

KOMATSU®

930E-3SE

MAXIMUM GVW
504400 kg **1,112,000 lb**

GROSS HORSEPOWER
2611 kW **3,500 HP**



Photo may include optional equipment.

ELECTRIC DRIVE TRUCK

930E-3SE ELECTRIC DRIVE TRUCK

SPECIFICATIONS



ENGINE

Make and model Komatsu SSDA18V170
 Fuel Diesel
 Number of cylinders 18
 Operating cycle 4 cycle
 *Rated brake power 2611 kW **3,500 HP** @ 1900 rpm
 Flywheel power 2558 kW **3,429 HP @ 1900 rpm
 Weight (wet) 10,000 kg **22,266 lb**

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



ELECTRIC DRIVE

AC CURRENT
 Alternator GTA-39
 Dual impeller in-line blower 453 m³/min **16,000 cfm**
 Control AC Torque Control System
 *Motorized wheels GDY106 AC Induction Traction Motors
 *Ratio 32.62:1
 Speed (maximum) 64.5 km/h **40 mph**

*Wheel motor application depends upon gross vehicle weight, haul road grade, haul road length, rolling resistance and other parameters. Komatsu and G.E. must analyze each job condition to assure proper application.
 *Optional ratios available.



TIRES AND RIMS

Rock service, tubeless, radial tires
 *Standard tire 53/80 R63
 Taper Lock
 914 mm x 1600 mm x 127 mm **36" x 63" x 5.0"** rim assembly
 Rated at 758 kPa **110 psi** cold inflation pressure for rims, 87 psi
600 kPa for tires.

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



BODY

All-welded steel flat floor body with horizontal bolsters and full canopy. Eyebrow, rear wheel rock ejectors, body up sling, and rubber mounts on frame are standard. Pivot exhaust heating optional.

Floor sheet 16 mm **0.63"** 1379 mPa **200,000 psi**
 tensile strength steel (two-piece)
 Front sheet 9 mm **0.35"** 1379 mPa **200,000 psi**
 tensile strength steel
 Side sheet 8 mm **0.31"** 1379 mPa **200,000 psi**
 tensile strength steel
 Canopy sheet 5 mm **0.19"** 690 mPa **100,000 psi**
 tensile strength steel
 Standard SAE heaped 2:1 211 m³ **276 yd³**
 Standard Komatsu body weight 30362 kg **66,936 lb**

*Komatsu must approve all bodies through a Body Application Worksheet.



CAB

Advanced Operator Environment with integral 4-post ROPS/FOPS structure (meets J1040 Apr88), adjustable air suspension seat w/lumbar support and arm rests, passenger seat, maximum R-value insulation, tilt and telescoping steering wheel, electric windshield wipers w/washer, tinted safety glass, power windows, Komatsu Payload Weighing System, 55,000 Btu/hr heater and defroster, 21,600 Btu/hr air conditioning (HFC - 134A refrigerant).



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"**
 Drive axle mounting Pin and spherical bushing
 Drive axle alignment Swing link between frame and axle



BRAKING SYSTEM

Service brakes: oil-cooled, hydraulic-actuated, multiple disc brakes at each wheel. Traction system wheel slip/slide control.

Max. service apply pressure 17237 kPa **2500 psi**
 Total friction area per brake 97025 cm² **15,038 in²**
 Emergency brakes Automatically applied prior
 to hydraulic system pressure dropping below level
 required to meet secondary stopping requirements.
 Wheel brake locks 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 @ maximum gross vehicle weight.
 Electric dynamic retarder Max 4026 kW **5400 hp**
 Continuous 2909 kW **3900 hp**
 Continuously rated high-density blown grids w/retard at engine idle
 and retard in reverse propulsion.



SUSPENSION

Variable rate hydro-pneumatic with integral rebound control
 Max. front stroke 328 mm **12.92"**
 Max. rear stroke 239 mm **9.40"**
 Max. rear axle oscillation ±6.5°

*Rear suspensions are inverted.



COOLING SYSTEM

L&M radiator assembly, split-flow, with deaeration-type top tank.



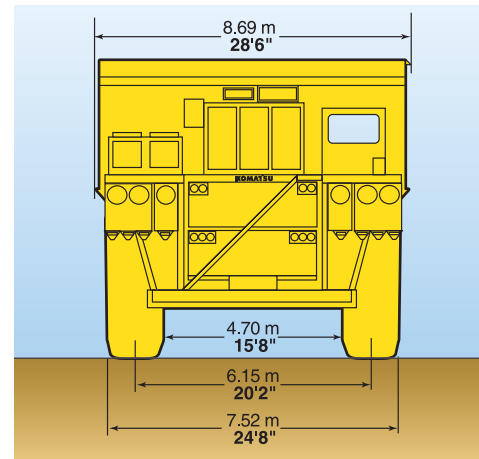
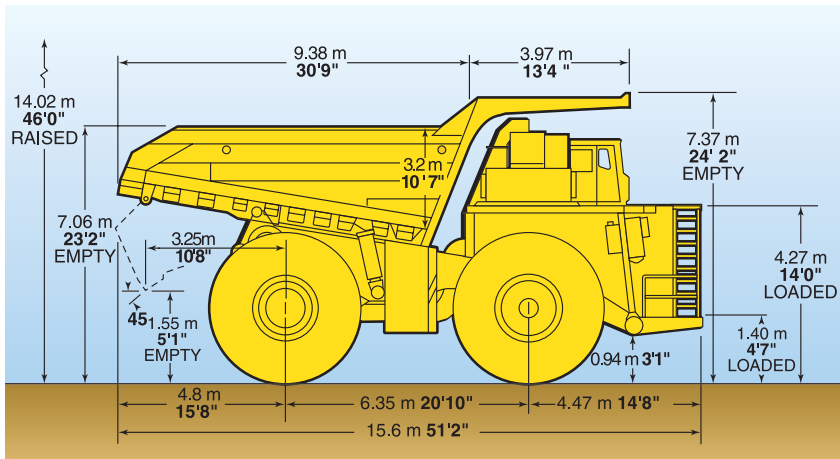
SERVICE CAPACITIES

Cooling System 719 L **190 U.S. gal**
 Crankcase* 341 L **90 U.S. gal**
 Hydraulic system 1325 L **350 U.S. gal**
 Motor gear box (each) 95 L **25 U.S. gal**
 Fuel 4542 L **1200 U.S. gal**

*Includes lube oil filters



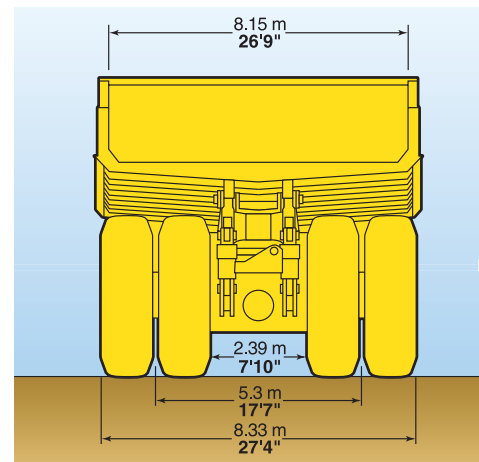
DIMENSIONS



All dimensions are with 218 m³ 285 yd³ body (optional body).

Bodies	Struck	2:1 Heap	*Loading Height
Standard	171 m ³ 224 yd ³	211 m ³ 276 yd ³	7.06 m 23'2"

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



HYDRAULIC SYSTEM

Steering Accumulator assisted with twin double acting cylinders provide constant rate steering. Emergency steering automatically supplied by accumulator.

Turning circle diameter (SAE) 29.7 m 97'7"

Reservoir 947 L 250 U.S. gal

Filtration In-line replaceable elements

Suction Single, full flow, 100 mesh

Hoist and steering 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 21 sec

Power-down 23 sec

Float-down empty 24 sec

Pumps Two pumps, single package, end of alternator

Hoist and brake cooling Tandem gear pump with output of 1022 lpm **270 gpm** at 1900 rpm and 17237 kPa **2,500 psi**

Steering and brake Pressure-compensating axial piston pump with output of 246 lpm **65 gpm** at 1900 rpm and 18961 kPa **2,750 psi**

System relief pressures

Hoist and brake cooling 17237 kPa **2,500 psi**

Steering and brake 27579 kPa **4,000 psi**

Quick disconnects standard for systems diagnostics and buddy dump.



ELECTRICAL SYSTEM

4 x 8D and 2 x 30H
 220-ampere-hour batteries, bumper-mounted with disconnect switch.

Alternator 24 volt, 260 amp

Lighting 24 volt

Cranking motor two/24 volt



WEIGHT DISTRIBUTION

Empty Vehicle	kg	lb	%
Front axle	106284	234,314	49.9
Rear axle	106710	235,253	50.1
Total (wet, 50% fuel)	212994	469,567	
Loaded Vehicle at maximum GVW rating			
Front axle	166143	366,280	32.9
Rear axle	338257	745,720	67.1
Total	504400	1,112,000	

NOTE: GVW shall not exceed 504,400 kg **1,112,000 lb** including options, liners, fuel and payload, subject to application approval by Komatsu.

NOTE: Komatsu trucks comply with SAE specifications for cab noise, ROPS, steering and braking. Cover photos and illustrations may show optional equipment. Materials and specifications subject to change without notice.



STANDARD EQUIPMENT

- Air cleaners, Donaldson SRG
- Alternator (24 volt/260A)
- Auto lubrication system (Lincoln) w/ground level fill & level indicator
- Batteries—4 x 8D and 2 x 30H (1450 CCA's)
- Battery charging cable and socket
- Body over center device
- Brakes: oil-cooled, multiple disc front & rear
- Circuit breakers, 24 volt
- Control cabinet
- Electric start
- Eliminator system for engine lubrication
- Filters, high pressure hydraulic
- Gate valves on hydraulic tank
- Ground level radiator fill
- Komatsu Payload Weighing System—PLM-III
- Mirrors, LH flat and RH rectangular convex
- Mud flaps
- Muffled exhaust—deck-mounted
- Power supply, 24 volt and 12 volt DC
- Quick disconnects (hoist and diagnostics)
- Radiator sight gauge
- Removable power module unit (radiator, engine, alternator, blower)
- Retard speed control
- Reverse retarding
- Rock ejectors
- Thermostatic Fan Clutch
- Wiggins Fast-Fill Fuel System (in tank and left side remote)
- Service Center—LH
- Body Impact Plate

SAFETY:

- All hydraulic service brakes with emergency auto apply
- Battery disconnect switch
- Body up sling
- Brake lock and drive system interlock
- Circuit breakers, 24 volt
- Diagonal staircase across grill, R to L
- Dynamic retarding with continuous rated element grids
- Engine shutdown at ground level
- Hoist propulsion interlock
- Horns (electric—front and back-up)

- Integral ROPS/FOPS Cab
- Maintenance and power lockout
- Parking brakes with warning light & speed application protection
- Power steering w/auto emergency steering
- Protective deck handrails
- Pump driveline protector
- Radiator fan guard
- Seat belts 76 mm 3" retractable
- Skid-resistant coating on walkways

STANDARD HIGH VISIBILITY DELUXE CAB:

- AC Drive Interface Display
- Air cleaner vacuum gauges
- Air conditioner HFC-134A
- Alarm System warning lights (red)
 - Accumulator pre-charge
 - Brake/hydraulic oil temperature w/alarm
 - Coolant low level w/alarm
 - Drive system temperature w/alarm
 - Electric system fault w/alarm
 - Hydraulic oil level w/alarm
 - Low engine oil pressure w/alarm
 - Low brake pressure w/alarm
 - No propel/retard power w/alarm
 - Stop engine no propel w/alarm
 - Steering pressure w/alarm
- AM/FM radio cassette, XM capable
- Column-mounted retarder control
- Digital tachometer and speedometer
- Dome light
- Engine hourmeter, oil pressure gauge, coolant temperature gauge, hydraulic oil temperature gauge
- Engine shutdown w/5 minute delay timer
- Floor mat (double barrier)
- Fuel gauge in cab and on tank
- Fuel low level light and buzzer
- Gauges (w/backlight)
- Headlight switch
- Heater and defroster (heavy-duty)
- Heater switch
- High beam selector and indicator
- Horn (center of steering wheel)
- Indicator lights (amber):
 - 5-minute shutdown time
 - Check engine w/alarm
 - Circuit breaker tripped

- Coolant high temperature w/alarm
- Drive system reset switch
- Drive system temperature w/alarm
- Dump body up
- Dynamic retarding
- Lincoln Lube
- Low Fuel
- Manual back-up lights
- Park brakes applied
- Propel system not ready
- Reduced propel system mode
- Retard at continuous level
- Retard speed control
- Service brakes
- Starter circuit
- Insulation (Max R-Value)
- Operator seat, adjustable w/air suspension, lumbar support and arm rests
- Panel lighting (adjustable)
- Passenger seat
- Power windows
- Pressurized cab air system w/fan on
- Single brake/retarder pedal
- Starter key switch
- Sunvisor (adjustable)
- Tilt & telescoping steering wheel
- Voltmeter (battery output)
- Windshield (tinted safety plate)
- Windshield wiper (dual) and washer (electric)

LIGHTING:

- Back-up lights—rear mount (2) halogen
- Back-up lights—R and L - deck mount (2) halogen
- Brake and retard lights on top of cab
- Clearance lights
- Control cabinet service light
- Dynamic retarding, rear (2) halogen
- Engine compartment service lights
- Fog lights (2) halogen
- Headlights (8) halogen
- Stairway lights
- Manual back-up light, switch and indicator
- Payload lights R and L
- Platform lights R, L and Center
- Stop & tail lights (2) halogen
- Turn signals halogen
- Under-hood service lights



OPTIONAL EQUIPMENT

(Optional equipment may change operating weight).

- Air filter evacuators
- Body Liners*
- Fire extinguisher 9 kg **20 lb**
- Heated Body
- Hot start engine coolant (220V 2-2500W)
- Hot start engine oil (220V 2-600W)
- Hubodometer (miles or kilometers)
- Modular Mining Systems (MMS) ready
- Mufflers between frame rails
- Service Center—RH
- Special language decals
- Suspensions, cold weather

*Available factory installed or non-installed. All other options and accessories listed are available factory installed only.

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