

## I. General description and features of the product

The YT22K1 fire-fighting vehicle is equipped with the ZZ5207N4717D6 Category II chassis which is designed for the major fighting vehicles of CNHTC, and complies with China Emission Stage IV standard. Its fire-fighting system is provided with Hale MBP fire pump + Zhangqiu electric fire monitor + 1t water. It is a kind of multi-purpose new type fire-fighting vehicle which is mainly intended for high-altitude rescue, and also integrates the fire extinguishment function, featuring fast and efficient actuation, mobility and flexibility, and accommodation of multiple passengers, able to satisfy the high-altitude rescue and fire fighting operations in central and western China areas and eastern second & third class cities, being widely applied in the fire fighting, water supply and rescue operations for mid-rise and high-rise buildings in the urban area, mines and factories.

## II. Advantages and highlights of the product

1. Powerful rescue performance and multiple rescue modes

The vehicle is provided with an independent quick-connection working platform, and it can realize multiple rescue modes;

When the vehicle is connected to the working platform, the person in distress at a high altitude can access the rescue platform via the platform front door, and descend onto the ground via the scaling ladder, or access the scaling ladder via the platform rear door and move onto the ground via the scaling ladder rescue passage.

Where there is no working platform, the scaling ladder will ascend to the target position, and have the ladder head lean against the building for bridging, thus creating an escape passage from a high altitude to the ground.

This vehicle is provided with four operation curves to maximize its performance and improve its rescue capability.

2. Perfect fire fighting system and outstanding fire fighting capacity

This vehicle is provided with imported fire pump, fire monitor, 1t water tank and telescoping water pipeline. The electric monitor on the scaling ladder top and the manual monitor on the platform are provided respectively; in such a way, the fire fighting operation can be performed by hand on the platform using the manual monitor, or where no working platform is available, the operation can be done by using the electric monitor on the ladder top as the high-injection vehicle.

3. High power, excellent mobility, and multi-passenger fire-fighting vehicle chassis

This vehicle is equipped with CNHTC chassis ZZ5207N4717D6 designed for the major fighting vehicles, as well as the four-door & double-row cab which can accommodate at most 8 persons. This chassis features strong power and excellent mobility, with the maximum loading capacity of 20t and engine power of 274kw.

4. Strong functional expandability to satisfy demands of different clients

This product can fully satisfy the customized and individual demands of various clients, and it is provided with multiple optional features, including the lifting illumination system (hydraulic generator), wind speed alarm, hydraulic towing system and centralized lubricating system.

## **III. Technical parameters**

Major performance parameters of the vehicle					
Outline dimensions: (length $\times$ width $\times$ height)		9820×2500×3810mm			
Gross weight		19200kg			
Loading capacity of the working platform		300kg			
Maximum working height		22m			
Maximum working range		18m			
Time of extension of the outriggers		≤30s			
Time for the boom frame to reach its maximum lifting height and rotate by 90°		≤55s			
Fire fighting performance	Fire pump	Rated flow (L/s)	≥40		
		Rated pressure (MPa)	≥1.2		
	Fire monitor	Model	PSKD40D	PS30-50D	
		Rated flow (L/s)	40	40	
		Rated pressure (MPa)	≤1.0	≤1.0	
		Injection range (m)	≥60m	≥60m	

## **IV. Main features**

Vehicle chassis				
Chassis model		CNHTC ZZ5207N4717D6 4×2		
Engine		Engine power: 274kw/ 2000rpm;		
Power take-off		Full-power power take-off: HW80Q; Side power take-off: HW70.		
Fire water system				
Fire tank	Materia	1:	polymer composites.	
	Liquid capacity	loading	Water loading capacity: 1t.	

Water pump	America Hale BMP single-stage centrifugal water pump; Flow: 55 L/S @ 1.0 MPa;			
Fire monitor	Zhangqiu monitor: PSKD40D electric fire water monitor. Flow: 40L/s; working pressure: ≤1.0MPa.			
Electric control system				
Console	Location of the superstructure console: Left side of the turntable (with a seat) and the working platform. The wired communicator is provided between two consoles.			
	Computer display screen: the colored LCD display screen is used. The screen can display the curves of the scaling ladder luffing and telescoping operations, the orientation of the scaling ladder and the cab, the working height, luffing angle and working radius of the scaling ladder, and the, load of the working platform and other data, and the query of faults via the screen is also permitted.			
Leveling of the outrigger	Automatic leveling + manual leveling			
Other features				
	1) Additionally installed in the northern cold area: fire water pipeline purging, water outlet electrically-heated ball valve.			
Optional features	2) Electric system: On-board radio and interphone; one 24V charger outlet; reserved onboard radio interface in the cab;			
	3) High-power illumination system: hydraulic generator, 2×500 high-power illumination lamp.			