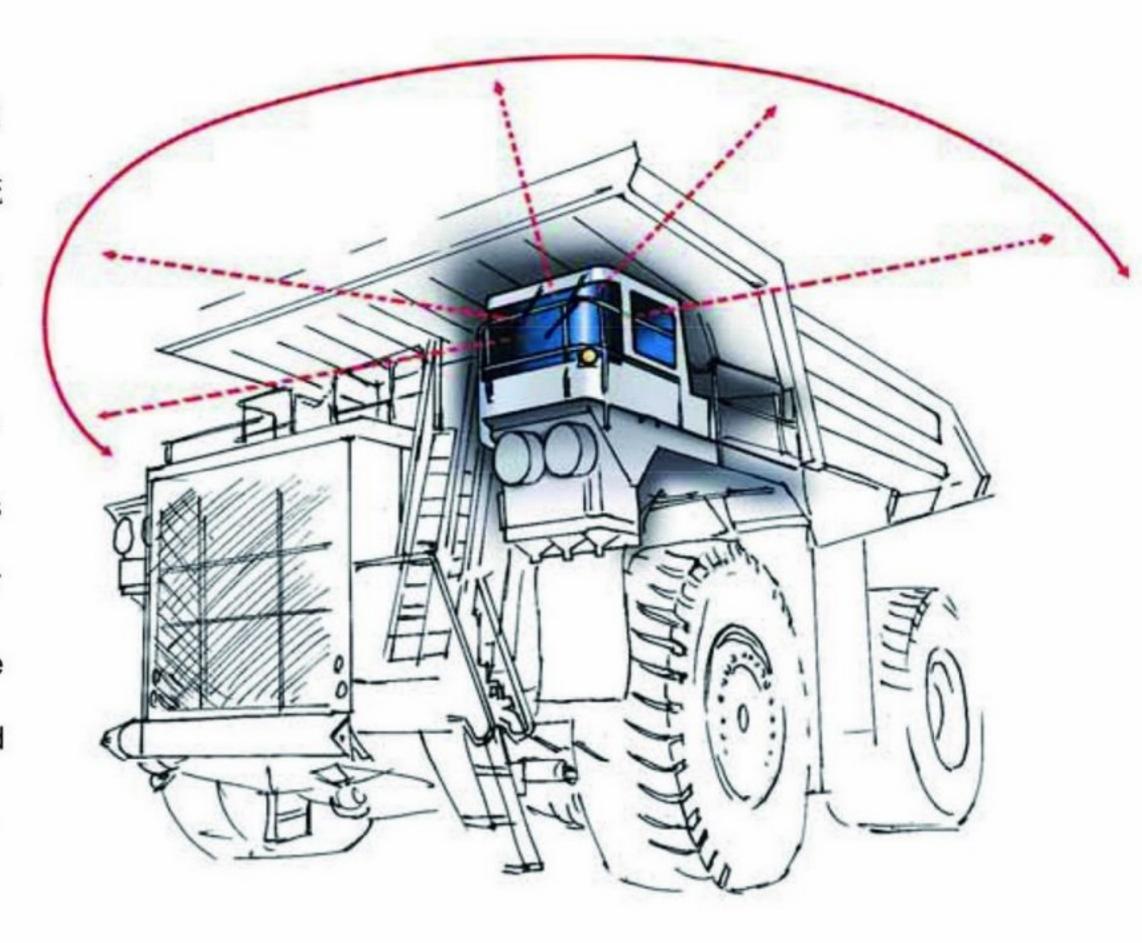
# NTE150电动轮矿用自卸车 ELECTRIC DRIVE MINING TRUCK



## 安全Safety

ROPS 和 FOPS 结构设计保证了驾驶员在行驶和装载过程中的安全。发动机预润滑系统和低温启动监控系统有效防止了发动机的意外磨损,提高了可靠性和耐久性。

The NHL NTE260's integrated ROPS (Rollover Protective Structure)/FOPS (Falling Objects Protective Structure) cab is designed to keep driver safe during running and loading. Engine Pre-Lube system and low temperature starting protection could prevent engine from unexpected failure, which increase engine reliability and durability.



#### 舒适 Comfort

可变氮/油比悬缸和前后桥的结构保证了行驶平顺性。宽大的内部空间、背光式仪表及空气过滤系统、全尺寸座椅保证了驾驶员的舒适性和驾驶的高效率。180度的大视角挡风玻璃,使得驾驶员视野最大化。

Variable rebound nitrogen-over-oil cylindrical suspension struts and independent front beam axle ensure a smooth ride. The cab features include big inner space, back-lit dashboard and filtered intake air system, two full-size seats, full 180 degrees of vision which keeps driver's comfort and high productivity.

#### 可靠 Reliability

针对矿山环境特殊设计的车桥、车架、车厢等结构件,选配全球知名制造商的电器元件和液压元件,保证了矿车的可靠性和寿命。

The specifically designed beam axle, main frame, dump body and other structures integrated with world famous hydraulic and electrical components make the NTE260 running reliable and durable.

## 动力 Feel the Power

康明斯 KTA50C 发动机配备 GE150AC™交流驱动系统,专为大型露天矿山设计,启动扭矩大、抗高温能力强、噪音低、维修检测方便、节能降耗。

The NTE 150 was equipped with Cummins KTA50C engine and GE150AC<sup>™</sup> drive systems which are specifically designed for surface mining. The power package features high starting torque, high temperature resistant ability, low noise, easy maintenance and cost saving.

mining dump truck NTE150 www.wme.cn/nhl-nte150/



#### 发动机Engine

制造商	Manufacturer	康明斯/Cummins
型号	Model	KTA50C
冲程	Operating Cycle	4
缸数	Number of Cylinders	16
额定功率	Rated Power (SAE)	1600hp (1193kW)
飞轮功率	Flywheel HP	1447hp (1079kW)
净重	Weight Dry	4900kg

飞轮功率指发动机飞轮处的额定功率减去常设附件消耗功率。附件消耗功率包括散热器风扇、发电机,泵等。标准条件额定功率符合 ISO 3046 和(或) SAE J 1995。

Flywheel HP is the rated horsepower at the engine flywheel minus the average accessory losses. Accessory losses include radiator fan, alternator and pumps. Rating based on standard conditions in accordance with ISO 3046 and/(or) SAE J 1995.



#### 电传动系统 Drive System

主发电机	Alternator	5GTA22W		
驱动马达	Wheel Motor	5GEB23W		
电控柜	Control Group	17KG527C ( IGBT )		
电阻柜	Resistor Grid	17EM137		
轮边减速器速比	Gear Ratio	28.8:1 64.4 km/h (40mph)		
最高车速	Max Speed			
电阻个数	Number of Resistor	9		
最大连续制动功率	Maximum Continuous Rating	2700 hp (2011kW)		

驱动系统适用性取决于车辆最大总重、运输路面坡度和长度、滚动阻力、发动机功率及其它参数。一定要对每一种知用性进行分析,以确保车辆的技术条件处于最佳状态。

Drive system application depends on the Vehicle Gross Weight, haul road grade and length, rolling resistance, engine HP and other parameters. Each of application must be analyzed to insure optimum truck specifications. 电制动系统配备风冷式电阻栅,可为电制动系统提供高效、安全、可靠的缓行力。

Electrical dynamic retarding with continuous rated blown resistance grids, ensure retarding safety and reliability.



#### 车架 Main Frame



车架主体由变截面的箱形直纵梁和无缝管横梁焊接而成,直纵梁设计消除了应力集中,变截面箱形纵梁结构降低了应力,延长了疲劳寿命,无缝管横梁结构使车架整体抗扭性能更加优越。车架采用埋弧焊焊接工艺,提高了焊缝的耐久性,延长了疲劳寿命。

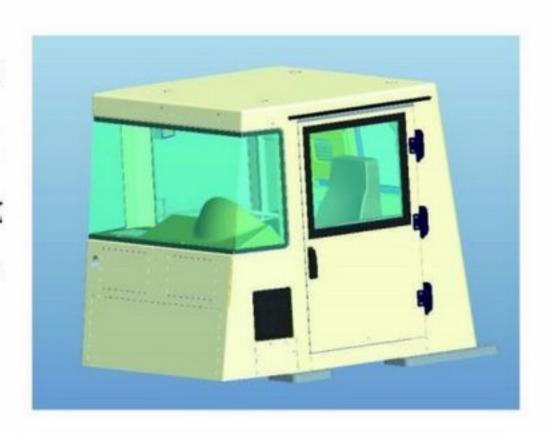
The frame features a straight rail and seamless tubes cross beam design to eliminate sources of stress concentration. Variable section main rails reduce stress and increase frame fatigue life. The seamless tubes cross beam structure enhances the torsional resistance. A submerged arc welding process further reduces stress with full-penetration weld joints, which increases frame fatigue life.

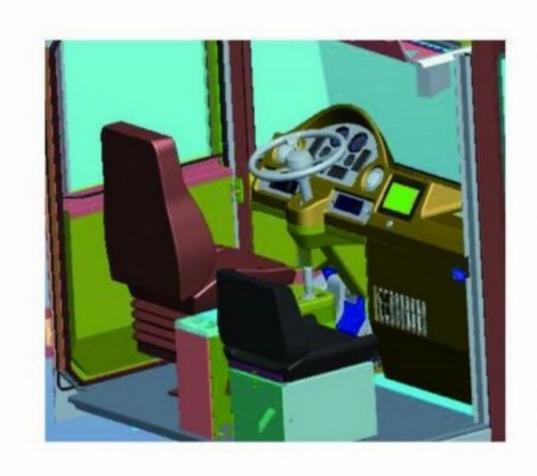
mining dump truck NTE150 www.wme.cn/nhl-nte150/



#### 驾驶室Cab

ROPS 防倾翻保护驾驶室,具有内饰豪华、浅色玻璃、让视野更加开阔的流线形风挡的特点。可倾斜和伸缩的方向盘,加热器和除霜器,加压、过滤的换气道使驾驶员更加舒适。ROPS 驾驶室按照 ISO 3471 标准设计。在驾驶员感觉到的噪音级方面,满足 SAE J 1166 标准要求:在门窗紧闭的情况下,噪音低于80 dB(A)。





Integral ROPS (Rollover Protective Structure) Cab meets requirements of ISO 3471. Features include deluxe interior, tinted safety glass, curved windshield for added field of view, tilt and telescopic steering wheel, heater and defroster and pressurized and filtered intake air for driver comfort. Sound exposure is at an Leq (equivalent sound level) of less than 80 dB(A) and is tested per SAE J 1166 MAY90 with doors and windows closed.



# 平台总成Super Structure

一体式 H 梁及封闭式底板结构保护了关键部件在矿车行驶过程中不受损坏。特殊设计的平台结构便于从平台上部维修发动机、电路等零部件。平台上各部件的布置使得驾驶员的视野最大化。

Rugged one-piece "H" beam construction with closed bottom protects critical components from road and mud damage. The special design for superstructure is easy to engine repair and electric circuit. The components were located suitability on superstructure can make maximization view.



## 前桥总成Front Axle

前桥通过两个前悬缸、四个纵向推力杆、一个横向稳定拉杆连接在车架上,这种布置方式不仅减少了车架的应力负荷,而且不论前悬缸的行程如何,都使轮胎处于正确的运动状态,延长了轮胎的使用寿命。

The axle is pin-connected to the main frame with four drag links, two suspensions and a pan hard rod for lateral stability which could reduce the stress acted on the main frame. The tires could remain true tracking regardless of suspension stroke, extends tire life.





#### 轮胎Tires

岩石型、深纹、无内胎

标配: 36.00R51 子午线胎, 轮辋规格 26.00X51 选配: 33.00R51 子午线胎, 轮辋规格 24.00X51

Rock deep tread type tubeless

Standard: 36.00R51\*\* Rzdial Rim Size: 26.00 X 51

Options: 33.00R51\*\* Radial Rim Size: 24.00 X 51



#### 驱动桥Axle Box

桥箱结构设计合理,减轻重量。鼻锥部件由两片轴承组成,特殊的结构降低了轴承的接触应力(小于 9653 kPa),延长了轴承的使用寿命。

The optimal designed axle box largely reduces the structure weight. Nose-cone attachment features a patented, large two-piece bearing, which reduces contact pressure less than 9653 kPa and extends the life Ir bearing.





## 悬挂系统Suspension

悬挂系统由四个可变氮/油比的悬缸组成,优越的减震性能不仅为驾驶员提供了驾驶的舒适性,而且有效地缓减了物料装载、不平路面行驶对车辆的冲击,提高了矿车的使用寿命。

前悬缸冲程: 14" (355 mm)

后悬缸冲程: 10.75" (275 mm)

后桥最大摆动度: ±6.5°

Four nitrogen-over-oil cylindrical suspension struts provide maximum driver comfort and minimize the impact act on the frame during loading and running on the uneven road, make maximize performance lifetime for truck.

Stroke:

Front: 14 inch (355 mm)

Rear: 10.75inch (275 mm)

Rear Axle Oscillation: ±6.5°



## 车箱Dump Body

深 V 形底板结构的车厢降低了矿车重心,提高了整车的行驶稳定性;具有整体刚性大,抗变形能力强的优点。标准岩石车厢采用 3/4 "(19 mm)底板 3/8 "(10 mm)侧板、1/2 "(13 mm)前板焊接。

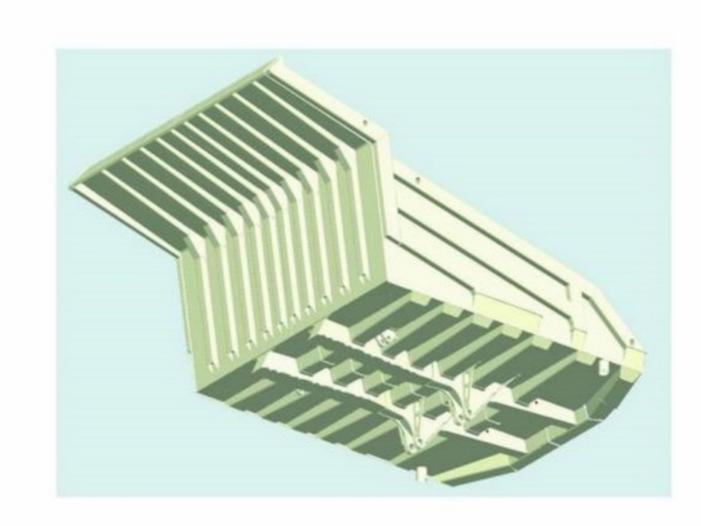
平装容积 (SAE) 56.4 m<sup>3</sup>

堆装容积 (SAE 2:1) 88 m<sup>3</sup>

工作容积 80 m<sup>3</sup>

根据物料的密度和额定载重的不同,可以选择备选车厢。

A horizontal bolster deep-V floor design lowers the center of gravity of the truck and improves maneuverability. Deep-V floor design is more stable and stronger.



Standard rock body incorporates 3/4" (19 mm) bottom plate with 3/8" (10 mm) side and 1/2" (13 mm) front plate.

Struck (SAE): 56.4 m<sup>3</sup>

Heaped (SAE 2:1): 88 m<sup>3</sup>

Working (2:1): 80 m<sup>3</sup>

Optional body available based on material density.



## 转向系统Steering System

全时、中闭式、负荷传感系统操纵的两个双向作用转向缸。转向系统的动力由负载传感式柱塞泵提供,并辅助两个蓄能器,当出现紧急情况时,蓄能器可向系统提供动力。符合标准 SAE J 1511。

最小转弯半径 (SAE): 13.39m

Full-time, closed center, load-sensing system operating two double-acting cylinders, supplied by accumulators that are replenished by a pressure-compensated piston pump. Auxiliary steering supplied by accumulator and meets SAE J 1511.

Minimum turning radius (SAE): 13.39 m



## 举升系统Hoist System

电控举升系统操纵两个双向作用的二级油缸,实现车厢 的举升、下降、保持、浮动功能。系统动力由一个双联 泵提供,为系统提供充足的压力。

满载举升时间 20s

动力下降时间 13s

过滤器: 过滤精度为6微米的高压滤芯保证了系统的可靠和安全,吸油过滤是过滤精度为100目的粗滤网。

Electric-operated pilot system controlling a hoist valve, operating two double-acting telescoping two-stage cylinders to make the dump body power up, power down, float and hold.

Hydraulic fluid is supplied by tandem gear pump.

Power up Loaded: 20s

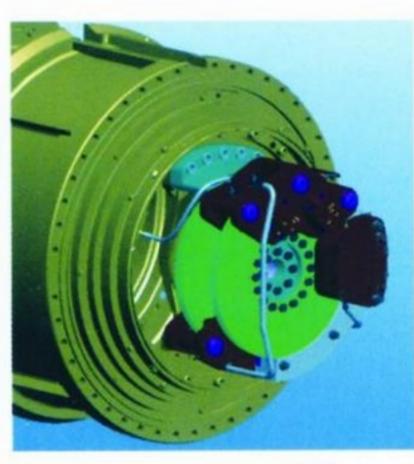
Power down: 13s

Filtration: High-pressure units with 6 micron (nominal) filtration assure the hydraulic system reliable and safe. Hydraulic tank inlet contains a strainer with 100 mesh screening.



# 制动系统Brake System





轻便的工作制动,辅助制动,装载制动,弹簧施压,液 压释放的驻车制动。储能器(3个)保证在紧急情况下, 提供足够的安全制动。系统压力低于2100 PSI 时,系 统报警提醒驾驶员注意。

前轮 四钳盘/轮,盘直径39"(991mm)

后轮 双钳盘/轮,盘直径20.125"(511mm)

驻车制动 弹簧制动,液压释放。

制动系统符合 ISO 3450 标准的要求。

Hydraulic brake actuation system features: service brakes (foot or hand operated), secondary brake (foot or hand operated), loading brake and spring apply, hydraulically released parking brake. Brake accumulators (3) could provide enough brake force under emergency situation. The system would alarm when system pressure drops below 2100PSI.

Front Brakes — 3 calipers per wheel on 39" (1168 mm) wheel speed discs.

Rear Brakes — 2 calipers per wheel on two 20.125" (511 mm) armature speed discs.

Park Brakes — spring apply, hydraulic release.

Braking system meets the requirements of ISO 3450.



## 24V电气系统24V Electrical System

24VDC 电气系统由 6 个 12V 电瓶供电,其中两两串联然后再三组并联。电路保护系统为手动复位断路器。

24 Volt system powered by six (6) twelve (12) volt batteries (3 series pairs in parallel). Battery isolation switch standard. Equipped with manual reset circuit breaker.

照明系统 Lighting 24VDC 启动系统 Starting 24VDC

充电发电机 Alternator 260A 内置电压调节器 / 260 Amp with voltage regulator



## 各部位液体容量Service Capacity



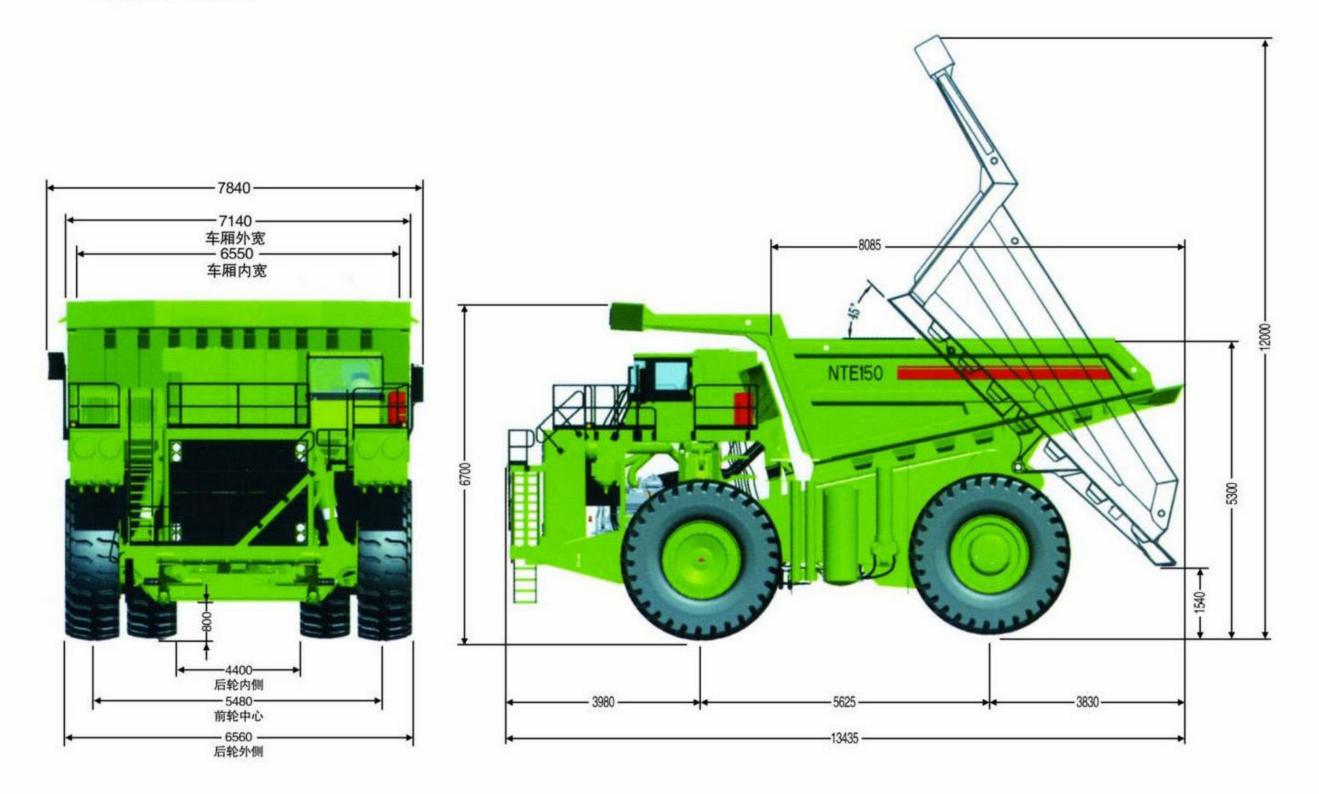
#### 重量参数Weight

发动机机油	Engine Oil	170 L	空载	<b>Empty Vehicle Weight (EVW)</b>		
发动机冷却液	Coolant	303 L	前轴	Front Axle	54050 kg	47%
燃油箱	Fuel tank	2120 L	后轴	Rear Axle	60950 kg	53%
减速齿轮箱 (每侧)	Wheel Motor	20 L	总计	Total	115000 kg	
前悬缸 (每支)	Front Suspension	33 L	满载	<b>Gross Vehicle Weight (GVW)</b>		
后悬缸 (每支)	Rear Suspension	42 L	前轴	Front Axle	82830 kg	33%
液压系统	Hydraulic System	890 L	后轴	Rear Axle	168170kg	67%
液压油箱	Hydraulic Tank	662L	总计	Total	251000kg	



#### 整车尺寸 Over All Dimension

单位: mm



Central lubrication

Hydraulic Cooler

**Auxiliary Dumping Connecter** 

Temp-sensing Fuel cooler

标准附件

驾驶室-隔音内饰 门锁

地板垫 ROPS 和 FOPS 保护

电动门窗

空调/加热/除霜器

顶灯

映照式仪表板 空气悬浮驾驶员座椅

乘员座椅 座椅安全带

可调式转向柱

遮阳板 浅色玻璃

雨刷器/洗涤器

储物箱

收音机及 MP3 播放

控制元件-

组合开关 换挡器

远近光开关/尾灯开关

钥匙锁控电源开关 雨刷开关

装载制动开关 驻车制动开关

登梯照明开关 发动机检测开关

发动机启动/熄火开关

手制动开关 诊断信息显示屏

仪表组建-

发动机转速表 燃油表 小时计

发动机油压表 车速/里程表 电压表

发动机水温表 闪光指示警报器

空气滤清器阻塞 报警指示灯/蜂鸣器

发动机熄火

发动机检测

冷却风道压力 燃油油位低

液压油温高 制动压力低

液压油位低 转向压力低

电器系统故障 冷却液位低

驻车制动 车厢举升

前大灯光束 24V 发电机不充电

转向指示 高低速指示

总体-

转向/制动储能器 双级空气滤清器

举升控制 手制动控制 缓行控制

液压控制箱 液压油箱 燃油油位

冷却液视窗螺母 燃油位视窗螺母

发动机预润滑 低温启动抑制保护

干盘制动 消音器 氙气大灯

倒车灯/倒车蜂鸣器

转向/缓行/行车制动

举升倒车互锁 举升高速互锁

驻车制动 双回路制动 后视镜 排石链

车厢安全链 发动机维修梯 可换芯散热器

高压液压滤 快速燃油加注 平台护栏

手动灭火器 维修照明灯 Standard

Acoustic lining

**Electric Window** 

Illuminative Panel

Passenger Seat

Seat Belts

Sun Visor

**Tinted Glass** 

Wipers/Washers

Radio and MP3 Player

Compartment

Air Suspension Seat

Steering Column, adjustable

Interior Light

ROPS/FOPS Protection

A/C /heater/Defroster

Door Locks

Floor Mat

Cab-

应急卸料连接 液压冷却器

温控燃油冷却器

集中润滑

备份附件

车厢耐磨衬板 制动自动投入

车厢加热 后部倒车监视器

集中灭火 自动称重

燃油加热

发动机冷启动系统 集中充注系统

大功率后照灯 增容车厢

人机交互界面

Controls-

**Block Switch** 

Selector Headlight / taillight switch

Key Switch, Power Wiper switch

Loading Brake Switch

Parking Brake Switch Stairway Light Switch **Engine Check Switch** 

Engine Start/stop switch Hand Braking Switch

DID

Instrumentation Group-

**Engine Tachometer Fuel Gauge** 

Hour meter

Engine oil pressure gauge

Speedometer Voltmeter

Engine coolant temperature Flashing indicator

Air Cleaner Restriction Warning indicator light/buzzer

**Engine Stop** 

Check Engine

Cooling duct Pressure

Low Fuel Level

High Hydraulic Temperature Low Brake Pressure

Low Hydraulic Oil Level Low Steering Pressure

Electric System Fault

Low Coolant level

Parking Brake **Body Hoist** 

Headlight Beam

24Valterator Not Charging

Turn indicator light

High/Low Speed indicator

General-

Steering/braking accumulators

Two-stage air cleaner

Hoist control

Hand Brake Control

Retardation Control Hydraulic control casing

Hydraulic Tank Fuel Level

Coolant sight glass nut

Fuel sight gauge nut

Engine Pre lube

Low-temp start- protection

Dry disk brake **Exhaust Muffler HID Lamp** 

Reversing light /buzzer Steer/Retard/Running brake Hoist/ Reverse interlocking

Hoist/ High speed interlocking

Parking Brake Two-circuit brake Rear View Mirrors **Rock Ejectors** 

Body safety chain Engine maintenance ladder

Radiator, changeable core Hydraulic filter, High pressure

Fuel Quick Fill Deck safety guards Extinguisher

Maintenance illuminator

Optional **Body Liners** 

Brake auto apply **Body Heating** 

Rear Backing-up monitor Central fire suppression

Auto Weigh system

**Fuel Heater** Engine cold start system

Central Fill System Superpower back light

Body, enlarged capacity HMI system

参数内容如有变动,恕不预先通知

Specifications subject to change without notice

