

# EH4000

## EH4000AC-3

**NOMINAL PAYLOAD:**  
221 tonnes (243.6 tons)

**OPERATING WEIGHT:**  
384 000 kg (846,575 lb.)

**RATED POWER:**  
1864 kW (2,500 hp)



**HITACHI**

## BY NOT BUILDING EVERYTHING, WE COMPROMISE ON NOTHING.

### HAULER FOCUSED.

At Hitachi, we don't get sidetracked building every kind of mining equipment. Instead, we build trucks and excavators. And that focus results in highly efficient, durable and reliable trucks with powerful performance.

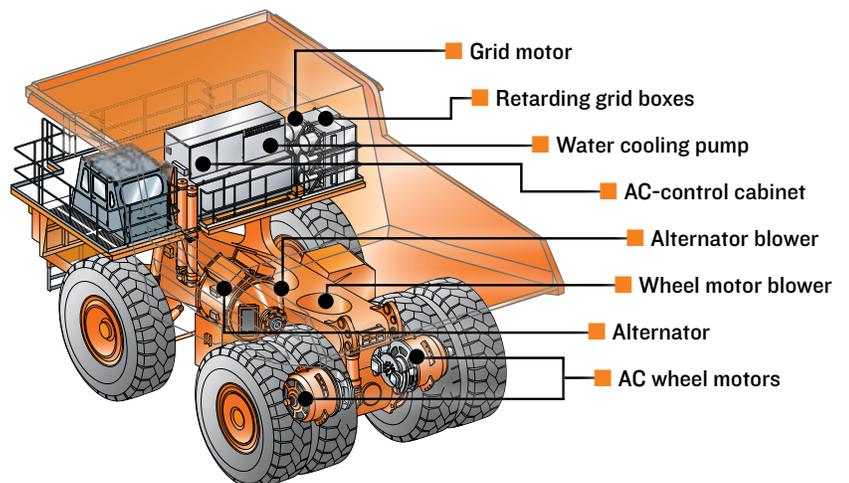
The EH4000AC-3 combines our time-proven truck technology with our newest and most efficient Advanced IGBT AC-Drive system. It's one of the most technologically advanced mining trucks in the world, and it helps raise profits by lowering fuel and maintenance costs. When you put the EH4000AC-3 to work, you get ...

### EFFICIENT PRODUCTIVITY.

■ **Hitachi AC Technology.** Hitachi has been at the forefront of both Gate Turn Off (GTO) and IGBT propulsion technology for over 30 years. Now, the company has channeled this expertise into Hitachi AC-drive trucks.

**Unlike all other competitors, the entire AC-drive system is designed, built and supported by the same company — HITACHI**

The new-generation Hitachi IGBT system outperforms previous and competitive systems through its simplicity, improved efficiency, and enhanced dependability. It couples the best GTO features with higher torque, faster acceleration, smoother retardation and lower operating costs.



# SPECIALISTS



## ■ Economical.

Our new Advanced AC-Drive System makes the EH4000AC-3 a more valuable asset for your mining operations. It delivers better performance, higher uptime and helps significantly reduce maintenance and fuel costs.

## ■ Efficient.

The EH4000AC-3 is equipped with a Cummins QSKTA60-CE diesel engine that generates 1864 kW (2,500 hp) at 1,900 rpms and meets Tier 2 EPA emission requirements.

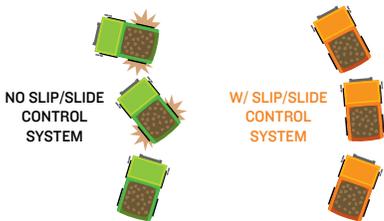
## ■ Long frame life.

The frame on the EH4000AC-3 has also been redesigned and improved for longer life. The bolt-on high-arch cross member, combined with new rear axle housing and nose cone designs, give the EH4000AC-3 the sturdiest frame of all.

## ■ High capacity.

The EH4000AC-3 gives you the ability to handle big hauling jobs. The nominal payload is at a very high level – 221 tonnes (243.6 tons).

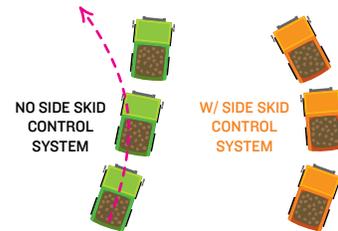
# INNOVATION



**Slip/slide control system**  
The enhanced Slip/Slide Control System is an active traction control and anti-lock brake system in slippery conditions. The enhanced performance of the Slip/Slide Control System comes from the utilization of various new sensors on the front wheels, suspension and steering systems.



**Pitch control system**  
The Pitch control feature of the Advanced AC-Drive System reduces bouncing/rebounding on the truck as it hits bumps or uneven ground on the haul road. As the truck comes to a stop the rebounding or rocking effect due to the change in inertia of the truck is also reduced.



**Side skid control system**  
The Advanced AC-Drive System also provides a side skid control feature that helps the operator in slippery road conditions when making turns. By utilizing changes in the wheel motor torque from left-to-right during cornering, it assists the operator in turning the truck and keeping it on the proper track.

# THE MOST ADVANCED AC-DRIVE SYSTEM EVER.

## EFFICIENT AND PRODUCTIVE.

The EH4000AC-3 runs with Hitachi's newest, state-of-the-art Advanced AC-Drive System using Hitachi's own IGBT controller, alternator and wheel motors. Hitachi has been in the electrical drive system business for years – first with GTO, now with IGBT. In fact, the technology has successfully been used on bullet trains, locomotives, monorails and commuter electric cars around the world. The result is an AC-powered truck that outperforms other systems through its simplicity, efficiency and dependability.

Hitachi is the only truck manufacturer in the world that builds its own AC-drive systems. So the new Advanced AC-Drive System is perfectly matched to the EH4000AC-3. It delivers higher torque, faster acceleration, smoother retardation and lower operating costs. With the Hitachi Advanced AC-Drive System, you get ...

## INNOVATION, NOT IMITATION.

■ **Auto cruise control** keeps vehicle speed constant within the set range by limiting the minimum vehicle speed.

■ **Superior electric braking** enables the driver to stop the truck using the electric brake pedal only with the exception of emergencies, because the AC drive control system applies the service brakes automatically just before the stopping, resulting in easy machine operation and longer time between service brake maintenance intervals.

■ **Auto retarding control** keeps vehicle downhill speed constant within the set range by limiting the maximum vehicle speed.

■ **IGBT modules** (inverter and chopper) are liquid cooled. Grid resistors, alternator and traction motors are forced-air cooled. The final drive gear oil is circulated, air-cooled and filtered before being directed back to the final drive.

■ **AC-drive wheel motor**  
The Hitachi Dual Path Epicyclic Planetary design provides high efficiency and easy maintenance. Allowing the 1st (outer) planetary carrier to travel at wheel speed provides lower operating temperatures. Better component and lubricant life is the result of an inverter controlled lubricant circulation system that includes lubricant cooling and filtration.



## BUILT TO OUTPERFORM AND OUTLAST.

### TACKLE TOUGH JOBS.

Hitachi trucks have earned a reputation for durable and dependable performance at mining operations across the world. The EH4000AC-3 is no exception. Its rugged, redesigned frame can handle your toughest jobs. This hauler is also built with a unique trailing-arm suspension that minimizes frame stress and fatigue, while providing lower tire wear and better steering. This durable system is easy to service and maintain. You get access to the strut without removal of the wheel, which reduces your downtime and repair costs. When you choose the EH4000AC-3, you get a hauler that ...

### MAKES NO EXCUSES.

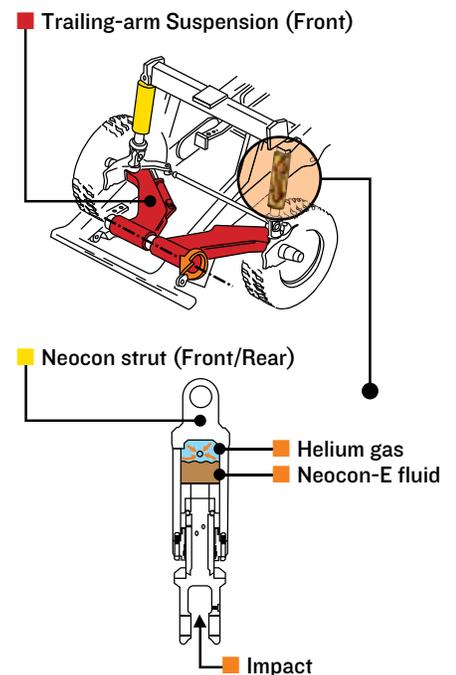


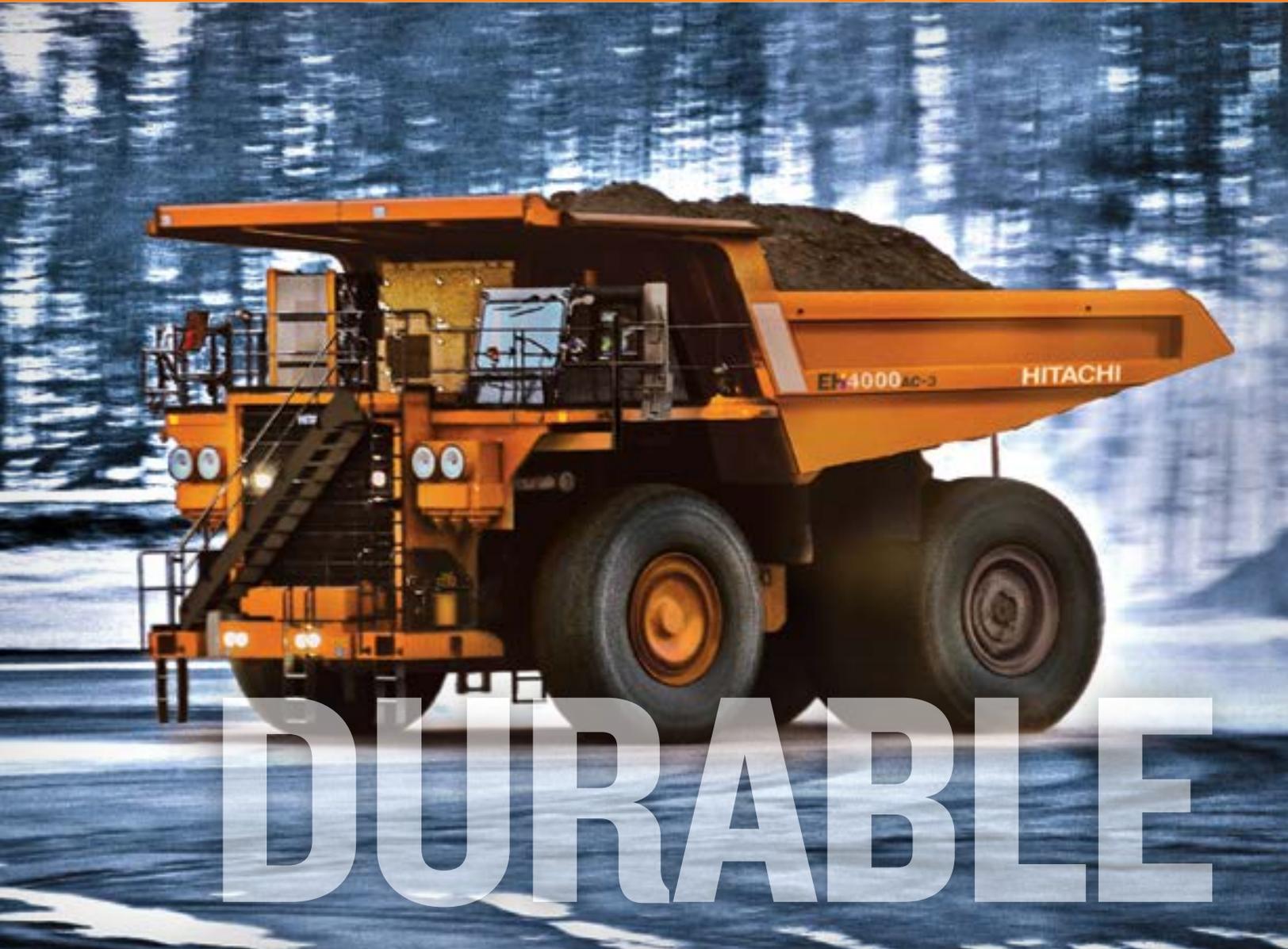
Our new cab structure provides improved safety and durability. The cab frame is stronger and features a three-point isolation-mount design to allow additional independent motion from the truck frame.

The updated body is stiffer and tougher with a six percent steeper floor pitch to reduce spillage and provide solid, well-cushioned body-to-frame support. The hoist system is auto-programmed to stop before stroke end to reduce shock.

The redesigned frame also features a bolt-on, high-arch cross member, combined with a new rear axle housing and nose cone design that together deliver higher strength and durability.

The new frame has fully fabricated box-section rails with section height tapered from rear to front. The one-piece top and bottom flanges eliminate cross member tie-in joints. The large radii at frame junctions minimize stress, and all welds are longitudinal to reduce stress cracks and deliver more strength and durability.





**■ Spindle**

Each spindle is controlled by a hydraulic steering cylinder, which rotates around the king-pin and the outer end of the trailing arm to position the wheels for steering. The spindles are attached by one tie-rod.

**■ King-pin**

Retains the spindle to the trailing arm. Spindle rotates around the king-pin, which is locked in position. The Neocon-E™ strut attaches to the top.

**■ Trailing Arm**

Main suspension member to which other suspension components are attached. The trailing arms hinge on a torque tube that is clamped to the front of the frame.

**■ Neocon Strut**

The energy absorption and release component of the ACCU-TRAC suspension system. Pinned to ball bushings at the frame and at the top of the king-pin to prevent bending movements from transferring to the strut. Receives only axial input.



**BOTH STRUTS AT NORMAL HEIGHT**



**BOTH STRUTS IN COMPRESSION  
WITH NO HORIZONTAL DEFLECTION**



**DRIVER SIDE STRUT IN COMPRESSION,  
OTHER STRUT IN EXTENSION**

# PRODUCTIVE



Bucket Passes to Dump Trucks		Passes to Fill							
Excavator	Bucket Capacity	1	2	3	4	5	6	7	8
Shovel	EX3600-6 21-m <sup>3</sup> (27.5 cu. yd.) Bucket								
	EX5600-6 29-m <sup>3</sup> (38.0 cu. yd.) Bucket								
	EX8000-6 40-m <sup>3</sup> (52.3 cu. yd.) Bucket								
Backhoe	EX3600-6 22-m <sup>3</sup> (28.8 cu. yd.) Bucket								
	EX5600-6 34-m <sup>3</sup> (44.5 cu. yd.) Bucket								
	EX8000-6 43-m <sup>3</sup> (56.2 cu. yd.) Bucket								



# HIGHER PRODUCTIVITY, HIGHER EARNINGS.

## WORK ANYWHERE, ANYTIME.

With the EH4000AC-3, you'll get more uptime and more work done. It's engineered to deliver the highest productivity possible – from a cab designed for operator comfort to large load capacities and an advanced monitoring system. Our years of experience building mining trucks give us the knowledge to build in a series of innovative, functional features that result in more efficient hauling. Put the EH4000AC-3 to work and you get ...

## BIG-TIME PRODUCTIVITY.

■ The EH4000AC-3 is built with an improved payload monitoring system with enhancements to handle rugged loading conditions better. It is fully integrated to the truck's monitoring system (and therefore your Mine Fleet Management System\*) for prompt reporting of tons moved, cycle times, cycle count and distance.

\*Requires optional equipment.

■ The IGBT Advanced AC-Drive System provides faster torque curve for greater acceleration, higher speeds under load and retardation to nearly 0 mph.

■ The improved hydraulic hoist system delivers faster raises and lowers. Hoist raise calibration system can be programmed to cut out the cylinder extension prior to reaching full extension. It also controls the body-lowering speed to ensure maximum cylinder life.

■ High availability results from a strong frame, long-lasting suspension, cooled and lubricated AC-drive system and excellent engine options.

## MORE COMFORT. MORE PRODUCTIVITY.

### EFFICIENT AND SAFE CAB.

It's true. A more comfortable operator is a more productive operator. The EH4000AC-3 cab gives your operators spacious room, adjustable seating, wide-area visibility, plus a quiet, low-vibration interior. This cab helps your operators feel less stressed and fatigued, which makes them more comfortable and capable of handling more work. In addition, your operators will be confident with the unobstructed visibility that adds to safety. When your operators step on board the EH4000AC-3, they'll discover a ...

### COMFORTABLE WORK ENVIRONMENT.

■ Visibility from the cab is enhanced with added mirrors, cameras for blind spots, backup and tire lights and brighter headlamps. Included as standard safety equipment is an analog monitor mounted to the dashboard to display live camera information.

■ The high-efficiency dashboard puts controls within easy reach and good visual contact. A full complement of easy-to-read gauges, a spacious environment, six-way adjustable operator's air seat, tilt/telescopic steering wheel and filtered adjustable air vents contribute to operator comfort.

■ The EH4000AC-3 features a new, easy-access diagonal ladder that provides a safe, quick way to get in and out of the cab.

■ The new, wider cab also has a double full-size seat available that provides plenty of space for a trainer to work with an operator.

■ Double-wall construction of inner and outer steel panels produces a more structurally sound cab. A three-point rubber isolation-mount design allows greater independent motion from the truck frame, which significantly reduces shocks, vibrations and noise, and keeps operators more comfortable.





■ Heating/cooling capacities have been increased to keep operators comfortable and productive in all types of weather.

■ The new HI-TECH ROPS/FOPS cabs are equipped with a Hitachi controller and a large, centrally mounted color Liquid Crystal Display (LCD) as used in our large size excavators. The display makes operation simple and easy.



## MINIMIZE MAINTENANCE. MAXIMIZE UPTIME.

### EASY SERVICING.

With our mining industry experience, we understand the biggest challenges in service and maintenance. So we've engineered the EH4000AC-3 with the most convenient and efficient service and maintenance solutions available. You'll spend less time working on the truck and more time working on jobs. Choose the EH4000AC-3 and get ...

### MORE UPTIME AND CONVENIENT MAINTENANCE.



■ The AC-drive system has multiple controls that ensure trouble-free reliability and less maintenance. They include grid dry motor control that keeps the grid system dry in cold or wet conditions. A blower control cools the alternator and wheel motors in hot conditions.



■ Hitachi trucks feature a fast-fill system station. This station, located on the left side of the radiator, gives you direct access at ground level for fast filling/topping off of lubricants, grease, hydraulic oil and engine oil. Our auto-lube system provides consistent lubrication to required areas on the truck reducing maintenance downtime. (Couplers are optional.)



■ Four, low maintenance air filters with evacuator valves bring easy and safe maintenance.



■ The collapsible step and flat service stage inside the rear axle brings higher serviceability and safety.

# CONVENIENCE



■ The box section design of the frame features one-piece top and bottom flanges that eliminate cross-member tie-in joints and provide a large, exposed center area for quick access to major components.

■ The well laid out design of the water-cooled, high-speed IGBT controls requires less space on the truck. Individual grid resistors provide easier maintenance and improved cooling.

■ Simple sight glasses on the fuel and hydraulic fluid systems allow for a quick pre-shift confirmation that the levels are not below minimums.

■ The trailing-arm suspension allows the front struts to be removed and installed without removing the front brakes or tires. This means fewer tools and less labor time are required, resulting in less downtime and higher productivity.

■ Our service tool allows downloads of a wide variety of information to your technicians' laptops for quicker diagnosis of performance issues.

■ The new system monitor gives you the ability to see information and diagnostics of all onboard systems and controls, helping you reduce downtime with faster and more reliable troubleshooting and analysis.

# SUPPORT



■ Mechanics and service technicians at your Hitachi dealer are highly trained and skilled, and know how to quickly service your equipment and solve any problems. They get you back up to speed quickly and efficiently.

■ To help ensure your trucks stay up and running, we provide parts backup both at our factories and strategic parts depots, so you'll have rapid access to any parts you need.

■ Hitachi factory support managers are assigned to specific mines and provide oversight to help ensure performance.

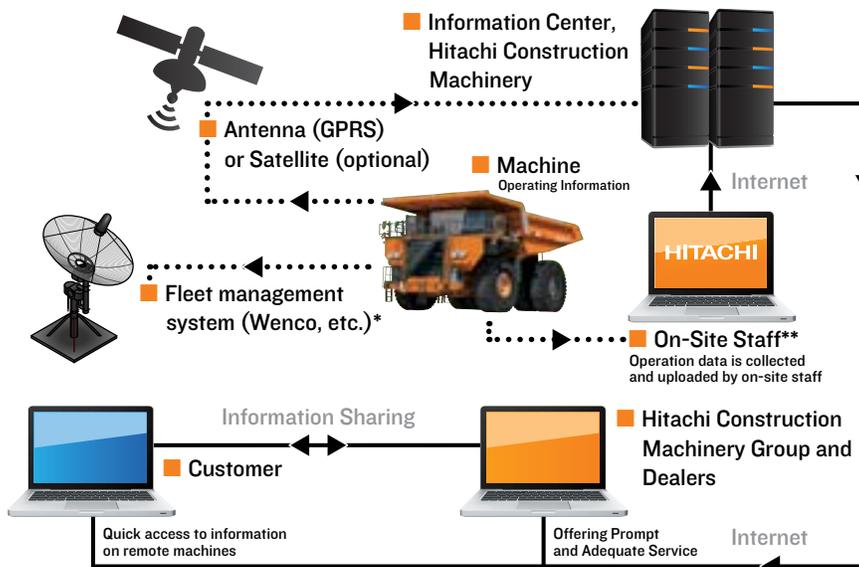
# FOCUSED ON YOU, NO DISTRACTIONS.

## SUPPORTING YOUR BOTTOM LINE.

It can be frustrating when you need service or parts – especially when you can't get them quickly because the manufacturer is distracted dealing with all kinds of other equipment customers.

At Hitachi, we concentrate on excavators and trucks. So you can count on us to respond rapidly. You'll get the parts you need, the service you want and the customer support you deserve. We stand behind you with a strong dealer network; a skilled factory support team; trained mechanics; and one of the best, most comprehensive warranty and maintenance programs available. Because we're focused on you, you get...

## WHAT YOU NEED, WHEN YOU NEED IT.

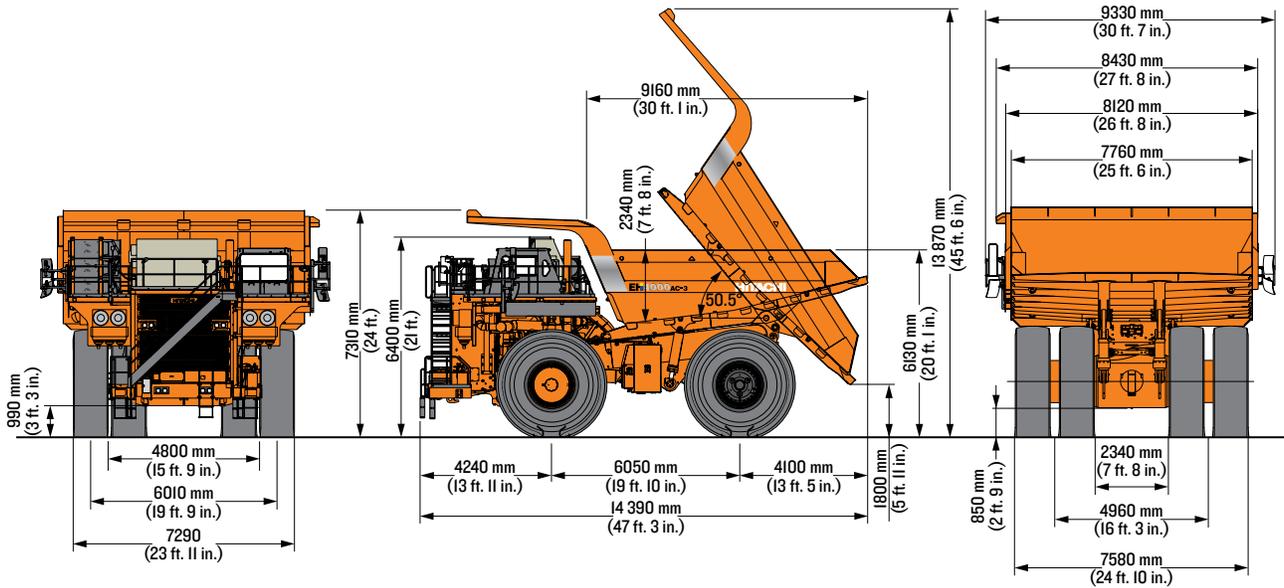


**Remote Machine Management with Global e-Service.**  
This online machine management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers. This system is available 24/7/365.

Note: In some regions, the Satellite Communication Device is not available by local regulations; the GPRS (mobile) communication device is an option for these regions.

\* DTU (Data Transfer Unit) (optional) is required for connection to fleet management systems.

\*\*WIU (Wireless Interface Unit) transmits operating data via wireless connection for downloading data.



### Engine

	Standard	Optional
Model	Cummins QSKTA60-CE	MTU 16V4000 C21*
Emission Certification	U.S. EPA Tier-2	Non-Certified
Configuration	4 Cycle Diesel w/ MCR fuel system	4 Cycle Diesel w/ DDEC
Piston Displacement	60 L (3,661 cu. in.)	65 L (3,967 cu. in.)
Rated Output @ 1900 min <sup>-1</sup> (rpm)		
Gross (SAE J1995)	1864 kW (2,500 hp)	1864 kW (2,500 hp)
Net (SAE J1349)	1771 kW (2,370 hp)	1771 kW (2,370 hp)
Maximum Torque (SAE J1995)	9839 Nm (1004 kgf/m) @ 1,500 min <sup>-1</sup> (rpm)	10 931 Nm (1 115 kgf/m) @ 1,500 min <sup>-1</sup> (rpm)
Aspiration	Turbocharged/Aftercooled	Turbocharged/Aftercooled
Cylinders	16	16
Bore and Stroke	159 mm x 190 mm (6.26 in. x 7.48 in.)	165 mm x 190 mm (6.50 in. x 7.48 in.)
Starting	24-volt electric	24-volt electric

\*Not available in US & Canada. Non-Certified (EPA Emissions) - Fuel optimized version.

### AC-Drive System

#### AC-Control Cabinet

Rectifier	
Number of Units	1
Rated Capacity	1680 kW (2,252 hp)
Inverter	
Number of Units	2
Rated Capacity Per Unit	1000 kVA
Chopper	
Number of Units	2
Rated Capacity Per Unit	1950 kW (2,614 hp)

Equipped with reliable water cooling system. Pressurized cabinet to reduce dust. Equipped with lockable doors for safety. Equipped with small inverters to provide grid motors and blower motors with adequate AC current. Uniquely constructed for the rigid truck application.

#### Alternator

Number of Units	1
Capacity	1900 kVA @ 1,900 min <sup>-1</sup> (rpm)

Equipped with an auxiliary alternator that provides AC current to grid motors, blower motors, control cabinet coolant pump and final drive oil cooling & filtering pump. Air cooled by an AC drive blower.

#### AC-Wheel Motor

Number of units	2
Capacity per unit	765 kW (1,025 hp)
Air cooled by AC-drive blower	

#### Grid Box (Electric Brake)

Number of modules	5
Capacity per unit	625 kW (838 hp) (3 min.)
Equipped with inverter-controlled variable speed cooling fan.	

#### Axle

Planetary Ratio	35.3:1
Maximum Speed (Continuous)	56 km/h (35 mph)

# SPECS

Tires	
Front and Rear (Standard)	<b>Rim Width</b>
46/90R57	736.6 mm (29 in.)
Front and Rear (Optional)	<b>Rim Width</b>
40.00R57	736.6 mm (29 in.)

Tire manufacturers offer tires having a range of capabilities suitable for a variety of applications. For high performance hauling it is important to consult with the tire manufacturer to choose a tire that is best matched to truck TGMOW, travel speed and customer specific jobsite conditions. Jobsite condition severity, may result in a reduced truck payload and travel speed recommendation.

Hydraulic System	
Two (2) Hitachi three-stage, double-acting cylinders, with electronic controlled cushioning in retraction and extension, containing dual rod seals and urethane energized scrapers, inverted and outboard mounted. A tandem piston pump combines with four position electronic pilot controlled hoist valve. The electrical controller is mounted to the shift tower.	
Body Raise Travel	57.5 deg.
Body Raise Time	18 sec.
Body Float Time	13 sec.

Electrical System	
24-volt system. 140 ampere engine driven or Cummins engine driven alternator. Four 245H52, 12-volt, heavy duty batteries connected in series/parallel.	

Steering System	
Closed-center, full-time hydrostatic power steering system using two double-acting cylinders and a variable displacement piston pump. Hitachi accumulators provide supplementary steering in accordance with ISO 5010 (SAE J1511), supplying a constant steering rate under all conditions. A tilt/telescopic steering wheel with 35 degrees of tilt and 57 mm (2.2 in.) telescopic travel is standard.	
Turning Diameter (ISO 7457)	30.2 m (99 ft. 1 in.)

Body Capacities	
Struck (SAE)	106 m <sup>3</sup> (138.6 cu. yd.)
Heap 3:1	138 m <sup>3</sup> (180.5 cu. yd.)
Heap 2:1 (SAE)	154 m <sup>3</sup> (201.4 cu. yd.)
Body capacity and payload subject to change based on customer-specific material density and application.	

Service Capacities	
Crankcase (includes filters): Cummins	260 L (68.6 gal.)
Crankcase (includes filters): MTU	250 L (66.0 gal.)
Engine Cooling System: Cummins	619 L (163.5 gal.)
Engine Cooling System: MTU	710 L (187.5 gal.)
Fuel Tank (Standard)	2680 L (707.9 gal.)
Fuel Tank (Optional)	4620 L (1,220.4 gal.)
Hydraulic System	750 L (198.1 gal.)
Brake cooling system	250 L (66 gal.)
Planetary Drives (L&R)	300 L (79.2 gal.)
Front Wheels (L&R)	34 L (8.9 gal.)
Control Cabinet cooling system	56 L (14.8 gal.)
Main Accumulator	2 x 70 L (2 x 18.5 gal.)
Windshield Washer	20 L (5.2 gal.)

Weights (Approximate)	
Net machine weight stated below includes standard equipment. Net machine weight changes will directly affect the Nominal Payload.	
<b>46/90R57</b>	

Chassis with Hoist	137 000 kg (302,033 lb.)
Body	26 000 kg (57,320 lb.)
Net Machine Weight	163 000 kg (359,353 lb.)

Net Machine Weight includes operator and 100% fuel.  
 Note: Body parts mean assembled standard parts to the body, such as mud guards, body pads, rock ejector bars, arm guard and fasteners.

Nominal Payload	221 tonnes (243.6 tons)
Target GMOW	384 000 kg (846,575 lb.)

Note: The Nominal Payload specification is calculated using the Hitachi Loading Policy. Specific job site requirements may result in an adjustment to the Nominal Payload weight. Consult your Hitachi dealer for a truck configuration which will match your haulage application.

Weight Distribution	Front	Rear
Empty	48%	52%
Loaded	33%	67%

### Brake System

Brake system complies with ISO 3450 (SAE J1473).

#### Service Brake

Service braking for the EH4000AC-3 is made up of front and rear hydraulically applied brakes and the electric brake.

##### Front Axle – Dry Disc

Disc Diameter Each (2 discs/axle, 4 calipers/disc) 121.6 cm (4 ft.)

##### Rear Axle – Oil-cooled Wet Disc

Total Friction Area per Brake 75 760 cm<sup>2</sup> (81 sq. ft.)

#### Secondary

Two of front hydraulic, rear hydraulic and electric brake within the service brake system provide modulated reserve braking capability. Both front and rear hydraulic brakes are automatically applied when loss of pressure is detected.

#### Parking Brake

This system is designed to use spring applied, hydraulically released brake calipers to hold the truck stationary.

#### Electric Brake

The Electric Brake is used for usual operating brake for the EH4000AC-3. The Hitachi AC-Drive system provides all necessary truck speed control, including speed reduction to 0 km/h travel speed when the electric brake pedal is depressed. Also, the rear service brakes automatically apply at speeds below 0.5 km/h if this pedal is depressed.

Maximum dynamic braking (Standard) 3200 kW (4,291 hp)

#### Load/Dump Brake Apply

Through activation of a switch by the operator, a solenoid is energized, sending full brake pressure to apply the rear Wet Disc brakes. For use during the load and dump cycles.

### Hi-Tech ROPS/FOPS Cab

ROPS complies with ISO3471 and SAE J1040-May 94, FOPS complies with ISO3449. A three-point rubber ISO-mount arrangement to the high-arch cross member minimizes vibration transfer to the operator compartment. New wider cab with double, full-size seat available and enough trainer's leg space brings comfortable operating and training.

#### Monitoring System

A new Hitachi system monitor provides display information and diagnostics of all onboard systems and controls which include the engine and Hitachi AC drive. Data links offer complete integration, while a color Liquid Crystal Display (LCD) clearly details machine functions. Downtime is minimized with faster and more reliable troubleshooting and analysis. A new Hitachi load monitoring system offers benefits such as better equipment utilization on the jobsite, accurate unit and fleet production results, and benchmark unit statistics against fleet results. Cycle time, distance and cycle count can all be measured and recorded as information that can help in developing higher productivity. The Hitachi load monitoring system is fully integrated with the Hitachi vehicle monitoring system and display interface, avoiding potential failure or error common in aftermarket systems.



- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Model</li> <li>2. Drive-related warning indicators</li> <li>3. Turn signal indicator</li> <li>4. Engine stop warning indicator</li> <li>5. Central warning indicator</li> <li>6. Tachometer</li> <li>7. Shift lever position indicator</li> <li>8. Hour meter</li> <li>9. Hydraulic related warning indicators</li> <li>10. Light indicators</li> <li>11. Fuel gauge</li> <li>12. Load meter</li> <li>13. Clock</li> <li>14. Wheel motor temperature gauge</li> </ol> | <ol style="list-style-type: none"> <li>15. Coolant temperature gauge</li> <li>16. Engine oil pressure gauge</li> <li>17. Indicate message</li> <li>18. Indicate SAE code</li> <li>19. Indicate HCM code</li> <li>20. Brake /steering hydraulic oil pressure gauge</li> <li>21. Speedometer (with odometer)</li> <li>22. Engine-related warning indicators</li> <li>23. Stop valve warning indicator</li> <li>24. AC drive system maintenance required warning indicator</li> <li>25. Body angle indicator</li> <li>26. Drive control status indicator</li> <li>27. Ambient temperature</li> </ol> |
|---|---|

### Camera Monitoring System

Included as standard safety support equipment, an analog monitor has been mounted to the dashboard to display live camera information of the rear and right front area.

### Suspension

#### Front Suspension

Independent trailing arms make up the front axle. NEOCON struts containing energy-absorbing gas and compressible NEOCON-E™ fluid are mounted between the trailing arms and frame. Inherent in the NEOCON strut design is a variable damping and rebound feature.

#### Rear Suspension

"A" frame structure, integral with axle housing, links the drive axle to the frame at forward center point with pin and spherical bushing. A track rod provides lateral stability between the frame and drive axle. Heavy-duty rear-mounted NEOCON struts containing energy-absorbing gas and compressible NEOCON-E™ fluid suspend the drive axle from the frame. Integral variable damping and rebound feature included.

# SPECS

## Body

An extended canopy protects service deck area. High tensile strength 400 BHN abrasion-resistant alloy steel is used in thicknesses indicated below:

Floor	16 mm (0.63 in.)
Front	9 mm (0.35 in.)
Sides	9 mm (0.35 in.)
Canopy	6 mm (0.24 in.)
Corners	12 mm (0.47 in.)

High strength 690 N/mm<sup>2</sup> (100 000 psi) alloy steel is also used for the canopy side members and floor stiffeners. The body is rubber cushioned on the frame.

### Optional Body Liners

Floor & Corners	12 mm (0.47 in.)
Sides & Front	6 mm (0.24 in.)
Canopy	6 mm (0.24 in.)

Special plate thicknesses and partial plates are available.



## Hitachi Bodies

### Tough Body Structure

Designed by Hitachi for long-lasting strength and productivity. Hitachi offers customized solutions to match specific load and haul applications. Optional bodies and parts are engineered on request.

### Standard Body

The Hitachi standard body is designed to accommodate the needs of popular mid-range material densities and the most popular loading machines. Various options, such as liners, spill guard, extended canopy are available.

### Coal Body (Optional)

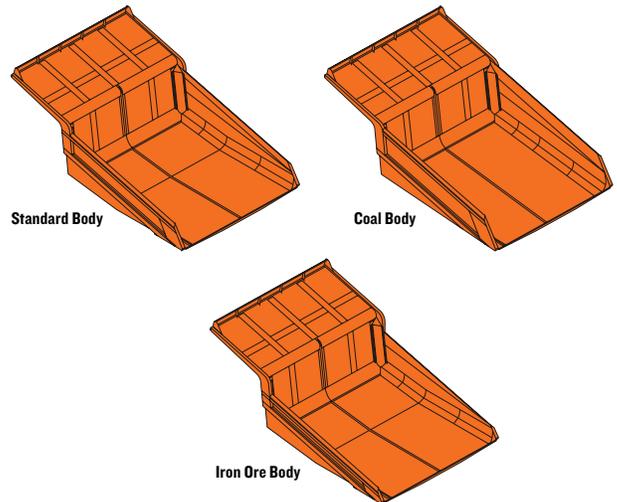
The Hitachi coal body has been designed for low material density, small fragmented, low abrasive material. This coal body offers excellent material shedding, low empty weight and large capacity.

### Iron Ore Body (Optional)

The Hitachi iron ore body has been designed for use in rugged iron ore mining applications. The body has been designed for high density material and optimized loading and dumping.

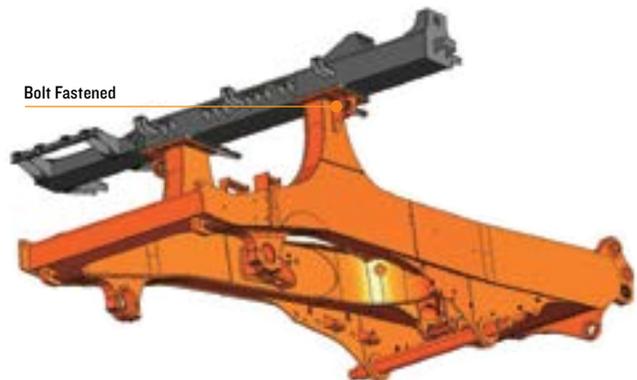
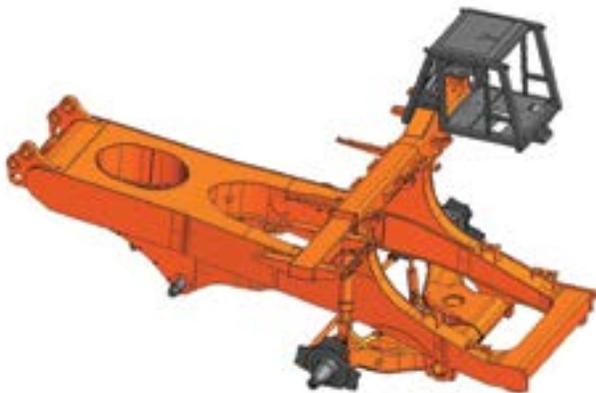
### Customized Body (Optional)

Upon request and approval, Hitachi will design bodies to suit special mining applications.



## Frame

Full fabricated box section main rails with section height tapered from rear to front. Narrow at the rear to support the load and wider at the front allowing truck stability and excellent engine access for servicing. One-piece top and bottom flanges that eliminate cross member tie-in joints and provide a large exposed center area for access to major components. Large radii at frame junctions are blended and ground to minimize stress concentrations. Weld joints are oriented longitudinally to the principal flow of stress for greater durability and more strength. The new "bolt-on" High Arch Design requires less assembling time and no welding. The design provides higher structural quality and better serviceability during engine overhaul.



### Hitachi Loading Policy

#### Operational Benefits

#### Haulroad Safety

Truck loading within the limitations of the Hitachi Loading Policy will result in designed and certified operational performance of the steering, brake and ROPS systems of the truck.\*

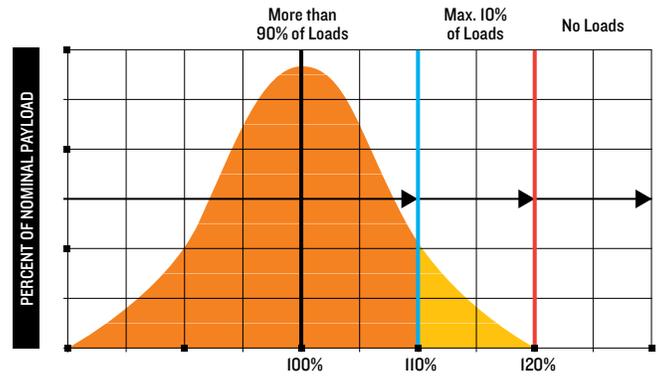
#### Efficient Productivity

Truck loading within the limitations of the Hitachi Loading Policy will result in optimizing the fuel economy and travel speed performance to which the truck was designed to.\*

#### Availability and Maintenance

Lower maintenance costs and higher availability can be achieved if truck loading is within the limitations of the Hitachi Loading Policy.\*

\*Hitachi recommended maintenance is required.



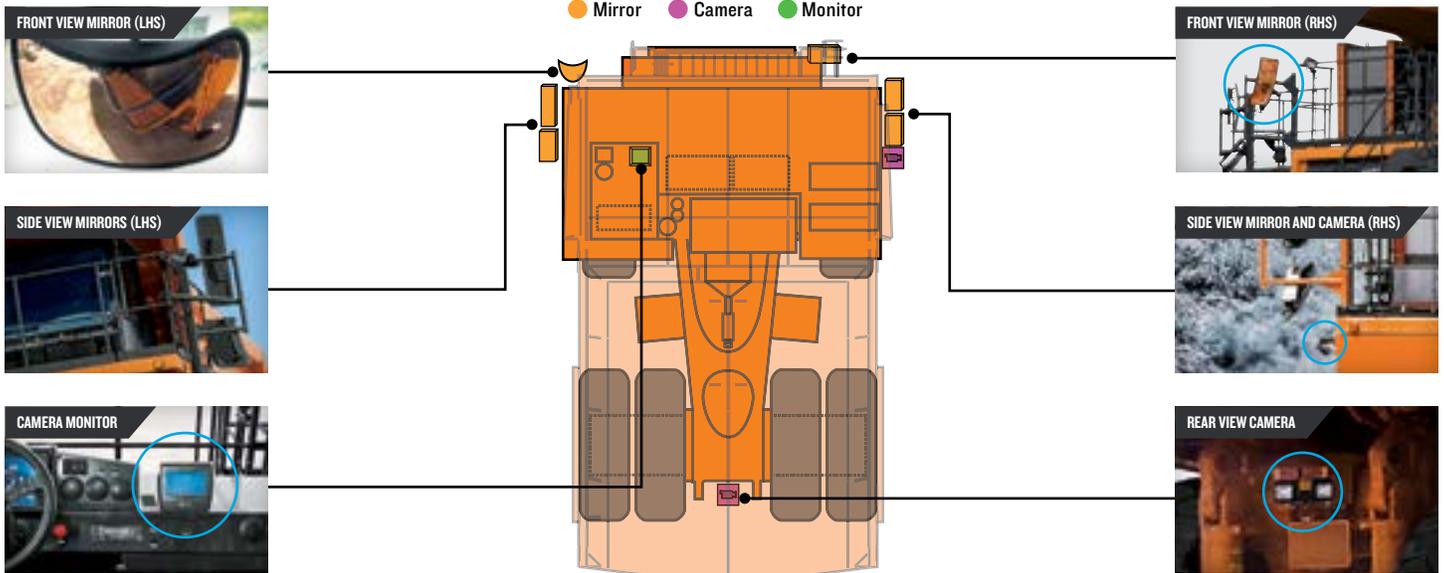
1: More than 90% of all loads must fall below 110% area (Orange area).

2: If necessary due to excessive variation in material density, loader bucket fill-factors or bucket sizes, loading the truck to between 110% and 120% of Nominal Payload is allowed if it accounts for less than 10% of all loads (Yellow area).

3: Loading above 120% of Nominal Payload is not allowed. (Red Area)

### Perimeter Visibility (Standard)

The addition of mirrors and cameras to the base model make the truck compliant to the perimeter viewing requirement of standards ISO 5006 and ISO 14401.



# SPECS

## SkyAngle™

### SkyAngle (Peripheral vision support system)

The SkyAngle feature is available to significantly increase peripheral vision around the dump truck by providing synthesized multiple images captured by cameras specifically positioned at four locations around the truck. The feature displays camera views on a single monitor to allow operators an auxiliary means of checking for ground level obstacles.



Available on neutral or forward only



# ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special kit

General
● AC-drive system
● Auto cruise control
● Auto retarding control
● Automatic lubrication system (Lincoln)
● Battery isolation switch
● Body prop cable
● Control cabinet pressurized/liquid cooled/lockable
● Deck-mounted muffler
● Deck-mounted stone guards
● Diagonal front stairway
● Electric-controlled hoist system
● Electric horns (4)
● Emergency ladder
● Engine access ladders (2)
● Engine shutdown switch
● Beside engine (2)
● Ground level, on bumper (1)
● Inside rear axle (1)
● Fan and belt guards
● Fan clutch
● Fast fluid filling system
● Fast fuel filling system provision
● Final drive lubricant cooling
● Final drive lubricant filtration
● Front view mirror, LHS/RHS
● Fuel/Water separator
● Fuel tank, 2680 L (708 gal.)
● Ground level battery box
● Ground level relay box
● IGBT-controlled blower fan motors (2)
● IGBT-controlled final drive lubricant motor (1)
● IGBT-controlled grid fan motors (5)
● Load weighing system
● Maximum speed control system according to payload
● NEOCON suspension struts
● Rear view camera
● Rear view mirrors (4)
● Rims, 736.6 mm (29 in.)
● Side view camera (RHS)
● Suction port shut-off valve at hydraulic tank
● Supplementary front braking system, accumulators
● Supplementary rear braking system, accumulators
● Supplementary steering system, accumulators
● Tow hooks, front
● Tow lugs, rear

Cab
● Air conditioner
● AM-FM radio
● Auxiliary outlet, 12 volt
● Camera monitor
● Engine shutdown switch
● Heater and defroster
● Integral ROPS/FOPS cab
● LCD system monitor
● Load and dump brake switch
● Override switch
● Communication system (alternative)*
● Satellite data transmitting system
● Seat with 2-point, 50 mm (1.97 in.) width seat belt
● Full size operator's seat, air suspension & 6 position
● Regular size trainer's seat, mechanical & adjustable
● Tinted safety glass, with roll-down windows
● WIU (Wireless Interface Unit) *
● I2-volt accessory connection
Monitor Panel
● AC-drive system maintenance required warning indicator
● Ambient temperature
● Body angle indicator
● Brake/steering hydraulic oil pressure gauge
● Central warning indicator
● Clock
● Coolant temperature gauge
● Drive control status indicator
● Drive-related warning indicators
● Engine oil pressure gauge
● Engine-related warning indicators
● Engine stop warning indicator
● Fuel gauge
● Hour meter
● Hydraulic-related warning indicators
● Indicate HCM code
● Indicate message
● Indicate SAE code
● Light indicators
● Load meter
● Model
● Shift lever position indicator
● SkyAngle (peripheral vision support system)
● Speedometer (with odometer)
● Stop valve warning indicator
● Tachometer
● Turn signal indicator
● Wheel motor temperature gauge

Machine Lights	
● Backup lights (2)	
● Clearance lights (4)	
● Combination stop and tail lights (2)	
● Deck lights (2)	
● Diagonal front stairway light	
● Engine compartment lights (2)	
● HID headlights (8)	
● Payload external indicators, 2 locations of 2 lights each	
● Rear axle compartment light	
Optional Equipment	
▲ Auxiliary dump connection	
▲ Auxiliary steer connection	
▲ Body liners (400BHN)	
▲ Body prop pins	
▲ Body sizes **	
▲ Cold weather package **	
▲ Communication system (alternative)*	
● GPRS communication system	
▲ Fast fluid filling system couplers	
▲ Fast fuel filling system coupler	
▲ Fuel tank, 4620 L (1,220.4 gal.)	
▲ Full size operator's seat, air suspension & 6 position, with 3-point, 50 mm (1.97 in.) width seat belt	
▲ Full size trainer's seat, air suspension & 6 position, with 2-point, 50 mm (1.97 in.) width seat belt	
▲ Gridbox guard **	
▲ Halogen front tire lights (2)	
▲ Heated mirrors	
▲ Loadweight displays (2)	
▲ Sound attenuation package **	
▲ Spare rim	
▲ Tire guards (2)	
▲ Trolley assist configuration **	
Optional Equipment Weight	
▲ Body liners (400BHN) plates including floor & corners (12 mm [0.47 in] thicknesses), sides & front and canopy drop edge (6 mm [0.24 in] thicknesses)	8200 kg (18,077 lb.)
▲ 4620 L (1,220 gal.) fuel tank with 100 % fuel (additional weight to the standard tank with 100 % fuel)	2300 kg (5,070 lb.)
▲ Loadweight displays (2)	150 kg (331 lb.)

See your Hitachi dealer for further information.

\*The availability of the system depends on licensing regulations in each country. Please contact Hitachi dealer for more information. \*\*Engineered on request. Note: Regarding the Cummins engine, fuel optimized ratings available to meet worldwide emissions and enhanced fuel efficiency. Contact your nearest authorized Cummins Distributor for details and availability.

# SHIPPING

## Shipping

	Skid/Case	Description	Net Weight	Gross Weight	Length	Width	Height	Volume
1	Steelskid	Frame	43 100 kg (95,019 lb.)	43 300 kg (95,460 lb.)	11 430 mm (37 ft. 6 in.)	4570 mm (15 ft.)	4020 mm (13 ft. 2 in.)	209.99 m <sup>3</sup> (274.66 cu. yd.)
2	Steelskid	Axle; Front	13 200 kg (29,101 lb.)	14 171 kg (31,242 lb.)	7070 mm (23 ft. 2 in.)	3000 mm (9 ft. 10 in.)	1750 mm (5 ft. 9 in.)	37.12 m <sup>3</sup> (48.55 cu. yd.)
3	Steelskid	Cab	2530 kg (5,578 lb.)	2680 kg (5,908 lb.)	2700 mm (8 ft. 10 in.)	1700 mm (5 ft. 7 in.)	2450 mm (8 ft.)	11.25 m <sup>3</sup> (14.71 cu. yd.)
4	Steelskid	Support; Cab	2410 kg (5,313 lb.)	2495 kg (5,501 lb.)	7130 mm (23 ft. 5 in.)	1890 mm (6 ft. 2 in.)	1200 mm (3 ft. 11 in.)	16.17 m <sup>3</sup> (21.86 cu. yd.)
5	Steelskid	Fender (L) & (R)	613 kg (1,351 lb.)	717 kg (1,581 lb.)	2400 mm (7 ft. 10 in.)	2250 mm (7 ft. 5 in.)	1650 mm (5 ft. 5 in.)	8.91 m <sup>3</sup> (11.65 cu. yd.)
6	Steelskid	Bumper (R)	114 kg (251 lb.)	145 kg (320 lb.)	1120 mm (3 ft. 8 in.)	840 mm (33 in.)	1640 mm (5 ft. 5 in.)	1.54 m <sup>3</sup> (2.01 cu. yd.)
7	Steelskid	Box; Battery	488 kg (1,076 lb.)	531 kg (1,171 lb.)	2500 mm (8 ft. 2 in.)	900 (35 in.)	700 mm (28 in.)	1.58 m <sup>3</sup> (2.07 cu. yd.)
8	Case	Control Cabinet	2400 kg (5,291 lb.)	2868 kg (6,323 lb.)	3080 mm (10 ft. 1 in.)	1580 mm (5 ft. 2 in.)	2480 mm (8 ft. 2 in.)	12.07 m <sup>3</sup> (15.79 cu. yd.)
9	Steelskid	Deck (R1)	300 kg (661 lb.)	366 kg (807 lb.)	2100 mm (6 ft. 11 in.)	2000 mm (6 ft. 7 in.)	1450 mm (4 ft. 9 in.)	6.09 m <sup>3</sup> (7.97 cu. yd.)
10	Steelskid	Deck (R2)	2390 kg (5,269 lb.)	2475 kg (5456 lb.)	2400 mm (7 ft. 10 in.)	2400 mm (7 ft. 10 in.)	2300 mm (7 ft. 7 in.)	13.25 m <sup>3</sup> (17.33 cu. yd.)
11	Steelskid	Deck and Handrails	798 kg (1,759 lb.)	1004 kg (2,213 lb.)	4510 mm (14 ft. 10 in.)	2350 mm (7 ft. 9 in.)	1930 mm (6 ft. 4 in.)	20.46 m <sup>3</sup> (26.76 cu. yd.)
12	Steelskid	Step Assy	261 kg (575 lb.)	313 kg (690 lb.)	5500 mm (18 ft. 1 in.)	970 mm (3 ft. 2 in.)	1370 mm (4 ft. 6 in.)	7.31 m <sup>3</sup> (9.56 cu. yd.)
13	Steelcase	Misc. Parts	1239 kg (2,732 lb.)	1350 kg (2,976 lb.)	2260 mm (7 ft. 5 in.)	1150 mm (3 ft. 9 in.)	1110 mm (3 ft. 8 in.)	2.89 m <sup>3</sup> (3.78 cu. yd.)
14	Steelcase	Clamp (Rear Wheel)	715 kg (1,576 lb.)	755 kg (1,664 lb.)	1150 mm (3 ft. 9 in.)	1130 mm (3 ft. 8 in.)	550 mm (22 in.)	0.72 m <sup>3</sup> (0.94 cu. yd.)
15	Steelcase	Misc. Parts	508 kg (1120 lb.)	600 kg (1,323 lb.)	2260 mm (7 ft. 5 in.)	1150 mm (3 ft. 9 in.)	740 mm (29 in.)	1.92 m <sup>3</sup> (2.51 cu. yd.)
16	Steelskid	Tank; Fuel (Opt)	1270 kg (2,800 lb.)	1340 kg (2,954 lb.)	2250 mm (7 ft. 5 in.)	1650 mm (5 ft. 5 in.)	2500 mm (8 ft. 2 in.)	9.28 m <sup>3</sup> (12.14 cu. yd.)
17	Steelskid	Suspension; Front	1040 kg (2,293 lb.)	1071 kg (2,361 lb.)	2290 mm (7 ft. 6 in.)	770 mm (30 in.)	580 mm (23 in.)	1.02 m <sup>3</sup> (1.33 cu. yd.)
18	Steelskid	Accumulator (1)	525 kg (1157 lb.)	556 kg (1,226 lb.)	3000 mm (9 ft. 10 in.)	370 mm (15 in.)	520 mm (20 in.)	0.58 m <sup>3</sup> (0.76 cu. yd.)
19	Steelcase	Accumulator (2)	181 kg (399 lb.)	271 kg (597 lb.)	2260 mm (7 ft. 5 in.)	1150 mm (3 ft. 9 in.)	740 mm (29 in.)	1.92 m <sup>3</sup> (2.51 cu. yd.)
20	Steelcase	Misc. Parts	226 kg (498 lb.)	336 kg (741 lb.)	2260 mm (7 ft. 5 in.)	1150 mm (3 ft. 9 in.)	1110 mm (3 ft. 8 in.)	2.89 m <sup>3</sup> (3.78 cu. yd.)
21	Steelskid	Muffler	230 kg (507 lb.)	282 kg (622 lb.)	1900 mm (6 ft. 3 in.)	1400 mm (4 ft. 7 in.)	920 mm (3 ft.)	2.45 m <sup>3</sup> (3.20 cu. yd.)
22	Steelskid	Spacer (Rear Wheel)	382 kg (842 lb.)	442 kg (974 lb.)	1360 mm (4 ft. 6 in.)	1360 mm (4 ft. 6 in.)	1180 mm (3 ft. 10 in.)	2.18 m <sup>3</sup> (2.85 cu. yd.)
23	Steelskid	Travel; Device	15 000 kg (33,069 lb.)	15 477 kg (34,120 lb.)	3300 mm (10 ft. 10 in.)	1700 mm (5 ft. 7 in.)	1900 mm (6 ft. 3 in.)	10.66 m <sup>3</sup> (13.94 cu. yd.)
24	Steelskid	Travel; Device	15 000 kg (33,069 lb.)	15 477 kg (34,120 lb.)	3300 mm (10 ft. 10 in.)	1700 mm (5 ft. 7 in.)	1900 mm (6 ft. 3 in.)	10.66 m <sup>3</sup> (13.94 cu. yd.)
25	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
26	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
27	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
28	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
29	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
30	Steelskid	Rim	1290 kg (2,844 lb.)	1455 kg (3,208 lb.)	1800 mm (5 ft. 11 in.)	1800 mm (5 ft. 11 in.)	1370 mm (4 ft. 6 in.)	4.44 m <sup>3</sup> (5.81 cu. yd.)
Body - 2 Piece								
	Steelskid	Body (L)	12 300 kg (27,117 lb.)	12 300 kg (27,117 lb.)	13 090 mm (42 ft. 11 in.)	4100 mm (13 ft. 5 in.)	3803 mm (12 ft. 6 in.)	204.10 m <sup>3</sup> (266.95 cu. yd.)
	Steelskid	Body (R)	12 300 kg (27,117 lb.)	12 300 kg (27,117 lb.)	13 090 mm (42 ft. 11 in.)	4074 mm (13 ft. 4 in.)	3803 mm (12 ft. 6 in.)	202.81 m <sup>3</sup> (265.27 cu. yd.)

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