

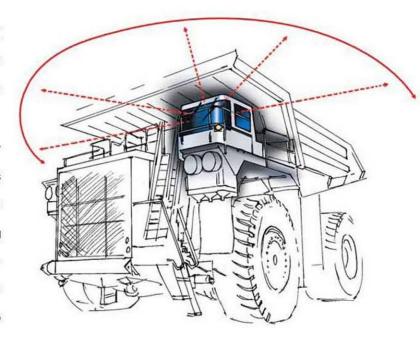
# NTE 260 MINING TRUCK



### 安全 Safety

ROPS和FOPS结构设计、牵引力及防滑控制,防溜坡 驱动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 and tractive effort, slip-slide control are designed to keep driver safe during running and loading. Pre-Lube system and low temperature starting protection could prevent engine from unexpected failure, which increase engine reliability and durability.



# 舒适 Comfort

可变氦/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、驾驶室加压系统及空气过滤系统、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, pressurized 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、车箱等结构件,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。双冷却电机设计、高效低耗,安全、可靠。

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. The double cooling motor design makes the system operating highly efficient, safe and reliable.

### 动力 Feel the Power

康明斯 QSK60 发动机配备西门子"Smart"电驱动系统,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 NTE260 equipped with Cummins QSK60 engine and Siemens "Smart" 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.



### 发动机 Engine

制造商	Manufacturer	康明斯/Cummins		
型号	Model	QSK60		
冲程	Operating Cycle	4		
缸数	Number of Cylinders	16		
额定功率	Rated Power (SAE)	2500 hp		
飞轮功率	Flywheel HP	2350 hp		
净重	Weight Dry	8570 kg		

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 ISO3046 和(或) SAE J1995。

Flywheel HP is the rated horsepower at the engine flywheel minus the average accessory losses. Accessory losses include radiator fan, battery charging alternator and pumps. Rating based on standard conditions in accordance with ISO 3046 and/or SAE J1995.



### 电传动系统 Drive System

主发电机	Alternator	Siemens 2500 hp 双绕阻/ Double stator winding				
驱动马达	Wheel Motor	Siemens 1TB3026-0GB03(M4)				
电控柜	Control Group	Siemens MMT 260 紧凑型 IGBT 逆变器/ MMT260 Compact				
电阻柜	Resistor Grid	Siemens MMT260 同轴双风机电阻柜/ Double Blower Resistor				
轮边减速器速比	Gear Ratio	39.6:1				
最高车速	Max Speed	56 km/h(35mph)				
电阻个数	Number of Resistor	16				
最大瞬时制动功率	Maximum instantaneous	s Rating 4950 hp				
最大连续制动功率	Maximum Continuous R	Rating 4300 hp				

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、可靠的动力。

Electrical dynamic retarding with continuous rated blown grids, ensure retarding safe and reliable.



### 车架 Main Frame



车架主体由变截面的箱形直纵梁和圆柱形横梁焊接而成,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,圆柱形的横梁结构使车架整体抗扭性能更加优越。车架采用先进焊接工艺,提高了焊缝的耐久性,延长了疲劳寿命。

The frame features a straight rail and tubular center cross beam design to eliminate sources of stress concentration. Variable section main rails reduce stress and increase frame fatigue life. The tubular center 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.



### 驾驶室 Cab

一体式 ROPS(防倾翻保护机构)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档的特点。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 SAE J1040 标准设计。在驾驶员感觉到的噪音级方面,其设计依据美国 OSHA 和 MSHA 职业噪音标准。按照标准 ANSI/SAEJ1166,在门窗紧闭的情况下,所测得的噪音低于 82dB。





Integral ROPS (Rollover Protective Structure) cab meets requirements of SAE J1040. 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 82 dB(A) and is tested per ANSI/SAE J1166 MAY90 with doors and windows closed. The cab also meets both U.S. OSHA and MSHA occupational noise criteria for operator-weighted sound exposure level.



### 平台总成 Super Structure

一体式"工"字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 "I" beam construction with closed bottom protects critical components from road and mud damage. Top access to engine, piping and electrical wiring allows for easy maintenance. Deck components are located to optimize driver visibility.





### 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

标配: 50/80 R 57 子午线轮胎。 选配: 40/90R57 和 40R57

轮辋规格: 32.00×57

Standard: 50/80R57 \*\* Radial
Options: 46/90R57 \*\* Radial

40.00R57 \*\* Radial

Rim Size: 32.00 x 57



### 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 bearing life.



### 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: 12 " (305 mm)

后悬缸冲程: 7.25 " (184 mm)

后桥最大摆动度: ±5.7°

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 finally maximize truck performance.

Stroke:

Front: 12 inch (305 mm)

Rear: 7.25 inch (184 mm)

Rear Axle Oscillation: ±5.7°



### 车箱 Dump Body

深 V 形底板结构的车箱降低了矿车重心,提高了整车的行驶稳定性;相对于底板为水平结构的车箱,它具有整体刚性大,抗变形能力更强的优点。标准岩石车箱采用 3/4 "(19 mm)底板、3/8"(10 mm)侧板、1/2"(13 mm)前板焊接。

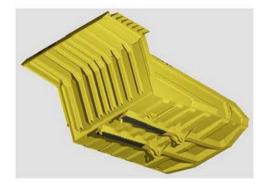
平装容积(SAE) 114 m<sup>3</sup>

堆装容积 (SAE 2:1) 156 m<sup>3</sup>

工作容积 140 m<sup>3</sup>

根据物料的密度的不同,可以选择备选车箱。

A horizontal bolster deep-V floor design lowers the center of gravity of the truck and improves maneuverability. Compared with horizontal floor body, 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): 114m3

Heaped (SAE 2:1): 156m3

Working (2:1): 140 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 J1151。

最小转弯半径 (SAE): 15.2 m

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 J1511/5010.

Minimum turning radius (SAE): 15.2 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,实现车箱 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 22 s

动力下降时间 15 s

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: 22s

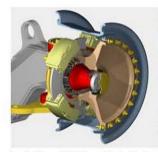
Power down: 15s

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 1168 mm

后轮 双钳盘/轮,盘直径 635 mm

驻车制动 弹簧制动,液压释放。

制动系统符合 ISO/J3450 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 — 4 calipers per wheel on 1168 mm wheel speed discs.

Rear Brakes — 2 calipers per wheel on two 635 mm armature speed discs.

Park Brakes — spring apply, hydraulic release.

Braking system meets the requirements of SAE/ 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 output with voltage regulator



# 各部位液体容量 Service Capacity



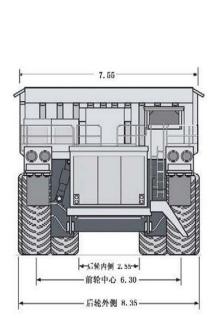
# 重量参数 Weight

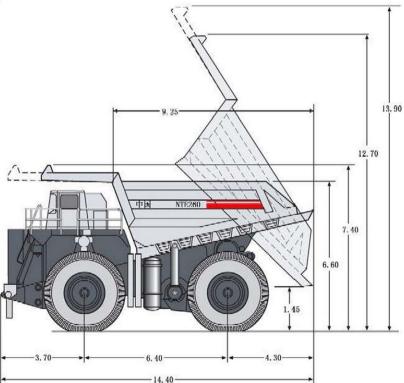
发动机机油	Engine Oil	291 L	空载	Empty Vehicle Weight (EVW)		•
发动机冷却液	Coolant	662 L	前轴	Front Axle	86730 kg	49%
燃油箱	Fuel	4921 L	后轴	Rear Axle	90270 kg	51%
电动轮	Wheel Motor	140 L	总计	Total	177000 kg	
前悬缸 (每支)	Front Suspension	36.7 L	满载	Gross Vehicle Weight (GVW)		
后悬缸 (每支)	Rear Suspension	33.7 L	前轴	Front Axle	136290 kg	33%
液压系统	Hydraulic System	908 L	后轴	Rear Axle	276710 kg	67%
液压油箱	Hydraulic Tank	662 L	总计	Total	413000 kg	



单位: m

# 整车尺寸 Over All Dimension





标准附件 冷却风道压力 灭火器 Standard Duct Air Pressure Extinguisher 燃油油位低 集中润滑 Cab -Low Fuel Level Auto Lube 驾驶室 隔音内饰 液压油温高 应急卸料连接 Acoustic Lining High Hydraulic Temp **Auxiliary Dump Connector** 门锁 制动压力低 液压冷却器 Door Lock Low Brake Pressure Hydraulic Oil Radiator 地板垫 液压油位低 燃油冷却器 Floor Mat Low Hydraulic Oil Level Fuel Radiator ROPS 和 FOPS 保护 转向压力低 备选附件 ROPS & FOPS Low Steering Pressure Optional-Electrical System Fault **Dump Body Liners** 电器系统故障 车厢耐磨衬板 Electrical Window 电动门窗 空调/加热/除霜器 冷却液位低 制动自动投入 AC/Defroster Low Coolant Level Brake Auto Apply 室壁灯 驻车制动 车厢加热 Courtesy Light Park Brake Heated Body 映照式仪表板 倒车监视器 Instrument Panel Dump Up Rear View Camera 车厢举升 空气悬浮库椅 集中灭火 Fire Suppressant System 前大灯光束 Seat, Air Suspension High Beam 乘员座椅 24V 发电机不充电 自动称重 Seat, Passenger Alternator Not Charging Weigh System 座椅安全带 Fuel Heater 转向指示 燃油加热 Seat Belts Turn Signal 可调式转向柱 高低速指示 冷启动系统 Steering Column - Adjustable High/Low Speed indicate Kim Hot Start 总体 Central Service Group 遮阳板 集中充注系统 Sun Visor General-浅色玻璃 转向/制动储能器 大功率后照灯 Tinted Glass Accumulator Steering/Brake Additional Reverse Light 雨刷器/洗涤器 双级空气滤清器 维修照明灯 Windshield Wipers, and Washer Air Cleaners (2), Two Stage Service Light 储物箱 举升控制 增容车厢 **Utility Compartment** Hoist Control Optional Body 收音机及 MP3 播放 手制动控制 架线驱动 Radio/MP3 Manual Control Trolley Assist Collision Avoidance System 控制元件 缆行控制 车辆防撞系统 Controls -Retard Control 组合开关 液压控制箱 混合制动 Combined Switch Hydraulic Component Box Service Brake Blending 换挡器 液压油箱 巡航定速 Hydraulic Oil Tank Cruise Headlight/Taillight Switch 远近光/尾灯开关 燃油油位 Fuel Level 钥匙锁控电源开关 冷却液视窗螺母 Manual Mode Key Switch Coolant Level Window 燃油位视窗螺母 Windshield Wipers Switch Fuel Tank Window 雨剧开关 装载制动开关 发动机预润滑 Load Brake Switch Engine Pre Lube 驻车制动开关 低温启动保护 Park Brake Switch Cold Start Protect 登梯照明开关 干盘制动 Stairway Light Switch Dry Disc Brake 发动机检测开关 消音器 Engine Check Switch Muffler Engine Start/Stop Switch 发动机启动/熄火开关 卤素大灯 Halogen Headlight 倒车灯/倒车蜂鸣器 Manual Brake Switch 手制动开关 Back Up Warning Alarm 仪表组件 Turning/Retard//Service Brake 转向/缓行/行车制动 Instrumentation Group-发动机转速表 举升倒车互锁 **Engine Tachometer** Hoist/Back up Lock 燃油表 举升高速互锁 **Fuel Gauge** Hoist/High Speed Lock 小时计 驻车制动 Hour Meter Park Brake 发动机油压表 双回路制动 Engine Oil Pressure Gauge **Dual Brake System** 车速/里程表 后视镜 Speedometer/Odometer Fear View Mirror 电压表 排石链 Rock Elector 发动机水温表 车厢安全链 Engine Coolant Temperature Gauge Dump Body Lock Cable 闪光指示警报器 发动机维修梯 Engine Service Ladder Warning Indicator 空气滤清器阻塞 可换芯散热器 Air Cleaner Restriction Gauges Changeable Radiator 报警指示灯/蜂鸣器 高压液压滤 Warning Indicator Light and Buzzer Hydraulic Oil Filter 发动机检测 快速燃油加注 Check Engine Fast Fuel Adaptor 发动机熄火 平台护栏 Engine Stop Rail

### 参数内容如有变动, 恕不预先通知

Specifications subject to change without notice

