KOMATSU

930E-5SE Electric drive truck



Gross horsepower 2 611 kW (3,500 HP)

Nominal GVW

521 631 kg (1,150,000 lbs.)

930E-5SE

You need a big truck that's productive, reliable and efficient. We've designed this truck to deliver.







Efficiency





From its high-horsepower diesel engine and electric-drive powertrain to the ergonomically designed operator cab, the 930E-5SE has been engineered for increased productivity, greater reliability, operator efficiency and a reduced carbon footprint. The 930E-5SE offers high performance via a 3,500 HP engine — the highest in-class horsepower on the market, to deliver loaded top speeds of 64 kph (40 mph). At the same time, the electric drive system boosts fuel efficiency.

Horsepower

2 611 kW (3,500 HP) @ 1 800 rpm

Operating weight

521 631 kg (1,150,000 lbs.)

Capacity

320 st (290 mt)

Walk-around

Productivity features

- High-performance Komatsu SSDA18V170 engine gross horsepower 2 611 kW (3,500 HP) fully solid state AC electric drive system
- Traction (spin-slide) control
- · Cruise control
- Komatsu-designed application-specific body
- Tight turning radius 15.8 m (51 ft. 10 in)
- Payload Meter IV
- 4 027 kW (5,400 HP) continuous retarding

Environmentally friendly

- Komatsu SSDA18V170 engine with aftertreatment meets U.S. EPA Tier 4 Final emissions regulations
- Fuel-efficient engine
- Less fluids compared to mechanical drive trucks

Operator environment

- Ergonomically designed spacious cab with excellent visibility
- Fully adjustable driving position settings

- Four post ROPS/FOPS level 2 cab
- User-friendly display with payload information
- Komatsu Hydrair II suspensions designed for optimum ride comfort
- AM/FM/CD/MP3/USB/weather band radio

Ease of maintenance

- Komtrax Plus allows immediate diagnostics of key engine, chassis, and drive system components
- Oil-cooled, wet disc, braking system reduces wear and extends replacement intervals
- Automatic lubrication system
- Eliminator oil filtration system
- Flange-mounted rims with optional Komatsu Smart, speed type rims
- In-tank and Remote fast fuel and DEF fill system

Reliability features

- Frame design optimized for 290 tonne (320 short ton)
- Simple and reliable hydraulic system
- Steering and brake accumulators



Productivity features

The high horsepower you need

You need a truck that isn't going to experience a decrease in power capacity. Komatsu's 3,500 HP engine will operate in most of today's mining applications with consistent, reliable power. Fuel efficiency is maximized due to optimized air handling with two-stage turbocharging. Standard features include:

- A standard pre-lube system designed to reduce start-up wear and increase overhaul life
- Cense onboard monitoring of engine performance for each cylinder
- Eliminator filtration system reduces oil and filter changes by as much as one-third

AC electric drive system

The GTA62 traction alternator coupled with GDY106C wheel motors and Invertex IIe AC control system provides reliable performance and easy maintenance. Invertex IIe offers independent

control of the rear wheel motors, which in turn provides outstanding traction-ability during wet and slippery conditions. This improves tire wear and increases operator confidence.

The air-cooled Insulated Gate Bipolar Transistor (IGBT) inverter system technology provides the highest available reliability. The IGBT inverter is more compact and much simpler than the design of its predecessor, the gate turn-off (GTO) inverter, which improves serviceability and reduces routine maintenance.

Electric dynamic retarder

The 4 027 kW (5,400 HP) retarding system provides state of the art braking capacity for navigating today's mining applications which contain steep continuous descents and sharp switchbacks.

Continuous retarding capacity enhances the productivity of the vehicle's operation, while eliminating the need for excessive mechanical braking effort.



Traction (spin-slide) control

During slippery conditions, the 930E-5SE wheel traction control technology detects and corrects wheel spin or slide events. Traction control operates automatically and independently of the service brakes. During propulsion, wheel slip control reduces non-productive wheel spin in low traction conditions. During retarding, wheel slide control prevents wheel lockup and subsequent sliding.

Cruise control

Cruise control, both in propulsion and retarding, allows the operator to concentrate on steering and situational awareness while maintaining a constant speed. A set speed indicator provides confirmation the truck speed matches the desired speed selected by the operator, with simple automotive style controls.

Komatsu-designed application specific body

Utilizing the required body worksheet (BW) process, Komatsu ensures that each body is designed to meet the requirements for specific applications while carrying its rated payload. Komatsu works with each customer to understand the material properties at a mine site and to identify the appropriate liner package.

Komatsu offers a standard all-welded steel, flat floor body with a full canopy and horizontal bolsters. This body includes a driver-side eyebrow, body up sling and rubber mounts on the frame.

- Standard body SAE heaped 2:1: 202 m³ (264 yd³)
- Standard Komatsu body weight: 36 228 kg (79,869 lbs.)

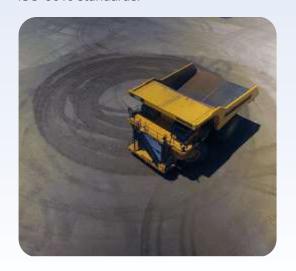


Productivity features



Tight turning radius

By using double acting hydraulic steering cylinders with a six-point articulation linkage, the 930E-5SE power steering system provides positive steering control with minimal operator effort. The ISO 7457 turning circle diameter of the 930E-5SE is 32 m (105 ft.), which provides excellent maneuverability for tight loading and dumping conditions. The steering accumulators comply with ISO-5010 standards.



Payload Meter IV (PLM IV)

PLM IV is an electronic system that monitors and records payload information for Komatsu's off-highway mining trucks. The accurate and reliable payload measurement system is designed to help optimize payload, maximize productivity and reduce the life cycle cost of the machine. PLM IV tracks and records the following key production parameters:

- Payload
- · Empty carry-back
- · Operator identification
- Haul cycle, loading, dumping time and date
- Distance traveled (loaded and empty)
- · Cycle time information
- Maximum speeds (loaded and empty)
- TMPH estimate for front and rear tires
- Average speed (loaded and empty)

Hydrair II hydropneumatic suspension

Hydrair II is a suspension system that utilizes four nitrogen-over-oil cylinders. This suspension system is designed to maximize machine productivity by providing the operator with a smooth and comfortable ride. By absorbing shocks to the chassis during operation,



Hydrair II contributes to the durability of the machine's frame and components.

Operator comfort and efficiency

Operator seat

Komatsu recognizes that operator comfort is a key to productivity in today's mining environment. The five-way adjustable operator seat and the tilt-telescopic steering column provides an optimum driving posture for increased operator comfort and control over the machine. The air suspension seat absorbs vibrations transmitted from the machine, reducing operator fatigue. A 51 mm (2 in) wide, blaze orange, three-point seat belt is provided as standard equipment.

Built-in ROPS and FOPS structure

These structures conform to ISO standards 3471 and 3449.

Ergonomically designed cab

The Komatsu 930E-5SE cab design provides a comfortable and productive environment to meet today's mining demands. The cab includes tinted safety glass windows, heating and air conditioning, acoustical insulation, double sealed doors and filtered, pressurized air to reduce dust.

User-friendly display

The 930E-5SE comes with a new operator-friendly dash configuration which includes lighted gauges, switches and information panel. This allows the operator to see the status of the machine during operation and informs them of any faults. An instructive message will appear after any fault is detected on the machine.



Photo may include optional equipment.

Electrification and sustainability



Evolutionary design

Komatsu's Tier 4 solution begins with a base engine which is very similar to the previous Tier 2 platform. In keeping the basic operation of the engine the same, durability is assured. Utilizing high pressure common rail fuel delivery ensures atomization of the fuel/air mixture to a level which reduces particulate matter, meeting U.S. EPA Tier 4 standards.



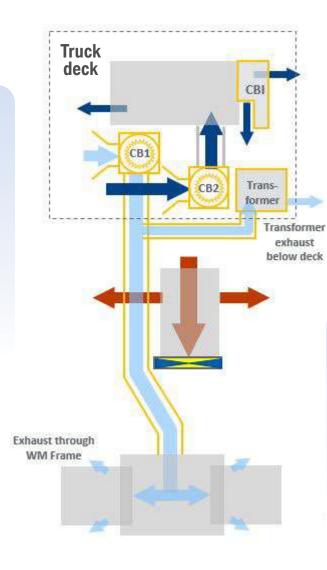
Komatsu aftertreatment

Removal of nitrogen oxides is accomplished by treating the exhaust through selective catalytic reduction (SCR). The introduction of diesel exhaust fluid (DEF) into the SCR canister generates a chemical reaction which breaks down the oxides of nitrogen into oxygen and nitrogen, both non-pollutants. Internal cleaning of the SCR is performed through an automatic process.



On-demand cooling

- Separate cooling circuits for control group and wheel motor systems
- Allows intelligent control of cooling
- Maintain optimal temperatures for each system



Alternator self-cooling only

- Reduced impeller size by 25%
- Reduced cooling housing/impeller
- 227 kg (500 lbs.) weight reduction

Uses wheel motor generator retarding energy for cooling

- Control group
- Wheel motors
- Grid blower

Reliability features

Structurally enhanced frame design

By using advanced computer-aided design, finite element analysis and full-scale dynamic and static

testing, the frame has been designed to carry 290 metric tons (320 short tons) and provides the high structural reliability Komatsu is known for.

Castings in high stress areas

To increase frame reliability, steel castings have been incorporated at key frame pivot points and critical load bearing portions of the structure. This includes the rear body pivot and horsecollar sections.



The hydraulic system is a proven and reliable design with fewer parts than other OEMs. The system utilizes a single tank, providing one common source of fluid for steering, braking and hoisting. In-line replaceable filtration elements provide protection from hydraulic system contamination, making the system easier to service.

To keep downtime to a minimum, Komatsu developed a sub-frame pump module that can be removed and replaced as a single unit. This reduces change-out time and allows easy access to the hydraulic pump module.



Proven wheel motor design

The GDY106C wheel motor builds on the success of its predecessor. Held to the highest standards, the transmission and motor were subjected to extensive testing and quality confirmation. A full scale controlled durability and field test was conducted at Komatsu's proving grounds during development to confirm design quality prior to production. By using planetary design, extensive machining is not required during a standard rebuild.



Fully hydraulic controlled multiple-disc wet brakes

While the dynamic retarding system is the primary braking force, the 930E-5SE comes standard with four-wheel, hydraulically actuated, oil-cooled service brakes. In the event that the truck's hydraulic system pressure drops below an acceptable level, the accumulators will automatically apply all-wheel brakes to bring the truck to a complete stop.

- Max. service apply pressure: 17 237 kPa (2,500 psi)
- Total friction area per brake: 97 025 cm² (15,038 in²)

The oil-cooled brake system provides lower maintenance costs and higher reliability versus dry disc brakes. This system is fully sealed to help keep contaminants out and reduce brake wear and maintenance. The brakes are hydraulically actuated; no pneumatic system is used. There are three independent hydraulic circuits that provide hydraulic backup.

The 930E-5SE stops within the required distance as stipulated by ISO 3450.



Easy maintenance



Access, service and convenience

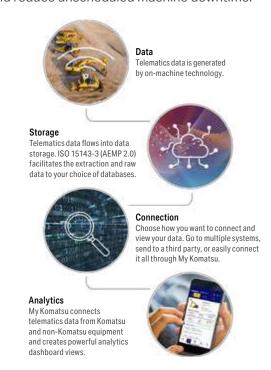
We know you need easy maintenance, so we've centralized many serviceable components near the entry area to the truck. This central location simplifies maintenance events, reducing the time the truck is out of service for routine upkeep.

- Auto-lubrication tank and controls
- Power, starter and drive system lockout (lock-out/tag-out capable switches)
- Emergency engine shutdown
- Fluid service center (coolant, engine oil, hydraulic oil, grease fill)
- Hydraulic step-up/down switch (hydraulic stairs are optional)

Komtrax Plus

As part of a complete service and support program, Komatsu equips every mining and quarry-sized machine with Komtrax Plus. By using a satellite-based communication system, Komtrax Plus offers a new vision of monitoring your valuable assets. By providing insight into critical operating metrics, the user can manage increased availability, lower owning and operating costs, and maximize fuel efficiency.

The information available through Komtrax Plus allows service personnel to review faults and trends, improve the quality of the troubleshooting process and reduce unscheduled machine downtime.



Smart type rim (7-piece type rim components)

Flange type tire rims (optional)

Komatsu Smart rim technology allows easy removal and installation of the tires to minimize the overall impact on downtime.

9 9 9 9 9 9

Item	Qty	Description
1	1	Rim base
2	2	Smart lock ring
3	2	Bead seat band
4	2	Side ring

Efficient and advanced drive system

Drive system (Invertex IIe)

- Cooling blower inverters (CBI)
- True quad chopper eliminates RP contactors
- Only single stack IGBTs
- From 24 to 12 traction IGBTs reduces weight and size
- Meets IP54 for dust and moisture control
- Increased cabinet rigidity
- Reduced rigid multi-axis joints
- Fiber optic cards integrated into backplane
- Front placement of indicator and interface panels
- Front access for maintenance
- All LED lighting

Improved bus bar

- · Close molded design eliminates potting
- · No soldered bushings
- Edge protection
- FR4 and abrasion protection
- Simplified, more robust bus bar design



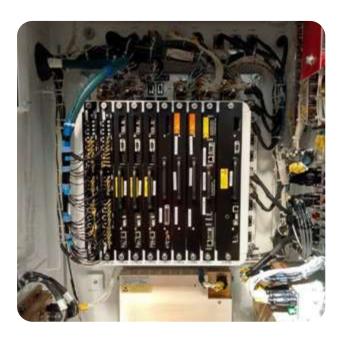
Efficient and advanced drive system

Improved truck performance

- Retains wheel slip/slide control in all modes of operation
- Cruise control (both motoring and retarding)
- Fuel saver 2 built-in

Technology advancements

- Supports data collection and transmission for remote monitoring
- New generation technology for faster processing with higher capacity (90% faster data transfer)
- Common CAN network consists of engine, truck and drive system
- · Supports CAN, ethernet and USB



VID display

- Replaces DID panel
- In-cab touch screen display for setup, maintenance and troubleshooting
- Access, download and update system from the operators cab
- Entry to control cabinet no longer required for basic troubleshooting



WebPTU

- · Replaces wPTU
- Primary maintenance and troubleshooting tool for all future systems
- Browser-based access and visualization of truck system data
- Eliminates dependency on legacy PCs and operating systems
- Accessible in operators cab via Ethernet



Additional features

Environmentally friendly

Fewer fluids than mechanical drives

Komatsu electric drive trucks contain 57% less hydraulic fluid compared to similar class mechanical drive trucks, creating a lower environmental impact and makes fluid replacement simpler, quicker and more economical.

U.S. EPA compliant

The Komatsu SSDA18V170 engine is compliant with the U.S. EPA Tier 4 emissions regulations.

Reduced fuel consumption

The engine and drive system are specifically tuned together, providing efficient power usage and minimizing fuel consumption.

Komatsu loading policy

In normal loading operations, variations in payloads occur. The loading policy identifies the guidelines and limitations for the loading of those Komatsu mining truck models specified.

Definitions:

- Rated gross vehicle weight (GVW) includes the chassis, body, tires, accessories (including local options), lube, fuel, operator, payload and any excess material buildup
- Rated payload is the resultant difference of rated GVW minus the empty vehicle weight (EVW)
- Overload refers to any payload amount above the rated payload
- Never to exceed GVW is the maximum allowable GVW under the guidelines of this policy

Actual payloads greater than the rated payload are allowable, but shall not result in a GVW that is greater than the "never to exceed" GVW.

No single payload that results in a GVW more than the "never to exceed" GVW is allowed under any circumstances.

The mean of all payloads for a rolling 30-day period shall not exceed the rated payload.

Truck model	930E-5SE		
Specification	kg	lbs.	
Rated GVW	521 640	1,150,000	
Standard tire size	53/8	0R63	
Rated / nominal payload	290 299	640,000	
Never to exceed GVW	579 688	1,278,000	

930E-5SE

Engine

Make and model	Komatsu SSDA18V170
Fuel	Diesel
Number of cylinders	18
Operating cycle	4 cycle
Gross horsepower*	2 611 kW (3,500 HP) @ 1,800 rpm
Net flywheel power**	2460 kW (3,346 HP) @ 1,800 rpm
Weight (wet)	11747 kg (25,897 lbs.)
Weight (dry)	11247 kg (24,798 lbs.)

^{*}Optional Tier 4 emissions compliant engine for North American market. Non-emissionized engine for markets outside of North America.

Electric drive

AC/DC current	
Alternator	GTA-62
Single impeller in-line blower	127.4 m3/min (4,500 cfm)
Control	AC torque control system
Motorized wheels*	GDY106-C
Ratio	32.62:1
Speed (maximum)	64.5 km/h (40 mph)

^{*} Drive system performance depends upon gross vehicle weight, haul road grade, haul road length, rolling resistance and other parameters. Komatsu must analyze each job condition to assure proper application.

Tires and rims

Rock service, tubeless, radial tires Standard tire*	53/80 R63
Flange mount, five-piece rim 914 mm x 1600 mm x 127 mm (36" x 63" x 5") rim assembly Rims rated at 758 kPa (110 psi) cold inflation pressure	
Typical tire weight	26 127 kg (57,000 lbs.)

^{*}Tires should meet application requirements for tkph/tmph, tread, compound, inflation pressure, ply rating or equivalent, etc.
* Tires sold separately.

Cab

Advanced operator environment with integral 4-post ROPS/FOPS level 2 structure (ISO 3449), adjustable air suspension seat with lumbar support $\,$ and arm rests, full-size passenger seat, maximum R-value insulation, tilt and telescoping steering column, electric windshield wipers with washer, tinted safety glass, power windows, payload meter IV, 55,000 Btu/hr heater and defroster, 21,600 Btu/hr air conditioning (HFC-134A refrigerant).

Suspension

Variable rate hydropneumatic with integral rebou	nd control
Maximum front stroke	328 mm (12.92")
Maximum rear stroke	239 mm (9.40")
Maximum rear axle oscillation	±6.5°

Frame

Advanced technology, full butt-welded box sectional ladder-type frame
with integral ROPS supports, integral front bumper, rear tubular cross
members, steel castings at all critical stress transition zones, rugged
continuous horsecollar.

Plate material	482.6 MPa (70,000 psi) tensile strength steel
Casting material	620.5 MPa (90,000 psi) tensile strength steel
Rail width	305 mm (12")
Rail depth (minimum)	864 mm (34")
Top and bottom plate thickness	45 mm (1.77")
Side plate thickness	25 mm (0.98") rear / 32mm (1.26") front
Drive axle mounting	Pin and spherical bushing
Drive axle alignment	Swing link between frame and axle

Body

All-welded steel flat floor body with horizontal bolsters and full canopy. Rubber mounts on frame, eyebrow and body up sling are standard. Extended canopy and pivot exhaust heating are optional.

Floor sheet	16 mm (0.63") outer/19 mm (0.75") center 1 379 MPa (200,000 psi) tensile strength steel
Front sheet	10 mm (0.39") outer/12 mm (0.47") center 1 379 MPa (200,000 psi) tensile strength steel
Side sheet	8 mm (0.39") 1379 MPa 1 379 MPa (200,000 psi) tensile strength steel
Canopy sheet	6 mm (0.24") 690 MPa 690 MPa (100,000 psi) tensile strength steel
SAE heaped 2:1	202 m³ (264 yd³)
Standard Komatsu body weight	36 228 kg (79,869 lbs.)

Braking system

Service brakes	Oil-cooled, hydraulic actuated, multiple disc brakes at each wheel
Traction system	Wheel spin-slide control
Max. service apply pressure	17 236 kPa (2,500 psi)
Total friction area per brake	97 025 cm² (15,038 in²)
Auto apply system	Automatically applied prior to hydraulic system pressure dropping below level required secondary stopping requirements
Secondary brake system	Complies with ISO-3450 standards
Wheel brake lock	Switch-activated
Parking brakes	Multiple disc, spring-applied, hydraulically released, dry brakes on inboard end of each wheel motor rotor shaft. Rated to hold on ±15% grade at maximum gross vehicle weight
Electric dynamic retarder	4 026 kW (5,400 HP)

Cooling system

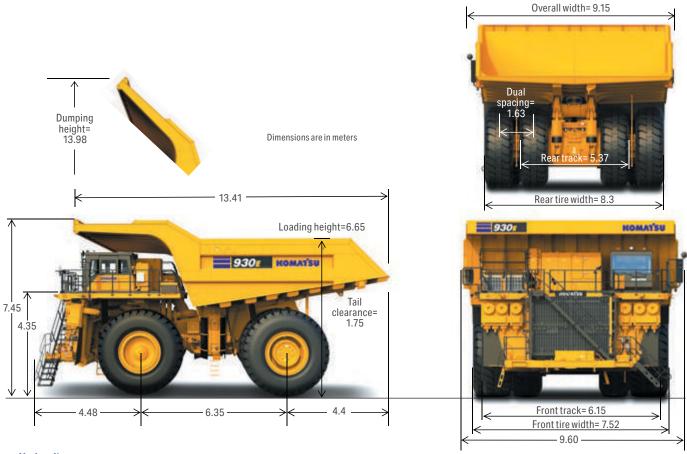
L&M radiator assembly, split-flow, with deaerator-type top	tank.
Radiator frontal area	7.02 m ² (75.5 ft. ²)

Non-emissionized engine for markets outside of North America.

*Gross horsepower is the output of the engine as installed in this machine, at governed rpm and with engine manufacturer's approved fuel setting. Accessory losses included are water pump, fuel pump and oil pump.

**Net flywheel power is the rated power at the engine flywheel minus the average accessory losses. Accessories include fan and charging alternator. Rating(s) represent net engine performance in accordance with SAE J1349 conditions.

General specifications



Hydraulic system

nyaraulic system	
Steering	Accumulator assisted with twin double acting cylinders provide constant rate steering; secondary steering automatically supplied by accumulator
Turning circle diameter (SAE)	32 m (105')
Reservoir	947 L (250 US gal)
Filtration Suction Hoist and steering	In-line replaceable elements Single, full flow, 100 mesh Dual, in-line, high pressure
Brake component cabinet	Above deck, easily accessible with diagnostic test connections
Hoist	Two 3-stage dual-acting outboard cylinders, internal cushion valve, over-center dampening
Hoist times Power-up loaded Power-down (high idle) Float-down empty (low idle)	21 s 12 s 18 s
Pumps	Two pumps, single package, in-line
Hoist and brake cooling	Tandem gear pump with output of 908 lpm (240 gpm) at 1,800 rpm
Steering and brake	Variable displacement piston pump with output of 242 lpm (64 gpm) at 1,800 rpm
System relief pressures Hoist and brake cooling Steering and brake	17 237 kPa (2,750 psi) 27 579 kPa (4,000 psi)

Ports available for powering disabled truck and for system diagnostics

Body	Capacity		Loading
bouy	Struck	2:1 Heap	height*
Standard	151 m ³ (197 yd ³)	202 m ³ (264 yd ³)	6.65 m (21'10")

^{*}Exact load height may vary due to tire make, type, and inflation pressure.

Electrical system

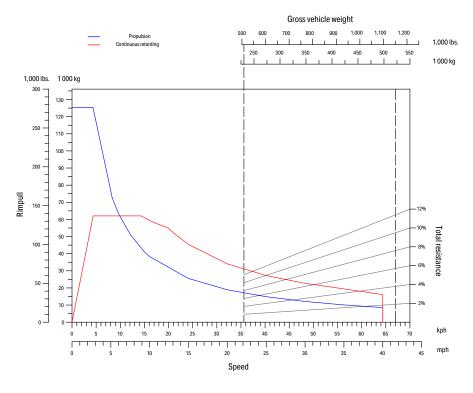
4 x 8D 1450 CCA, 12 volt, in series/parallel, 220 ampere-ho bumper-mounted with disconnect switch and lock-out.	ur,
Alternator	24 V, 275 A
Lighting	24 V
Cranking motors	2 x 24 V

Service refill capacities

Cooling system	568 L (150 gal)
Crankcase	363 L (95.8 gal)
Hydraulic system	1325 L (350 gal)
Motor gear box (each)	57 L (15 gal)
Fuel tank (non-emissionized)	5 299 L (1,400 gal)
Fuel tank (tier IV)	4 542 L (1,200 gal)
DEF tank	288 L (84 gal)

Truck performance graph

930E-5SE Performance 3,500 HP-53/80 R63 Tires



Front axle distribution (48%)	107 912 kg	237,905 lbs.
Rear axle distribution (52%)	116 904 kg	257,730 lbs.
Total EVW	224 816 kg	495,635 lbs.
Optional Allowance	5 748 kg	12,673 lbs.
Gross vehicle weight		
Front axle distribution (33%)	172 141 kg	379,500 lbs.
Rear axle distribution (67%)	349 499 kg	770,500 lbs.
Nominal GVW	521 640 kg	1,150,000 lbs.
Payload		
Nominal payload	290 tonne	320 Short tons
	290 000 kg	640,000 lbs.

Standard equipment

- Air cleaners, Donaldson SSG with auto evacuators Alternator (charging 24 V x 275 A) Automatic lubrication system with ground-level fill, level indicator and dynamic timing
- Backup alarm

- Backup alarm
 Batteries 4 x BD (1,450 CCAs)
 Battery charging/jump start connector
 Body over center device
 Body-up sling (with KAC-supplied body)
 Brakes: oil-cooled, multiple disc (front and rear)

- Electric start
 Eliminator, Cense
 Fast-fill fuel system (in tank and left side remote)
- Filters, high pressure hydraulic Ground-level radiator fill

- Mirrors:
 LH: Flat with convex aux mirror
- RH: Heated, multi-cambered convex Mud flaps

- Mud riaps
 Muffled exhaust deck-mounted
 Power supply, 24 V and 12 VDC
 Quick disconnects (steering, hoist and diagnostics)
 Retard speed control with set indicator

- Radiator sight gauge Removable power module unit (radiator, engine, alternator)

- Reverse retarding
 Service center LH
 Electronically controlled viscous fan clutch

Operator environment and control

- All hydraulic service brakes with auto apply
- Battery disconnect switch Brake lock and drive system interlock Circuit breakers, 24 V

- Diagonal staircase across grille
 Dynamic retarding with continuous-rated element grids
 Engine shutdown at ground level
 Hoist propulsion interlock
 Horns (electric-front)

- Integral ROPS/FOPS cab level 2
- Maintenance and power lockout
 Parking brakes with warning light and speed application protection
 Power steering with auto secondary steering
 Protective deck handrails
 Pump driveline protector

- Radiator fan guard
- Seat belts
- Operator 3-point 51 mm (2") retractable
- Passenger lap 51 mm (2") retractable
- Slip-resistant walkways

Lighting

- Backup lights rear-mount (2) LED
 Backup lights R and L deck mount (2) halogen
 Brake and retard lights on top of cab
 Clearance lights (LED)
 Dynamic retarding, rear (2) (LED)
 Excitate Secretary and the lights

- Engine compartment service lights Fog lights (2) halogen
- Headlights (8) halogen
- Headingnis (8) halogen Manual backup light, switch and indicator Payload lights R and L (LED) Stairway lights Stop and tail lights (2) (LED) Turn signals (LED)

Standard high visibility deluxe cab

- AC drive interface display Air conditioner HFC-134A AM/FM radio with CD, USB and MP3
- Dome light

- Dome light
 Electronic dash panel
 Body up
 Engine oil temperature (high)
 Parking brake
 Propulsion system not ready
 No DC link voltage
 No propul

 - No propel
 Service brake applied
 Wheel brake lock applied
 Maintenance monitor
- Engine hour meter, oil pressure gauge, coolant temperature gauge, hydraulic oil temperature gauge Engine shutdown with Smart timer delay
- Floor mat (double barrier)
- Fuel gauge in cab Fuel low level light and buzzer

- Gauges (with backlight)
 Headlight switch
 Heater and defroster (heavy-duty)

- Heater switch
 High beam selector and indicator
 Horn switch (center of steering wheel)
- · Indicator lights (blue)

 - Engine service Komtrax Plus Snapshot (IM)
- Komatsu Payload Meter IV (PLM IV) Komtrax Plus
- Operator seat, adjustable with air suspension, lumbar support and arm rests
- Panel lighting (adjustable)
 Passenger seat, mechanical suspension
 Power windows
- Pressurized cab air system with fan on Single brake/retarder pedal
- Sunvisor (adjustable)
- Tilt and telescoping steering column Voltmeter (battery output) Windshield (tinted safety glass)

- · Windshield wiper (dual) and washer (electric)

Optional equipment

Note: Optional equipment may change operating weight.

- · Amber beacon light
- Application-specific body structure Body liners
- Body-up sling
- Bumper access hydraulic retractable steps Bumper-mounted headlights
- Double wall exhaust tubes
- Engine access platform, LH Extended canopy
- Eyebrow

- Eyebrow Fire extinguisher 9 kg (20 lbs.) Heated body Hot start engine oil (220 V, 2-500 W) Hot start hydraulic oil Hot start engine coolant (220 V, 2-500 W)

- Hubodometer
 Komatsu Smart type rims
 KomVision all-around monitoring system
- LED headlights
 Mufflers between frame rails (standard tier IV)
 PLM IV scoreboards
- Premium operator seat Reversed access ladder
- Rock ejectors
- Service center, RH Shutters (radiator)
- Spare rim Spare Smart rim
- Special language decals Suspensions (cold weather)

Product designs, specifications and/or data in this document are provided for information purposes only and are not warranties of any kind. Product designs and/ or specifications may be changed at any time without notice. The only warranties that apply to sales of products and services are Komatsu's standard written warranties, which will be furnished upon request.

Komatsu and other trademarks and service marks used herein are the property of Komatsu Ltd. Or its subsidiaries, or the respective owners or licensees.



komatsu.com









