



Negative pressure units




DEHACO

Negative pressure units

Dehaco provides an extensive range of negative pressure units. This equipment is used in jobsites where the airflow has to be controlled. For example with activities where hazardous or irritating dust particles are released, such as asbestos remediation activities.

By using a negative pressure unit a vacuum is created inside the workspace that prevents contaminated air from escaping. In addition, the concentration of particles in the air is reduced and the polluted air is filtered.

How do you choose the right machine?

The required capacity of the air mover is determined based on the size of the work area. A pressure that is too low is dangerous for fibre emissions and a too high pressure may rupture the containment. That's why the capacity of Dehaco air movers is adjustable to allow perfect regulation of the negative pressure in the containment.

How do you calculate the right capacity?

When determining the negative pressure requirements of a containment, a good rule of thumb is to ensure eight air changes per hour. The required capacity is then calculated by multiplying the volume of the work area (LxWxH) by a factor of 8. The result provides an indication of the air mover to be used.

Features:

- Very lightweight
- Easy to handle
- Easy to clean
- Constructed of extra thick plate material (8 mm)
- Compact design
- Corrosion resistant and durable
- Maintenance friendly
- Well-insulated electrical components
- Includes manometer to measure the pressure
- Equipped with HEPA filter according to EN 1822 Class H13
- Made in the Netherlands



Example

The workspace is 7 meters long, 4 meters wide and 3 meters high. The volume of this space is 84 m³. When this result is multiplied by a factor of 8, then the outcome is 672. In this case, an air mover with a maximum capacity of 750 m³/h is sufficient.

Monitoring

To allow the negative pressure in the workspace (the containment) to be verified, a negative pressure monitor is connected. Dehaco provides advanced equipment that is easily operated and has a high reliability.

Safety switch

If the negative pressure in a containment drops too far, dangerous situations can occur. To prevent or reduce the risk of fibre emission, Dehaco provides a safety switch which can be connected to the negative pressure monitor.

The safety switch is connected to the negative pressure monitor and a backup air mover is placed in the containment. This backup machine is connected to the safety switch and is switched on if the pressure in the containment drops below the required value. Extra negative airflow in the containment limits any fibre emission.



DEH500

The DEH500 is the only machine in our range of negative pressure units with a fixed capacity and a discharge at the bottom. The DEH500 is therefore only suitable for installation in a decontamination unit.

Technical details DEH500

- Capacity: 500 m³/h
- Dimensions (lxbxh): 38x38,5x38,5 cm
- Weight: 15 kg
- Pre-filter: 290x290x45 mm
- HEPA Filter: 290x290x69 mm
- Infinitely adjustable: No
- Discharge: Bottom
- Voltage: 230 Volt
- Ampères: 2 A
- Frequency: 50 Hz



DEH750

The DEH750 is the smallest negative pressure unit that can be connected to a containment up to 750m³. The outlet is on the side which often leaves enough space to discharge the air when working in confined areas.

Technical details DEH750

- Capacity: 750 m³/h
- Dimensions (lxbxh): 38,3x50x48 cm
- Weight: 19 kg
- Pre-filter: 290x290x45 mm
- HEPA Filter: 305x305x69 mm
- Infinitely adjustable: 30 - 100 %
- Discharge: Side
- Voltage: 230 Volt
- Ampères: 2 A
- Frequency: 50 Hz



DEH2000

The DEH2000, with its powerful engine, is a compact, lightweight negative pressure unit with relatively high capacity, particularly suitable for remediation in difficult to access areas.

Technical details DEH2000

- Capacity: 2000 m³/h
- Dimensions (lxbxh): 87,5x55,5x57,5 cm
- Weight: 40 kg
- Pre-filter: 375x375x95 mm
- HEPA Filter: 381x381x292 mm
- Infinitely adjustable: 30 - 100 %
- Discharge: Rear
- Voltage: 230 Volt
- Ampères: 7 A
- Frequency: 50 Hz



DEH5000

The DEH5000 is a double-engined negative pressure unit to deliver sufficient capacity. The machine is therefore fitted with two on/off switches to allow the motors to be controlled separate from each other.

Technical details DEH5000

- Capacity: 5000 m³/h
- Dimensions (lxbxh): 106x74x83 cm
- Weight: 80 kg
- Pre-filter: 595x595x95 mm
- HEPA Filter: 610x610x292 mm
- Infinitely adjustable: 20 - 100 %
- Discharge: Rear
- Voltage: 230 Volt
- Ampères: 14 A
- Frequency: 50 Hz



DEH10000

The DEH10000 is a machine that's genuinely capable of achieving a volume of 10,000 m³/h at 'just' 230V. The combination of a bigger motor, ensures that fewer revolutions are required (making it more efficient), a large fan and an HEPA filter with a large surface area means that the motor does not have to work anywhere near as hard.

Technical details DEH10000

- Capacity: 10000 m³/h
- Dimensionsn (lxbxh): 123,8x75x114,3 cm
- Weight: 150 kg
- Pre-filter: 910x610x95 mm
- HEPA Filter: 910x610x4002 mm
- Infinitely adjustable: 30 - 100 %
- Discharge: Rear
- Voltage): 230 Volt
- Ampères: 12 A
- Frequency: 50 Hz

DEH30000

The DEH30000 is the largest negative pressure unit with the highest capacity (30,000 m³/h) in the Dehaco range. The DEH30000 includes a double suspension ventilator driven by a V-belt on a separate engine. This provides extra durability. The DEH30000 includes a number of other benefits very typical of this specific type of air mover:

- Divisible (2 parts)
- Easy to transport
- Relatively low weight (300 kg)
- Wide range of uses

Technical details DEH30000

- Capacity: 30000 m³/h
- Dimensionsn (lxbxh): 153x141x156 cm
- Weight: 300 kg
- Pre-filter: 595x595x95 mm
- HEPA Filter: 610x610x292mm
- Infinitely adjustable: 33 - 100 %
- Discharge: Rear
- Voltage): 380 V
- Ampères: 50 A
- Frequency: 50 Hz



Article Number	Description	Contents
5410.0002	DEH500 Negative pressure unit, built-in unit, bottom discharge	p.pc.
5410.0012	DEH750 Negative pressure unit, 1-piece, side discharge	p.pc.
5410.0004	DEH2000 Negative pressure unit, 1-piece, rear discharge	p.pc.
5410.0006	DEH5000 Negative pressure unit, 1-piece, rear discharge	p.pc.
5410.0065	DEH10000 Negative pressure unit, 2-pieces, rear discharge	p.pc.
5410.0029	DEH30000 Negative pressure unit, 2-pieces, rear discharge	p.pc.

Article Number	Option possibility	Contents
5425.0267	DEH10000 Negative pressure unit, spigot	p.pc.

Accessories

Pre-filters

Pre-filters are constructed from a blend of cotton and synthetic fibre, surrounded by a sturdy cardboard frame. The filters are also fitted with a diagonal grid support. The zig-zag pleated filter medium is glued to the entire inside surface of the frame to increase dust collection and retention the shape.

Can be use as a pre-filter in negative pressure units, but also suitable for use in air-conditioning installations and ventilation systems.



Article Number	Description	Contents
5425.0082	Pre-filter, 290x290x45 mm (fits DEH500/750)	56 pieces
5425.0077	Pre-filter, 375x375x95 mm (fits DEH2000)	12 pieces
5430.0010	Pre-filter, 375x375x45 mm (fits DEH 2000)	12 pieces
5425.0079	Pre-filter, 595x595x95 mm (fits DEH5000/30000)	6 pieces
5430.0017	Pre-filter, 595x595x48 mm (fits DEH 5000/30000)	12 pieces
5430.0031	Pre-filter, 910x160x47 mm (fits DEH 10000)	12 pieces

Coarse filters

The coarse filter is placed before the pre-filter in air movers. It is a synthetic filter, constructed from a mixture of special plastic fibres.

Also suitable in air conditioning and as a pre-filter in paint spray booths.



Article Number	Description	Contents
5430.0009	Coarse filter, 300x300 mm (fits DEH500/750)	50 pieces
5430.0011	Coarse filter, 370x370 mm (fits DEH2000)	50 pieces
5430.0018	Coarse filter, 600x600 mm (fits DEH5000/30000)	25 pieces
5430.0019	Coarse filter on roll, 1x20 metre	per roll
5425.0012	Coarse filter on roll, 2x20 metre	per roll

Accessories

Blow off hoses

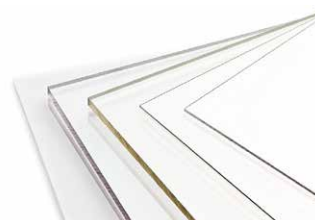
A blow off hose is connected to the discharge side of an negative pressure unit. This allows the air flow to be controlled. The hose consists of a polypropylene cloth with a metal coil incorporated in the fabric.



Article Number	Description	Contents
5425.0045	Master vent hose HD, 152 mm x 10 m, 6" (for DEH750)	p.pc.
5425.0048	Master vent hose HD, 305 mm x 10 m, 12" (for DEH2000)	p.pc.
5425.0050	Master vent hose HD, 407 mm x 10 m, 16" (for DEH5000)	p.pc.
5425.0051	Master vent hose HD, 450 mm x 10 m, 18" (for DEH30000)	p.pc.

Cover panels

When a clean-up is completed, a negative pressure unit is connected. This is done by placing a transparent cover panel so the HEPA filter remains visible for proper visual inspection.



Article Number	Description	Contents
5425.0092	Cover panel DEH500/750, transparent	p.pc.
5425.0002	Cover panel DEH2000, transparent	p.pc.
5425.0096	Cover panel DEH5000, transparent	p.pc.
5425.0266	Cover panel DEH10000, transparent	p.pc.
5425.0091	Cover panel DEH30000, transparent	p.pc.

Recommendation

Negative pressure units must be inspected once a year.
Our approach to ensure proper inspection

1. At Dehaco, we test the leak-tightness of HEPA filters in negative pressure units according to NEN-EN-ISO 14644-3. When doing so, we also check how well the filter fits in the negative pressure unit to determine whether the filter provides the required performance quality when mounted in the negative pressure unit. A special "particle generator" is used for this.
2. Our leak-tightness test equipment operates according to the protocol in NEN-EN-ISO 14644-3 and measures the particles both in front of and behind the HEPA filter. The difference between the two measurements determines the filtration class of the HEPA filter.
3. The negative pressure unit is inspected and tested electrically according to NEN 3140.
4. After the unit has been fully tested, inspected and approved, the certificates are updated and the unit is given a new certificate.

Plan your inspection with us now: planning@dehaco.nl



Negative pressure monitor

Bulk Air negative pressure monitor

The Dehaco BulkAir negative pressure monitor is the innovation in negative pressure monitoring. Several innovative solutions are integrated into one compact machine.

Features

- Available with 1 or 4 measurement channels
- Integrated thermal printer
- Digital colour display
- Mini-USB port for direct connection to a PC
- Includes SD card
- Shock-proof, splash-proof housing
- Digital pressure gauge
- Standard equipped with telephone dialler
- GSM/GPRS capabilities for SMS alerts
- Multilingual operation including Dutch
- Equipped with back-up battery



Safety switch and LED alarm
(compulsory in France)



Technical details

Weight: 4 kg
Dimensions: 300x300x200 mm
Voltage: 220 V

Optional: PowerSwitch en LED-alarm

The PowerSwitch ensures that in case of an emergency the backup air mover is switched on. When the pressure falls below the lower or above the upper, a visual LED alarm is activated

Article No.	Description	Contents
5610.0008	Bulk Air negative pressure monitor 1 channel	p.pc.
5610.0025	Bulk Air negative pressure monitor 4 channels	p.pc.
5610.0009	LED alarm for Bulk Air negative pressure monitor	p.pc.
5610.0010	Safety switch for Bulk Air negative pressure monitor	p.pc.
5630.0008	Print role for Bulk Air negative pressure monitor	p.pc.
5630.0032	Bulkair carry case	p.pc.

VAC Overpressure and vacuum monitor/logger

The VAC is an overpressure and vacuum monitor/logger. Depending on the version, the appliance is provided with 1 to 4 measuring channels. The appliance is provided with 3 or 6 adjustable outputs.

Each model can be made as VAC and VAC Cloud. With the latter, it is possible to use VAC Cloud (online platform) via Upload or direct link with the case. Log data can be exported via USB and printed live with the incorporated printer.



Technical details

Weight: 3 kg
Afmetingen: 360x280x145 mm
Voltage: 220 V

Article No.	Description	Contents
5610.0027	VAC-1 negative pressure monitor 230V 1 channel	p.pc.
5610.0028	VAC-2 negative pressure monitor 230V 2 channels	p.pc.
5610.0029	VAC-4 negative pressure monitor 230V 4 channels	p.pc.
5630.0137	Visual alarm for Dehaco VAC negative pressure monitor	p.pc.
5630.0144	Safety switch, for VAC negative pressure monitor 230V	p.pc.
5630.0167	Audible alert for Dehaco VAC negative pressure monitor	p.pc.

Dehaco Products



Contact your dealer for more information



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