

TRUCKS DELIVER LOVE

Sany Intelligent Heavy Truck Industrial Park

No. 31, Paitou Road, Huanghua Town,  
Changsha City, Hunan Province, China.

Service Hotline: 400 166 6318

SANY TRUCK |  |  | 

[www.sanyglobal.com](http://www.sanyglobal.com)

<https://www.31truck.com/intl/en>

# SANY



**SANY HEAVY TRUCK**  
PRODUCT BROCHURE



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# SANY AIMS TO BECOME A LEADING ENTERPRISE IN THE "BELT AND ROAD" INITIATIVE

Strategically Positioned in the "Belt and Road," SANY Achieves  
Remarkable Globalization Success



**15** Operating 15 overseas  
manufacturing plants

**158** Exports to 158  
countries and regions

**50** Leading brand in over  
50 countries

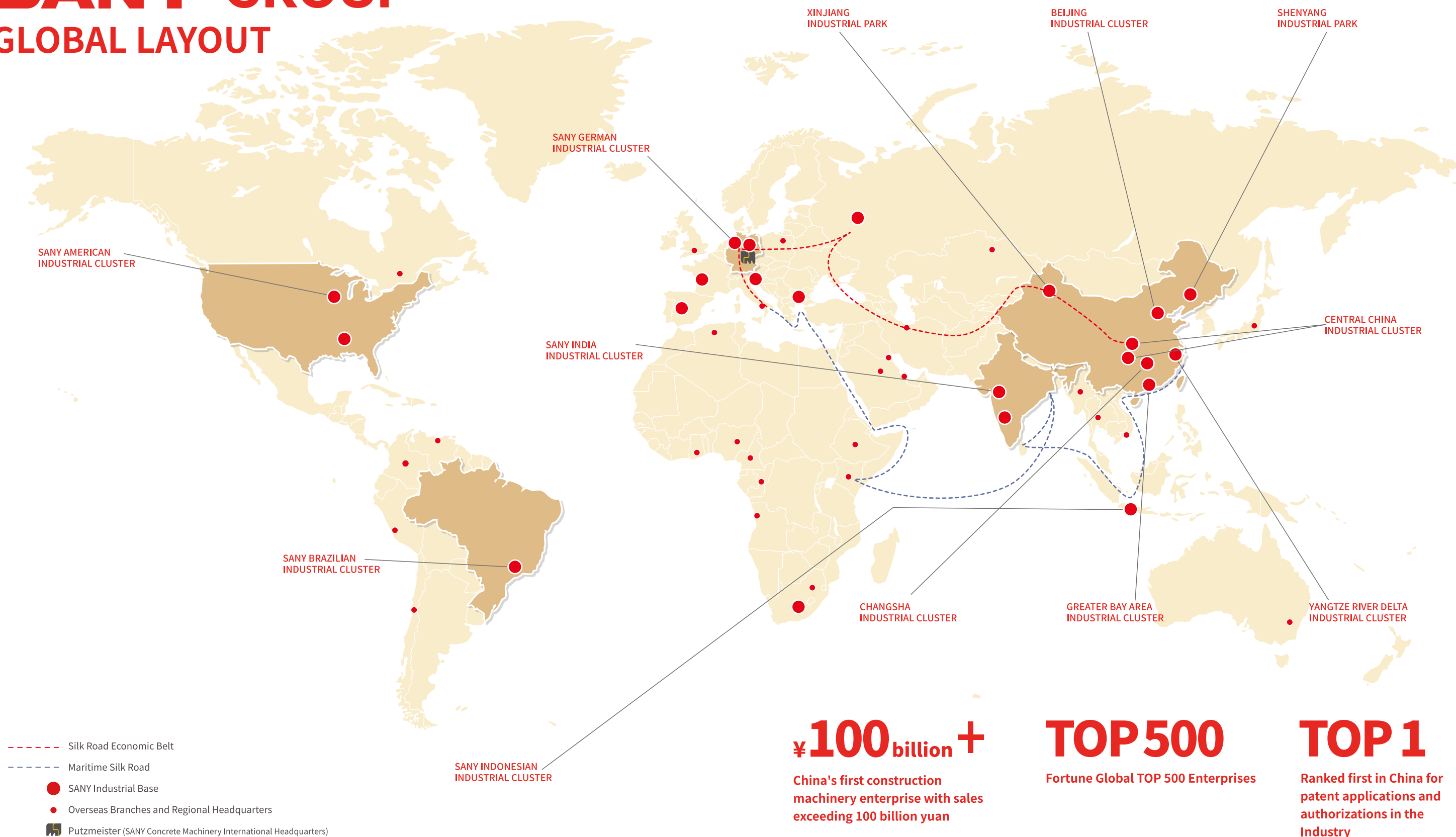
**39%** 39% Compound annual growth  
rate in overseas exports over  
the last six years

**75%** Over 75% of sales derived  
from "belt and road"  
regions



# SANY GROUP

## GLOBAL LAYOUT



¥100 billion +

China's first construction machinery enterprise with sales exceeding 100 billion yuan

TOP 500

Fortune Global TOP 500 Enterprises

TOP 1

Ranked first in China for patent applications and authorizations in the Industry



# SANY TRUCK

With the strong R&D, manufacturing technology, and resource support from SANY Group, SANY Heavy Trucks has seen sales breakthroughs year by year since its establishment in 2017. Within three years, it became a leading enterprise in China's heavy truck industry, and its electric heavy trucks now hold the highest market share in China.

In 2021, it exported to **Kuwait**, setting the record for the fastest export achievement by a new heavy truck brand. In 2022, it ranked first in cumulative sales across China. By 2023, it became the first electric heavy truck brand to enter the **UAE, Indonesia, and Singapore** in large quantities, leading the establishment of battery swapping standards in countries like Singapore.

Building on this foundation, diesel heavy trucks have been successively exported to **Russia, Saudi Arabia, Oman, Belarus, Uzbekistan, Turkmenistan, Africa, and Southeast Asia**, with the overseas market and sales expanding year by year.

SANY Heavy Trucks is the pioneer in SANY Group's digital and intelligent transformation. Adhering to the philosophy of "mass production of one generation, reserving one generation, and developing one generation," SANY leverages industry-leading R&D and manufacturing capabilities to strategically position itself, offering integrated solutions to customers.

53  
SECONDS

The first batch of 500 heavy trucks sold out in just 53 seconds

2  
YEARS

Broke the record for the fastest new brand to exceed 20,000 units in just 2 years



# INTELLIGENT MANUFACTURING

ZZ44

ZZ45

ZZ46

ZZ15

ZZ14

ZZ13

ZZ12

In 2022, Sany Truck officially launched the intelligent heavy truck industrial park, investing over 22 billion yuan. This is Sany's first park fully driven by digital intelligence technology. The factory is fully equipped with 5G communications. The information efficiency is 10 times higher than that of traditional factories, allowing a truck to be completed

every six minutes. It is the most automated heavy truck factory in the world, with an annual production capacity of up to 300,000 units.



**3** STEREOSCOPIC  
WAREHOUSE

**700<sup>+</sup>** AGV

**200<sup>+</sup>** ROBOTS



# CHALLENGING THE LIMITS OF TRANSPORT ENVIRONMENT

Designed for User Needs,  
Adaptable to All Conditions with  
Superior Performance

**1** ULTRA-POWERFUL  
POWERTRAIN

**4** EXTREME ENVIRONMENTAL  
CHALLENGES

**5** DISTINCT RELIABLE  
PERFORMANCES





## 1 ULTRA-POWERFUL POWERTRAIN | DIAMOND POWER CHAIN

# SURGING POWER SEAMLESS TRANSMISSION ROBUST LOAD-BEARING

### NEXT-GENERATION INTEGRATED AUTOMATIC TRANSMISSION

- **High-Efficiency Transmission:** Employs fully helical gears and grinding technology, resulting in low noise and a transmission efficiency of up to 99.8%.
- **Ultra-High Load Capacity:** Designed with twin intermediate shafts, providing exceptional load-bearing capacity.
- **All-Aluminum Lightweight Design:** Lightweight design with a fully aluminum alloy die-cast three-piece case, capable of withstanding high torque while balancing high and low-speed performance.
- **Ease of Operation:** Features dual economy/sport modes, ensuring smooth gear shifting and easy operation.
- **Reliable and Durable:** Long lifespan with a durability of 6 million gear shifts and 4 million brake actuations.

### SANY-DEUTZ ENGINE

#### • A Century-Old Brand:

(1) The first power product jointly developed by DEUTZ and SANY, adhering to German DEUTZ manufacturing standards and quality control, ensuring reliable quality.

(2) The D13 engine complies with Euro 3, Euro 5, Euro 6, China V, and China VI emission regulations.

#### Superior Performance:

(1) The engine has a maximum power of 585 horsepower and a maximum torque of 2600Nm, delivering strong power.

(2) Utilizes 2000-bar ultra-high-pressure fuel injection technology, pioneering the use of TVCS dual swirl combustion chambers and high-efficiency turbochargers, ensuring high fuel efficiency.

(3) Features steel pistons, DLC-coated piston rings, and wet friction-reducing cylinder liners, which minimize cylinder liner wear and prevent scoring.

#### Extended Reliability:

(1) Equipped with an advanced in-cylinder braking system for enhanced safety.

(2) The engine has undergone rigorous "extremely cold, high altitude, high temperature, high salinity, high dust" tests, achieving a B10 life of up to 1.6 million kilometers.

### HIGH-PERFORMANCE DRIVE AXLE

- **High Strength:** Made with high-strength steel and reinforced main reduction gears, providing high load-bearing and torque capacity across the entire axle.
- **High Efficiency:** Achieves a transmission efficiency of up to 98%.
- **Lightweight Design:** Utilizes laser-welded gear technology, reducing weight by more than 50 kg.
- **High Adaptability:** Adapt to various conditions such as highways, national roads, and unpaved roads.



## 4 EXTREME ENVIRONMENTAL CHALLENGES



# EXTREME COLD



## Vehicle Fluids Anti-Freezing, All Components Resistant to Low Temperatures

Standard configuration includes low-viscosity engine oil, gear oil, lubricants, and antifreeze.

The cabin is equipped with additional insulation, and standard features include low-temperature-resistant cable ties, components, and seals.



## Normal Start at Ultra-Low Temperatures of -40°C, Extended Cycle Life

Equipped with ultra-low-temperature batteries, providing optimal charge and discharge control for maximum energy efficiency.



## Independent Heating with Precise Temperature Control, Enhanced Comfort and Convenience

Independent air heater ensures constant cabin temperature during parking.

Heated massage seats, heated steering wheel, and NTC temperature-sensitive heating maintain a constant 35°C, ensuring a comfortable driving experience in winter.

Fuel heating system and engine water heating system ensure stable performance in low temperatures.



## Customized Configurations for Regional Markets, Efficient Handling of Complex Conditions

- Hydraulic Retarder: Provides auxiliary braking, unaffected by deceleration and long downhill conditions, reduces brake pad wear, and extends the life of braking components.
- Long Maintenance Cycle Axle: 500,000 km maintenance-free wheel end, five times the maintenance interval of a standard axle.





## 4 EXTREME ENVIRONMENTAL CHALLENGES



# DESERT CONDITIONS



## Customized configurations for regional markets to handle high temperatures and dusty environments

- **Efficient cooling system:** Enhanced vehicle cooling systems to effectively manage high-temperature conditions without compromise;
- **Efficient air intake system:** A cyclone air filter is utilized to efficiently separate sand and dust in high-dust environments.



## Operation at Extreme High Temperatures of 55°C, Enhanced Cooling Across the Vehicle

Equipped with high-density radiators and thicker fan blades, increasing airflow for enhanced cooling.



## Superior Dust Filtration, High Reliability, Reduced Failures

Standard desert air filters effectively reduce dust intake in the engine and the entire vehicle, lowering the probability of mechanical failures.



## Superior Performance on Soft Ground Surfaces, Effortlessly Handling Heavy Load Conditions.

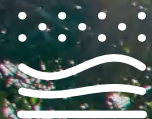
Large-radius tires and high-ground-clearance bumpers adapt to desert terrain, ensuring strong possibility.

Reinforced 7.5-ton front axle, with some models upgraded to 9 tons, providing stable performance under complex conditions.





## 4 EXTREME ENVIRONMENTAL CHALLENGES



# COASTAL RAINFOREST

## 500h

Chassis materials including axles, balance suspension, gearbox, drive shaft, various supports, and connecting plates meet the 500-hour neutral salt spray requirement (equivalent to 21 years in a natural environment).

## 720h

Bolts on exposed and high-temperature corrosion-prone areas undergo special surface treatment, meeting the neutral salt spray test requirement of 720 hours (equivalent to approximately 30 years in a natural environment).

## 1000h

Cab and Frame meet the 1000-hour neutral salt spray requirement (equivalent to over 40 years in a natural environment).

## 1000h

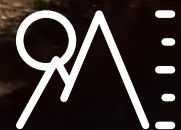
**Corrosion Resistance Design for up to 1000 Hours of Salt Spray**

(\*24 hours of neutral salt spray testing equals 1 year in a natural environment)





## 4 EXTREME ENVIRONMENTAL CHALLENGES



# PLATEAU ENVIRONMENT



## POWERFUL PERFORMANCE

## SUPERIOR VEHICLE PERFORMANCE STABLE CRUISE

## OPTIMIZED IN MULTIPLE ASPECTS

### 1 OPTIMIZED ENGINE INTAKE SYSTEM

Enhances combustion efficiency,  
stabilizes power output

### 2 DEDICATED TURBOCHARGER

Increases intake pressure, boosts  
airflow

### 3 OPTIMIZED FUEL INJECTION SYSTEM

Adjusts injection quantity, ensures  
proper air-fuel mixture ratio, improves  
combustion efficiency, lowers exhaust  
temperature

### 4 ENHANCED START PERFORMANCE

Optimizes fuel quantity, injection  
timing, and rail pressure

### 5 OPTIMIZED EMISSION CONTROL SYSTEM

Adjusts plateau correction data



## 5 KEY RELIABLE PERFORMANCES | ACTIVE SAFETY

# CHALLENGING THE LIMITS OF TRANSPORTATION SAFETY

SPECIALIZED CONTROL STRATEGIES  
ENHANCE VEHICLE ACTIVE SAFETY FUNCTIONS

## EBS+ESP

Electronic Brake System  
Electronic Stability Program



The cab retracts in the event of a collision, providing additional buffer space

## JACOBS

JACOBS custom + independent rocker-arm brake, braking power >300kW@2200rpm, faster downhill speed control, reduced flat road deceleration time/distance



Optional fuel anti-theft technology includes features such as radar alarms, camera snapshots, horn alarms, and SMS notifications

## BSD+LCA+DMS

BSD Pedestrian and non-motorized vehicle blind spot monitoring + LCA lane change assist warning + DMS driver fatigue monitoring



TPMS Tire pressure monitoring system, monitors front and rear tires simultaneously, includes emergency blowout function



360° vehicle surround view system, no blind spots around the vehicle, trailer, and both sides



**5 KEY RELIABLE PERFORMANCES | RUGGED DURABILITY**

# HIGH RELIABILITY AND CONVENIENCE FOR STEADY OPERATION

Challenging the Limits of  
Worry-Free Delivery Quality

## EXTENDED LIFESPAN INDUSTRY-LEADING



**7000h**

Engine bench durability test



**1600000km**

vehicle main assembly B10 life

**RIGOROUS TESTING IN PLATEAU, EXTREME COLD, HEAT, SALT, AND  
DUST, HIGHLY ADAPTABLE WITH EXTENDED WARRANTIES**

IN COLLABORATION WITH CENTURY-OLD BRANDS LIKE DEUTS  
AND OTHER PREMIUN MANUFACTURES

INTEGRATED VEHICLE DESIGN, TOP SUPPLY  
CHAIN SUPPORT FOR KEY COMPONENTS





**5 KEY RELIABLE PERFORMANCES | HIGH EFFICIENCY AND LOW CONSUMPTION**

# POWERED BY ADVANCED CORE EFFICIENCY TECHNOLOGIES THAT ENHANCE FUEL PERFORMANCE

Challenging the Limits of High Efficiency  
and Low Consumption

Streamlined Exterior Design:  
Aerodynamic body shape, with  
spoilers and body attachments  
designed for low drag, achieving over  
10% lower air resistance compared to  
competitors

**↓10%** than the  
competitors

## VEHICLE LIGHTWEIGHTING

Incorporation of new materials and structural  
optimizations, including aluminum alloy wheel hubs

## ENGINE FUEL-SAVING TECHNOLOGIES

Stratified combustion, swirl mixing, high  
compression and low friction, electronic  
control for reduced consumption, thermal  
management

Tire optimization:  
Low rolling resistance tires,  
saving 1% fuel

**FUEL  
SAVE 1%**





**5 KEY RELIABLE PERFORMANCES | CONVENIENT MAINTENANCE**

# CONVENIENT MAINTENANCE LAYOUT IMPROVE ATTENDANCE SECURITY

The long-lasting diesel filter requires replacement every 100,000 kilometers, and can be changed without tilting the driver's cabin, ensuring efficient and worry-free maintenance

The externally mounted fuel manual switch valve offers a low failure rate, easy operation, and straightforward maintenance

The cab can be raised and flipped without requiring the operator to squat, making it more convenient to observe the surroundings

The three-section split bumper ensures easier maintenance and reduces overall costs

LED daytime running lights and fully flip-up headlights make maintenance easier





## 5 KEY RELIABLE PERFORMANCES | SMART COCKPIT

# UPGRADE TO AN INTELLIGENT COCKPIT FOR A WORRY-FREE AND COMFORTABLE DRIVING EXPERIENCE

STANDARD COAT AND HAT HOOKS  
BUNK AREA EQUIPPED WITH USB  
CHARGING PORTS AND CONTROL PANEL

HIGH-QUALITY KNITTED BRUSHED  
FABRIC AND EMBOSSED DESIGN,  
PROVIDING A FIVE-STAR PRESSURE-  
FREE MATTRESS



**POWER SUPPLY  
INTERFACE FOR  
LIVING APPLIANCES**

Roof-Mounted Parking Air  
Conditioner, In-Vehicle  
Refrigerator, Sunroof

**1600L  
LARGE STORAGE SPACE**

**810mm  
UPPER BERTH**

**← 1100mm →  
EXTRA-LARGE DOUBLE BUNK BED**

**MULTIFUNCTION  
STEERING  
WHEEL**

**12.3-INCH  
FULL LCD INSTRUMENT CLUSTER**

**ELECTRONIC  
HANDBRAKE**

Air-suspended shock-absorbing  
seats, memory cushion, dual  
airbag lumbar support, and  
infinitely adjustable armrests

**12.1-INCH  
MULTIMEDIA SCREEN**

**FLAT FLOOR**



# OEM DIRECT SALES

Direct Access Without Middlemen  
Transparent and Honest

## SERVICE

Create a high-quality, high-capacity "direct sales" iron army, standardize the visit process to effectively improve the quality of customer service, and provide customers with "1V1" personalized in-depth marketing services.

## RESPONSE

The local branch company system builds an end-to-end sales and service triangle of marketing-R&D-service. The manufacturer dispatches directly, and the comprehensive response speed is faster; problems go directly to the main engine factory, and the manufacturer covers the entire product life cycle.

## COST PERFORMANCE

Manufacturers directly connect with customers, eliminate middlemen, reduce costs, and provide cost-effective products to benefit customers.

## MODES

Based on the strength of our manufacturers and in response to customer needs, we offer various sales models, including complete vehicle sales, financial leasing, and joint venture operations.

## VISIBLE

Relying on the factory-direct sales model, we open up information nodes throughout the entire process, achieving full visibility of order delivery and making delivery more secure.





# OEM DIRECT AFTER SERVICE

1v1 On-site Direct Service  
Lifelong Peace of Mind



## OEM DIRECT AFTER SERVICE

Industry Exclusive: Breaking the limitations of time and space such as traditional service models, manufacturers directly dispatch R&D and service engineers to provide "one-on-one" butler-style on-site services.

Dedicated service: Dedicated personnel will respond to customer service needs, and designated service engineers will track the entire process; a dedicated team and accessories will accompany you, close to user needs, and handle maintenance issues promptly and efficiently; provide users with professional training on vehicle use, maintenance, etc. at any time.



## LIFETIME PROTECTION

Active tracking: Provide multiple active services such as door-to-door visits, telephone return visits, and on-site tours throughout the entire life cycle from product delivery to operation and maintenance to ensure customer satisfaction.

Lifetime service: Provide standardized and unified after-sales service, original parts supply, and free technical support throughout your life.



## EXTREMELY FAST RESPONSE

All year round: 365 days a year, 24/7 dedicated personnel accept repair reports, complaints, consultations, all-weather emergency rescue and fault repair services, and respond quickly within 15 minutes.

Own parts library: Each service engineer comes standard with a light truck mobile parts library, which greatly reduces waiting time and improves maintenance efficiency. Solve the problem once and for all, anytime and anywhere.



## TECHNICAL SUPPORT

More than 100 technical experts are on call throughout the year to provide customers with professional technical support.



## SERVICE TEAM

More than 3,000 front-line maintenance personnel and nearly 1,400 service vehicles are on standby at any time.



## SPARE PARTS RESERVE

There are more than 30 powerful brand center warehouses, with a national parts reserve exceeding 100 million yuan. These warehouses cover major provinces across the country and hold more than 7,000 types of vehicle parts in stock.



QUALITY CHANGES THE WORLD