

IX/IP/IB Series - Powder Recovery System -



When sucking ultra-fine powder such as toner with a conventional recovery machine or vacuum cleaner, it is unavoidable that the filtration performance is insufficient, the powder is blown out, and foreign matter is mixed into the recovered powder. The IX series solves these problems by incorporating a new resin filter and a swirling flow separation mechanism. High collection performance can be obtained because the pore size of the filter is several µm. Since the filter medium uses an element without a surface treatment layer, which is a special single-layer sintered single-material plastic, impurities are not mixed into the recovered product (powder).



#### Features:

Fine powder recovery machine from general powder to toner

- Handles ranging from common powder to toner.
- Layout-free model has a separate filter and blower unit.
- Prevention of contamination of powder collection
- Since the filter unit and blower unit are separated, the installation layout is flexible
- No leakage of collected powder
- Equipped with a shatterproof mechanism when discharging powder
- Can be operated continuously for 24 hours



• Resin filter



Material: High molecular weight polyethylene Surface treatment: Polyethylene sintering Corresponding models: <u>IX</u>, <u>IXR</u>, <u>FPV</u>, <u>FP-N</u> and <u>FPV-2S</u> Application: Toner fine powder (particle size 10µm or less)

Various type of filter is available



• A reliable pulse jet system



A pulse jet method using compressed air is used to remove the powder adhering to the filter surface. It allows the recovery machine to operate continuously.

### • High collection efficiency



Long-lasting filter due to the built-in swirl flow type separator

The sucked air swirls along the inner surface of the cylindrical body, and only the air with a low powder concentration inside passes through the filter. The powder on the outside where the powder concentration is high goes directly into the bucket. It also significantly reduces filter wear.

#### • Easy filter replacement



The filter replacement work can be easily done by simply opening the upper part of the main body. The new resin filter used in the IX series has a lifespan of 3 to 5 times (compared to our company) compared to conventional filter media, which greatly reduces maintenance man-hours.

# "Anti-Explosion Dust Collector Type" for recover powders that have a high risk of explosion



A control panel that is easy to operate and maintains optimum operating conditions.



• Equipped with a new recovery powder scattering prevention mechanism



We consider the health of workers and the hygiene of the working environment are very important. When the recovered powder is discharged, the blower is operated at an ultra-low speed by inverter control to prevent the powder from scattering to the surroundings.

\* This mechanism is not built with IB-D series.

# • Sample combination of Filter unit and Blower Unit

_								0	Filter a	rea
		Standard filter				Fine filter				
		Standa	ard unit Anti-explosion Sta		Standa	lard unit Anti-explosion unit		plosion		
	A		IP-3 (3.5m²)	IP-5 (4.7m <sup>2</sup> )	IP-3D (3.5m²)	IP-5D (4.7m <sup>2</sup> )	IX-3 (3.2m²)	IX-5 (4.8m²)	IX-3D (3.2m²)	IX-5D (4.8m²)
		IB-3 (3.0m³/min)	0	0	0	0	0	0	0	0
5	Standard unit	IB-4 (4.0m³/min)	0	0	0	0	0	0	0	0
Mo		IB-5 (5.0m³/min)	-	0	-	0	-	0	-	0
m	Anti IE	IB-3D (3.0m <sup>3</sup> /min)	0	0	0	0	0	0	0	0
	unit	IB-5D (4.0m <sup>3</sup> /min)	0	0	0	0	0	0	0	0
		()					C	: Very Good	⊖ :Good	— : NG

# • Sample combination one blower and multiple filter unit

									()	) Filter a	rea
ada, ada,		Standard filter				Fine filter					
			Standard unit		Anti-explosion unit		Standard unit		Anti-explosion unit		
		IP-3 (3.5m²)	IP-5 (4.7m <sup>2</sup> )	IP-3D (3.5m²)	IP-5D (4.7m²)	IX-3 (3.2m²)	IX-5 (4.8m²)	IX-3D (3.2m²)	IX-5D (4.8m <sup>2</sup> )		
		Standard unit	IB-3 (3.0m³/min)	1	1	1	1	1	1	1	1
	5		IB-4 (4.0m³/min)	1	1	1	1	1	1	1	1
	DWG		IB-5 (5.0m³/min)	2	1	2	1	2	1	2	1
	Ē	Anti explosion unit	IB-3D (3.0m³/min)	1	1	1	1	1	1	1	1
			IB-5D (4.0m <sup>3</sup> /min)	2	1	2	1	2	1	2	1

# Filter Units

#### IXP Series

IP Series

IX-D Series

IP-D Series





- Resin filter
- Equipped with a resin filter for fine powder. For collecting fine powder such as toner.





- Antistatic resin filter
  - Explosion pressure diffusion port
  - For recovery of explosive flammable fine powder such as toner.



- Antistatic filter
- Explosion pressure diffusion port
- For recovery of explosive flammable general powder.

#### • Blower Units

**IB** Series





Energy-saving blower equipped with an inverter, mechanism.



Equipped with a dust explosion-proof motor.

#### • Dimensions

Filter units

# Bucket type





Discharge valve type





Blower units











# • SPECIFICATION

FILTER UNIT

Particular	Unit	IP-3	IP-3D	IX-3
Power Supply	Volt	220	220	220
Frequency	Hz	60	60	60
Max. Static Pressure	kPa	5.39	6.08	6.37
Filter Material		POLYESTER	POLYESTER	POLYETHYLENE
Filter Area	m²	3.5	3.5	3.2
Suction Port Ø	mm	50.8	50.8	50.8
Dimension (WxDxH)	mm	653x658x1409	881x658x1537	651x654x1568
Weight	kg	65	83	65
Particular	Unit	IX-3D	IP-5	IP-5D
Power Supply	Volt	220	220	220
Frequency	Hz	60	60	60
Max. Static Pressure	kPa	5.88	5.88	5.88
Filter Material		POLYETHYLENE	POLYESTER	POLYESTER
Filter Area	m²	3.2	4.7	4.7
Suction Port Ø	mm	50.8	63.5	63.5
Dimension (WxDxH)	mm	879x654x1696	653x658x1609	881x658x1737
Weight	kg	83	70	88

LOWER UNIT				
Particular	Unit	IB-3	IB-4	IB-5
Power Supply	Volt	220	220	220
Frequency	Hz	60	60	60
Phase		3P	3P	3P
Output	kw/hp	1.5/2	3.7/4	5.5/7.3
Max Airflow	m³/min	3	5	6
Max. Static Pressure	kPa	13	23.5	27
Motor Type		STANDARD	STANDARD	STANDARD
WITH INVERTER		YES	YES	YES
Suction Port Ø	mm	76.3	76.3	76.3
Dimension (WxDxH)	mm	700x500x608	700x500x850	700x500x850
Weight	kg	90	130	155
Particular	Unit	IB-3D	IB-5D	
Power Supply	Volt	220	220	
Frequency	Hz	60	60	
Phase		3P	3P	
Output	kw/hp	2.2/3	5.5/7.3	
Max Airflow	m³/min	5	5	
Max. Static Pressure	kPa	12	22	
Motor Type		EXPLOSION PROOF	EXPLOSION PROOF	
WITH INVERTER		NO	NO	
Suction Port Ø	mm	76.3	76.3	
Dimension (WxDxH)	mm	600x430x776	750x520x866	
Weight	ka	105	187	