

# WIDELY USED IN :

- Metal transforming facilities
- Wood shops
- Powder and bulk processing plants
- Training schools
- Food/pharmaceutical industries





# EFFICIENCY AND QUALITY... HAND IN HAND!

A dust collector is not an expense. It is an investment designed to keep the air clean for employees and should last many worry free years. That is why Eurovac dust collectors are engineered, manufactured and assembled to meet the specific requirements of the customer including safety for users.

Source Capture Equipment and Dust Collector Manufacturer

### **Product Description:**

Unlike many equipment manufacturers who are limited to only one or two types of dust collectors, Eurovac offers a wide variety of systems ranging from highly efficient vertical cartridges arrangement to integrated cyclonic separators when large amounts of dust are present in the airstream. The fully automated control panels ensure that minimal maintenance will be required. If no toxic fumes are generated in the process, it is possible to recycle clean air back in the facility. Depending on the nature of the dust or smoke, Eurovac will select certified high efficiency pleated filters or bags. The vessel robust steel construction may be equipped with NFPA safety features such as explosion vents or suppression devices. Our engineering staff will recommend energy concious owners and plant managers the use of a variable frequency drive (VFD) if not all work stations are required to operate simultaneously.

### Some of the features include:

- Direct or belt drive fans with high efficiency motors
- Automatic pulse cleaning system
- Small, medium or large dust storage bins
- Powder coat paint protection
- Sturdy and solid support structures
- Cyclonic entry separation (when required)
- Modular conception
- Minimal footprint
- Simplified field assembly

### **Optional accessories for safety or increased production:**

- Spark detection / extinguishing systems
- ATEX certified abort and blow back dampers
- Explosion vents
- Sprinkler ports
- Rotary airlocks for constant dust discharge into bin or canister
- OSHA acess ladders and work patforms
- Fan outlet silencers
- HEPA final filters
- Multiple hoppers on large collector

Basic requirements on cartridge pulse cleaning type dust collectors:

- Compressed air fed into the tank should not exceed 90 P.S.I.
- Compressed air should be free of moisture and dust to keep valves clean. A dryer and filter are suggested.
- Cold climates exterior installation will need a solenoid heating element.

**Safety note:** Eurovac may require dust samples if customer cannot ascertain origin and type of pollutants to be filtered. Dust collector is not to be used for any other types of dust for which it was designed and/or specified.

# **EUROVAC TYPE OF COLLECTORS:**



### RCC (Rectangular Cartridge Collectors)

Vertical pleated cartridge collector for large air volume capacities with automatic pulse cleaning system. Exterior installation and possible clean air recirculation into the facility. Ideal for welding and metal transforming plants.

Capacities from 1500 CFM to 50000 CFM

# **BIBO (Bag In Bag Out)**

This type of dust collector is mostly required for plants which may draw toxic particles or harmful pollutants. The horizontal cartridges are pulled out of the collector by means of plastic bags sealed around the outer flange of the cartridge access port ensuring no dust comes in contact with the maintenance staff.

Capacities from 1000 CFM to 6000 CFM



### CCC (Cyclonic Cartridge Collectors)

Cyclonic separators with self cleaning cartridges for applications with large amounts of dust. Large dust containment bins or 55 gallon drums are available.

Capacities from 500 CFM to 6000 CFM

### MDC (Modular Dust Collector)

Smaller sized unit with 2 or 4 extended surface cartridges system for interior installation with minimal foot print and direct drive top mounted fan.

Capacities from 1000 CFM to 2500 CFM



# CAF (Cyclone with After Filters)

True cyclones are great units to serve as separators of large particles and have smaller size dusts being captured by the high efficiency cartridges. Designed for interior installation, the top mounted direct drive fan is connected to a plenum and hanging cartridges. Bottoms of cartridges are removable for easy dust disposal.

Capacities from 400 CFM to 4000 CFM

# **RECOMMENDED TRANSPORT VELOCITIES FOR COMMON DUSTS**

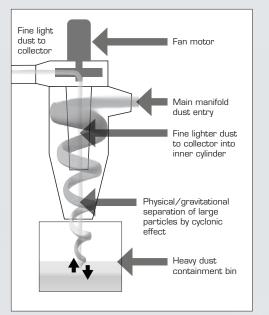
	Product	Feet per minute/Meter per sec CFM/MPS	Product	Feet per minute/Meter per sec CFM/MPS
V	/elding smoke	2000-2500/10-12	Plastic dust	3200-3500/16-18
Fin	e dust (cotton)	2000-2500/10-12	Wood chips/shavings	3500-4000/18-20
Fi	ne dust (flour)	2500-3000/12-15	Granite dust	3500-4000/18-20
Fi	ine wood dust	2800-3200/14-16	Heavy/moist dust	4400-4800/22-24
	Rubber dust	3000-3500/15-18	Metal chips	4800-5000/22-25

**Dust collector selection note:** due to a multiple variety of dusts, application, air volume or various static pressure on systems, Eurovac cannot list all systems possibilities or arrangements in this brochure. By answering a few simple questions, our sales and engineering staff will guide you to a stafe and efficient affordable solution.

**Safety note :** Dust collectors described above may not be used for highly reactive dust such as aluminium. Eurovac will recommend wet type scrubbers for such application. Contact factory or representative for details.







# Dust Explosion Pentagon

# Do I need a cyclone?

The question lies only on one important factor. DUSTLOAD! If your process creates large dusts or substantial amount of dusts, then Eurovac will recommend a high efficiency cyclone or a cyclonic entry dust collector. This device will remove particles at 15 to 20 microns and larger allowing only finer particles to enter the dust collector.

This translates into longer filter or cartridge life and greatly reduced operational costs. It also allows recovery of the valuable product for more money savings if required. Contact your sales representative or Eurovac for more details and suggestions.

# Do I need NFPA safety features?

The answer is in the type of dust! Some of the dusts (if not mixed with other dusts) have no reactive possibility such as silica or welding smoke and others have high St values such as aluminum and magnesium.

NFPA and OSHA organizations have defined parameters for dust collectors used with the collection, filtering and storing of reactive dusts. Safety measures may be as simple as a low pressure releasing venting door on the collector and up to intricate devices such as spark detection and extinguishing systems or flameless explosion valves.

Eurovac can help you and mechanical engineers in designing the proper unit for your application. You need three factors for an explosion: fuel which the dust, a spark to ignite the dust and oxygen to feed the fire and explosion. No one can afford the effects of an explosion on workers.

# Tips on selecting the proper dust collector

- Rely on a well established manufacturer. Internet deals may sound interesting but not all collectors are created equal. Beware of those "do it yourself kits" as they may not meet NFPA or local fire marshal requirements.
- Install proper ductwork and use long radius elbows to minimize static pressure loss.
- Do not rely on indicated percentage of efficiency. As an example, a 95% efficient filter is only a number. Ask on what size particles.
- In order to minimize fires and/or explosions, empty dust bin or drum every day if possible and check filter status as often as possible.
- Schedule a routine weekly maintenance of all components.
- And finally, not everyone is a dust collector expert. Eurovac has factory trained sales staff and an engineering department to guide you from your first question right to turning the switch to ON when your system is ready to be put to work.

EUROVAC

Printed in Canada

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