

FCN Series



FCN series dust collector is developed for work that generates dust including sparks such as laser processing machine, plasma processing machine, welding, metal cutting processing, and grinding works. Also, the duct collector has a high-efficiency of welding fume collection function which has a high risk of sucking sparks.



FIRE PREVENTION FUME COLLECTOR (Countermeasures against fire)

- Have function to prevent sparks-sputter from going into filter box.
- Have function to absorb heat to sparks and to prevent ignition.
- Sparks and smoke sensor auto shutdown system.
- With circle flow separator and heat absorber roller.

- Molded cartridge filter



Material: Polyester

Surface treatment: –

Corresponding models: PIE, FCN, Mi and PiH

Application: General dried particles (particle diameter about 10µm)

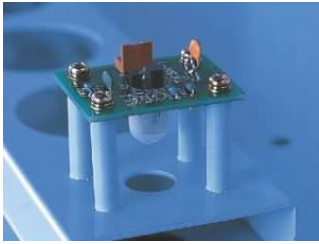
Features

- For dust having a particle diameter of about 10µm.
- Collecting efficiency: Good, Particle diameter about 10µm
- Heat resistant temperature (F): Normal temperature 40°C (104°)
- Dust removal: Pulse jet

Various type of filter are available

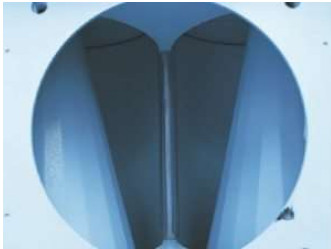


Spark & Smoke Sensor



Sparks sucked into the dust collector are detected by an infrared sensor. Fire breaking out inside the dust collector is detected by a smoke sensor. If a spark enters or a fire inside the dust collector is detected, the dust collector will automatically stop. The safe design, protect your facility from fire.

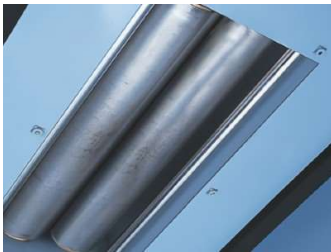
Circle Flow Separator



Primary separation and heat absorption of dust suctioned into the circle flow separator prevents fires from ignition.

This process separates out more than 70 percent of dust. Lightening the load on the filter in this way, gives the filters a longer service life.

Heat Absorber Roller



Sparks and inflammable dust separated by the circle flow separator are prevented from combusting by the energy absorption and the effect of the heat absorber roller, and inflammable dust are prevented entering the bucket. The energy absorption and dispersion effect of the metal roller work in preventing fires.



Bucket



Dust separated out by the circle flow separator collects in the bottom bucket, and dust after filtering collects in the bottom bucket of the dust collector. Dust can be removed just by releasing the locking clip and taking out the bucket.

Fire extinguisher port



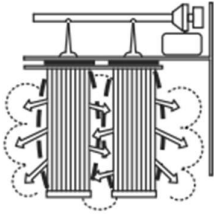
In case of fire inside dust collector, you can extinguish the fire from the fire extinguisher port.

Control Panel



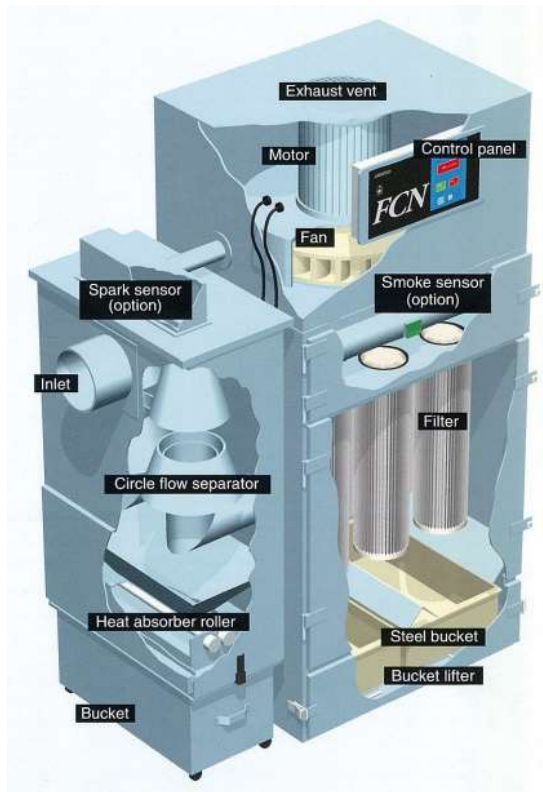
Panel is designed for good visibility. Warning lamp lights up when sparks or high temperature dust enter the system. Warning lamp flashes to report that smoke (fire) occurred. Dust collector automatically comes to a stop when a problem occurs.

Filter Cleaning



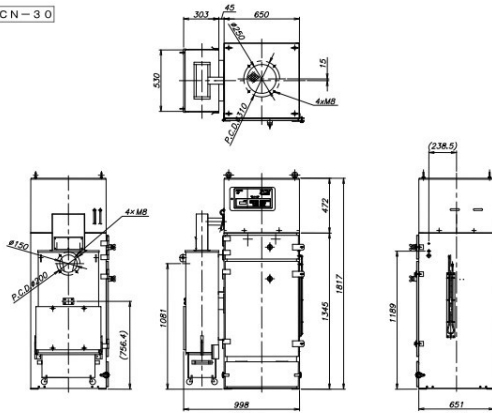
The pulse jet method cleans the filter by instantly releasing the compressed air and plunging it into the filter. It operates automatically, so there is no need to bother the operator.

INTERNAL DESIGN

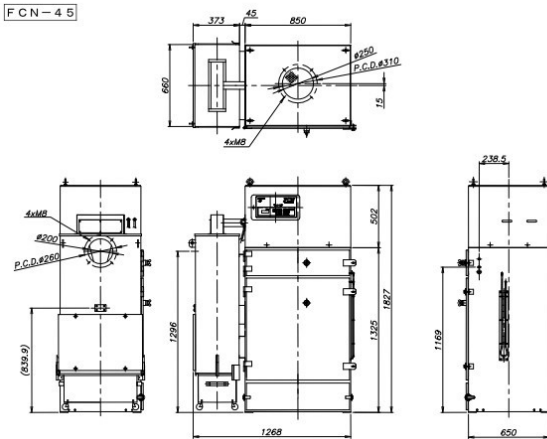


EXTERNAL VIEW

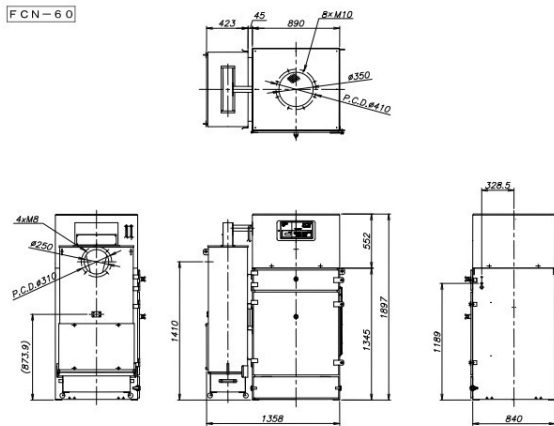
FCN-30



FCN-45



FCN-60



Unit(mm)

APPLICATION

- Plants running 24 hours a day and automated factories.
- Requiring a high degree of safety.
- Workplaces with fumes from laser machining.
- Workplaces with fumes from plasma machining.
- Workplaces with fumes and sparks in the air from welding and cutting metal.



SPECIFICATION

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Particular	Unit	FCN-30	FCN-45	FCN-60
Power Supply	Volt	220	220	220
Frequency	Hz	60	60	60
Phase		3P	3P	3P
Output	kw/hp	1.5/2.0	2.2/3.0	3.7/5.0
Max Airflow	m ³ /min	18	30	45
Max. Static Pressure	kPa	2.55	2.55	2.84
Filter Area	m ²	27.0	40.5	60.8
Suction Port Ø	mm	150	200	250
Dimension (WxDxH)	mm	998x651x1817	1268x660x1827	1358x840x1897
Weight	kg	245	305	430