## Unimaster® Dust Collectors





#### Filtration Engineered for Performance

The Unimaster® dust collector from Donaldson® Torit® is designed to maximize dust collection and the life of collector components for years of extended service. In production for over 40 years with hundreds of thousands in use worldwide, the Unimaster collector's compact design and quiet operation is an industry success. Yet, Donaldson Torit is continually improving the Unimaster to ensure that it provides efficient, trouble-free service.

A self-contained collector with everything needed to begin collecting dust, the Unimaster comes complete with fan and fan motor, automatic shaker and shaker motor, and system controller making installation quick and easy. Since the automatic shaker cleans the filter bags, there is no need for expensive compressed air. Ideal for intermittent operations in plant processes, the Unimaster can be used as a central system or at the point of dust generation.

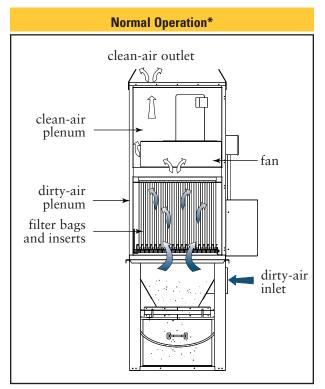
# 40 Years of Proven Performance

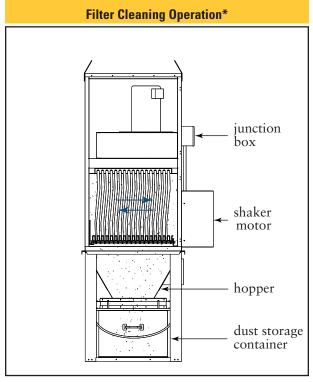
#### **Unimaster Offers:**

- **Compact design** Minimizes floor space and fits in virtually any plant layout.
- **Versatility** Three configurations to suit a variety of dust collection applications.
- **Broad range** Offering maximum air handling capacity in a compact design, the Unimaster offers filtration media area from 40 to 750 square feet.
- Quiet & efficient operation Motors and fan are enclosed in collector housing to minimize noise.
- Easy maintenance
- 10-year warranty



#### **Sizes & Operations**





#### **Unimaster Performance**

- **Perforated inlet deflector** knocks down larger particles into the hopper reducing bag abrasion and increasing filter bag life.
- Quick-release lever allows for easy removal and maintenance of bin.
- **Heavy-duty flexible metal coils** inserted into filter bags keeps bags open to maximize airflow and assist in knocking dust off during cleaning cycle.
- **Bag-release levers** allow for easy removal of bags.

Perforated Inlet Deflector



Quick-Release Lever



Heavy-Duty Flexible Metal Coils



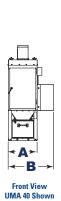
**Bag-Release Levers** 

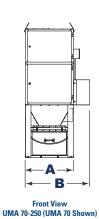


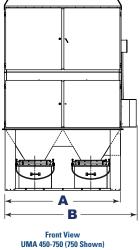
<sup>\*</sup> Doors not shown on unit for illustrative purposes.

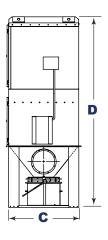
#### **Dimensions & Specifications**

#### **HOPPER BASE**



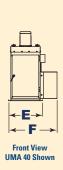


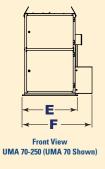


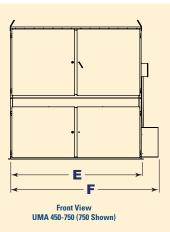


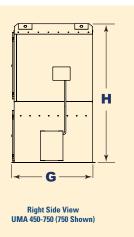
**Right Side View** UMA 450-750 (750 Shown)

#### **BIN VENT BASE (H-TYPE)**

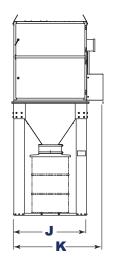




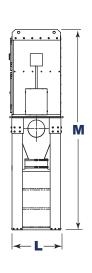




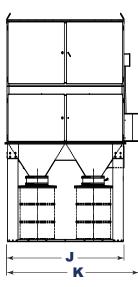
**55-GALLON DRUM BASE** 



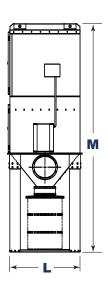
Front View UMA 150-250 (UMA 150 Shown)



Side View UMA 150-250 (UMA 150 Shown)



Front View UMA 450-750 (750 Shown)



**Right Side View** UMA 450-750 (750 Shown)

#### **Dimensions & Specifications**

Model	Nominal Airflow Range* (cfm)	Cloth Area (ft²)	No of Filter Bags	No of Bins/Drums**	Inlet Diameter (in)	Ship Hopper Base	oping Weig Bin Vent Base	ght (lbs) 55-Gallon Drum Base
40	120-400	40	1	1	4	250	260	N/A
70	200-525	70	1	1	4	450	320	N/A
100	200-1,000	100	1	1	8	600	440	N/A
150	450-2,000	150	1	1	8	800	600	875
250	450-3,000	244	1	1	10	1155	700	1265
450	1,350-5,000	444	2	2	12	1840	1415	1830
750	2,000-10,000	750	2	2	14	2355	1800	2345

- \* Based on clean filter.
- \*\* UMA 40 uses one 0.75 cu ft bin; UMA 70 uses one 2 or 3 cu ft bin (for 3 cu ft bin, add 9-in to height); UMA 100-250 uses one 3 cu ft bin; and UMA 450-750 uses two 3 cu ft bins.

55-gallon drum base available on UMA 150-750. UMA 150-250 uses one drum and UMA 450-750 uses two drums (drums not included).

Dimensions (inches)												
Model	Α	В	С	D	E	F	G	Н	J	K	L	M
40	17.6	27.6	17.6	61.2	20.3	27.9	20.3	41.5	N/A	N/A	N/A	N/A
70	22.6	32.7	22.6	88.8	25.4	33.8	25.4	49.5	N/A	N/A	N/A	N/A
100	30.1	40.2	22.6	84.2	32.9	43.0	25.4	50.8	N/A	N/A	N/A	N/A
150	30.1	40.2	30.1	94.5	32.9	43.0	32.9	59.8	32.9	41.6	30.3	121.0
250	45.1	55.1	30.1	105.2	47.8	57.9	32.9	62.2	47.8	56.6	32.9	121.3
450	59.8	70.1	38.1	121.5	63.0	73.1	41.1	80.6	59.8	70.1	38.1	148.4
750	76.3	86.5	47.4	125.9	79.6	89.7	47.4	85.3	76.2	86.5	47.4	150.2

#### **UMA Weighted Sound Pressure Levels**

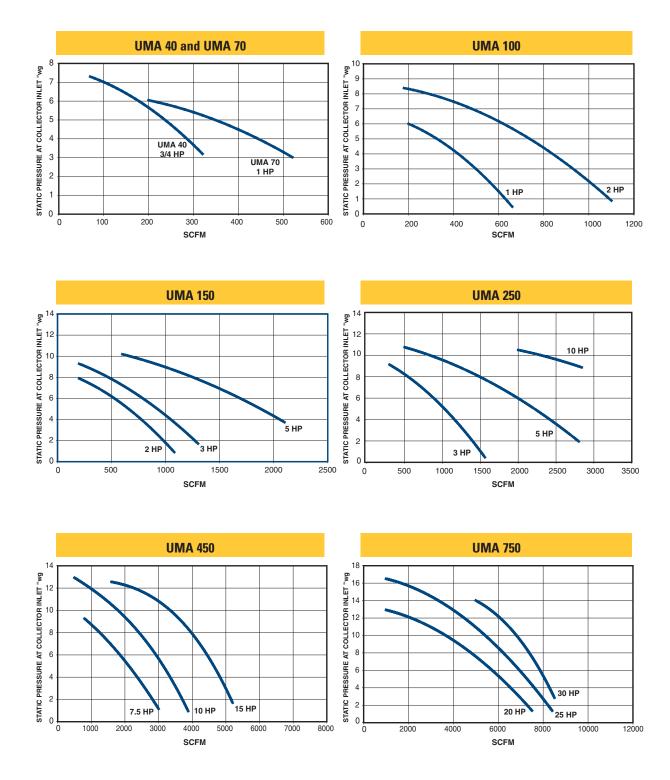
Model	40	70	100	150	250	450	750
With acoustic diffuser* dB(A)	71	70	71	74	74	82	79
Without acoustic diffuser dB(A)	78	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**

Above dB(A) sound levels are an average of measurements taken in a normal industrial area. Sound levels were taken in accordance with Reference Standard ISO 3746:1995, Survey Method, Grade 3. Installed sound levels may vary depending upon measurement location, operating conditions, and installations.

- \* Sound ratings on UMA 40, 70, 80, 150 and 450 are with the largest available fan. UMA 250 sound rating is with 5 HP K7 fan. UMA 750 sound rating is estimated for the 30 hp TBI fan. For specific fan models, contact Donaldson Torit.
- \*\* Acoustic diffuser (silencer) is standard on UMA 70, 100, 150, 250, 450 and 750.

#### **Performance Selections**

**Flexible Power Offerings** The Unimaster offers a variety of power packs to better meet your precise needs. The system performance graphs below show available static performance at the collector inlet with clean filters.



### **Standard Features & Equipment Options**

Standard Optional

Standard Optional

	2,	-
Collector Design		
Integral Fan and Fan Motor	X	
Integral TENV Shaker Motor	X	
Acoustic Diffuser Silencer (70-750)	X	
Acoustic Diffuser Silencer (40)		X
Caster Pack		X
Weatherhood (weather bend) Roof		X
Various Inlet Locations		X
Filter Bags		
8 oz. Polyester One-Piece Filter Bags	X	
Anti-Static Filter Bags		X
Variety of Bag Media Options		X
Paint System		
Blue Powder Coat Finish (inside and out) Meets 350-Hour Spray Corrosion Protection Test	X	
Custom Color		X

Hopper Discharge							
Bin Base with Quick Release Lever		X					
55-Gallon Drum Base		X					
Bin Vent Base		X					
Electrical Controls, Gauges and Enclosures							
Push-Button Controls	X						
Solid-State Timer in Type (NEMA /UL) 12 Enclosure	X						
Motor Starter	X						
Magnehelic®* Gauge		X					
Safety Features							
Explosion Vents		X					
Sprinkler Taps		X					
Warranty							
10-Year Warranty	X						

#### **Proven Performance on Hundreds of Applications**



**UMA 450** filtering plastic from a CNC machine



**UMA 250** on a school wood shop application

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

<sup>\*</sup> Magnehelic is a registered trademark of Dwyer Instruments, Inc.

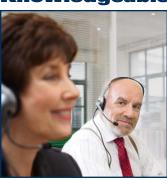
## Cleaner Air Worldwide

#### **Better Technology**



- 550 engineers worldwide
- More than 500 patents
- Broad range of innovative collectors and filters
- 100's of media formulations

#### **Knowledgeable Service**



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

#### **Global Support**



- Facilities in 35 countries
- 37 manufacturing plants and 11 distribution centers
- Sales offices worldwide



## Donaldson.

Filtration Solutions

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