AMANO

AMANO Corporation

ENVIRONMENTAL SYSTEMS

GENERAL CATALOG

- Dust collectors
- Vacuum cleaners
- Mist collectors
- Pneumatic conveying systems

www.amano.co.jp/English/products/environment.html

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https://www.amano.co.jp/English/products/environment.html

Design and specifications are subject to change without notice.

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Using engineering to the max to solve eco-issues and problems from Japan to the world!

Cleaner, faster, with more satisfaction.

Amano has been meeting customer production plant needs since 1951 when it first started working on environmental issues. We can provide continual support for ever-evolving production plant engineering since we continuously upgrade and refine our tech skills.

Our production engineering is known worldwide as the No. 1 catalyst for Japanese craftsmanship. We do our part by helping to lower labor accidents and reduce accidents!

Our work doesn't end there! We also make tech breakthroughs that precisely capture market and social needs such as by improving work efficiency, boosting production and removing toxic subtances to continuously produced products that are just what the customer wants!

Amano is also currently enlarging its playing field to include not only Japan but the rest of the world as well.

High-level environmental tech fostered in Japan to all types of factories the world over.

Total engineering to environmental issues confronting plant management.

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AMANO ENVIRONMENTAL SYSTEMS LINEUP

Compact Dust Collectors

	Low pressure (static pressure up to 3 kPa)		Mid-to-high pressure (static pressure 5kPa or more)	
	Manual shaking	Pulse jet	Manual shaking	Pulse jet
General dry dust	VF-5N P5, IS-15 P5, VNA P6	PiF P6~7	VF-2S P8	PiF-MP/HP P8, IP/IX/IB P9
For inflammable-combustible dust	SS-N P20 ※Scrubber			
For potentially explosive power or dust With explosion pressure diffusion port	VN-SD P23	PiE-DN P24, PiF-D/SD P24		IP-D/IX-D/IB-D P9
Food factories and Pharmaceutical factories	SP P10			FP-N P9, FPV-2S P10
For laser markers VOC Remover	VF-5HN P13	PiF-H P14, VRC-N P14	VF-5HG P12	
Welding work	FD-10 P11, HF P12	FCN P11		

※Calculate the small dust collector device internal pressure loss (filter pressure differential) utilizing about 1.47 kPa as a general guide.

Preprocessing device	Cyclone	SR P15
	Centrifugal pre-dust box	DB P15

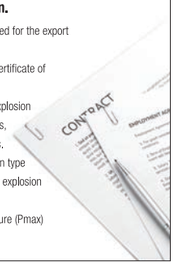
Vacuum Cleaners

		Manual shaking	Pulse jet
General dry dust		V-Σ P16	IPR/IXR P16
For potentially explosive power or dust With explosion pressure diffusion port		V-SDR P17	
	For toners (organic powder)	VF-2LD P17	

We will exchange confirmatory notes after the business discussion below. Please contact our dealer for more information.

- A "product export application confirmatory note" is required for the export business discussion.
- Please inquire to our company sales representative if a certificate of non-applicability is required.
- A "Consultation confirmatory sheet"is required on dust explosion pressure diffusion type dust collectors & vacuum cleaners, welding work dust collectors and wet type dust collectors.
- Business discussions for dust explosion pressure diffusion type dust collectors & vacuum cleaners require performing an explosion test and a hazard rating (billable).

①Explosion index (Kst value) ②Maximum explosion pressure (Pmax) ③Minimum ignition energy (MIE)



Large-scale Dust Collectors

	Medium and lower pressure (static pressure up to 5 kPa)		High pressure (static pressure up to 20 kPa)
	Large air volume (up to 1000m³/min[35315cfm])	Medium air volume (up to 100m³/min[3531cfm])	Medium air volume (up to 100m³/min[3531cfm])
Plate filter	SNP P25		
Woven filter	SI P25		
Woven filter	WRT P25	BV P25	CT P25
High-temperature toxic gas eliminator system	HGD P26		
Molded cartridge filter	WRT-ST P25	PPC P26	MF P26
Bag-in bag-out type	TFP P26		
Stainless steel specifications (for high pharmacologically-active powder)	TFP-S P26		

※WRT-ST is equipment having a molded cartridge filter mounted in the WRT unit.

※The bag-in bag-out concept utilizes a dedicated filter to allow replacing filters & ejecting dust without touching the filter or dust.

Mist Collectors

	Electrostatic precipitator		Filter type	Filter less
		Self-Cleaning		
Large air volume (50m³/min [1765cfm] or more)	EM-eH P20		MS P22	
Small air volume (up to 50m³/min [1765cfm])	EM-8eⅢ P18, EM-eⅡ P18	EM-SC P19, EM-SCⅡLt P19	MZ P21, MC-45 P22	MR P21

Pneumatic Conveying Systems

			Pressure feed	Vacuum feed
Large volume conveyor (up to 200 tons/h)	High pressure (Compressor)	Blow pot type	HAF P33	
		High sealing feeder type	HSF P33	
	Low pressure(Blower)		LAF P33	VAF P33
Small volume conveyor (up to 2 tons/h)	For foodstuff and pharmaceutical plants	Blower type		FPV P34
		Ejector pump type		Vacuum conveying system P34
	For general-purpose plants and factories	Blower type		FV P34

VF-5N

Compact dust collector

Minisize fits securely into work bed.
Compact size and low-noise make it ideal for indoor work.

Molded filter | Manual shaking (VF-5N) | Automatic shaking (VF-5NA) | General dry dust | 6 m³/min Max. airflow

Compact body

Molded cartridge filter

Specifications

Model			VF-5N		VF-5NA
Power supply			Single phase 100V or 3-phase 200V 50Hz or 60Hz (or voltage/frequency listed on product name plate)		
Output		kW	0.4		
		HP	0.5		
Airflow		m³/min	0	3.5	6.0
		cfm	0	123	211
Static pressure [kPa]			2.65	1.76	0.98
Filter	Area	m²	1.6		
		ft²	17.2		
	Quantity		1		
	Shape/Material		Molded cartridge/Polyester Spunbond		
	Dust removal		Manual shaking		Automatic shaking
Bucket capacity		L	6.5		
		U.S.gallon	1.7		
Recommended breaker [A]			15 (Single-phase 100V) / 5 (3-phase 200V)		
Power cord		m	• Single-phase 100V, 2.3 (3 core with plug) • 3-phase 200V, 2.7 (4 core without plug)		
		inch	• Single-phase 100V, 90 (3 core with plug) • 3-phase 200V, 106 (4 core without plug)		
Suction port diameter		mm	Φ63.5		
		inch	Φ2.5		
Dimensions W×D×H		mm	380×500×623		
		inch	15.0×19.7×24.6		
Weight		kg	43		46
		lb	95		102
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A		

IS-15

Dust with a built-in cyclone

Superb dust collection capability and easy handling!

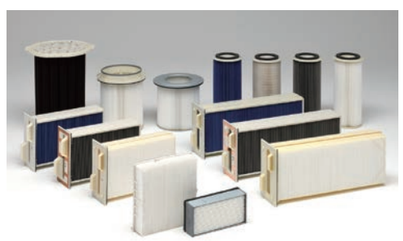
Molded filter | Manual shaking | General dry dust | 11 m³/min Max. airflow | IE3 Premium efficiency motor

Built-in cyclone

Molded cartridge filter

Specifications

Model			IS-15		
Power supply			3-phase 200V 50/60Hz common use		
Output		kW	0.75		
		HP	1		
50Hz	Airflow	m³/min	0	6.0	9.0
		cfm	0	211	317
	Static pressure [kPa]		2.0	1.1	0.4
60Hz	Airflow	m³/min	0	7.5	11.0
		cfm	0	264.8	388.4
	Static pressure (kPa)		2.8	1.5	0.4
Filter	Area	m²	4.1		
		ft²	44.1		
	Quantity		1		
	Shape/Material		Molded cartridge/Polyester Spunbond		
	Dust removal		Manual shaking		
Bucket capacity		L	20		
		U.S.gallon	5.2		
Recommended breaker [A]			10		
Power cord		m	3 (4-core, without plug)		
		inch	118 (4-core, without plug)		
Suction port diameter [mm]		mm	Φ125		
		inch	Φ5		
Dimensions W×D×H		mm	649×649×1462		
		inch	25.6×25.6×57.6		
Weight		kg	70		
		lb	155		
Paint color			JPMA (Japan Paint Manufactuirng Association) (Body F35-85A, Top/Bottom YN40)		



Molded cartridge filter has internal jet amplifier to boost the unique Amano in-house jet effect.

Hosoe Factory manufactures products under strict quantity supervision.

Hosoe Facility

8123 Kiga, Hosoe-cho, Hamana-ku, Hamamatsu-shi, Shizuoka-ken

※Performance values might change from those shown on custom order specifications.

VNA

Dust collector

Standard model designed to pursue high-quality finished basic performance.

Woven filter | Manual shaking | General dry dust | 110 m³/min Max. airflow | IE3 Premium efficiency motor

Woven plate filter

Specifications

Model			VNA-15			VNA-30			VNA-45			VNA-60			VNA-120		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V														
Output		kW	0.75			1.5			2.2			3.7			7.5		
		HP	1			2			3			5			10		
Airflow		m³/min	0	7.5	12	0	15	28	0	22	40	0	30	55	0	60	110
		cfm	0	264	423	0	529	988	0	776	1412	0	1059	1942	0	2118	3884
Static pressure [kPa]			2.45	1.77	0.69	2.55	2.10	1.20	2.55	2.20	1.00	2.90	2.35	0.80	3.20	2.94	0.70
Filter	Area	m²	4.5			9.0			13.5			18.0			36.0		
		ft²	48.4			96.8			145.2			193.6			387.3		
	Quantity		1			2			3			4			8		
	Shape/Material		Woven plate/ canvas														
	Dust removal		Manual shaking			Manual shaking (Option: Automatic shaking)											
Bucket capacity		L	18			25			36			50			25×4 (BS type)		
		U.S.gallon	4.7			6.6			9.5			13.2			6.6×4 (BS type)		
Recommended breaker [A]			10			15			20			30			60		
Power cord		m	3 (4-core, without plug)												Option(4-core)		
		inch	118 (4-core, without plug)												Option(4-core)		
Suction port diameter		mm	Φ127			Φ150			Φ200			Φ200			Φ300		
		inch	Φ5			Φ6			Φ8			Φ8			Φ12		
Dimensions W×D×H		mm	650×400×1205			650×650×1492			850×650×1542			1100×700×1652			1174×1464×1796		
		inch	25.6×15.8×47.5			25.6×25.6×58.8			33.5×25.6×60.8			43.4×27.6×65.1			46.3×57.7×70.8		
Weight		kg	92			145			180			270			510		
		lb	203			320			397			596			1125		
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A														

PiF 15/30/45/60

Energy and space-saving pulse-jet dust collector

Auto energy-saving operation via inverter & premium efficiency motor.

Molded filter | Pulse jet | General dry dust | 60 m³/min Max. airflow | IE3 Premium efficiency motor ※Except PiF-15

Pulse jet type (By differential pressure detection)

Automatic airflow control

Molded cartridge filter (length:500mm)

- **Energy Saving**
- **Premium efficiency motor (IE3)**
- **Inverter control improves filter life**
- **Easy filter replacement**
- **Data logging function**

Specifications

with inverter

Model			PiF-15			PiF-30			PiF-45			PiF-60		
Power supply			3-phase 200V 50/60Hz common use											
Motor	Output	kW	0.6			1.35			2.0			3.1		
		HP	0.8			1.8			2.6			4.1		
	Inverter		Standard equipment											
	Efficiency		IE2			IE3								
Airflow		m³/min	0	10	18	0	20	30	0	30	45	0	40	60
		cfm	0	353	635	0	706	1059	0	1059	1589	0	1412	2118
Static pressure [kPa]			2.65	1.80	0.50	2.65	2.06	1.08	2.65	1.96	0.64	3.00	2.26	0.98
Filter	Quantity		2			4			6			8		
	Shape		Molded cartridge (length:500mm)											
	Dust removal		Automatic pulse jet (By differential pressure detection)											
	Material		Polyester Spunbond											
	Area	m²	6.0			12.0			18.0			24.0		
		ft²	64.5			129.1			193.6			258.2		
Compressed air consumption [L/min]			30			36			45			67		
Diaphragm valve [pcs.]			2			2			3			4		
Bucket capacity		L	22.5						14×2			22.5×2		
		U.S.gallon	5.9						3.6×2			5.9×2		
Recommended breaker [A]			10			15			20			30		
Power cord		m	3 (4-core, without plug)											
		inch	118 (4-core, without plug)											
Suction port diameter		mm	Φ127			Φ150			Φ200			Φ250		
		inch	Φ5			Φ6			Φ8			Φ10		
Dimensions W×D×H		mm	520×650×1200			520×650×1617			680×650×1645			950×650×1797		
		inch	20.5×25.6×47.2			20.5×25.6×63.7			26.8×25.6×64.8			37.5×25.6×70.7		
Weight		kg	127			163			208			315		
		lb	280			360			459			695		
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A											

PiF 75/120/150

Pulse jet type dust collector

Pulse jet type dust collector
Handles air flow of 60m³/min or more.

Pulse jet by differential pressure detection

Automatic airflow control

- **Energy Saving**
- **Premium efficiency motor(IE3)**
- **Inverter control improves filter life**
- **Easy filter replacement**
- **Oneside filter inlet**

Molded filter | Pulse jet | General dry dust | 180 m³/min Max. airflow | IE3 Premium efficiency motor

Molded cartridge filter (length:750mm)

Specifications

with inverter

Model			PiF-75			PiF-120			PiF-150		
Power supply			3-phase 200V 50/60Hz common use								
Motor	Output	kW	5.5			7.5			11.0		
		HP	7.3			10.0			15.0		
	Inverter		Standard equipment								
	Efficiency		IE3								
Airflow		m³/min	0	60	90	0	80	110	0	120	180
		cfm	0	2118	3178	0	2825	3884	0	4237	6356
Static pressure [kPa]			3.10	2.50	0.70	3.20	2.50	0.60	3.10	2.50	0.70
Filter	Area	m²	38.4			57.6			86.4		
		ft²	413.3			620			930		
	Quantity		8			12			18		
	Shape / Material		Molded cartridge (length:750mm) / Polyester spunbond								
	Dust removal		Automatic pulse jet (by differential pressure detection)								
Compressed air consumption [L/min]			75			86			100		
Diaphragm valve [pcs.]			4			6			6		
Suction port diameter		mm	φ300			φ300			φ380		
		inch	φ12			φ12			φ15		
Recommended breaker [A]			50			60			75		
Power cord			Option(4-core)								
BO type	Dimensions W×D×H	mm	950×950×1737			1398×950×1731			1484×1000×2439		
		inch	37.4×37.4×68.3			55.0×37.4×68.3			58.4×39.3×96.0		
	Weight	kg	360			460			710		
		lb	794			1015			1565		
Bucket BS type	Dimensions W×D×H	mm	950×950×1927			1398×950×2062			1484×1000×2770		
		inch	37.4×37.4×75.8			55.0×37.4×81.1			58.4×39.3×109.0		
	Weight	kg	400			550			780		
		lb	882			1213			1719		
	Bucket capacity	L	22.5×2			22.5×3			22.5×3		
		U.S.gallon	5.9×2			5.9×3			5.9×3		
Bucket BL type	Dimensions W×D×H	mm	990×990×2419			1413×965×2382			1497×1013×3154		
		inch	39×39×95.2			55.6×38.0×93.7			58.9×39.9×124.1		
	Weight	kg	460			570			810		
		lb	1014			1257			1785		
	Bucket capacity	L	100			130			130		
		U.S.gallon	26.4			34.3			34.3		
Hopper F type	Dimensions W×D×H	mm	962×962×3538			1410×962×3832			1496×1012×4710		
		inch	37.9×37.9×139.2			55.5×37.9×150.8			58.9×39.8×185.4		
	Weight	kg	640			820			1090		
		lb	1411			1808			2403		
	Hopper capacity	L	314			610			778		
		U.S.gallon	83			161.1			205.5		
Paint color			JPMA (Japan Paint Manufacturing Association) F35-85A								

PiF 200/300

Pulse jet type dust collector

Pulse jet type dust collector
Handles air flow of 160m³/min or more.

Pulse jet by differential pressure detection

Automatic airflow control

Molded filter | Pulse jet | General dry dust | 290 m³/min Max. airflow | IE3 Premium efficiency motor

Molded cartridge filter (length:750mm)

- **Energy Saving**
- **Premium efficiency motor(IE3)**
- **Inverter control improves filter life**
- **Easy filter replacement**
- **Oneside filter inlet**

Specifications

with inverter

Model			PiF-200			PiF-300		
Power supply			3-phase 200V 50/60Hz common use					
Motor	Output	kW	15.0			22.0		
		HP	20.0			30.0		
	Inverter		Standard equipment					
	Efficiency		IE3					
Airflow		m³/min	0	160	190	0	240	290
		cfm	0	5650	6709	0	8475	10238
Static pressure [kPa]			4.00	2.40	0.40	4.00	2.40	0.40
Filter	Area	m²	115.2			172.8		
		ft²	1240			1860		
	Quantity		24			36		
	Shape / Material		Molded cartridge (length:750mm) / Polyester spunbond					
	Dust removal		Automatic pulse jet (by differential pressure detection)					
Compressed air consumption [L/min]			100			100		
Diaphragm valve [pcs.]			8			12		
Suction port diameter		mm	φ450			φ580		
		inch	φ17.8			φ22.9		
Recommended breaker [A]			125			175		
Power cord			Option (4-core)					
Bucket BL type	Dimensions W×D×H	mm	2132×1130×3667			3028×1230×3922		
		inch	83.9×44.5×144.4			119.2×48.4×154.4		
	Weight	kg	1270※1			1840※2		
		lb	2800※1			4057※2		
	Bucket capacity	L	200 (100×2)			260 (130×2)		
		U.S.gallon	52.8 (26.4×2)			68.7 (34.3×2)		
Paint color			JPMA (Japan Paint Manufacturing Association) F35-85A					

※1 Self-standing electrical box (120kg/264.5lb) is not included.
※2 Self-standing electrical box (130kg/286.6lb) is not included.

※Performance values might change from those shown on custom order specifications.

VF-2S

Small high-pressure dust collector

24 hour continuous operation.

- **Compact**
- **High static pressure 20 kPa**
- **Energy Saving**

Molded filter | Manual shaking | General dry dust | 2.7 m³/min Max. airflow

Molded cartridge filter

Strong suction power

Powerful vacuum about 7 times greater than our small-size VF-5N dust collector.

Specifications

Model			VF-2S	
Power supply			3-phase 200V 50/60Hz common use Single-phase 100V (both 50/60Hz) available for special orders	
Output		kW	1.0	
		HP	1.3	
Blower motor			Brushless blower motor	
Max. Airflow		m³/min	2.7±0.3 (200V 3-phase)	2.5±0.3 (100V single-phase)
		cfm	95±10 (200V 3-phase)	88±10 (100V single-phase)
Max. static pressure [kPa]			20.0±3.0 (200V 3-phase)	17.0±2.3 (100V single-phase)
Filter	Area	m²	0.67	
		ft²	7.2	
	Quantity		1	
	Shape/Material		Molded cartridge/ Polyester Spunbond	
	Dust removal		Manual shaking	
Bucket capacity		L	2.2	
		U.S.gallon	0.58	
Recommended breakers [A]			10 (200V 3-phase)	15 (100V single-phase)
Power cord		m	2.8 (without plug)	
		inch	110 (without plug)	
Suction port diameter		mm	φ50.8	
		inch	φ2	
Dimensions W×D×H		mm	395×342×399	
		inch	15.6×13.5×15.8	
Weight		kg	26 (3-phase 200V specification)	29 (Single-phase 100V specification)
		lb	58 (3-phase 200V specification)	64 (Single-phase 100V specification)
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A	

PiF-MP/HP

Medium pressure dust collector

2 times more vacuum power for small diameter hose or multiple suction points.

Molded filter | Pulse jet | General dry dust | 50 m³/min Max. airflow

Molded cartridge filter (lenght:500mm)

Specifications

Model		PiF-30MP			PiF-45MP			PiF-60MP			PiF-15HP			PiF-30HP		
Type		4kPa									6kPa					
Power Supply		50Hz 60Hz, Three-Phase 200V														
Output (kW)		2.0			3.1			5.5			3.1			5.5		
Inverter		Included as standard														
Air Flow *see below for more info.		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	(m³/min)	0	17	30	0	27	40	0	37	50	0	10	25	0	20	30
	(cfm)	0	600	1059	0	953	1412	0	1306	1765	0	353	882	0	706	1059
Static Pressure (kPa)		4.5	4.0	0.8	5.0	4.0	1.0	5.5	4.0	0.7	6.5	6.0	1.0	7.0	6.0	0.9
Noise (dB[A])		72±2 or less			72±2 or less			73±2 or less			72±2 or less			73±2 or less		
Filter	Surface Area (m²)/(ft²)	12.0 / 129.1			18.0 / 193.6			24.0 / 258.2			6.0 / 64.6			12.0 / 129.1		
	Unit (pcs)	4			6			8			2			4		
	Shape/Material	Molded cartridge / Polyester spunbond														
	Dust Removal	Auto pulse jet (Differential pressure detection)														
Compressed Air Consumption (L/min)		36			45			67			30			36		
Diaphragm Valve (pcs)		2			3			4			2			2		
Bucket Capacity (L)		22.5			14×2			22.5×2			22.5			22.5		
Recommended Breaker (A)		20			30			50			30			50		
Power Cord (m)		3 (4-core without plug)														
Suction Port Diameter (mm)/(in)		φ150 / 6			φ200 / 8			φ250 / 10			φ127 / 5			φ150 / 6		
Dimensions	W x D x H (mm)	520×650×1687			680×650×1690			950×650×1878			521×651×1537			521×651×1867		
	W x D x H (in)	20.5×25.6×66.4			26.8×25.6×66.5			37.4×25.6×73.9			20.5×25.6×60.5			20.5×25.6×73.5		
Weight (kg)/(lbs.)		189 / 416			246 / 542			350 / 771			196 / 432			267 / 588		
Paint Color		JPMA F35-85A														

Note: It is recommended to use the dust collector with the suction air flow at the vicinity of point B.
[Air Flow] Air flow and Static pressure value above are from a fan performance curve.
A and C are not the point where the unit usually operate. If it is used at the point A, dust cannot be sucked because there is no air volume.
And at point C, problems such as filter clogging and motor overload may occur.
A: Fully closed (unusable point) B: Recommended point of use C: Fully open (unusable point)
※The specifications above are for standard unit only.
※The noise value stated above is the actual measurement value based on our standard.
It does not guarantee the noise value of all usage conditions.

IP/IX/IB

High pressure dust collector

Handles ranging from common powder to toner.
Layout-free model has a separate filter unit and blower unit.

IP — Molded filter / Pulse jet / General dry dust / Max. airflow 6 m³/min

IX — Resin filter / Pulse jet / Fine powder / Max. airflow 6 m³/min

Standard filter (Polyester)

Resin filter (Polyethylene)

Filter Unit Specifications

Model			IP-3	IP-3D	IX-3	IX-3D	IP-5	IP-5D	IX-5	IX-5D
Power supply			3-phase 200V 50/60Hz common use							
Filter	Area	m²	3.5		3.2		4.7		4.8	
		ft²	37.6		34.4		50.5		51.6	
	Quantity		3		27		3		27	
	Shape		Molded cartridge							
	Material		Polyester		polyethylene		Polyester		polyethylene	
	Dust removal		Automatic pulse jet (At fixed interval)							
Diaphragm valve [pcs.]			3							
Compressed air consumption [L/min]			5.4～15.0		8.5～30.0		5.4～15.0		8.5～30.0	
Suction port diameter		mm	Φ50.8				Φ63.5			
		inch	Φ2				Φ2.5			
Exhaust port diameter		mm	Φ76.3							
		inch	Φ3							
Method of standard discharge			Bucket tank		Discharge valve		Bucket tank		Discharge valve	
Bucket capacity		L	30		–		30		–	
		U.S.gallon	7.9		–		7.9		–	
Dimensions	mm	W	653	881	651	879	653	881	651	879
		D	658	658	654	654	658	658	654	654
		H	1409	1537	1568	1696	1609	1737	1768	1896
	inch	W	25.8	34.7	25.7	34.7	25.8	34.7	25.7	34.7
		D	26.0	26.0	25.8	25.8	26.0	26.0	25.8	25.8
		H	55.5	60.6	61.8	66.8	63.4	68.4	69.7	74.7
Weight	kg		65	83	65	83	70	88	70	88
	lb		143	183	143	183	154	194	154	194
Paint color			JPMA (Japan Paint Manufactuirng Association) (Body F35-85A, Top/Bottom YN40)							

Blower Unit Specifications

Model			IB-3	IB-4	IB-5	IB-3D	IB-5D
			Standard motor type (with inverter)			Explosion-proof sealed motor type (without inverter)	
Power supply			3-phase 200V 50/60Hz common use			Frequency 50Hz or 60Hz at 3-phase 200V	
Output	kW		1.5	3.7	5.5	2.2	5.5
	HP		2	4	7.3	3	7.3
Airflow	m³/min		0 3	0 4	5 0 5 6	0 3	5 0 3 5
	cfm		0 105	0 141	176 0 176 211	0 105	176 0 105 176
Static pressure [kPa]			13 12.5	23.5 21	18.5 27 22 18.5	12 11.2	9.5 22 20 13.5
Suction port diameter	mm		Φ76.3			Φ76.3	
	inch		Φ3			Φ3	
Exhaust port diameter	mm		–			Φ127	
	inch		–			Φ5	
Recommended breaker [A]			15	30	50	20	50
Power cord			Option (4-core)			Option (4-core)	
Accessories			Hose 1 meter (specify length)			Hose 1 meter (specify length)	
Dimensions	mm	W	700	700	700	600	750
		D	500	500	500	430	520
		H	608	850	850	776	866
	inch	W	27.6	27.6	27.6	23.7	29.6
		D	19.7	19.7	19.7	17.0	20.5
		H	24.0	33.5	33.5	30.6	34.1
Weight	kg		90	130	155	105	187
	lb		199	287	342	232	413
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A				

SP

All-stainless steel body dust collector

Easy filter installation and removal by lever operation.
Excellent internal cleansing in main unit.

Water-washable filters available

Woven filter / Manual shaking / General dry dust / Max. airflow 55 m³/min / Premium efficiency motor IE3

※Casters available as options.

Woven plate filter

Specifications

Model			SP-15			SP-30			SP-45			SP-60		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V											
Output		kW	0.75			1.5			2.2			3.7		
		HP	1			2			3			5		
Airflow		m³/min	0	7.5	12.0	0	15.0	28.0	0	22.0	40.0	0	30.0	55.0
		cfm	0	264	423	0	529	988	0	776	1412	0	1059	1942
Static pressure [kPa]			2.45	1.70	0.69	2.55	2.26	1.27	2.55	2.35	1.37	2.90	2.55	1.22
Filter	Area	m²	4.5			9.0			13.5			18.0		
		ft²	48.4			96.8			145.2			193.6		
	Quantity		1 (holds 10 pieces)			2 (holds 20 pieces)			3 (holds 30 pieces)			4 (holds 40 pieces)		
	Shape/Material		Woven plate/polyester (water-washable)											
	Dust removal		Manual shaking											
Material [body/fan]			SUS304/aluminum			SUS304/iron								
Bucket capacity		L	21			21			21×2			21×2		
		U.S.gallon	5.5			5.5			5.5×2			5.5×2		
Recommended breakers [A]			10			15			20			30		
Power cord		m	2.8 (4-core, without plug)											
		inch	110 (4-core, without plug)											
Suction port diameter		mm	Φ127			Φ150			Φ200			Φ200		
		inch	Φ5			Φ6			Φ8			Φ8		
Dimensions W×D×H	mm	Standard type	400×650×1207			650×650×1469			850×650×1497			1180×650×1660		
		HEPA filter type	400×650×1500			650×650×1740			850×650×1808			1180×650×1981		
	inch	Standard type	15.8×25.6×47.6			25.6×25.6×57.9			33.5×25.6×59.0			46.5×25.6×65.4		
		HEPA filter type	15.8×25.6×59.1			25.6×25.6×68.6			33.5×25.6×71.2			46.5×25.6×78.0		
Weight		kg	92			145			185			250		
		lb	203			320			408			552		

FP-N

All-stainless steel body medium pressure dust collector

Water washable filter box interior.
Hygienic design helps prevent dust from accumulating on the inside of a dust collector.

Standard filter type — Molded filter / Pulse jet / General dry dust / Max. airflow 10 m³/min

Resin filter type — Resin filter / Pulse jet / Fine powder / Max. airflow 8 m³/min

For Pharmaceutical and Food factories

Standard filter (Polyester)

Resin filter (Polyethylene)

Specifications

with inverter

Model			FP-5N						FP-10N					
Filter type			Standard filter			Resin filter			Standard filter			Resin filter		
Power supply			3-phase 200V 50/60Hz common use											
Output		kW	1.5						2.2					
		HP	2						3					
Airflow		m³/min	0	5.0	8.0	0	3.2	6.0	0	8.0	10.0	0	6.5	8.0
		cfm	0	176	282	0	113	211	0	282	353	0	229	282
Static pressure [kPa]			8.5	5.5	3.2	8.5	6.1	3.1	8.5	5.5	3.4	8.5	5.6	4.2
Filter	Area	m²	4.5			2.6			4.5			5.2		
		ft²	48.4			27.9			48.4			55.9		
	Quantity		2			4			2			8		
	Shape		Molded cartridge											
	Material		Polyester Spunbond			Polyethylene			Polyester Spunbond			Polyethylene		
	Dust removal		Auto pulse jet (fixed gap [pressure differential detector as an option])											
Compressed air consumption [L/min]			20						30					
Diaphragm valve [pcs.]			2											
Exterior finish			All SUS electrolytic grinding finish											
Bucket capacity		L	20									37		
		U.S.gallon	5.2									9.7		
Recommended breakers [A]			15						20					
Power cord			Option (4-core)											
Suction port diameter		mm	Φ100											
		inch	Φ4											
Dimensions W×D×H		mm	617×966×1488			617×966×1472			617×966×1488			753×1071×1473		
		inch	24.3×38.1×58.6			24.3×38.1×58			24.3×38.1×58.6			29.7×42.2×58		
Weight		kg	190			195			200			230		
		lb	419			430			441			508		

※Performance values might change from those shown on custom order specifications.

FPV-2S

All-stainless steel body small-size high-pressure dust collector

Easily-washable high-pressure vacuum unit.

High static pressure 20 kPa

Molded filter / Resin filter / Pulse jet / Fine powder / Max. airflow 2.7 m³/min

Resin filter (Polyethylene)

Molded cartridge filter

Filter Unit Specifications

Power supply			3-phase 200V 50/60Hz common use
Filter	Area	m²	1.07
		ft²	11.5
	Quantity		9
	Shape		Molded cartridge
	Material		Polyethylene
	Dust removal		Manual pulse jet ※
Bucket capacity		L	14
		U.S.gallon	3.6
Suction port diameter			IDF standard ferrule 2S
Exhaust port diameter			IDF standard ferrule 2S
Dimensions W×D×H		mm	550×514×892
		inch	21.7×20.3×35.2
Material surface treatment			SUS304 equiv. inner/outersurface buff#400

※Compressed air is fed by ball valve (manual). Exhaust of air-blow is a condition for backwash.

Blower Unit Specifications

Power supply			3-phase 200V 50/60Hz common use
Output		kW	1.0
		HP	1.3
Blower motor			Brushless blower motor
Max. airflow		m³/min	2.7±0.3
		cfm	95±10
Max. static pressure [kPa]			20.0±3.0
Filter	Area	m²	0.67
		ft²	7.2
	Quantity		1
	Shape		Molded cartridge
	Material		Polyester Spunbond
	Dust removal		Manual shaking
Bucket capacity		L	2.2
		U.S.gallon	0.58
Recommended breakers [A]			10
Power cord		m	2.8 (4-core, without plug)
		inch	110 (4-core, without plug)
Dimensions W×D×H		mm	395×342×591
		inch	15.6×13.5×23.3
Weight		kg	Approximately 31
		lb	Approximately 69
Material surface treatment			Exterior and coupling section are SUS304

FCN

Dust collector for welding work

Welding work dust collector with fire control function.

- **Smoke sensor**
- **Spark sensor**
- **Pre-dust box**

Molded filter | Pulse jet | Fumes | 45 m³/min Max. airflow | IE3 Premium efficiency motor

Molded cartridge filter

Specifications

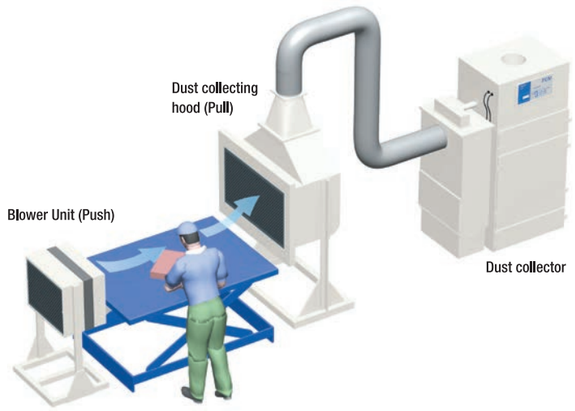
Model			FCN-30			FCN-45			FCN-60		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V								
Output		kW	1.5			2.2			3.7		
		HP	2			3			5		
Airflow		m³/min	0	12	18	0	20	30	0	30	45
		cfm	0	423	635	0	706	1059	0	1059	1589
Static pressure [kPa]			2.55	1.72	0.75	2.55	2.22	1.30	2.84	2.20	1.00
Filter	Area	m²	27.0			40.5			60.8		
		ft²	290.5			435.7			654.2		
	Quantity		4			6			9		
	Shape		Molded cartridge (length:750mm, 132-ridge Φ200 cylinder type)								
	Material		Polyester Spunbond								
	Dust removal		Automatic pulse jet (At fixed interval)								
Diaphragm valve [pcs.]			2			3			3		
Compressed air consumption [L/min]			20			30			40		
Bucket capacity	L	Bottom part of separation box	16			30			44		
		Bottom part of dust collector	25			18×2			20×2		
	U.S.gallon	Bottom part of separation box	4.2			7.9			11.6		
		Bottom part of dust collector	6.6			4.7×2			5.2×2		
Recommended breakers [A]			15			20			30		
Power cord		m	3 (4-core, without plug)								
		inch	118 (4-core, without plug)								
Suction port diameter		mm	Φ150			Φ200			Φ250		
		inch	Φ6			Φ8			Φ10		
Dimensions W×D×H		mm	998×651×1817			1268×660×1827			1358×840×1897		
		inch	39.3×25.7×71.6			50.0×26.0×72.0			53.5×33.1×74.7		
Weight		kg	245			305			430		
		lb	541			673			949		
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A								

HF

Push Pull hood

Push pull dust collecting system.

Energy Saving and Compact type



Specifications

Model			HF-45	HF-60	HF-75	HF-150
Blower Unit	Power supply		3-phase 200V 50/60Hz common use			
	Output	kW	0.15	0.2	0.2	0.75
		HP	0.2	0.26	0.26	1
	Effective outlet area	m²	0.22	0.33	0.60	1.20
		ft²	2.3	3.5	6.4	12.9
	Size of supply opening	mm	474×474	574×574	574×1044	1044×1154
		inch	18.7×18.7	22.6×22.6	22.6×41.2	41.2×45.5
	Range of injection velocity [m/s] [50/60Hz]		0.5～2.1/2.5	0.5～2.3/2.8	0.5～1.6/1.9	0.5～1.9/2.2
	Range of injection airflow [50/60Hz]	m³/min	6.7～28.3/33.7	9.9～45.5/55.4	18.0～57.5/68.3	36.1～137.3/159.0
		cfm	236～999/1190	349～1606/1956	635～2030/2411	1274～4848/5615
	Weight	kg	61	76	126	221
		lb	135	168	278	488
	Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A			
Dust collecting hood	Effective suction area	m²	0.32	0.45	0.78	1.74
		ft²	3.4	4.8	8.3	18.7
	Size of suction opening	mm	570×570	690×690	690×1140	1254×1386
		inch	22.5×22.5	27.2×27.2	27.2×44.9	49.4×54.6
	Dust collection airflow	m³/min	63	91	163	367
		cfm	2224	3213	5756	12960
	Weight	kg	70	95	175	250
		lb	155	210	386	552
	Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A			

FD-10

Welding work dust collector with swing arm

Dust collector for welding work.

- **Swing arm**
- **Caster**
- **Fire extinguishing mechanism**

Molded filter | Manual shaking | Fumes | 9 m³/min Max. airflow | IE3 Premium efficiency motor

Molded cartridge filter

Specifications

Model			FD-10
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V
Output		kW	0.75
		HP	1
Max. airflow		m³/min	9.0
		cfm	317
Max. static pressure [kPa]			2.5
Filter	Area	m²	20.0
		ft²	215.2
	Quantity		2
	Shape/Material		Molded cartridge / nanofiber
	Dust removal		Manual shaking
Suction port diameter		mm	Φ160
		inch	Φ6.3
Recommended breakers [A]			10
Power cord		m	5 (4-core, without plug)
		inch	196 (4-core, without plug)
Dimensions		mm	710×851×985
		inch	28.0×33.5×38.8
Weight		kg	152
		lb	336
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A

VF-5HG

Laser marker dedicated dust collector (with deodorizing function)

The "Ace" among laser marking dust collectors.
Long filter life by fixed regulation of auto air flow (capacity).

With deodorizing function | Automatic air flow control

Electret filter

Activated carbon box

Electret filter | Fumes | 3 m³/min Max. airflow

Specifications

Model			VF-5HG	
Power supply			3-phase 200V	single-phase 100V
			50/60Hz common use	
Output		kW	1.1	0.875
		HP	1.4	1.1
Blower motor			Brushless blower motor	
Max. airflow		m³/min	3.0±0.3	2.8±0.3
		cfm	105±10	98±10
Max. static pressure [kPa]			20±3.0	17±2.3
Filter	Filtration method		Internal surface filtration	
	Area	m²	2.3	
		ft²	24.7	
	Internal volume	L	Approximately 15	
		U.S.gallon	Approximately 3.9	
	Quantity		1	
	Material		electret nonwoven fabric	
Deodorant			Activated carbon [20L(8.4kg)]	
Recommended breakers [A]			10	15
Power cord		m	2.8 (without plug)	
		inch	110 (without plug)	
Suction port diameter		mm	Option (uses Φ38.Φ50.Φ65)	
		inch	Option (uses Φ1.5.Φ2.0.Φ2.6)	
Dimensions W×D×H		mm	440×488×798	
		inch	17.4×19.3×31.5	
Weight		kg	78	
		lb	172	
External plate material			Iron structure : finish coating JPMA (Japan Paint Manufactuirng Association) F35-85A Stainless steel: hairline finish	
Operation control			Auto constant air flow control (adjustable range 0.4 to 2.2 m³/min)	

※Performance values might change from those shown on custom order specifications.

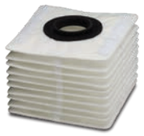
VF-5HN

Laser marker dedicated dust collector (with deodorizing function)

Low-cost laser marker dust collector.

With deodorizing function

Electret filter | Fumes | 3.6 m³/min Max. airflow


Electret filter

Activated carbon box

Specifications

Model			VF-5HN	
Power supply			3-phase 200V	single-phase 100V
			Frequency 50Hz or 60Hz	
Output		kW	0.4	
		HP	0.5	
Max. airflow		m³/min	3.6±0.2	
		cfm	127±7	
Max. static pressure [kPa]			2.65	
Filter	Filtration method		Internal surface filtration	
	Area	m²	2.3	
		ft²	24.7	
	Internal volume	L	15	
		U.S.gallon	3.9	
	Quantity		1	
	Material		Electret nonwoven fabric	
Deodorant			Activated carbon [20L(10kg)]	
Recommended breakers [A]			5	15
Power cord		m	2.3 (with plug)	
		inch	90 (with plug)	
Suction port diameter		mm	Option (uses Φ65.Φ75.Φ100)	
		inch	Option (uses Φ2.6.Φ3.0.Φ4.0)	
Dimensions W×D×H		mm	400×400×779	
		inch	15.8×15.8×30.7	
Weight		kg	53	
		lb	117	
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A	

PiF-H

Laser marking dust collector

For laser marking and engraving applications
Long-lasting performance on adhesive fume and odor

Molded filter | Pulse jet | Fumes | 26 m³/min Max. airflow | IE3 Premium efficiency motor

With deodorizing function

Molded cartridge filter
(lenght:750mm)

Specifications

Model		PiF-30H			PiF-60H		
Power Supply		50 or 60Hz, Three-phase 200V					
Motor Output (kW)		1.35			3.1		
Inverter		Standard Equipment					
Type		IE3 (2P) / Vertical flange mounted TEFC motor					
Airflow(m³/min)/(cfm)	(m³/min)	0	10	13	0	20	26
	(cfm)	0	353	459	0	706	918
Pressure (kPa)		2.65	1.5	1.0	3.0	1.5	1.0
Filter	Area (m²) / (ft²)	9.6 / 103			19.2 / 206		
	Quantity	2			4		
	Shape / Material	Molded Cartridge / Polyester Spunbond					
	Dust Off	Pulse Jet					
Compressed Air Consumption (L/h)	Pulse Jet Type	25 (working hour 10s/h) <30ms / 5s / 1 cycles as std. 2 times >			54 (working hour 20s/h) <30ms / 5s / 1 cycles as std. 4 times>		
	Flushing	177 (working hour 40s/h) <0.5ms / 5s / 8 cycles as std.8times>			620 (working hour 83s/h) <0.5ms / 5s / 16 cycles as std.16times>		
Zeolite (kg) / (lbs)		6.0 / 13.2			6.0×2 / 13.2×2		
Deodorant (kg) / (lbs)		5.6 / 12.3			5.6×2 / 12.3×2		
Bucket Size (L) / (U.S.gallon)		22.5 / 5.9			22.5 × 2 / 5.9×2		
Power Code (m) / (ft)		3 (4-core without plug) / 9					
Inlet Size (mm) / (in)		Φ127 / Φ5"			Φ200 / Φ7.87"		
W×D×H (mm / in)		520×950×1657 / 20.4×37.4×65.2			1040×950×1804 / 40.9×37.4×71.0		
Weight (kg) / (lbs)		230 / 507			405 / 893		
Paint Color		JPMA (Japan Paint Manufactuirng Association) F35-85A					

SS-N

Wet type dust collector (Scrubber)

Scrubber for combustible dust. Wet type dust collector.

Scrubber

Scrubber | Inflammable dust | 70 m³/min Max. airflow | IE3 Premium efficiency motor

Raschig ring

Collection unit

Specifications

with inverter

Model			SS-30N	SS-40N	SS-60N	SS-75N
Power supply			3-phase 200V 50/60Hz common use			
Output		kW	3.7		5.5	7.5
		HP	5		7.3	10
Airflow		m³/min	30	40	50	70
		cfm	1059	1412	1765	2472
Static pressure [kPa]			3.0			
Filler	Type		Rashig ring (porcelain)			
	Size		Φ10×10×thickness 2mm			
	Specific surface area	m²	650			
		ft²	6996			
	Filling capacity	L	225	300	360	495
		U.S.gallon	59.5	79.3	95.2	130.8
Suction /Exhaust port		mm	Φ200/Φ200	Φ250/Φ250	Φ300/Φ300	Φ350/Φ350
		inch	Φ8/Φ8	Φ10/Φ10	Φ12/Φ12	Φ14/Φ14
Circulation tank		L	330	420	510	670
		U.S.gallon	87.1	111.0	134.7	177.0
Demister		mm	1pc. (515×780)	2pcs. (370×780)	2pcs. (515×780)	2pcs. (615×780)
		inch	1pc. (20.3×30.7)	2pcs. (14.7×30.7)	2pcs. (20.3×30.7)	2pcs. (24.3×30.7)
Nozzle			4 pcs./10A	6 pcs. /10A	8 pcs. /10A	10 pcs. /10A
Circulating pump	Recirculating water quantity [L/min]		30	50	75	90
	Output	kW	0.18		0.25	
		HP	0.2		0.3	
Water supply			Water line 0.15MPa or higher/ball-tap (with manual ball valve 15A)			
Maximum inlet dust concentration/ maximum suction temperature			300mg/m³ / 40˚C or less			
Recommended Breaker			Standard equipped			
Power cord			Option (4-core)			
Dimensions W×D×H		mm	1445×1000×2480	1745×1000×2480	1995×1000×2480	2520×1000×2580
		inch	56.9×39.4×97.7	68.8×39.4×97.7	78.6×39.4×97.7	99.3×39.4×101.6
Weight [Not including water]		kg	610	760	880	1180
		lb	1345	1676	1940	2602

VRC-N

VOC remover

VOC removal high-performance is achieved
by zeolite with high adsorption capacity.

VOC | 30 m³/min Max. airflow | IE3 Premium efficiency motor

Specifications

Model		VRC-30N	VRC-60N
Power Supply		Three-phrase 200V 50Hz or 60Hz	
Power Consumption		16.5kw at Startup 9.4kw at No Load *Breaker capacity 75A	30.9kw at Startup 17.0kw at No Load *Breaker capacity 150A
Airflow Capacity (Max)		10~30m³ / min (at20ºC)	20~60m³ / min (at20ºC)
VOCs Removal Type		Zeolite Rotary Concentrator + Catalyst Oxidation	
Efficiency		More than 90% at 560ppmC (Toluene, Max Airflow)	
Processing Gas Temperature		0～40ºC	
Concentration Capacity		Lower than 700ppmC	
Ambient Temperature		0～40ºC	
Installation Condition		Indoor, Non-hazardous area	
Primary filter		HEPA Filter	
Suction Port Diameter (mm)	W×D×H (mm)	Φ200	Φ300
	W×D×H (in)	Φ7.8	Φ11.8
Dimensions	W×D×H (mm)	1140×757×1960	1395×1325×1861
	W×D×H (in)	44.9×29.8×77.1	54.9×52.1×73.2
Weight (kg)/(lbs.)		600 / 1322	1170 / 2579

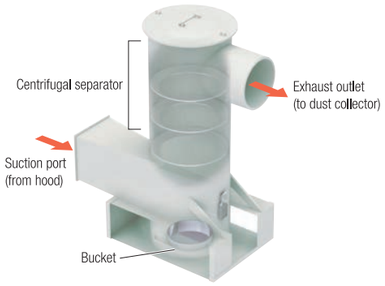
※Performance values might change from those shown on custom order specifications.

DB

Pre-dust box

Reduce entering fire inside dust collector.
Prevent from a fire accident

Pre-dust box



Specifications

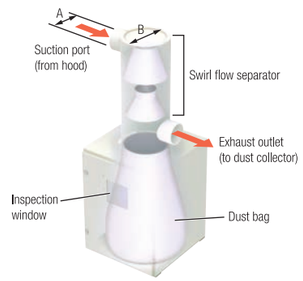
Model		DB-10	DB-20	DB-30	DB-40
Applicable airflow	m^3/min	10	20	30	40
	cfm	353.1	706.2	1059.4	1412.5
Pressure loss		490Pa at 7.5m^3/min	490Pa at 15m^3/min	539Pa at 22.5m^3/min	588Pa at 30m^3/min
Minimum working airflow	m^3/min	3.5	7.0	11.0	15.0
	cfm	123.6	247.2	388.4	529.7
Dimensions W×D×H	mm	465×309×647	550×405×938	700×501×1149	850×590×1372
	inch	18.4×12.2×25.5	21.7×16.0×37.0	27.6×19.8×45.3	33.5×23.3×54.1
Corresponding models		VNA-15,PiF-15	VNA-30,PiF-30	VNA-45,PiF-45	VNA-60,PiF-60
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A			

SR

Cyclone

Amano's unique in-house cyclone
Lengthens life of dust collector filter

Cyclone



Specifications

Model		SR-65	SR-100	SR-125
ΦA	mm	63.5	100	127
	inch	2.5	4	5
ΦB	mm	127	200	254
	inch	5	8	10
Dimensions W×D×H	mm	400×402×879	400×402×1044	600×602×1485
	inch	15.8×15.9×34.7	15.8×15.9×41.1	23.7×23.8×58.5
Applicable airflow	m^3/min	2～4	4.5～9	7.5～12
	cfm	70～141	158～317	264～423
Corresponding models		VF-5N	IS-15	VNA,PiF-15
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A		

Model		SR-150	SR-200	SR-250
ΦA	mm	150	200	250
	inch	6	8	10
ΦB	mm	300	400	500
	inch	12	16	20
Dimensions W×D×H	mm	600×602×1595	900×905×2063	900×905×2302
	inch	23.7×23.8×62.8	35.5×35.7×81.3	35.5×35.7×90.7
Applicable airflow	m^3/min	10～20	17.5～35	30～50
	cfm	353～706	618～1236	1059～1765
Corresponding models		VNA,PiF-30	VNA,PiF-45	VNA,PiF-60
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A		

Model		SR-300	SR-380
ΦA	mm	300	380
	inch	12	15
ΦB	mm	600	760
	inch	24	30
Dimensions W×D×H	mm	1200×1203×3039	1200×1203×3419
	inch	47.3×47.4×119.7	47.3×47.4×134.7
Applicable airflow	m^3/min	40～80	60～120
	cfm	1412～2825	2118～4237
Corresponding models		PiF-75/120,VNA-120	PiF-150
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A	

※Performance values might change from those shown on custom order specifications.

V-Σ

Vacuum cleaner

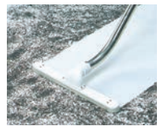
Factory vacuum cleaner unit Proven Bestseller!
Incredible power and durability!

Molded filter | Manual shaking | General dry dust | Max. airflow 6.4 m³/min | Premium efficiency motor IE3

Molded cartridge filter

Specifications

Model			V-2Σ			V-3Σ			V-5Σ			V-7Σ		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V											
Output		kW	1.5			2.2			3.7			5.5		
		HP	2			3			5			7.3		
Airflow		m^3/min	0	2.0	4.2	0	2.5	5.1	0	3.3	6.0	0	3.3	6.4
		cfm	0	70	148	0	88	180	0	116	211	0	116	226
Static pressure [kPa]			9.81	9.32	5.39	14.7	13.2	8.04	22.1	19.1	9.81	26.0	22.6	9.81
Filter	Molded	Area	m^2	2.0					2.6					
			ft^2	21.5					27.9					
		Quantity	1											
		Dust removal	Automatic shaking / Manual shaking											
	Woven	Area	m^2	0.7					1.2					
			ft^2	7.5					12.9					
		Quantity	1											
		Dust removal	Manual shaking											
Bucket capacity		L	27						60					
		U.S.gallon	7.1						15.8					
Recommended breakers [A]			15			20			30			50		
Power cord		m	10 (4-core, with plug)											
		inch	393 (4-core, with plug)											
Suction port diameter		mm	Φ38.1											
		inch	Φ1.5											
Dimensions W×D×H		mm	380×908×925						480×1252×1020					
		inch	15.0×35.8×36.5						18.9×49.3×40.2					
Weight		kg	100			110			195			220		
		lb	221			243			430			486		
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A											



Suctions up metal fragments & cutting chips

Collect metal and cutting scraps with stable suction force.
Also functions as vacuum source for factories producing precision components

IPR/IXR

Pulse jet vacuum cleaner

Internal pulse jet & compressor.
Top of the line among industrial vacuums.

IPR: Molded filter | Pulse jet | General dry dust | Max. airflow 6 m³/min

IXR: Resin filter | Pulse jet | Fine powder | Max. airflow 6 m³/min

Standard filter
(Polyester)

Resin filter
(Polyethylene)

Specifications

※Suction brushes, rods, hoses are sold separately.

with inverter

Model		IXR-3	IPR-4	IXR-4	IXR-5
Power supply		3-phase 200V 50/60Hz common use			
Control method		Inverter drive (6 step speed change operation)			
Output	kW	1.5	3.7		5.5
	HP	2	5		7.3
Max. airflow	m^3/min	3.0	5.0		6.0
	cfm	105	176		211
Max. static pressure [kPa]		13.0	23.5		27.0
Filter	Area	m^2	3.2	4.7	4.8	4.8
		ft^2	34.4	50.5	51.6	51.6
	Quantity	1			
	Material	Polyethylene	Polyester	Polyethylene	Polyethylene
	Dust removal	Automatic pulse jet (At fixed interval)			
Diaphragm valve [pcs.]		3			
Bucket capacity	L	30			
	U.S.gallon	7.9			
Recommended breakers		Standard equipment			
Power cord	m	3.5 (4-core, without plug)			
	inch	137 (4-core, without plug)			
Suction port diameter	mm	Φ50.8	Φ63.5		
	inch	Φ2	Φ2.5		
Dimensions W×D×H	mm	1254×622×1258	1254×622×1458		
	inch	49.4×24.5×49.6	49.4×24.5×57.5		
Weight	kg	200	240	250	275
	lb	441	530	552	607
Internal compressor operating control		3-phase 200V 0.2kW 50/60Hz common use			
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A (roof & bucket unit: YN40)			

V-SDR

Dust explosion pressure diffusion type industrial vacuum cleaner

For use with explosive or inflammable powder such as aluminum dust.
Fullfilling safety measures.

Molded filter | Manual shaking | Inflammable powder/ dust that might explode | Max. airflow 5.7 m³/min

For metals

Effect on Kst value 200·160 (3SDR) (7SDR)

Molded cartridge filter
(Anti-electrostatic filter)

Specifications

Model			V-3SDR			V-7SDR		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V					
Output		kW	2.2			5.5		
		HP	3			7.3		
Airflow		m³/min	0	2.4	4.8	0	2.7	5.7
		cfm	0	84	169	0	95	201
Static pressure [kPa]			12.4	10.9	7.9	22.6	19.7	9.7
Filter	Area	m²	2.0			2.6		
		ft²	21.5			27.9		
	Quantity		1					
	Shape		Molded cartridge (Anti-electrostatic filter)					
	Dust removal		Manual shaking					
Bucket capacity		L	27			60		
		U.S.gallon	7.1			15.8		
Recommended breakers [A]			20			50		
Power cord		m	15 (4-core, without plug)					
		inch	590 (4-core, without plug)					
Suction port diameter		mm	φ38.1					
		inch	φ1.5					
Dimensions W×D×H		mm	496×1123×1052			621×1430×1194		
		inch	19.6×44.2×41.5			24.5×56.2×47.1		
Weight		kg	141			250		
		lb	311			552		
Paint color			JPMA (Japan Paint Manufactuirng Association) S11-344					

1. For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
2. In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

VF-2LD

Dust explosion pressure diffusion type industrial vacuum cleaner

For explosive & inflammable dust other than metal such as toner.
Fullfilling safety measures.

Molded filter | Manual shaking | Inflammable powder/ dust that might explode | Max. airflow 2.7 m³/min

For toner

Effect on Kst value 300

Explosion test Our inhouse explosion test photos.

Molded cartridge filter
(dedicated toner Fine-fil static charge)

Specifications

※Suction brushes, rods, hoses are sold separately.

Model			VF-2LD	
Power supply			3-phase 200V	single-phase 100V
			Frequency 50Hz or 60Hz	
Output		kW	1.0	
		HP	1.3	
Airflow		m³/min	2.7±0.3	2.5±0.3
		cfm	95±10	88±10
Static pressure [kPa]			20.0±3.0	17.0±2.3
Filter	Area	m²	2.2	
		ft²	23.6	
	Quantity		1	
	Shape		Molded cartridge (dedicated toner fine-fil static charge)	
	Dust removal		Manual shaking	
Bucket capacity		L	13	
		U.S.gallon	3.4	
Recommended breakers [A]			10	15
Power cord		m	10.3 (4-core, without plug)	10.3 (3-core, with plug)
		inch	405 (4-core, without plug)	405 (3-core, with plug)
Suction port diameter		mm	φ38	
		inch	φ1.5	
Dimensions W×D×H		mm	430×895×1500	
		inch	17.0×35.3×59.1	
Weight		kg	107	110
		lb	236	243
Paint color			JPMA (Japan Paint Manufactuirng Association) S11-344	

※Performance values might change from those shown on custom order specifications.

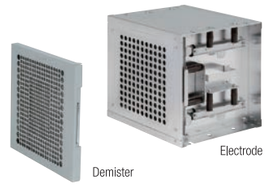
EM-8eⅢ

Electrostatic precipitator mist collector

Powerful collection of highly concentrated mist up to 200mg/m³
Compact electric collectors. Operational for both oil and water soluble mist

Electrical | Mist | Max. airflow 7.5 m³/min

Compact



Specifications

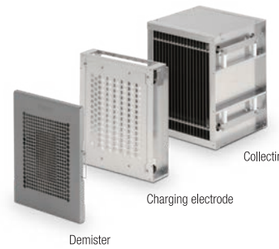
Model		EM-8eⅢ
Power Supply		200V Single Phase, 50/60Hz
Power Consumption (kW) / (HP)		0.13 / 1.3
Rated Airflow (m³/min) / (cfm)		7.5 / 265
Max Static Pressure (Pa)		900
Noise Level (dB[A])		less than 65±2
Primary Filtration		Stainless Steel Wire Demister
Charge Method		Two-stage Negative Charge
Ionize Electrode		Brush Type
Ionize Cell HV (kV)		-8
Collection Cell LV (kV)		-6
Collecting target		Soluble mist and Oil mist with a flash point of more than 80°C. Soluble mist with electrical conductivity of less than 300mS/m.
Collection Efficiency (%)		99
Max Concentration (mg/m³)		200
Recommended Breaker (A)		5
Power Code (m) / (inch)		3.5 / 138 (VCT 3-core, 0.75mm², No plug)
Oil Drain Port		R1 (1 inch male taper)
Dimensions	W x D x H (mm)	430×535×400
	W x D x H (in)	16.6×21.1×15.3
Weight (kg)/(lbs.)		29 / 63
Paint Color		JPMA(Japan Paint Manufacturing Association) F35-85A

EM-eⅡ

Electrostatic precipitator mist collector

Powerful collection of highly concentrated mist up to 200mg/m³
Bestseller among electric collection Mist Collectors
Operational for both oil and water soluble mist

Electrical | Mist | Max. airflow 30 m³/min | Premium efficiency motor IE3



Specifications

Model			EM-15eⅡ	EM-30eⅡ
Power supply			3-phase 200V 50/60Hz common use	
Output		kW	0.75	1.5
		HP	1	2
Usage Point Airflow ※Figure in ( ) is maximum value	m³/min	50Hz	15 (19)	30 (34)
		60Hz	15 (22)	30 (40)
	cfm	50Hz	529 (670)	1059 (1200)
		60Hz	529 (776)	1059 (1412)
Usage point static pressure [Pa] ※Figure in ( ) is maximum value		50Hz	350 (550)	280 (450)
		60Hz	600 (750)	500 (600)
Prefilter			Stainless steel wire demister	
Electric collection part	Electric charge method		(–) negative charge, 2-stage charging system	
	Charging electrode type		Needle type (titanium)	
	Electrode charging voltage HV [kV]		–10	
	Collecting electrode voltage LV [kV]		–6	
Collecting target			Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°Cor more Water-soluble mist with electric conductivity of 300mS/m or less	
Collecting efficiency [%]			99 (Weight ratio per filter paper) Depending on suction air volume	
Maximum inlet concentration [mg/m³]			200	
Recommended breakers [A]			10	15
Power cord		m	3.5 (4-core, without plug)	
		inch	137 (4-core, without plug)	
Drainage port			1-inch nipple (taper male screw for R1 pipe)	
Dimensions W×D×H		mm	478×993×620	813×1093×620
		inch	18.9×39.1×24.5	32.1×43.1×24.5
Weight		kg	72	120
		lb	159	265
Paint color			JPMA(Japan Paint Manufacturing Association) F35-85A	

EM-SC

Electrostatic precipitator mist collector

Clean electrodes without washing by water or detergent.
Equipped with auto self-cleaning function.
Top of the line in electric collection -mist collectors.

Cleaning | Electrical | Mist | 30 m³/min Max. airflow | IE3 Premium efficiency motor ※Except EM-8SC

Self-cleaning

Specifications

Model			EM-8SC	EM-15SC	EM-30SC
Power supply			3-phase 200V 50/60Hz common use		
Output		kW	0.4	0.75	1.5
		HP	0.5	1	2
Max. airflow		m³/min	8.0	15.0	30.0
		cfm	282	529	1059
Max. static pressure [Pa]			500		
Pre-processing			Metal eliminator		
Electric collection part	Electric charge method		(+) positive charge, 2-stage charging system		
	Charging electrode type		Needle type (titanium)		
	Electrode charging voltage HV [kV]		10		
	Collecting electrode voltage LV [kV]		8		
	Cleaning method		Cleaning by rotating electrode & stationary scraper		
Objects for collection			Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°Cor more Water-soluble mist with electric conductivity of 300mS/m or less		
Collecting efficiency [%]			99 (weight ratio per filter paper)		
Maximum inlet concentration [mg/m³]			200		
Recommended breakers [A]			5	10	15
Power cord		m	3.5 (4-core, without plug)		
		inch	137 (4-core, without plug)		
Drainage port			1-inch nipple (taper male screw for R1 pipe)		
Dimensions W×D×H		mm	707×476×1081	872×476×1086	1310×476×1209
		inch	27.9×18.8×42.6	34.3×18.8×42.8	51.6×18.8×47.6
Weight		kg	84	107	140
		lb	186	236	309
Paint color			JPMA(Japan Paint Manufactuirng Association) F35-85A		

※Suction inlet packing comes supplied with optional suction inlet.

EM-SCⅡLt

Electrostatic precipitator mist collector

Low-priced model for EM-SC.
Equipped with auto self-cleaning function only for collecting electrode.

Cleaning | Electrical | Mist | 30 m³/min Max. airflow | IE3 Premium efficiency motor

Self-Cleaning

Specifications

Model			EM-15SCⅡLt	EM-30SCⅡLt
Power supply			3-phase 200V 50/60Hz common use	
Fan motor output		kW	0.75	1.5
		HP	1	2
Electrode cleaning motor output		W	7.0	
		HP	9.5	
Usage point airflow [m³/min] ※Figure in ( ) is min / max value		50Hz	15 (Min 12.5 / Max 19)	30 (Min 25 / Max 34)
		60Hz	15 (Min 12.5 / Max 22)	30 (Min 25 / Max 34)
Usage point static pressure [Pa] ※Figure in ( ) is max value		50Hz	270 (550)	190 (450)
		60Hz	540 (750)	420 (600)
Pre-processing			Metal eliminator	
Electric collection part	Electric charge method		(–) negative charge, 2-stage charging system	
	Charging electrode type		Needle type	
	Electrode charging voltage HV [kV]		10 (7line)	10 (14line)
	Collecting electrode voltage LV [kV]		8 (13line)	8 (26line)
Cleaning method			Cleaning by rotating electrode & stationary scraper	
Objects for collection			Oil mist, Water-soluble oil mist and Oil soluble & water soluble mist with ignition point of 80°C or more Water-soluble mist with electric conductivity of 300mS/m or less	
Collecting efficiency [%]			99 (weight ratio per filter paper)	
Maximum inlet concentration [mg/m³]			200	
Recommended breakers [A]			10	15
Power cord		m	3.5 (4-core, without plug)	
		inch	137 (4-core, without plug)	
Drainage port			1-inch 90° ellbow / Hose nipple	
Dimensions W×D×H		mm	500×1234×620	835×1334×620
		inch	19.7×48.6×24.5	32.9×52.6×24.5
Weight		kg	83	128
		lb	183	283
Paint color			JPMA(Japan Paint Manufactuirng Association) F35-85A	

EM-eH

Electrostatic precipitator mist collector

Turbofan gives extra power for air flow & static pressure.
Ideal for die casting machines.

Electrical | Mist | 90 m³/min Max. airflow | IE3 Premium efficiency motor

Max. air flow 90m³/min

Specifications

with inverter

Model			EM-60eH			EM-90eH		
Power supply			3-phase 200V 50/60Hz common use					
Output		kW	3.7			5.5		
		HP	5.0			7.3		
Airflow		m³/min	0	40	60 (Operating point)	0	60	90 (Operating point)
		cfm	0	1412	2118 (Operating point)	0	2118	3178 (Operating point)
Static pressure [kPa]			2.23	1.50	0.50	2.76	1.70	0.27
Pre-processing	Eliminator		4 pcs.			6 pcs.		
	Demister		2 pcs.			4 pcs.		
Electric collection part	Charging electrode		4 pcs.			6 pcs.		
	Collecting electrode		4 pcs.			6 pcs.		
Safety measure	Fire protection damper		One unit of the FVD type damper (with volume adjuster, temperature fuse, limit switch) is provided as a standard accessory.					
Collecting efficiency [%]			97.5 (weight ratio per filter paper) airflow at operating point					
Maximum inlet concentration [mg/m³]			50					
Recommended breakers			Standard equipped					
Power cord			Option (4-core)					
Drainage port			1-inch single-ended male nipple (with valve and elbow)					
Dimensions W×D×H		mm	905×958×2221			905×1303×2266		
		inch	35.7×37.8×87.5			35.7×51.3×89.2		
Weight		kg	375			550		
		lb	827			1213		
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A					

※Performance values might change from those shown on custom order specifications.

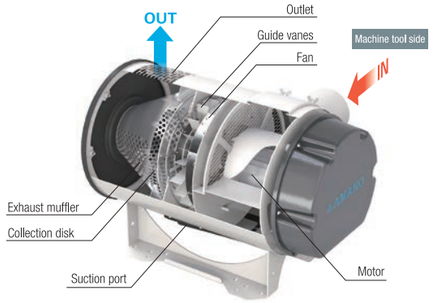
MR

Filter less mist collector

Equipped self-draining system and iverter operation.
Grately reduce clogging of collection disks.

Filter Less

Filter Less | Mist | Max. airflow 22 m³/min



Specifications

型式			MR-5	MR-10	MR-15	MR-25
Power supply			3-phase 200V 50/60Hz common use	3-phase 200～240V 50/60Hz common use		
Output	kW		0.4	0.75	1.5	2.2
	HP		0.5	1	2	3
Max. airflow	50Hz	m³/min	4.8	9.5	15.0	22.0
		cfm	169	335	529	776
	60Hz	m³/min	5.5	9.5	15.0	22.0
		cfm	194	335	529	776
Max. static pressure [Pa]	50Hz		0.8	1.3	1.3	1.3
	60Hz		1.2			
Collecting method			Rotary collision method			
Collecting efficiency [%]			99.9 ※Particle size 5μm or larger			
Objects for collection			Water soluble mist (Ph7.0～10.5) ※Particle size 2μm or larger			
Maximum inlet concentration [mg/m³]			50			
Recommended breakers [A]			5	20		
Power cord			Option(4-core)			
Suction port diameter		mm	Φ98	Φ123	Φ148	Φ198
		inch	Φ3.9	Φ4.9	Φ5.9	Φ7.9
Drainage port			Primary draing port:Dia.25mm (1Inch) / secondary drain port:Dia.10mm (0.39Inch)			
Dimensions W×D×H		mm	440×590×460	460×660×466	512×746×507	557×857×569
		inch	17.3×23.2×18.1	18.1×25.9×18.3	20.1×29.3×19.9	21.9×33.7×22.4
Weight		kg	45	35	50	65
		lb	99	77	110	143
Paint color			JPMA(Japan Paint Manufactuirng Association) F35-85A / YN-40			

MS

Large air flow filter type mist collector

Proprietary swirl flow separator.
Ideal for collection from multiple machine tools.

Max. airflow 400m³/min

Filter | Mist | Max. airflow 400 m³/min

Filter

Specifications

※ Fan motor is sold separately

Model			MS-100	MS-150	MS-200	MS-250	MS-350	MS-400
Applicable capacity		m³/min	100	150	200	250	350	400
		cfm	3531	5297	7062	8828	12360	14125
Primary filter	Dimensions W×H	mm	500×666		800×1000			
		inch	19.7×26.3		31.5×39.4			
	Quantity		16	20	24	32	40	40
	Material		Sponge + particular fiber					
Secondary filter	Dimensions W×H×D	mm	610×610×290	610×760×290		610×610×290	610×760×290	
		inch	24.1×24.1×11.5	24.1×30.0×11.5				
	Quantity		4		6	9		12
	Material		Glass wool					
Objects for collection			Water soluble mist/oil mist					
Maximum inlet concentration [mg/m³]			20					
Suction port diameter		mm	Φ380	Φ470	Φ550	Φ610	Φ720	Φ770
		inch	15	18.6	21.7	24.1	28.4	30.4
Dimensions	mm	W	3250	3635	4590	4730	5300	5390
		D	1500	1870	1700	2050	2560	2600
		H	1590	1590	2250	2250	2250	2700
	inch	W	128.0	143.2	180.8	186.3	208.7	212.3
		D	59.1	73.7	67.0	80.8	100.8	102.4
		H	62.6	62.6	88.6	88.6	88.6	106.3
Weight		kg	1200	1600	2200	2400	2900	3500
		lb	2646	3528	4851	5292	6395	7718
Drainage port	1-1/2 inch socket [set]		4					
	2 inch socket [set]		1					
Paint color			JPMA (Japan Paint Manufactuirng Association) F35-85A					

MZ

Filter type mist collector

Energy Saving model.
Operation at same air flow but with a motor that is lower notch.

Energy Saving

Filter | Mist | Max. airflow 20 m³/min | Premium efficiency motor ※Except MZ-10

Primary filter

Secondary filter

Easy toolless maintenance!

Maintenance is easy even in high positions such as upper parts of machine tools.

Unclamp at 2 positions and open the cover.

Remove the rectifier cone unit.

Remove the primary filter from the rectifier cone unit.

Take out the secondary filter from the fan unit and replace with a new secondary filter.

Specifications

Model			MZ-10	MZ-15	MZ-30
Power supply			3-phase 200V 50/60Hz common use		
Output		kW	0.4	0.75	1.5
		HP	0.5	1	2
Max. airflow	m³/min	50Hz	8.3	10.5	17
		60Hz	10	12.5	20
	cfm	50Hz	293	370	600
		60Hz	353	442	709
Max. static pressure [kPa]		50Hz	0.9	0.9	1.2
		60Hz	1.3	1.3	1.75
Primary filter			Polyester (1 pc. use)		
Secondary filter			Polyester (1 pc. use)		
Collecting efficiency [%]			99.7 and over (2μm and over water soluble mist)		
Objects for collection			Water soluble mist (intake of oily mist after mounting an after-filter available as an option)		
Maximum inlet concentration [mg/m³]			20		
Recommended breakers [A]			5	10	15
Power cord			Option (4-core)		
Suction port diameter		mm	Φ123	Φ148	Φ198
		inch	Φ4.9	Φ5.9	Φ7.8
Drainage port			Φ16mm (2 locations) non-thread screws (use for insertion of hose)		
Dimensions W×D×H		mm	306×556×450	356×583×460	407×672×604
		inch	12.1×21.9×17.8	14.1×23.0×18.2	16.1×26.5×23.8
Weight		kg	27	35	60
		lb	60	78	133
Paint color			JPMA (Japan Paint Manufactuirng Association) main unit F35-85A, exhaust box U77-60L		

MC-45

Filter type medium airflow mist collector

Medium airflow mist collector.

Max. airflow 42m³/min

Filter | Mist | Max. airflow 42 m³/min | Premium efficiency motor

Filter

Specifications

Model		MC-45		
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V		
Output	kW	2.2		
	HP	3		
Airflow	m³/min	0	20	42
	cfm	0	706	1483
Static pressure [kPa]		2.75	2.26	0.49
Primary filter	Quantity	1		
	Material	Metal mesh		
Secondary filter	Quantity	1		
	Material	Urethane sponge		
Objects for collection		Water soluble mist		
Maximum inlet concentration [mg/m³]		20		
Recommended breakers [A]		20		
Power cord	m	3 (4-core, without plug)		
	inch	118 (4-core, without plug)		
Suction port diameter	mm	Φ200		
	inch	Φ8		
Drain port		Equipped with drain valve and drain tank		
Dimensions W×D×H	mm	850×650×1759		
	inch	33.5×25.6×69.3		
Weight	kg	185		
	lb	408		
Paint color		JPMA (Japan Paint Manufactuirng Association) F35-85A		

※Performance values might change from those shown on custom order specifications.

VN-SD

Dust explosion pressure diffusion type dust collector

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Effect on Kst values of 400

Woven plate filter
(canvas plus aluminum sheet)

Explosion pressure diffusion port

Pressure from explosion is discharged into air to prevent damage to the equipment.

Extinguisher port

In the unlikely event fire occurs in the equipment, extinguishing agent is dispensed.

Check valve

Prevents reverse flow of blow force or fire to protect the worker.

Woven filter | Manual shaking | Inflammable powder/dust that might explode | Max. airflow 35 m³/min

Model	Kst value (x10³kPa·m/s or less)	Pmax(×10⁵kPa or less)
VN-30SD	400	11.5
VN-45SD	400	11.5

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)NIIS-TR-No.38(2005) in incorporated agency industrial safety institute laws.
Above figures are for standard equipment.
Please have the target dust evaluated for explosion potential (billed to customer).

Specifications

Model			VN-30SD			VN-45SD		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V					
Output		kW	1.5			2.2		
		HP	2			3		
Airflow		m³/min	0	15	24.5	0	20	35
		cfm	0	529	865	0	706	1236
Static pressure [kPa]			2.84	1.62	0.39	2.75	1.72	0.49
Filter	Area	m²	7.5			10.0		
		ft²	80.7			107.6		
	Quantity		3			4		
	Shape		Woven plate (canvas filter plus aluminum sheet with earthing conductor)					
	Dust removal		Manual shaking					
Bucket capacity		L	27			38		
		U.S.gallon	7.1			10.0		
Recommended breakers [A]			15			20		
Power cord		m	5 (4-core, without plug)					
		inch	196 (4-core, without plug)					
Suction port diameter		mm	Φ150			Φ200		
		inch	Φ6			Φ8		
Dimensions W×D×H		mm	650×850×1656			850×900×1812		
		inch	25.6×33.5×65.2			33.5×35.5×71.4		
Weight		kg	220			280		
		lb	486			618		
Paint color			JPMA (Japan Paint Manufactuirng Association) S11-344					

1. The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
2. A dust explosion-proof motor (motor having structure to prevent the invasion of the outside substance) is installed.
3. For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN or D.
4. In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN or D.

SA

Dust explosion pressure diffusion type wet dust collector (scrubber system)

Magnesium alloy dust dedicated scrubber.
The pinnacle of wet dust collectors.

Specifically designed for Magnesium

Top-level capture efficiency

High capture efficiency has been achived through a two-stage S-shape impeller dust collection mechanism.
This system can be installed in machines such as shot blasting machines that generate high concentrations of dust.
Additionally, since it has a filterless structure, there is no need to dispose of used filters.

Wet dust collection | Inflammable powder/dust that might explode | Operating airflow 60 m³/min

Model	Kst value (x10³kPa·m/s or less)	Pmax(×10⁵kPa or less)
SA-30	500	17.5
SA-45	500	17.5
SA-60	500	17.5

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)NIIS-TR-No.38(2005)" in incorporated agency industrial safety institute laws.
Above figures are for standard equipment.
Please have the target dust evaluated for explosion potential (billed to customer).

Specifications

※ The main body of the dust collector is designed for outdoor use. The control panel is designed for outdoor use (dustproof and waterproof).

Model		SA-30	SA-40	SA-60
Power supply		Frequency 50Hz or 60Hz at 3-phase 200V		
Output	kW	3.7	5.5	7.5
	HP	5.0	7.3	10.0
	Specidications	Safety-enhanced explosion-proof type※1		
Airflow	m³/min	30	45	60
	cfm	1059	1589	2118
Static pressure [kPa]		1.39	1.43	1.14
Noise		74±2 or less	76±2 or less	76±2 or less
collection efficiency		99% (Measured using the JIS test powder No.1 white alumina (average particle size of 2.04μm) with the filter paper weighing method.)		
Qty. of installed hydrogen venting valves		4	8	8
Qty. of installed explosion vents		4	8	8
Water storage capacity	L	800	1125	1600
	U.S.gallon	211	297	423
Water supply method		Automatic control by automatic water supply valve and water level sensor		
Dust discharge method		scrape out		
Power cord		Option (4-core)※2		
Suction port diameter	mm	Φ200	Φ250	Φ250
	inch	Φ8	Φ10	Φ10
Dimentions W×D×H	mm	2592x1296x3612	2677x1635x3812	2818x2010x3972
	inch	102.0x51.0x142.2	105.4x64.4x150.1	110.9x79.1x156.4
Weight	kg	880	1125	1400
	lb	1940	2480	3086
Paint color		JPMA (Japan Manufacturing Association) S11-344		

※Please note that the performance values listed are for standard specifications. Performance values may vary for custom specifications.
※1 A motor with features to prevent foreign object intrusion from external sources and to prevent spark generation.
※2 In the separate control panel specification, it is not possible to attach the control panel directly to the main body of the dust collector. The length of the cords between the motor and the control panel, and between the control panel and the power supply, must be specified when placing an order. (extra charge).
In the case of mounting control panel to main body specifications, the cord between the motor and the control panel is installed as standard. It is not necessary to specify.

※Performance values might change from those shown on custom order specifications.

PiE-60DN

Dust explosion pressure diffusion type dust collector with pulse jet dust removal system

See page 17 for dust explosion diffusion type vacuum cleaners

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Pulse jet type (By differential pressure detection)

Effect on Kst values of 300

Molded cartridge filter
(Anti-electrostatic filter)

Dust-proof electrical equipment box

Structure is sealed by packing to make dust explosions unlikely to occur.

Check valve

Prevents reverse flow of blow force or fire to protect the worker.

Explosion pressure diffusion port

Pressure from explosion is discharged into air to prevent damage to the equipment.

Molded anti-electrostatic filter | Pulse jet | Inflammable powder/dust that might explode | Max. airflow 150 m³/min | Premium efficiency motor ※Except PiE-30SDN/45SDN

Model	Kst value (x10³kPa·m/s or less)	Pmax(×10⁵kPa or less)
PiE-60DN	300	11.0

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)NIIS-TR-No.38(2005)" in incorporated agency industrial safety institute laws.
Above figures are for standard equipment.
Please have the target dust evaluated for explosion potential (billed to customer).

Specifications

Model			PiE-60DN		
Power supply			Frequency 50Hz or 60Hz at 3-phase 200V		
Output		kW	3.7		
		HP	5		
Airflow		m³/min	0	35	55
		cfm	0	1236	1942
Static pressure [kPa]			2.73	2.03	0.92
Filter	Area	m²	18.0		
		ft²	193.6		
	Quantity		8		
	Shape		Molded cartridge (Anti-electrostatic filter with grounding conductor)		
	Dust removal		Automatic pulse jet (By differential pressure detection)		
Compressed air consumption [L/min]			33		
Diaphragm valve [pcs.]			4		
Recommended breakers [A]			30		
Power cord		m	5 (4-core, without plug)		
		inch	196 (4-core, without plug)		
Suction port diameter		mm	Φ250		
		inch	Φ10		
Dimensions W×D×H		mm	1160×1244×2144		
		inch	45.7×49.0×84.5		
Bucket capacity		L	25×2		
		U.S.gallon	6.6×2		
Weight		kg	550		
		lb	1213		
Paint color			JPMA (Japan Paint Manufacturing Association) S11-344		

1. The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
2. For countries with high efficiency motor regulation, the high efficiency Totally Enclosed Fan-cooled (non-explosion-proof) motor that meets the regulations of each country is installed. The model name will be DN.
3. In the case of power supply specification is not 200V50Hz/60Hz or 220V60Hz, the Totally Enclosed Fan-cooled (non-explosion-proof) motor is installed. The model name will be DN.

PiF-D/SD

Dust explosion pressure diffusion type dust collector with pulse jet dust removal system

Fullfilling safety measures.
Dust collector for explosive and flammable dust, aluminum and so on.

Pulse jet type (By differential pressure detection)

Effect on Kst values of 400 ※Except PiF-75D/120D/150D

Molded cartridge filter
(Anti-electrostatic filter)

Check valve

Prevents reverse flow of blow force or fire to protect the worker.

Explosion pressure diffusion port

Pressure from explosion is discharged into air to prevent damage to the equipment.

Molded anti-electrostatic filter | Pulse jet | Inflammable powder/dust that might explode | Max. airflow 150 m³/min | Premium efficiency motor ※Except PiF-30SD/45SD

Model	Kst value (x10³kPa·m/s or less)	Pmax(×10⁵kPa or less)
PiF-30D	400	11.5
PiF-45D	400	11.5
PiF-60D	400	11.5
PiF-75D	300	11.0
PiF-120D	300	11.0
PiF-150D	300	11.0
PiF-30SD	400	11.5
PiF-45SD	400	11.5

Effective area was calculated based on "Explosive pressure discharge device technical guidelines(Revised version)NIIS-TR-No.38(2005)" in incorporated agency industrial safety institute laws.
Above figures are for standard equipment.
Please have the target dust evaluated for explosion potential (billed to customer).

Specifications

Model			PiF-30D			PiF-45D			PiF-60D			PiF-75D			PiF-120D			PiF-150D			PiF-30SD			PiF-45SD		
Power supply			3-phase 200V 50/60Hz common use																		Frequency 50Hz or 60Hz at 3-phase 200V					
Motor	Output	kW	1.35			2.0			3.1			5.5			7.5			11.0			1.5			2.2		
		HP	1.8			2.6			4.1			7.3			10.0			15.0			2.0			3.0		
	Inverter		Standard equipment																		—					
	Efficiency		IE3																		IE1 (Dust explosion-proof motor)					
Airflow	m³/min		0	15	30	0	22.5	45	0	35	60	0	50	75	0	65	105	0	100	150	0	15	22	0	22.5	35
	cfm		0	529	1059	0	794	1589	0	1236	2118	0	1765	2648	0	2295	3708	0	3531	5297	0	529	776	0	794	1236
Static pressure [kPa]			2.75	2.00	0.80	2.75	2.20	0.40	3.00	2.20	0.50	3.10	2.50	0.90	3.20	2.41	0.59	3.10	2.27	0.72	2.75	1.72	0.49	2.75	1.62	0.35
Filter	Area	m²	12.0			18.0			24.0			38.4			57.6			86.4			12.0			18.0		
		ft²	129.1			193.6			258.2			413.4			620.0			930.0			129.1			193.6		
	Quantity		4			6			8			8			12			18			4			6		
	Shape		Molded cartridge (length:500mm) (Anti-electrostatic filter)									Molded cartridge (length:750mm) (Anti-electrostatic filter)									Molded cartridge (length:500mm) (Anti-electrostatic filter)					
	Dust removal		Automatic pulse jet (by differential pressure detection)																							
Compressed air consumption [L/min]			36			45			67			75			86			100			36			45		
Diaphragm valve [pcs.]			2			3			4			4			6			6			2			3		
Recommended breakers [A]			15			20			30			50			60			75			15			20		
Power cord		m	5 (4-core, without plug)									Option (4-core)									5 (4-core, without plug)					
		inch	196 (4-core, without plug)									Option (4-core)									196 (4-core, without plug)					
Bucket capacity		L	27			38			27×2			22.5×2			22.5×3			22.5×3			27			38		
		U.S.gallon	7.1			10.0			7.1×2			5.9×2			5.9×3			5.9×3			7.1			10.0		
Suction port diameter		mm	Φ150			Φ200			Φ250			Φ290			Φ380			Φ150			Φ200					
		inch	Φ6			Φ8			Φ10			Φ11.5			Φ15			Φ6			Φ8					
Dimensions W×D×H		mm	607×1243×1569			786×1228×1600			950×1209×1774			950×1540×2291			1398×1666×2393			1484×2009×3054			556×1245×2247			681×1237×2392		
		inch	23.9×48.9×61.7			30.9×48.3×62.9			39.0×47.5×69.8			37.4×60.6×90.2			94.4×65.6×94.2			58.4×79.0×120.2			21.8×49.0×88.4			26.8×48.7×94.1		
Weight		kg	290			340			465			520			710			1020			375			435		
		lb	640			750			1026			1147			1566			2249			827			959		
Paint color			JPMA (Japan Paint Manufacturing Association) S11-344																							

1. The dimensions mentioned above are only for the main unit. A check valve, an electrical box, the roof of outdoor specifications are not included.
2. A dust explosion-proof motor (motor having structure to prevent the invasion of the outside substance) is installed on PiF-30SD and PiF-45SD.
※Notes 3 and 4 in above PiE-SDN are not applicable when changing PiF-SD motor.

SNP

Pulse jet type dust collector

Space saving dust collector from the use of plate filter.

Moderate pressure large blow force

SNP-5H2W

Plate filter

Plate filter | Pulse jet | General dry dust | 450 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 27 of specification table

SI

Pulse jet type dust collector

Down flow & Side inlet type woven filter
Safe and hygienic filter replacement

Moderate pressure large blow force

SI-1004

※Suction connection piping etc are not included.

Woven filter

Woven filter | Pulse jet | General dry dust | 100 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) F35-85A

See page 30 of specification table

WRT/WRT-ST

Pulse jet type dust collector

Bestseller among large blowforce dust collectors
Large filter selection gives wide-ranging response potential(WRT)
Space saving & low cost by Molded cartridge filter(WRT-ST)

Moderate pressure large blow force

WRT-10320

WRT-5154ST

Woven filter

Molded cartridge filter

(WRT) Woven filter | Pulse jet | General dry dust | 1055 ㎡ Filter area

(WRT-ST) Molded filter | Pulse jet | General dry dust | 816 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 27~29 of specification table

BV

Pulse jet type dust collector

Ideal for air bleeding from silos and hoppers.

Moderate pressure medium blow force

BV-1009

Woven filter

Woven filter | Pulse jet | General dry dust | 35 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 30 of specification table

CT

Pulse jet type dust collector

High vacuum resistant body ideal for pneumatic conveying and central cleaning.

High pressure medium blow force

CT-1008

Woven filter

Woven filter | Pulse jet | General dry dust | 90 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 30 of specification table

※Performance values might change from those shown on custom order specifications.

PPC

Pulse jet type dust collector

Molded filter type
Ideal for air bleeding from silos and hoppers.

Moderate pressure medium blow force

PPC-3066

Molded cartridge filter

Molded filter | Pulse jet | General dry dust | 75 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 31 of specification table

MF

Pulse jet type dust collector

Compact, cylindrical body is ideal for intake of pneumatic conveying.

High pressure medium blow force

MF-2004

Molded cartridge filter

Molded filter | Pulse jet | General dry dust | 18 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 32 of specification table

TFP

Bag-in, bag-out dust collector

The bag-in bag-out concept allows replacing filters & ejecting dust without touching the dust.

Bag-in Bag-out

TFP-0403

Molded cartridge filter

Molded filter | Pulse jet | General dry dust | 81 ㎡ Filter area

Paint color JPMA (Japan Paint Manufactuirng Association) 634

See page 32 of specification table

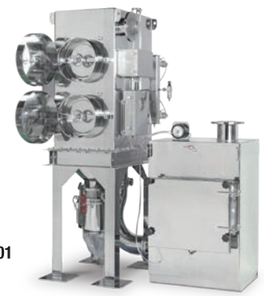
TFP-S

High-pharmacologically-active dust collector.

High-pharmacologically-active dust collector.

Effective on high-pharmacologically-active powder

- Bag-in Bag-out type
- Wet-down
- Liner packs



TFP-S0201

Molded filter | Pulse jet | High chemically active powder | 33 ㎡ Filter area

See page 32 of specification table

HGD

High temperature toxic gas removal device

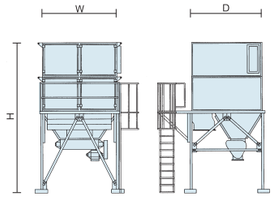
Removes dioxins, acid gas, heavy metals and fine particles from high temperature incinerated gas.

Compatible with dioxins

We design to match customer needs.

SNP

●Filter: Plate filter ●Dust removal: Automatic pulse jet



SNP

Model	Dimensions mm W	Dimensions mm D	Dimensions mm H	Dimensions inch W	Dimensions inch D	Dimensions inch H	Filter Area m²	Filter Area ft²	Filter Quantity	No. of valves	Air supplied quantity [L /min]	Weight kg	Weight lb
SNP-2H1W	1150	2182	4708	45.3	86.0	185.4	90	968	68	8	187	1550	3418
-3H1W			5808			228.7	135	1452	102	12	280	2100	4631
-4H1W			6908			272.0	180	1936	136	16	420	2500	5513
-2H2W	2300		5031	90.6		198.1		1936	136			3100	6836
-3H2W			6131			241.4	270	2905	204	24	560	4200	9261
-4H2W			7231			284.7	360	3873	272	32	700	5100	11246

Model description

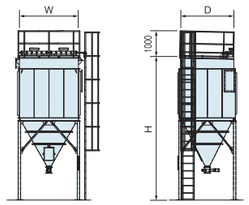
Basic unit is expressed by 1H1W. A total of 34 filters are installed inside and provide a total surface area of 45 square meters. Assembling these units horizontally and vertically gives the model type shown at right. Model types combinable as standard configurations in this catalog are listed.

Example : **SNP-3H 2W**

Number of vertical units ↑ ↑ Number of horizontal units

WRT

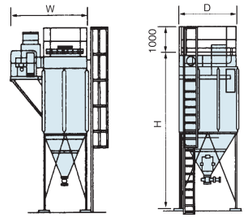
●Filter: Woven filter ●Dust removal: Automatic pulse jet



WRT-3000/5000 Series (with a separate fan)

B: Bottom inlet T: Top inlet

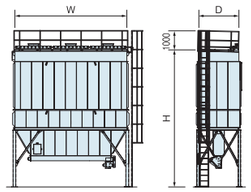
Model	Dimensions mm W	Dimensions mm D	Dimensions mm H	Dimensions inch W	Dimensions inch D	Dimensions inch H	Filter Area m²	Filter Area ft²	Filter Quantity	Filter Length mm	Filter Length inch	No. of valves	Air supplied quantity [L/min]	Weight kg	Weight lb
WRT-3054B	1200	1810	5330	47.3	71.3	209.8	51.5	554	54	1933	76	6	150	1700	3749
-3054T	1200	2160	5580	47.3	85.1	219.7	51.5	554	54			6	150	1900	4190
-5054B	1200	1810	5900	47.3	71.3	232.3	67.6	727	54	2540	100	6	150	1900	4190
-5072B	1600			63.0			90.1	969	72			8	200	2200	4851
-5090B	2000			78.8			112.7	1212	90			10	240	2500	5513
-5108B	2400		6440	94.5		253.5	135.2	1454	108			12	290	2700	5954
-5054T	1200	2160	6150	47.3	85.1	242.1	67.6	727	54			6	150	2000	4410
-5072T	1600			63.0			90.1	969	72			8	200	2300	5072
-5090T	2000			78.8			112.7	1212	90			10	240	2600	5733
-5108T	2400		6440	94.5		253.6	135.2	1454	108			12	290	3100	6836
-5126B	2800	1810	5975	110.3	71.3	235.2	157.8	1697	126	2540	100	14	340	3200	7056
-5144B	3200			126.0			180.3	1940	144			16	390	3500	7718
-5126T	2800	2160	6275	110.3	85.1	247.1	157.8	1697	126			14	340		
-5144T	3200			126.0			180.3	1940	144			16	390	3900	8510
-5162T	3600			141.8			202.8	2182	162			18	440	4200	9261
-5180T	4000			157.5			225.4	2425	180			20	480	4700	10364
-5198T	4400			173.3			247.9	2667	198			22	530	5000	11025



WRT-3000/5000 Series (with an onboard fan)

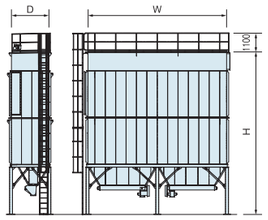
B: Bottom inlet T: Top inlet

Model	Dimensions mm W	Dimensions mm D	Dimensions mm H	Dimensions inch W	Dimensions inch D	Dimensions inch H	Airflow m³/min	Airflow cfn	Static pressure [kPa]	Output kW	Output HP	Filter Area m²	Filter Area ft²	Filter Quantity	Filter Length mm	Filter Length inch	No. of valves	Air supplied quantity [L/min]	Weight kg	Weight lb
WRT-3054TF	1200	2160	5580	47.2	85.1	219.7	50	1765	3.43	5.5	7.3	51.5	554	54	1933	76	6	150	2400	5292
							75	2648		7.5	10									
							95	3354		11	15									
							110	3884												
							125	4414		15	20									
-5054TF	1200	2160	6150	47.2	85.1	242.1	75	2648		7.5	10	67.6	727	54	2540	100	6	150	2600	5733
							95	3354		11	15									
							110	3884												
							145	5120		15	20									
-5072TF	1600		6150	63.0		242.1	95	3354		11	15	90.1	969	72	2540	100	8	200	2900	6395
							125	4414		15	20									
							145	5120												
	3065		6006	120.7		236.4	200	7062		18.5	25									
-5090TF	2000		6150	78.7		242.1	110	3884		11	15	112.7	1212	90	2540	100	10	240	3200	7056
							145	5120		15	20									
	3465		6005	136.5		236.5	180	6356		18.5	25									
							200	7062												



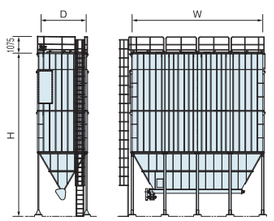
WRT-7000 Series (with a separate fan)

Model	Dimensions mm W	D	H	inch W	D	H	Filter Area m²	ft²	Quantity Long	Short	Length mm Long	Short	inch Long	Short	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
WRT-7080	2000	2160	7255	78.8	85.1	285.6	132.7	1427	72	8	3500	2133	138	84	10	330	3300	7275
-7096	2400		7545	94.5		297.0	160.3	1724	88						12	400	3800	8378
-7112	2800		7795	110.3		306.9	182.5	1963	96	16					14	460	4300	9480
-7128	3200		8055	126.0		317.1	210.1	2260	112						16	530	4900	10803
-7144	3600		7380	141.8		290.6	237.8	2558	128						18	590	5300	11685
-7160	4000			157.5			265.4	2855	144						20	660	5800	12787
-7176	4400			173.3			287.6	3094	152	24					22	720	6200	13669
-7192	4800			189.0			315.2	3391	168						24	790	6600	14551
-7208	5200			204.8			342.8	3688	184						26	860	7100	15653
-7224	5600			220.5			365.1	3928	192	32					28	920	7500	16535
-7240	6000			236.3			392.7	4225	208						30	990	8000	17637



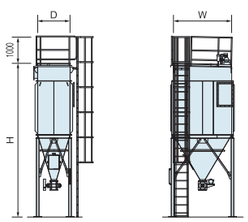
WRT-S10000 Series (with a separate fan)

Model	Dimensions mm W	D	H	inch W	D	H	Filter Area m²	ft²	Quantity Long	Short	Length mm Long	Short	inch Long	Short	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
WRT-S10112	2800	2160	8900	110.3	85.1	350.4	270.6	2912.7	104	8	5080	2540	200	100	14	460	6600	14551
-S10128	3200			126.0			310.7	3344.3	120						16	530	7200	15874
-S10160	4000			157.5			390.9	4207.6	152						20	660	8500	18740
-S10192	4800			189.0			461.1	4963.2	176	16					24	780	10000	22047
-S10224	5600			220.5			541.2	5825.4	208						28	920	11400	25133
-S10256	6400		9100	252.0		358.3	621.5	6689.8	240						32	1050	13100	28881
-S10288	7200			283.5			691.6	7444.3	264	24					36	1170	14400	31747
-S10320	8000			315.0			771.8	8307.6	296						40	1300	15900	35054



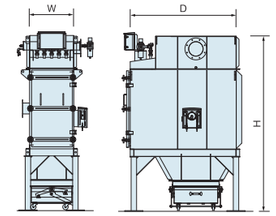
WRT-19000 Series (with a separate fan)

Model	Dimensions mm W	D	H	inch W	D	H	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
WRT-19320	7000	3100	10655	275.6	122.1	419.5	844.4	9085	320	5350	210	32	1360	20800	45864
-19360	7800			307.1			950.0	10222	360			36	1520	22800	50274
-19400	8600			338.6			1055.6	11358	400			40	1690	25400	56007



WRT-ST

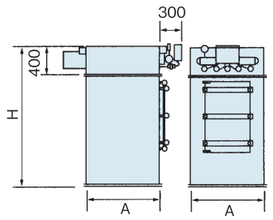
Model	Dimensions mm W	D	H	inch W	D	H	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
WRT-3042ST	1200	2160	5705	47.3	85.1	224.6	155.4	1672	42	1455	57	6	210	1900	4190
-3056ST	1600			63.0			207.2	2229	56			8	280	2200	4851
-3070ST	2000			78.8			259.0	2786	70			10	330	2500	5513
-3084ST	2400		5995	94.5		236.0	310.8	3344	84			12	390	2900	6395
-5042ST	1200		6500	47.3		255.9	222.6	2395	42	2055	81	6	220	2100	4631
-5056ST	1600			63.0			296.8	3193	56			8	290	2400	5292
-5070ST	2000			78.8			371.0	3991	70			10	340	2800	6174
-5084ST	2400		6790	94.5		267.3	445.2	4790	84			12	410	3200	7056
-5098ST	2800		6625	110.3		260.8	519.4	5588	98			14	480	3700	8159
-5112ST	3200			126.0			593.6	6387	112			16	550	4000	8820
-5126ST	3600		6825	141.8		268.7	667.8	7185	126			18	620	4400	9702
-5140ST	4000			157.5			742.0	7983	140			20	670	4800	10584
-5154ST	4400			173.3			816.2	8782	154			22	730	5000	11025



SI

●Filter: Woven filter ●Dust removal: Automatic pulse jet

Model	Dimensions mm W	D	H	inch W	D	H	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
SI-0502	600	1450	2465	23.7	57.1	97.0	10	107.6	10	1083	42.6	5	60	680	1500
-1002	1100		2475	43.4		97.4	20	215.2	20			10	125	950	2095
-1004			3575	43.4		140.7	40	430.5	40			8	100	1300	2866
-2003	2200	1500	3025	122.1	59.1	119.1	60	645.8	60			12	150	2050	4520
-2004			3575			140.7	80	861.1	80			16	200	2500	5512
-2005			4125			162.4	100	1076.3	100			20	250	3000	6614

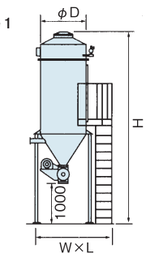


BV

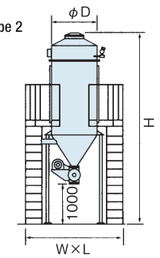
●Filter: Woven filter ●Dust removal: Automatic pulse jet

Model	Dimensions mm A	H	inch A	H	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
BV-1009	600	1620	23.7	63.8	4.1	44	9	914	36	3	70	215	475
-1016	800		31.5		7.2	77	16			4	90	275	607
-1025	1000		39.4		11.3	121	25			5	110	370	816
-1036	1200		47.3		16.2	174	36	914	36	6	130	590	1301
-1049	1400		55.2		22.1	237	49			7	160	685	1511
-2009	600	2180	23.7	85.8	6.5	69	9	1472	58	3	75	230	508
-2016	800		31.5		11.6	124	16			4	95	330	728
-2025	1000		39.4		18.2	195	25			5	110	470	1037
-2036	1200		47.3		26.1	280	36			6	140	750	1654
-2049	1400		55.2		35.6	383	49			7	170	900	1985

■ Shape 1



■ Shape 2

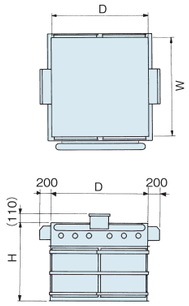


CT

Model	Shape	Dimensions mm D	H	W	L	inch D	H	W	L	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
CT-2008	1	765	3990	1065	1515	30.2	157.1	42.0	59.7	5.8	62	8	1472	58	3	75	315	695
-2014		950	4220	1250	1700	37.5	166.2	49.3	67.0	10.2	109	14			4	90	385	849
-2018		1100	4400	1400	1850	43.4	173.3	55.2	72.9	13.1	140	18				100	470	1037
-2024		1250	4580	1550	2000	49.3	180.4	61.1	78.8	17.4	187	24			5	110	570	1257
-4024		1250	5280	1550	2000	49.3	207.9	61.1	78.8	25.2	271	24	2133	84		115	680	1500

Model	Shape	Dimensions mm D	H	W	L	inch D	H	W	L	Filter Area m²	ft²	Quantity	Length mm	inch	No. of valves	Air supplied quantity [L/min]	Weight kg	lb
CT-2030	2	1400	4760	1700	2600	55.2	187.5	67.0	102.4	21.8	234	30	1472	58	6	125	720	1588
-2038		1525	4930	1825	2725	60.1	194.1	71.9	107.3	27.6	296	38				130	820	1809
-4030		1400	5460	1700	2600	55.2	215.0	67.0	102.4	31.6	340	30	2133	84		130	805	1776
-4038		1525	5630	1825	2750	60.1	221.7	71.9	108.3	40.0	430	38				140	985	2172

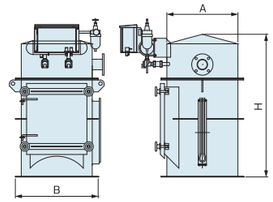
※Mass is only for the tank section.



PPC

●Filter: Molded filter (with jet amp) ●Dust removal: Automatic pulse jet

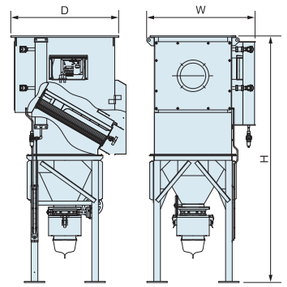
Model	Dimensions						Filter					No. of valves	Air supplied quantity [L/min]	Weight	
	mm			inch			Area		Quantity	Length					
	W	D	H	W	D	H	m²	ft²		mm	inch			kg	lb
PPC-1022	600	600	855	23.6	23.6	33.7	2.8	30	4	250	9.9	2	40	140	309
-2022			1105			43.6	5.6	60		500	19.7			160	353
-3022			1355			53.4	8.4	90		750	29.6			180	397
-1032		850	855		33.5	33.7	4.2	45	6	250	9.9	3	55	170	375
-2032			1105			43.6	8.4	90		500	19.7			200	441
-3032			1355			53.4	12.6	135		750	29.6			230	508
-1042		1200	855		47.2	33.7	5.6	60	8	250	9.9	4	75	220	486
-2042			1105			43.6	11.2	120		500	19.7			260	574
-3042			1355			53.4	16.8	180		750	29.6			300	662
-1033	850	850	855	33.5	33.5	33.7	6.3	67	9	250	9.9	3	60	210	464
-2033			1105			43.6	12.6	135		500	19.7			240	530
-3033			1355			53.4	18.9	203		750	29.6			270	596
-1043		1200	855		47.2	33.7	8.4	90	12	250	9.9	4	80	260	574
-2043			1105			43.6	16.8	180		500	19.7			300	662
-3043			1355			53.4	25.2	271		750	29.6			350	772
-1053		1450	855		57.1	33.7	10.5	112	15	250	9.9	5	100	320	706
-2053			1105			43.6	21.0	225		500	19.7			370	816
-3053			1355			53.4	31.5	338		750	29.6			420	927
-1063		1700	855		66.9	33.7	12.6	135	18	250	9.9	6	120	360	794
-2063			1105			43.6	25.2	271		500	19.7			420	927
-3063			1355			53.4	37.8	406		750	29.6			480	1059
-1044	1200	1200	855	47.2	47.2	33.7	11.2	120	16	250	9.9	4	90	350	772
-2044			1105			43.6	22.4	241		500	19.7			410	905
-3044			1355			53.4	33.6	361		750	29.6			470	1037
-1054		1450	855		57.1	33.7	14.0	150	20	250	9.9	5	110	420	927
-2054			1105			43.6	28.0	301		500	19.7			490	1081
-3054			1355			53.4	42.0	451		750	29.6			560	1235
-1064		1700	855		66.9	33.7	16.8	180	24	250	9.9	6	130	480	1059
-2064			1105			43.6	33.6	361		500	19.7			560	1235
-3064			1355			53.4	50.4	542		750	29.6			640	1412
-1045	1450	1200	855	57.1	47.2	33.7	14.0	150	20	250	9.9	4	95	420	927
-2045			1105			43.6	28.0	301		500	19.7			490	1081
-3045			1355			53.4	42.0	451		750	29.6			560	1235
-1055		1450	855		57.1	33.7	17.5	188	25	250	9.9	5	120	490	1081
-2055			1105			43.6	35.0	376		500	19.7			570	1257
-3055			1355			53.4	52.5	564		750	29.6			650	1434
-1065		1700	855		66.9	33.7	21.0	225	30	250	9.9	6	140	550	1213
-2065			1105			43.6	42.0	451		500	19.7			630	1390
-3065			1355			53.4	63.0	677		750	29.6			720	1588
-1046	1700	1200	855	66.9	47.2	33.7	16.8	180	24	250	9.9	4	100	460	1014
-2046			1105			43.6	33.6	361		500	19.7			530	1169
-3046			1355			53.4	50.4	542		750	29.6			600	1323
-1056		1450	855		57.1	33.7	21.0	225	30	250	9.9	5	125	530	1169
-2056			1105			43.6	42.0	451		500	19.7			610	1346
-3056			1355			53.4	63.0	677		750	29.6			690	1522
-1066		1700	855		66.9	33.7	25.2	271	36	250	9.9	6	150	600	1323
-2066			1105			43.6	50.4	542		500	19.7			690	1522
-3066			1355			53.4	75.6	813		750	29.6			780	1720



MF

●Filter: Molded filter ●Dust removal: Automatic pulse jet

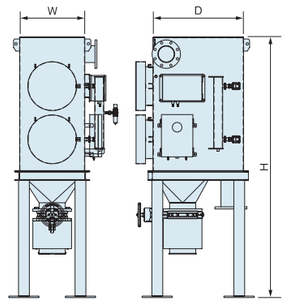
Model	Dimensions						Filter					No. of valves	Air supplied quantity [L/min]	Weight	
	mm			inch			Area		Quantity	Length					
	A	B	H	A	B	H	m²	ft²		mm	inch			kg	lb
MF-2003	ϕ500	ϕ600	800	19.7	23.7	31.5	4.5	48	3	500	19.7	2	30	-	-
-2004	ϕ600	ϕ700	1205	23.7	27.6	47.4	6.0	64	4				40	-	-
-2007	ϕ765	ϕ865	1250	30.2	34.1	49.2	10.5	112	7			3	50	-	-
-2012	ϕ1100	ϕ1200	1345	43.4	47.3	53.0	18.0	193	12			4	100	-	-



TFP

●Filter: Molded filter (with jet amp) ●Dust removal: Automatic pulse jet ●Bag-in Bag-out specifications

Model	Dimensions						Filter					No. of valves	Air supplied quantity [L/min]	Weight	
	mm			inch			Area		Quantity	Length					
	W	D	H	W	D	H	m²	ft²		mm	inch			kg	lb
TFP-0201	747	1060	2472	29.5	44.5	41.7	13.5	145	2	750	29.6	2	20	210	464
-0202	1067		2572	42.1			27.0	290	4				30	270	596
-0302	1067		2952	42.1			40.5	435	6			3	45	320	706
-0303	1387		3222	54.7			60.8	654	9				50	450	993
-0402	1067		3332	42.1			54.0	581	8			4	60	370	816
-0403	1387		3602	54.7			81.0	871	12				70	500	1103



TFP-S

●Filter: Molded filter ●Dust removal: Automatic pulse jet ●Bag-in Bag-out specifications

Model	Dimensions						Filter					No. of valves	Air supplied quantity [L/min]	Weight	
	mm			inch			Area		Quantity	Length					
	W	D	H	W	D	H	m²	ft²		mm	inch			kg	lb
TFP-S0201	920	1034	2153	36.2	40.7	84.8	11.0	118	2	500	19.7	2	20	420	926
-S0301			2593			102.1	16.5	177	3			3	30	490	1081
-S0202	1318		2153	51.9		84.8	22.0	236	4			2	40	520	1147
-S0302			2593			102.1	33.0	355	6			3	60	600	1323

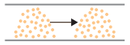
HSF

Continuous dense phase high pressure conveyance

Amano's unique high-sealing rotary feeder brings low-cost and low crush rate.

This is a compact high-pressure feed system using a high-sealing rotary feeder. The dust supply section is simple compared to systems using blow pots. This is a cyclic low-speed high-concentration transfer feed system having a transfer speed of 4 to 6 meters per second so there is almost no danger of crushing. Employing a custom helical rotor drastically reduces crushing of dust particles due to bite-in.

- Minimal crushing
- High quality material conveyance
- Compact



Plug conveyance

Specifications

Conveyance speed	1～15m/s
Conveyance quantity	～20t/h
Conveyance distance	～300m
Conveyance pressure	～+300kPa
Air source	Compressor

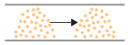
HAF

High pressure conveyance

Ideal for conveyance dust that cannot be allowed to crush and for long distance conveyance.

Plug shaped particles are pressed, moved and fed by static pressure from conveyance air feed. In the HAF system there is almost no crushing for conveying dust particles since the conveyance speed is low.

- Minimal crushing
- High quality material conveyance
- Long-distance large-volume conveyance



Plug conveyance

Specifications

Conveyance speed	1～15m/s
Conveyance quantity	～200t/h
Conveyance distance	～2000m
Conveyance pressure	～+700kPa
Air source	Compressor

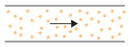
LAF

Low pressure conveyance

Ideal for short distance conveyance or conveying from 1 to multiple locations.

By using the dynamic pressure of the conveyance air, the particles are flown through the conveyance pipe at relatively low densities. The conveyance speed is much greater than that of the high-pressure conveyance system at a typical speed of 20 to 30 m/s.

- Low cost
- Multiple conveyance



Low-concentration conveyance

Specifications

Conveyance speed	15～40m/s
Conveyance quantity	～100t/h
Conveyance distance	～200m
Conveyance pressure	～+100kPa
Air source	Turbo / Roots blower

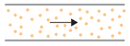
VAF

Low-pressure intake conveyance

Ideal for conveying/feeding from several locatons to one location.

By sucking both particles and air, the particles are conveyed by the air flow resulting from sub-atmospheric pressure. By using dynamic pressure of the conveyance air, the particles are lifted and transported. The conveyance air speed is typically 20 to 30 m/s. Vacuum conveyance produces cooling and drying effects on the conveyed items, and is best suited in conveying particles from narrow and deep locations.

- Low cost
- Cluster conveyance



Low-concentration conveyance

Specifications

Conveyance speed	15～40m/s
Conveyance quantity	～100t/h
Conveyance distance	～200m
Conveyance pressure	～−60kPa
Air source	Turbo / Roots blower

Test plant

Dust particle handling plant

At this plant, pneumatic conveying testing of dust provided by the customer is carried out.

The dust particle handling plant makes conveying tests of the target dust particles for conveying and accumulates data for designing an actual plant. Here, equipment is installed to allow dealing with dust by efficiently gathering data for handling diverse types of dust particles. The conveying distance can be measured from short distances of 39 meters to long distances of 184 meters.Here, 10 or more conveyance test patterns are executed to match the customer's application.

※Performance values might change from those shown on custom order specifications.

EV/FV

Suction type general-purpose dust conveying feeder

Installable at a reasonable cost.
Compact pneumatic conveying feeder.

Specifications

Model		FV-3
Suction air source		Brushless blower motor
Power supply		3-phase 200V 50/60Hz common use
Output	kW	2.0
	HP	2.6
Dimensions	mm	ϕ405×1295
	inch	16×51
Filter Quantity		1
Filter area	m^2	0.7
	ft^2	7.5
Dust removal		Automatic pulse jet (At fixed interval)
Compressed air consumption		20 L/min 0.5MPa to 0.7MPa (for pulse jet)
Compressed air coupling port	mm	6A
	inch	0.3A
Exhaust valve specifications		Weight damper method
Control system		Electrical control
Suction hose diameter	mm	ϕ38
	inch	ϕ1.5
Main material		SUS or SPHC
Weight	kg	80
	lb	177

FPV

Suction type general-purpose dust conveying feeder

Small size pneumatic conveying feeder.

No tools required for dismantling

Standard filter (Polyester)

Resin filter (Polyethylene)

Specifications

Model			FPV-40	FPV-40X	FPV-50	FPV-50X	FPV-65	FPV-65X
Filter box	Outer diameter (nominal)	mm	ϕ356(350A)		ϕ456(450A)		ϕ558(550A)	
		inch	14(350A)		18(450A)		22(550A)	
	Design withstand pressure [kPa]		−50(intake)					
Dust removal	Method		Automatic pulse jet (At fixed interval)					
	Diaphragm valve [pcs.]		1		2		3	
	Pulse jet compressed air pressure [MPa]		Normally 0.4 to 0.5					
Filter	Name		Standard filter	Resin filter	Standard filter	Resin filter	Standard filter	Resin filter
	Material		Polyester	Polyethylene	Polyester	Polyethylene	Polyester	Polyethylene
	Quantity		1	9	2	18	3	27
	Area	m^2	1.17	1.07	2.34	2.13	3.50	3.20
		ft^2	12.5	11.5	25.1	22.9	37.6	34.4
	Cleaning (water-washing)		×	○	×	○	×	○
Section hopper	Suction port diameter (nominal)	m	38.1 (Sanitary 1.5S ferrule)		50.8 (Sanitary 2.0S ferrule)		63.5 (Sanitary 2.5S ferrule)	
		inch	1.5 (Sanitary 1.5S ferrule)		2 (Sanitary 2.0S ferrule)		2.5 (Sanitary 2.5S ferrule)	
	Slope angle standard [degrees]		60					
	Exhaust port diameter		4.5S(100A)		6.5S(150A)		8.5S(200A)	
			ISO standard ferrule					
Electrical components	Standard (pilot valve box)		Pulse jet board & pilot valve 200V/100V selectable specifications					
Unit material	Material		SUS304					
	Surface treatment		Inner/outer surface buffing (※Inner/outer surface #400)					
Weight		kg	Approximately 55	Approximately 55	Approximately 70	Approximately 75	Approximately 85	Approximately 95
		lb	Approximately 122	Approximately 122	Approximately 155	Approximately 166	Approximately 188	Approximately 210

Vacuum conveying system

Suction type general-purpose dust conveying feeder

Water-washable & modular design.

Tool free and easily disassenblable

- Easy installation with a compact design
- Eliminates ignition sources with a fully pneumatic design (ATEX certified)
- Improves working enviroment with a sealed structure that eliminates dust emissions
- Offers high flexibility in designing the conveyance line

Specifications

Model		AGR-130	AGR-150	AGR-200M	AGR-200
Cylinder diameter	mm	200	250	350	450
	inch	8	10	14	18
Overall height	mm	704	870	1016	1315
	inch	28	34	40	52
Batch capacity	L	2.5～3.0	5.5	12.9	26.0
	U.S.gallon	0.7～0.8	1.5	3.4	6.9
Conveying capacity [L/h]		100～500	500～1000	1000～2000	2000～3000
Number of filters [quantities]		1	2	4	7
Air consumption	at0.55MPa[NL/min]	344～516	344～1720	516～3440	860～4300
Material of the main body		SUS316L			
Material of filters		Conductive polyester non-woven fabric with PTFE film / High-density sintered polyethylene / Stainless steel			
Weight	kg	20	30	40	50
	lb	44	66	88	110

Filter for Compact Dust Collectors

Main filter is listed. Others are also available. The listed product names and commercial names are each trademarks or registered trademarks of their companies.

Name	Standard filter (Polyester Spunbond)			
Material	Polyester			
Surface treatment	–			
Corresponding models	PiF			
Application	General dried particles (particle diameter about 10μm)			
Features	For dust having a particle diameter of about 10μm.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Canvas filter			
Material	Cotton			
Surface treatment	–			
Corresponding models	VNA			
Application	General dried particles (particle diameter about 10μm)			
Features	For dust having a particle diameter of about 10μm.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Vibration	×

Name	Anti-electrostatic filter			
Material	Polyester			
Surface treatment	Stainless evaporation			
Corresponding models	PiF-D/SD			
Application	Electrostatic characteristic dust (particle diameter about 10μm)			
Features	Specifications give high charge prevention effect and make cause of dust explosions unlikely to occur.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Canvas Finefil filter			
Material	Cotton + fluororesin porous thin film			
Surface treatment	Fluororesin porous thin film laminate processing			
Corresponding models	VNA			
Application	Dried fine particles (particle diameter 10μm or less)			
Features	For dust having a particle diameter of about 10μm or less.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	◎	normal temperature 40℃ (104˚)	Vibration	×

Name	OW filter			
Material	Polyester+Acrylic resin			
Surface treatment	–			
Corresponding models	PiF			
Application	Dust including watery oil			
Features	Maintains breathability even in dust containing oily and wet partcles			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	△	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Anti-electrostatic filter			
Material	Polyester			
Surface treatment	Metal wire net weaving			
Corresponding models	VNA-SDN/DN			
Application	electrification characteristic dust (particle diameter about 10μm)			
Features	Specifications give high charge prevention effect and make cause of dust explosion unlikely to occur.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Vibration	×

Name	Resin filter			
Material	High molecular weight polyethylene			
Surface treatment	Polyethylene sintering			
Corresponding models	IX · IXR · FPV · FP-N · FPV-2S			
Application	Toner fine powder (particle size 10μm or less)			
Features	For fine powders such as toner. Water-washable			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	◎	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Standard filter (Polyester Spunbond)			
Material	Polyester			
Surface treatment	–			
Corresponding models	FCN · Mi · PiH			
Application	General dried particles (particle diameter about 10μm)			
Features	For dust having a particle diameter of about 10μm.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Electret filter			
Material	Polyester+polyethlene+polypropylene			
Surface treatment	–			
Corresponding models	VF-5HG · VF-5HN			
Application	Fumes adhering during laser marking			
Features	Due to erect fibers on inner surface is not prone to clogging even from adhering fumes, also efficiently traps high percentage of tiny attached fumes by static electricity.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	◎	normal temperature 40℃ (104˚)	None	×

Name	Finefil filter			
Material	Polyester			
Surface treatment	Fluororesin porous thin film laminate processing			
Corresponding models	FCN · Mi · PiH			
Application	Dried fine particles (particle diameter 10μm or less)			
Features	For dust having a particle diameter of about 10μm or less.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	◎	normal temperature 40℃ (104˚)	Pulse jet	×

Name	Nanofiber filter			
Material	PET blend cellulose			
Surface treatment	Nanofiber film laminate			
Corresponding models	FD-10			
Application	Dried fine particles (particle diameter 10μm or less) and fumes			
Features	For dried fine particles (particle diameter 10μm or less) Flame retardance			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	◎	normal temperature 40℃ (104˚)	Vibration	○

Name	Anti-electrostatic filter			
Material	Polyester			
Surface treatment	Stainless evaporation			
Corresponding models	PiE-SDN/DN			
Application	Electrostatic characteristic dust (particle diameter about 10μm)			
Features	Specifications give high charge prevention effect and make cause of dust explosions unlikely to occur.			
	Collecting efficiency	Heat resistant temperature (F)	Dust removal	Noncombustibility
	○	normal temperature 40℃ (104˚)	Pulse jet	×

Filter for Systematic Pulsejet Dust Collectors

We select and design filter for dust collectors to match the customer's application.
The listed product names and commercial names are each trademarks or registered trademarks of their companies.

Name	Tetoron felt				
Material	Polyester				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT				
Application	General dried particles (particle diameter about 10μm)				
Features	General dried particles (particle diameter about 10μm) Standard filter. Most widely used item.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 120℃ (248˚)	△	△	×

Name	PTFE felt				
Material	Toyofuron (fluororesin fiber)				
Surface treatment	Special processing				
Corresponding models	WRT · BV · CT · HGD				
Application	High-temperature dust collection (particle size about 10μm)				
Features	This filter is for high-temperature dust collection. This filter is preferably detachable and allows air to pass. Besides it has extremely good chemical resistance.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 260℃ (500˚)	◎	◎	○

Name	Finefil tetoron felt				
Material	Polyester				
Surface treatment	Fluororesin porous thin film laminate processing				
Corresponding models	WRT · BV · CT				
Application	General dried particles (particle diameter about 10μm)				
Features	For dried fine particles (particle diameter 10μm or less) Is preferably detachable.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	◎	normal temperature 120℃ (248˚)	△	△	×

Name	P84				
Material	Polyimide				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT · HGD				
Application	High-temperature dust collection (particle size about 10μm)				
Features	This filter is for high-temperature dust collection.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 240℃ (464˚)	○	○	×

Name	Tetoron felt impregnated with teflon				
Material	Polyester+impregnated fluororesin				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT				
Application	Dust containing moisture (particle diameter about 10μm)				
Features	This filter has water repellency. Maintains breathability even in dust containing watery oil.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 120℃ (248˚)	△	△	×

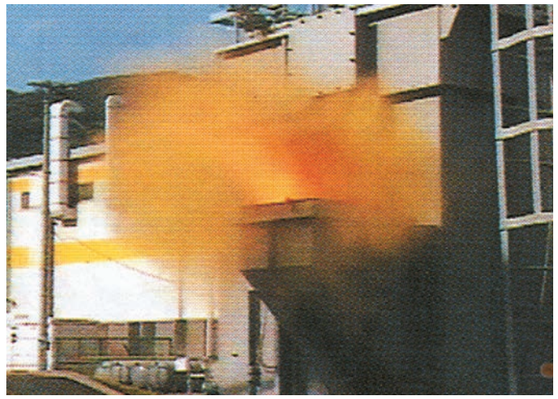
Name	Tefaire				
Material	Fluororesin fiber + glass fiber				
Surface treatment	Special processing				
Corresponding models	WRT · BV · CT · HGD				
Application	High-temperature dust collection (particle size about 10μm)				
Features	This filter is for high-temperature dust collection. Extremely good trapping performance and chemical resistance.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	◎	normal temperature 230℃ (446˚)	◎	◎	○

Name	Pyrene felt				
Material	Polypropylene				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT				
Application	Acidic, alkaline dust (particle size about 10μm)				
Features	Excellent chemical resistance				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 85℃ (185˚)	○	○	×

Name	Heat-resistant nylon felt				
Material	Aramid				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT · HGD				
Application	High-temperature dust collection (particle size about 10μm)				
Features	This filter is for high-temperature dust collection.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 170℃ (338˚)	△	○	×

Name	PPS felt				
Material	Polyphenylene sulfide				
Surface treatment	Singed				
Corresponding models	WRT · BV · CT · HGD				
Application	High-temperature dust collection (particle size about 10μm)				
Features	This filter is for high-temperature dust collection.				
	Collecting efficiency	Heat resistant temperature (F)	Acid-resistant	Alkali-proof	Noncombustibility
	○	normal temperature 160℃ (320˚)	○	○	△

Do you know that...? Hazardous dust collector explosions



Dust explosion. This hazard is not as well recognized as the threat from inflammable gas and fluids. However, compared to the same volume of gas the mass is considerably larger so the explosion is huge. Each dust or powder explosion that occurs leaves behind a tremendous amount of damage and tragedy. Amono does continual R&D work into preventing these dust and powder explosions.

Three conditions leading to dust explosions

Oxygen

Dust in concentration higher than the explosion lower limit threshold

Minimum ignition energy

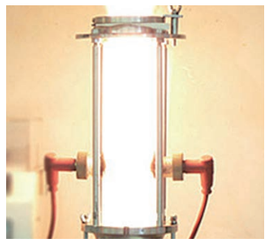
Dust explosions occur when the 3 conditions of "oxygen", "Dust concentration higher than explosion threshold", and "minimum ignition energy" are all present. If even just 1 of these conditions can be eliminated then dust explosions can be prevented. So the crucial point in preventing explosions is eliminating oxygen or sources of sparks.

Dust and powders that might cause explosions

- Magnesium
- Aluminum
- Aluminum light alloys
- Iron powder(non-oxidized)
- Epoxy resin
- Cornstarch
- Titanium
- Toner

Other inflammable powders

Consult Amano for dust explosion countermeasures



In client consultations for dust explosion pressure diffusion type dust collectors we always make a test analysis of the following items…

- **Explosion index** Kst value
- **Maximum explosion pressure** Pmax
- **Minimum ignition energy** MIE

Test analysis ※To propose the best dust collector equipment.

※Tests fee will be charged Environmental Technology Co., Ltd. does the testing.

Guide to selecting hood types & required air blow quantity

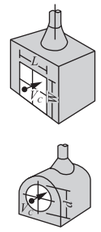
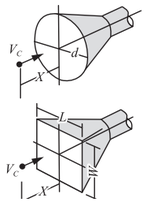
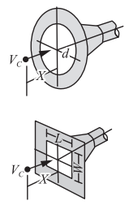
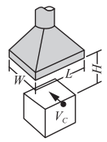
Capture velocity determined by dust ordinances

Hood models		Capture velocity (m/s)
Enclosure type hood		0.7
External attached hood	Side intake type	1.0
	Downward intake type	1.0
	Upward intake type	1.2

※The capture velocity for the designated dust emission source may differ sometimes from the above content.

Hood installation methods	Capture velocity (m/s)
Method for enclosing entire device containing rotor	0.5
Method for covering opening in hood in a direction where dust caused by rotation of rotor might fly outwards.	5.0
Method for enclosing just the rotor	5.0

Remarks
1. The capture velocity used in this table is called the capture velocity when all hoods on all simultaneously used local exhaust ventilation devices are open.
2. The capture velocity used in this table is called the minimum wind velocity through the open side of the hood when the rotor is stopped.

Hood models	Sample drawing	Airflow (m^3/min)
① Enclosure type	 Opening surface area : $A(m^2)=L(m) \times W(m)$ $A=\frac{\pi}{4}\cdot d^2$	$Q = 60 \cdot A \cdot V_O$ $= 60 \cdot A \cdot V_C \cdot k$ V_O : Average wind velocity at open side[m/s] V_C : Capture velocity[m/s] k : Correction coefficient for irregular wind velocity
② Externally attached type ※Circular or rectangular hood mounted in free space	 $A=\frac{\pi}{4}\cdot d^2$ Distance : $X(m)$ $A = L \cdot W$ Aspect ratio : $W/L > 0.2$	$Q = 60 \cdot V_C \cdot (10X^2 + A) \cdot k$ k : Correction coefficient for disturbance flow
③ Externally attached type ※Circular or rectangular hood with flange mounted in free space	 $A=\frac{\pi}{4}\cdot d^2$ $A = L \cdot W$ $W/L>0.2$	$Q = 60 \cdot 0.75 \cdot V_C \cdot (10X^2 + A) \cdot k$ k : Correction coefficient for disturbance flow
④ Externally attached type ※Circular or rectangular canopy type hood	 Canopy perimeter : $P = 2(L + W)$ Height coefficient : $H/L \leqq 0.3$	$Q = 60 \cdot 1.4 \cdot P \cdot H \cdot V_C \cdot k$ k : Correction coefficient for disturbance flow

Correction coefficient

Opening area		Correction coefficient k	
m^2	ft^2	Enclosure type	Externally attached type
~0.2	~2	1.1	1.2
0.3~0.5	3~5	1.2	1.3
0.6~1.0	6~10	1.3	1.4
1.1~2.0	11~21	1.3	1.5
2.1~3.0	22~32	1.4	1.5
3.1~	33~	1.5	1.5

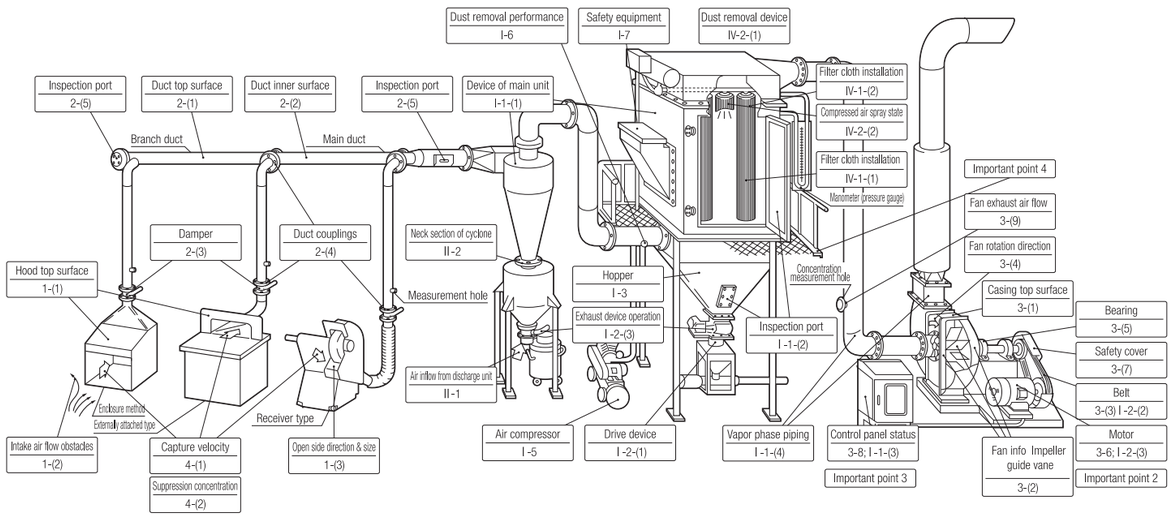
※Correction coefficient k is a given value depending an the situation.

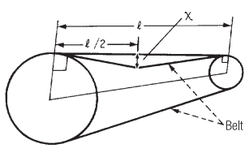
Exhaust ventilation (dust removal) device periodic self-inspection guidelines

Autonomous inspection guidelines (Public bulletin No. 5 No. 6) based on Article 45 item 3 of the labor safety health law.

Daily inspections provide important data for pinpointing causes of equipment breakdowns, the periodic inspection table (6-month as general guide) is vital data for maintaining the equipment service life so be sure to do the daily self-inspections according to schedule.

For local exhaust (dust removal) devices, the periodic self-inspections and their records shall be filed for a period of 3 years.





Note 1 Belt slack amount (×)0.01L<×<0.02L
Note 2 Range of electric motor surface temperature and peripheral (coolant) temperature.
Inspect fan after operating for 1 hour.

1.Hood・2.Duct・4. intake-exhaust performance

Item		Inspection item	Inspection method and tools	Judgement criteria
Hood and intake-exhaust performance	1-（1）	Check for any wear, corrosion or deformation	Visual, touch	Shall have no abnormalities that lower intake air capacity.
	1-（2）	Intake status (any impediments)	Visual, smoke tester	Shall completely suction in the air stream.
	1-（3）	Receiver type opening side direction & size	Visual	Shall be no dispersal to outside the hood.
	4-（1）	Capture velocity (at designated position)	Wind gauge	Shall be specified value or higher.
	4-（2）	Suppresion concentration (at designated position)	Shall conform to work environment measurement criteria	Shall not exceed the specified value.
Duct	2-（1）	Check for any wear, corrosion or deformation on outer surface	Visual	Shall be no air leaks, and no increased resistance
	2-（2）	Check for any breakage and dust accumulation on inner surfaces	Ultrasonic thickness gauge, manometer, stethoscope to check for surface impacts	Shall be no abnormalities due to wear, corrosion, or depositions. ● Shall be no drastic difference versus design plate thickness ● Shall be no drastic difference in design value for static pressure of duct
Damper	2-（3）	Adjustment & clamped state of air flow adjuster valve opening Cutoff operation of selector valve, etc.	Visual, smoke tester	Shall be in a state capable of maintaining performance Shall operate correctly with light force.
Coupling section	2-（4）	Check for any breakage, missing items, loosenes in coupling section	Visual, auditory, smoke tester, manometer (pressure gauge)	Shall have no air leakage and no inflow. ● Shall be no drastic difference in design value for static pressure of duct
Inspection port	2-（5）	Inspection window open/close state	Smoke tester	Opening and closing shall be smooth with no air leaks.
Safety	Important point 4	Safety measures for inspection scaffold and passage away.	Visual, safety & health regulations	Shall be no corrosion, breakage or looseness.

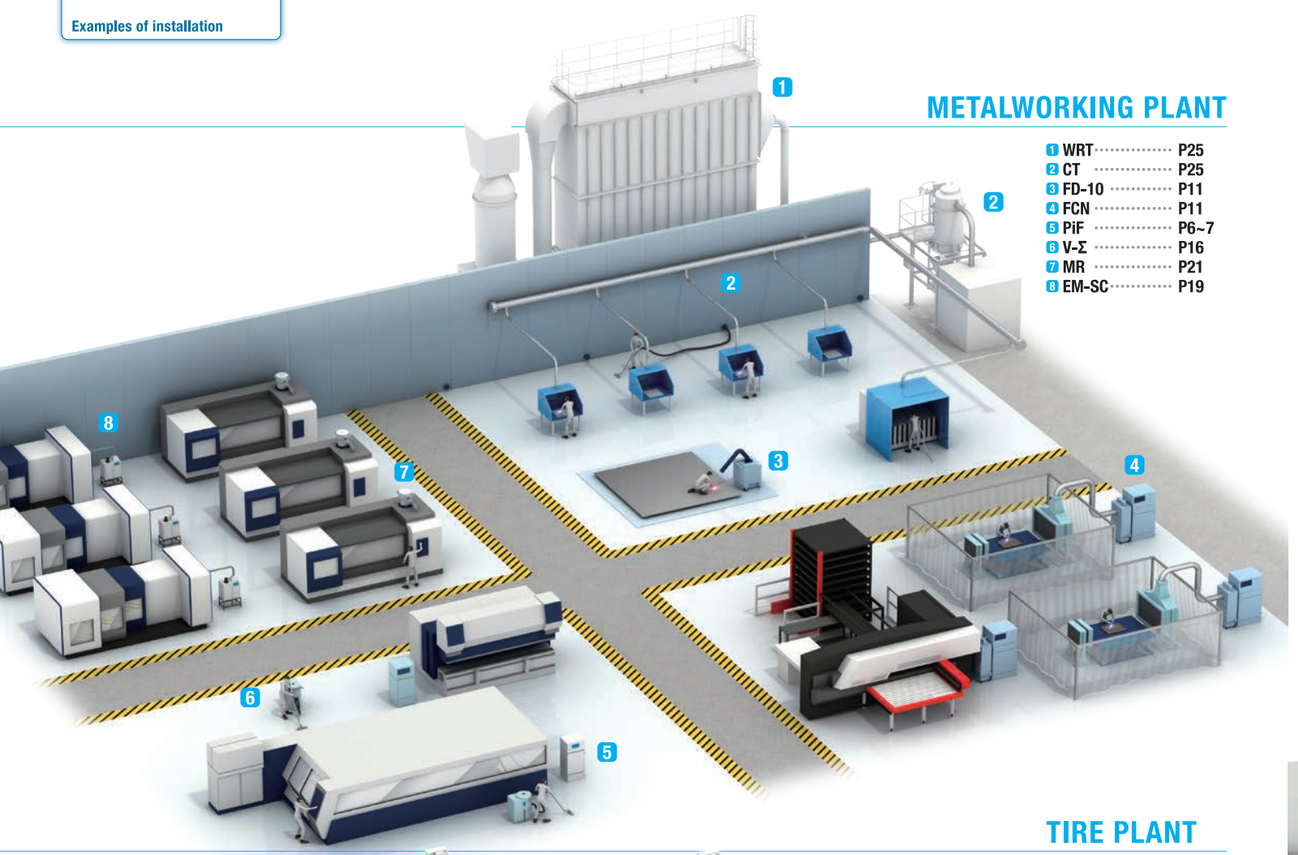
3. Fan and electric motor

Item		Inspection item	Inspection method and tools	Judgement criteria
Fan	3-（1）	Casing outer surface wear-corrosion and deformation	Visual	Shall be no abnormalities to impair fan functions.
	3-（2）	Check for any wear, corrosion, deformation dust adhering on the casing inner surface & impeller and guide vane.	Visual, thickness gauge, scraper	Shall be no abnormalities to impair fan functions.
Belt	3-（3）	Check for any belt wear/damage, amount of droop, pulley wear, eccentricity, rpm (when there is insufficient intake exhaust performance)	Visual, touch, scale, deflection gauge, tachometer	Shall be no breakage, eccentricity, or looseness.(See Note 1) Shall be specified RPM.
Rotation direction	3-（4）	Check direction (when intake exhaust performance is inadequate)	Visual	Shall be specified rotation direction
Fan bearing	3-（5）	Abnormal bearing sounds, temperature, oil and grease oil quantity and state of impurities	Auditory, touch, surface temperature, visual	Shall be no abnormal sounds, difference versus ambient temperate shall be 40℃(104℉) or less at a surface temperature of 70℃(158℉).
Motor	3-（6）	Status of winding and case, winding and ground terminal for insulating resistor and surface termperature	Insulation resistor tester, surface temperature meter	Shall be specified value or more. (See Note 2 for state of change in surface temperature)
Safety cover	3-（7）	State of safety covers such as for belts.	Visual, touch	Shall be no wear deformation and no looseness in installation section.
Control panel	3-（8）	Display lamp (display cover) name plate broken/missing, looseness in terminals such as causing operating defects in meters, check for discoloration, dust accumulation status	Visual, tester, clamp-meter	Shall be no breakage or missing items and no operating defects. Shall be no accumulated dust adhering
Fan exhaust air flow	3-（9）	Measure the air flow distribution within duct on inlet or outlet port, and calculate the exhaust flow quantity (when intake exhaust performance is low)	Air flow gauge, Manometer	Shall be required air flow or greater to meetjudgment criteria for intake/exhaust performance.
Safety	Important point 2,3	Safety measures for machine and electrical inspections	Safety & health regulations	Shall have hazard prevention measures installed.

Dust removal device (Air cleaning device)

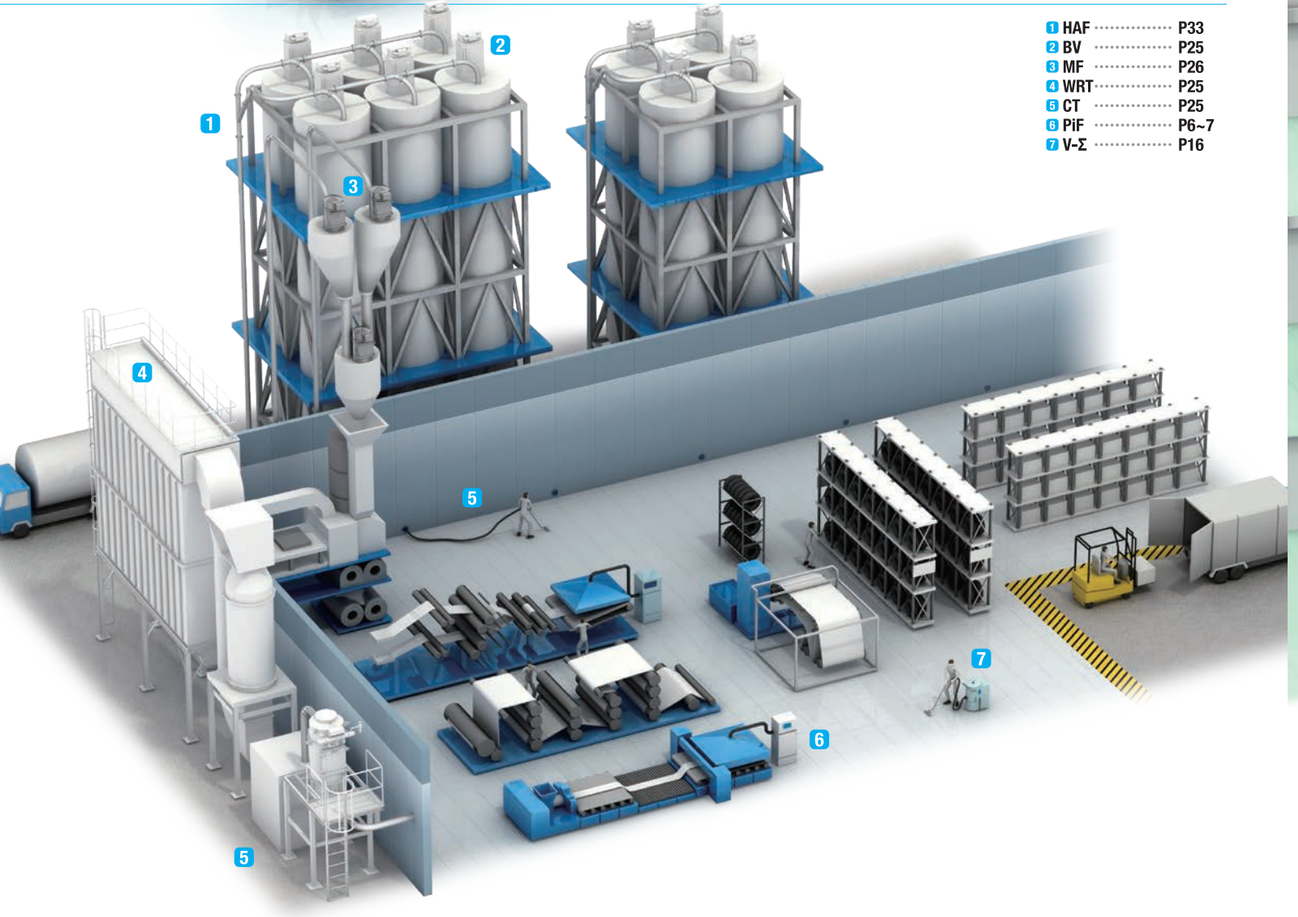
Item			Inspection item	Inspection method and tools	Judgement criteria
Dust collector	Device main unit section (including coupling duct)	I-1-（1）	Outer surface wear, corrosion, breakage, accumulated dust status	Visual (inspection door or coupling), stethoscope to check for surface impacts, ultrasonic thickness gauge, manometer, air flow meter	There shall be no abnormalities (breakage, looseness, dust, etc.) that lower the performance of the dust collector equipment.
	Inspection port	I-1-（2）	Inspection door open/close state	Touch tasks	Shall open/close smoothly and seal securely.
	Vapor phase piping	I-1-（4）	For the damper: check status of other bypass valves and flexible joints the same as 2-(3)	Visual, auditory	Shall operate smoothly and shall be no abnormalities (breakage, air leakage and dust accumulation, etc.) that lower performance
	Belt etc.	I-2-（2）	For the belt and so on: Check status of lubrication and dust adhering to other chains the same as 3-(3)	Visual	Shall be no abnormalities from dust adhering & no lack of oil.
	Hopper, exhaust damper, rotary valve, etc.	I-3	Status of external and inner sections (inspection door or impact noises) Exhaust status and operation of exhaust equipment	Visual, auditory, listen for surface impact	Shall be no dust leakage or abnormalities due to dust accumulation. Shall be no drop in smooth discharge function, operating defects, abnormal sounds, and abnormal vibration.
	Air compressor	I-5	Investigate pressure and check for abnormalities in meters Check for drain within air receiver	Visual	Pressure shall be in range of design values, and drainage shall be minimal.
	Dust removal performance	I-6	Measure the concentration in the upper and lower flow sections of main unit and find the dust removal efficiency.	Method specified in JIS-Z-8808, etc.	Design values shall be within the specified range.
	Safety equipment	I-7	Check for defects in operation of pressure dispersion vent, fire damper, interlock release valve, etc.	Touch tasks, visual	Shall operation smoothly and satisfactorily.
Cyclone type	Cyclone	II-1	Check status of air inflow at dust exhaust unit of intake type cyclone	Visual, smoke tester	Shall be no intake of smoke or dust.
		II-2	Check dust accumulation on neck section and breakage/wear status	Listen for impacts, ultrasonic thickness gauge	Shall be design thickness or higher with no abnormal deposits/accumulations.
Filtering method	Filter material	IV-1-（1）	Measure the before and after pressure differential and check for any clogs, breakage, deterioration, and dampness	Visual, touch, manometer (pressure gauge)	Shall be no abnormalities that lower filter performance, pressure differential shal be within design value range.
	Filter material installation	IV-1-（2）	Check installation status and breakage in clamping parts of omissions/uneven clamping	Visual, touch	Shall be securely tightened and in a suitable state with nothing loose or missing or drooping.
	Shakedown unit	IV-2-（1）	Check status of reverse flow fan（Same as 3-(9)）for wear, corrosion, deformation, and abnormal vibration during operation & abnormal sounds	Visual, auditory	Shall operate smoothly and shall be no abnormalities breakage, abnormal vibrations or sounds that lower dust removal function.
	Compressed air spray device	IV-2-（2）	Check operation spray sounds of pilot and diaphragm valve & for water oil during compressed air, air leaks during non-spray	Auditory, check paper leakage	Shall have normal spray sounds and no air leakage sounds, and no paper leakage in air from spray nozzle.
Safety		Important point 4	Safety measures for inspection scaffold and passage away.	Visual, touch	Shall be no corrosion, breakage or looseness.

METALWORKING PLANT

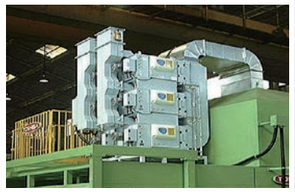


1 WRT ····· P25
2 CT ····· P25
3 FD-10 ····· P11
4 FCN ····· P11
5 PiF ····· P6~7
6 V-Σ ····· P16
7 MR ····· P21
8 EM-SC ····· P19

TIRE PLANT



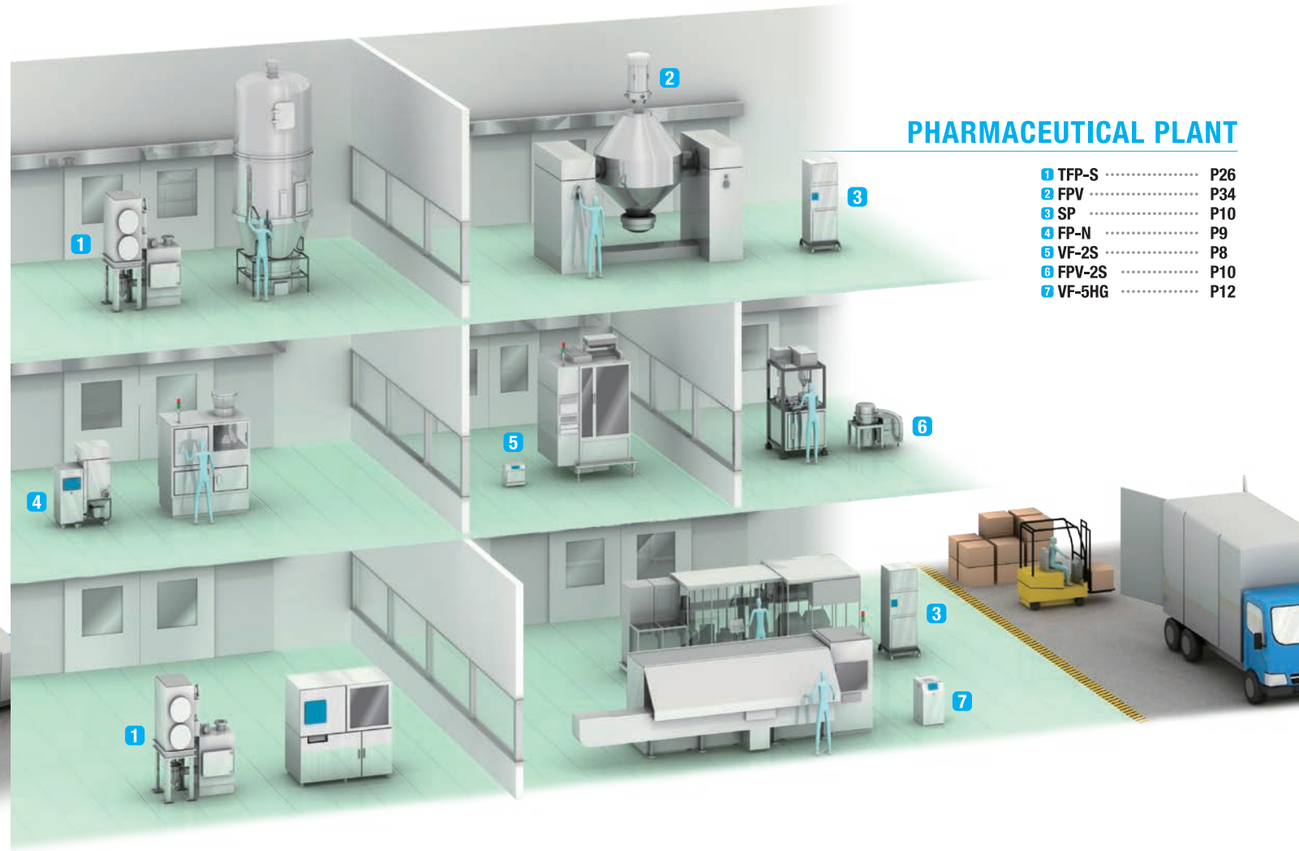
1 HAF ····· P33
2 BV ····· P25
3 MF ····· P26
4 WRT ····· P25
5 CT ····· P25
6 PiF ····· P6~7
7 V-Σ ····· P16



Amano environmental products

Our dust collectors, vacuum cleaners, mist collectors, pneumatic conveying systems are used in all sections of production plants. We design and provide ideal systems that meet customer needs and applications.

PHARMACEUTICAL PLANT



1 TFP-S ····· P26
2 FPV ····· P34
3 SP ····· P10
4 FP-N ····· P9
5 VF-2S ····· P8
6 FPV-2S ····· P10
7 VF-5HG ····· P12

We also have a number of overseas delivery records. Feel free to consult us whenever you like.

■ Overseas local subsidiaries
https://www.amano.co.jp/corp/group/oversea.html

To Ensure Safe Operation

Standard Dust Collectors (VNA,PiF,VF-5N,IS-15,IP, IX,IB,VF-2S,SP,FP-N,FPV-2S and Large-scale Dust Collectors)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Standard model dust collectors are for collecting dust/powder that is not likely to cause fires or dust explosions.
- Do not suction the following materials:
  - · Explosive materials .....magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Sparks .....sparks, or dust that contains sparks
  - · Fire remains .....cigarette stubs, ashes, etc.
  - · Others.....water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- In case of suctioning dust including sparks produced by polishing or cutting work, Pre-dust box is required. Consult with Amano branch office to select the appropriate model.
- This machine is not an explosion-proof type. Do not install the machine at hazardous area specified by laws.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for installation.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- When using an antistatic filter, use a steel bucket.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.
- As for collecting explosive dust, consult with your Amano representative, since dust explosion pressure diffusion type dust collector are available.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

VNA,FCN

- If piping must be connected to the exhaust port then order an item with sealed structure specifications. When connecting piping to a standard specification (non-countermeasure part) exhaust port, then air leaks might occur from the upper section of the unit.

Laser marking dust collector (PiH)

- This device collects dust from fumes and deodorizes odors from those fumes.
- Among other item, please comply with all caution items for standard dust collectors.

Dust explosion pressure diffusion type dust collector(VN-SD, PiF-D/SD, PiE-60DN, IX-D, IP-D)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Dust explosion pressure diffusion type dust collector collects flammable dust (with dust explosiveness). Flammable substances, flammable gases and mixtures of flammable dust and gases can not be collected.
- Do not suction the following materials:
  - · Highly combustible potentially explosive materials..... magnesium, etc.
  - · Flammable materials..... gasoline, thinner, benzene, kerosene, paint, etc.
  - · Sparks ..... sparks, or dust that contains sparks
  - · Fire sources ..... such as cigarette stubs, ashes, etc.
  - · Others..... water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- To change the type of inflammable dust for collection, have an (fee-charging) evaluation made for the extent of dust explosiveness, and only device on dust confirmed to be collectable by this device.
- We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- Dust explosion pressure diffusion type dust collectors are designed to maintain conditions under which it is difficult for explosions to occur; however, they cannot completely prevent explosions.
- Please evaluate the explosion characteristics of the target dust from the dust explosion hazard test etc., and select an acceptable model for the result.
- Dust explosion pressure diffusion type dust collectors are basically outdoor equipment designed to lower the risk during explosion force dispersion. In case the dust collectors are installed indoors,the dust explosion pressure diffusion increase the riks of damage.
- To set it up indoors, be sure take a protective measure against dust explosion (including protection wall installation, elimination of elements which hamper the diffusion of explosion pressure, etc.). Along with the measure, change it to a fire extinguishing specification to alleviate the hazard induced by explosion pressure diffusion.
- Install dust explosion pressure diffusion type dust collectors in a place where people will not be working above it. Also, do not place any factory equipment on or above the machine.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for instllation.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F). (system is not applicable)
- Be sure to ground the machine to protect against electrical shock and to remove static electrical charges.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to the dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- To prevent static buildup, do not use dust bag.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- In the event a dust explosion occurs please request an inspection by our company.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas.If intending to use this device outside Japan then please consult with our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

Fume Collector (FD-10, HF, FCN)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The Fume Collector FCN series is designed to collect fumes from welding or cutting as well as sparks emitted during those tasks.
- Do not suction the following materials (they could cause explosions):
  - · Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Adhesive materials.....water-soluble mist, oil mist, etc.
  - · Other .....water, oil, liquid chemicals, cigarette stubs, ashes, as well as toxic dust from asbestos, etc.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.
- As for collecting explosive dust, consult with your Amano representative, since dust collectors equipped with anti-explosion mechanisms are available.

DB

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The DB series is a preprocessor device for preventing sparks from entering within the dust collector.
- Do not suction the following materials:
  - · Explosive materials .....aluminum, magnesium, titanium, zinc, epoxies, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Abrasive dust.....such as dust emitted from high-speed cutters and grinders, etc.
  - · Fire sources .....such as cigarette stubs, ashes, etc.
  - · Other .....water, oil, liquid chemicals, paper or other combustible waste, as well as toxic dust from
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.

SR

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The SR Series dust collectors are preprocessor devices designed to present dust collector filter blockages and allow a long-term filter replacement cycle.
- If the aim is spark prevention then use the bucket type.
- Do not suction up the following materials:
  - · Explosive materials .....aluminum, magnesium, titanium, zinc, epoxies, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Fire sources .....such as cigarette stubs, ashes, etc.
  - · Others.....water, oil, liquid chemicals, toxic dust such as asbestos, etc.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or dust bag.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consult our company beforehand.

Industrial vacuum cleaners·concentrated cleaning systems (V-Σ,IPR/IXR,central cleaning)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This device is for collecting ordinary dust/powder that is not likely to cause fires or dust explosions.
- Do not suction the following materials:
  - · Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Sparks .....sparks, or dust that contains sparks
  - · Fire sources .....such as cigarette stubs, ashes, etc.
  - · Other fluids .....such as water, oil, liquid chemicals, etc.
- If there is a danger of suctioning sparks when collecting flammable dust from polishing work and so forth, consult with your branch or sales office to select the appropriate model.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket or hopper.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

Dust explosion pressure diffusion type industrial vacuum cleaner (V-SDR)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The collecting dust of the dust-explosion pressure diffusion type industrial vacuum cleaner shall be the combustible dust of which we are ensured of dust-collecting capability by the evaluation of its dust explosion hazardous characteristics.
- Do not suction the following materials:
  - · Highly combustible potentially explosive materials..... magnesium, etc.
  - · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  - · Sparks .....sparks, or dust that contains sparks
  - · Fire sources .....such as cigarette stubs, ashes, etc.
  - · Other fluids .....such as water, oil, liquid chemicals, etc.
- To change the type of inflammable dust for collection have an (fee-charging) evaluation made for the extent of dust explosiveness, and only use on dust confirmed to be collectable by this device.
- We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- Dust explosion pressure diffusion type dust collectors are designed to maintain conditions under which it is difficult for explosions to occur; however, they cannot completely prevent explosions.

- Install dust explosion pressure diffusion type dust collectors in a place where people will not be working above it. Also, do not place any factory equipment on or above the machine.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Be sure to ground the machine to protect against electric shock and to prevent static electrical charges.
- Dispose of collected dust daily. Do not allow dust to accumulate in the bucket.
- To prevent static buildup, do not use dust bag.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- In the event a dust explosion occurs please request an inspection by our company.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.

VF-2LD

- To ensure proper usage of this product please read the instruction manual carefully before using.
- The collecting dust shall be limited to general particulates and combustible organic perticulates, which are ensured the dust-collecting capability by dust explosion risk assenment as well as with dust explosibility numerically expressed as follows.
  Kstvalue 300×10^2kPam/s or less
  Pmax: 11×10^2kPa or less
- Do not suction the following materials:
  · Potentially explosive combustible dust.....magnesium, aluminum, etc.
  · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  · Sparks .....sparks, or dust that contains sparks
  · Others.....toxic dust such as asbestos and fluids such as liquid chemicals
- To change the inflammable organic dust targeted for collection, make an evaluation of the extent of that dust's explosiveness, and only use on dust confirmed to be collectable by this device. We are not responsible for any determination of dust-collecting capability in case of a dust explosion risk remains unclear or without evaluation.
- Please consult with Amano branch office and sales office about (fee-charging) evaluation of dust explosion risk.
- This device has a structure designed to prevent explosions however it cannot completely prevent explosions..
- Remove all combustible material within 4.7 meters above the explosion discharge port and utilize non-combustible material.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Always connect to ground regardless of whether operating, stopped, or performing maintenance.
- Use electrically conductive material in piping such as hoses and ducts, and satisfy the condition of a resistance value of $10^6\Omega$/cm or less.
- Always connect to ground for tasks such as shakedown of dust adhering to filters and dust exhaust (discharge), and have the worker perform the tasks after removing static charges accumulated on the workers themselves.
- Do not extract buckets right after shakedown of filters where dust is adhering.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas.
- Discharge dust collected in the bucket every day, and do not allow dust to accumulate within the bucket.
- To prevent static buildup, do not use dust packs.
- Devices where explosions occurred cannot be reused.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

Oil and Water-Soluble Mist Collectors (EM-eⅡ, EM-eH, EM-SC, EM-SCⅡLt,MZ, MR, MS)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is designed to handle mist of water-soluble and oil based cutting fluids.
- During intake (suction) of oily mist in the MZ·MR series, attach and use the after-filter option.
- Do not suction the following materials:
  · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  · Dust or fumes
  · Fire sources .....such as cigarette stubs, ashes, etc.
  · Other fluids .....such as water, water vapor, chemicals
  · Oil or mist with a flash point lower than 80°C(176°F)
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Use the machine at below maximum inlet concentration.
- This device cannot remove odors or gas component.
- Use the EM-eH for die casting machines.
  · Do not use in magnesium die-casting machines.
  · Do not utilize parting agents (mold lubricators) containing diluted kerosene.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- If you want to use the machine to suction exhaust gases from vacuum pumps, combustion engines, etc., please inform our branch or sales office of the suction conditions and find out whether or not you can use this machine.
- Perform maintenance of electrodes according to the following items.
  · Inspect for dust contamination adhering to parts at least once a week.
  · If dust or contamination has deposited up to 2mm(0.07inch) at time of inspection then wash it away.
  · Periodically wash at least once every 3 months.
- When making inspections and replacing filters and components always cut the power and check that the fan rotation has completely stopped before starting the task.
- Do not use oily detergent adhering to the collecting unit or inflammable substances for cleaning the unit. Operating the unit with fluid containing inflammable substances may cause it to ignite and lead to explosions or fires.
  【Banned inflammable substances】
  · Liquids such as gasoline, kerosene, thinner, tolulene
  · Inflammable detergents (Detergents marketed under commercial names such as parts cleaners and brake cleaners)
- Use soluble detergent for oil/grease removal when cleaning the main unit and adhered oil of the collecting unit.
  Always comply with the instructions listed on the detergent.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

Water-Soluble Mist Collectors (MC-45)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is designed to handle water-soluble mist.
- Do not suction the following materials:
  · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  · Dust or fumes
  · Fire sources .....such as cigarette stubs, ashes, etc.
  · Other fluids .....such as water, water vapor, chemicals
  Oily mist generated from oily cutting fluid
  To suction oil mist, use another model designed to collect oil mist.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Use machine at below maximum inlet dust concentration.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Always connect to ground to prevent electrical shocks.
- Be sure to use pipes with the appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- This device cannot remove odors or gas component.
- If piping must be connected to the exhaust (discharge) port then order an item with sealed structure specifications.
  When connecting piping to a standard specification (non-contermeasure part) exhaust port, then air leaks might occur from the upper section of the unit.

SS-N

- To ensure proper usage of this product please read the instruction manual carefully before using.
- Do not allow intake/suction of the following materials:
  · Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
  · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  · Fire sources .....such as cigarette stubs, ashes, etc.
  · Adhesive materials.....Water-Soluble Mist, oil mist, etc.
  · Other fluids .....such as water, oil, liquid chemicals
- Absolutely never operate this devices if the internal water level is not at the correct level.
- Please consult Amano branch office in the case of freezing in the winter season, cold areas, and outdoor installations.
- Remove the trapped dust and discharge it every day as sludge.
  Discharge the sludge according to related legal regulations as specified by each company.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Be sure to use pipes with no droop and an appropriate diameter and keep them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Always connect to ground to remove static charges and to prevent electrical shock.
- Keep the operating ambient temperature between 0 and 40°C(32 and 104°F).
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas.
  If intending to use this device outside Japan then please consult our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

Laser marking dust collectors (VF-5HG,VF-5HN)

- To ensure proper usage of this product please read the instruction manual carefully before using.
- This machine is for collecting fumes generated by laser markers and other items and deodorizes those fumes.
- Do not suction the following materials:
  · Explosive materials... magnesium, aluminum, titanium, zinc, epoxies, flour, etc.
  · Flammable materials.....gasoline, thinner, benzene, kerosene, paint, etc.
  · Corrosive substance.....chlorine gas, chlorine-sulfuric acid gas, hydrogen fluoride, etc.
  · Sparks .....sparks, or dust that contains sparks
  · Fire sources .....such as cigarette stubs, ashes, etc.
  · Other .....Toxic dust such as asbestos and fluid such as water, oil, liquid chemicals, etc.
- Before selecting a particular model, please consult with us beforehand if the machine must intake (suction) dust containing sparks.
- This unit is not an anti-explosion design. It cannot be installed in locations defined by law as hazardous.
- Do not operate the machine in areas exposed to mist, fumes or gases that are explosive or corrosive, and in or near place where explosive flammable dust scatters.
- Please comply with any legal regulations that are established for this device.
- Keep the operating ambient temperature between 5 and 40°C(41 and 104°F).
- Be sure to ground the machine to protect against electric shock.
- Be sure to use pipes with no droop and with an appropriate diameter and make them as short as possible according to dust collection conditions so that dust will not accumulate in them.
- Please perform daily and periodical maintenance work in accordance with instructions described in the operation manual. Please comply with regulations stipulated by laws and/or ordinances that are applicable to product maintenance.
- This device is intended for usage and transactions within Japan and the manufacturer bears no responsibility whatsoever for usage overseas. If intending to use this device outside Japan then please consults our company beforehand.
- In case of installing machine in a place with high dust concentration, please take measures against dust of the electric part.

TFP,TFP-S,HGD, Pneumatic Conveying Systems

- Be sure to read the instruction manual thoroughly before getting started, and use the machine correctly.