasingly accepted by a wide range of users, signaling the arrival of the era of sintered plate dust collectors.



PRODUCT ADVANTAGES



- Can effectively capture dust particles of 0.1 μ m and above, achieving a dust removal efficiency of 99.999% for particles of 0.3 μ m and above
- Extremely high dust removal efficiency meets ultra-low concentration emission standards, with an emission concentration of $\leq 1\text{mg}/\text{Nm}^3$
- Coating deeply embedded in the substrate, ensuring excellent filtration performance without wear or tear
- Purely surface filtration mechanism, maintaining stable filtration efficiency during use
- Rigid filter material, wear-resistant, with a normal service life of up to 10 years
- PE and PTFE provide excellent chemical resistance, wide dust adaptability, self-lubrication, and easy ash removal
- High moisture resistance, with oil and water repellent properties, can be cleaned with compressed air or high-pressure water gun
- Diverse product models to meet different customer selection needs
- Free of heavy metals, no fiber shedding, no risk of product contamination
- Compact design, only 1/2 to 1/3 the size of a bag, easy to install and maintain
- Suitable for high inlet concentrations without the need for pre-dedusting
- Low and stable resistance, no need to increase fan static pressure, reducing energy consumption

APPLICATION FIELDS



Lithium batteries, new energy, petrochemical, steel, chemical, building materials, boilers, electronics, food, mining, etc.

PRODUCT SPECIFICATIONS

Product Model	Filter Area (m ²)	Airflow Capacity (m ³ /h)	Filter Air Speed (m/min)	Compressed Air Consumption (m ³ /min)
DC-IDS-750-12	33	1584-2574	0.8-1.3	0.08
DC-IDS-1500-10	55	2640-4290	0.8-1.3	0.12
DC-IDS-1500-16	88	4224-6864	0.8-1.3	0.24
DC-IDS-1500-20	110	5280-8580	0.8-1.3	0.24
DC-IDS-1500-33	181.5	8712-14157	0.8-1.3	0.53

Note: The above are standard configurations.

DC-IDCS HORIZONTAL INSERTION EXPLOSION UNIT

When producing lithium batteries, equipment such as cold pressing, die cutting, winding, ultrasonic welding, stacking, or laser welding not only require the use of smoke purification devices to filter and purify the generated smoke and dust, but also demand that these purification devices have fire prevention and firefighting functions. Due to the unique nature of power batteries and the production process, dust collectors that collect dust with sparks must use single-unit explosion-proof dust collectors. The DC-IDCS horizontal explosion-proof single machine provides an explosion-proof purification unit that can be equipped with an automatic fire extinguisher and powder spraying protection device.



PRODUCT ADVANTAGES



- **Whole Machine Protection**
Using various explosion-proof monitoring components to monitor the operation status in real-time and eliminate the risk of electrical sparks
- **Explosion-proof Protection**
Comprehensive use of explosion-proof, explosion suppression, explosion isolation, and explosion venting measures to ensure the installation and operation of the system
- **Fire Protection**
The dust collector can be equipped with an automatic fire extinguisher to quickly and effectively extinguish flames inside the dust collector, preventing combustion of dust containing fire
- **Precision Filtration**
Nano-coated antistatic flame-retardant wood pulp fiber filter cartridge, safe, high dust filtration efficiency, optional secondary filtration (high-efficiency filter)
- **Pressure Monitoring**
Low air source pressure alarm to ensure effective ash cleaning of the filter cartridge
- **Smart Technology**
The explosion-proof electrical control cabinet is equipped with a PLC intelligent control system, which adjusts various parameters of the dust collector according to different working conditions and monitors the operation status in real-time

APPLICATION FIELDS



Suitable for the lithium battery manufacturing industry.

PRODUCT PARAMETERS TABLE

Product Model	DC-IDCS-1-2		DC-IDCS-2-4	DC-IDCS-2-6	
	Power (kW)	5.5	7.5	1910	15
Voltage (V/Hz)	380/50	380/50	380/50	380/50	380/50
Rated flow rate (m ³ /h)	5,00	1,000	2,000	2,500	3,500
Rated static pressure (Pa)	9,000	10,000	8,500	11,700	10,500
Filtration area (m ²)	40	40	80	120	120
Filtration material	Nano-coated antistatic flame-retardant wood pulp fiber filter cartridge				
Suction port diameter (mm)	90	130	180	210	240
Dust collection box volume (L)	30	30	30	30*2	30*2
Operating Noise Level (dB[A])	≤ 85	≤ 85	≤ 85	≤ 85	≤ 85
Optional accessories	Powder spraying device, explosion relief panel, dry powder fire extinguisher, material level detection, high-efficiency filter, surface cooler, etc.				

Note: The above are standard configurations.

DC-IDCHV HIGH NEGATIVE PRESSURE DUST COLLECTOR

The negative pressure cleaning system uses a side-channel or multi-stage centrifugal blower to create high negative pressure. Dust is sucked into the pipe network and drawn into the main unit along the negative pressure pipeline. A pre-filter separates and filters the dust, which falls into a collection bucket. A small amount of very light dust is filtered and separated in a high-efficiency filter. Cleaned air meeting standards is discharged through the unit's exhaust port and muffler.

The dust on the filter surface is cleaned by an automatic pulse backflushing system. Check valves are installed at the pipes entering the main unit to prevent reverse airflow from carrying dust back into the clean area, ensuring effective dust collection.



PRODUCT FEATURES



Compared to low vacuum industrial dust collectors, another advantage of high vacuum is that it can also be used for general cleaning systems in factories or workshops. Welders can use industrial dust collection devices to extract fumes during welding, or use grinding equipment integrated with industrial dust collection devices for grinding and dust capture. High vacuum industrial dust collectors can also be used to clean the work environment. This eliminates safety hazards in special industries and explosive environments, improves workshop environments, achieves clean production, improves product quality and yield, reduces manual labor, reduces employee work intensity, and increases employee enthusiasm and efficiency.

APPLICATION FIELDS



Used in the pharmaceutical industry, cosmetics, textiles, card production, fats, food production, flour processing, grain storage and processing, biotechnology electronics, photovoltaics, solar energy, coal chemical industry, semiconductors, precision machinery, aerospace, surface technology, fine chemicals, industrial clean rooms.

PRODUCT PARAMETERS TABLE

Product Model	Airflow Capacity (CMH)	Negative Pressure (kPa)	Weight (kg)	Length (mm)	Width (mm)	Height (mm)
DC-IDCHV-150	150	20	194	1,200	690	2,000
DC-IDCHV-300	300	20	235	1,200	690	2,000
DC-IDCHV-500	500	20	338	1,200	690	2,000
DC-IDCHV-1000	1,000	20	430	1,500	800	2,050
DC-IDCHV-C-1500	1,500	30	565	1,295	1,330	3,451

Note: The above are standard configurations.

CDC COMPACT CARTRIDGE DUST COLLECTOR

The CDC compact cartridge dust collector can choose cartridges based on different dust conditions. When dusty exhaust enters the collector, larger, heavier particles collide and settle at the bottom of the dust collection box under initial filtration. Finer, lighter dust particles are intercepted on the outer surface of the cartridges, while clean air passes through the inner wall of the cartridges and enters the clean room for discharge by the fan.

The dust collector cleans the cartridges using an automatic cleaning system. The electromagnetic valve opens to allow compressed air to blow through the blowing pipes onto the cartridges. High-pressure pulse airflow dislodges dust from the cartridges' outer surface, which is collected in the dust collection box. The vertical cartridge installation ensures high pulse cleaning efficiency and prevents secondary dust accumulation.



PRODUCT ADVANTAGES



- Control Panel:**
The functions are clear and easy to operate, allowing for a clear observation of the equipment's operating status and pressure differential condition
- Filter Cartridge:**
Independently developed screw-lock filter cartridge, convenient installation, high sealing performance; unique circular filter cartridge and vertical installation improve the efficiency of pulse backflush cleaning
- Centrifugal Fan:**
Independently developed centrifugal fan, easily meets various working condition requirements; unique duct design gives the fan significant advantages in efficiency
- and noise level.Dust Collection Box:**
Drawer-type maintenance structure, with a bottom pressure bar lifter and a dust collection port sealing device, makes it easier to clean collected dust, prevents dust overflow, and facilitates equipment maintenance

APPLICATION FIELDS



- Mechanical processing:**
Grinding, welding, polishing, cutting, laser cutting, etc
- Electronics industry:**
Drilling, cutting, segmentation, etc
- Pharmaceutical industry:**
Crushing, screening, mixing, conveying, etc
- Battery new energy:**
Crushing, slicing, conveying, powder sintering, etc

PRODUCT SPECIFICATIONS

Product Model	CDC-16	CDC-16	CDC-30	CDC-45	CDC-60
Voltage (V)	AC380 five-wire system				
Power (KW)	0.75	1.1	1.5	2.2	4
Airflow (CMH)	500	1,000	1,800	2,700	3,600
Filtration Area (m ²)	3.5	7	12	18	24
Number of Cartridges (pcs)	1	1	4	6	8
Cartridge Size (mm)	324*213*265	324*213*500	202*120*500	202*120*500	202*120*500
Cleaning Method	Pulse cleaning				
Number of Electromagnetic Valves (pcs)	1	1	2	3	4
Operating Noise Level (dB[A])	65.5	65.8	65.8	68.3	66.9
Single Cartridge PM2.5 Purification Efficiency	≥95%@500CMH	≥95%@1000CMH	≥95%@450CMH	≥95%@450CMH	≥95%@450CMH
Dust Collection Box Capacity (L)	14	14	25	37	25*2
Equipment Inlet Diameter (mm)	80	120	150	200	250
Equipment Weight (kg)	111	119	160	210	290
Product Dimensions (mm)	533L*518W*1189H	533L*518W*1389H	681L*677W*1659H	881L*677W*1659	1115L*677W*1744H
Casters	4 optional accessories				
Spray Color	RAL9016 orange pattern				

Note: The above are standard configurations.

MFD/MFS FLAT BAG DUST COLLECTOR

Flat bag dust collectors are divided into pulse jet cleaning and fan reverse cleaning.



WORKING PRINCIPLE



MayAir dust collectors typically use a 'co-current' airflow pattern. The dust-laden gas enters the dust chamber from the top or back of the dust collector. After backflushing, the dust falls from top to bottom into the dust hopper, while the airflow also exits the dust collector from top to bottom. In this airflow, the dust is easily separated and enters the dust hopper under strong negative pressure, especially ensuring good separation for fine dust particles. Therefore, Amer's dust collectors can have a better airflow pattern than other manufacturers' counter-current dust collectors, with lower resistance and cleaner dust separation. This co-current dust collector is particularly suitable for fine dust particles.

TECHNICAL FEATURES



- Smaller footprint
- The cabinet adopts a modular design, which is compact in structure, saves space, and is approximately 30-40% smaller in volume compared to traditional bag-type dust collectors
- The filter bag installation type is side-insertion
- The spring tensioning mechanism presses the filter bag tightly, making replacement easy and effortless
- High dust removal efficiency, flexible combination, and stable and reliable performance

MODULAR DESIGN



The modular units of the flat bag dust collector come in three sizes: 0.5, 0.75, and 1.0. The number or concentration of modules used depends on the model of the dust collector. These three sizes correspond to the respective sizes of the back wall and perforated plate. The combination of modules, along with the left and right side walls, as well as the corresponding top and bottom plates, make up the main body of the dust collector.

SPRAYING METHOD



Offline spraying

REVERSE AIR CLEANING PRINCIPLE



The composition and structure of a reverse air cleaning bag filter are similar to those of a pulse jet cleaning system, and the working principle is also the same. The difference lies in the components and structure of the cleaning system.

APPLICATION FIELDS



Foundry, food, metallurgy, energy, mining, powder handling.

SPECIFICATIONS - PARTIAL MODELS

MFD/MFS 620 Series

Product Model	Filter Area (m ²)	Processing Air Volume (m ³ /h)	Filter Air Speed (m/min)	Compressed Air Consumption (Nm ³ /h)
MFD/MFS 620/0.75/90	123	7380-11070	-	17.23
MFD/MFS 620/1.00/120	164	9840-14760	1.0-1.5	19.39
MFD/MFS 620/1.25/150	204	12240-18360	1.0-1.5	20.97
MFD/MFS 620/1.50/180	245	14700-22050	1.0-1.5	22.17
MFD/MFS 620/1.75/210	286	17160-25740	1.0-1.5	23.12
MFD/MFS 620/2.00/240	327	19160-29430	1.0-1.5	23.88
MFD/MFS 620/2.25/270	368	22080-33120	1.0-1.5	24.52
MFD/MFS 620/2.50/300	408	24480-36720	1.0-1.5	25.05
MFD/MFS 620/2.75/330	449	26940-40410	1.0-1.5	25.50
MFD/MFS 620/3.00/360	490	29400-44100	1.0-1.5	25.89
MFD/MFS 620/3.25/390	531	31860-47790	1.0-1.5	26.23
MFD/MFS 620/3.50/420	572	34320-51480	1.0-1.5	46.25
MFD/MFS 620/3.75/450	612	36720-55080	1.0-1.5	47.05
MFD/MFS 620/4.00/480	653	39180-58770	1.0-1.5	47.78
MFD/MFS 620/4.25/510	694	41640-62460	1.0-1.5	48.44
MFD/MFS 620/4.50/540	735	44100-66150	1.0-1.5	49.04
MFD/MFS 620/4.75/570	776	46560-69840	1.0-1.5	49.59
MFD/MFS 620/5.00/600	817	49020-73530	1.0-1.5	50.10
MFD/MFS 620/5.25/630	857	51420-77130	1.0-1.5	50.56
MFD/MFS 620/5.50/660	898	53880-80820	1.0-1.5	51.00
MFD/MFS 620/5.75/690	939	56340-84510	1.0-1.5	51.40
MFD/MFS 620/6.00/720	980	58800-88200	1.0-1.5	51.77
MFD/MFS 620/6.25/750	1,020	61200-91800	1.0-1.5	52.12
MFD/MFS 620/6.50/780	1,061	63660-95490	1.0-1.5	52.45
MFD/MFS 620/6.75/810	1,102	66120-99180	1.0-1.5	52.75

MFD/MFS 722 Series

Product Model	Filter Area (m ²)	Processing Air Volume (m ³ /h)	Filter Air Speed (m/min)	Compressed Air Consumption (Nm ³ /h)
MFD/MFS 722/0.75/105	158	9450-14175	-	17.23
MFD/MFS 722/1.00/140	210	12600-18900	1.0-1.5	19.39
MFD/MFS 722/1.25/175	263	15750-23625	1.0-1.5	20.97
MFD/MFS 722/1.50/210	315	18900-28350	1.0-1.5	22.17
MFD/MFS 722/1.75/245	368	22050-33075	1.0-1.5	23.12
MFD/MFS 722/2.00/280	420	25200-37800	1.0-1.5	23.88
MFD/MFS 722/2.25/315	473	28350-42525	1.0-1.5	24.52
MFD/MFS 722/2.50/350	525	31500-47250	1.0-1.5	25.05
MFD/MFS 722/2.75/385	578	34650-51975	1.0-1.5	25.50
MFD/MFS 722/3.00/420	630	37800-56700	1.0-1.5	25.89
MFD/MFS 722/3.25/455	683	40950-61425	1.0-1.5	26.23
MFD/MFS 722/3.50/490	735	44100-66150	1.0-1.5	46.25
MFD/MFS 722/3.75/525	788	47250-70875	1.0-1.5	47.05
MFD/MFS 722/4.00/560	840	50400-75600	1.0-1.5	47.78
MFD/MFS 722/4.25/595	893	53550-80325	1.0-1.5	48.44
MFD/MFS 722/4.50/630	945	56700-85050	1.0-1.5	49.04
MFD/MFS 722/4.75/665	998	59850-89775	1.0-1.5	49.59
MFD/MFS 722/5.00/700	1,050	63000-94500	1.0-1.5	50.10
MFD/MFS 722/5.25/735	1,103	66150-99225	1.0-1.5	50.56
MFD/MFS 722/5.50/770	1,155	69300-103950	1.0-1.5	51.00
MFD/MFS 722/5.75/805	1,208	72450-108675	1.0-1.5	51.40
MFD/MFS 722/6.00/840	1,260	75600-113400	1.0-1.5	51.77
MFD/MFS 722/6.25/875	1,313	78750-118125	1.0-1.5	52.12
MFD/MFS 722/6.50/910	1,365	81900-122850	1.0-1.5	52.45
MFD/MFS 722/6.75/945	1,418	85050-127575	1.0-1.5	52.75

DC-IDC VERTICAL DUST COLLECTOR

The vertical dust collector mainly consists of several parts including the fan section, filtering section, dust collection section, and reverse blowing system. Dust-laden air enters the filtering box through the inlet of the dust collector under the negative pressure generated by the fan. Inside the filtering box, there are diversion and uniform flow devices. Internally connected filter cartridge filters trap dust, with finer particles uniformly adhering to the outer surface of the filter cartridge. Clean gas passes through the filter cartridge and exits through the outlet of the device driven by the fan. The intake can be through grid intake, side intake, or bottom intake. The overall structure adopts modular design, and the dust collection section can be replaced with ash cylinders, drawers, or left empty. When the dust collection section is not installed, it can be switched to use as a top-mounted dust collector, making it



PRODUCT ADVANTAGES



- Ultra-low emissions:**
 The self-made filter cartridge, installed with a square flange, effectively resolves dust-containing exhaust gases from various industries such as welding, grinding workshops, welding centers, robot welding lines, and plasma laser cutting and blanking production lines, ensuring clean and pollution-free emissions
- Modular design:**
 Allows for multi-module combination use; the intake can be grid intake or side intake, expanding equipment application areas
- Quick-release filter cartridge design:**
 The installation and removal of the filter cartridge are very convenient, and no tools are needed to quickly and easily replace the filter cartridge, providing great convenience for manual cleaning of the filter
- Noise reduction treatment:**
 Independently developed centrifugal fan can easily meet various working condition requirements; unique duct design provides great advantages in fan efficiency and noise reduction

APPLICATION FIELDS



Dusty workshops, Grinding, cutting, stamping, polishing, welding and other processing sites Feeding, mixing, packaging and bag sealing operations Electronic component production sites Chemical, hospital, and food processing sites Spraying and painting sites

PRODUCT SPECIFICATIONS

Product Model	DC-IDCV-40-F-S-V0
Voltage (V)	AC380V Five-Wire System
Power (kW)	2.2
Rated Air Volume (CMH)	2,400
Filtration Area (m ²)	56
Number of Filter Cartridges (pcs)	4
Cleaning Method	Pulse cleaning
Number of Electromagnetic Valves (pcs)	2
Operating Noise Level (dB[A])	75±2
Single Filter Cartridge PM2.5 Purification Efficiency @ 600 CMH	≥95
Dust Collector Capacity (L)	84
Side Air Inlet Diameter (mm)	240
Equipment Weight (kg)	360
Product Dimensions (mm)	1000(W) * 2288(H) * 1071(D)
Pressure Gauge	Optional
Casters	4 optional
Spray Paint Color	RAL9016 orange pattern

Note: The above are standard configurations.

DC-SMR MATERIAL RECOVERY UNIT

The DC-SMR material recovery unit uses the main unit's fan for negative pressure to handle edge materials. It utilizes a pre-settling tank to separate solid and gas in the waste through aerodynamics. Waste gas undergoes secondary filtration in the negative pressure dust removal device, while waste is compressed in the compression chamber. The compression unit squeezes the waste to the outlet's front, where it is further compressed by the side wall of the discharge chamber, the discharge gate, and the servo compression unit. Once compressed, the waste is squeezed into a receiving bag.

This unit is designed for collecting and compressing aluminum foil and copper foil waste from the cutting and die-cutting of lithium battery electrode sheets. It is easy to operate, ensures tight and compact waste compression, offers safe and reliable discharge, prevents secondary dust escape, and operates smoothly at speeds up to 180m/min.



PRODUCT ADVANTAGES



- Highly wear-resistant extrusion unit**
 Equipped with a high-precision, highly wear-resistant extrusion unit, it can operate continuously and stably for a long time
- Fully redundant safety system**
 Equipped with air source pressure detection function, when the air source is abnormal, it can automatically lock the baffle to prevent accidental operation and injury;
 The system is equipped with a pure mechanical safety device. After the device is triggered, it can forcibly ensure that the baffle does not accidentally operate
 The discharge port is equipped with a grating to prevent personnel from accidentally operating and causing work-related injuries. When the grating detects other foreign objects entering, the compactor will react promptly and stop the extrusion unit
- Automatic cleaning system for extrusion chamber**
 Can automatically clean the waste inside the extrusion chamber
- Automatic waste detection system**
 Can monitor the waste situation in real time, detect waste abnormalities in a timely manner, and automatically clean the waste

APPLICATION FIELDS



For use in the lithium battery manufacturing industry

PRODUCT PARAMETERS TABLE

Product Model	DC-SMR-16	DC-SMR-33
Power Supply (V/Hz)	AC380V, 5-wire system	AC380V, 5-wire system
Motor	Form	Direct connection
	Power (KW)	15+3
Rated Air Volume (CMH)	1,000	2,000
Rated Negative Pressure (KPa)	12	12
Operating Noise Level (dB[A])	<85	<85
Filter Cartridge	Area (m ²)	22
	Quantity	2
	Material	Nano flame retardant anti-static
	Shape	Easily foldable moldable filter cartridge
	Ash Cleaning Method	Pulse backflush
	Air Pressure	0.4-0.6mpa
Number Of Solenoid Valves (pcs)	2	4
Dust Collection Box Capacity (liters)	40	40
Applicable Types Of Edge Trim	Width: <50mm	Width: <50mm
	Thickness: <50 nm	Thickness: <50 nm
	Number of layers: <2 continuous or segmented	
Compressed Size (mm)	Cutting speed: <180m/min	Cutting speed: <180m/min
	400*400 (thickness 10-180mm optional)	
Inlet Diameter (mm)	165	165
Outlet Diameter (mm)	250	250
Mass (kg)	2400±50	2400±50
Movability	Fuma foot wheel	Fuma foot wheel
External Dimensions (mm)	3518(L) * 1789(W) * 2945(H)	

Note: The above are standard configurations.

DUST REMOVAL FILTER CARTRIDGE



APPLICATIONS



Widely used in shipbuilding, large steel structures, locomotives, containers, and other industries' shot blasting treatment lines.

PRODUCT FEATURES



- Wide pleat spacing, easy ash cleaning design
- Unique internal spiral glue, external protective edge band
- High efficiency filtration
- Top open, bottom open/seal bottom/bottom small hole
- Galvanized metal
- Rubber ring seal

FILTER MATERIAL SELECTION



- Polyester fiber
- Polyester membrane (ptfe membrane)
- Anti-static polyester fiber
- Wood pulp fiber
- Nanofiber
- Flame retardant nanofiber
- Anti-static nanofiber
- Anti-static + flame retardant nanofiber
- Needle felt

STRUCTURAL FEATURES



- Cylindrical structure
- Pleated filter material

Under The Structural Characteristics and Filtration Principle:

the filter cartridge utilizes a mesh-like breathable structure formed on the surface of the filter material to intercept particulate matter in the gas. dust-containing gas passes through the filter mesh from the inlet to filter and reduces its dust concentration to meet emission standards.

PRODUCT PARAMETERS TABLE

Filter Cartridge Model	End Cap Design	Outer Diameter (mm)	Inner Diameter (mm)	Height (mm)	Filter Area (m ²)	Remark
DIN1	Through-hole/ small hole	350	240	660	10	Various non-standard flange sizes and heights are available for selection. 2000
DINO	Through-hole/ through-hole	350	240	660	20	

DUST REMOVAL FILTER CARTRIDGE (LONG AND SLIM FILTER CARTRIDGE)



APPLICATIONS



Widely used in shipbuilding, large steel structures, locomotives, containers, and other industries' shot blasting and sand blasting treatment lines.

PRODUCT FEATURES



- Shallow pleat spacing design, easy to clean ash
- Efficient filtration
- Filter area is 2 to 3 times that of the same cloth bag
- Top open, bottom sealed
- Head and bottom material: polyurethane, stainless steel, galvanized metal or silicone
- Polypropylene, stainless steel or galvanized mesh, perforated mesh
- Suitable for a variety of plate sizes, directly used to replace cloth bags and skeletons
- Can withstand high temperatures (sealed with high-temperature adhesive)

FILTER MATERIAL SELECTION



- Ordinary polyester fiber
- Oil and water repellent treated polyester fiber
- Antistatic treated polyester fiber
- Film-coated polyester fiber
- Aramid needle felt (high temperature resistant)
- PPS aramid needle felt (high temperature resistant)
- General needle felt

STRUCTURAL FEATURES



- Long and slim cylindrical structure
- Pleated filter material

PRODUCT PARAMETERS TABLE

Filter Cartridge Model	Plate Size (mm)	Height (mm)	Filter Area (m ²)
PB1331000	133	1000	2.2
PB1332000	133	2000	4.4
PB1551000	155	1000	2.2
PB1552000	155	2000	4.4
PB1581000	158	1000	2.2
PB1582000	158	2000	4.4
PB1601000	160	1000	2.2
PB1602000	160	2000	4.4
PB1621000	162	1000	2.2
PB1622000	162	2000	4.4

PE SINTERED FILTER CARTRIDGE

ADVANTAGES OF SINTERED FILTER CARTRIDGES



- High dust collection efficiency, emissions can be as low as 0.2mg/m³, stable pressure loss, good dust cleaning effect, strong moisture resistance, with oil and water repellent properties, long service life, can last for more than 10 years under normal use, compact and miniaturized dust collector structure.

FLEXIBLE AND DIVERSE INSTALLATION METHODS



- It can be designed as top-mounted, bottom-mounted, side-mounted, etc., according to different equipment models and on-site installation space positions.

STRONG SELECTION OF FILTER MATERIALS



- The filter material can be selected according to different operating conditions, including options such as anti-static, PTFE coating, anti-static with PTFE coating, etc. Additionally, the metal components can be selected from carbon steel, stainless steel, hard PU, soft PU, etc.

PRODUCT APPLICATIONS AND ON-SITE APPLICATION CASES



- Widely used in other industries such as lithium battery materials, cement, mining, metallurgy, chemical industry, automotive, electronics, pharmaceuticals, food, welding processing, and purification of dust removal equipment in precious metal recycling and other industries.

INTEGRATED PE SINTERED FILTER PLATE

The sintered plate is of a folding type, with a length of up to 1.5m. Various styles are available for selection, with products including both 'high-permeability type' and 'conductive type' integrated PE sintered plate styles, which can be customized according to customer needs.

PRODUCT PARAMETERS TABLE

SINTERED PLATE					
Series	MS01	MS02	MS03	MS05	MS06
Width	565±2	630±2	515±2	565±2	1050±2
Thickness	80±2	110±2	50±2	77±2	60±2
Length	-1500mm	-1210mm	-1210mm	-1500mm	-1500mm
Filtration Area	-5.5m ²	-6.4m ²	-3.5m ²	-4.5m ²	9m ²
Filtration Efficiency	>90%				
Temperature Resistance	-110°C				
Service Life	Usable for 10 years				
Anti-static Performance	<108Ω				



You can choose from high-permeability type, anti-static type, etc. MS05 offers optional high-temperature plates, which can withstand temperatures of 130°C, 160°C, and 180°C.

INTEGRATED PE SINTERED FILTER PLATE

The sintered plate is of a folding type, with a length of up to 1.5m. Various styles are available for selection, with products including both 'high-permeability type' and 'conductive type' integrated PE sintered plate styles, which can be customized according to customer needs.

PRODUCT PARAMETERS TABLE

FOLDED PE SINTERED FILTER CARTRIDGE	
Pipe diameter	140±2mm
Length	-1450mm
Filtration area	-1.8m ²
Filtration efficiency (0.3-0.5μm)	>90%
Temperature resistance	70°C
Service life	Usable For 10 Years
Anti-static performance	<108Ω
Optional high-permeability type, anti-static type, etc	



MULTI-TUBE PE SINTERED FILTER TUBE

The diameter of the sintered tube is 51mm, with up to 18 tubes per group and a length of up to 3m. The product includes 'high-permeability type' and 'conductive type' multi-tube PE sintered filter tubes, optional PTFE film coating, and both the number of tubes and length can be customized according to customer needs.

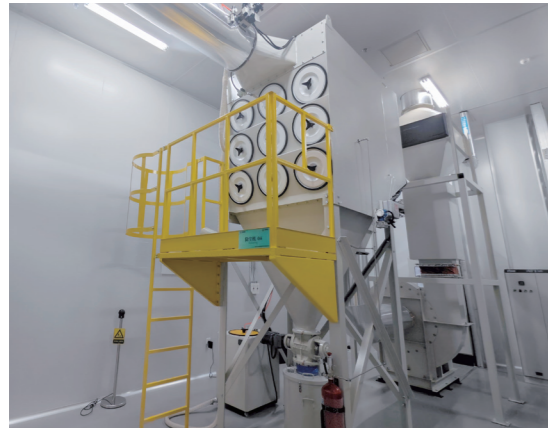
PRODUCT PARAMETERS TABLE

FOLDED PE SINTERED FILTER CARTRIDGE	
Quantity per group	8-18 pieces
Pipe diameter	52±2mm
Length	500-3000mm
Filtration area	0.5m ² to -9m ²
Filtration efficiency (0.3-0.5μm)	>99.9%
Temperature resistance	70°C
Service life	Usable for 10 years
Anti-static performance	<108Ω
Optional high-permeability type, anti-static type, etc	

*Note: The above are standard product models. For non-standard dimensions, please confirm with our sales personnel.



APPLICATION EXAMPLES



CARTRIDGE DUST COLLECTOR
Applied in the treatment of explosive dust in lithium battery core production



INTERBEDDED PLATE DUST COLLECTOR
Applied in lithium battery cathode and anode materials



CARTRIDGE DUST REMOVAL SYSTEM
Applied in the polysilicon industry



CARTRIDGE DUST COLLECTOR
Applied in automotive sandblasting, grinding, and welding dust control



CARTRIDGE DUST COLLECTOR
Applied in welding processes



CARTRIDGE DUST COLLECTOR
Applied in the treatment of explosive dust in photovoltaic polycrystalline silicon



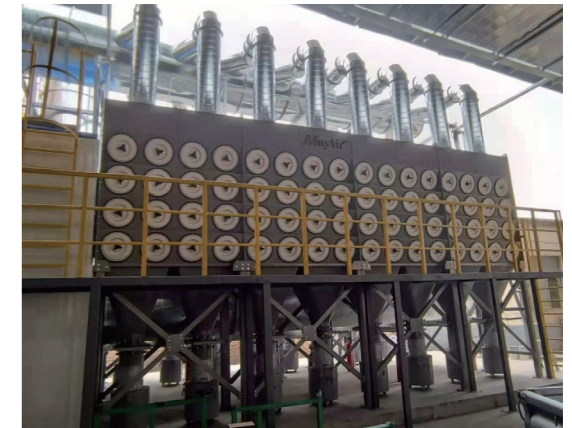
HORIZONTAL INSERT-TYPE SINGLE MACHINE
Applied in lithium battery cell production lines



MATERIAL RECYCLING MACHINE
Applied in lithium battery cell production lines



HIGH NEGATIVE PRESSURE DUST COLLECTOR
Used for cleaning in lithium battery cathode material workshops



CARTRIDGE DUST COLLECTOR
Applied in welding processes



CARTRIDGE DUST COLLECTOR
Applied in automotive components



CARTRIDGE DUST COLLECTOR
Applied in the treatment of explosive dust in photovoltaic polycrystalline silicon



CARTRIDGE DUST REMOVAL SYSTEM
Applied in the polysilicon industry



CARTRIDGE DUST COLLECTOR
Applied in lithium battery cell production lines



BAG DUST COLLECTOR
Applied in semiconductor packaging and testing dust removal