

## NTE130E Off-Highway Mining Dump Truck



Stacking 21 (SAE): 87m<sup>3</sup>  
Rated load capacity: 120t  
Drive motor rated power: 730kW

*"The [NTE130E](#) is a 120-tonne, Chinese-developed pure electric mining truck manufactured by Inner Mongolia North Hauler Joint Stock Co. (NHL). As of early 2025, over 15 units have been deployed, featuring high-load capacity and eco-friendly technology for large-scale open-pit mining operations".*

## *NTE130E brings a new experience to users*

### security

Heavy-duty downhill descent technology Hill lift assist and limp control behaviour monitoring (optional) Battery high-voltage interlocking

Dry disc brake + electric feedback brake ring field image (optional)

### Economical

Large-capacity power battery

Breaking and slow descent energy feedback high-power drive motor. The oil pump motor is independently controlled

### reliability

High-strength frame

Optimised configuration of high-efficiency and energy-saving U-shaped car hydraulic system

High-quality electric-hydraulic components are equipped with battery packs and water-cooled centralized layout domain control modules

Centralised lubrication



# NTE130E Haul Truck



## Comfort

Large space, wide field of view,  
low-noise cab electronically  
controlled lifting handle

High-quality air suspension seats  
with four-way adjustable steering  
wheel

Cab supercharger (optional)

Cab air heater (optional) plateau  
oxygen generator (optional)

## Maintain

The battery box is independently  
arranged, and the battery box is  
disassembled as a whole, and the  
oil pump motor is installed and  
protected

Vulnerable wiring harness  
installation protection cable  
pipeline arrangement

Controller protection

## Intelligent

CAN bus network central control  
and domain control technology,  
mining truck remote health  
monitoring and diagnosis platform  
(optional) full LCD instrument,  
touch display

Driverless system (optional)

## Security

### Heavy Load Downhill Decent

When the vehicle is heavily loaded downhill, the electric feedback braking is used to ensure that the vehicle presses. According to the set speed, sufficient slowing ability to effectively control the speed at any time, improve vehicle safety, reduce the driver's labour intensity.

### Slope Assist and Limp Control

When the vehicle is heavily loaded, when the pavement is parked on a large slope, the ramp assist can prevent potential safety hazards caused by vehicle slippage, and at the same time, when the vehicle has a low-level failure, it can drive to the maintenance station by relying on the limp function.

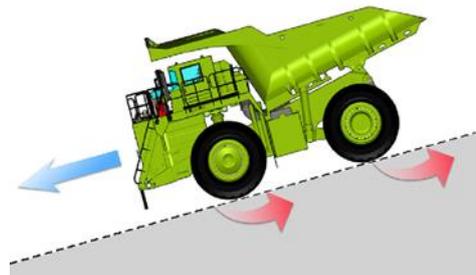


### Battery High Voltage Interlock

The high-voltage system of the whole vehicle has a high-voltage interlock function, which can prevent human error. Operation, mis insertion and unplugging of high-voltage components and joints to prevent personnel from the risk of electric shock.

### Electric Feedback + Electric Brake

When going downhill, the electric brake pedal controls the electric feedback braking function, and under normal circumstances, the braking energy is fed back to the power battery, and when the energy cannot be recovered, the braking energy is consumed by the electric braking resistance grid. Mechanical braking can be achieved with dry disc brakes during low-speed stops or emergency braking. The braking response of the NTE130E is faster, the braking distance is shorter, and the braking system



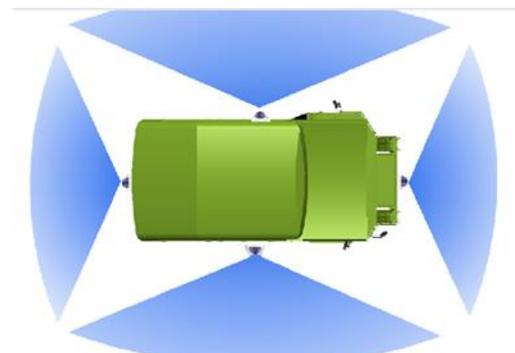
### Behaviour Monitoring (Optional)

During the driving of the vehicle, real-time detection and early warning of driver behaviour (smoking, phone calling, fatigue driving, distracted driving) are carried out. At the same time, the centre receives an alarm for real-time intervention in dangerous driving behaviours through voice intercom to ensure the safety of vehicle and Operator.



### Circumferential Image (Optional)

When the whole vehicle is equipped with 360° panoramic images, the 7-inch LCD screen in the cab panoramic display ensures that each mine car is operated in an environment without blind spots, providing guarantee for mine management and mine car operation safety



## Economical

### Large Capacity Power Battery

Lithium iron phosphate power battery, high cycle life helps to improve the cost performance of the vehicle, high safety, high energy density helps the vehicle lightweight, prolong the mileage, high reliability helps to reduce the failure rate of the vehicle. Zero emission, energy saving and environmental protection.



### High Power Drive Motor

It has the characteristics of high efficiency and fast response. The left and right electric wheels are the same and interchangeable, and the modular design is easy to detect and replace. The three-phase squirrel cage induction motor is sturdy and durable, improves the insulation level of the motor, cancels the exciter and motor without commutator restrictions, increases the torque, and improves the performance.



### Braking and Slow-design energy

The traction motor counter-drive electric brake is standard, and the braking capacity is sufficient to keep the vehicle close to zero speed. The centre console of the cab has a constant speed downhill switch, and the downhill speed is adjustable, which can realize the constant speed downhill of the truck. It has the function of receiving braking feedback energy, and recovers potential energy and kinetic energy through a constant speed control switch or electric brake pedal on downhill sections or during braking, and converts it into electrical energy and recharges it to the power battery.



制动踏板控制



### Hydraulic Pump Motors

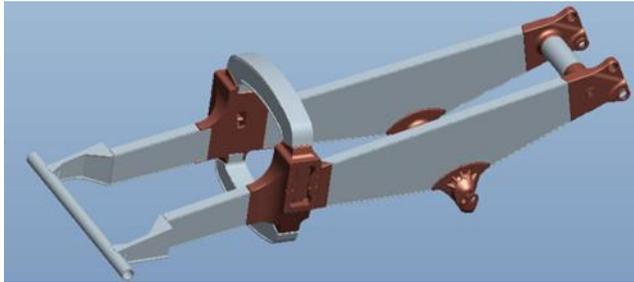
The Hoist pump motor and the Steering pump motor are controlled independently, and the steering oil pump motor can be controlled to suspend the operation after the vehicle is parked, and the Hoist pump motor can be controlled to not work when the vehicle is running, so as to effectively control the energy consumption of the Hoist pump motor.



## Reliability

### High-Strength Frame

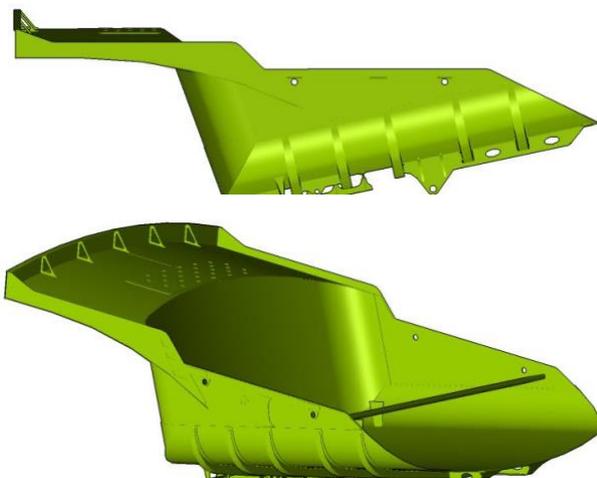
Frame construction with full box section. It has an integral front bumper and a closed ring beam. The high-stress parts of the ring beam, torsion cylinder and rear tailstock connection to the longitudinal member are made of high-strength alloy steel castings.



### Energy Efficient U-Shaped Carriage (Tray)

The overall structure of the carriage is a U-shaped structure, and the bottom is provided with an I-shaped transverse buffer groove, which can effectively reduce the welding stress, reduce the welding deformation, and have sufficient strength and rigidity at the same time, and can effectively carry the weight of the carriage and the material while reducing the weight.

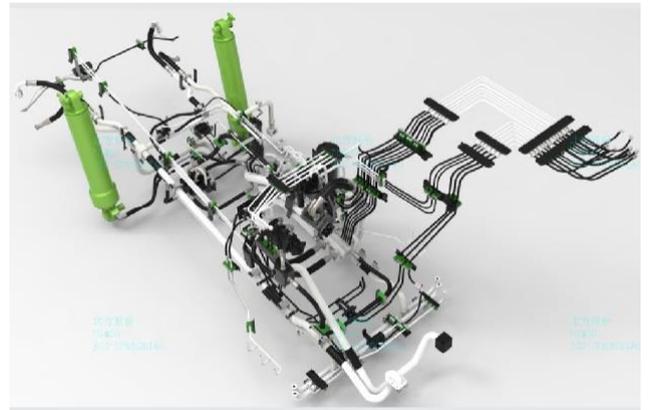
The main structure of the carriage floor is made of high-hardness, high-strength and high-quality wear-resistant steel.



### Optimised Configuration of Hydraulics

According to the actual working conditions of the operation of the mining dump truck in the open-pit mine, combined with the compact structure of the mining dump truck itself and the characteristics of dense hydraulic pipelines, the hydraulic pipelines of the whole vehicle are optimally arranged, and the pipeline layout makes full use of the space to achieve orderly arrangement, clear hierarchy and rigid fixation, so as to avoid the running and dripping caused by the cross-wear of the pipelines, vibration fatigue, thermal expansion and contraction, etc.

### High-Quality Electro-Hydraulic



The configuration of high-quality wiring harnesses, plugs, pipe joints, clips and other electrical components fully guarantees the reliability and durability of the minecart in the perennial operation of the open-pit mine under the working conditions of large vibration, strong rainwater corrosiveness and poor maintenance conditions.



## Side Battery Pack, Water Cooled

The battery pack and its water-cooled unit are centrally arranged in the side battery box, the pipeline layout is smooth, the installation and maintenance are convenient, the cooling channel does not occupy other space of the vehicle, the path is short, the fault point is few, and the reliability is strong. The independent battery box structure is easy to organize and replace.



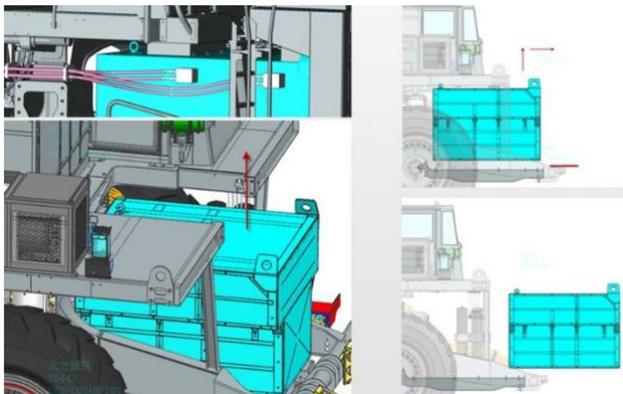
## Domain Control Module

Independent domain control module, each channel is independent, using MOSFET transistors, and with short-circuit/over-current protection, generally not like relays with poor contact and relay coils continuous energized for a long time to overheat and burn, reliable and stable.



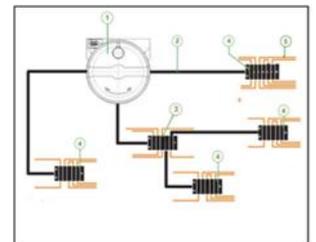
## Front Battery Box

The overall structure of the front battery box, the high and low voltage cables are connected to the box through reliable connectors, and the cooling channel, connector and the cover near the box are disconnected, and the front battery box can be disassembled as a whole, for easy maintenance and repair.



## Centralised Lubrication

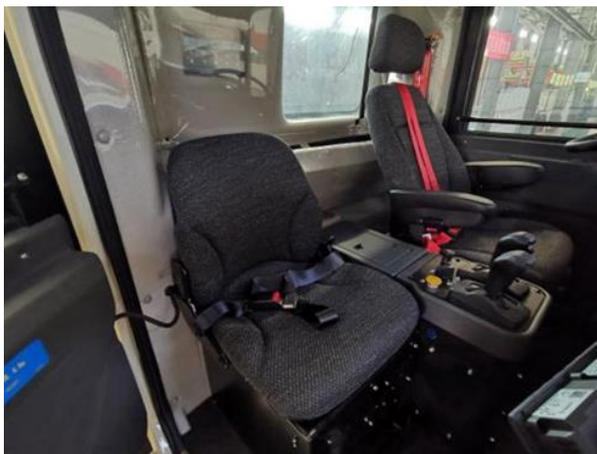
The world-class centralized lubrication system is used to lubricate the steering cylinder, lifting cylinder, front and rear suspension cylinder, ball pin, hinge pin and the main bearings of each part to reduce the friction and wear of each component, thereby improving the production efficiency and reliability of the components.



## Comfort

### Cabin, Large Space, Wide Field of View & Low Noise

The front, rear, left and right sides of the cab are designed with wide panoramic glass to improve driving visibility; Sufficient expandable space inside to meet the needs of different groups of people; Professional double-glaze, double-layer sealing, and the application of soundproof cotton can effectively reduce noise and reduce the driver's discomfort; The high-end and stable interior design and ergonomic arrangement create a quiet and comfortable driving environment for the driver.



## Electronic Hoist Control

The application of CAN bus all-electronic control lifting technology makes the response of lifting four gears (lifting, descending, floating, and holding) faster; The configuration of the high-quality lifting handle brings a more relaxed and convenient control experience to the driver; The oil-free hose is connected to the cab, creating a cleaner driving environment inside the cab.

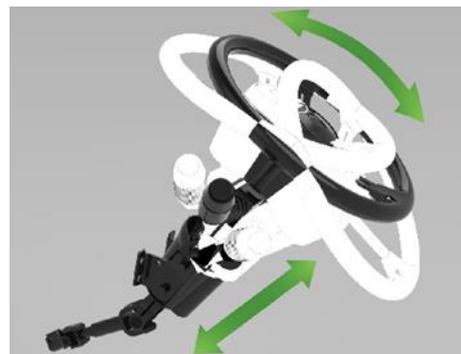


## High Quality Suspension Seat

The high-quality air suspension seat effectively alleviates the discomfort caused by the vibration of the equipment to the driver and provides the driver with a comfortable driving experience. The front and rear positions and tilt angles of the seats can be adjusted to meet the driving habits of different groups of people to the greatest extent.

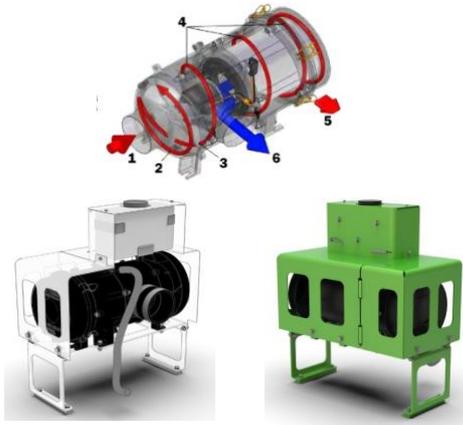


## Four-way Adjustable Steering Wheel



## Cab Supercharger (Optional)

Fresh air and debris are pulled into the power pre-cleaned/filter/pressuriser, and the debris is separated from the airflow and ejected. Clean and filtered air enters the cab through the power unit, creating positive pressure and preventing dust from being drawn into the cab. High-efficiency recirculation filtration continuously removes dust from the cab, minimizing settling dust build-up, improving air quality and reducing occupational exposure. Protects operator health, improves operator comfort and productivity, and reduces environmental pollution and deterioration of cab electronics.



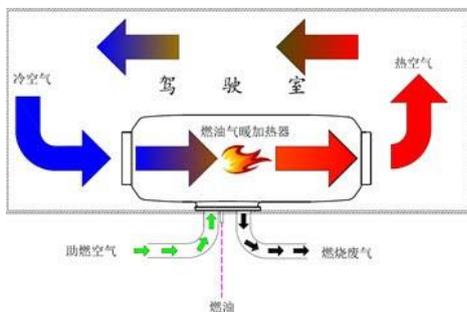
## Plateau Oxygen Concentrator (Optional)

The advanced membrane separation technology is used to produce oxygen, with large oxygen production and low power consumption, normal and continuous work in the range below 6000 meters above sea level, diffuse oxygen supply, eliminating the discomfort and inconvenience of wearing oxygen tubes and masks, increasing the body's blood oxygen saturation, increasing the partial pressure of oxygen, and preventing altitude sickness.



## Cab Air Heater (Optional)

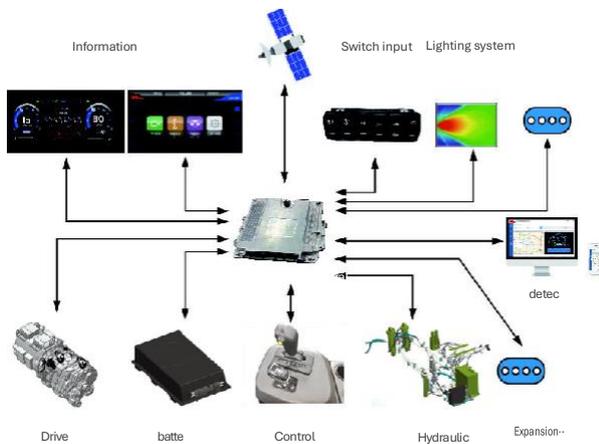
Cab air heating heaters are used in cold areas to provide additional heating to the cab. It is compact and easy to install quickly inside the vehicle and can quickly heat the air inside the vehicle and in the cargo compartment and maintain the required temperature continuously, and the continuous operation is quiet.



## Intelligent

### CAN bus network Central Control

The electrical system adopts the central power distribution technology of the central controller and the standard three-CAN bus network platform, and all components issue instructions through the central controller to control the execution of actions. In order to realize the digitization and informatization of the mining cart, the network platform has rich node expansion functions, strong flexibility and versatility, and can meet the customized needs of various users.



### Full LCD Instrument with Touchscreen

Full LCD instrument configuration: display style switching, fault alarm, operation information display. Information management system 14.6-inch LCD screen configuration: human-computer interaction, weighing system display, fault diagnosis, ring field image and data download, etc.



### Truck Remote Health Monitoring

The application of Internet of Vehicles technology enables each vehicle to enter the remote health monitoring and diagnosis platform of the mine truck, so that the mine management can be informatized, remote and dynamic; Realize all-round management of vehicle operation, safety, fuel consumption, maintenance, etc.



### Driverless System (Optional)

NORINCO provides users with efficient and reliable unmanned mining dump truck system solutions, with two unmanned technical solutions to choose from, pre-installation and modification, which fully meet the technical needs of users to build smart mines.



## Technical Parameters

### Powertrain

Drive motors	Rated power(kW)	2×365
	Rated torque(Nm)	11540
	Rated Operating Voltage (V)	510
	Cooling method	Air-cooled
Assembly	Weight (kg)	7300

### Power Battery

Battery type	Lithium iron phosphate
Voltage Platform (V)	850
Battery level (kWh)	1540
Heating method	Water heat
Cooling method	Water

### Carriage

The main body of the carriage is made of high-quality wear-resistant steel plate with high hardness and high strength. The cab fender meets ISO3471 standards

thickness	motherboard	20mm (0.79in)
	Side panels	10mm (0.39in)
	Front plate	12mm (0.47in)
volume	Paperback (SAE)	70m(3 65.5yd <sup>3</sup> )
	Stacked 2:1 (SAE)	87m(3 104.6yd <sup>3</sup> )

### Hoisting System

Independent of steering hydraulics settings. Two two-stage lifting cylinders are installed on the inside of the frame, and the second stage of the cylinder is a double-acting type.

System pressure	190ba (r 2750lbf/in <sup>2</sup> )
Lift hydraulic pump flow (at 1900rpm)	870L/min(229.8US gal/min)
Working hours: lifting	17 seconds
Working hours: Down	13 seconds

## Braking System

Service brakes - full hydraulic brake control system. Motor-driven, pressure-compensated piston pumps provide power for braking and steering. Separate front and rear control loops are equipped with a nitrogen/oil accumulator to store energy to provide emergency braking power. Parking brake - hydraulically released, with a spring applied to the piston load on the front/rear brake disc sets.

Electric Feedback Braking - When the electric brake pedal is pressed, the motor becomes a generator, and the vehicle enters the electric feedback braking mode, and the generated power is charged into the power battery to improve the battery life of the whole vehicle. The parking brake button provides the parking brake through solenoid valve control. Braking performance

Front brakes	Dry disc braking
	Brake Disc Diameter: 980mm (38.6in)
Rear brake	Dry disc braking
	Brake Disc Diameter: 496mm (19.5in)

meets ISO3450 standards.

## Drive Axle

Split rear axle for easy disassembly; The rear axle is limited by a laterally stabilized tie rod and a rear overhang have to swing horizontally; The bridge box structure is reasonably designed and the weight is light.

	Ratio
Wheel reducer	31.875:1
Total reduction ratio	31.875:1

## Steering System

The wheel steering is hydraulically operated, and the steering hydraulic oil is supplied by a self-adjusting piston pump Oil. Equipped with a reliable accumulator system, the steering system has an independent accumulator to ensure that the drive system fails to lose hydraulic power in the special case, continue to provide a certain steering force for the truck, the accumulator is cold-resistant, piston-type, maintainable, and easy to replace. The

# NTE130E Haul Truck

emergency steering is powered by an energy storage and meets the standard of SAEJ1511/ISO5010.

Maximum steering angle of the wheels	39°
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## Suspension

Front suspension: Independent kingpin suspension with self-contained "variable nitrogen/oil ratio" suspension cylinders.

Rear suspension: A self-contained "variable nitrogen/oil ratio" suspension cylinder hinged to the main frame and rear axle body via wide spherical bearings.

Maximum impact stroke	Front	300mm(11.8in)
	Rear	210mm(8.27in)
Maximum swing of the rear axle	±6.5°	

## tyre

Standard: Front and rear wheels 30.00-R51

Rim Width: 22in

In the event that the t-km/h (ton-mile/h) value of a specified standard tire may exceed the limit under special conditions, consult the tire manufacturer for the best option.

## Technical Parameters

### Standard Accessories

#### Cab

Soundproof interior	Lock
Floor mats	Cab fenders
Ceiling lights	Heater/defroster
Occupant seats	Driver's seat
Adjustable steering column	Seat belts
Light-coloured glass	Full-width sunshades
Multi-purpose storage bins	Wipers/scrubbers
radio	Automatic lubrication system

#### Control Elements

Slow down the control knob	Combination switches
Gear selector	Main switch of the power supply
Lifting handles	Vehicle controller
High and low beam light switches	Manual key switch

#### Gauge Components

Turn indicators	Headlight high/low beam indicator
Hydraulic oil temperature indicator	Front brake accumulator low pressure indicator
Rear brake accumulator low pressure indicator	Turn to the accumulator pressure low indicator
Parking brake indicator	Service brake indicator
Low coolant level warning light	Fog light indicator
Battery voltage indicator	Power battery level display icon
Overspeed warning lights	Hydraulic oil level indicator
Gear display icon	Speed/hour meter
Speed/odometer	Battery temperature gauge
Cooling system temperature gauge	

### Maintenance Refill Volume

	L	(US gal)
Power battery coolant	60	(15.85)
Electric wheels	50	(13.21)
Cooling system	30	(7.93)
Hydraulic tanks	600	(158.5)
Hydraulics (Total)	780	(206.05)
Front suspension (each)	48	(12.68)
Rear suspension (each)	35	(9.24)

#### Collectively

Steering to hydraulic accumulators radiator	Electric air conditioning, PTC heating
Powertrain bottom guard	Servo lift controller
Power splitter PDU	Pressure detection points
Oil pump motor mounting plate	Reversing alarm
Stone dischargers	LED reversing lights
Dual-tone electric horn	LED headlights
Cab guards	fender
Parking controller	Disc brake system
Rearview mirrors	Auxiliary emergency braking system
Cooling system	Safety pins
Separate steering and lifting systems	Rear retarder indicator
Flashing indicator combination light	Side/rear/brake/turn indicators

### Optional Extras

The cab is heated by air heating	Compartment anti-sticking material
增容车厢 Increased capacity carriages	Automatic weighing system
Compartment wear-resistant lining	tool
Cab supercharger	Spill-proof grille
Cold-proof curtains	Oxygen
360° surround field image	Remote health monitoring and diagnosis platform
Unmanned systems	Tire pressure monitoring system
Behaviour monitoring	The cab is heated by air heating

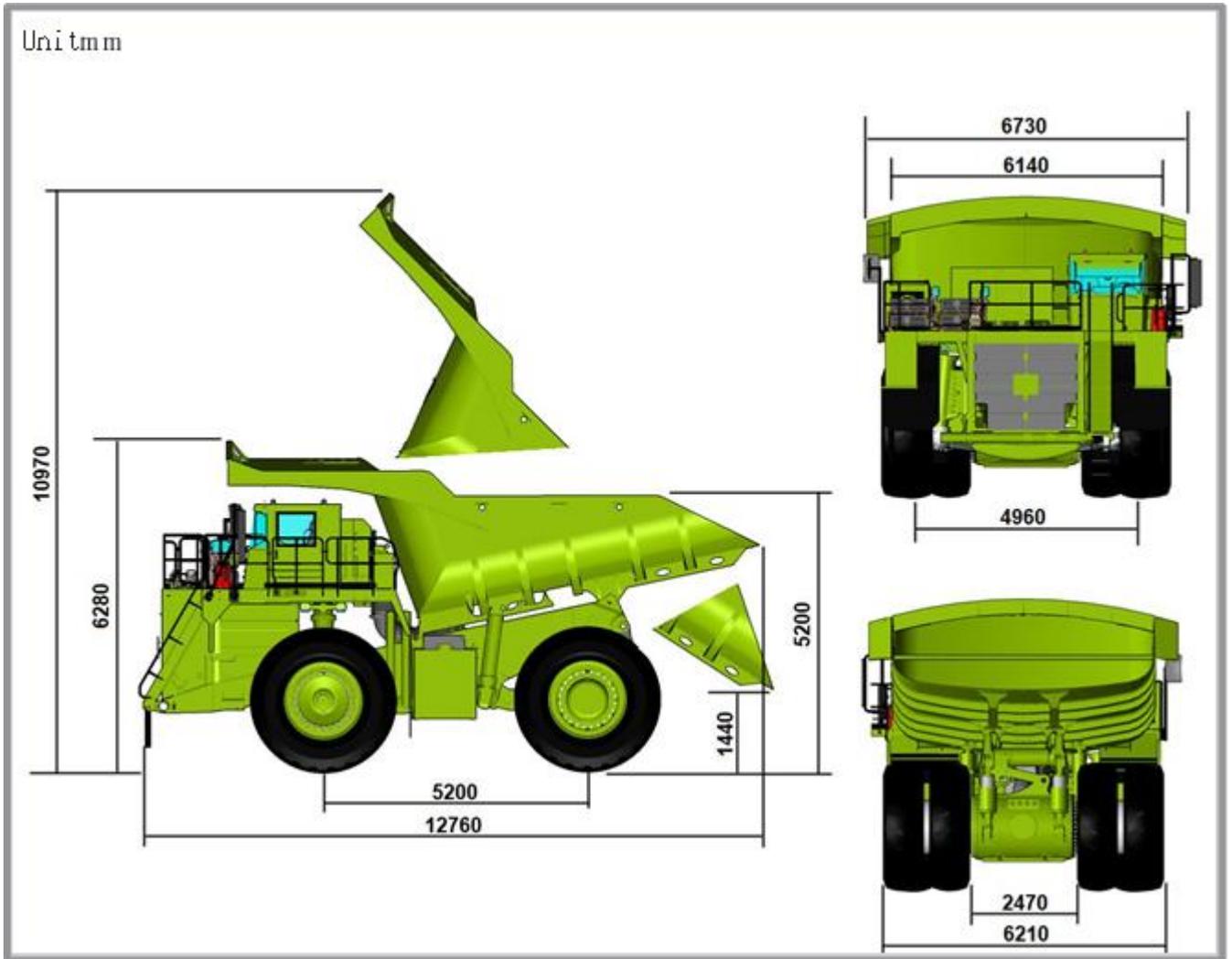
### Weight Parameters

\*Maximum gross vehicle weight includes options, all accessories, filled fluids and load.

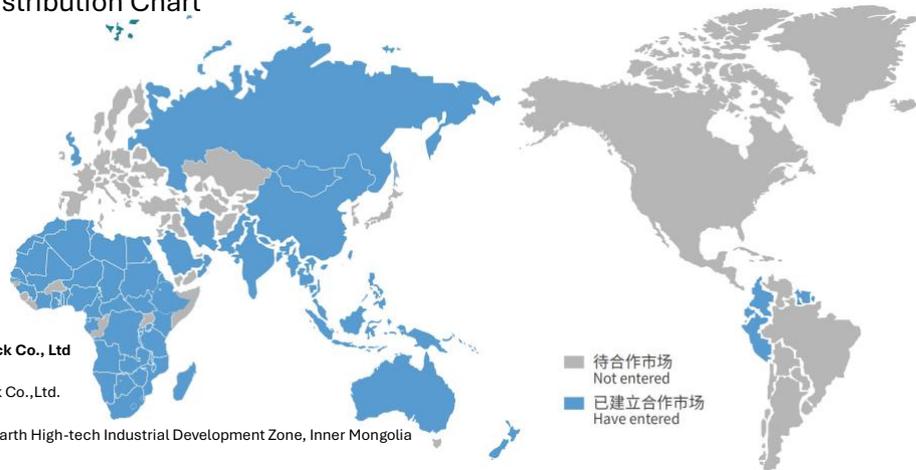
	Kg	lb
Chassis equipped with lifting cylinders	79000	174165
Light U-shaped carriages	16000	44092
The weight of the vehicle	95000	209440
Rated load capacity	120000	264555
Maximum gross vehicle weight*	215000	473996

# NTE130E Haul Truck

## Vehicle Size



## NHL Global Market Distribution Chart



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