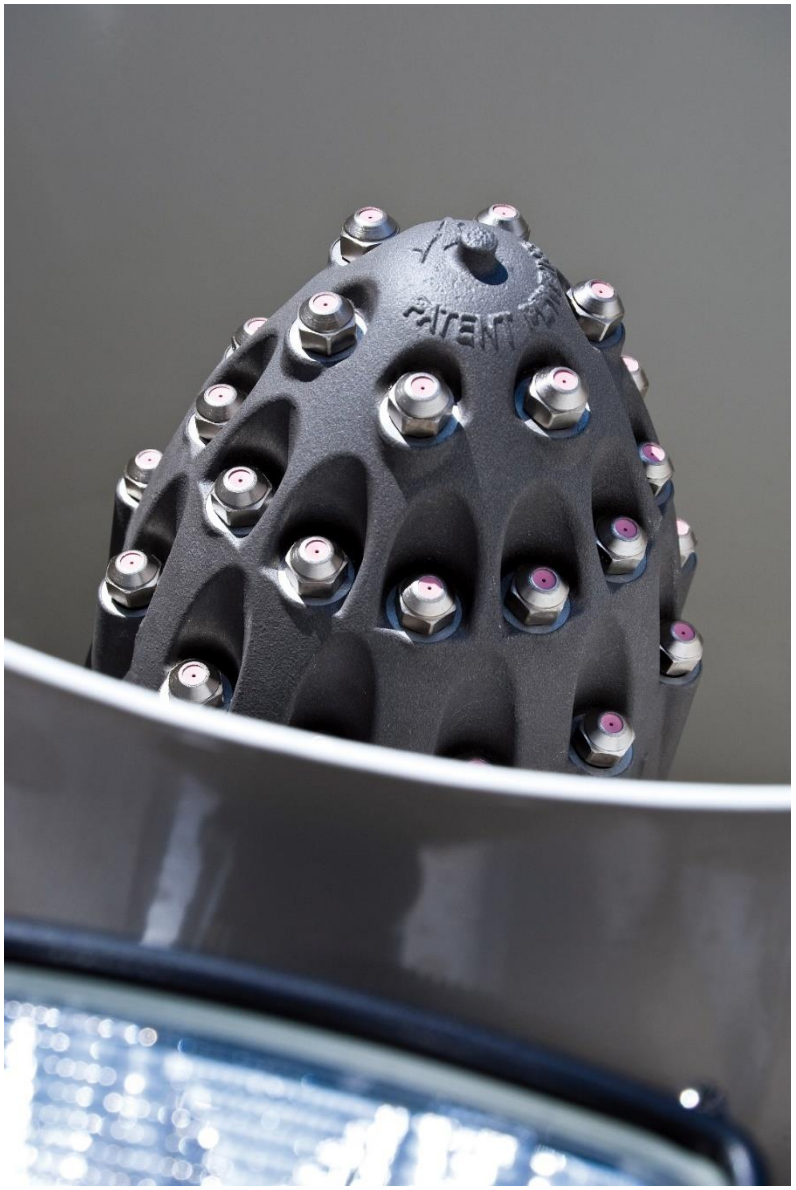
EmiControls GmbH

Product Information – January 2016



Lance L3

New updated model now available!

STATION EMICONTROLS

SWING EMICONTROLS

TRAILER EMICONTROLS

H1 Product Family

Discover our new range of products!

Our line of turbine dust abating machines

V7 DUST CONTROLLER

V12 DUST CONTROLLER

V22 DUST CONTROLLER

V12 silent S DUST CONTROLLER

V12 also available as silenced model

L3 „Lance“

L3 DUST CONTROLLER

EMI CONTROLS

Main characteristics and features
▪ For use in close ranges: demolition sites, recycling areas, tunnels, crushers, quarries
▪ Extremely compact, easy to handle, easy to use
▪ 2 nozzle kits included ▪ 3 different spray patterns: – Straight away: throwing range about 18m-20m – Curtain about 90° opening angle throwing range about 18-20m – Roof covering nebulization 18-20m
▪ Low water and energy consumption
▪ Extremely rapid nozzle head with 2 remote controlled electric motors for rotation and tilting mechanism.

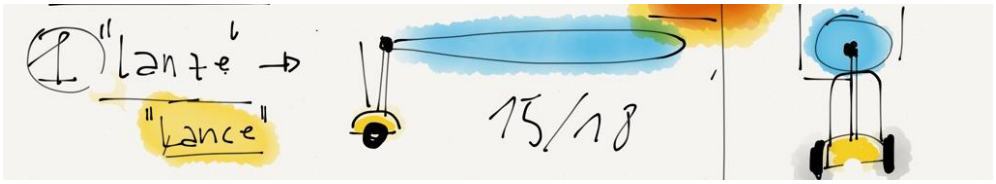
L3 „Lance“ - Technical specification

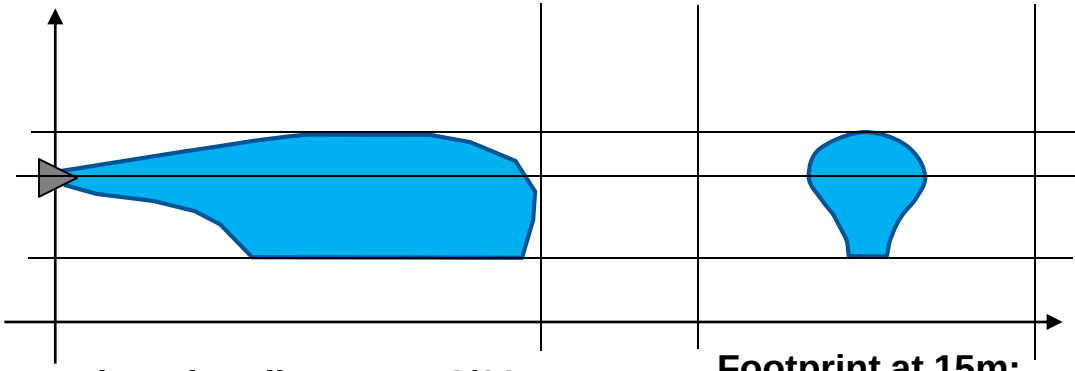
INGLESE	L3 21 l/min	L3 4 l/min
Length A mm	1000	1000
Width B mm	785	785
Height C mm	2700	2700
Length with rod lowered mm	935	935
Height with rod lowered mm	1560	1560
Length without rod mm	880	880
Height without rod mm	1385	1375
Weight kg	111	111
Max. swing value °	270	270
Head inclination °	-6 +60	-6 +60
Load current A	8/7	1,5
Pump motor power kW	3	0,75
Power supply voltage V	400/440	400/440
Frequency Hz	50/60	50/60
Electrical connection plug	16A x 5 polig	16A x 5 polig
Hydraulic connection GEKA-type	GEKA-Kupplung/type	GEKA-Kupplung/type
Coarse water filter micron / mesh	80/100	80/100
Fine water filter micron / mesh	177 / 80	177 / 80
Number head nozzles	2	1
Water flow l/min	21	4
Incoming water pressure bar	from 1 to 10 bar	from 1 to 10 bar
Operating pressure bar	70 bar	70 bar
Radiocontrol range m	100	100
Sound pressure LA db (A)	63 @ 20 m	63 @ 20 m
Operating temperature °C	+5 +50	+5 +50

L3 „Lance“– 21 Liter Version
Operating range and spray pattern

Pattern 1: „Lance“

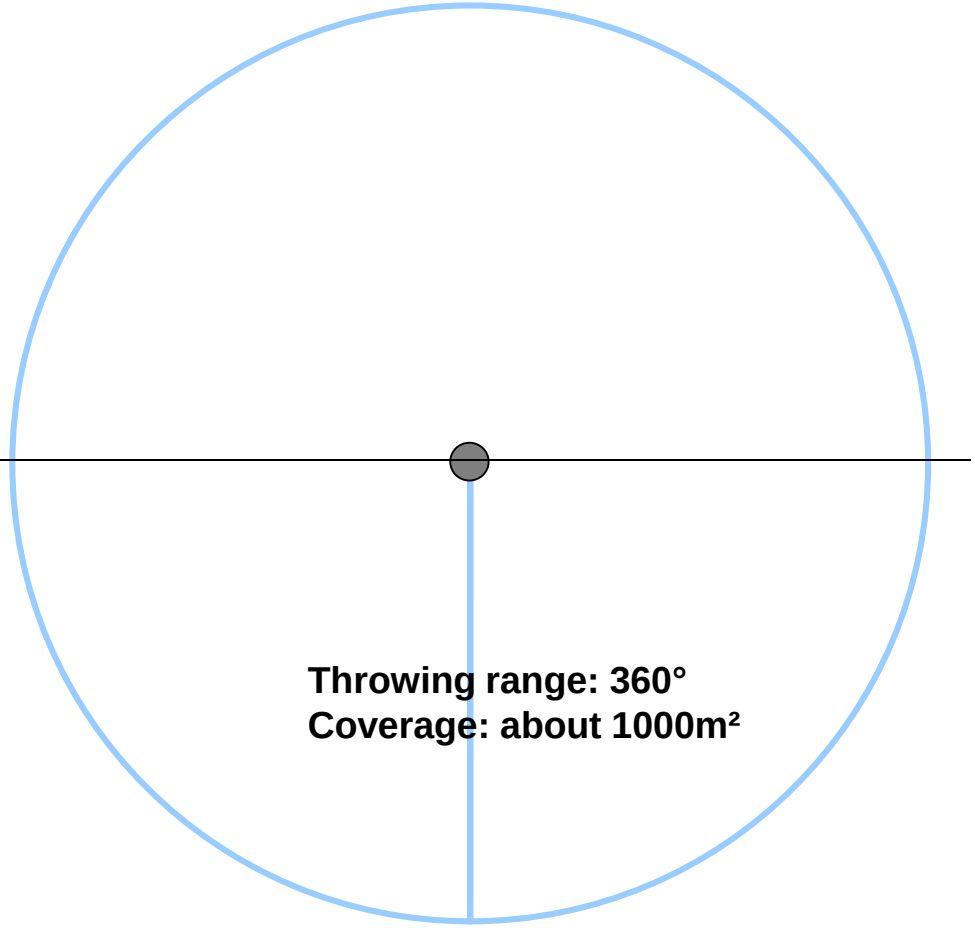
L3-21 Liter Version





Throwing distance: 18/20m

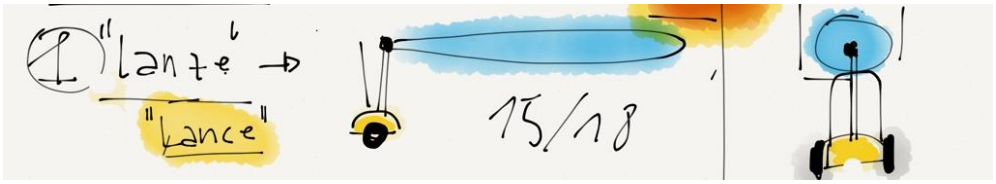
Footprint at 15m: 1,5mx1,5m



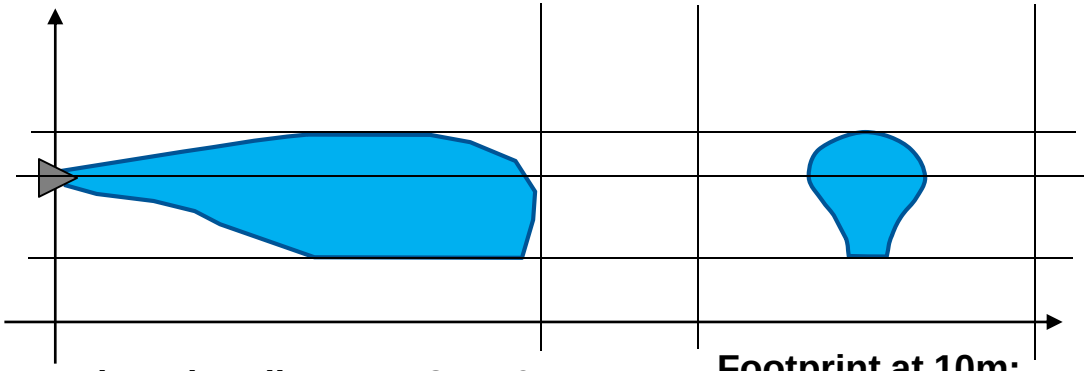
Throwing range: 360°
Coverage: about 1000m²

L3 „Lance“– 4 Liter Version
Operating range and spray pattern

Pattern: „Lance“

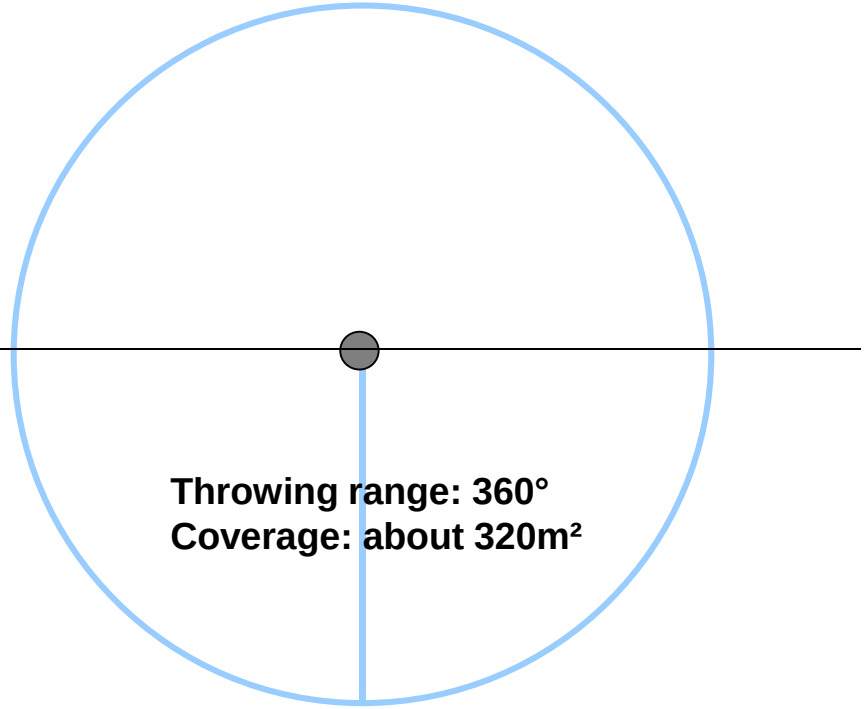


L3-4 Liter Version



Throwing distance: 8m-10m

Footprint at 10m: 1,0mx1,0m



Throwing range: 360°
Coverage: about 320m²

L3 „Lance“

L3 “Lance” *previous model shown

L3 “Lance” *previous model shown

Dust and odor controller – High Pressure System

Main characteristics and features
▪ Ideal solution for open spaces or wide areas
▪ Very flexible, tailored to the customers´ needs, easy to install and to use
▪ Fully automated, no particular attention required by the final user
▪ Simple and limited maintenance
▪ Low costs compared to the actual alternatives
▪ 5 Variants: H1, H1 Box, H1 Station, H1 Trailer, H1 Swing

High Pressure System

H1 | **H1 BOX** | **H1 STATION** | **H1 TRAILER** | **H1 SWING**

H1

- Water consumption - 1-21 l/m
- Working pressure - 70-100 bar

H1 Box

- Single pump
- Water consumption:
  - 1-10 l/m
- Working pressure
  - 70-100 bar

H1 Station

- 2/4 pumps
- Water consumption:
  - 4-84 l/m
- Working pressure
  - 70 bar

H1 Trailer

- 2 pumps
- Water consumption:
  - 2-15 l/m
- Working pressure
  - 70 bar

H1 Swing

- Single pump
- Water consumption:
  - 4-15 l/m
- Working pressure
  - 70-100 bar

High Pressure System
H1 Pump

Main characteristics and features
▪ ideal for intense applications, harsh and hostile environmental conditions (steel mills, ports, industries etc.
▪ adjustable working pressure 60-100 bar
▪ water consumption 1-21 l/min
▪ brass head hot forged for high resistance to corrosion, to very high pressure and to vibrations
▪ ceramic pistons for very limited wear of the seals, as well as the friction and overheating

H1 Pump
Technical specification

CHARACTERISTICS	1-21 L/MIN
Power	3 Kw
Maximum current	18,6 A
Voltage	400 V~50/60 Hz
Noise	<75 dB
Working pressure	100 bar
Regul. pressure	digital or manual
Inlet pressure	2-8 bar
Working temperature	0-50°C
Dimensions	variable measures & size
Weight	variable weight & size

High Pressure System
H1 BOX

Main characteristics and features
▪ Extremely flexible and easy to use and to transport
▪ Single pump, water consumption1-8 l/m
▪ Working pressure 60-100 bar
▪ Nozzles size tailored specifically for each application and system
▪ Pipelines of PVC or of stainless steel, pump case in aluminum
▪ Filtering stations (manual or automatic)
▪ The pump can be supplied with remote control

H1 Box
Technical specification

CHARACTERISTICS	1-5 L/MIN	6-8 L/MIN
Power	0,75 Kw	0,75 Kw
Maximum current	8,6 A	14,8 A
Voltage	230 V~50/60 Hz	230V ~50/60 Hz
Noise	<65 dB@0,2 l/min	<65 dB@1,2 l/min
Working pressure	60-100 bar	60-100 bar
Regul. pressure	digital or manual	digital or manual
Inlet pressure	2-8 bar	2-8 bar
Working temperature	0-50°C	0-50°C
Dimensions	620x280x260 mm	670x280x260 mm
Weight	27 kg	30 kg

High Pressure System
H1Station

Main characteristics and features
▪ 2-4 pumps, water consumption 4-84 l/m
▪ needs only an electrical and a hydraulic connection
▪ Control panel touch screen of the latest generation
▪ Web and Smartphone interface and predisposition for all functions
▪ Self-cleaning filters system
▪ Possibility to connect to local PLC
▪ Easy installation and maintenance

H1 Station
Technical specification

ENVIRONMENTAL CONDITIONS	
Working temperature	-5°C/45°C
Storage temperature	-20°C/60°C
Maximum relative humidity	90,0% (from 25°C up to 40°C)
Protection	IP57
Service class	1
ELECTRIC DATA	
Power	3-12 KW
Voltage	400V~3F+N+T
Frequency	50Hz
Plug	16A 3F+N+T
HYDRAULIC DATA	
Inlet pressure	2-8 bar
Inlet water temperature	4°C-50°C
Water filter	50 micron, with electric self-cleaning system
Water type	fresh water
Maximum working pressure	70 bar
Maximum flow (each pump)	21 l/min
OPTIONAL	
UV filter	
Automatic heating system	
Remote control	

H1 High Pressure System
H1 Trailer

Main characteristics and features
▪ mobile station, ideal for ports and construction sites
▪ flexible and easy to position
▪ 2 pumps, water consumption 2-15 l/m
▪ 60m high pressure hose, 20m inlet water pipe and 20m electric cable
▪ Self-cleaning filters system, electric panel, heating system
▪ Case of aluminum powder coated

H1 Trailer
Technical specification

ENVIRONMENTAL CONDITIONS	
Working temperature	-5°C/45°C
Storage temperature	-20°C/60°C
Maximum relative humidity	90,0% (from 25°C up to 40°C)
Protection	IP54
Service class	1
ELECTRIC DATA	
Power	9 KW
Voltage	400V~3F+N+T
Current	13A
Frequency	50Hz
Plug	16A 3F+N+T
HYDRALULIC DATA	
Inlet pressure	2-10 bar
Inlet water temperature	4°C-50°C
Water type	fresh water
Maximum working pressure	100 bar
Maximum flow (each pump)	15 l/min
MECHANIC CHARACTERISTICS	
Carriage net maximum capacity	150 kg
Torsion bar	Suspension with independent wheels
Reverse gear	With automatic release
Brake	Lever parking brake
Security cable	Yes
Jokey wheel	Yes
Tires	400/10
Tire inflation pressure	2,3 bar
OPTIONAL	
H1 Station 2 pumps	
UV filter	
Automatic box heating system	
Remote control	

***mobile installation on a freifgt ship**

H1 High Pressure System
H1 Swing

Main characteristics and features
▪ Mounted on fix column
▪ Specifically designed to abate dust in construction sites and industrial plants for indoor and outdoor solutions.
▪ Single pump, water consumption 4-15 l/m
▪ Can be positioned at different heights and distances from the pump
▪ Moistens the soil and prevents from puddles
▪ Throwing range 5-18m

H1 Swing
Technical specification

CHARACTERISTICS	
Height	200mm
Basic width	90mm
Number of nozzles	1
Man. Swing	Aut. 360°
Tilt	-10/+20
Working pressure	70-100 bar
Weight	5kg
MODELS:	
H1 Swing Manual	
H1 Swing Automatic	

*** odor abatement in a recycling plant**

Dust control turbine

V7 DUST CONTROLLER

EMI CONTROLS

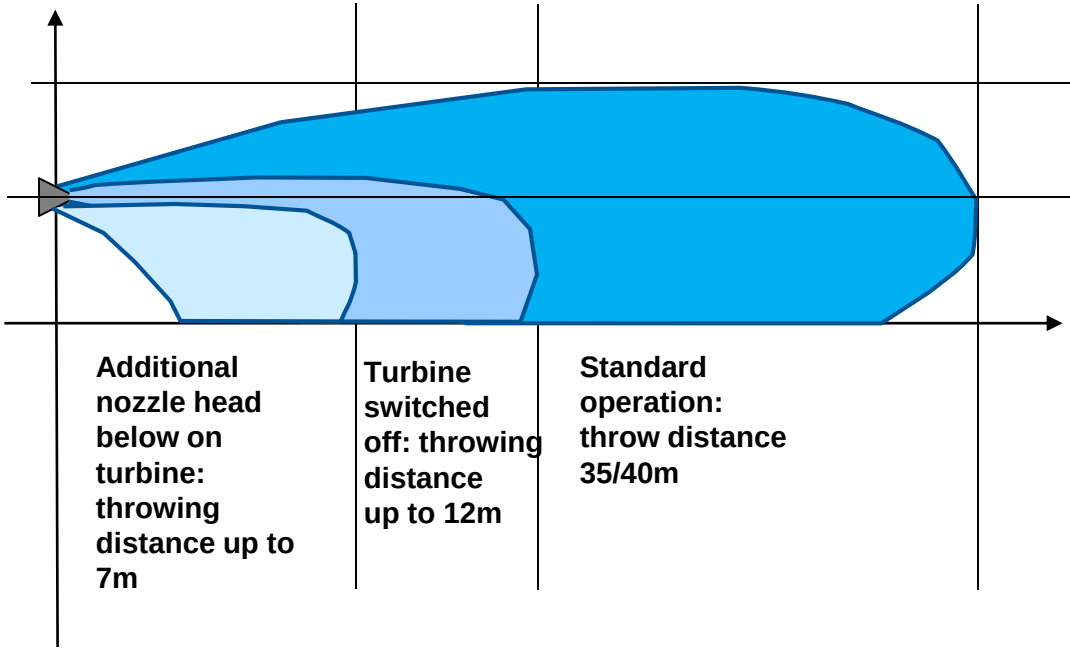
Main characteristics and features
▪ for medium operating range: demolition sites, recycling areas, tunnels, crushers, quarries
▪ Complete solution: 20 bar pump integrated
▪ User friendly, very easy to handle
▪ flexibility: mounted on transport frame, lift, trolley or tower, drawbar adjustable in height
▪ patented nozzle head mounted centrally inside creates finely atomized mist and generates a wind-resistant water spray
▪ nozzle head can also be used with the turbine switched off
▪ remote control standard equipment
▪ regulable water quantity in 3 steps

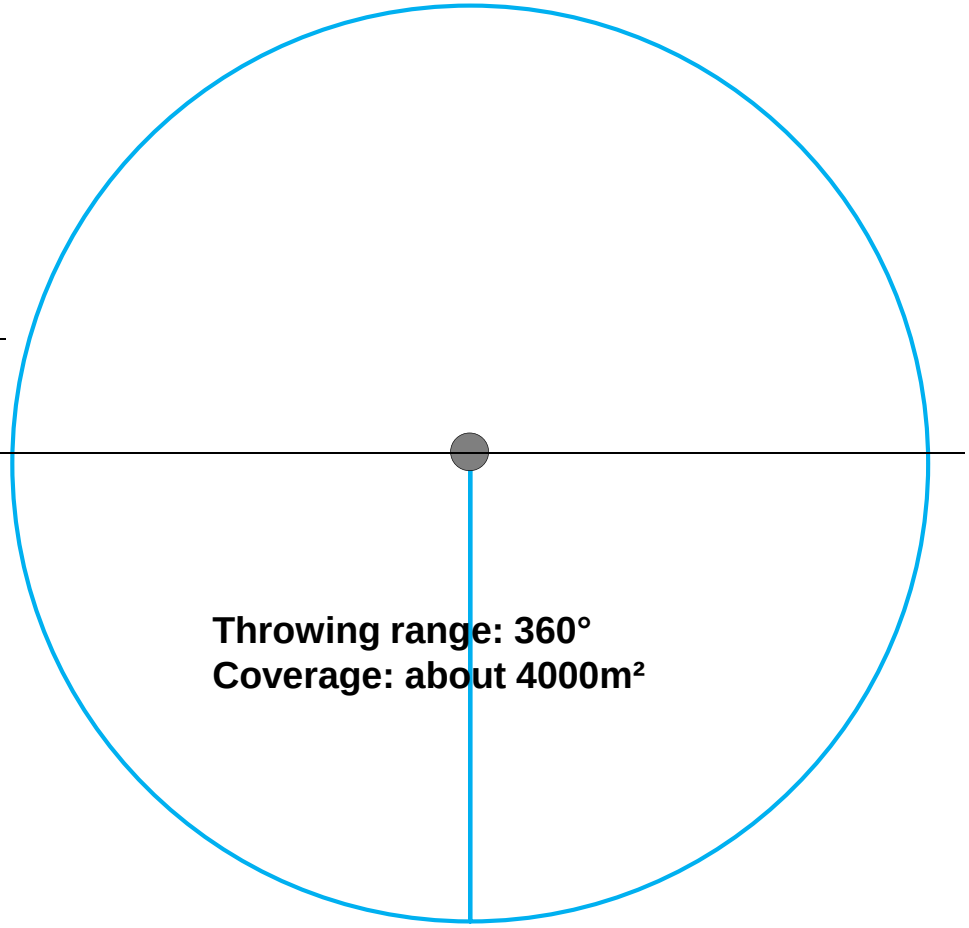
V7 - Technical specification

Length without steering (on carriage)	1860 mm
Length with steering (on carriage)	2360 mm
Width without wheels (on carriage)	1430 mm
Width with wheels (on carriage)	1820 mm
Height without wheels (on carriage)	2140 mm
Height with wheels (on carriage)	2250 mm
Length (on fixed underframe)	1200 mm
Width (on fixed underframe)	1000 mm
Height (on fixed underframe)	2300 mm
Weight on carriage without-with front wheel	500 - 540 kg
Weight on underframe	420 kg
Weight machine only	350 kg
Rotation angle max.	360°
Tilting angle	0° - 52°
Height adjustment	electric/manual
Pump	4 kW
Turbine motor	6,5 kW
Voltage	400/440 V
Frequency	50/60 Hz
Power plug	32 A x 5
Water connection	Kamlock/Storz “C”
Minimum input water pressure	3 bar
Pump monitoring:	Pressure transducer
Water filter	250 µm
No. of nozzles	12 + 18
Water consumption	15 - 100 l/min
Halogen lamp	150 W
Remote control	radio, 100 - 150 m

V7 - Operating range and spray pattern

Throwing distance: 35m (without wind / 90% droplet concentration)





V7

Dust control turbine

V12 DUST CONTROLLER

EMI CONTROLS

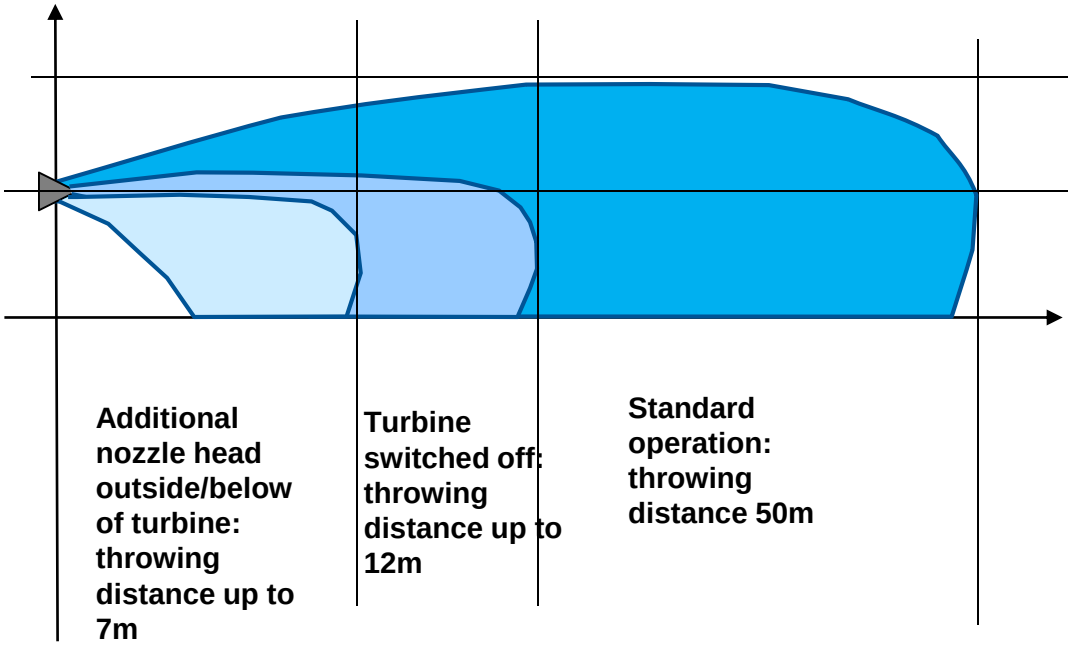
Main characteristics and features
▪ for large operating range: demolition sites, recycling areas, quarries, mining, industries, loading/unloading plants
▪ complete solution: 20 bar pump integrated
▪ user friendly, very easy to handle
▪ flexibility: mounted on transport frame, lift, trolley or tower, drawbar adjustable in height
▪ patented nozzle head mounted centrally inside creates finely atomized mist and generates a wind-resistant water spray
▪ nozzle head can also be used with the turbine switched off
▪ remote control standard equipment
▪ selectable water consumption in 3 steps
▪ available in extra silent version (V12 silent: 67db/55db 20m) and in version V12So for neutralization of odors

V12 Technical specification

Length without steering (on carriage)	1715 mm / 67.5 in.
Length with steering (on carriage)	2250 mm / 88.6 in.
Width without wheels (on carriage)	1430 mm / 56.3 in.
Width with wheels (on carriage)	1820 mm / 71.7 in.
Height without wheels (on carriage)	2080 mm / 81.9 in.
Height with wheels (on carriage)	2250 mm / 88.6 in.
Length (on fi xed underframe)	1310 mm / 51.6 in.
Width (on fixed underframe)	1000 mm / 39.4 in.
Height (on fixed underframe)	2100 mm / 82.7 in.
Weight on carriage without/with front wheel	540/580 kg / 1.190/1.279 lb
Weight on underframe	470 kg / 1.036 lb
Machine only weight	420 kg / 926 lb
Rotation angle max.	360°
Tilting angle	0° - 52°
Height adjustment	electric/manual
Pump	4 kW / 5,4 HP
Turbine motor	12,5 kW / 16,8 HP
Voltage	400/440 V
Frequency	50/60 Hz
Power plug	63 A x 5
Water connection	Storz “C” / UNI 45 / Kamlock
Minimum input water pressure	3 bar / 43 psi
Pump monitoring	Pressure transducer
Water fi lter	250 micron / 60 mesh
No. of nozzles	12 + 18
Water consumption	15 - 100 l/min / 4 - 26 gpm
Halogen lamp	150 W
Remote control	radio, 100 m / 328 ft

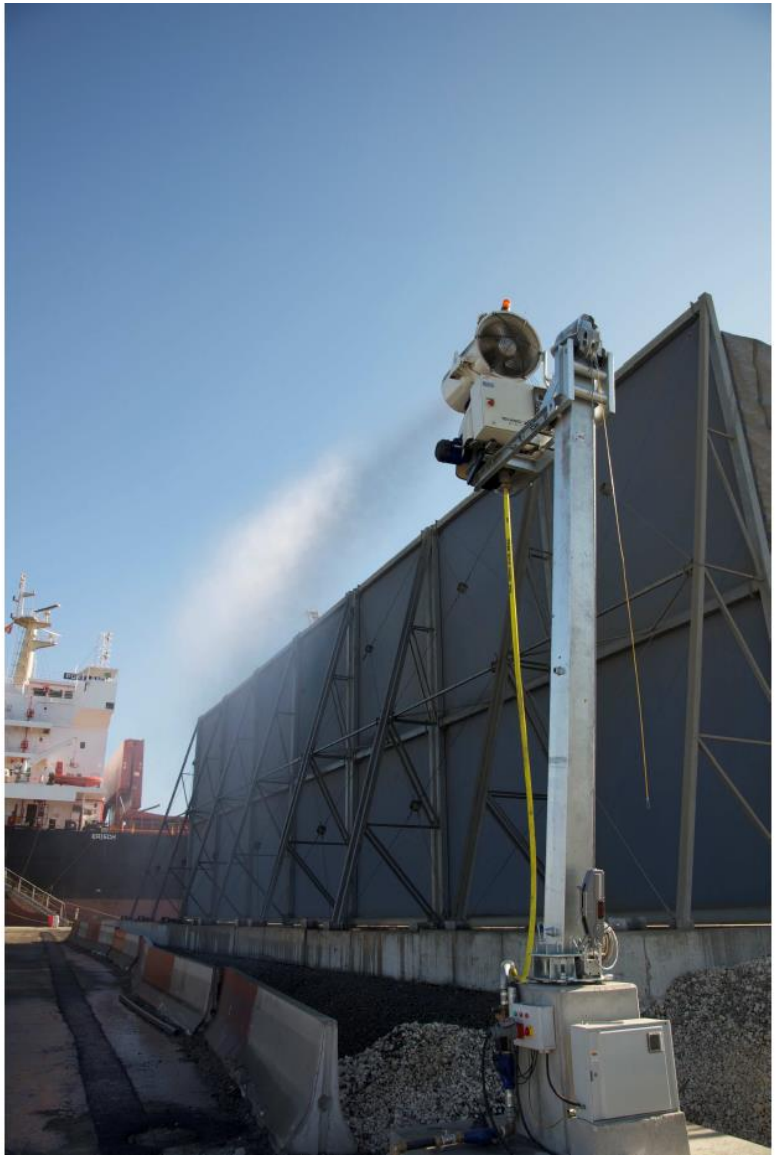
V12 - Operating range and spray pattern

Throwing distance: up to 50m
(in still air - 90% of droplet concentration)



Throwing range: 360°
Coverage: about 7900m²

V12



V12 S - SILENT

Dust control turbine V12S - SILENT

Main characteristics and features
▪ ideal solution for working in noise sensitive areas
▪ specially designed 12,5 kW turbine produces only 60 dBa at 20 m
▪ universal, powerful and super silent environmentally-friendly dust control solution
▪ flexibility: mounted on transport frame, lift, trolley or tower, drawbar adjustable in height
▪ 2 speeds: 1500 rpm and 1000 rpm to throw the water mist from 10m to over 50m
▪ inclination 0-52°, full oscillation 360°
▪ user friendly, very easy to handle
▪ remote control standard equipment

V12s - Technical specification

Length on underframe	1590 mm
Width on underframe	1100 mm
Height on underframe	2360 mm
Max.rotation	max 360°
Inclination	0-52°
Nominal current	31 A
Pump motor nominal power	4 kW
Turbine motor nominal power	12,5 kW
Nominal voltage	400/440 V
Nominal frequency	50/60 Hz
Connection plug	32A x 5
Hydraulic connection	Storz C/UNI 45/BS 336/Camclock
Minimum water pressure needed	3 bar
Water filter	250 micron/ 60 mesh
Number of nozzles	30
Water consumpion	20-100 l/min
Halogen light	150 W
Remote control range	100 m
Sound pressure at 1500 rpm	63dbA at 20 m
Sound pressure at 1000 rpm	59 dbA at 20 m

V12S

V12So

Main characteristics and features
▪ Ideal equipment for the treatment and odor control in large industrial and commercial environments
▪ Chemical neutralization: atomization of water with a special chemical, but completely harmless product
▪ The natural decomposition process will be accelerated and not modified
▪ Very competitive costs if compared with other solutions offered by the market (bio filters, scrubbers, chimneys etc…)

V12So - Technical specification

Power turbine	12,5 KW
Number of nozzles	12
Nozzles type	atomizers to 80 microns
Peristaltic pump	from 0,5 l/h to 1 l/h
Tank for the additive	30 l
Hydraulic connection	¾“ female
Pump capacity	4,2 l/min
Pump power	0,75 kW
Pressure of work	70 Bar
Swinging	360°
Rang of the remote control	150 m

V22 Dust controller –

V22 – standard version – to be used with fresh-water
V22 – salt version – to be used with salt-water
The question at the beginning of the project V22 turbine has been:
how can we create a super-powerful turbine and at the same time save energy?
The result is very convincing…

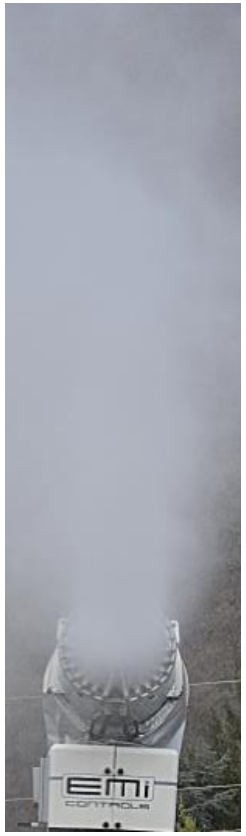
More of …

- **Water mist**
- **Throwing distance**

Less of …

- **Power consumption**
- **Energy cost**
- **Noise**

V22



- most modern turbine on the market
  - Excellent efficiency
  - Power saving
  - Low acoustic emission
- universal, powerful and environmentally-friendly solution
- water consumption up to 350l/min.
- fully automated, easy to use (remote control)
- patented nozzle head, plus outer nozzles ring for generate a finely atomized mist
- projection range with the central nozzle head is much greater if compared to other nozzle configurations
- nozzle head can also be used with the turbine switched off
- 360° programmable oscillation angle
- fields of application: mining, steel industries, demolition, recycling plants, materials handling & reloading facilities, landfill, woodworking …
- available V22 for salt-water

V22

Technical specification V22

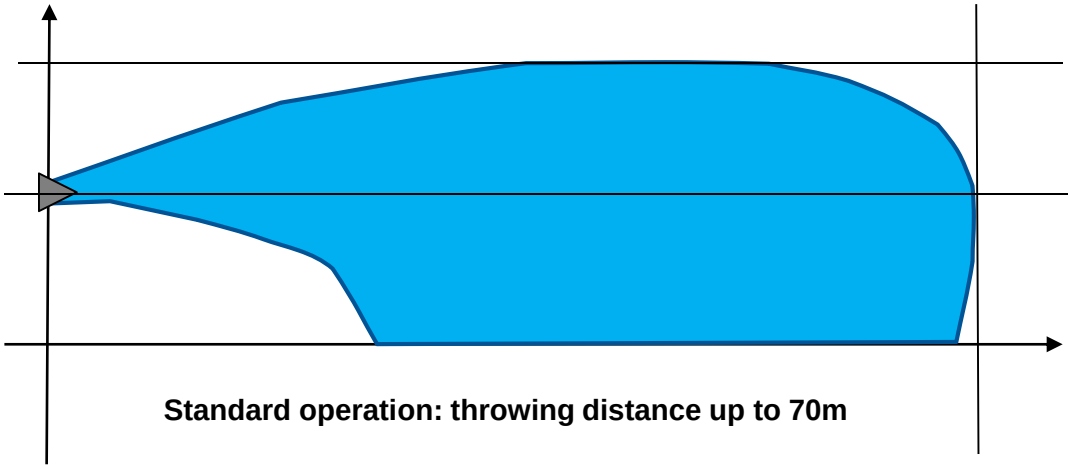
Length without steering (on carriage)	2205 mm
Lengh with steering (on carriage)	2740 mm
Width without wheels (on carriage)	1730 mm
Width with wheels (on carriage)	1970 mm
Height without wheels (on carriage)	2330 mm
Height with wheels (on carriage)	2500 mm
Lenght (on fixed underframe)	1800 mm
Width (on fixed underframe)	1250 mm
Height (on fixed underframe)	2350 mm
Weight (on carriage)	1400 kg
Weight (on underframe)	700 kg
Machine only weight	650 kg
Rotation angle	Max 360°
Tilting angle	6° + 46°
Pump	15 kW optional
Turbine motor	18,5 kW
Voltage	400 V
Fraquency	50 Hz
Nominal current	35 A
Power plug	63Ax5 or 125Ax5
Water connection	R 2 1/2
Pump monitoring	Pressure transducer
Water filter	250µm/60 mesh
No. of nozzles	20 AMP 1.8 + 27 Quadrijet
Water consumption	60-300 l/m
Halogen lamp	150 W
Remote control	100 m
Decibel dbA distance 20m	63 dB(A)
Operating temperature	2°-40°C
Operating pressure	20 bar

Water consumption

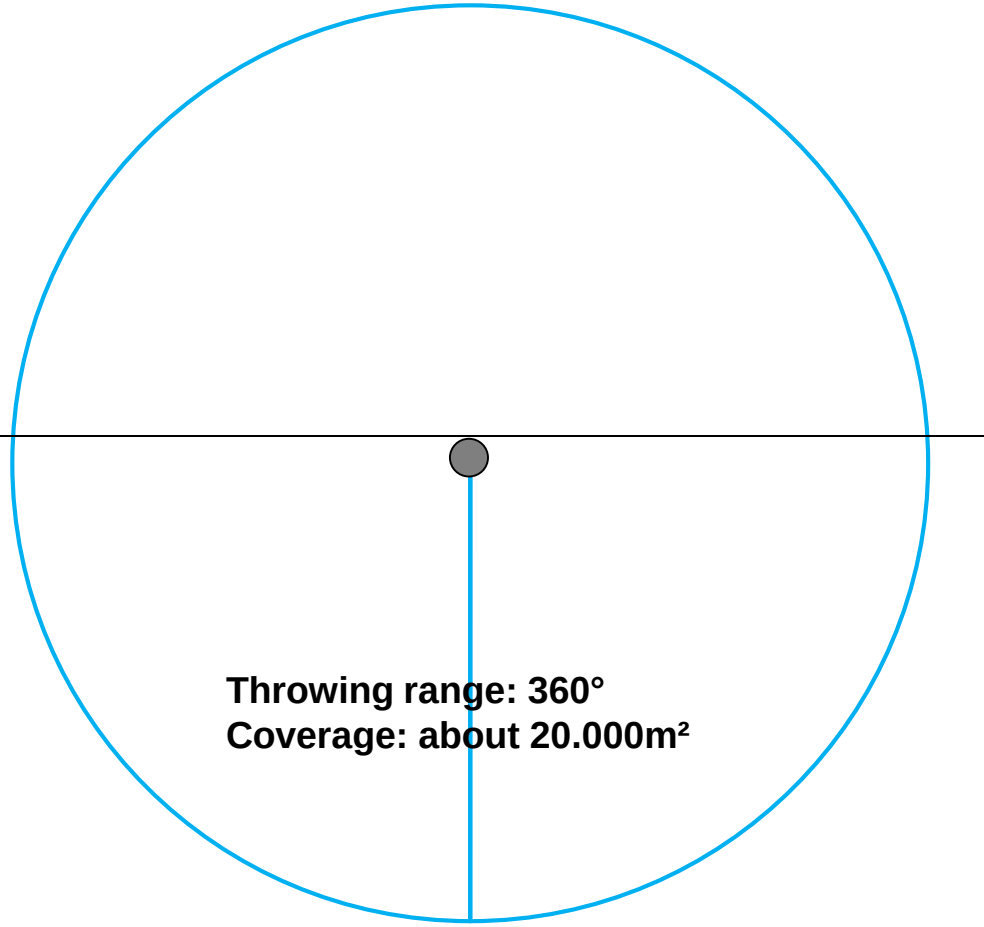
The water flow depends from the mounted nozzles and water pressure. The water flow of the nozzles, mounted on central head and on the outer ring are listed below. The total amount of the water consumption is the sum of the water flow of the inner head and outer
ring nozzles at the operating pressure. Available also on undercarriage with pump and 350l/min water pump.

V22 - Operating range and spray pattern

Throwing distance: up to 70m
(in still air - 90% of droplet concentration)



Standard operation: throwing distance up to 70m



Throwing range: 360°
Coverage: about 20.000m²

V22 in action

Several applications for maximal flexibility

- Single machine on metallic frame or wheeled undercarriage with remote control
- Tower/lift:1,6m – 3,5m – 4,5m

Single machines

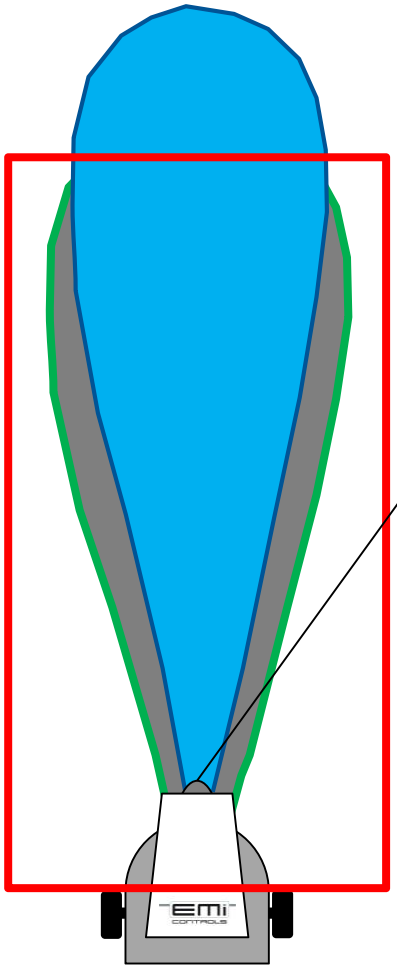
Tower

Lift

Main advantages of Emicontrols dust controllers

- **Inner, patented installed nozzle head:**
  - The mist is protected from the wind by the cone of the turbine
  - creates a very homogeneous water mist with ideal droplet size for any kind of dust
  - 30 ceramic nozzles: easy to clean and available with different sizes to be suited for the different applications (wood dust – cement – coke – sand – aggregates etc.)
  - 2 water circuits: adjustable water consumption through the most modern electric valves technology. 3 levels (standard: 30/60/90 l/min)
  - each application field needs proper nozzles (AMP 1.0 – AMP 1.4 – AMP 1.8 – AMP 2.5)

EmiControls turbine protects the nebulization



- EmiControls dust controllers equipped with 20bar water pump:
  - wind-resistant nebulization
  - very homogeneous mist
  - optimal quantity and droplet size
  - excellent throwing distance

Throwing distance V12

- **High droplets´ concentration till 50m (more than 90%)**
- **Throwing distance more than 50m**

Distance 37m

Distance 43m

Distance 47m

THANK YOU FOR YOUR ATTENTION

FOR ANY ADDITIONAL INFORMATION YOU SHOULD NEED,

JUST CONTACT US!

info@emicontrols.com