



**MDB-DILUTER SYSTEM**

A standalone general  
welding fume filtration system



## DO YOU CONTROL DUST AND WELDING FUMES?

**We do.** Controlling welding fumes in a welding workshop significantly contributes to a better work environment. Simply by keeping the background concentration of welding fumes as low as possible. This can be realised by using the right welding processes and by using a high-quality welding fume extraction and filtration system that prevents the accumulation of welding fumes in your workshop.

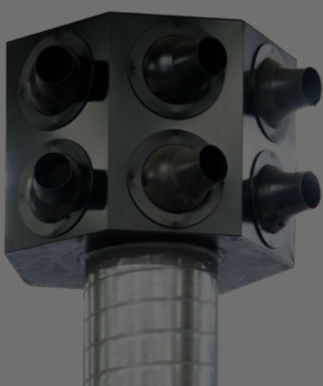
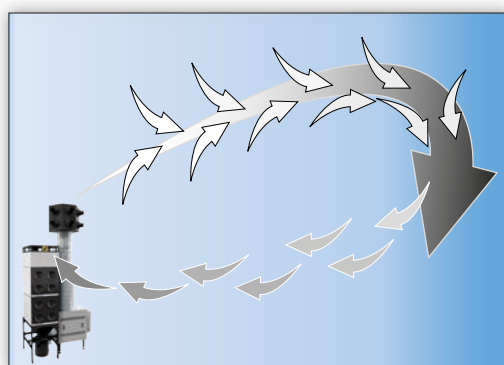
As a specialist in air cleaning technology, Plymovent offers various solutions to control welding fumes in the metal-working industry, like source extraction, extraction hoods and general ventilation and filtration systems. All designed to remove and control welding fumes as best as possible.

## MDB-DILUTER SYSTEM

The MDB-Diluter system is a free-standing general filtration system, developed to reduce and control the background concentration of welding fumes in a workshop. It makes sure that legal limits for welding fumes are not exceeded. MDB-Diluter systems are designed for intensive dry welding activities with extremely heavy dust load and is the ideal solution if source extraction and hoods are not an option, for example when large work pieces are being fabricated, various welding processes take place at changing locations or when ductwork is difficult to install.

## HOW DOES IT WORK

- The blue haze of welding fumes, caused by the risen fumes that concentrate between four and six meters above the floor, is continuously mixed with clean air injected by nozzles.
- You and your personnel immediately see that the blue haze disappears.
- The injection of clean air is done by filtered air from the workshop, completely adaptable in volume and direction to your situation.
- The background concentration is kept under control by continuously cleaning workshop air.
- Filter is cleaned automatically and residue is collected in a dustbin.
- The fan speed is controlled and adaptable to need by a frequency inverter. This saves energy, expands filter life and ensures a constant and reliable performance.



## BENEFITS

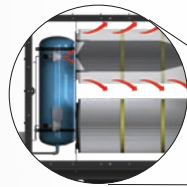
- Energy saving; a re-circulation concept (expensive heated or cooled air stays within the workshop)
- Stand-alone without fixed duct work, less installation costs
- Flexible
- Relatively small investment for controlling welding fume
- Designed for intensive dry welding activities with a very heavy dust load
- W3 compliant
- The fan speed is pressure controlled by a frequency inverter
- Healthier and cleaner working environment as a result of continuous filtration of polluted air
- It isn't just about the welder; welders and other people will notice the difference immediately

Adjustable outlet nozzles, direction and volume control throw up to 50 meters (164 ft)

360° air inlet with integrated spark arrester

Pressure indication device controls the preset volume, no draft, energy savings in 1<sup>st</sup> year 50%.

Silencer to reduce noise level of the air flow.



RamAir™ pulse amplifier provides superior cleaning for longer filter cartridge life and lower pressure loss



Integrated control system: with the ControlPro; an intuitive touch screen interface.

80 liters (21 gallon) dustbin on wheels can be removed while unit is operational.

Sound absorbing case to reduce the noise of the fan motor 7.5 kW Max. power ≤ 69 dB(A).

Image: MDB-Diluter PRO

## CONTROLPRO FILTER CONTROL

The MDB-Diluter will be available with the newest filter control of Plymovent; the ControlPro. This control has an intuitive touchscreen interface that shows at a glance how the system is performing, what the system is doing now, will do next and how to keep it in shape. An extensive and very accessible menu allows full adaptability in an easy way. ControlPro can use ethernet communication for a wide variety of connectivity options. ControlPro is the control that meets the full needs of the professional user: Simple, Insight, Connected.

**SIMPLE  
INSIGHT  
CONNECTED**

## FILTER CARTRIDGES

The MDB-Diluter PRO has eight BiCo spunbond polyester cartridges with PTFE membrane. This makes that the MDB-Diluter PRO is W3 compliant in accordance with NEN EN-ISO 15012-1:2013.

### Main features\*

### MDB-Diluter-PRO

Main features*	MDB-Diluter-PRO
Intelligent filter cleaning	✓
Connection for external devices	✓
Software updates	✓
7" touch display	✓
Data logging	✓
Auto start/stop by weekly timer	✓
Network connection	✓

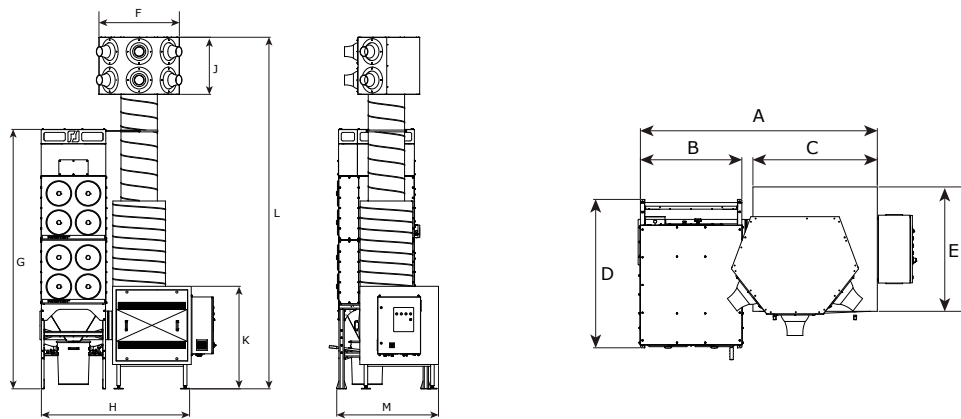
\* Ask your sales representative for the full feature list

## TECHNICAL SPECIFICATIONS

Filter area	8 x 15 m <sup>2</sup> = 120 m <sup>2</sup> (1290 ft <sup>2</sup> )
Filter cartridge	Type CART-PTFE/15, BiCo spunbond polyester with PTFE membrane
Power consumption	7,5 kW (10 HP)
Efficiency	MERV 16 (according to standard ASHRAE 52.2)
Power connection	400-690V/3~/50Hz (435) 480V/3~/60Hz (536) 600V/3~/60Hz (636)
Fan type	radial
Airflow (max.):	■ unrestricted 12.000 m <sup>3</sup> /h/ 7,063 CFM ■ operational 9.000 m <sup>3</sup> /h/ 5,297 CFM
Throw max.	50 m (164 ft)

## DIMENSIONS

	mm	inch
A	2095	82.5
B	897	35.3
C	1100	43.3
D	1312	51.7
E	1100	43.3
F	1124	44.3
G	3649	143.7
H	2072	81.6
J	803	31.6
K	1442	56.8
L	4945	194.7



# PLYMOVENT®

clean air at work

International Distributor Sales

Plymovent Group BV

P.O. Box 9350

1800 GJ Alkmaar

The Netherlands

T +31 (0)72 5640 604

F +31 (0)72 5644 469

E [export@plymovent.com](mailto:export@plymovent.com)

## PLYMOVENT OFFERS TOTAL SOLUTIONS FOR AIR CLEANING

For over 40 years, Plymovent has been gaining experience in the field of air cleaning. We not only have extensive knowledge of the extraction and filtration of welding fumes and oil mist in metalworking industries, we are also specialised in the removal of vehicle exhaust fumes.

Your authorised Plymovent distributor:

*Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world.*

*We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.*

Plymovent reserves the right to make design changes.

[www.plymovent.com](http://www.plymovent.com)