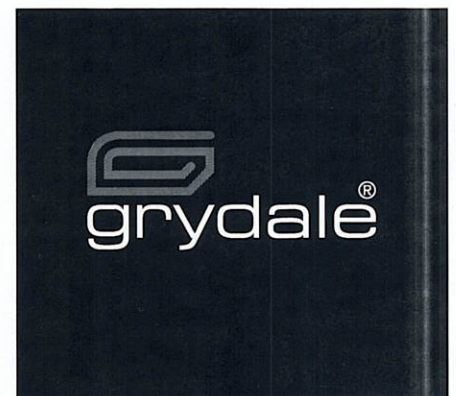
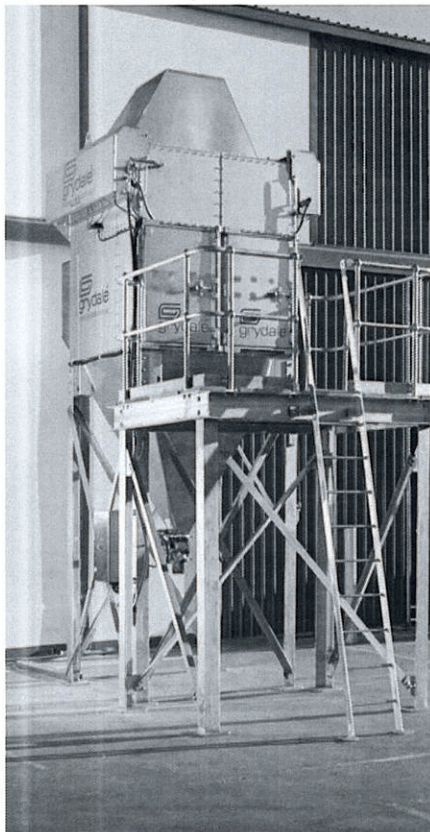
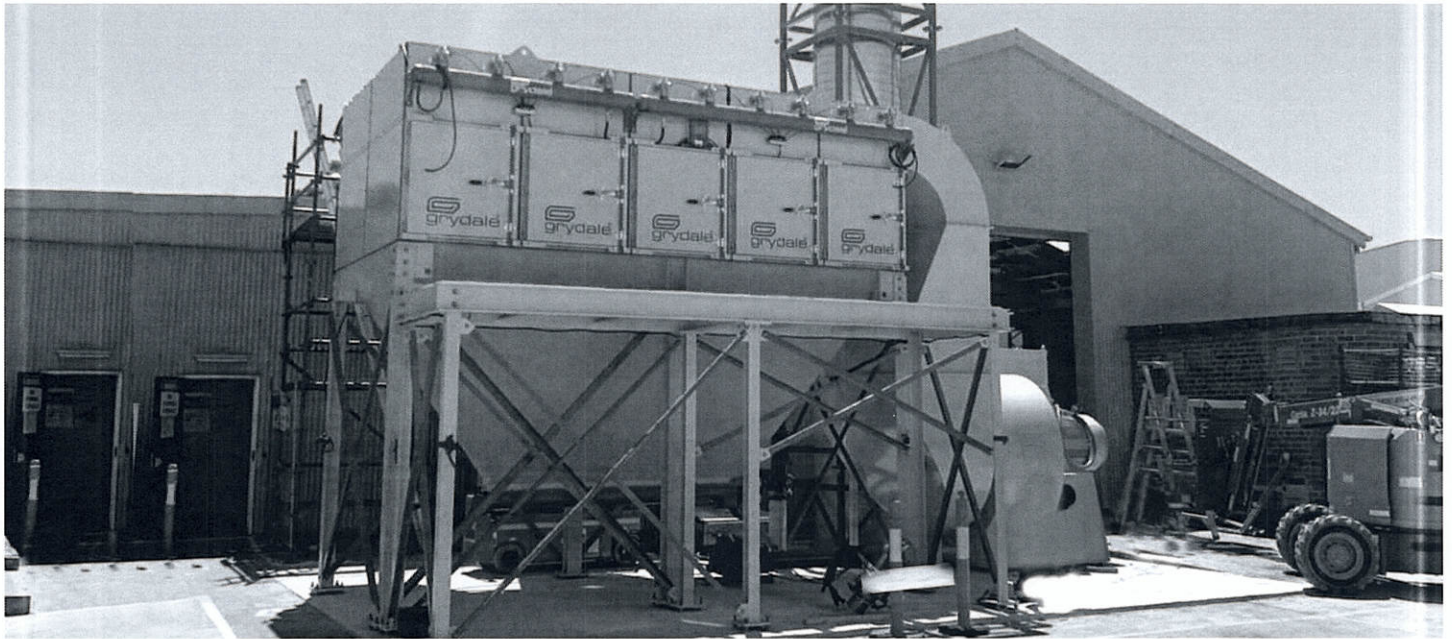


# Fixed Dust Control Solutions

## JMS F-Series Dust Collectors





# JMS F-Series

## Modular design provides flexible solution

Our fixed unit dust collectors offer a long-term and cost-effective solution to dust and fume control and are designed to handle high-volume dust loads. JMS F-Series dust collectors consist of a centrifugal fan, dirty air intake, high efficiency filters, reverse pulse cleaning system, dust discharge system, clean air exhaust and fan silencer.

The JMS F-Series is based on a modular design which provides the flexibility to size the dust control units in relation to the required air volumes. Units range from 6,000m<sup>3</sup>/hr to 400,000m<sup>3</sup>/hr. Dust collectors can be combined to provide greater air flow.

Our engineering team can take site and process drawings to determine air flow requirements and design ducting configuration to achieve a total dust control solution.

### Centrifugal Fan

Custom sized for the application air flow and pressure requirements. Our fans offer superior energy efficiency and enhanced durability, allowing them to operate in even the most corrosive environment. Top or ground mounted depending on site conditions and dust collection system. Exhausts through a silencer to reduce noise pollution.

### Variable Speed Drive (VSD)

Varies power usage to achieve programmed air volume. If cost constraints apply, can be replaced with a soft starter or DOL.

### Filters and Filter Housing

High efficiency cartridge filters are mounted in the filter house and provide a filtration efficiency of 99.99% at 0.067 micron and provide filtration of dust and diesel particulates.

Filters can be easily accessed via the filter access doors allowing efficiency filter maintenance.

### Support Legs

Steel legs provide a stable mounting position with adequate clearance for positioning recovery waste bins under the hopper. For non-ground level installations, maintenance platforms and access ladders can be installed to allow safe maintenance and servicing.

### Fan and Differential Pressure Monitors

Fan pressure monitor alerts operators when air volume needs to be increased (e.g. due to a long duct run or a blockage).

Differential pressure monitor alerts operators of blocked filters or higher than normal dust loads.

### Clean Air Exhaust

Particle detectors report real-time emissions monitoring from the exhaust stack.

### Reverse Pulse Cleaning System

Reverse pulse cleaning removes dust build up on the filters during operation. Pressure and frequency of pulse cleaning can be adjusted as required, reducing the number of filter changes required.

An onboard compressor can be supplied or dust collectors can use an on-site compressor if available.

### Dirty Air Intake

Single, dual or triple dirty air intakes options. An abrasive intake can slow airflow before the filters are engaged if required.

### Hopper & Dust Discharge System

The hopper collects the heavy dust particulates released from the filters. The dust type will determine the number and shape of the hopper(s).

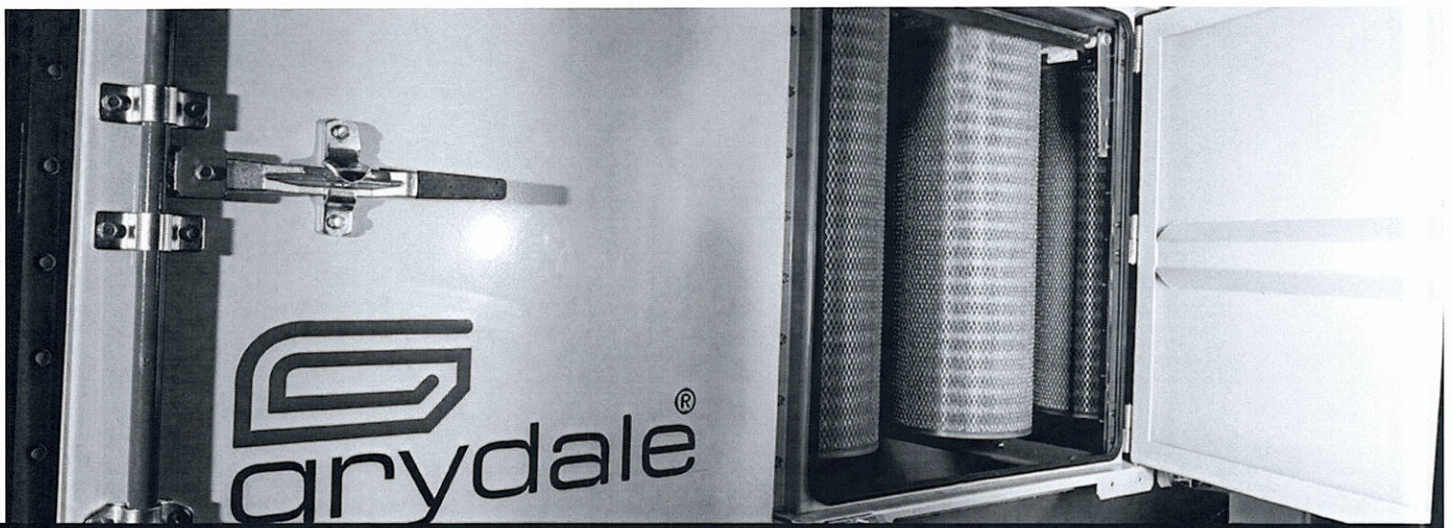
For standard applications a pyramid hopper is used and discharges to a recovery bin. If collected dust doesn't flow, a rotary valve coupled with a pneumatic aerator - that automatically cleans the hopper - can be installed for more efficient discharge. Optional slide gates are a cost effective option for minimising spillage.

For high volumes a trough hopper can be used with an auger and rotary valve; also serves to convey materials to an separate discharge location.

### Floor Sweeps

For industrial processes that create heavy dust particles, floor sweeps and ducting can be installed.





# Key Features

Custom solutions to meet application and site needs

## Air Intakes

JMS F-Series dust collectors can be designed with single or multiple air intake options depending on the design of the ducting, application and site conditions.

**Configuration options:** Single, dual or multiple air intakes.

## Filters

High efficiency filter cartridges provide filtration of both dust and diesel particulates. Baffle plates distribute air throughout the dust collector ensuring an even wear of filters.

**Configuration options:** The number of filters required is dependent on the air-to-cloth ratio required for the specific application.

## Filtration Efficiency

Certified air flow performance and filtration testing has been conducted both above and below ground as part of rigorous performance verification and certification processes and shows a collection efficiency of 99.99% at 0.067 micron.

## Filter Maintenance

The filters can be easily accessed through the filter access doors for efficient filter maintenance to maximise machine up-times. Filter life is dependent on dust type, dust loading and application.

Changing the filters at the optimum time ensures the dust collector does not draw more kW than required to maintain air flows.

Depending on the height of the dust collector customised maintenance access platforms can be designed and manufactured.

## Reverse Pulse Cleaning System

JMS F-Series dust collectors are connected to an external compressor to provide air for the on-board reverse pulse filter cleaning system, using the plant air receiver tank and attachment kit fitted to the unit.

Jet tubes direct air inside the filters which blasts air from the inside of each filter, effectively removing dust build-up and prevents the filters from clogging. The adjustable timer allows the pressure and frequency of pulse cleaning to be set to the application and dust loading. This reduces the number of filter changes required.

## Centrifugal Fan

Centrifugal fans offer superior energy efficiency and enhanced durability, allowing them to operate in even the most corrosive environment. Centrifugal fans provide the required air volume using one motor and one impeller to develop system pressure.

**Configuration options:** Centrifugal fans are custom designed to provide optimum air volume and pressure to suit specific applications. Fans can be ground or roof mounted depending on the application and space constraints.

## Fan Silencer

Exhausted air passes through silencers to reduce noise pollution.

**Configuration options:** Custom exhaust silencers can be designed and manufactured to meet site acoustic requirements. Depending on the site and application an exhaust stack may also be required.



# Technical Specifications

Modular design provides a cost effective and scalable solution

Grydale F-Series	JMS 6	JMS 8	JMS 12	JMS 16	JMS 18	JMS 24	JMS 32	JMS 36	JMS 48	JMS 60	JMS 72	JMS 84	JMS 96	JMS 108
<b>Dirty Air Inlets - Sized to meet requirements</b>														
<b>Filters</b>														
Number of High Efficiency Filters	6	8	12	16	18	24	32	36	48	60	72	84	96	108
Individual Filter Area (m <sup>2</sup> )	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>	28m <sup>2</sup>
Total Filter Area (m <sup>2</sup> )	168m <sup>2</sup>	336m <sup>2</sup>	336m <sup>2</sup>	448m <sup>2</sup>	504m <sup>2</sup>	672m <sup>2</sup>	896m <sup>2</sup>	1008m <sup>2</sup>	1344m <sup>2</sup>	1680m <sup>2</sup>	2016m <sup>2</sup>	2352m <sup>2</sup>	2688m <sup>2</sup>	3024m <sup>2</sup>
Filter Temperature	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C	82°C
Filter Access Doors	1	2	1/2	2	3	2/3	4	3	4	5	6	7	8	9
<b>Reverse Pulse Cleaning System</b>														
Pulse Cleaning Solenoids	3	8	6	8	6	8	12	18	16	20	20	22	20	24
Plant Air Attachment	•	•	•	•	•	•	•	•	•	•	•	•	•	•
On-Board Compressor	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Adjustable Pressure and Frequency Rate	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Auto Drains	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Centrifugal Fan</b>														
Centrifugal Fan Sized to meet requirements	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fan Pressure Sized to meet requirements	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fan Power (Electric) Sized to meet requirements	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fan Silencer	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Variable Speed Drive</b>														
Variable Speed Drive Sized to meet requirements	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Hopper Design Options</b>														
Single Pyramid Hopper	•	•	•	•	•	•	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Double Pyramid Hopper	n/a	▲	▲	▲	▲	▲	▲	n/a	▲	n/a	n/a	n/a	n/a	n/a
Multiple Pyramid Hopper	n/a	n/a	n/a	n/a	▲	n/a	n/a	•	•	•	•	•	•	•
Single Trough Hopper	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Multiple Trough Hopper	n/a	n/a	n/a	n/a	n/a	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Dust Discharge Options</b>														
Steel Recovery Drums	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Slide Gate Mechanism	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Rotary Valve Discharge	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Screw Conveying Auger	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

• Yes- Standard Configuration

▲ Optional Configuration

# Technical Specifications

Modular design provides a cost effective and scalable solution

Grydale F-Series	JMS 6	JMS 8	JMS 2	JMS 16	JMS 18	JMS 24	JMS 32	JMS 36	JMS 48	JMS 60	JMS 72	JMS 84	JMS 96	JMS 108
<b>Control and Monitoring System</b>														
CANBus PLC	●	●	●	●	●	●	●	●	●	●	●	●	●	●
HMI Display	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Static Pressure Gauge	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Differential Pressure Gauge	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Emissions Monitoring Probe	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Operational Lights and Alarms	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Velocity Probe	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Fan Vibration Sensors	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Safety Features</b>														
Emergency Stop	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mains Isolator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Explosion Vent	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

- Yes- Standard Configuration
- ▲ Optional Configuration