

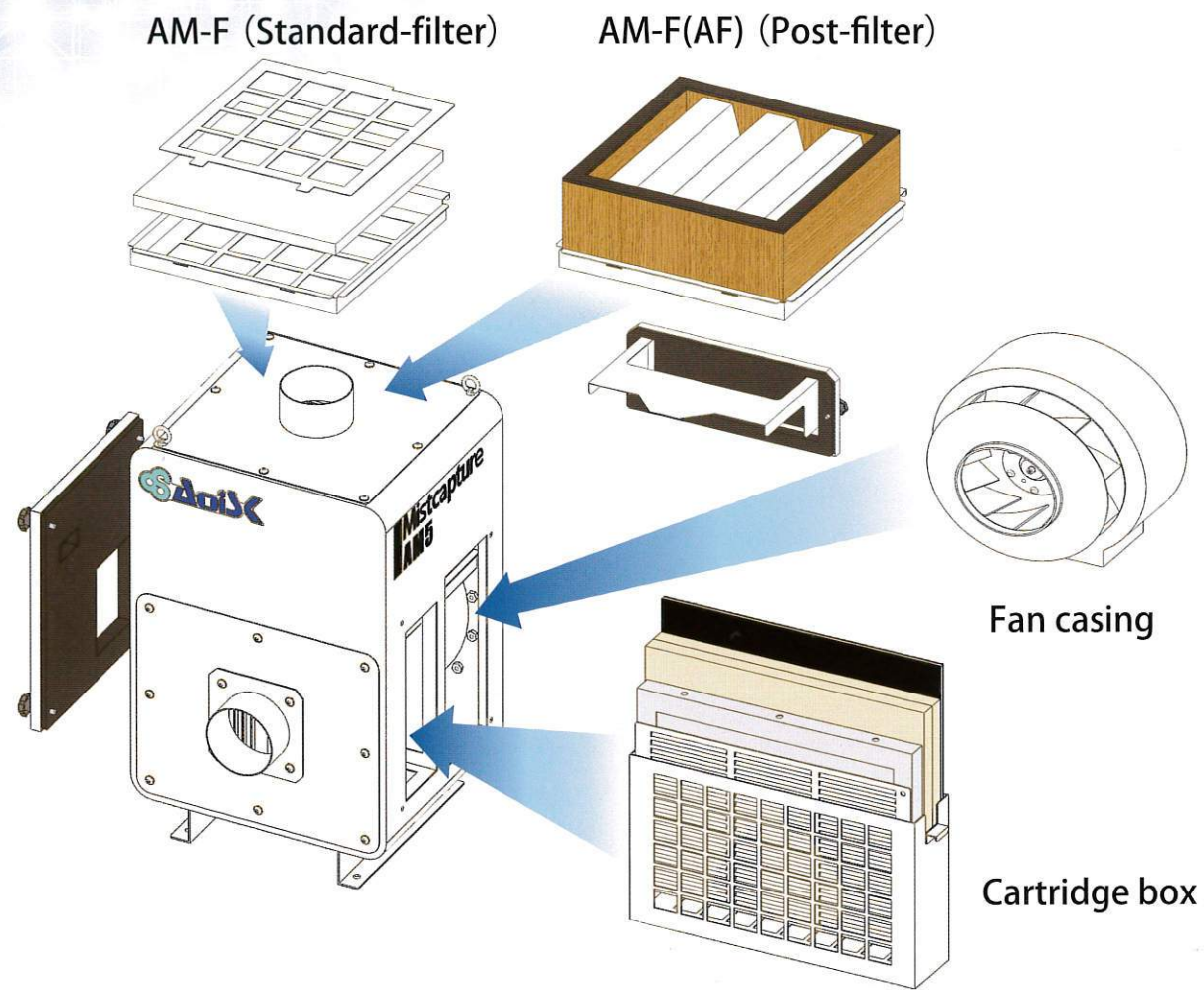


Oil Mist Collector

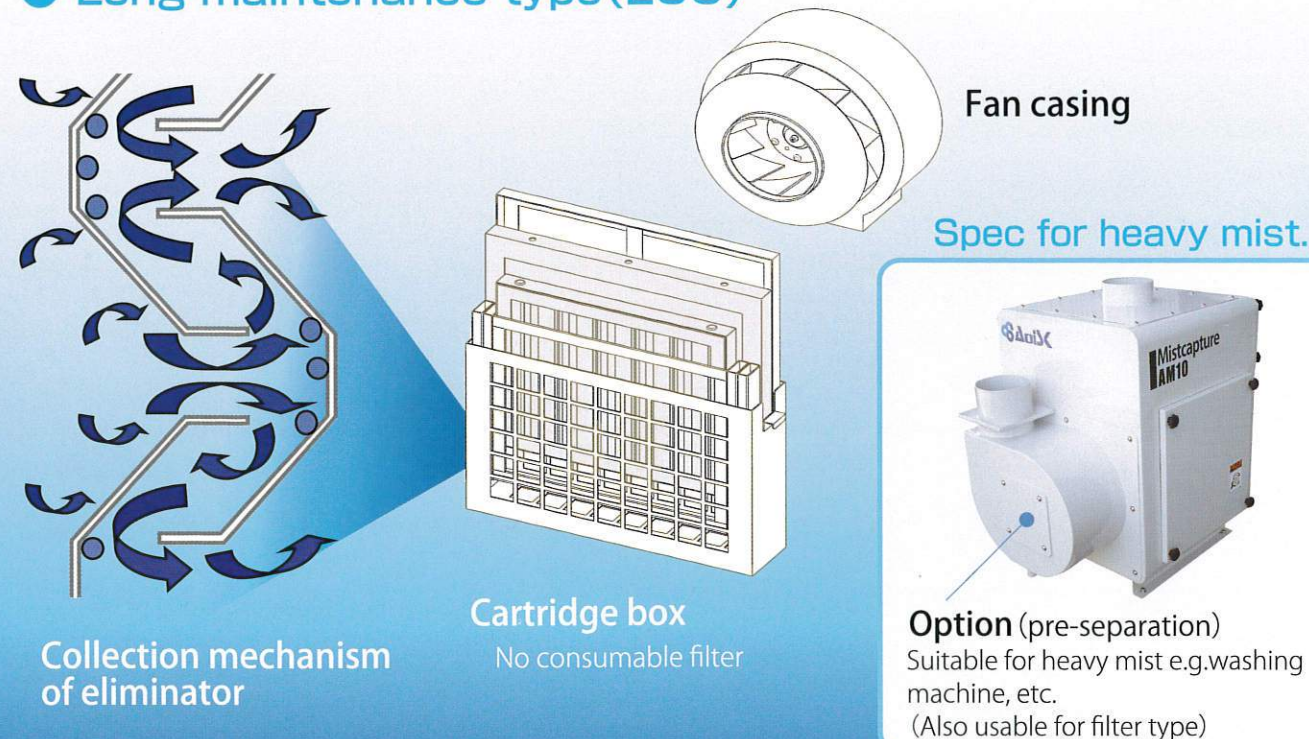
Mistcapture

Basic Structure of model

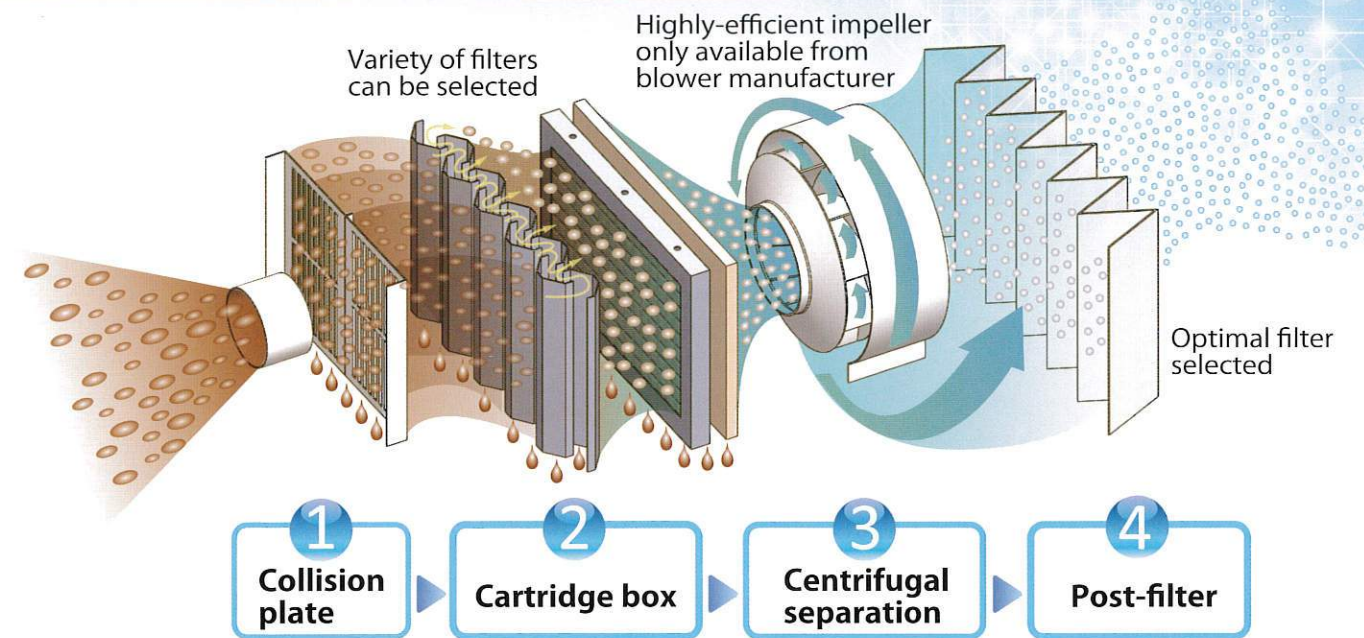
● Filter type(F, F(AF))



● Long maintenance type(ECO)



Mechanism of mist collection



- 1 Removes rough particle mist containing dust.
- 2 Filter type, energy saving type or Long maintenance type can be selected to collect mist according to the customers' needs.
- 3 Highly-efficient impeller (fin) is only available from the blower manufacturer, which separates mist and air.
- 4 The post-filter collects even super fine mist. The optimal filter can be selected depending on the operating environment.

Model selection method

To select the model, calculate the air volume required for the target equipment. There are two methods. Select either method depending on the degree of protective shield/sealer used in the machining area.

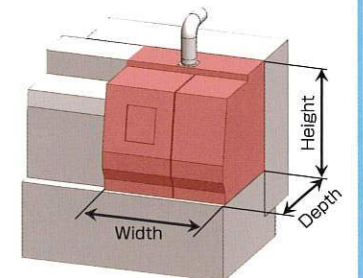
1 When any guards are provided for machining area

Use the formula below based on the ventilation frequency to calculate the air volume.

$$\text{Required air volume (Q1)} = \text{Volume in machining area (V)} \times \text{Ventilation frequency (N)}$$

(m³/min) Width × Depth × Height (m³) (times / minute)

【Calculation example】
Volume V: 1.0 × 0.5 × 1.0 = 0.5m³ Ventilation frequency N: 4~8
Required air volume (Q1): 0.5m³ × 8 = 4.0m³/min
Can be determined that selecting the AM-5 is best.



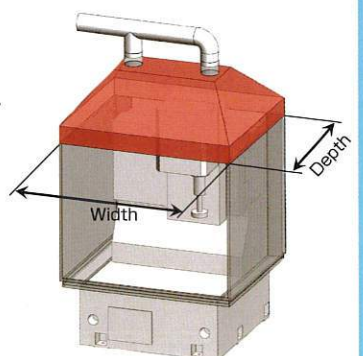
2 When no guards are provided for machining area

Use the formula below based on the controlled wind velocity to calculate the air volume.

$$\text{Required air volume (Q2)} = \text{Cross section of suction port of food (A)} \times \text{Controlled wind velocity (Vc)} \times 60$$

(m³/min) Width × Depth (m²) (m / second)

Use 0.5 to 0.9 m/second for controlled wind velocity (Vc).
【Calculation example】
Cross section of suction port of food (A): 1.5 × 0.5 = 0.75 m²
Controlled wind velocity (Vc): 0.5 m / second
Required air volume (Q2): 0.75 m² × 0.5 × 60 = 22.5 m³/min
Can be determined that selecting the AM-30 is best.



Basic Specifications

Filter type

Model	AM-5F		AM-10F		AM-20F		AM-30F	
Type	AM-5F	AM-5F(AF)	AM-10F	AM-10F(AF)	AM-20F	AM-20F(AF)	AM-30F	AM-30F(AF)
Mist collection method	Standard filter specifications	Post-filter specifications	Standard filter specifications	Post-filter specifications	Standard filter specifications	Post-filter specifications	Standard filter specifications	Post-filter specifications
Power source (V)	Three-phase 200V 50/60Hz, 220V 60Hz							
Electric motor specifications (model)	Totally-enclosed-fan-cooled form flange							
Output (kW x p)	0.4×2		0.75×2		1.5×2		2.2×2	
Frequency (Hz)	50/60/60		50/60/60		50/60/60		50/60/60	
Electric current (A)	1.9/1.8/1.8		3.4/3.2/3.0		6.2/5.8/5.4		9.0/8.4/7.8	
RPM (min ⁻¹)	2800/3350/3400		2850/3420/3450		2820/3380 /3420		2830/3390/3430	
Maximum air volume (m ³ /min)	4.6/5.4	4.0/5.0	7.6/8.8	6.7/8.6	14.4/17.3	13.3/16.2	20.2/24.3	18.3/22.8
Noise (dB-A)	59±2/64±2		64±2/68±2		69±2/73±2		69±2/73±2	
Collection efficiency (%)	98	99.9	98	99.9	98	99.9	98	99.9
Highest suction temperature (°C)	60							
Room temperature (°C)	-10 to 40 (There should be no condensation)							
Outer diameter of suction port (φmm)	φ98		φ123		φ148		φ198	
Coating color	(Munsell color system) 5R8/0.5							
Weight (kg)	Approx. 45		Approx. 67		Approx. 90		Approx. 105	

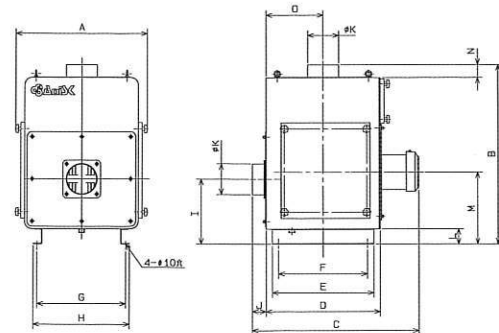
Long maintenance type

Model	AM-5	AM-10	AM-20	AM-30
Type	AM-5ECO	AM-10ECO	AM-20ECO	AM-30ECO
Mist collection method	Eliminator specifications			
Power source (V)	Three-phase 200V 50/60Hz, 220V 60Hz			
Electric motor specifications (model)	Totally-enclosed-fan-cooled form flange			
Output (kW x p)	0.4×2	0.75×2	1.5×2	2.2×2
Frequency (Hz)	50/60/60	50/60/60	50/60/60	50/60/60
Electric current (A)	1.9/1.8/1.8	3.4/3.2/3.0	6.2/5.8/5.4	9.0/8.4/7.8
RPM (min ⁻¹)	2800/3350/3400	2850/3420/3450	2820/3380 /3420	2830/3390/3430
Maximum air volume (m ³ /min)	4.9/6.0	8.2/9.5	16.5/19.0	24.0/29.0
Noise (dB-A)	59±2/64±2	64±2/68±2	69±2/73±2	71±2/73±2
Collection efficiency (%)	98 (3 μm particle, soluble mist)			
Highest suction temperature (°C)	80			
Room temperature (°C)	-10 to 40 (There should be no condensation)			
Outer diameter of suction port (φmm)	φ98	φ123	φ148	φ198
Coating color	(Munsell color system) 5R8/0.5			
Weight (kg)	Approx. 45	Approx. 67	Approx. 90	Approx. 105

Dimensions

Unit: mm (round off to the nearest whole number)

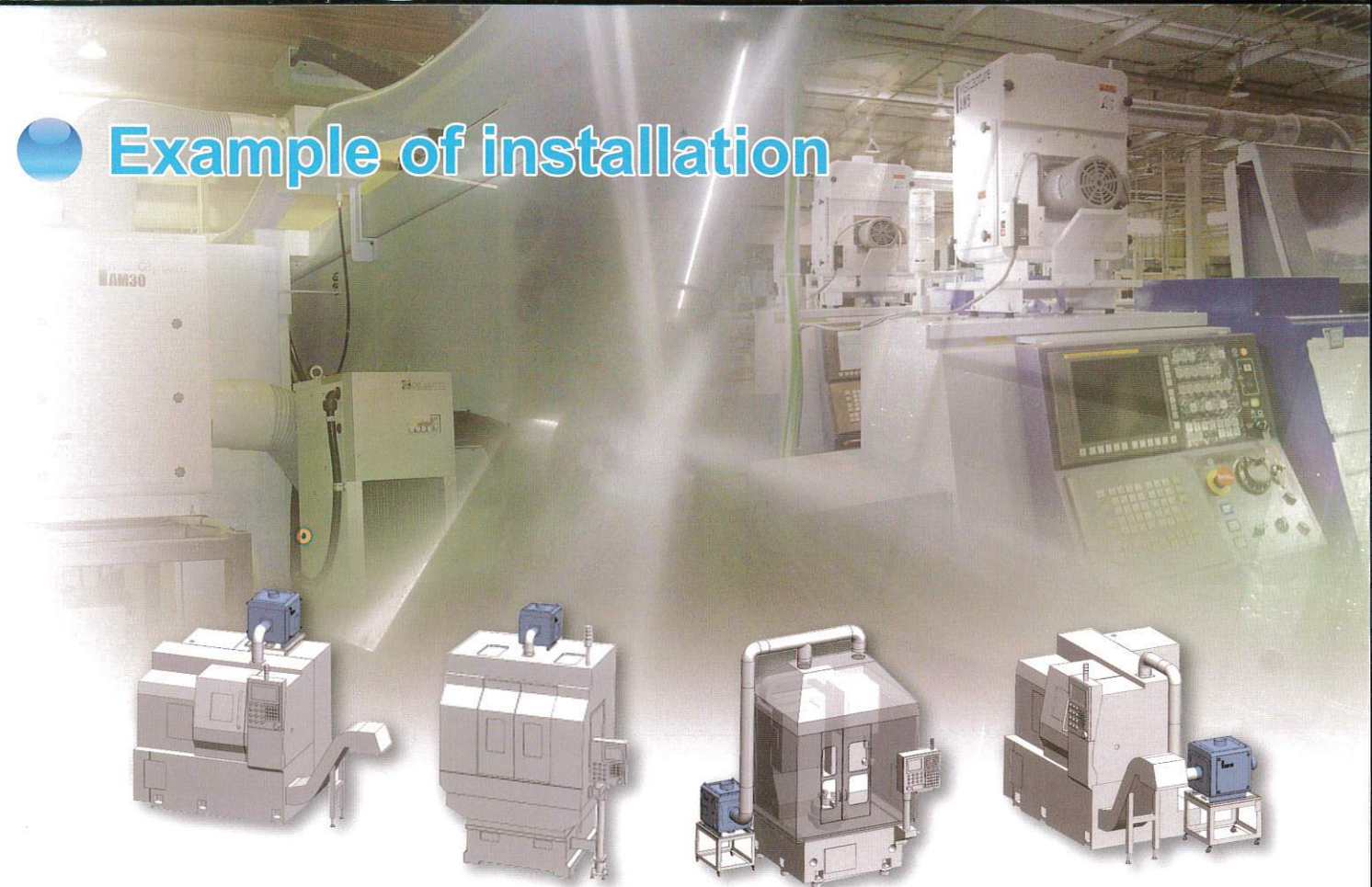
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
AM-5F (AF)	450	642	560	330	300	250	250	280	220	55	98	60	250	52	165
AM-10F (AF)	520	712	673	450	400	350	350	380	258	55	123	60	285	52	225
AM-20F (AF)	570	830	754	500	450	400	400	430	280	65	148	60	310	60	250
AM-30F (AF)	620	902	824	550	500	450	450	480	305	85	198	60	335	82	275



Safety precautions

- Carefully read the Instruction Manual to correctly use the MISTCAPTURE.
- Do not use the MISTCAPTURE on corrosive and explosive mists and gases.
- Do not use MISTCAPTURE on gases with low flash points as they may ignite.
- Do not use the MISTCAPTURE for purposes other than collecting oil mist.
- Avoid the presence of an open flame or an intense heat source such as a lit cigarette butt. If such an object is inserted into the MISTCAPTURE, an explosion may occur.

Example of installation



Optional parts

Suction side (on machining equipment side) [*1] The length of the duct hose is in 1 m increments. [*2] Cannot be used for oil mist or oily air.

Duct flange	Air volume adjusting damper	Duct hose	Duct cuffs	Hose band
(Straight coupling)	(Elbow coupling)	(Air volume adjustment)	(With fire-safety function)	(General purpose) [*1], [*2]
		(Oil resistant) [*1]		

Suction side (on mist collector side)

Mount and others

Duct flange	Drain hose	Mount	Power push button switch	Vibration-proof rubber
(Elbow coupling)	(T coupling)	[*3]	(With casters)	(With adjusters)
		(With overload protective device) [*4]		(With nut and washer)

[*3] The length of the drain hose is in 1 m increments.

[*4] The power push button switch can be used when using a mount.

Maintenance filter parts

Product name	Inside cartridge box				Fan surrounding area		Post filter	
	Eliminator	Demister	Filter ①	Filter ②	Drum filter	Casing	Filter ③	Medium efficiency filter
AM-5·10·20·30F		●	●	●	▲	●	●	
AM-5·10·20·30F(AF)		●	●	●	▲	●		●
AM-5·10·20·30(ECO)	●	●				●		
Remarks	Replacement not necessary	Replacement not necessary	Washable for reuse	Consumable	Consumable	Replacement not necessary	Consumable	Consumable

(1) Required regular cleaning of eliminator and demister. No need to replace under normal use.

(2) ▲Mark: Recommended to use depending on usage environment and machines.

(3) Replacement frequency of filter ② & ③ varies depending on amount and density of mist and operating time.

Solution for concentrated mist separation of multiple machines.



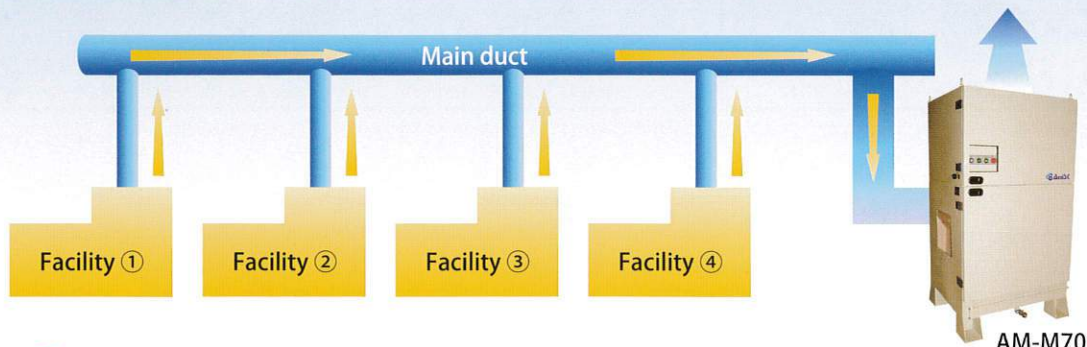
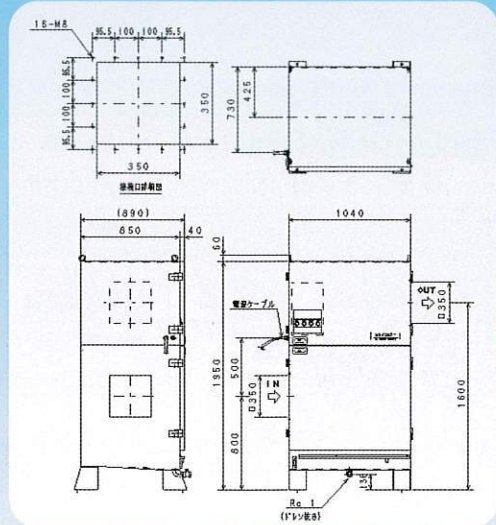
Mist collector with afterfilter.

AM-M70 Mist Collector

- Outstanding suction power.
- Large energy saving effect by concentrated exhaust.
- Achieve 99.8% collection efficiency with standard type.
- Easy to replace filter without any tools.
- Suitable for various types of mist.

※ Afterfilter is consumable, need to be replaced.

Separation method	Filtration + centrifugal agglomeration + adsorption	
Frequency (Hz)	50	60
Voltage (V)	200	200 / 220
Process air volume (m ³ /min)	60	70
Fan static pressure (Pa)	440	588
Motor output (kW)	3.7	
Rated input current (A)	14.6	14.2 / 13.4
Rated speed (min ⁻¹)	1420	1710 / 1730
Noise (dB(A))	70	
Suction allowable temperature (°C)	40	
Usage environment (°C)	0 ~ 40	
Duct Port size (mm)	350 × 350	
Drain Port size (B)	Rc (PT) 1	
Main body dimensions (mm)	1040 (W) × 890 (L) × 1950 (H)	
Estimated weight (kg)	400	



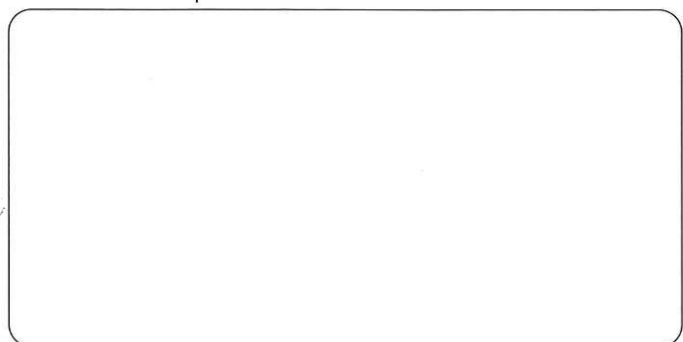
AOISEIKO
<http://www.aoi-sk.co.jp>

AOISEIKO CO., LTD.

93 Yanagihara, Karasu-cho, Tsushima City, Aichi 496-0026
 TEL: +81-567-31-3805, FAX: +81-567-31-1625



Contact for inquiries



Descriptions and specifications in this catalog are subject to change without notice.