

IMPORTANT USER GUIDANCE

DF SMART WATER MISTING CANNON

READ ALL THE INSTRUCTIONS BEFORE USING THE EQUIPMENT

General Specification: The Dust Fighter (DF) Smart is a high capacity misting fan which discharges a fine water mist of “Nebulized” water droplets to suppress airborne fugitive dust. Because water-mists “float” they cover and envelop airborne dust more effectively than water sprays or jets.

The DF Smart is an easy to use, easy to clean, mobile unit which operates using 110v power and water. The throughput of water can be adjusted to suit the users application, and the smaller droplet size which the DF Smart produces compared with sprays means less pooling on the ground.

The DF Smart is on wheels and has a lifting point, so can be positioned where convenient to the user. The DF Smart can also be used for cooling purposes, or without water misting simply as a high capacity ventilator. DF Smart is “roll up, plug in, and switch on”.

1. **INSTALLATION:** the equipment can be lifted or wheeled into place; note the lifting point is only for that purpose - do not attempt to operate the unit while it is suspended in the air ! The unit can be used inside or outdoors. Place on a firm level surface and ensure there is nothing to obstruct the fan inlet or discharge. Don't operate where there are loose materials that may be entrained and drawn into the fan - they will be discharged at high speed.
 - Set the angle of the mist discharger jet by pulling out the knob (4) and tilting the fan to the desired angle; release the knob to lock it in place.
 - Connect a water supply hose to the connection point (9).

2. **OPERATION:** the unit is supplied with a 110v 32 amp fly lead. Connect this to a 110v CTE site supply; if using a generator we recommend one of at least 5KvA to accommodate the start-up surge current:
 - Press the start button; the fan will spool to its operating speed within a few seconds.
 - Gradually adjust the water supply (8) to achieve your desired misting.
 - To switch-off reverse the above procedure; we recommend you always disconnect the hose from the connection point (9) to drain the water circuit – and this is an absolute requirement during frost conditions.

In-use routine maintenance: the incoming water supply passes through a filter which will gradually block if your supply contains suspended solids (and most supplies contain some).

- Periodically clean the filter by unscrewing the filter hexagon nut (7) and removing the cartridge for cleaning.
- If the water jet is uneven clean the nozzles (6) by unscrewing them and rinsing them in water.
- If you are in a “hard water” area (water with a high calcium carbonate content) soak the nozzles in an anti-scale solution; finally rinse in clean water before re-fitting.



Pos.	Description
1	Start button
2	Socket
3	STOP button / Emergency
4	Tilting blower knob
5	Lifting hook
6	Nozzles
7	Water filter
8	Water tap
9	Water connection
10	Tilting blower handle
11	

Technical Details:	
Water Usage:	Airflow 5400 m3/hr
1.0 bar - 3.6 L/min	Tilt Range 10 – 50 degrees
1.5 bar - 4.5 L/min	Reach 13 metres (without wind)
2.0 bar - 5.0 L/min	Noise 78dBA at 7 m, Weight 77kg
2.5 bar - 5.8 L/min	Dimensions (LxWxH mm) 985 x 785 x 835
	Voltage 110v, Current Draw Running 20 amps

Trouble-Shooting:

Problem

Fan won't start ?
Fan tries to turn but supply trips to off ?

Cause / Solution

Re-set emergency stop button, check plug is secure in socket.
Supply not delivering sufficient current to start fan. Minimise power cable length, use heavier gauge cable, ensure supply can accommodate 5KvA transient load.
Machine suffers excess vibration ?
Imbalanced fan due to debris build up on fan blade, or damage to fan blade. Stop machine & remove debris; in case of damage to blade contact supplier.

3. **WARNINGS:** Do not attempt to open the fan casing and NEVER remove the inlet and outlet guards. The fan discharges a jet of high speed air - don't walk within 2 metres of the discharge while it is in operation; always wear eye protection. This machine works best with clean water - avoid using dirty or untreated water; do not use stagnant, fetid water. Should the machine sustain mechanical damage the equipment must be taken out of service and returned to the supplier.

4. **AFTER USE:** on completion of work disconnect machine from power and water supply; always clean off the outside of the machine before returning to supplier. Store in a frost-free environment when not in use.

FOR MORE INFORMATION ABOUT OUR RANGE OF DUST CONTROL, AIR FILTRATION AND VACUUM EQUIPMENT SEE OUR WEBSITE www.envirogard.co.uk OR CONTACT OUR HIRE DEPOTS

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