



Hosoe Facility in JAPAN

# FCN SERIES

## COUNTERMEASURES AGAINST FIRE FIRE PREVENTION FUME COLLECTOR

ARE YOU COMPLETELY SAFE FROM DANGEROUS SPARKS  
IN THE FUMES SUCKED INTO YOUR SYSTEM?



**OUR FUME COLLECTOR HAS:**

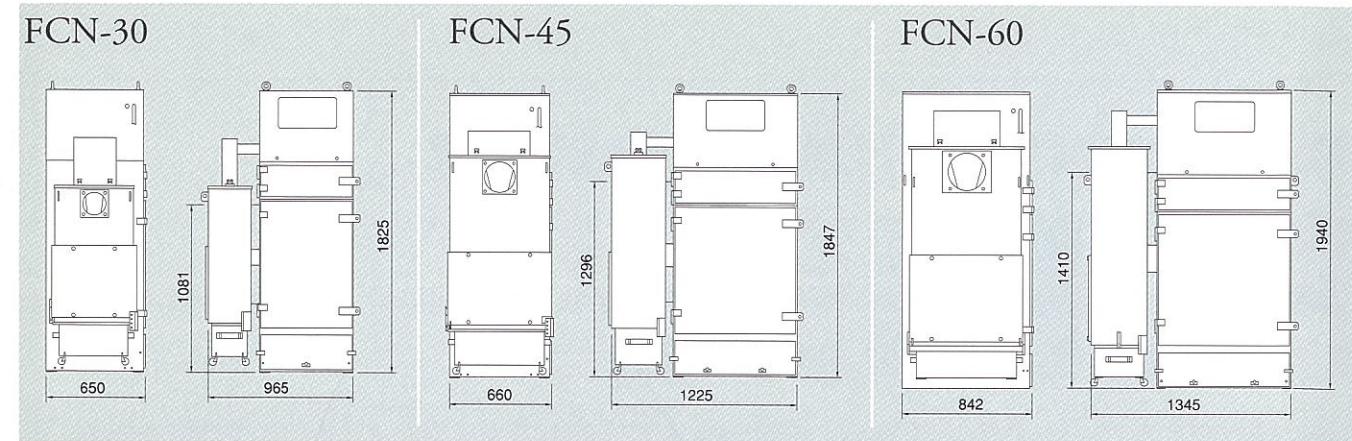
- The Function to prevent sparks-sputter from going into the filter box
- The Function to absorb heat to sparks and to prevent ignition
- Sparks & smoke sensor (option)  
dust collector automatic shutdown system

**FULL FIRE PREVENTION FEATURES**



**THE AGE OF NEW  
ENVIRONMENTAL-AWARENESS**  
For an age when a company is rated on its  
environmental awareness!

### ■Dimensions (in mm)



### ■Specifications

Model		FCN-30			FCN-45			FCN-60		
Power (Volts, Hertz)		200 volt 3-phase 50/60Hz								
Output (kW)		1.5			2.2			3.7		
Dust collector unit	Air capacity(m³/min)	0	10	15	0	20	30	0	30	45
	Static pressure (kPa)	2.55	2.25	1.20	2.55	2.35	1.29	2.84	2.32	0.73
Fan unit	Air capacity(m³/min)	10	20	25	15	30	40	20	40	55
	Static pressure (kPa)	2.77	2.68	2.48	2.78	2.65	2.36	3.39	3.12	2.49
Noise (db(A))		70 ± 2 or below			70 ± 2 or below			73 ± 2 or below		
Filter	Area (m²)	27.0			40.5			60.8		
	Quantity (pcs.)	4			6			9		
	Shape	Formed cartridge (length 750mm 132 ridge type)								
	Material	Polyester span bond								
	Dust drop	Auto pulse jet method								
Pilot valves (quantity)		2			3			3		
Compressed air consumption (N liters/min)		20			30			40		
Spark sensor		Option								
Smoke sensor		Option								
Heat absorber roller drive motor		2.2W×2								
Bucket capacity (liters)	Bottom of separator box	16			30			44		
	Bottom of dust collector	21			12×2			20×2		
Power cord (meters)		3 meters (4 core, no plug)								
Suction inlet diameter (mm)		φ 150			φ 200			φ 250		
Size: W×D×H (mm)		965×650×1825			1225×660×1847			1345×842×1940		
Weight (kg)		250			340			430		
Paint color		JPMA J11-833								

※ Noise value is a reference figure. It does not include noise when pulse jet is operating.

※ Lists performance figures for standard specifications. Performance may differ on units with custom specifications.

**This unit does not completely eliminate the intrusion of sparks. Please consult with our branch office or dealer for installing and selecting the hood shape, height and piping.**  
Inflammable powder from non-oxidized fumes such as generated by carbon-dioxide welding might be suctioned in and generate sparks causing combustion.

### ⚠ FOR SAFE OPERATION

- Be sure to read the instruction manual thoroughly before getting started, and use the machine correctly.
- Do not suction the following materials:
  - Flammable materials... gasoline, thinner, benzene, kerosene, paint, etc.
  - Explosive materials... aluminum, magnesium, titanium, zinc, epoxies, etc.
  - Adhesive materials... Water-Soluble Mist, oil mist, etc.
  - Other... water, oil, liquid chemicals, cigarette stubs, ashes, etc.
- Do not operate the machine in areas exposed to mist, fumes or gases that are inflammable, explosive or corrosive.
- Be sure to ground the machine to protect against electric shock.
- If there is a danger of suctioning sparks, consult with our branch or sales office to select the appropriate model.
- 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.

Specifications and descriptions contained in this catalog may be subject to change without notice.

Please direct any questions to:

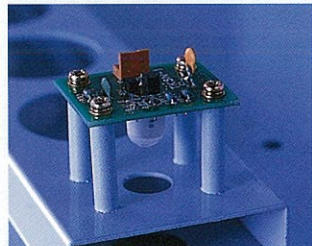
**AMANO Corporation**  
275 MAMEDO-CHO, KOHOKUKU, YOKOHAMA, JAPAN  
TEL(045)401-1441 FAX(045)439-1150

# FIRE PREVENTION FUME COLLECTOR

## FCN series

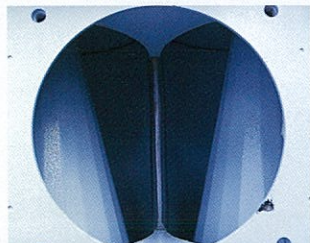
FCN-30  
FCN-45  
FCN-60

**NOW MORE STRONGER PROTECTION AGAINST DUST COLLECTOR FIRES!  
NOW CARRIED WITH VARIOUS KINDS OF FIRE-PREVENTION FUNCTIONS!**



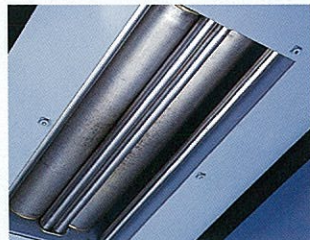
### SPARK & SMOKE SENSOR (option)

Sparks sucked into the collector are detected by an infrared sensor. Fire breaking out inside the dust collector is detected by a smoke sensor. The safe design which always checks operation.



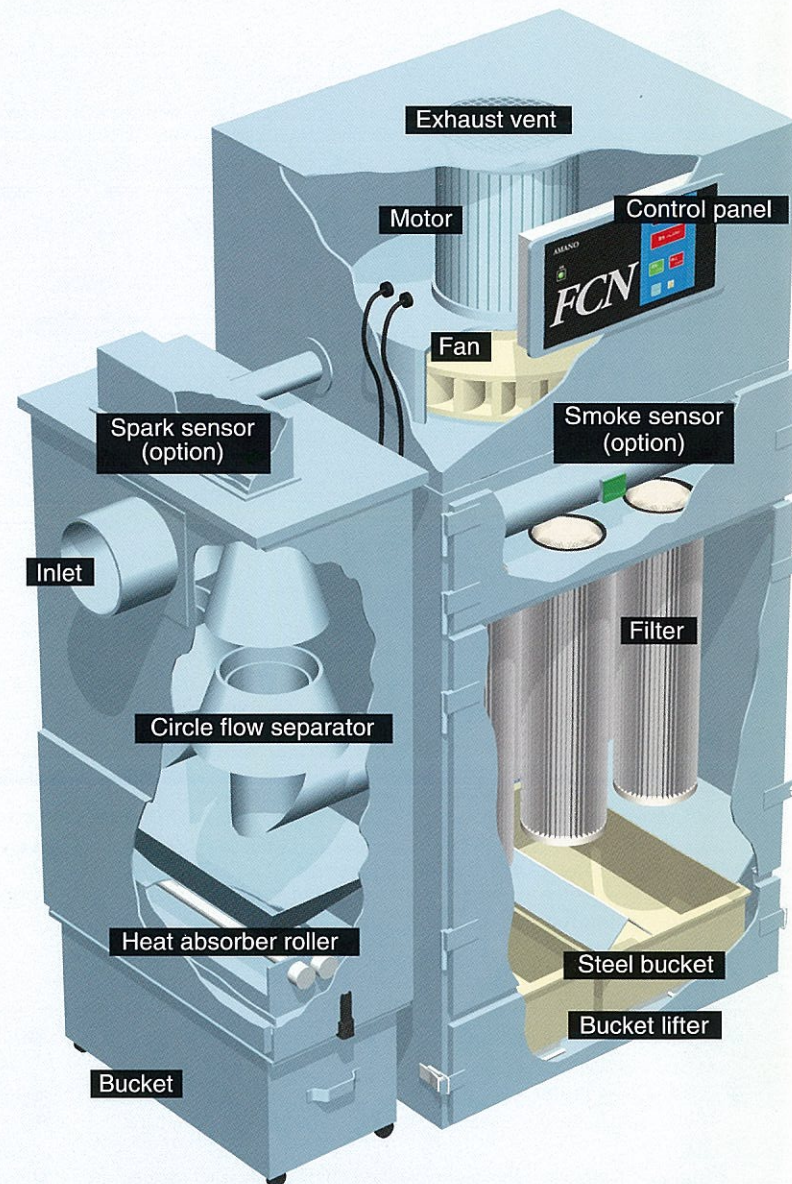
### CIRCLE FLOW SEPARATOR

Primary separation and heat absorption of dust suctioned into the circle flow separator prevents fires from starting. This process separates out more than 70 percent of dust. Lightening the load on the dust 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.

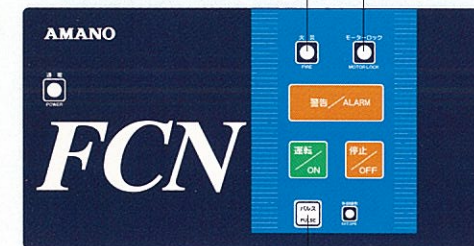


### BUCKET

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.

## COMPACT DESIGN WHICH UNITED. A ROTARY FLOW SEPARATOR

Motor lock lamp  
(heat absorber roller discharge error)  
Fire lamp  
(Lights up when sparks are detected)  
(Flashes when fire is detected)



Filter cleaning switch

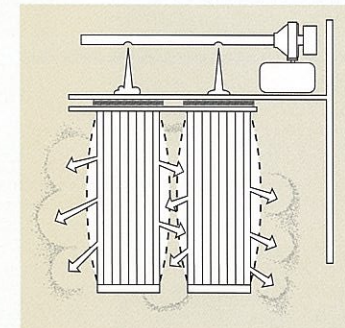
### CONTROL PANEL

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. (When installed with spark/smoke sensor.)

※ Spark/smoke sensor is optional.

### FILTER & CLEANING

The reliable pulse jet system is used for shaking dust off the filter. The internal jet-amp operates to remove dust. Completely filter is easily replaced without having to use tools.



### OPTIONS

- Spark sensor Installs inside rotary flow separator. (for detecting intrusion of sparks or thermal powder)
- Smoke sensor Installs inside dust collector (for detecting fire)
- Fine-fill filter High efficiency dust trapping type filter

MODEL	PART NO.		
	FCN-30	FCN-45	FCN-60
Spark sensor	FCQ-762072	FCR-762072	FCS-762072
Smoke sensor	FCQ-767072	FCR-767072	FCR-767072
Fine-fill filter	PGA-322270	PGA-322270	PGA-322270
Standard filter	PGA-322170	PGA-322170	PGA-322170

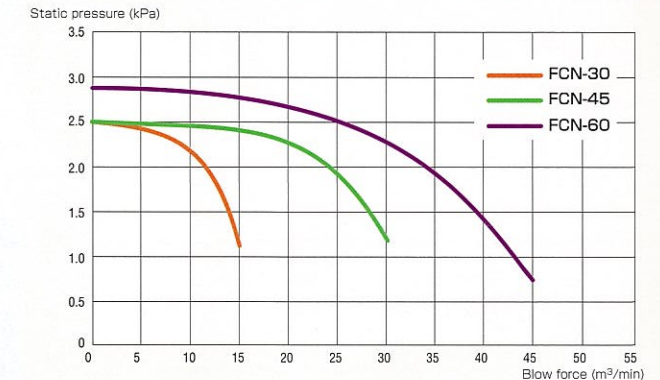


-45 (with option)

### APPLICATIONS

- Plants running 24 hours a day & 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

### PERFORMANCE CURVE



## Hybrid Dust Collector Systems

HF series are ideal for welding booths. Installed as a set with the FCN Series saves energy and boosts safety.

**HF series**

High level air current control with a newly developed blower device means that dust collectors need less blow force.



Proposing you a new generation of dust collector for clean air and greater energy saving.

See our dealer for more details.