

LAGUNA P|FLUX 1 CYCLONE DUST COLLECTOR



TECHNICAL SPECIFICATION

Motor	1100 W 1.5 hp
Power Supply	220-240 V 50 Hz 1 phase
Recommended Breaker Size (MCB)	16 Amps (Type C)
Airflow	Traditional Method: 1786 m ³ /h Realistic Method: 1224 m ³ /h
Max Static Pressure	256 mm in water
Canister Filter Type	HEPA 100% @ 1 micron
Filtration Efficiency	99.2 % @ 0.4 micron
Control Panel	Anodised aluminium
Hand Held Remote Control	High frequency
Inlet Diameters	1 x 150 mm or 2 x 100 mm
Impeller Fan Type	340 mm Steel radial fin (Balanced ISO 1940)
Impeller Fan Speed	2800 rpm
Collection Drum Full Signal	LED warning light
Collection Drum Capacity	95 litre octagonal drum
Collection Drum Bag (Layflat Dimensions)	810 x 1090 mm
Collection Bag Hold Down	Metal insert frame
Canister Requires Cleaning Signal	LED warning light
Filter Canister Cleaning	Fully automated paddle cleaning
Filter Canister Emptying	4" hose connection (re-circulate until empty)
Sound Level	70 dB(A) @ 3 m
Power Cable	1.8 m 3 wire
Assembled Dimensions (W x D x H)	1168 x 610 x 1753 mm
Shipping Dimensions (W x D x H)	1150 x 760 x 1350 mm
Weight (Net/Ship)	122 kg/155 kg
Manufacturers Warranty	1 year
Assembly Time	5 1/2 hours (requires 2 people)

DESCRIPTION

The Laguna P|FLUX 1 Cyclone Dust Extractor is a high-end cyclone equipped with HEPA Class filtration.

This mobile unit is the perfect solution for those looking to minimise workshop dust to the lowest level.

The Cyclone Dust Collector's octagonal collection drum is mounted on a set of castors to allow it to be rolled over to waste bin for emptying.

When the collection drum is locked into position, using the quick action lever, a rubber seal is engaged to make it airtight. These smart features mean faster drum emptying.

A 100mm (4") hose port is located on the end of the HEPA filter to allow automated emptying of the very fine dust collected in the chamber.

Connect the other end of the hose to the main inlet and run the cyclone which moves the fine dust into the collection drum.

SUPPLIED WITH

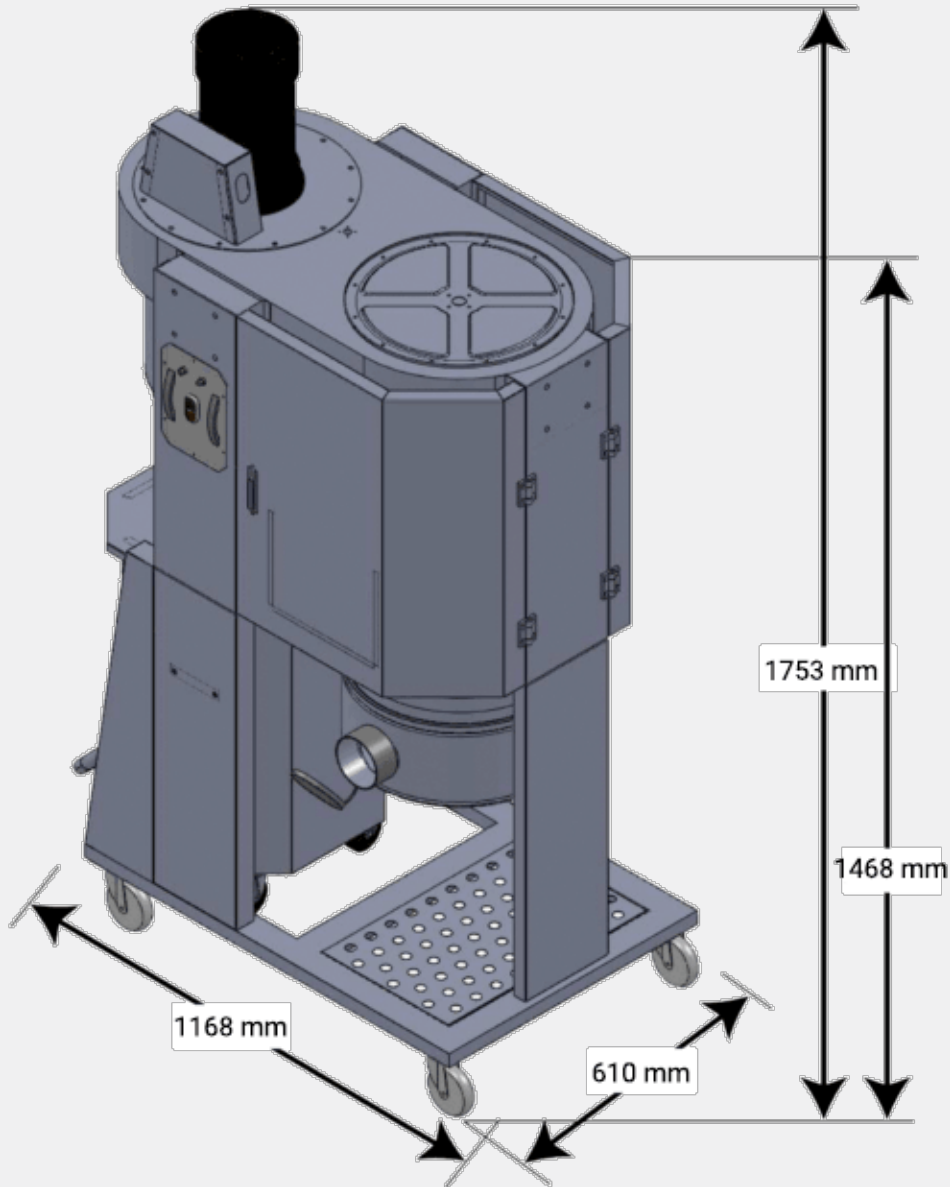
- Remote start handset
- 1 collection bag for main drum
- 1.8m power cable with a fitted 16amp Industrial plug

This machine requires a 16amp supply and it's recommended that a C Type breaker is used.

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LAGUNA P|FLUX1 DIMENSIONS

DIMENSIONAL DIAGRAM



SPARE PARTS

Item	Part Code
Polythene collection bags (pack of 10)	FLUX1DB

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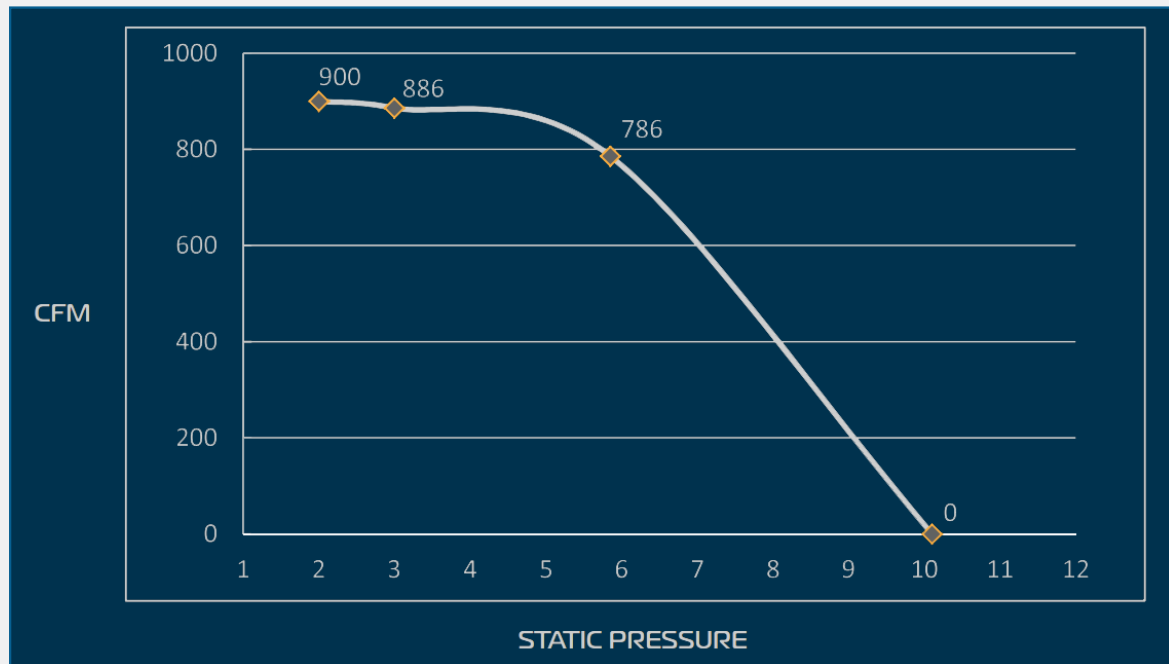
LAGUNA P|FLUX 1 PERFORMANCE DATA

PERFORMANCE DATA - P|FLUX 1

MAX STATIC PRESSURE	MAX AIRFLOW	MOTOR POWER	VOLTS	Hz	IMPELLER	INLET
2515 Pa (10.1 inch/H ² O)	1,530 m ³ /h (900 CFM)	1.1 kW (1.5 HP)	120 V	60Hz	Ø340 mm (Ø13.4")	Ø152 mm (Ø6")

RESTRICTOR PLATE	DIA. 6" (Ø152 mm)	DIA. 5" (Ø127 mm)	DIA. 4" (Ø100 mm)	DIA. 0" (Ø0 mm)
STATIC PRESSURE	2 inch/H ² O	3 inch/H ² O	5.85 inch/H ² O	10.1 inch/H ² O
AIRFLOW	1,530 m ³ /h (900 CFM)	1,505 m ³ /h (886 CFM)	1335 m ³ /h (786 CFM)	0 m ³ /h (0 CFM)
VELOCITY	1.31	1.27	1	0

PERFORMANCE CURVE - P|FLUX 1



How results were obtained:

- Testing based on new clean filter. Results will vary depending on use.
- The inlet on p|flux: 1 6" (≈ 152 mm)
- A flex hose 16 X longer than inlet diameter is attached 6 x 16 = 96"
- Air pressure meter measures the velocity & static pressure is inserted into this hose at halfway point = 48"
- The Air Pressure Meter measures in Inches of Water
- The CFM is measured with 6" opening at end of hose, no restrictions, 48" from inlet
- The Max. Static pressure is measured when the restrictor plate at end of hose is closed (0) 48" from inlet
- Air pressure meter measures the velocity and static pressure in inches of water
- CFM is calculated in the following manner:
- Square root of Velocity in inches of water x cross sectional area of cyclonic inlet in square feet x 4005
- Calculate cross sectional area of cyclonic inlet in square feet:
- 6"/12 = 0.5ft 0.5/2 = 0.25ft 0.25 x 0.25 x 3.1416 = 0.19635 ft²
- Formula: $\sqrt{1.31 \text{ inch of water} \times 0.19635 \text{ ft}^2 \times 4005} = 900\text{CFM}$ (website states 900CFM; this calculated value will slightly vary due to the rounded off values derived from the above formula.

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LAGUNA P|FLUX 1 HEPA FILTER CERTIFICATION

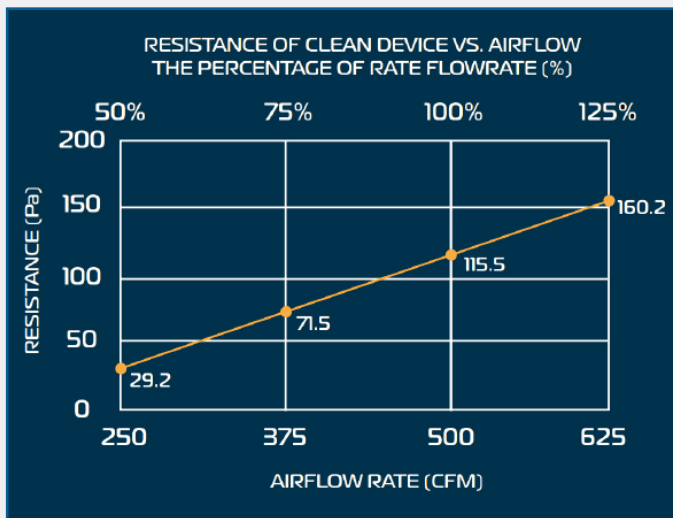
FILTER TESTING REPORT

- FILTER NAME : HEPA CARTRIDGE FILTER TEST SAMPLE
- FILTER NUMBER : 350 x 660 HEPA CARTRIDGE
- FILTER AREA : 10.2 m²
- FILTER PLEAT : 162
- MEDIA MATERIAL : SYNTHETIC FIBER
- MEDIA COLOR : GRAY

TEST CONDITIONS

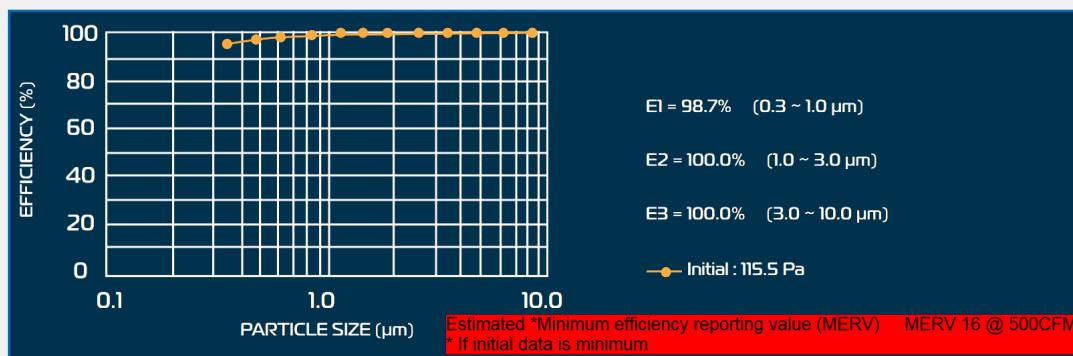
- TEST METHOD : ASHRAE 52.2:2012
- VOLUME AIRFLOW RATE : 500 CFM
- TEMPERATURE : 25±2°C
- HUMIDITY : 45±5%
- AEROSOL TYPE : KCI

MEASUREMENT OF PRESSURE DROP VS, AIRFLOW



AIRFLOW RATE IN % OF RATED AIRFLOW	AIRFLOW RATE		RESISTANCE	
	CFM	M ³ /H	Pa	in. H ₂ O
50%	250	425	29.2	0.12
75%	375	640	71.5	0.29
100%	500	850	115.5	0.46
125%	625	1235	160.2	0.64

INITIAL EFFICIENCY



Particle Size (µm)	0.3 ~ 0.4	0.4 ~ 0.5	0.5 ~ 0.7	0.7 ~ 1.0	1.0 ~ 1.3	1.3 ~ 1.6	1.6 ~ 2.2	2.2 ~ 3.0	3.0 ~ 4.0	4.0 ~ 5.5	5.5 ~ 7.0	7.0 ~ 10.0
Electric Mean Particle Size (µm)	0.35	0.45	0.59	0.84	1.14	1.44	1.88	2.57	3.46	4.69	6.20	8.37
Initial 115.5 Pa	96.7	98.5	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

AIRFLOW READINGS

Laguna quote the traditional method, for comparison against other brands, as well as a more realistic method which gives a 'real world' result. At Laguna Tools measurements are taken based on applicable dust collection scenarios. Instead of measuring at the port of the machine, measurements are taken in the front half of a 12.5-foot testing hose. While this is a bigger size than the standard 10-foot tube, it helps provide a more accurate measurement of the actual CFM. Different air inlet sizes are also tested to arrive at an even more precise measurement for buyer convenience.

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LAGUNA P|FLUX1 FEATURES

HEPA FILTRATION



The HEPA Filtration removes 99.2% of particles down to 0.4 micron.

DUST COLLECTION CHAMBER



This cyclone is equipped with a viewing window which allows the user to check when emptying is needed.

SMART SENSORS



Smart Sensors - LED Warning Light when the collection drum is full. LED warning light when the HEPA filter needs cleaning.

CYCLONE TECHNOLOGY



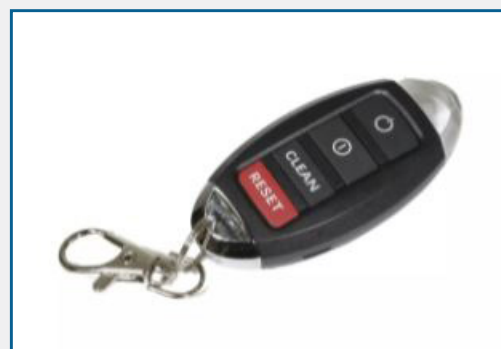
Cyclones are designed to put the maximum amount of dust directly into the drum, without passing the fan.

HOSE PORT - SEMI AUTOMATIC EMPTYING



HEPA Fine Dust Chamber Hose Port for the Semi Automatic emptying of the cyclone unit.

REMOTE CONTROL STOP/START HANDSET



Supplied with remote control stop/start handset.

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