



# DM10.000 - Compact

The Kiekens Dustmaster DM10.000-compact is widely applicable and extremely suitable for use in industrial processes in continuous operations. This is because the DM10.000 is not only robust, but also requires minimum maintenance thanks to the use of lamella filters and a powerful Jet- Pulse compressed air filter cleaning system.

The Dustmaster DM10.000-Compact features an integrated quiet and energy-efficient fan as standard. Thanks to its modular design, this Dustmaster offers maximum flexibility in set-up options and air volumes. The capacity can be up to 5,500 m<sup>3</sup>/h. The filtered air has a very low residual dust content (< 1 mg/Nm<sup>3</sup>) and may be returned to the room in many circumstances. If an even lower residual dust content is preferred, the DM10,000 compact can be equipped with a HEPA filter module. The dust is collected in a 70L drum

on wheels as standard. For collecting larger dust volumes, we have an 85L drum on wheels available or a rotary sluice, possibly combined with a bigbag. For maximum convenience, we mount the switch and control box on the Dustmaster so that you can immediately put the DM10,000-compact into operation.

## Advantages

- High quality based on proven Kiekens technology
- Energy-efficient
- Robust, welded steel construction
- Effective filtration, residual dust emission <1mg/Nm<sup>3</sup> in standard version
- Energy-saving Jet-Pulse filter cleaning through intelligent control
- Low-noise
- Low-maintenance
- Various options for dust removal
- Modular design
- Dutch quality product

'Thanks to its modular design, this Dustmaster offers maximum flexibility in set-up options and air volumes.'



Solid steel construction



Hepafilter optional



High suction capacity



Low sound level



Long lifespan



Dutch product





## Effective filtration

In the pre-separation chamber, the dirty air is directed towards the dust outlet, resulting in a quiet air flow, low air velocity in the filter unit and more efficient dust separation. Application of this technique ensures that even 'tricky' types of dust are separated smoothly and the service life of the filters is extended. This results in a lower total cost of ownership.

## Filter elements

Kiekens lamella filters have a high filtration rate and a long service life. Thanks to the construction used, these filters are very dimensionally and wear-resistant. Because of the pleated structure the filter can be cleaned very well, regardless of the type of dust. We manufacture these pleated filters from polyester as standard. Optionally, these filter elements are equipped with an ePTFE (Teflon) membrane and/or in an antistatic version. Polypropylene pleated filters with a microporous coating or specifically suitable for high temperatures are available on request.

## Jet-pulse cleaning

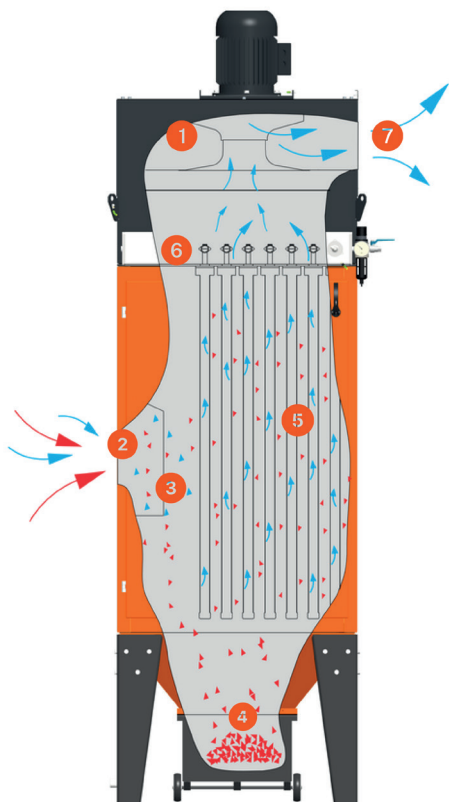
Jet-Pulse filter cleaning, which cleans the filters by means of a powerful and effective blast of compressed air. Jet-Pulse filter cleaning uses a generously sized compressed air reservoir to which the membrane valves are mounted. A valve and blower nozzle are fitted for each lamella filter.

## ATEX

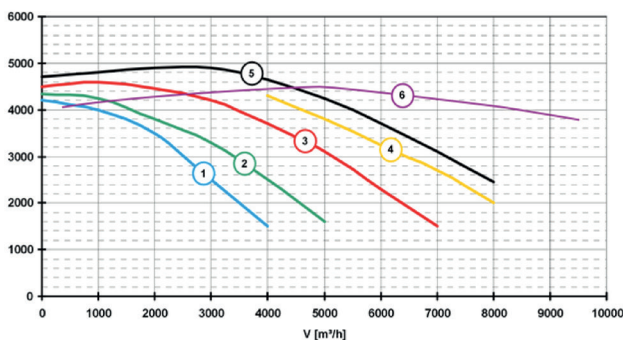
If you are dealing with explosive substances, we can also supply the DM10,000 Compact according to ATEX 114 (directive 2014/34/EU) for use in danger zone 22 (dust). The Dustmaster is then protected in such a way that the dust extractor itself cannot form an ignition source. And should you use it to vacuum explosive dust, the Dustmaster is pressure- and shock-proof and Kiekens has an extensive range of active and passive safety systems to safely discharge or nip in the bud the overpressure created by an explosion. Our specialists will gladly advise you.

Filtertype	Lamellen
Filter class (EN 60335-2-69)	M
Filter efficiency (%)	> 99,9
Restemission (mg/m <sup>3</sup> )	< 1
Filter surface (m <sup>2</sup> )	63
Air displacement maximum (m <sup>3</sup> /h)	5.500
HEPA filter class*	H14
Filter efficiency Hepa (%)	> 99,997
HEPA filter surface (m <sup>2</sup> )	41 - 62
Filter cleaning	Jet-pulse
Filter control	FCCU, Filter Condition Control Unit
Inlet adaption with flange (mm)	315
Fan motor (kW)	3 / 4 / 5,5 / 7,5
Soundlevel (dB(A))**	72 / 75
Dustbin (litres)	70
Color	RAL2004/7021 (oranje/donkergrijs)
Weight (kg)	ca. 625
Dimensions L x W x H (mm)***	1.050 x 1.250 x 3.500

\*optional \*\*with/without optional silencer, under free-field conditions, tolerance 2 dB(A) \*\*\*dimensions standard version



## Relationship between static vacuum and air movement



Curve	Type	Fanmotor
1	8KV315/2	3,0 kW
2	8KV315/3	4,0 kW
3	12KV315	5,5 kW
4	8KS315	7,5 kW

## How it works

The dust-contaminated air drawn in by the fan ① flows through the inlet ② into the Dustmaster, in the pre-separation chamber ③ the relatively heavier dust is separated directly towards the dust bin ④. The remaining dust in the contaminated air is filtered out of the airflow by the lamellar filters ⑤. Depending on the degree of soiling, the filters are cleaned by the Jet-Pulse filter cleaning ⑥ by blowing a powerful blast of compressed air through the ⑤ slat filters one by one. The dirt loosened during this process falls into the dust bin ④. The filtered air is blown back into the room ⑦ via the fan outlet. When the Dustmaster is switched off, the filter cleaning will blow all filters clean again so that they are clean for the next use.