

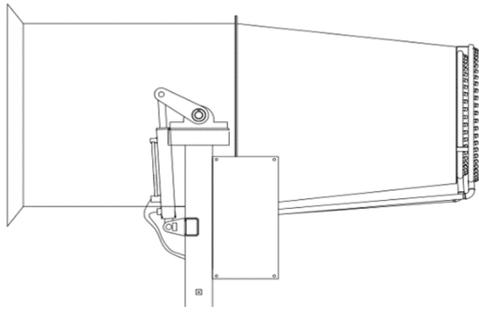
# MULTI-FUNCTIONAL DUST SUPPRESSION TRUCK



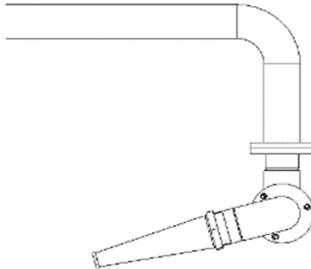
## Main Parameters

Items		FLM5180TDYDF6NG		FLM5250TDYDF6NG	
GVW	kg	18000	18000	25000	25000
Wheelbase	mm	5200	5200	4350+1350	4350+1350
Payload Weight	kg	7475	5205	9420	8900
Upper Weight	kg	3840	6110	6450	6970
Air Supply Type Sprayer Model		FW-D60	FW-D100	FW-D100	FW-D120
Max Spraying Range	m	60	100	100	120
Max Spraying Height	m	20	30	30	45
Spraying Mist Flow	L/min	30~55	0~160	0~160	0~240
Pressure Of Spraying Mist	MPa	2	2	2	2.5
Upper Transportation Dimensions	mm	FW-D60:11776×2550×2660(40FR) FW-D100:11776×2550×3110(40FR)		11776×2550×3110(40FR)	
Max Working Speed	km/h	89		89	
Selectable Of Chassis Brand		DONGFENG/FAW		DONGFENG/FAW	
Generator Set Model		JHRQW-30GF	YCW-N150T5	YCW-N150T5	
Generator Det Rated Power	kW	30	120	120	
Generator Set Rated Voltage	V	400/230		400/230	
Sprayer Pitching Angle		-10°~60°		-10°~60°	
Horizontal Rotating Angle		-90°~90°		-90°~90°	
Sprinkler Pump Model		65QZB-50/110N		65QZB-50/110N	
Sprinkler Pump Flow	L/min	833		833	
Rinsing Width	m	≥24		≥24	
Sprinkling Width	m	≥16		≥16	
Water Tank Effective Volume	m <sup>3</sup>	9.8		11.58	14
Noise	dB	≤82	≤88	≤88	≤90
Power Type		LNG		LNG	

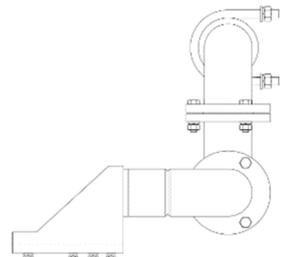
# Spray Nozzle



Air Supply Type Sprayer on rear work platform

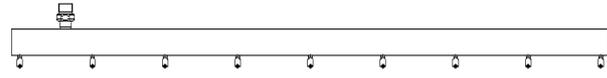


Middle cleaning device under tank

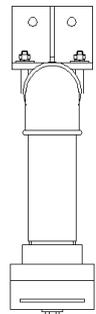


Front cleaning device under Cab

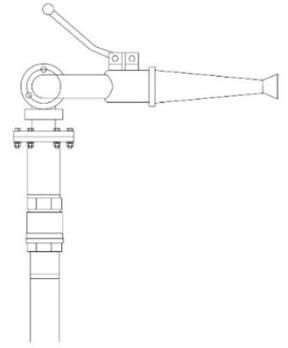
## Optional device



Low-pressure front cleaning device under Cab



Rear water sprinkling device under rear work platform



Rear mounted water sprayer on rear work platform

Device Data	
Low-pressure front cleaning device	2.5 m
Rear water sprinkling device	14 m
Rear mounted water sprayer	50 m

# Base Specification

### Electric generator:

- The vehicle mounted natural gas generator set is used to provide the power supply, and the output voltage of the generator is adjusted automatically by the automatic voltage regulator without manual adjustment.

### Body:

- The switch control valve parts and sprinkler system pipes are made of corrosion-resistant materials, the tank body is made of Q235B steel plate, and the internal part is treated with special process, without corrosion.

## **Water pump:**

- The self-priming two-stage centrifugal pump is adopted, the pump is driven by the power of chassis engine, and the low-level flushing mode is the first one in China.

## **Hydraulic system:**

- The dual hydraulic cylinder is used in the pitching system to make the spray equipment operate more smoothly, especially in the process of running along the side of the dust suppression truck. The structure of the double oil cylinder effectively guarantees the safety of the equipment.

## **Control system:**

- The whole vehicle adopts the advanced pneumatic system with high reliability and no pollution, which is convenient and flexible for operation.
- The self-made sprayer electric control system adopts imported PLC as the core of control, combined with the way of cockpit touch screen and remote control, it can control the direction, power output and working mode of the sprayer conveniently, and also constrains the action limits of the sprayer to ensure the safety of the equipment.
- The fan motor and pump motor are controlled by imported frequency converter, which ensures the energy saving, stability, reliability, controllability and safety of the equipment. The spray electric control box can monitor the current, voltage and frequency of the sprayer in real time. The original parts of the key electrical appliances in the electronic control box are imported. The imported circuit breaker can take corresponding action response to the unsafe current of the equipment in time and effectively, so as to ensure the overall safety of the equipment..

## **Safety:**

- The water tank is equipped with a low water level sensor alarm system, which can automatically alarm when the water level is low.

## **Washing and cleaning device:**

- It has the function of front sprinkling, which can not only be used for daily sprinkling, but also for humidification and dust reduction. It can also be used for road cleaning.
- Equipped with left and right middle column side impact device, the nozzle can be adjusted.

## **Other advantages:**

- It can be used as an emergency power supply vehicle and can provide two voltages of 220V and 380V.
- 200 mesh high-precision water filter is adopted to effectively filter impurities in operation water and avoid nozzle blockage.
- The double wall muffler technology is adopted for the air duct to effectively reduce the operation noise of the air duct. The maximum noise of the whole vehicle is no more than 88dB.
- FLM5250TDYDF6NG adds the coolant switching device, can start the engine of the chassis or generator individually to heat the fuel, and do not need to start the chassis engine at the fixed point spray operation, so as to reduce the vehicle cost.

## **Mist sprayer:**

- It adopts the environmental protection dust removal air delivery sprayer, compact structure, long range, small mist particles, large coverage area, can be operated manually or remotely. All operations can be carried out in the cab through the camera.
- The sprayer can rotate around the 90° by using the micro motor. The hydraulic system can control the pitch angle of -10° to 60°, and the speed of the transformation angle is fast and the working efficiency is high.
- The sprayer equipped with emergency stop button, safe and reliable operation.
- The sprayer fan and water pump are all imported with frequency converter, which can adjust the speed of the fan and the speed of the pump, and control the range and operation time of the spray system by controlling the air volume and water volume.
- The spray system uses three-cylinder plunger high-pressure pump, the maximum pressure can reach 2MPa, which strengthens the atomization effect of spray operation. Ensure the range of the sprayer.

## LNG:

- The engine equipped with chassis engine and generator set is YUCHAI natural gas engine, with chassis engine reaching national VI emission. The engine equipped with the generator set reaches the national III emission, which is a clean energy vehicle, with the following advantages:

Economy: each LNG truck saves about 20% - 30% of the cost compared with the diesel truck in the same horsepower section, no carbon deposition, no oil dilution, no need to change the oil frequently, reduce the maintenance times, reduce the maintenance cost, extend the service life of the engine, and reduce the abnormal loss.

Environmental protection: the content of methane in LNG is more than 90%, the sulfur removal is more thorough, and the emission is easy to reach the standard.

Safety: low temperature (-162 °C ), low pressure (below 0.62 MPa), high ignition point (623 °C ).

Good driving comfort: the octane number of LNG is higher than the 97# gasoline on the market, with good antiknock performance, low noise and smooth operation.

## Optional device:

- Front installing low-pressure cleaning device.
- The rear of the car can be equipped with a water spray.
- Stainless steel tank can be selected.
- Main control of rear watering.
- FW-D100 sprayer/FW-D120 sprayer/FW-D60 sprayer can be selected (Three choose one).
- It can select JHRQW-30GF generator set.

---

# Operation Instructions For Equipment To Disinfect

## 84 Disinfectant:

- The effective chlorine content will be shown on the label of 84 disinfectant mother liquor, for example, 1% represents 10,000 ppm. The amount of 84 disinfectant mother liquor to be added needs to be determined according to the final required concentration. Now take the FULONGMA brand 18-ton multi-function dust suppression truck as an example. The maximum capacity of tank is 10t, now we need mix the 84 disinfectant solution at 200 ppm. First add about 5 tons of water, and then evenly add the 84 disinfectant mother liquor with an effective chlorine content of 6% to the two front and rear mouths on the top of the tank, total weight is 33.33kg, and finally fill up with water. The added amount of 33.33kg of 84 disinfection mother liquor is calculated by the following formula:

$$G = VXC / 1000000 / d$$

Remark: G = adding amount of 84disinfection solution (unit :kg, 1kg ≈ 1L)

V = Water tank volume (Unit: kg)

C = required solution concentration (ppm)

D = Available chlorine content of 84 disinfection mother solution (%)

## **Points for attention:**

- 84 disinfectant is corrosive and irritating to the skin and oral mucosa. If it comes into direct contact with the original solution, there will be slight pain. The operator must do self-protection and wear appropriate equipment. Wearing gloves, masks, protective glasses, and work clothes (protective clothing should be worn if possible).
- 84 disinfectant is a chlorine-containing disinfectant, and chlorine is a volatile gas, so the container containing the disinfectant must be covered, otherwise the disinfection effect will not be achieved.
- Do not mix 84 disinfectant with other detergents or disinfectants, because this will increase the concentration of chlorine in the air and cause chlorine poisoning, which endangers life safety.
- Maintain proper ventilation in the driver's cab during driving. During spraying disinfection, spraying on people and animals is strictly prohibited.
- During the disinfection operation of the truck, pls use the sprayer at the maximum angle and the maximum wind force toward the air to achieve the widest disinfection range.
- In order to achieve the best disinfection and spraying effect, the working speed of the truck should be maintained at 5-10km / h.
- Because 84 disinfectant is corrosive to metal, it is not recommended to use this truck as disinfection and epidemic prevention equipment for a long time. During short-term use, it is normal to see a slight leak at the seal part of water pipe. If the water leakage is serious, replace the seal ring in time. As far as possible after each operation, water tanks and pipelines should be washed with clean water to prevent chemicals from corroding, including pipelines ,pump seals, tanks and pipeline parts.