



**Donaldson**  
FILTRATION SOLUTIONS



## Modular Baghouse Dust Collectors



# Compact, Modular Design

## Designed for Performance and Ease of Maintenance

▶ The enhanced Donaldson Modular Baghouse delivers reliable, efficient, continuous-duty, pulse-jet operation. The Modular Baghouse advantage is found in the breakthrough technology of Dura-Life™ filter bags. Dura-Life bags - the filter which lasts 2 to 3 times longer and provides lower emissions. When the bags need to be replaced, Quick-Release Filter Bag Cages have been added to the collector to make replacing easier.



*Efficient and Reliable with Dura-Life Twice The Life Filter Bags.*

The Modular Baghouse provides reliable service with easy maintenance. Computer designed inlets and deflector plates and optimised by extensive test work provides excellent preseparation, coupled with maximised bag spacing, result in optimal airflow with minimal abrasion. Advanced valves, providing 50% more cleaning air, result in a more efficient operation. The truly flexible and robust Donaldson baghouse

solution provides you with cost advantages and value over the life of the collector.

## Modular Baghouses offer

- ▶ New models with high level dust inlets allow higher air-to-media ratios on lighter dusts
- ▶ With the efficient Dura-Life bags smaller housings can be selected
- ▶ Clean-air side bag access for easier bag service
- ▶ Welded design increases durability
- ▶ Tool-free installation of filter bags & cages
- ▶ Optimal sizing and assembly reduces shipping and installation costs

## When to use a baghouse

- ▶ Any environments from light duty to aggressive environments
- ▶ High loading
- ▶ High moisture content
- ▶ Agglomerative dust

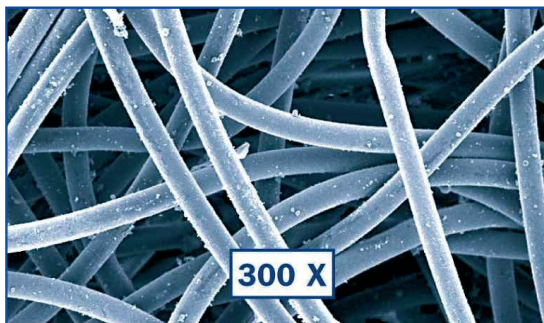
## Applications

- ▶ Chemical
- ▶ Mineral processing
- ▶ Food
- ▶ Agriculture
- ▶ Pharmaceutical
- ▶ Foundries
- ▶ Bulk handling
- ▶ Cement
- ▶ Paper processing
- ▶ Fertilisers
- ▶ Petrochemical
- ▶ Rubbers and plastics

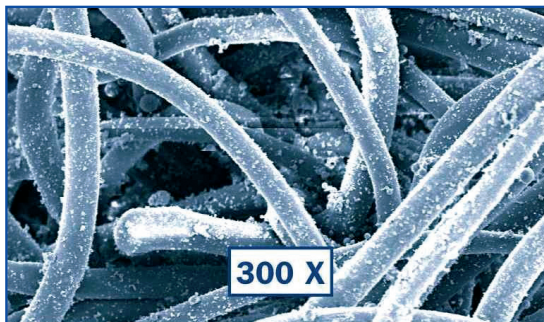
# Dura-Life™ Filter Bag Technology

## Particularly efficient: Modular Baghouse with Dura-Life

► The new Modular Baghouse system can be used with any filter media. In combination with Dura-Life filter media though the customer benefits from additional advantages. Traditionally, polyester bags are produced by a needling process, that creates a variety of pore sizes, some are so large that dust can become embedded into the fabric, inhibiting cleaning and reducing bag life. Dura-Life bags are engineered with a unique hydroentanglement process that uses water to blend the fibres. This process provides a more uniform material with much smaller pores, resulting in better surface loading, and better cleaning. These advantages deliver twice the operating life before bags need to be replaced due to pressure drop. Longer life from Dura-Life bags lowers maintenance costs and raises baghouse dust collection to a whole new level.



*Dura-Life Bag-Clean Air Side*



*Polyester Bag-Clean Air Side*

*These photos were taken with a scanning electron microscope, of filter media used in a collector that was filtering fly ash. The bags were removed after 2,700 hours of use. Air-to-media ratio was 1.4 m/min. Pressure drop was 152 da Pa on traditional polyester bags and 51 da Pa on Dura-Life.*



## Dura-Life bags provide big benefits!

Dura-Life technology provides better surface loading and better pulse cleaning, resulting in:

- Two to three times longer bag life, due to innovative filter technology
- Reduced maintenance and replacement bag costs
- 30% fewer emissions based on EPA and ETV tests as well as Isokenetic sampling
- Even larger reductions in energy costs due to reduced differential pressures
- Best cost/performance ratio

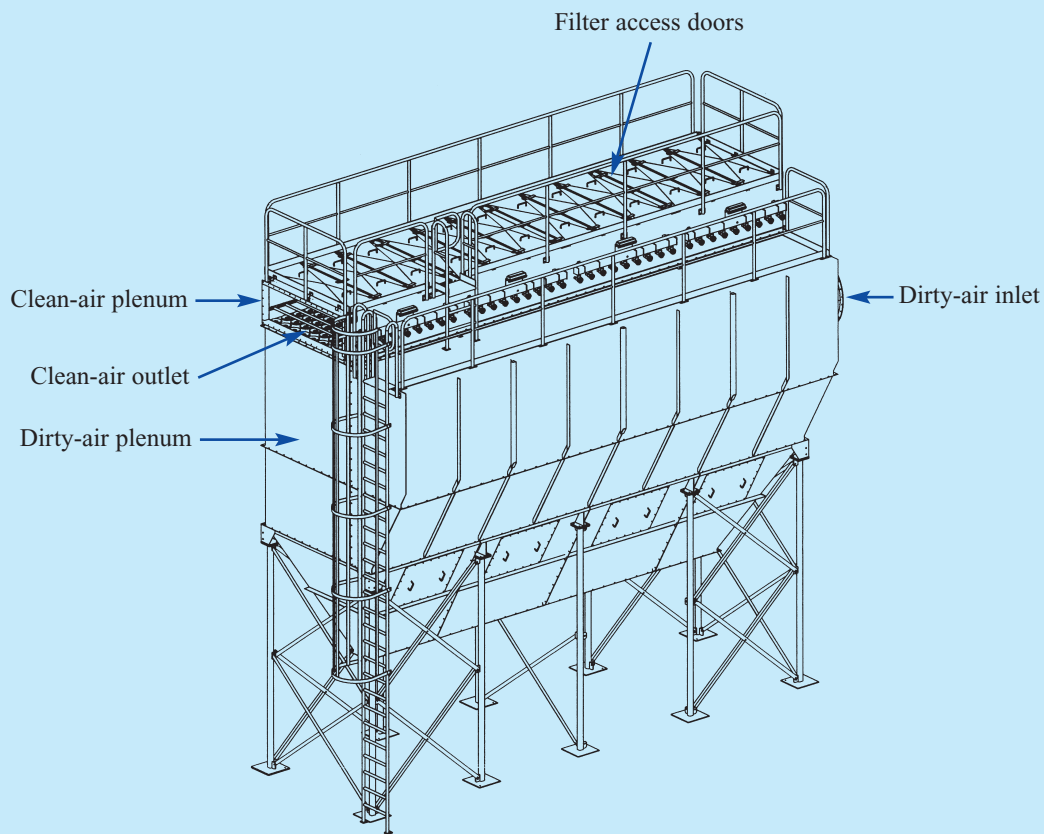
# Standard Features & Equipment Options

Collector Design	Standard	Optional
Clean air plenum with top-bag removal	X	
Top access lift doors	X	
All-welded, carbon steel design	X	
Integrated filter cleaning system	X	
Service platform and access ladder	X	
High temperature construction +200°C		X
Temperatures 10°C - +60°C	X	
Operating pressure - 500mm H <sub>2</sub> O	X	
<b>Bags &amp; Cages</b>		
Dura-Life polyester bags	X	
Single piece cage with internal venturi	X	
Mid steel galvanized quick-release bag cages	X	
Mid steel powder coating quick-release bag cages		X
Variety of bag media options (oleophobic, antistatic, oleophobic antistatic, Nomex)		X
Sealing arrangement - stainless steel snap ring and double cuff	X	
<b>Hopper Design</b>		
Pyramid hoppers		X
Inlets and deflector arrangement	X	
Trough/valley hopper	X	
Hopper access covers	X	
<b>Hopper Discharge</b>		
Pyramid hopper flange to accept rotary valve		X
Valley hopper flange to accept screw conveyor	X	
<b>Support Structure</b>		
Clearance leg pack	X	
<b>Electrical Controls, Gauges and Enclosures</b>		
IPC	X	
TCB/IPC DP		X
<b>Safety Features</b>		
Explosion vents		X
ATEX compliant		X
<b>Special Options</b>		
Dirty side stainless steel		X
Stainless steel construction		X
Operating pressure - 1000mm H <sub>2</sub> O		X
Cell isolation		X
Sprinkler system		X
Insulation and heating		X
Explosion suppression		X
High temperature construction +250°C		X
<b>Paint System</b>		
Standard water based paint finish	X	

Information contained in this document is subject to change without notice.

# Operations & Features

## Normal Operation



## Easy Maintenance

▶ Quick-Release Filter Bag Cages (patent pending) make filter bag removal extremely easy. When swung into position, the handle serves as a lever to remove

the cage from the tubesheet. The Quick-Release Filter Bag Cage requires only 2,5 kilos of force to remove compared to other cages that require more than 20 kilos.



## Donaldson. *And everything just got better.*

### Total Filtration Management

▶ Donaldson offers a wide variety of solutions to reduce your energy costs, improve your productivity, guarantee production quality and help protect the environment.

**Compressed Air Filtration, Sterile Filtration, Process Filtration, Refrigerant Drying, Adsorption Drying, Condensate Drains, Condensate Purification Systems, Water Chillers, Air / Oil Separation, Dust and Fume Removal, Process Air and Gas Processing, Oil Mist Separation, Industrial Hydraulics**

### Total Filtration Service

▶ A comprehensive range of services especially designed to keep your production at peak performance and at the lowest total cost of ownership.

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