

# EH750-3 SPECIFICATIONS

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Truck  
EH750-3

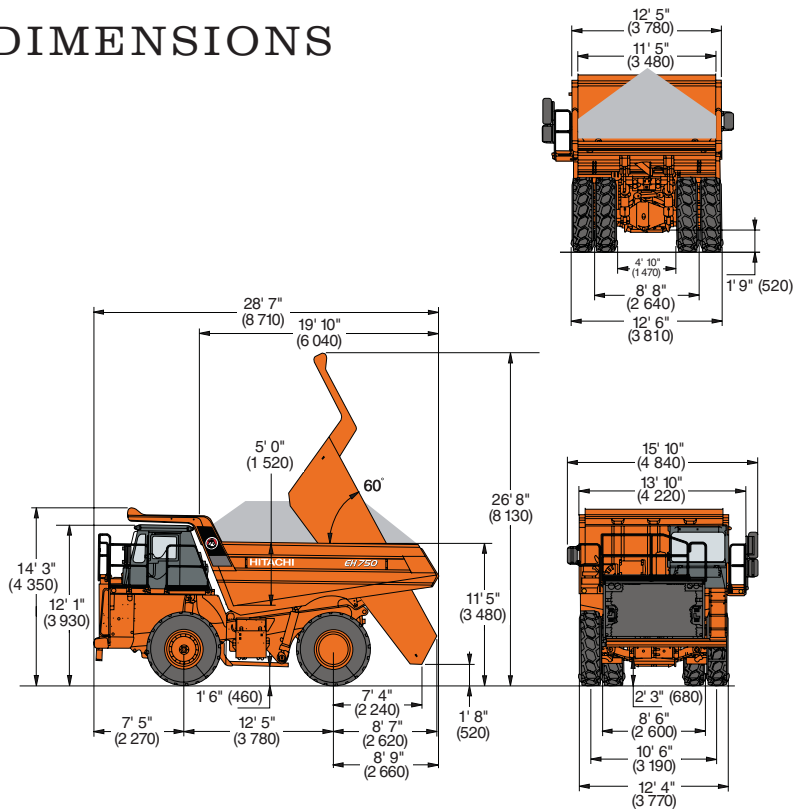
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*MAXIMUM GMW: 166,200 LB (75 400 KG)*

*RATED POWER: 525 HP (391 KW)*

# HITACHI

# EH750-3 DIMENSIONS



## STANDARD EQUIPMENT

### General

ACCU-TRAC suspension system  
 All-hydraulic braking  
 Allison M6610 transmission  
 Automatic transmission shifting  
 Battery disconnect switch  
 Body-down indicator, mechanical  
 Body exhaust  
 Body prop cable  
 Body-up and -down cushioning  
 Body-up speed restriction  
 Bolt-on nose-cone bushing  
 Canopy spill guard  
 Circuit port, circuit breaker  
 Circuit port, fuse  
 Continuous heated body  
 Cooling system surge tank  
 Dagger clamps (rear wheels)  
 DC/DC converter, 25 amp  
 Driveline guard, front  
 Electric horns  
 Electric start  
 Electronic hoist control  
 Engine access step  
 Engine belt protection  
 Engine compartment light  
 Fan guard  
 Fenders  
 Five-piece rims  
 Fixed steering stops  
 Fluid sampling port  
 Front brake cut-off switch  
 Fuel/water separator  
 Guardrails  
 Hoist interlock  
 LED taillights  
 Load/dump brake  
 Mirrors, right and left, hand adjustable

NEOCON suspension struts  
 Park brake, dry disc  
 Park-brake interlock  
 Radiator grill guard  
 Reverse alarm  
 Rock-ejector bars  
 Sight gauges for cooling system, hoist tank, steering tank, and transmission  
 Steering accumulator  
 Swing-out grille  
 Tire guards, bolt-on  
 Tow points, front and rear  
 Trainer seat  
 Transmission guard  
 Two-speed reverse

### Cab

12-volt accessory connection  
 Air conditioning  
 Air-filtration/replaceable element  
 Cigarette lighter  
 Climate center with air conditioner and heat  
 Door locks  
 Footrest (left and right)  
 Full trainer seat  
 Heater and defroster, 26,000 Btu  
 Integral ROPS/FOPS cab  
 ISO driver envelope  
 Quick-connect test ports  
 Rubber floor mat  
 Seat, air ride  
 Seat belts, retractable (operator/trainer)  
 Speakers, antenna, and wiring  
 Tilt/telescopic steering wheel  
 Tinted safety glass, with roll-down windows  
 Windshield washer, intermittent wiper

### Gauges and Indicators

Battery charge  
 Body up  
 Brake system oil pressure  
 Central warning (caution)  
 Central warning (stop)  
 Engine coolant level  
 Engine oil pressure  
 Engine, other malfunctions  
 Filter restrictions  
 High beam  
 Parking brake applied  
 Steering oil pressure  
 Steering oil temperature  
 Transmission malfunction  
 Transmission oil pressure  
 Turn signal/hazard  
 Brake oil temperature  
 Converter oil temperature  
 Coolant temperature  
 Hour meter (LCD)  
 Odometer  
 Speedometer  
 Steering/brake oil pressure  
 Tachometer

### Machine Lights

Backup lights (2)  
 Clearance lights (2)  
 High-intensity headlights (HID) (4)  
 Stop and tail (2)  
 Turn signals and 4-way flashers

## OPTIONAL EQUIPMENT

### Cab

Active Traction Control (ATC) w/ Electronic Downhill Speed Control (EDSC)  
 Air suspension seat, semi-active, with heat and lumbar, 3-point seat belts  
 AM/FM radio with CD/MP3 player  
 Power cab windows

### Chassis

Automatic lube system, Groeneveld  
 Body liner, heavy duty (1/2 in. with rock cap)  
 Body liner, partial (add 1/2 in. to floor plate and valley)  
 Body liner, standard (3/8 in. with rock cap)  
 Body side extensions  
 Canopy arm guard  
 Canopy spill guard extension  
 Mild cold-weather package (32 deg. F to -4 deg. F)  
 Extreme cold-weather package (-4 deg. F to -41 deg. F)  
 Electrically heated mirrors  
 Exhaust system, deck mounted  
 Fog lights  
 Ground-level engine shutdown  
 Haultronics III load-monitoring system  
 Hill hold brake  
 Lube system, centralized  
 Rock cap  
 Service center without fast filling  
 Service center with fast filling on steel tank (must purchase steel fuel tank)  
 Side mud guard  
 Sound-suppression kit

### Miscellaneous

Extra operators manual  
 Extra parts manual — hard copy  
 Service manuals — hard copy

# EH750-3 SPECIFICATIONS

## ENGINE

<b>Model</b>	<b>Detroit Diesel Series 60</b>
Configuration	4-cycle, inline, 6 cylinder diesel
Emission Certification	U.S. E.P.A. Tier 3
Aspiration	Turbocharged/Aftercooled
Gross Power @ 2,100 rpm (SAE J1995)	525 hp (391 kW)
Net Power @ 2,100 rpm (SAE J1349)	486 hp (362 kW)
Maximum Torque @ 1,350 rpm	1,750 ft/lb (242 kgf/m) (2373 N.m)
Bore and Stroke	5.24 in. x 6.61 in. (133 mm x 168 mm)
Piston Displacement	854 cu. in. (14 liters)
Torque Rise	33%
Starting	Electric

## TRANSMISSION

Allison H5610A, remote-mounted, fully automatic, planetary type, with integral lockup converter	
Ranges	Six forward, two reverse
Control	Allison CEC2 electronic shift system with Shift Energy Management (SEM)
Maximum Speed	42.6 mph (68 km/h) with standard tires

## DRIVE AXLE

Full floating axle shafts, Model 2052 differential and single reduction planetary at each wheel. Optional electronic downhill speed control feature

<b>Differential and Final-Drive Ratios</b>	<b>Standard</b>	<b>Optional</b>
Differential	3.13:1	3.13:1
Planetary	5.25:1	6.00:1
Total Reduction	16.43:1	18.78:1

## TIRES

<b>Standard – Front and Rear</b>	<b>Rim Width</b>
18.00 R33 E4 (standard)	13 in (330 mm)
Optional tire brands and tread patterns available.	

## ELECTRICAL SYSTEM

24-volt starting, lighting and accessories system. 70-ampere alternator with integral transistorized voltage regulator. Two 12-volt heavy-duty batteries capable of 1300 cold cranking amps, each, at 0 deg. F (-17 deg. C). A Hitachi solid state reprogrammable controller controls and monitors hauler systems, provides output information to control gauges and lights and incorporates connections for diagnostic tools.

## BODY

Flat-floor, flat-tail-chute design

### Capacity

36.3-yd<sup>3</sup> (27.7 m<sup>3</sup>) SAE 2:1 heaped capacity

Body capacity and payload subject to change based on customer specific material density, options, and application.

## WEIGHTS (Approximate)

	<b>lb.</b>	<b>kg</b>
Chassis with Hoist	56,710	25 723
Body	17,090	7752
Net Machine Weight	73,800	33 475
Maximum GMW with Standard Tires [18.00 R33 (***) E4] Including Options, 50% Fuel, with Operator and Payload Not to Exceed	166,200	75 400
Maximum Payload with Standard Equipment	46.2 tons (42 tonne) (Refer to Hitachi payload policy)	
Nominal Payload with Standard Equipment	42 tons (38 tonne) (Nominal Payload is 100/110 of Maximum Payload with Standard Equipment)	
Load Weight Distribution	Empty	Loaded
Front	50%	34%
Rear	50%	66%

The following list of options (not limited to) will change Net Machine Weight:

- Body Liners, partial and heavy-duty
- Automatic Fire Suppression System
- Deck Mounted Mufflers

## STEERING SYSTEM

Closed-center, full-time hydrostatic power steering system using two double-acting cylinders, pressure-limit with unload piston pump, and brake actuation/steering system reservoir. Accumulator provides supplementary steering in accordance with SAE J1511 and ISO 5010. Tilt/telescopic steering wheel with 35 deg. of tilt and 2.25 in. (57.2 mm) telescopic travel is standard.

Steering Angle	42 deg.
Turning Diameter (SAE)	53 ft. (16.15 m)
Steering Pump Output	25.3 gpm (95.7 L/min.)
System Operating Pressure	2,745 psi (18.9 MPa)

## HYDRAULIC SYSTEM

Two 2-stage, double-acting cylinders, with cushioning in retraction, inverted and outboard mounted. Separate Hoist/Brake Cooling reservoir and independent tandem gear pump.

Control valve mounted on reservoir.

Body Raise Travel	60 deg.
Body Raise Time (at 1,700 rpm)	13.9 s
Body Float Time	15.0 s
Brake Cooling Pump Output (at 2,100 rpm)	52.8 gpm (200 L/min)
Hoist Pump Output (at 2,100 rpm)	79.5 gpm (301 L/min)
System Relief Pressure	2,500 psi (17.2 MPa)

## HI-TECH ROPS/FOPS CAB

ROPS complies with ISO 3471 and SAE J1040-May 94. FOPS complies with ISO 3449. Double wall construction of 11 gauge inner and outer steel panels, lends itself to a more structurally sound cab. Multiple layered floor mats act to absorb sound and control interior temperature. A three-point rubber isomount arrangement to the deck surface minimizes vibration to the operator compartment.

## EXCELLENT SERVICEABILITY

A removable front panel allows easy access to service brake valves, retarder valve and heater assembly. A removable cover located behind the operator's seat provides easy access to the Transmission Controller (TCU), Central Controller (CCU) and all electrical junction points.

## COMFORT AND EASE OF OPERATION

A flat panel style dashboard positions controls within easy reach and visual contact. A full compliment of easy-to-read gauges, automobile type monitor with warning system, a spacious environment, multiple position adjustable seat, tilt/telescopic steering wheel, filtered cab ventilation and door locks all contribute to operator convenience, control and comfort.

## BODY

The body has been made to the flat floor, flat tail chute design. The rear hinge has been designed to cause the hinge pin to float when the body is in the fully lowered position. The weight of the body and payload is distributed across rubber body pads that are evenly spread across the length of the body rail-box that rests on the truck frame.

High tensile strength 400 BHN abrasion-resistant alloy steel is used in the thickness of:

Floor	5/8 in. (16 mm)
Front Plate	5/16 in. (8 mm)
Sides	5/16 in. (8 mm)
Canopy	3/16 in. (5 mm)

High yield strength allow steel is also used for canopy side members and floor stiffeners. The Hitachi horizontal stiffener design minimizes stress concentrations. Load shocks are dissipated over the entire body length. Closely spaced stiffeners provide additional protection by minimizing distances between unsupported areas.

### Cap and Liner Option Detail

Rock cap—this is a 3/8 in. (10 mm) plate that gets installed to the top of the body side plates.

Partial Liner—this is a liner package that only adds 1/2 in. (13 mm) to the floor plate and to the valley.

Standard Liner—this is a complete liner package, but is lighter than the Heavy Duty liner package:

Floor	3/8 in. (10 mm)
Front Plate	1/4 in. (6 mm)
Side Plate	1/4 in. (6 mm)
Valley Plate	3/8 in. (10 mm)

Heavy-Duty Liner — this is the heaviest liner package we supply

Floor	1/2 in. (13 mm)
Front Plate	5/16 in. (8 mm)
Side Plate	5/16 in. (8 mm)
Valley Plate	1/2 in. (13 mm)

## SERVICE CAPACITIES

Crankcase (includes filters)	7.9 gal. (30 L)
Transmission, Cooler and Lines	22 gal. (83.3 L)
Cooling System	55.8 gal. (211.1 L)
Fuel Tank	119.9 gal. (454 L)
Hydraulics	
Hoist System	47 gal. (178 L)
Steering System	25.6 gal. (97 L)
Drive Axle	13.3 gal. (50.3 L)
Windshield Washer Fluid	1.5 gal. (5.7 L)

## BRAKE SYSTEM

Complies with SAE J1473/ISO 3450. All-hydraulic actuated braking system provides precise braking control and quick system response. The Hitachi brake controller has a unique variable front to rear brake proportioning that maximizes the stopping performance under all road conditions. The Hitachi wet-disc brake is engineered for long service life even in the most extreme environments. The wet-disc brakes are located on the rear axle and provide service braking, secondary braking, and retarding. The wet-disc brake is designed with automatic retraction to prevent drag. The brakes are a multi-plate design and continuously oil-cooled. The sealed design protects against environmental contamination for prolonged service life. Separate pedals activate the service braking and retarding functions. Two independent circuits within the service brake system provide backup stopping capability. System is manually or automatically applied to stop machine within prescribed braking distance. The parking brake is a dry disc mounted on differential input shaft and controlled by a toggle switch on the dash. Brakes apply automatically if hydraulic pressure is lost.

### FRONT AXLE (DRY DISC)

Disc Diameter, Each (2 discs/axle)	26.5 in. (673 mm)
Brake Surface Area Per Axle	640 sq. in. (4129 cm <sup>2</sup> )
Lining Area Per Axle	215.5 sq. in. (1390 cm <sup>2</sup> )
Brake Pressure (Max.)	2,291 psi (15.8 MPa)

### REAR AXLE (OIL-COOLED WET DISC)

Brake Surface Area Per Axle	5,766 sq. in. (37 200 cm <sup>2</sup> )
Brake Pressure (Max.)	1,204 psi (8.3 MPa)

### PARKING BRAKE (DRY DISC)

Disc Diameter	22.4 in. (568 mm)
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# SHIPPING INFORMATION

## NUMBER/CONTENTS OF LOADS

LOAD 1	
Dimensions	28.6 ft. (8.71 m) L x 12.9 ft. (3.94 m) H
Weight (without rock liner)	71,300 lb. (32 341 kg)

# EXCAVATOR MATCH

## PASSES TO FILL EH750-3\*\*

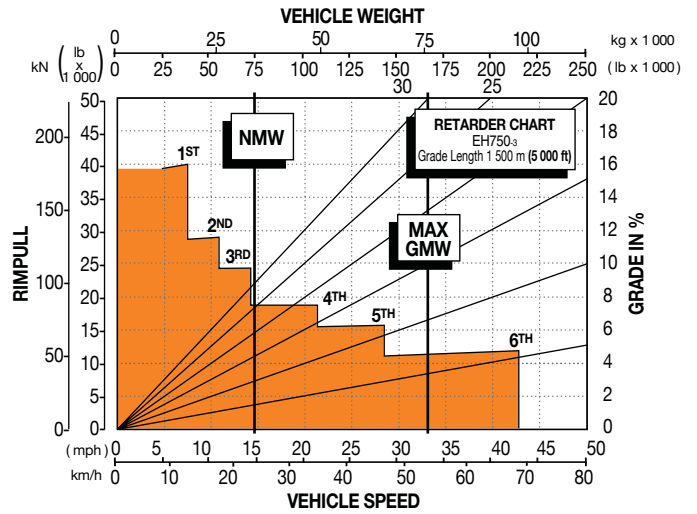
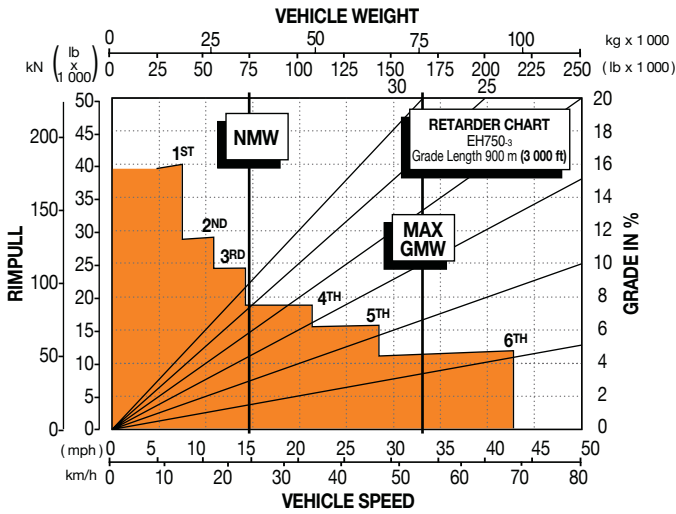
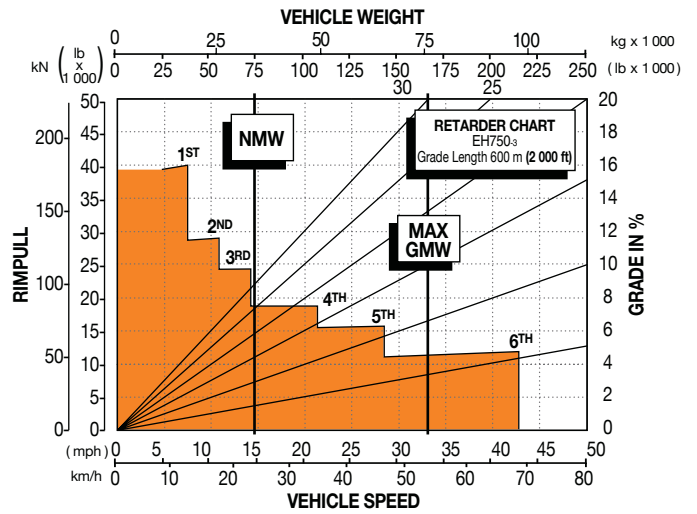
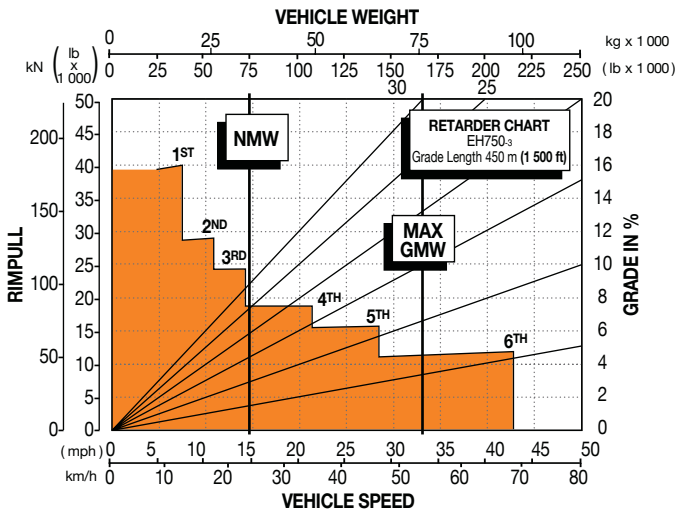
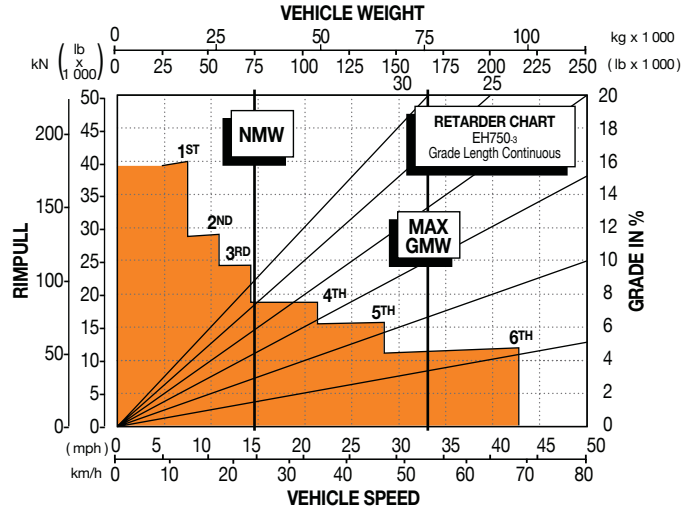
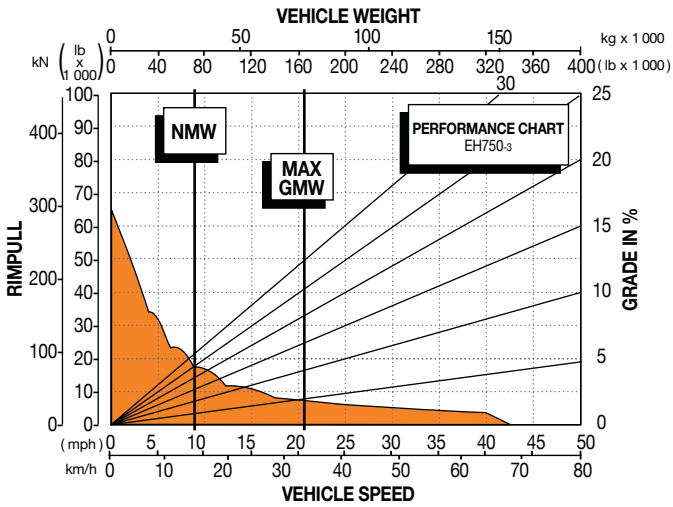
Zaxis 650LC-3 Excavator	Zaxis 850LC-3 Excavator	EX1200-5D Excavator	
Backhoe	Backhoe	Shovel	Backhoe
5.5-cu.-yd. (4.2 m <sup>3</sup> ) bucket*	7.0-cu.-yd. (5.3 m <sup>3</sup> ) Bucket*	6.5-cu.-yd. (5.0 m <sup>3</sup> ) Bucket*	9.3-cu.-yd. (7.1 m <sup>3</sup> ) Bucket*
6 to 7 Passes	4 to 5 Passes	4 to 5 Passes	3 to 4 Passes

\*Bucket Capacity (SAE, PCSA heaped.)

\*\* SAE 2:1 36.2-cu.-yd. (27.7 m<sup>3</sup>).



# PERFORMANCE DATA



## NOTES:

Diagonal lines represent total resistance (Grade % plus rolling resistance %).

Charts based on 0% rolling resistance, standard power of engine, standard tires, and gearing unless otherwise stated.

1. Find the total resistance on diagonal lines on right-hand border of rimpull or retarder chart.
2. Follow the diagonal line downward and intersect the NMW or GMW weight line.
3. From intersection, read horizontally right or left to intersect the rimpull or retarder curve.
4. Read down for machine speed.

OUR NAME LOOKS GOOD ON ORANGE.

It's our color. It's our brand. New product-support initiatives and our strengthened dealer network are more proof that we are as passionate as ever about this industry. We are dedicated to building the best equipment in the world and keeping it painted Hitachi Orange.

# HITACHI

[www.hitachimining.com](http://www.hitachimining.com)

Specifications and design subject to change without notice.

