

ACMAN

Environment—protect

脉冲滤筒式除尘机组

パルスジェット集塵機

PULSE JET TYPE DUST COLLECTOR



NINGBO NINHUA INTERNATIONAL CO., LTD

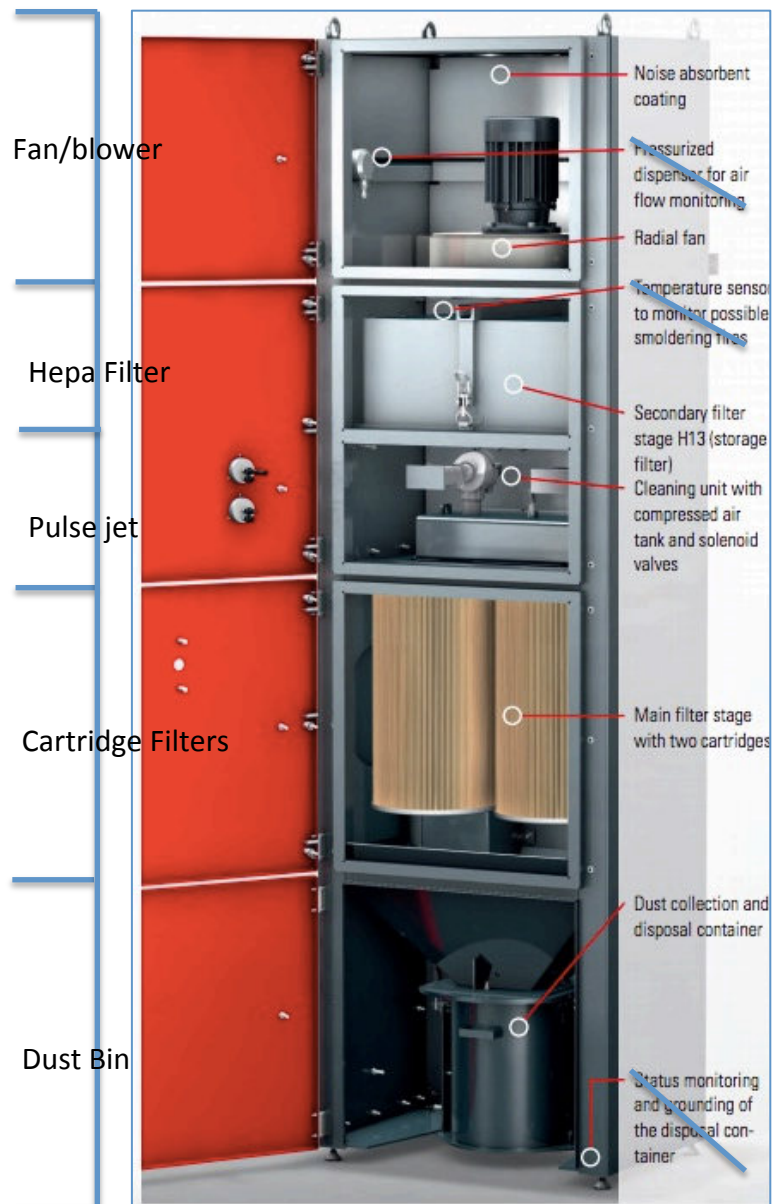
爱科曼（杭州）环境设备有限公司

ACMAN HANGZHOU ENVIRONMENT EQUIPMENT CO.,LTD

咨询电话：0571-88532678 **ECO-Dust Control Solution**

技术支持：18768123711/17767061368

■Dust collector unit



Standard Configuration

High pressure centrifugal fan, ~ 1500pa full Pressure

Apolegamy : Super high pressure centrifugal fan, ~ 2500pa full Pressure

Standard Configuration:

Do not have HEPA

Apolegamy :With HEPA

Standard Configuration:

Pulse-jet (0.4-0.6mp)

Apolegamy: Shaking

Mode

Standard Configuration:

PE Cartridge Filters, F9 Emission

Apolegamy: Anti-(water, Oil, flame)PE Cartridge filters, PTFE Coating, H11 Emission:

Standard Configuration: Dust Drawer(low dust concentration condition)

Apolegamy: Dust Bin((High dust concentration condition)



Note: Before use, please read the instruction manual carefully and use it correctly.

●Collect general dust, dust with no risk of dust explosion and fire.

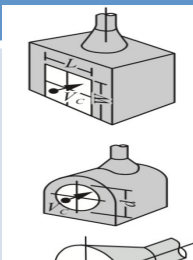
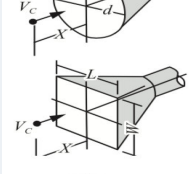
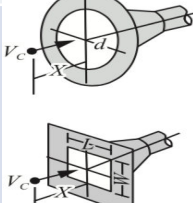
●Please do not suck the following materials.

- Explosive combustible dust...magnesium, aluminum, titanium, zinc, epoxy resin, etc.
- Flammable substances..... Gasoline, thinner, benzene, kerosene, paint, etc.
- Dust contains sparks..... Spark, potential spark
- Spark..... Like cigarette butts, ashes of tobacco,
- Others..... Such as hazards like water, oil, chemical liquids and asbestos dust
- ●If you want to absorb the above dust, including polishing and cutting, which are prone to sparks, you need fire fighting measures.
- ●This machine is not explosion-proof. Install in dangerous areas due to reference to laws and regulations.
- ●Separate space should be set for combustible dust, explosive and flammable, corrosive mist, smoke and gas, please do not use near these locations.
- ●The use environment temperature is 0°C~80°C.
- ●Be sure to connect the ground wire to prevent electric shock.
- ●Please discharge the collected dust every day.
- ●Maintain according to the requirements described in the manual, daily inspection and regular inspection.

■Select the dust hood and calculate the air volume

一： Choose the right dust hood

Support: 18768123711

Type of suction hood (フードの型式)	Picture and calculation method (事例略図)	Airflow Calculation Q (m3/min)
1:Closed Type	 <p>Opening area: $A(m^2)=L(m) \times W(m)$ $A=\pi/4 \cdot d^2$</p>	$Q=60 \cdot V_a \cdot V_o$ $=60 \cdot A \cdot V_c \cdot K$ <i>V_o: Opening area's average air velocity</i> <i>V_c: control Air velocity</i> <i>K: Copositive coefficient k</i>
2: External type (no flange)	 <p>$A=\pi/4 \cdot d^2$ Distance: X:m $A=L \cdot W : L/W>0.2$</p>	$Q=60 \cdot V_c \cdot (10X^2 + A) \cdot K$
3 : External type (With flange)	 <p>$A=\pi/4 \cdot d^2$ $A=L \cdot W (L/W>0.2)$</p>	$Q=0.75 \cdot V_c \cdot (10X^2 + A) \cdot K$

二： Calculation of control Air velocity
V_O

Type of suction hood フードの型式	control Air velocity 制御風速(メートル/秒)
封闭式制御風速 (囲い式フード)	0.7
外部式 制御風速 (外付け式)	側方吸引型 1.0 下方吸引型 1.0 上方吸引型 1.2

三： Copositive coefficient k

Opening area[m2]	Copositive coefficient k	
	Closed Type	External type
~0.2	1.1	1.2
0.3~0.5	1.2	1.3
0.6~1.0	1.3	1.4
1.1~2.0	1.3	1.5
2.1~3.0	1.4	1.5
3.1~	1.5	1.5

Product Features:

- 1: The dust collector can be set according to the setting, and can automatically use compressed air to blow back the filter cartridge at fixed time and pressure to restore the regeneration capacity of the filter cartridge
- 2: Unique sunken baffle is good for dust settling, improving equipment efficiency, energy saving and durability
- 3: There are air inlets on the left and right sides, which can be connected arbitrarily according to the installation conditions. The air inlets are equipped with matching flanges for easy installation
- 4: Drawer with dust at the bottom, convenient for dust discharge
- 5: The pressure difference meter is used to display the resistance value of the filter cartridge in real time, which accurately reflects the dust accumulation of the filter cartridge, as an important basis for replacing the filter cartridge
- 6: The filter cartridge can be disassembled and installed through the front and rear inspection doors, which is convenient and quick. The interior and appearance of the equipment are designed to prevent dust accumulation.
- 7: No dead ends, easy to clear
- 8: Pulse blowback is equipped with blowback diversion nozzles to increase the efficiency of compressed air use and reduce compressed air waste
- 9: Local and remote ports can be linked and controlled with other devices

Technical Parameter

Model	Air Volume (m ³ /h)	Filtration Velocity(m/min)	Provide Static Pressure(pa)	Power (kw)	Filter Area (m ²)	Weigh t(kg)	Noise (db)	Air Source (Mp)
TR-5B	500-700	0.69-0.97	1000-950	0.75	12	207	65	0.4-0.6
TR-10B	700-900	0.97-1.25	1050-970	0.75	12	215	68	0.4-0.6
TR-15B	900-1100	1.25-1.53	1300-1180	1.5	12	236	68	0.4-0.6
TR-25B	1400-1600	1.3-1.48	1470-1350	3.0	18	263	70	0.4-0.6
TR-30B	1600-2500	0.89-1.39	1600-1520	4.0	30	300	72	0.4-0.6
TR-40B	3700-4500	1.71-2.08	1730-1650	5.5	36	400	77	0.4-0.6
TR-60B	4900-6500	1.7-2.26	1780-1700	7.5	48	450	80	0.4-0.6
TR-80B	7000-8500	1.94-2.36	1820-1760	7.5	60	460	83	0.4-0.6
TR-100B	8489-10455	1.88-2.32	1790-1020	11	75	550	85	0.4-0.6
TR-120B	10400-13455	1.92-2.49	1790-1020	15	90	600	85	0.4-0.6



■Explosive environment

The prerequisite for dust explosion is to have an explosive environment

Dust explosions are not accidental. The mixing of two or more reactive substances forms the basis of an explosive environment. Metal dust, organic dust and spray paint dust can mix with oxygen to create explosive environmental conditions. The dust mixed air stream formed by fine dust of different sizes and gas molecules is a prerequisite for forming an explosive environment. The density difference will cause continuous dust and diffusion, resulting in continuous mixing.

Once a certain dust density value is reached and exceeds a certain limited particle size, an explosive environment is formed. However, because of the different particle sizes, the explosion limit value of combustible dust cannot be defined in general. Only through a special test can the explosion limit (lower explosion limit UEG) be defined.

■Explosion dust

Organic dust

For example, chlorofluorocarbon composite materials, glass fiber reinforced plastics, polyester materials, rubber, PTFE (polytetrafluoroethylene), insulating materials, as well as carbon fiber, flour, lime powder, cocoa powder, starch, wood chips, feed, cellulose and paint And spray dust, The dust formed during the processing of such products and materials is flammable and can generally be classified as ST1 explosive dust.

Metal dust

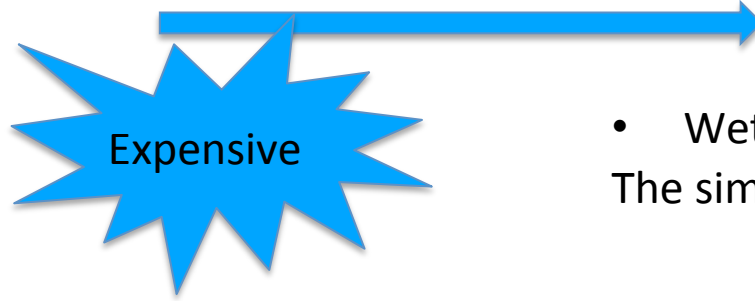
The representative ones are inorganic substances such as magnesium and aluminum and dusts such as iron produced in fine shot blasting. These metals may also ignite spontaneously when there are very few particles (such as dust), even though they are generally not flammable in a solid state. The extremely large opposite surfaces of metal dust particles will quickly absorb heat, thereby forming an explosive air mass.

■Ignition source

In addition to spontaneous combustion of dust, explosive air masses are most likely to be formed during the back-blowing cleaning process of dry dust removal. If a fire source enters the dust collector at this time, it will explode.



- Dry dust removal of explosive dust is urgently needed
- Explosion Suppression
- Explosion Isolation
- Explosion Venting



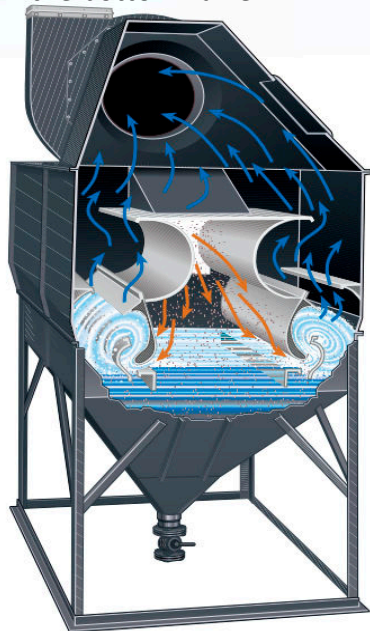
Highly Recommend

- Wet Type Dust Collection
The simplest and safest solution

Hydraulic dust collector,
deodorization,
exhaust gas absorption

Principle/structure

- 1: The dusty gas passes through the "S" plate, rolls up the water, and violently collides with the inner wall
- 2: A vortex is generated in the washing part, and effective gas-liquid mixing occurs, And the dust is collected by water;
- 3: The purified gas is discharged after the water is separated by the water baffle, no Droplets bring out;
- 4: As the dust settles, the sludge is discharged from the bottom valve



Features

- ✓ **Stable operation simple structure** Without filter, the air volume will not decrease
- ✓ **Excellent dust removal efficiency** 100% collection of 8um particles
- ✓ **Explosion / Fire Measures** Because you use water filtration, no need to worry about fire
- ✓ **No pump required** Due to the absorption of the liquid itself and the principle of self-excitation, no pump is required.



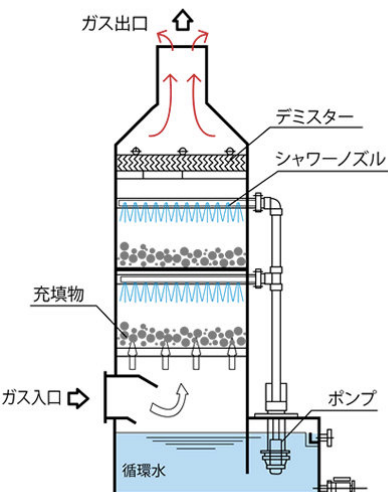
- 1:Hygroscopic dust (dryer gas)
- 2:Hot exhaust
- 3:Combustible and explosive dust (grinding machine, polishing)
- 4:Toxic gas absorption, neutralization (acid, alkali)
- 5:Malodorous gas absorption (exhaust gas treatment, etc.)

Application

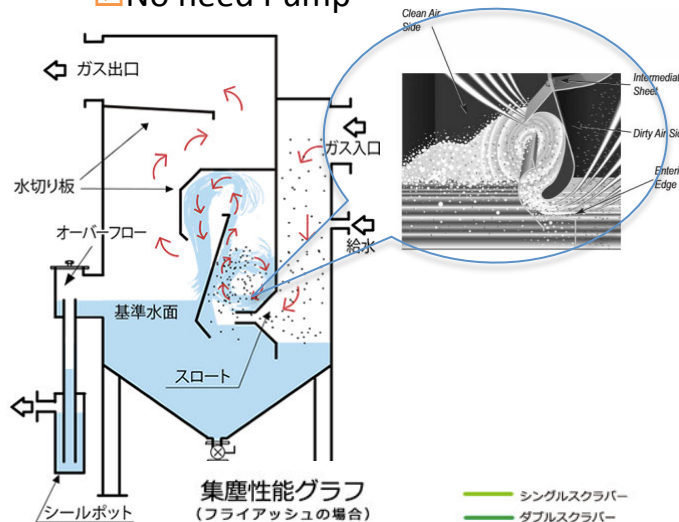
Model	Airflow	Resistance	Height	Width	Deep	Weight
ZH-2	1600-2900	~80Pa	950	1110	2357	1100kg
ZH-4	2900-4000	~80Pa	1100	1300	2653	1320kg
ZH-6	4000-6400	~80Pa	1330	1630	3242	1480kg
ZH-8	6400-8500	~80Pa	1530	1830	3242	1990kg
ZH-10	8500-10580	~80Pa	1730	2030	3432	2460kg
ZH-15	12000-17000	80~120Pa	2075	2903	3930	3680kg
ZH-20	17000-24000	80~120Pa	2225	2903	4238	4200kg
ZH-30	30000	80~120Pa	2346	3356	4700	6020kg
ZH-50	50000	80~120Pa	2634	4378	5785	7000kg

■Comparison of sprayer tower and self-excited wet scrubber

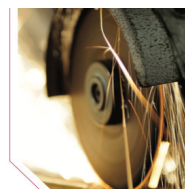
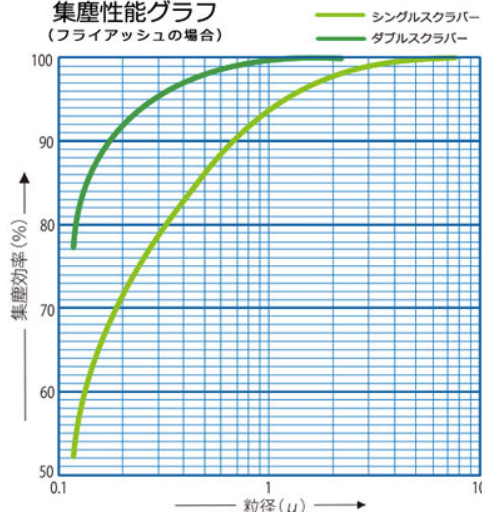
- ☑Blockage ☑Airflow decrease
- ☑Packages decrease
- ☑Pump maintenance



- ☑Won't blockage ☑Airflow stable
- ☑Simple construction, reduce costs
- ☑No need Pump



集塵性能グラフ
(フライアッシュの場合)



ガス吸収性能

ガス名称	洗浄液	シングル	ダブル
亜硫酸ガス (SO ₂)	NaOH	80%	95%
アンモニア (NH ₃)	H ₂ SO ₄	90%	99%
	H ₂ O	80%	95%

・Metal Processing Factory ·Chemical Factory ·Food Factory
 ・Steel plant ·Perfume plant ·Fish meal processing plant
 ・Pharmaceutical plant ·Fertilizer plant ·Waste treatment plant, etc.

Steam: waste disposal, welding gas, Release agent, paint vapor, condensate, Spark discharge material remover, die casting machine, paint stripper, electroplating device, lead production, electro galvanizing plant, foundry

Aluminum magnesium powder: lubrication, sand production, chip removal, Deburring, bushing, separation, finishing process, Forging process, grinding and polishing

Aluminum and magnesium cutting: drilling, machining, roughing, Sawing, deburring, forming process, recycling system

Rubber/leather/plastic products: footwear industry, Tire remanufacturing, plastic processing, foil production, Extruder, modeling, textile manufacturing

Fiber/fluff/fabric dust polishing process, papermaking machinery, Waste sorting system, textile processing, recycling plant, Insulation material production, asbestos, food processing, food processing

Sticky dust: pharmaceutical technology, food manufacturing, animal feed, Dyestuffs, molds and mold manufacturing, printing machinery, Tire and chip production, adhesive application, textile printing, Mixing and conveying equipment, plastic processing, ceramic coating

Flammable/explosive pollution: grinding process, polishing, polishing, Sandblasting machine, explosive production, forging press, grain processing, Printed circuit board production, brake test bench, Recovery and drying plant, power plant engineering, mining



ACMAN, In addition to providing the above dry and wet dust removal solutions, More dedicated to the unique design of equipment under specific working conditions



Wall-mounted dry smoke dust collector



Mobile dust removal equipment



Sinter-plate Dust Collector



■High Pressure Dust Extractor

■With packaging machine



■With cleaning machine



■With tablet press machine
capsule filling machine

■Dumping machine



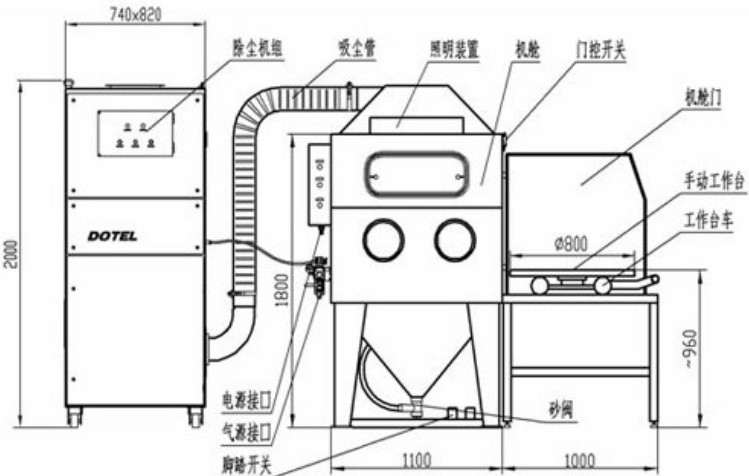
■Pesticide unpacking
and feeding

■Reactor feeding



■Dust collector for sandblasting machine

Model	Airflow	Pressure	Motor
B-15/G	1688-3517	1300-792pa	2.2kw
B-25/G	1600-2200	3250pa	4kw

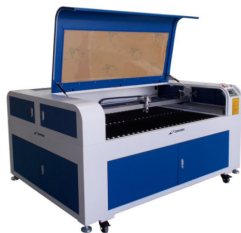


Features

- (1) Convenient operation (connected with compressed air and electric pulse controller, which is compatible with fluidized bed And fan linkage operation);
- (2) High pressure resistance (-10000pa~10000pa);
- (3) The air inlet and outlet are customized according to the customer's pipeline; (4) Pulse online dust removal to ensure stable resistance of the equipment;
- (5) Optional: film/anti-static filter cartridge, explosion-proof solenoid valve, high-pressure centrifugal fan;
- (6) Small footprint, easy maintenance



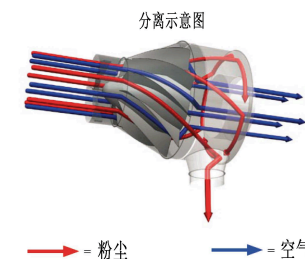
Model	Airflow	Filters	Pressure	Size	Air inlet	Outlet	Air source 0.6MPa
15B-FB	1500-3000m3/h	9	≤600	780*1050*1732	225mm	225mm	
30B-FB	3000-4000 m3/h	12	≤600	930*1050*1732	300mm	300mm	
40B-FB	4000-5000 m3/h	16	≤600	930*1190*1732	300mm	300mm	
60B-FB	5000-7000 m3/h	20	≤600	1130*1340*1732	390mm	390mm	
80B-FB	7000-9000 m3/h	25	≤600	1130*1540*1732	450mm	450mm	
100B-FB	10000 m3/h	30	≤600	1130*1720*1732	500mm	500mm	



Model	Airflow	Resistance	Pressure	Motor	
LZ-30	3000m3/h	≤800	2500pa	5.5kw	
LZ-60	5500m3/h	≤800	2850pa		

■Dust removal equipment for laser/engraving machine

The pipeline trap provides efficient spark removal, and it is an extremely efficient pretreatment device for separating dust in the pipeline;
Its horizontal installation reduces the footprint of the equipment, and there is no need to remove the pipeline for maintenance.



Spark arrestor

Application: Pipeline trap is a safety device, Usually used in high-risk industrial and mining sites that can cause fires:

- 1: Metal welding;
- 2: Metal polishing;
- 3: Pre-separation of high-concentration dust; 4: Classification of powder particles

型号	SC-200	SC-250	SC-300	SC-350	SC-400	SC-450	SC-500	SC-630	SC-700	SC-750
A (mm)	Ø400	Ø500	Ø600	Ø680	Ø710	Ø820	Ø900	Ø1200	Ø1260	Ø1260
B (mm)	Ø213	Ø250	Ø300	Ø350	Ø400	Ø450	Ø500	Ø630	Ø750	Ø750
C (mm)	690	798	880	925	963	1070	1179	1460	1640	1640
H (mm)	2712	2770	2814	2852	2921	2944	3046	3222	3279	3279
处理风量 (Nm ³ /h)	1200~1800	1800~2800	2800~4000	4000~5500	5500~7000	7000~9000	9000~11000	11000~19000	12000~25000	14000~30000
进口流速 (m/s)	10~14	10~16	11~16	11~16	12~16	12~16	13~16	10~17	9~18	9~19
阻力 (Pa)	≤500	≤500	≤500	≤500	≤500	≤500	≤500	≤500	≤500	≤500
设备重量 (kg)	~70	~90	~105	~110	~115	~135	~155	~220	~260	~280



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●設置について法令および条例による規定がある場合は、その規定に従ってください。 ●使用環境温度は0℃~40℃です。

●感電防止のため必ずアースを接続してください。 ●配管は粉塵のたまりがないように垂れさがりがなく、集塵条件に合わせて最適な配管径で最

短距離となるように設置してください。 ●粉塵は毎日排出してバケット、またはホッパーにためないでください。 ●取扱説明書に記載された保守に関する指示に従い、日常点検および定期点検を励行してく

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ださい。 ●本機は直射日光が当たる場所に設置しないでください。

・爆発性のある可燃性粉塵 ...

・引火性物質

・火花

・火種

・その他 ●研磨・切断等で火花を含む粉塵を吸引する場合は、火消し対策が必要です。当社支店・営

マグネシウム・アルミニウム・チタン・亜鉛・エポキシ・トナー・小麦粉など ガソリン・シンナー・ベンジン・灯油・塗料など 火花、および火花を含む粉塵

たばこの吸いながら・灰など 水・油・薬品などの液体およびアスベスト等の有害性粉塵

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発性のある可燃性粉塵が飛散する場

所、およびこれらの付近で使用しないでください。

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