

Clean Air Solution



air pollution control

27MEC Co., Ltd

APC - Bulletin

Air Pollution Control



27 MEC LTD., CO.

DCT[®] - DUST COLLECTOR



FEATURES:

Modular design dust collector provides optimum field flexibility and short manufacturing lead time - have it your way fast!

Heavy duty carbon steel construction for long life - Dust collector module constructed of 4.5mm carbon steel. Door, hopper, inlet and panels are all 3 gauge steel.

Baked on, durable green powder coat paint - All carbon steel components are 5-stage acid washed prior to powder coating for maximum paint adhesion. Dust collector is painted inside and outside for unsurpassed weather and corrosion resistance.

Vertical design of the filter cartridges provides more efficient pulsing of dust, thus eliminating uneven dust loading associated with horizontally mounted cartridges.

High entry cross flow inlet eliminates upward can velocities associated with traditional hopper inlets in industrial dust collectors. The channel baffles installed in the inlet protect the filters from incoming dust and separate the larger particles directly into the hopper, reducing the load on the filters.

The dust collector utilizes Gold Cone[®] cartridge technology to deliver clean air and long life while utilizing the smallest floor space of any dust collector available today.

Multiple filter media and pleat spacing options are available to best suit your specific application and dust.

Meeting airflow requirements with a 25% smaller housing allows the dust collector to deliver premium performance at a competitive price and take up less factory floor space. The service benefits are numerous offering faster, trouble-free change-out of cartridges.

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Options for dust collector:

- Explosion venting
- Rotary airlock
- Drum Cover Kit
- Quick Open Access Panel in Clean Air Chamber
- Custom Colors
- NEMA 7/9 Solenoid Enclosure
- Increase Leg Length
- Hopper Access Door
- Sprinkler Coupling
- Dust Level Indicator
- Dust Bin w/Drawers
- Common Trough Hopper
- Large Pyramid Hopper
- Stainless Steel Construction
- Various Inlet Designs



Gold Cone Filter Media Options:

325 Sq. Ft. HemiPleat[®] Filters (Media Area)–180°F Max 99.99%
at 0.5 micron Efficiency

HMPTS–Poly-Tech Standard

HMPTC–Poly-Tech Carbon Impregnated

HMPTF–Poly-Tech Fire Retardant

HMPTU–Poly-Tech Ultra High Efficiency

HMPTUF–Poly-Tech Ultra High Efficiency, Fire Retardant

225 Sq. Ft. Filters (Media Area)–250°F Max, Washable

DPS–Dura-Pleat[®] Standard Spun-Bond Polyester

DPA–Dura-Pleat[®] Aluminized Finish (static drain)

DPO–Dura-Pleat[®] Oleophobic Treatment (moisture resistant)

DPT–Dura-Pleat[®] with Teflon Membrane

Specialty Hi Temp Nomex[®] & PTFE cartridges for 350° F also
available

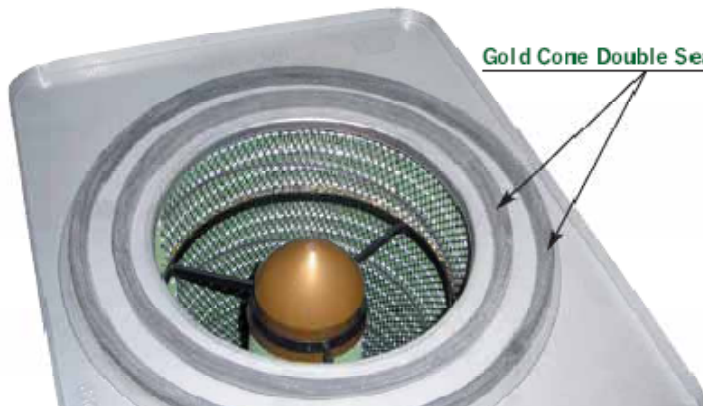


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Filtration Technology

The Most Advanced Dust Collector Media Ever Made

- Poly-Tech[™] media's filtration efficiency is 99.999% on the 0.5 μ and larger particles.
- The Gold Series meets the 5 mg/m³ or less emissions required to recirculate air back on non-hazardous dusts in most cases.
- Poly-Tech is offered with a flame resistant treatment and carbon impregnated for static drain.
- Other media options include Dura-Pleat[®] for sticky dusts and PTFE for the demanding applications.



Gold Cone Key Benefits:

- High filtration efficiency
- Low Pressure Drop
- Long filter life

Gold Cone Cartridge

- Vertically mounted to shed dust readily for efficient cleaning and longer service life.
- Features a cone in the center of the cartridge.
- Cleaning is accomplished by pulse waves that emanate outward also expanding the area of the cartridge.
- Test results indicate that this new pulse distribution method provides enhanced cleaning.
- More efficient operation, longer cartridge life and reduced service requirements.

HemiPleat[®] vs. Typical Pleats

No matter which dust collector you have, the HemiPleat[®] filter can improve its performance.

Guaranteed.

Media Comparison

The HemiPleat's high quality uniform pleat pack establishes the superiority of this cartridge over all other products in the market. The difference in pleating quality can be seen at left in a comparison against the media pack with typical industry pleats. Notice the difference in pleat spacing and alignment.



HemiPleat Advantages

- Lower pressure drop through open pleat spacing improves cleaning efficiency, which will reduce energy costs through less compressed air consumption during cleaning in many applications.
- More media is available for filtration, for improved performance and longer life.
- The separation beads, not the media pleats, contact the inner cage, protecting the media from frictional damage.

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Advantages:

- Modular design for optimum flexibility
- Easy to install and maintain
- High collector efficiency using HemiPleat cartridges
- Simple cartridge replacement using quick release cam bars
- Footprint typically 25% smaller than competitor products

Application: Gold Series cartridge dust and fume collectors may be used for a wide range of pollution control and product recovery applications.

Type: Pulse cleaning, cartridge based dust collector with high performance filter elements. Cleaning is accomplished by pulse waves that emanate from the centre of the filter providing enhanced cleaning for a more efficient operation.

Construction: Strong modular construction using 4.5mm carbon steel for the frame and 3mm carbon steel for the doors, hopper and panels.

Finish: As standard in a green, durable, corrosion resistant powder coated finish. Alternative constructions and colors are also available.

Options: A wide variety of options are available including: Explosion Venting, Special Inlet Designs, BIBO (bag in-bag out) for Pharmaceutical Applications, Custom Colors, Stainless Steel Construction, Alternative Hopper Designs etc. please contact us with your specific requirements.

Types	Exterior dimension	Qua. Filter	Media area	Max. Airflow	Weight	Fan or blower
	(WxDxH)mm	cartridge	m ²	m ³ /h	kg	
DCT04	1100x1100x4000	04	120.8	6,800	780	option
DCT06	1100x1650x4000	06	181.2	10,200	1,030	option
DCT08	1100x2200x4000	08	241.6	13,600	1,250	option
DCT10	1100x2750x4000	10	302.0	17,000	1,410	option
DCT12	1100x3300x4000	12	362.4	20,400	1,600	option
DCT12Sq.	2200x2750x4000	12	362.4	20,400	1,600	option
DCT16	1100x4400x4000	16	483.2	27,200	2,100	option
DCT16Sq.	2200x2200x4000	16	483.2	27,200	2,100	option
DCT20	2200x2750x4000	20	604.0	34,000	2,700	option
DCT24	2200x3300x4000	24	724.8	40,800	2,830	option

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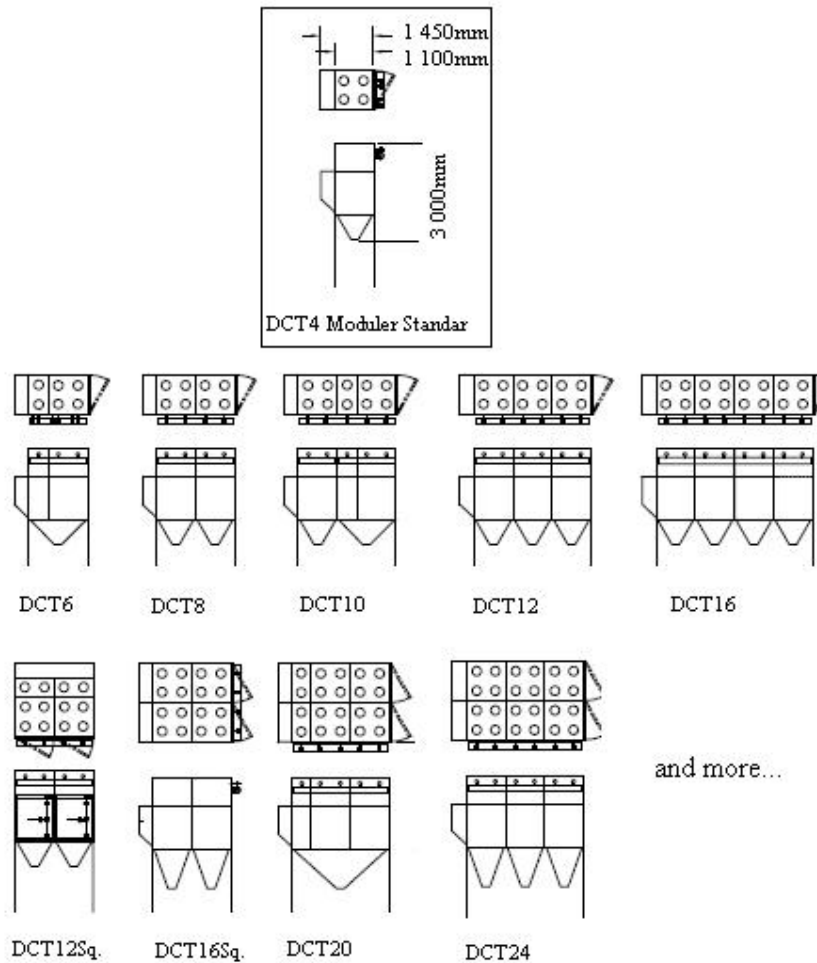
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	(WxDxH)mm	cartridge	m ²	m ³ /h	kg	
DCT32	4400x2200x4000	32	966.4	54,400	3,830	option
DCT Sq.36	3300x3300x4000	36	1087.2	61,200	4,340	option
DCT40	2200x5500x4000	40	1208.0	68,000	4,630	option
DCT48	2200x6600x4000	48	1449.6	81,600	6,690	option
DCT Sq.48	3300x4400x4000	48	1449.6	81,600	5,620	option
DCT56	2200x7700x4000	56	1691.2	95,200	7,840	option
DCT60	3300x5500x4000	60	1812.0	102,000	6,950	option
DCT64	2200x8800x4000	64	1932.8	108,800	8,390	option
DCT72	3300x6600x4000	72	2174.4	122,400	8,520	option
DCT84	3300x7700x4000	84	2536.8	142,800	9,720	option
DCT96	3300x8800x4000	96	2899.2	163,200	10,990	option
DCT108	3300x9900x4000	108	3261.6	183,600	12,240	option

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MECHANICAL DETAILS:



Every modular has dimension W x L x H: 1 100 x 1 100 x 1 200 mm, and hoper inline angels 45 degree. Simple, quick-open heavy gauge door(s) provide access to a super-fast cartridge change-out system that does not require entry into the collector. The door is fully reversible for access from either side and has an exclusive lock-out feature for worker safety.



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TYPICAL APPLICATIONS:

- Blasting—Shot & Grit
- Pharmaceutical—Pill press, tablet coating, drying
- Welding
- Grinding and Sanding
- Thermal Spray
- Food processing
- Paper dust—Corrugated, folding carton, printing, binding
- Fiberglass
- Process Chemicals
- Wood Working
- Powder & Bulk
- Laser and Plasma Cutting
- Mining—Crushing & Conveying

