Spray Mist Systems



Nebulisation is the process or act of converting some physical substance (water + additives) into the form of particles small and light enough to be carried on the air.

It refers to a process of converting and suspending particles or a composition in a moving stream of air for the purpose of delivering the particles (i.e. mist water) to a particular location or area.











mww.brookshire.com.au

DUST FIGHTERS: GENERAL GUIDELINES

Generac Mobile's Dust Fighter range is composed by many different nebuliser units which provide our users and customers, with solutions based on application and size of area which requires coverage. The dust suppression systems under traditional conditions of use, are suitable for a variety of applications such as demolition works, mining, odor suppression in waste dumps and recycling depots, aggregate production, environmental repairs and much more.

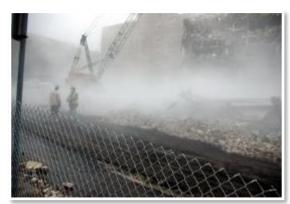
Latest application example:

During the period of development and enlargement of the corona virus pandemic, also known as Covid19, many of our customers started to use our Dust Fighters to nebulise at a wide distance high solutions of water and various sanitizing substances in order to sanitise various public areas such as: roads, sidewalks, pedestrian paths, hospital entrances and emergency rooms, just to name a few cases.



DUST FIGHTERS: SOME TRADITIONAL DUST SUPPRESSION WAY





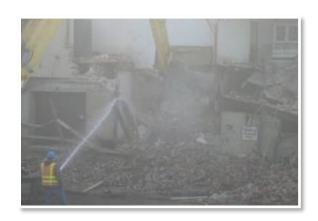






DUST CAN BE HIGHLY HARMFUL







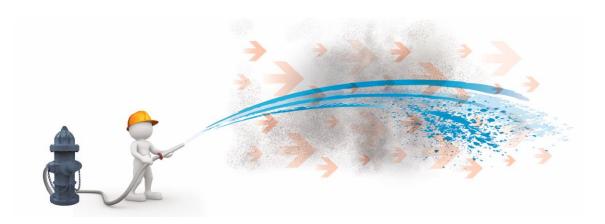




DUST FIGHTERS: HOW THE SYSTEM WORKS



TRADITIONAL

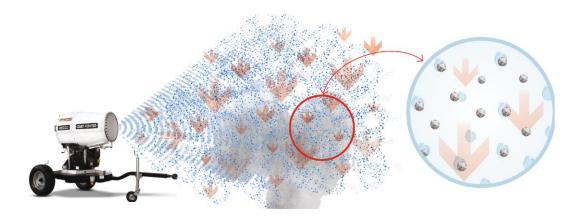


Using a traditional dust suppression system through a water hose, you can obtain water particles with a 1000 micron average diameter: these particles are not able to catch dust particles that have a 80 micron diameter instead. Moreover, the water flow passes through the dust cloud without covering it completely.



DUST FIGHTERS





Nebulised water mixed with chemical or disinfectants, produces particles that have a 50-150 micron diameter: they can easily combine themselves with dust, humidity or particles that are suspended in the air or on flat surfaces and drag them to the ground.

DUST FIGHTERS: ADVANTAGES OF THE DUST FIGHTER SYSTEM

- ➤ Eliminates private costs used to manual water spray the job site with a water tank-truck, since is totally automatic, for a fast return on the investment.
- ➤ Eliminates mud problems, by emitting only the water necessary to eliminate dust. Guarantees the highest rating on public and private bids.
- ➤ Uses only a small fraction of the water employed by traditional irrigation systems.
- ➤ Has a strong impact on public health and environmental control agencies (i.e. public sanitization)
- ➤ Creates a cooler work environment as the water evaporates it decreases the outside temperature by up to 4°C.
- > The machine can be easily installed on any transport vehicles



DUST FIGHTERS: GENERAL BENEFITS



Dust Fighter is not just the best solution to reduce the dust, it is an environmental friendly solution.

The traditional systems used during the demolitons can consume huge amount of water, even up to 300 - 350 l/m.

With Generac Mobile's **Dust Fighters** you just have a water consumption of approx. **12 to 120 l/m** depending by chosen models.



In a nutshell, this means:

- **□** Lower water consumptions
- ☐ Better results
- ☐ Better efficiency
- ☐ Respect of the natural resources
- SAVING MONEY

DUST FIGHTERS: EASY TO USE AND PUT IN PLACE

Dust Fighter is born as the Solution for all working environment where you need to reduce dust and odors.

POWER SUPPLY:

- from a Generating Set
- from the Electrical Main







WATER SUPPLY: or from the Public Water Net

or from a Mobile Water Tank



Minimum Water pressure approx. 1.5 bar

DUST FIGHTERS: GENERAL LINE-UP

WIDE RANGE OF AVAILABLE MODELS, FOR ANY KIND OF APPLICATION



DF Mini

- Horizontal range: from 5 to 8 m
- Water tank: 70 L
- Running time with water tank: from 80' to 318'
- Hand trolley
- Ideal for small indoor jobs



DF Smart

DF Mini

- Horizontal range: 13 m
- Mains powered equipment
- Water consumption: from 5.4 to 12 L/min
- Tilting: +10° / +50°
- Hand trolley

Water tank: 70 L

from 80' to 318'

Hand trolley

Ideal for small outdoor jobs

■ Horizontal range: from 5 to 8 m

Running time with water tank:

Ideal for small indoor jobs



DF Smart All In One

- Horizontal range: 13 m
- Mains powered equipment
- Water consumption: 7 L/min
- Rotation: 100° / Tilting: +10° / +50°
- Water tank: 1000 L

Horizontal range: 13 m

■ Tilting: +10° / +50°

Hand trolley

Mains powered equipment

Ideal for small outdoor jobs

■ Water consumption: from 5.4 to 12 L/min

■ Ideal for sanification jobs



DF Smart

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- Water consumption: from 5.4 to 12 L/min
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DF Smart All In One

- Horizontal range: 13 m
- Mains powered equipment
- Water consumption: 7 L/min
 Rotation: 100° / Tilting: +10° / +50°
- Water tank: 1000 L
- Ideal for sanification jobs



DF 110000



AUTONOMUS LINE-UP



100

DF Smart All In One

- Horizontal range: 13 m
- Mains powered equipment
- Water consumption: 7 L/min
- Rotation: 100° / Tilting: +10° / +50°
- Water tank: 1000 L
- Ideal for sanification jobs



- Horizontal range: 30 m
- Built-in diesel engine: 6.2 kW
- High pressure pump
- Water consumption: from 44 to 50 L/min
- Rotation: 90° / Tilting: +0° / +40°
- Hand trollev



DF 3000 MPT

- Horizontal range: 20 m
- Water consumption: 6.25 L/min
- Tilting: -30° / +10°
- Tilting: -30° / +10
- Water tank: 1000 LGenerating set: 3.7 kW





DF Smart

- Horizontal range: 13 m
- Mains powered equipment
- Water consumption: from 5.4 t
- Tilting: +10° / +50°
- Hand trolley
- = Ideal for small outdoor jobs



MEDIUM SIZE LINE-UP



DF 7500 - DF 15000 - DF 20000

- Horizontal range: 40/50/60 m
- Vertical range: 16/20/24 m
- Max. covered area: 4600/7190/10355 m²
- Water consumption: 52/60/70 L/min
- Rotation: 335° / Tilting: +0° / +40°

1999

DF 50000

DF Smart

- Horizontal range: 80 m
- Vertical range: 32 m
- Max. covered area: 20000 m²
- Water consumption: 125 L/min
 Rotation: 340° / Tilting: +0° / +35°

DF 110000

- Horizontal range: 120 m
- Vertical range: 40 m
- Max. covered area: 45000 m²
- Water consumption: from 150 to 315 L/min ■ Rotation: 320° / Tilting: +0° / +40°





Pow





COMPACT LINE-UP: THE RANGE







COMPACT SIZE LINE-UP

DF MINI
DF SMART
DF SMART ALL IN ONE

The range of compact DFs will offer a wide range of applications to our customers. They can be used both indoors (DF MINI) and outdoors (DF SMART). They are easy to transport, therefore also easy to install on light size vehicles (pickups and small trucks). They are increasingly used for sanitation in small environments where space does not allow movement with large vehicles.

COMPACT LINE-UP: TECHNICAL CHARACTERISTIC

DF MINI: PASSIVE FLOW (NO FAN)

- Stainless steel 70 L water tank
- Three interchangeable type of nozzles for different coverages
- Wheels and handles for transport
- High pressure pump
- Signal for low water level
- Adjustable for an easy transport
- Manually adjustable nozzles spray angle
- Pump: 230 V 50 Hz 2.6 A 0.55 kW 100 bar
- Nozzle spray angle: +80°/+150°
- Tilting head: +15°/+25°
- Spray distances options:
 - Mode1 (opt.): 8m | Running time: 1 h 20'
 - Mode2 (std.): 7m | Running time: 2 h 25'
 - Mode3 (opt.): 5m | Running time: 5 h 18'



DF MINI: unique in its kind, not being equipped with a push fan, is recommended for indoor use and for applications in quiet areas. The tank is entirely made in stainless steel.

DF SMART: COMPACT AND POWERFUL

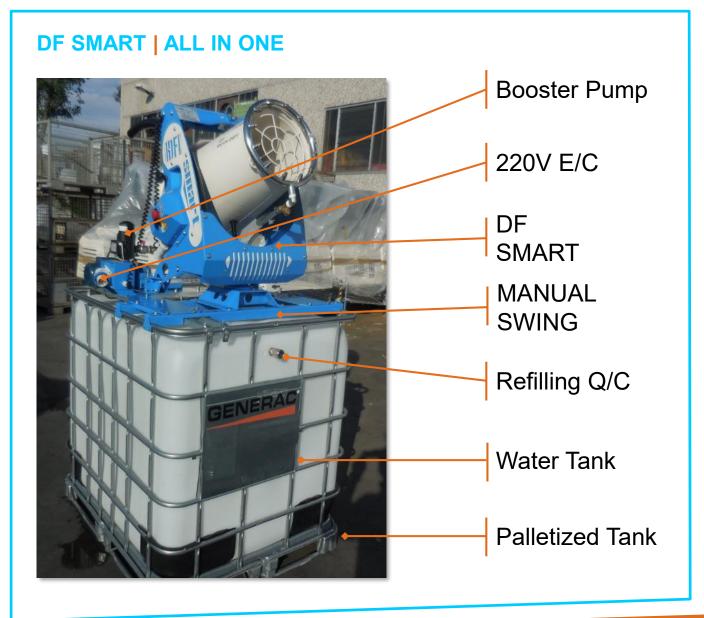
- Wheels and handles for transport
- Stainless steel crown with nozzles
- Water inlet filter
- Emergency stop button
- Manual tilting
- Water connection: express type ½" quick connection
- Electric motor: 2.2 kW Single-phase 230 V 50/60 Hz
- Water consumption: from 5.4 to 12 l/min
- Max. horizontal range: 13m
- Air flow: 90 m³/min



Available Options:

- 10 m electrical cable with Schuko plug
- Plastic box for documents
- 110V kit

COMPACT LINE-UP: SANITIZATION AND NOT ONLY



The compact line has recently been used in sanitation campaigns in various regions of the world. Here on the right a special ready-to-use application (Pump+Tank+DFSMART) while here under two application videos that will give clear examples of how these products are used by our customers.

Recent application videos:





COMPACT LINE-UP: APPLICATIONS









MEDIUM LINE-UP: THE RANGE







DF 20000 on low-speed trailer



DF 20000 on base

MEDIUM SIZE LINE-UP

DF 4500

DF 7500

DF 15000

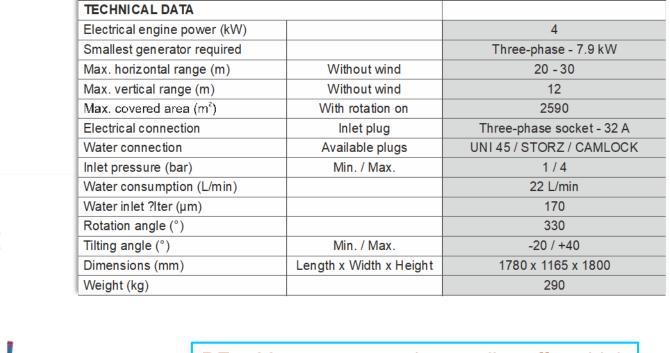
DF 20000

The range of medium Dust Fighters is by far the most requested and sold all over the world: this DF line guarantees high nebulization capacity along with compact dimensions. This range of products is easy to move thanks to the wheels but also simply installable on trucks or pick-ups, with the available "on base" configuration.

MEDIUM LINE-UP: DF4500 - TECHNICAL DATA

DF4500: COMPACT YET POWERFUL

- Integrated control panel
- Phase inverter
- Pump with peripheral impeller
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading
- Stainless steel crown with nozzles
- Water drain system
- Low speed trailer with drawbar
- Two wheels and jockey wheel
- Forklift pockets
- · Four height adjustable stabilizers
- Manual rotation
- Electric tilting



<u>**DF4500**</u>: compact and versatile, offers high mobility thanks to the trolley and side loading pockets, and is entirely made of powder-coated steel. All controls are easily accessible and user-friendly.

MOBILE

DF 4500

MEDIUM LINE-UP: DF7500 - DF15000 - DF20000 - TECHNICAL DATA

DF7500 | DF15000 | DF20000: THE BEST SELLERS

Powerful

- Booster pump with peripheral impeller
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading

Durable Design

- Stainless steel crown
- Powder coat finish

- DUST FIGHTER - 20000

Easy to Use

- Integrated control panel
- Remote control (Opt.)
- Automatic oscillation system
- Motorized tilting: 10-50° (Opt.)

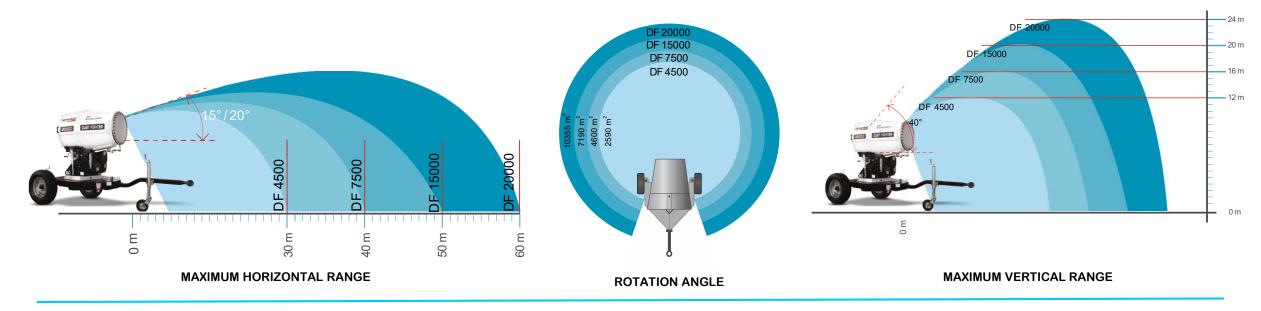
Versatile

- Adjustable angle and rotation
- Skid mount or trailer option

		DF 7500	DF 15000	DF 20000
TECHNICAL DATA				
Electrical engine power		7.5	15	20
Smallest generator		Three-phase - 20 kW	Three-phase - 35 kW	Three-phase - 50 kW
Max. horizontal range (m)	Without wind	30 - 40	40 - 50	50 - 60
Max. vertical range (m)	Without wind	16	20	24
Max. covered area (m²)	With rotation on	4800	7190	10355
Electrical connection	Inlet plug	3 phase - 32 A	3 phase - 32 A	3 phase - 63 A
Water connection	Available plugs	UNI 45 / STORZ	UNI 45 / STORZ	UNI 45 / STORZ
Min. inlet pressure (bar)		1	1	1
Water consumption		52	60	70
Water inlet filter (µm)		180	180	180
Rotation angle (°)		335	335	335
Tilting angle (°)	Min. / Max.	+0° / +40°	+0° / +40°	+0° / +40°
Dimensions (cm)	Length x Width x	330 x 183 x 218	330 x 183 x 218	330 x 183 x 218
Weight (kg)		760	810	850

The almost total absence of plastic materials makes our product very resistant and suitable for continuous and repeated use in many applications.

MEDIUM LINE-UP: DF7500 | DF15000 | DF20000 - TECHNICAL DATA



STANDARD VERSION:

- Integrated control panel
- Phase inverter
- Pump with peripheral impeller
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading
- Stainless steel crown with nozzles
- Water drain system
- Equipped with two wheels, tow bar and forklift pockets
- Two height adjustable stabilizers

OPTIONS AVAILABLE:

- Remote control
- Road trailer type CM (adjustable)
- Documents for road registration (EU)
- Automatic rotation
- Electric tilting
- Dosing pump for chemical additives
- Water supply pump
- Side forklift pockets (for low-speed trailer only)
- Ball or eyelet hitch

LARGE SIZE LINE-UP: DF50000 | DF110000





LARGE SIZE LINE-UP

DF 50000 DF 110000 This range of Dust Fighters, are Generac Mobile's high-end products with high atomisation jet up to more than 120 horizontal meters. The models are normally offered on base and not on trolley as for the medium range and have high requirements in terms of water and electricity.

LARGE LINE-UP: DF50000 - TECHNICAL DATA

GENERAC

DUST FIGHTER

TECHNICAL DATA

Flectrical engine power (kW)

DF50000

StandardIntegrated control panel

- Phase inverter
- Pump with peripheral impeller
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading
- Stainless steel crown with nozzles
- Water drain system
- Installed on base with forklift pockets
- Automatic rotation
- Electric tilting
- Remote control

Options:

- Low speed trailer (no brakes)
- Dosing pump for chemical additives
- Water supply pump
- Customized colour (RAL)

32 2000 Three-phase
20000 Three-phase
Three-phase
· · · · · · · · · · · · · · · · · · ·
UNI 45 / STORZ
1
125
180
340
+0 / +3
2270 x 1450
1410



DF 500

LARGE LINE-UP: DF110000 - TECHNICAL DATA

DUST FIGHTER

DF110000

Standard Equipment

- Control panel on separated electrical cabinet
- Integrated multistage water pump
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading
- Double stainless-steel crown with nozzles
- Water drain system
- Installed on base with forklift pockets
- Automatic rotation
- Electric tilting
- Remote control

Options:

- Dosing pump for chemical additives
- Water supply pump
- Customized colour (RAL)

TECHNICAL DATA

	Electrical engine power (kW)		(kW)		
	Smallest generator required		ired		
	Max. horizontal range (m)	Without wind	1)	Without wind	ĺ
	Max. vertical range (m)	Without wind		Without wind	
	Max. covered area (m²)	With rotation on		With rotation on	
	Water connection	Available plugs		Available plugs	l
	Min. inlet pressure (bar)				
	Water consumption (L/min)		in)		ĺ
	Water inlet filter (µm)				
	Rotation angle (°)				ĺ
	Tilting angle (°)	Min. / Max.		Min. / Max.	l
	Main unit dimensions (mm)	Length x Width x Height	m)	Length x Width x Height	
	Electrical cabinet dimensions (mm)	Length x Width x Height	sions (mm)	Length x Width x Height	ĺ
	Main unit weight (kg)				
6	Electrical cabinet weight (kg)		(kg)		
200	The state of the s				



AUTONOMOUS LINE: POWERJET - DF3000MPT - DF7500MPT



AUTONOMOUS LINE-UP

POWER JET DF 3000 MPT DF 7500 MPT This is an express line designed for mobility, for towing on site or on the road (with approved trolleys offered as an option). The MPT kit offers all together the best features: high performance spray heads, built-in power generators and large tanks for pre-mixed water with disinfectant elements. All in one solution. Total flexibility.

AUTONOMOUS LINE: POWERJET - TECHNICAL DATA

TECHNICAL DATA

POWER JET: EASY TO MOVE, COMPACT & MIGHTY

- Integrated control panel
- Spray head with two nozzles
- High pressure pump coupled with engine
- Protection against running dry pump
- Nozzle pressure gauge
- Water drain tap
- Inlet water filtration system
- Hand trolley
- Forklift pockets on 3 sides
- Central lifting eye
- Manual rotation
- Manual tilting

Dual nozzle spray head









Max. horizontal range (m)	Without wind	30
Water connection	Inlet plug	UNI 45 / STORZ / CAMLOCK
Max. inlet pressure allowed (bar)		6
Water consumption (L/min)	Min. / Max.	44 / 50
Water inlet filter (µm)		170
Rotation angle (°)		90
Tilting ange (°)	Min. / Max.	+0 / +40
Diesel engine		Yanmar L100N V6 (1-cyl Air cooled - Stage V)
Engine speed (RPM)	Min. / Max.	2900 / 3100
Fuel tank (litres)		5.4
Running time (h)	@ 2900 RPM	3
Avg. noise pressure level	dB(A) @ 7 m	87



Integrated diesel engine

Length x Width x Height

Length x Width x Height





PowerJet 30

1291 x 990 x 1072

1605 x 990 x 1563 210



AUTONOMOUS LINE: DF3000MPT - TECHNICAL DATA

DF3000MPT: TOWABLE WITH LARGE AUTONOMY

Telescopic vertical mast (max. height: 4m)

1000 liters plastic water tank

• 3.7 kW - 230 V integrated generating set

Integrated control panel

Stainless steel crown with nozzles

Nebulizer cone foldable for shipment

Telescopic mast with double crank winch

Water Supply network connections

Main Electricity network connections

High pressure washer connection

Water drain system





TECHNICAL DATA		
Electrical engine power (kW)		2.2
Integrated generating set		3.7 kW - 230 V - Yanmar L70N
Max. horizontal range (m)	Without wind	20
Max. covered area (m²)	With rotation	1170
Running time (min)		160
Fuel tank capacity (L)		18
Water tank capacity (L)		1000
Water consumption (L/min)		6.25
Water inlet filter (µm)		170
Rotation angle (°)		335
Tilting angle (°)	Min. / Max.	-30 / +10
Dimensions on base (mm)	L x W x H (min./max.)	2374 x 1210 x 2230/3920
Dimensions on road trailer* (mm)	L x W x H (min./max.)	3920 x 2015 x 2780/4470
Dry weight on base (mm)		490
Dry weight on road trailer* (kg)		840





DF 3000 MPT

AUTONOMOUS LINE: DF7500MPT - TECHNICAL DATA

DF7500MT: THE REAL ALL IN ONE SOLUTION

- 2000 liters water tank, 100% stainless steel
- 17 kW integrated generating set
- · Installed on base with forklift pockets
- Integrated control panel
- Two pumps with peripheral impellers
- Flowmeter for pump protection
- Pressure gauge for outlet pressure reading
- Stainless steel crown with nozzles
- Water drain system
- Four height adjustable stabilizers
- Automatic rotation
- Electric tilting
- Remote control

DF 7500 MPT

TECHNICAL DATA		
Electrical engine power (kW)		7.5
Integrated generating set		Diesel engine - 17 kW - 400 V - 1500 RPM - 50 Hz
Max. horizontal range (m)	Without wind	30 - 40
Max. vertical range (m)	Without wind	17
Max. covered area (m²)	With rotation on	4600
Running time (min)	1 pump / 2 pumps	85 (@ 6 bar) / 60 (@ 12 bar)
Fuel tank capacity (L)		85
Water tank capacity (L)		2000
Water consumption (L/min)	1 pump / 2 pumps	23 (@ 6 bar) / 35 (@ 12 bar)
Water inlet filter (µm)		180
Rotation angle (°)		335
Tilting angle (°)	Min. / Max.	+0 / +40
Dimensions on base (mm)	Length x Width x Height	3180 x 1820 x 2215
Dimensions on trailer (mm)	Length x Width x Height	4450 x 2240 x 2640
Dry weight on base (kg)		2070
Dry weight on trailer (kg)		2450



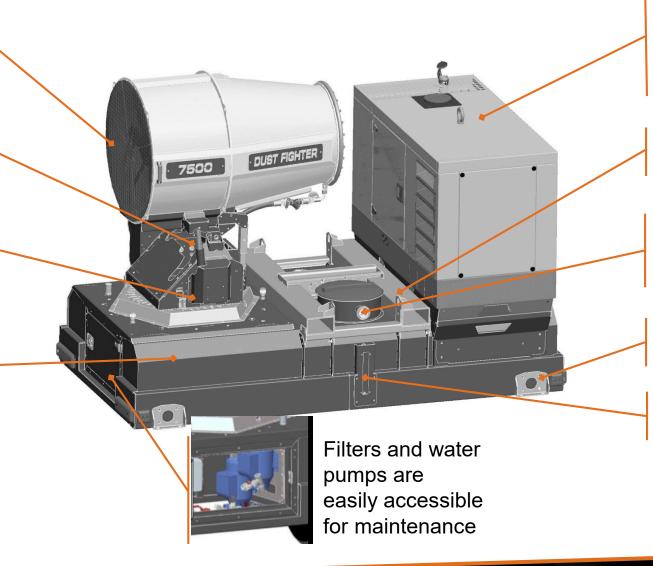
AUTONOMOUS LINE: DF7500MPT - FUNDAMENTALS

Nebulizer head model DF 7500 with maximum horizontal range of 40m

Integrated "tilting" system for vertical adjustment

Automatic rotation on the motorized Y-axis

Water tank integrated in the base, with 2000 liters of capacity



17kW Diesel Genset with autonomy of more than 17 hours. Available at 400V/110V or 400V/230V

Integrated loading and unloading fork pockets

Large water inlet, with STORZ coupling or via the large screw-on lid.

Built-in hooks for cranes lifting.

Visual water level indicator

APPLICATION PHOTOS



















