Donaldson. Torit

MODULAR BAGHOUSE DUST COLLECTORS





COMPACT, MODULAR DESIGN

The Donaldson® Torit® Modular Baghouse (MB) delivers reliable, efficient, continuous-duty, pulse-jet operation. The MB advantage is found in the breakthrough technology of Dura-Life™ bag filters. Dura-Life bags offer longer bag life and reduced emissions. The MB provides reliable service with easy maintenance. Computer designed inlets and deflector plates, coupled with maximized bag spacing, result in optimal airflow with minimal abrasion. Advanced valves, providing 50% more cleaning air, result in a more efficient operation. Over the life of the collector, no other baghouse can provide this much value.

The Modular Baghouse Features:

- High body inlet models allow higher air-to-media ratios on lighter dusts
- Square models help minimize ducting and accessory costs
- Dura-Life "Twice the Life" Bag Filters

- Clean air bag access for easier bag service
- Welded design increases durability
- Integral fan option reduces space requirements
- Tool-free installation of bag filters and cages
- 10-year warranty



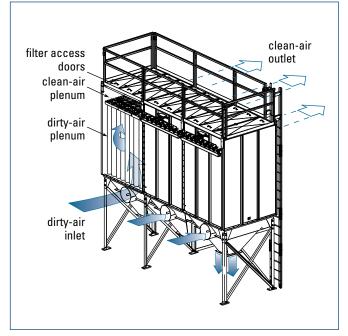
SUPERIOR PERFORMANCE

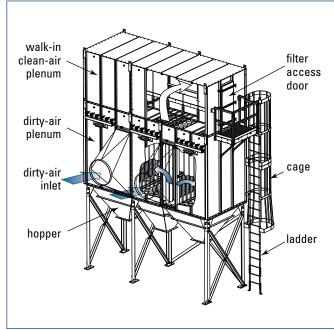
WITH DURA-LIFE™ "TWICE THE LIFE"

BAG FILTERS

405MBW10

OPERATIONS & FEATURES





MBT NORMAL OPERATION

MBW HIGH INLET NORMAL OPERATION

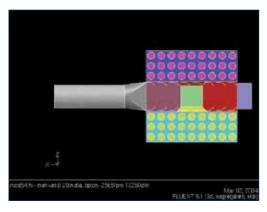
BAGHOUSE OPERATIONS THAT WORK

The Modular Baghouse collector comes in two models: the MBT allows walk-on, top access to the bags (clean-air side) of the collector. This configuration is ideal for indoor or tight budget applications. The MBW offers a walk-in clean-air plenum, so bags can be replaced in any kind of outdoor weather.

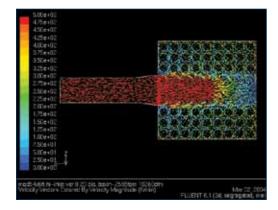
The MB has two inlet configurations; the most common configuration allows the dirty-air to enter through the hopper inlet located under the bag filters. The dirty air hits a deflector at the end of the inlet, which causes heavy particulate to fall directly into the hopper. This reduces the amount of dust that comes in contact with the bags resulting in longer bag life and lower pressure drop. For applications with light and fibrous dust, a high body inlet is available that reduces upward air velocities allowing the dust to properly fall into the hopper after the bags have been pulsed.

ENGINEERED FOR RELIABLE PERFORMANCE

Modular Baghouses are a reflection of Donaldson Torit's commitment to technical research and development. Sophisticated FLUENT®* computer airflow analysis has been used to assure the Modular Baghouse provides a uniform airflow resulting in reduced bag abrasion, longer bag life and lower maintenance costs.



Top view of Modular Baghouse with high inlet without airflow.



Top view of Modular Baghouse with high inlet showing FLUENT Computer Analysis of airflow.

FLUENT computer airflow analysis shows that the baffles in the MB high inlet deflect and reduce dust particle velocities and then properly distribute them throughout the collector for effective filtration with minimum bag and collector wear.

DUMPSTER DISCHARGE FOR HEAVY DUST LOADING

For applications with heavy dust loading, the MB has an easy to use Dumpster Discharge. This option provides either a two or three cubic yard self-dumping dumpster that can be hauled away with the use of a forklift. The dumpster comes with a lid that seals the system so that no rotary valve is required. The lid is lifted off of the dumpster via a mechanical lift, which is included with the package.



PROVEN PERFORMANCE ON HUNDREDS OF APPLICATIONS



405MBW10 at a foundry



at a cabinet shop on wood dust, from cutting, moulding and sanding





324MBWS10 at a glass manufacturing facility



162MBT8 on wood dust

324MBWS10

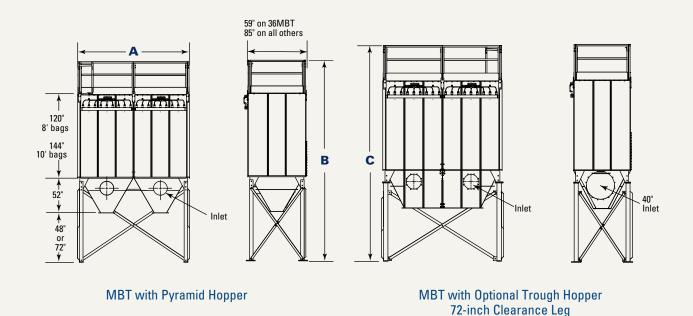
at a shingle manufacturing facility collecting sand



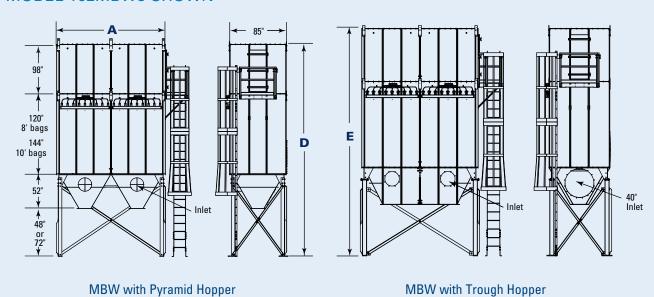


405MBT8 at a brick manufacturing facility

MODEL 162MBT8 SHOWN

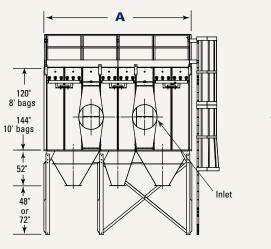


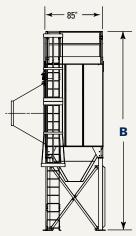
MODEL 162MBW8 SHOWN

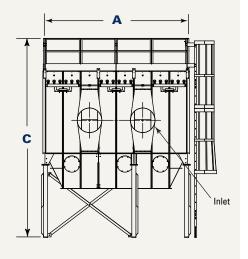


72-inch Clearance Leg

MODEL 162MBTH8 (MODULAR BAGHOUSE HIGH INLET) SHOWN



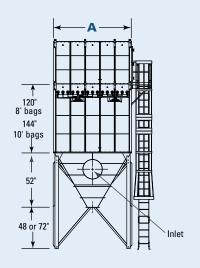




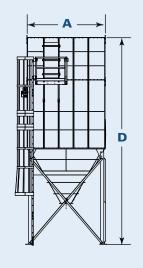
MBTH with Pyramid Hopper

MBTH with Trough Hopper

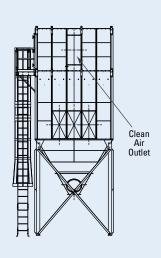
MODEL 162MBWS8 (MODULAR BAGHOUSE SQUARE) SHOWN



MBWS with Pyramid Hopper



MBWS with Pyramid Hopper Side View



MBWS with Pyramid Hopper Rear View

	Nominal				Shipping Weight	
Model	Airflow Range* (cfm)	Cloth Area (ft²)	No. of Bags	No. of Valves	MBT (lbs)	MBW (lbs)
36 MBT5	1,150 - 2,880	288	36	6	3000	(ID3)
36 MBT6	1,380 - 3,450	345	36	6	3100	
36 MBT8	1,840 - 4,600	460	36	6	3400	
54 MBT6	2,070 - 5,180	518	54	6	3900	
54 MBT8	2,760 - 6,910	691	54	6	4200	
54 MBT10	3,460 - 8,660	866	54	6	5300	_
54 MBT(W)H8		691	54		5890	6870
	2,760 - 8,290 3,460 - 10,390	866	54	6	6565	7710
54 MBT(W)H10				6		
31 MBT(W)8	4,150 - 10,390	1039	81	9	5800	6800
81 MBT(W)10	5,190 - 12,990	1299	81	9	7300	7900
81 MBT(W)H8	4,150 - 12,460	1039	81	9	7085	8145
81 MBT(W)H10	5,190 - 15,580	1299	81	9	7690	9172
108 MBT(W)8	5,530 - 13,830	1383	108	12	7800	8400
108 MBT(W)10	6,920 - 17,300	1730	108	12	8500	9400
108 MBT(W)H8	5,530 - 16,590	1383	108	12	8480**	9555**
108 MBT(W)H10	6,920 - 20,760	1730	108	12	9320**	10,580**
144 MBWS8	7,380 - 18,450	1845	144	12	_	10,088
144 MBWS10	9,220 - 23,070	2307	144	12	_	10,559
162 MBT(W)8	8,310 - 20,780	2078	162	18	9300	9200
162 MBT(W)10	10,390 - 25,980	2598	162	18	10,800	11,000
162 MBT(W)H8	8,310 - 24,930	2078	162	18	12,538	13,672
162 MBT(W)H10	10,390 - 31,170	2598	162	18	13,725	15,302
189 MBT(W)H8	9,690 - 29,070	2423	189	21	13,532	14,565
189 MBT(W)H10	12,110 - 36,340	3029	189	21	14,910	16,508
225 MBWS8	11,530 - 28,840	2884	225	15	_	14,460
225 MBWS10	14,420 - 36,060	3606	225	15	_	15,481
243 MBT(W)8	12,460 - 31,170	3117	243	27	13,300	14,700
243 MBT(W)10	15,580 - 38,970	3897	243	27	15,200	17,200
297 MBT(W)H8	15,230 - 45,960	3808	297	33	20,173	21,390
297 MBT(W)H10	19,040 - 57,120	4760	297	33	21,924	24,172
324 MBT(W)8	16,620 - 41,560	4156	324	36	18,900	21,400
324 MBT(W)10	20,780 - 51,960	5196	324	36	21,700	24,000
324 MBT(W)H8	16,620 - 49,870	4156	324	36	21,570	21,755
324 MBT(W)H10	20,780 - 62,352	5196	324	36	23,215	25,495
324 MBWS8	16,620 - 41,560	4156	324	36	_	20,076
324 MBWS10	20,780 - 51,960	5196	324	36	_	20,154
405 MBT(W)8	20,780 - 51,950	5195	405	45	23,300	26,000
405 MBT(W)10	25,980 - 64,950	6495	405	45	26,900	28,900

Based on clean filters.
 Two pyramid hoppers. Single outlet hopper also available.

	Α		В	С	Ε)	E
Model	MBT/MBW	MBT 48-in.	MBT 72-in.	MBT	MBW 48-in.	MBW 72-in.	MBW
36 MBT5	57.5	209.7	_	_	_	_	_
36 MBT6	57.5	221.7	_	_	_	_	_
36 MBT8	57.5	245.7	_	_	_	_	_
54 MBT6	57.5	244.2	_	_	_	_	_
54 MBT8	57.5	268.2	_	_	_	_	_
54 MBT10	57.5	292.2	_	_	_	_	_
54 MBT(W)H8	85.0	268.1	292.1	_	294.1	318.1	_
54 MBT(W)H10	85.0	292.1	316.1	_	342.1	366.1	_
81 MBT(W)8	85.0	268.2	292.2	_	294.1	318.1	_
81 MBT(W)10	85.0	292.2	316.2	_	342.1	366.1	_
81 MBT(W)H8	111.0	290.8	314.8	_	316.7	340.7	_
81 MBT(W)H10	111.0	314.8	338.8	_	364.7	388.7	_
108 MBT(W)8	111.0	290.8	314.8	_	316.7	340.7	_
108 MBT(W)10	111.0	314.8	338.8	_	364.7	388.7	_
108 MBT(W)H8	137.0	268.2*	292.2*	_	294.1	318.1	_
108 MBT(W)H10	137.0	292.2*	316.2*	_	342.1	366.1	_
144 MBWS8	111.0	_	_	_	316.6	340.6	_
144 MBWS10	111.0	_	_	_	364.6	388.6	_
162 MBT(W)8	163.0	268.2	292.2	292.3	294.1	318.1	318.4
162 MBT(W)10	163.0	292.2	316.2	316.2	342.1	366.1	366.1
162 MBT(W)H8	215.0	268.3	292.3	292.3	294.1	318.1	318.1
162 MBT(W)H10	215.0	292.3	316.3	316.3	342.1	366.1	366.1
189 MBT(W)H8	241.0	268.2	292.2	292.3	294.1	318.1	318.1
189 MBT(W)H10	241.0	292.2	316.2	316.2	342.1	366.1	366.1
225 MBWS8	137.0	-	-	-	339.1	363.1	_
225 MBWS10	137.0	_	-	_	387.1	411.1	_
243 MBT(W)8	241.0	268.2	292.2	292.2	294.1	318.1	318.1
243 MBT(W)10	241.0	292.2	316.2	316.2	342.1	366.1	366.1
297 MBT(W)H8	371.0	268.3	292.3	292.3	294.1	318.1	318.1
297 MBT(W)H10	371.0	292.3	316.3	316.3	342.1	366.1	366.1
324 MBT(W)8	319.0	268.2	292.2	292.2	294.1	318.1	318.1
324 MBT(W)10	319.0	292.2	316.2	316.2	342.1	366.1	366.1
324 MBT(W)H8	395.5	268.1	292.1	292.1	294.1	318.1	318.1
324 MBT(W)H10	395.5	292.1	316.1	316.1	342.1	366.1	366.1
324 MBWS8	163.0	_	_	_	320.6	344.6	_
324 MBWS10	163.0	_	_	_	417.3	441.3	_
405 MBT(W)8	397.0	268.2	292.2	292.2	294.1	318.1	318.1
405 MBT(W)10	397.0	292.2	316.2	316.2	342.1	366.1	366.1

DURA-LIFE™— A TECHNOLOGY BREAKTHROUGH FOR BAG USERS

STANDARD IN ALL DONALDSON TORIT MB BAGHOUSE COLLECTORS

Traditional 16 oz. polyester bags are produced with a needling process that creates larger pores where dust can embed 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 fibers. This process provides a more uniform material with smaller pores, better surface loading, and better cleaning. These advantages provide twice the operating life before bags need to be replaced due to pressure drop. Longer life from Dura-Life bags lowers maintenance and operating costs and raises baghouse dust collection to a whole new level.



Dura-Life Bag-Clean Air Side (300x)



Polyester Bag-Clean Air Side (300x)

These photos were taken with a scanning electron microscope of bag 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 4.5 to 1. Pressure drop was 6 in. on polyester bags and 2 in. 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
- Energy savings due to lower pressure drop
- Reduced replacement bag costs due to fewer bag changeouts
- Reduced maintenance and operating costs due to fewer bag changeouts
- 30% fewer emissions based on EPA tests



STANDARD FEATURES & AVAILABLE OPTIONS

Collector Design	Std	Opt
Clean Air Plenum with Top-Bag Removal	X	
Heavy-Duty Ribbed Housing Construction	X	
All-Welded, Carbon Steel Design - 12 Gauge Minimum	X	
Heavy-Duty 10-Gauge Tubesheet	X	
Filter Cleaning System	X	
Service Railing with Kickplate per OSHA Specs (MBT)	X	
Bottom Bag Removal		X
High Temperature Construction		X
Stainless Steel Construction		X
Direct Drive Fans		X
Power Pack Transition for TBI Fans		X
Chamber and Exhaust Silencers		X
Damper Pack		X
Service Platform (MBW)		X
Bags & Cages		
Dura-Life Twice the Life Polyester Felt Snap-In Bags	X	
Galvanized Bag Cages	X	
Variety of Bag Media Options		X
Articulated Cages		X
Paint System		
Prime Coated Interior	X	
Blue Exterior Finish Coating Meets 250-Hour Salt Spray Corrosion Protection Test	X	
Hostile Environment Paint		X
Custom Colors		X

 $^{^{\}ast}$ $\,$ Magnehelic and Photohelic are registered trademarks of Dwyer Instruments, Inc.

Hopper Design	Std	Opt				
60° Pyramid Hoppers	X					
Inlets with Deflector	X					
Trough Hopper with Multiple or Single Inlets	X					
Hopper Access Covers	X					
Inlet Transitions		X				
Pyramid Hopper Cover with Flood Valve		X				
Hopper Discharge						
Slide Gate Pack		X				
55-Gallon Drum Pack		X				
Dumpster Discharge with Dumpster		X				
AN Rotary Valves and Transitions		X				
Support Structure						
48" Clearance Leg Pack (pyramid hoppers)	X					
Stub Legs (trough hopper)	X					
72" Clearance Leg Pack		X				
48" Clearance Ladder Pack		X				
72" Clearance Ladder Pack (with cages)		X				
Electrical Controls, Gauges and Enclosures						
Solenoid Valves in NEMA 4 Enclosure	X					
Magnehelic®* Gauge	X					
Control Timer in NEMA 4 Enclosure	X					
Solenoid Enclosure in NEMA 7 or 9		X				
Photohelic®* Gauge		X				
Delta P or Delta P Plus Control Panel		X				
Safety Features						
Sprinkler Access Ports	X					
Sprinkler Pack Assembly (wet or dry)		X				
Explosion Vents		X				
Warranty						
10-Year Warranty	X					

Donaldson.



GLOBAL SUPPORT



- Facilities in 37 countries
- 40 manufacturing plants and 14 distribution centers
- Sales offices worldwide

LEADING TECHNOLOGY



- Over 1,000 engineers and scientists worldwide
- Broad range of innovative collectors and filters
- 100s of filter media formulations

EXPERIENCE & SERVICE



- Technical expertise and support
- Ready-to-ship filters and parts within 24 hours
- 1,000,000+ dust, fume, and mist collectors installed



Call Donaldson Torit to get Cleaner Air today 800-365-1331 donaldsontorit.com



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Modular Baghouse Brochure (04/11)

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