

Pre-Separator

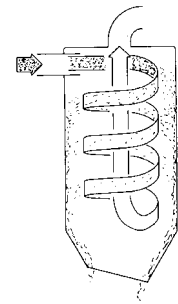
When large quantities of material are to be separated, it is advisable to use a pre-separator. The pre-separator can be placed at the workplace or in conjunction with the central unit.

Pre-separators should be used:

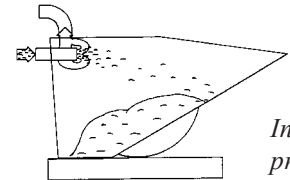
- for material recovery
- for material transportation
- to reduce the loading on the ducting system
- to relieve loading on the central filter
- to reduce the risk for filter clogging
- when fluids are to be separated

When a pre-separator is to be used the following should be considered:

1. Type of dust to be handled.
 2. How the unit should be placed and how emptying will be performed.
 3. Expected airflow.
- 1. Cyclone Principle** meaning that the inlet is mounted tangentially on the body and the air-flow is thus forced against the inside of the cyclone. This principle is very effective in separating particles down to 1/100 mm.
- 2. Inertial Principle** meaning that the air stream flows into the container and abruptly changes course. The outlet sits behind the inlet and the particles are thus thrown into the container.



Cyclonic principle



Inertial principle

Cyclone Pre-Separators

Type of Material	Air Flow	Select pre-separator	Page
All types, particularly where a large percentage is fine particulate	100-500 m ³ /h	DCF Mobil	24
	100-200 m ³ /h	DCF Mini	25
	200-500 m ³ /h	DCF 3500	25
	500-700 m ³ /h	F 8000	26
	500-1000 m ³ /h	F 11000	26
	1000-4000 m ³ /h	F 20000	27
	2000-5000 m ³ /h	F 30000	28-29

Discharge to	Volume	Equipment	Page
Plastic sack	lesser	Discharge cone	26-28
	greater	Auger Compactor	28
Compacted in plastic sack	lesser	Foot Valves/Auto Foot Valve/	29
	greater	Discharge Valves	
Open Container, Conveyor	greater	Peristaltic Airlock	30
	lesser	Plastic and Steel Container	31
	greater	Tipping Container	31

Inertial Pre-Separators

Material Type	Air Flow	Volume	Select Pre-Separator	Page
Coarse and dense	250-2000 m ³ /h	moderate	Stainless dispenser	32
	250-2000 m ³ /h	large	Container	33
	250-500 m ³ /h	portionable	Stainless Silo	34