

PART 3 Innovation · Products INNOVATE

01 Pavement cleanings



07

Electric Multi-functional Dust Suppression Vehicle

18T

The pure electric multifunctional dust suppression vehicle is a new generation of dust suppression vehicle independently developed by Sany Environment. It adopts a self-developed low entrance cab chassis for environmental sanitation, with integrated design of vehicle layout, control system, cooling system, etc. It realize one-step boarding, high safety, and comfortable driving. Equipped with environmental protection dedusting air spray, it has the characteristics of safe and reliable operation, long spray range, energy saving and environmental protection, low noise, water saving, etc. Can be used for haze control, dust removal, cooling in urban streets, dust removal in industrial and mining enterprises, etc.

At the same time, it has all the functions of a sprinkler truck, including forward flushing, reverse flushing, and rear spraying, which can achieve tasks such as watering, cooling, and rinsing the road surface.

Performance Feature

18T Electric Multi-functional Dust Suppression Vehicle

Self-developed chassis for safe and convenient operation

Low-entry one-step boarding, upright passage, more convenient; 25% increase in visibility, automatic parking, safer; larger load-bearing capacity, with an additional 20% or more installed; zero modifications, bidding farewell to leakage, rust and fracture; 12 inch console screen, airbag shock-absorbing seats, more comfortable; Liquid cooled battery, with a 20% increase in lifespan and greater durability.

Large volume, long operation time

The water tank volume is 12.3m³, which is the largest in the dusty. Combined with the automatic matching technology for spray flow, the comprehensive spray duration is 120 min. Extra operating 8 km per tank of water. Sandblasting pre-treatment + Aksu paint, with less rusting.

Intelligent operation

50/60/70/80/90/100-meter spray operation, controlled with one button. The spray flow automatically adjusts to the range. Real-time display of operation parameters, remaining water volume, and remaining operation time. Integrated operation control buttons on the steering wheel, operated with one button. Visual operation + reverse monitoring, all-round and without blind spots. A long-distanceremote controller, more convenient.

Safe and reliable

Intelligent Maintenance System. Overheating and overspeed shutdown protection for auxiliary motors and controllers. Spray pump can be emptied with idle rotation, will not be frozen. No need for large hydraulic systems, low maintenance.

High-performance spray system

Aluminum die-casting hub, high strength, light weight and high dynamic balance; sickle-shaped PAG blades, 15% higher air volume and 10% higher wind pressure than industrial wing structure; direct motor drive blades, simpler and more efficient; hydromechanical design, with small wind resistance and 4 db(A) lower noise. With the industry's first integrally polyurethane foamed air duct, without resonance; central rocket nozzle + outer ring spray, with no interference of spray; atomizing nozzle, with finer water mist particles and longer drifting time in the air; the air duct is seamlessly welded as a whole, without siphon negative pressure interference from the nozzle.

Spray system has imported diaphragm water pump, providing<3.5kw energy consumption and 50% energy efficiency increase. It is the first motor-driven diaphragm water pump in the industry. Spray pump is anti-corrosion type. As no large-sized hydraulic system is required, maintenance is reduced and is much easier.

	Item	Unit	Parameters
Vehicle parameters	Announced model	/	SYR5181TDYSYABEV/SYR5181TDYSYBBEV
	Chassis model	/	SANY chassis SYM1181T1BEVL2 SYM1182T1BEVL2
	Gross mass	kg	18000
	Curb weight	kg	10800/11000
	L×W×H	mm	10780×2520×3780
	Total capacity of power battery	kW.h	243/Gotion, 282/Gotion
	Approach/departure angle	°	8/12
	Front extension/front suspension/rear suspension	mm	2000/2400/1680
Operating performance parameters	Maximum volume of clean water tank	m ³	12.3
	Spray velocity	km/h	3-25
	Maximum spray range	m	≥100
	Maximum spraying height	m	≥35
	Pitch angle/steering angle of fog gun	°	-10-50/±90
	Maximum spraying operation time	min	120
	Watering speed	km/h	3-25
	Watering width	m	≥14
	Rear converging flushing width	m	≥24
	Range of high-pressure water gun	m	≥38