








WATER SPRINKLER-WS28

SALIENT FEATURES

- Sturdy turbocharged Cummins diesel engine for sustained power and fuel economy.
- Allison automatic powershift transmission with torque converter eliminates operator's errors, automatically adjusts to varying loads faster, giving minimum cycle time. Hydraulic retarder increases service brake's life.
- Dependable air over hydraulic wedge actuated shoe type service brakes.
- Orbitrol full time hydraulic power steering.
- Emergency steering is a standard fitment.
- Unique hydair II suspension on front and drive offers improved operator's comfort, increases tyre life, reduces shock loads on frame and tank structures and eliminates heavy cumbersome leaf springs on front axle.
- Traction sensing differential transfers enough power to the wheel on firmer footing when other wheel starts spinning.
- Higher tank capacity for longer duration of sprinkling.
- Special anti corrosive treatment of tank interior for longer life.
- Water tank with baffles minimises surging and improves control over vehicle.
- Pressurised discharge through sprinkling nozzles, higher spreading width for effective dust settling.
- Quick adaptability for fire fighting.
- Adaptability of self filling of tank for cross country utilization.





WS28 WATER SPRINKLER SPECIFICATIONS


 Engine		 STEERING SYSTEM		
Make	Cummins (India)	Type	Orbitrol, full time power steering	
Model	NTA-855-C - BC III - 380	Cylinder		
Type	Diesel water cooled, 4 cycle, turbo charged and after cooled	Type	Double acting piston type	
Net power (FHP)	272 kW (365 hp) @2100 rpm	Quantity	One	
Maximum net torque	1450 N-m (148 kgm) @ 1350 rpm	Bore x stroke	114.4 mm x 434.6 mm	
No. of Cylinders	6, inline	Relief pressure	12.3 MPa (125 kg/cm ²)	
Bore & Stroke	140 mm x 152 mm	Turning angle	45°	
Displacement	14,010 cc	Turning circle dia.	14.32 m	
Electricals		Emergency steering	Electrically driven hydraulic pump & motor	
Alternator	24V, 30 A	 BRAKE SYSTEM		
Starting motor	24 V, 7.5 kW	Service brakes		
Battery	2 x 12 V x 200 Ah	Front and rear	Dual shoe type, air-over-hydraulic, wedge actuated	
 POWER TRAIN		Emergency	Air over hydraulic, system protection valves, dual relay valves and tank provide automatic brake application upon loss of operating pressure in the service brake system.	
Torque convertor		Parking brake	Internal expanding type	
Model	TC 497	 TYRES & RIMS		
Stall ratio	2.7 : 1	Size	18.00 - 25, 32 PR(E-3) tubeless, Rock grip	
Transmission		Optional	18.00 - 25, 32 PR(E-4) tubeless, Rock grip	
Model	AVTEC CLBT 754	Rim size	13.00 x 25	
Type	Powershift with lock-up clutch	 SUSPENSION		
Final drive		Type		
Type	Double reduction	Front	Wheel mounted, hydro-pneumatic, integral rebound control	
Differential	Traction sensing automatic	Rear	Axle mounted, hydropneumatic	
Ratio		Cylinder	Front	Rear
Bevel set	2.92 : 1	Quantity	2	2
Final set	5.5 : 1	Bore x stroke	216 mm x 365.3 mm	216mm x 265.2 mm
Total reduction	16.06 : 1	 FRAME		
Travel speeds (km/h)		Type	Box section frame made of high tensile strength alloy steel	
Range	Forward			
1st	7.72			
2nd	12.34			
3rd	19.42			
4th	28.47			
5th	39.97			
Reverse	4.11			

WS28 WATER SPRINKLER SPECIFICATIONS





 HYDRAULIC SYSTEM	
Hydraulic pump	
Type	Gear pump
Capacity	232 ltr/min @2100 r/min
Rotation	CCW
Relief valve pressure - Hoist Motor	125 kg/cm ² 140 kg/cm ²
MOTOR	
HP developed	25 @ 120 kg/cm ² system pressure
Rated flow	110 ltrs/min @ 2900 rpm

 SYSTEM REFILL CAPACITIES	
System	Capacity (ltrs)
Cooling systems	83
Crank case	40
Transmission & torque converter	32
Final drive	40
Fuel tank	397
Hydraulic system	185
Water Tank	28,000
Air chambers, main and auxillary tank	125
Suspensions	
Front	17
Rear	8.8

 CABIN
Standard heavy duty all steel sound suppressed and heat insulated "ENVIRONMENTAL CABIN" engineered to provide superb working comfort and excellent visibility for maximum production efficiency. Features include : Fully visible front toughened glass tilted @ 15° pressurised cab with fresh forced air circulation and stale air exhaust, fully adjustable suspension operator's seat with safety seat belt and provided with rubberised floor mat

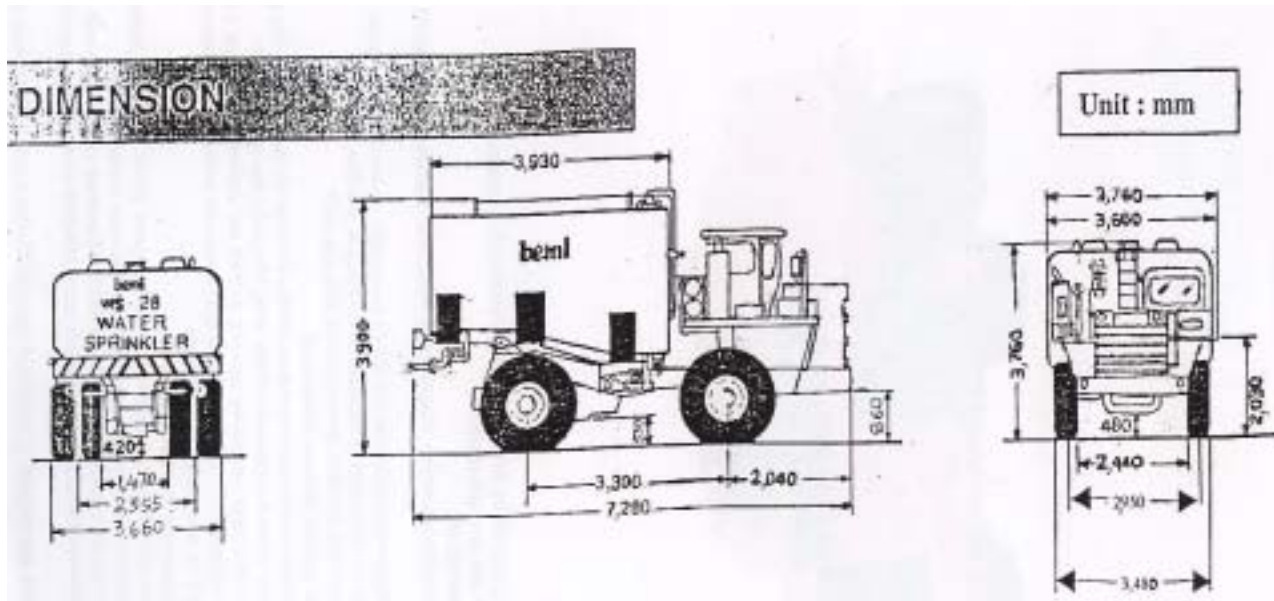
WEIGHT DISTRIBUTION		
Axle	Empty	Loaded
Front	11,700 kg	16,160 kg
Rear	10,800 kg	34,340 kg

 Water System	
Pump	
Type	Centrifugal
Capacity	600 ltrs./min. @ 70 m head
Drive	Hydraulic motor through flexible coupling
Piping	
Suction	80 mm
Discharge	50 mm
Valves	Butterfly type
Sprinkling	
Pressurised Sprinkling	Constant sprinkling velocity maintained by a centrifugal pump
Spreading width	10,000 mm
Gravity Sprinkling	Through perforated manifold connected to tank bottom
Nozzles	Fish tail type
Positions	Close jet and spary
Self filling	By connecting the pump suction to outside reservoir or pond through armoured hose, foot valve unit.
Fire fighting unit adaption	Quick connecting adaptor provided for fire fighting with canvas hose & triple purpose nozzle.

 TANK	
Construction	All welded reinforced, 6mm thick steel plates. Cross baffles to avoid heavy surging.
Interior coating	Coated with special anti-corrosive black paint.

DIMENSION

in mm



GENERAL : Vandalism protection caps (Radiator & fuel tank), Head & tail lights, Twin air horn, Alternator, Electric starter, Stator key switch, Emergency power steering, Road condition valve, Wind shield wiper, Wind shield washer, Wheel brake lock, RH & LH mirror, Sunvisor, Co-passengers's seat, Portable fire extinguishers, Standard tool kit, Armoured hose, Parking brake valve, Tilt steering wheel and column, Fuel tank indicating 1/4, 1/2, 3/4 and full level, Foot valve unit, Fire fighting canvas hose with triple purpose nozzle

GAUGES : Ammeter, Air pressure gauges, Engine coolant temperature and Oil pressure, gauges, Tachometer, Speedometer, Air cleaner restriction gauge, Transmission oil temperature and pressure gauge, Electrical hour meter.

GUARDS : Engine & transmission belly guards, Drive line protector, Dirt and water shield for brake assemblies, Hydraulic Oil splash guard at the rear of horse collar

LIGHTING : Head light Hi-beam indicator, Backup light, Turn signal lamp, Low lubrication oil pressure indicator, High water temperature indicator, Parking brake indicator, Emergency steering lamp.

ALARMS: Low air pressure alarm, High water temperature alarm, Low lubrication oil pressure alarm, Back up alarm.

OPTIONAL ACCESSORIES : Hydrair service kit, Electronic water level indicator, Transmission oil temperature alarm, Transmission oil pressure alarm, Cold weather starting aid, Auto emergency steering, Tyre inflation kit, Radiator-coolant level indicator, Front pressurised sprinkling, Auto lube system, Auto fire system, Air conditioner, Full fledged fire fighting system attachment, Rops cabin.

Note :

- 1) Materials & specifications are subject to change without notice.
- 2) Illustrations may include optional equipment and accessories and may not include all standard accessories.
- 3) All the specifications meets relevant ISO standard.