



I. General description and features of the product

The JP20A1 high-injection vehicle is additionally provided with fire-extinguishing liquid and foaming device based on the high-injection vehicle. It has integrated the large-sized water tanker, foam truck and lifting injection fire-fighting vehicle, and is mainly intended for fire extinguishment in the low-rise buildings in the urban area, industrial and mine enterprises, petrochemical enterprises, oil tanks, warehouses and the like.

This high-injection vehicle is equipped with Benz Actros4144 chassis, the full-circle slewing superstructure and two-section folding boom frame structure. Various moving mechanisms are provided with electric control and hydraulic drive, to make the vehicle operation simple, flexible, safe, reliable and practical.

II. Advantages and highlights of the product

- **Leading-edge main operation parameters in China:** working height up to 20m, working range up to 9.5m and liquid carrying capacity up to 20t.
- **Luxury high-power imported chassis:** Benz Actros4144 chassis, 320kw engine power, high specific power of the whole vehicle.
- **Convenient and quick operation, and high safety:** the actuation of the superstructure boom frame, turntable and water monitor and the water pump revolution are controlled by the substructure. The turntable can continuously slew by 360° to obtain high operation efficiency, safety level and comfort level. Furthermore, the 40m effective remote control is also provided to facilitate the fire fighting operation in the flammable and explosive areas, thus ensuring the safety of the fire fighting personnel in a better way.
- **Safety protection setup and high intelligent level:** when the first section of boom lowers to less than 15°, the vehicle will be decelerated automatically for stable operation; when the first section of boom is at the angle of less than 15°, the turntable will be prevented from slewing to avoid collision. When the first section of boom is not seated on the boom frame bracket, the second section of boom will be prevented from being lowered to an angle by more than 30° to avoid collision with the safety protection device in the cab.
- **High adaptability to the ground:** four outriggers are provided to increase the leveling capacity, and in the fire fighting operation, all tires will be lift from the ground to ensure the safety and vehicle stability on the fire ground.
- **Human-based design:** the cab automatic sprinkling self-protection system is provided, and major valves of the fire fighting system are provided with electric control to facilitate the operation.

III. Technical parameters

Major performance parameters of the vehicle		
Outline dimensions: (length × width × height)	11410×2500×3940mm	
Gross weight	41000kg	
Outrigger span	Longitudinal span	5600 mm
	Lateral span	2200mm

Rated working height	20m		
Maximum working range	9.5 m		
Time of extension of the outriggers	≤30s		
Actuation time of the boom frame	≤90s		
Liquid loading capacity	Water	17000kg	
	Foam	2700kg	
Fire pump	Rated flow	70 L/s	
	Rated pressure	1.7 MPa	
	Water suction depth	7m	
	Water suction time	≤50	
Fire monitor	Model	3578+3626 (injection of water)	3578+3626 (injection of foam)
	Rated flow	64 L/s	64 L/s
	Rated pressure	1.0 MPa	1.0 MPa
	Injection range	≥65 m	≥60 m

IV. Main features

Vehicle chassis		
Chassis model	Benz Actros4144	
Engine	Engine power: 320kw(435hp)/ 1,800rpm;	
Power take-off	Full-power power take-off: NMV200;	
Fire-fighting system		
Fire tank	Material:	304L stainless steel; plate thickness: 4mm in the case of bottom plates and side plates, or 3mm in the case of other plates
	Liquid loading capacity	Water loading capacity: 17t; foam loading capacity: 2.7t
Water pump	America HALE RSD vehicle-mounted fire pump Flow (L/s): 70 Outlet pressure (Mpa): 1.7 Water outlet diameter (mm) 150	
Vacuum pump	ESP-24 Vacuum ≥85kPa; water suction depth ≥7m; water suction time: less than 50s.	

Foam system	Manual foam mixing, at the mixture ratio of 6%.
Fire monitor	America Akron 3578 monitor body. Type of monitor head: 3626 foam monitor. Flow rate of 10~64L/s (at the rated working pressure of 1.0MPa), water injection range ≥ 65 m.
Electric control system	
Leveling of the outrigger	Manual leveling
Operation of the superstructure	The actuation of the superstructure boom frame, turntable and water monitor and the water pump revolution are controlled by the substructure, and the 40m effective wired remote control is available.
Other features	
Optional features	The water outlet electrically-heated ball valve is to be additionally installed in northern cold areas; Onboard radio and interphone, visual reversing monitor in the cab.