



# DILUTER SYSTEM



A standalone general welding fume filtration system with a new integrated control 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.

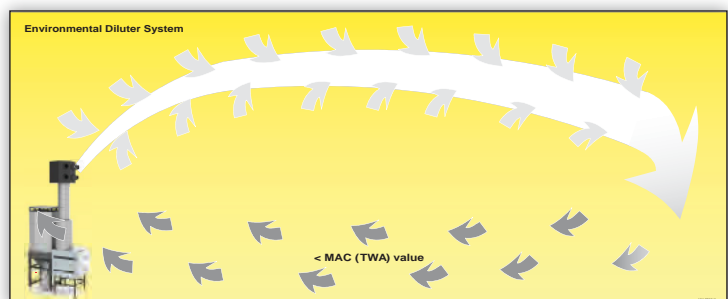
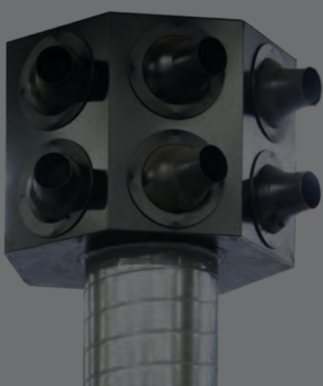
## DILUTER SYSTEM

The Diluter system is a stand alone 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.

Diluter systems are 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
- Healthier and cleaner working environment
- It isn't just about the welder; welders and other people will notice the difference immediately

Direction and volume control throw up to 50 meters.

360° air inlet with integrated spark arrester.

150 m2 filter cartridge, automatic filter cleaning.

100 liter dustbin on wheels can be removed while unit is operational.

image: Diluter-PRO



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.



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

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

## TWO VERSIONS OF FILTER CONTROLS

The Diluter will be available with the new filter controls of Plymovent; the ControlPro and the ControlGo. The Diluter-PRO is fitted with the ControlPro. This version has a control with 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 uses 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.



The Diluter-GO has integrated control unit the ControlGo. The ControlGo is built on the same platform as the ControlPro, offering the same performance, but with preset configurations for the user with basic needs. The Diluter-GO uses push buttons and indicator lights for simple interaction and meets the basic needs of any user.

Main features*	Diluter-GO	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

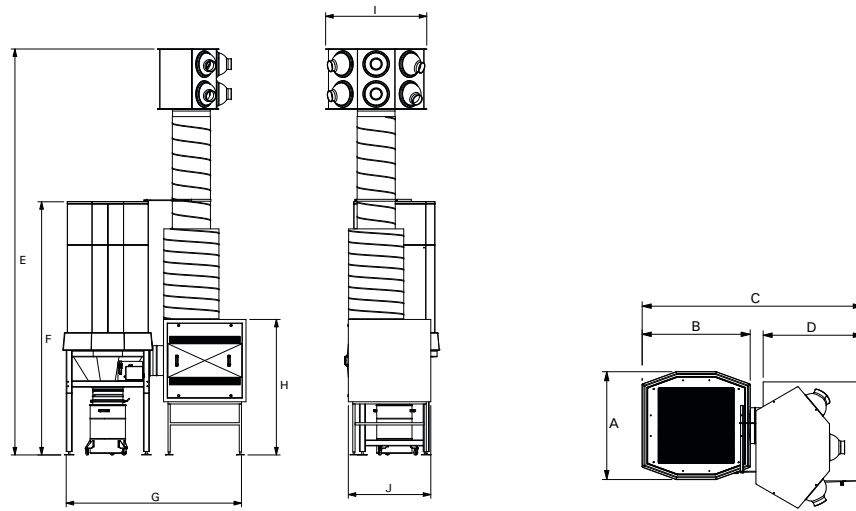
## TECHNICAL SPECIFICATIONS

Weight (net)	800 kg (1764 lbs)
Fan type	radial
Power consumption fan	7,5 kW (10 HP)
Connection voltage	400-690V/3~/50Hz
Insulation class fan	F with PTC
Nominal current	13,9 A
Protection class	IP 54
Filter area	150 m <sup>2</sup> (1615 ft <sup>2</sup> )

Power connection	400-690V/3 phase / 50Hz
Motor protection	by PTC
Filter control	PLC with LCD display
Fan control	VFD with Pressure sensor
Panel	IP 54
Fan speed control	Variable Frequency Drive with PID control function
Instruments	PID set point measured by pressure sensor and transmitter

## DIMENSIONS

	mm	inch
A	1200	47.2
B	1200	47.2
C	2440	96.1
D	1100	43.3
E	4186	164.8
	5425	213.6
F	3385	133.3
G	2340	92.1
H	1810	71.3
I	1350	53.2
J	1100	43.3



**PLYMOVENT**<sup>®</sup>  
clean air at work

## PLYMOVENT OFFERS TOTAL SOLUTIONS FOR AIR CLEANING

For 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:



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*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.*