

## PC7000-11 Excavator



Safety



Reliability



Productivity



Keep your trucks productive with the intelligent, robust and versatile PC7000. Its 38m<sup>3</sup> shovel is sized to cycle big loads fast, while its advanced intelligent data solutions and performance monitoring can help you optimize the transfer of every load.

### Operating capacities

	Front shovel	Backhoe
Operating weight	682 MT	690 MT
Standard bucket configuration	38 m <sup>3</sup> (49.4 yd <sup>3</sup> )	
Engine power	2 500 kW (3,350 HP)	
Truck compatibility	240 short tons - 400 short tons	
Swing speed	3.1 rpm	
Boom length	8 000 mm	11 000 mm
Stick length	5 500 mm	5 100 mm
Breakout force	2 023 kN	1 648 kN
Crowd force/*tear-out force	2 151 kN	*1 473 kN
Tier 4 option	Yes	Yes
Electric drive option	as -6 version	as -6 version

# PC7000-11

## Diesel drive

Model (Tier 4)	Komatsu SSDA16V159E-3
Type	4-cycle, water-cooled, direct injection
Aspiration	Turbocharged and aftercooled
Number of cylinders	16
Engines amount	2
Rated power per engine	1 250 kW (1,500 HP) @ 1800 rpm
Governor	All-speed, electronic
DEF tank capacity (Tier 4)	514 L (136 gal)

## Electric drive

Type	Squirrel cage induction motor
Availability-11	Not available
Engines amount	2
Rated power per engine	1 250 kW (1,630 HP) @ 1800 rpm
Voltage	6 000 - 7 200 V
Amperage (approx.)	2x 128 A - 2x 107 A
Frequency standard	60 Hz @ 1800 rpm
Frequency option	50 Hz @ 1500 rpm

## Electric system

System	24 V
Batteries	4x 12 V
Alternator	2x 260A
Standard working lights (amount)	12 LED lights
Standard service lights	Throughout the platform including emergency egresses and stairways

## Undercarriage

Track adjustment	Automatic hydraulic type
Number of track shoes each side	48
Number of top rollers each side	3
Number of bottom rollers each side	7

## Travel and brake systems

Gradeability	Up to 50%
Travel speed (max)	2.5 km/h (1.55 mph)
Service brake	Hydraulic brake
Parking brake	Multiple brake

## Swing system

Hydraulic motors and swing gears	2
Swing brake, dynamic	Hydraulic brake
Swing brake, parking	Multiple-disc
Swing ring teeth	External
Swing speed (max)	3.1 rpm

## Environment

Hand-lever (ISO 5349-1)	Lower than 2.5 m/s <sup>2</sup>
Whole body vibration and shock (ISO 2631-1)	Below 0.5 m/s <sup>2</sup>
Greenhouse gas	HFC-134a (GWP 1430)
PC7000-11 D quantity of gas	5.5-10.0 kg
PC7000-11 D CO <sub>2</sub> equivalent	7.865-14.300 t
PC7000-11 E quantity of gas	7.9-12.4 kg
PC7000-11 E CO <sub>2</sub> equivalent	11.297-17.732 t

## Hydraulic system

Description	
The powertrain consists of two main drives. Each of the two gearboxes drives three identical main pumps which draw hydraulic oil from an unpressurized hydraulic tank. Open circuit hydraulics provide maximum cooling and filtering efficiency.	
Main hydraulic pumps	Komatsu
Main hydraulic pumps	6 210 L/min (1,640 gpm)
Relief valve setting	310 bar (4,495 psi)
Swing flow rate	1035 L/min (273 gpm)
High pressure screens	200 microns

## Flow description

The four-circuit systems feature a load-limiting governor with oil delivery summation to the working circuits and incorporates pressure cut-off control. Hydropilot prioritizes hydraulic flow giving smooth hydraulic response, simple hydraulic system layout, and a reduced number of components. The hydraulic system includes large swing-out vertical air-to-oil hydraulic coolers with temperature-regulated hydraulically driven fans.

## Automatic lubrication system

Description	
Three hydraulically powered Lincoln single line automatic lubrication systems are provided as standard, complete with time and volume variable controls. The two central lubrication circuits and open gear grease circuit are supplied by identical pump assemblies from refillable containers which have a capacity of 1x 600 and 1x 300 L (total 238 gal). Replenishment of the containers is through the Wiggins connections on the service arm.	

## Capacities

Hydraulic oil tank	4 750 L (1,255 US gal)
Hydraulic system	9 500 L (2,510 US gal)
Fuel tank - usable volume including reserve	13 310 L (3,516 US gal)
Fuel tank - reserve	280 L (74 US gal)
Engine coolant	880 L (232 US gal)
Engine oil	472 L (124 US gal)
Lubrication system (total)	900 L (238 US gal)

## Operator cab

Damping pads (amount)	Enclosed steel cab mounted on viscous pads
AC System	Automatic air-condition unit
Suspension of seat	Full suspension operator seat with belt
Heating of seat	Electrically heated
Seat belt	Trainer seat with belt
Adjustments of seat	Multiple adjustments
Joystick controls	Electro-hydraulic joystick controls
Foot controls	Foot control for shovel clam, crawler and swing brake
Radio version	AM-FM radio with MP3 ready CD player and AUX in
Windshield washers	1 large parallel windshield wash wiper
Windshield washer speed	Two speeds and intermittent operation
Additional mirrors	2 heated rear mirrors
Sun blinds	Internal and external
Roller blinds	Standard on all windows (excluding rear door)
Sliding window	ESG escape window, VSG according to ECE R43
Window tinting	Parsol green
Penetration-proof windows	Impact-resistant front window (21 mm and tolerances)
Walkway	Walkway around the cab
Engineering standards	ISO 3449, ISO 6394, ISO 10263-4 TL: EN474-1, EN 474-5, DIN 15018, BR2-S DIN EN 1063, ECE R43, ISO 10262

## Komtrax Plus

Version	Komtrax Plus Upgrade
Description	The Komtrax Plus monitoring system is designed for Komatsu mining equipment to provide real-time and stored information about the operating status of the machine. Fault messages are immediately available to the operator via a digital display and in the event of critical malfunctions the engine is also shut down. The digital storage provides failure summary and analysis, which can be downloaded by laptop computer. This data will assist in predicting or reducing downtime. Optionally available is ORBCOMM and Iridium satellite transmission (check for availability in your territory).
Argus PLM ready	Yes

## Front shovel attachment

Boom length	8 000 mm (26.2 ft.)
Stick length	5 500 mm (18.0 ft.)
Break-out force (ISO)	2 023 kN (454,788 lbf.)
Crowd force (ISO)	2 151 kN (483,564 lbf.)
Max cutting height	21 049 mm (69.1 ft.)
Max dumping height	13 682 mm (44.9 ft.)
Max digging depth	3 085 mm (10.1 ft.)
Max digging reach	17 722 mm (58.1 ft.)
Level crowd at ground level	5 054 mm (16.6 ft.)
Bucket opening width	3 164 mm (10.4 ft.)

## Front shovel capacities

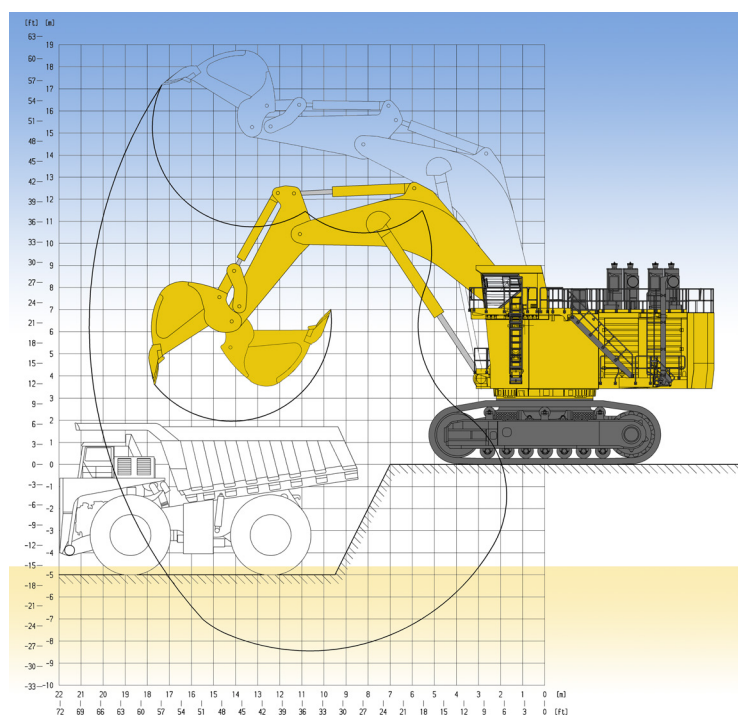
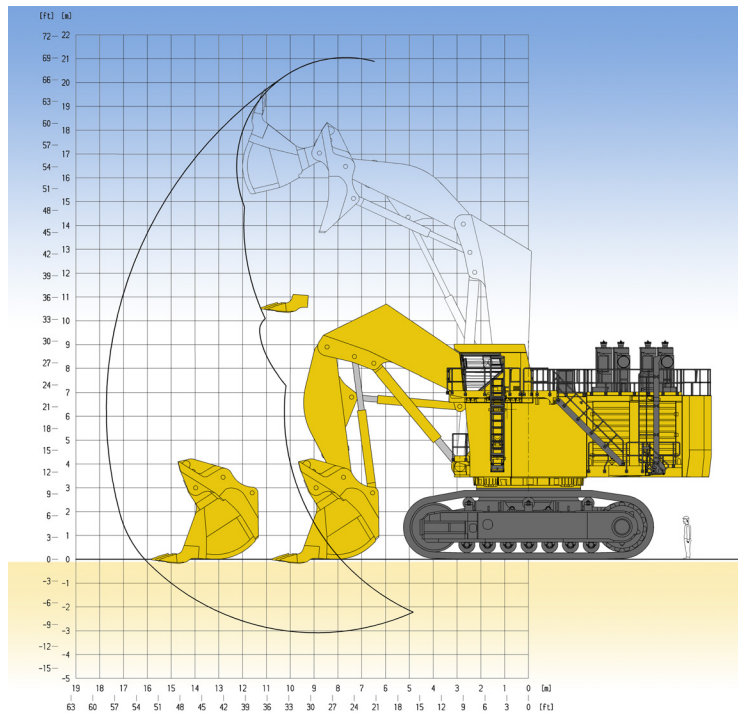
38 m <sup>3</sup> (standard)	38 m <sup>3</sup> (49.7 yd <sup>3</sup> )
Width	5 208 mm (17.1 ft.)
Teeth	6
Wear package	Heavy duty, standard, light
GET system	Hensley XS 644* *(further systems on request)
Max material density	1.8 t/m <sup>3</sup> (3,034 lb/yd <sup>3</sup> )

## Backhoe attachment

Boom	11 000 mm (36.1 ft.)
Stick	5 100 mm (16.7 ft.)
Break-out force (ISO)	1 648 kN (370,485 lbf.)
Tear-out force (ISO)	1 473 kN (331,143 lbf.)
Max digging height	17 179 mm (56.4 ft.)
Max dumping height	10 752 mm (35.3 ft.)
Max digging depth	8 446 mm (27.7 ft.)
Max digging reach	20 630 mm (67.7 ft.)
Max digging reach at ground level	19 607 mm (64.3 ft.)

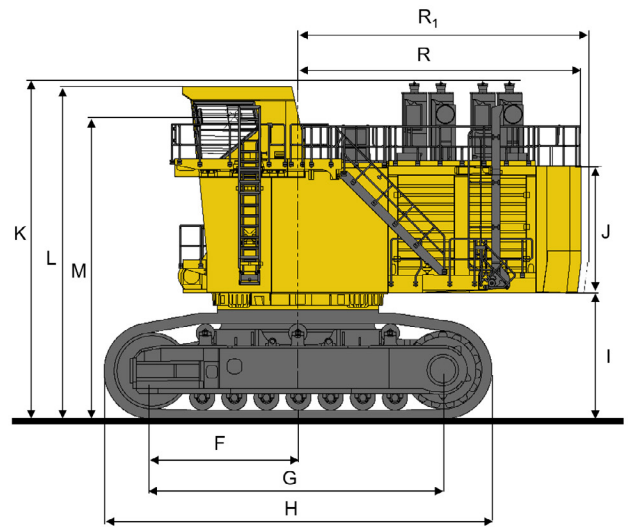
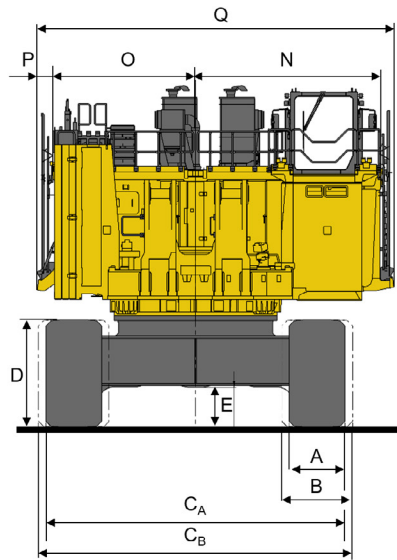
## Backhoe capacities

38 m <sup>3</sup> (standard)	38 m <sup>3</sup> (49.7 yd <sup>3</sup> )
Width	4 815 mm (15.8 ft.)
Teeth	6
Wear package	Heavy duty, standard, light
GET system	Hensley XS 644* *(further systems on request)
Max material density	1.8 t/m <sup>3</sup> (3,034 lb/yd <sup>3</sup> )



## Dimensions

A	1 500 mm (4 ft. 11 in)
B	1 900 mm (6 ft. 3 in)
C <sub>A</sub>	8 050 mm (26 ft. 5 in)
C <sub>B</sub>	8 450 mm (27 ft. 9 in)
D	2 895 mm (9 ft. 6 in)
E	1 065 mm (3 ft. 6 in)
F	3 945 mm (12 ft. 11 in)
G	7 875 mm (25 ft. 10 in)
H	10 500 mm (34 ft. 6 in)
I	3 452 mm (11 ft. 4 in)
J	3 420 mm (11 ft. 3 in)
K	9 200 mm (30 ft. 2 in)
L	9 016 mm (29 ft. 6 in)
M	8 255 mm (27 ft. 3 in)
N	4 990 mm (16 ft. 4 in)
O	3 839 mm (12 ft. 7 in)
P	425 mm (1 ft. 5 in)
Q	9 610 mm (31 ft. 6 in)
R	7 670 mm (25 ft. 2 in)
R <sub>1</sub>	7 850 mm (25 ft. 9 in)



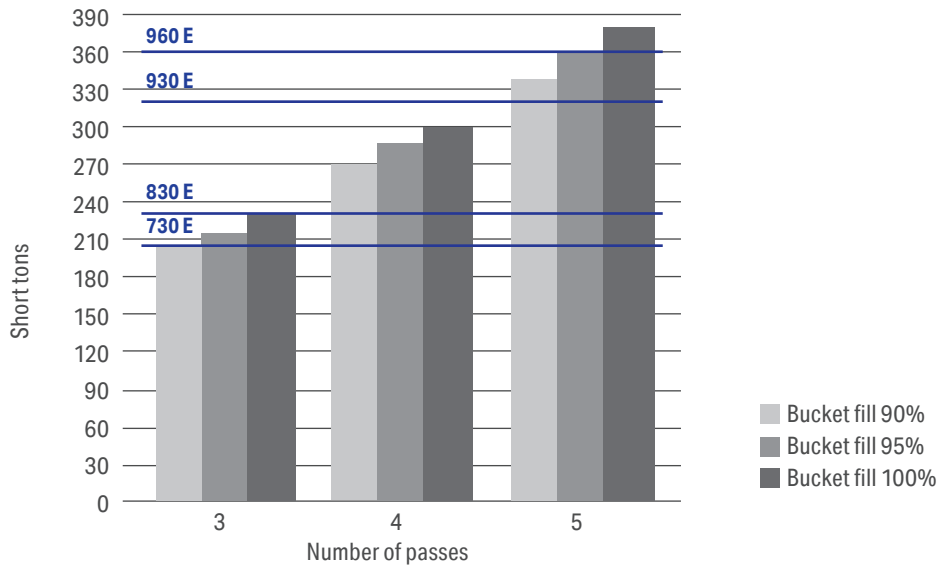
### Front shovel operating weights

Boom dimensions	8 000 mm (26 ft. 3 in)
Stick dimensions	5 500 mm (18 ft. 1 in)
Standard bucket	38 m <sup>3</sup> (49.4 yd <sup>3</sup> )
Shoe width and weight (1 500 mm)	1 500 mm (59 in)
Ground pressure	25.3 N/cm <sup>2</sup> (37.73 psi)
Operating weight	682 MT (1,504,000 lbs.)
Shoe width and weight (1 900 mm)	1 900 mm (75 in)
Ground pressure	20.3 N/cm <sup>2</sup> (30.23 psi)
Operating weight	692 MT (1,526,000 lbs.)

### Backhoe operating weights

Boom dimensions	11 000 mm (36 ft. 1 in)
Stick dimensions	5 100 mm (16 ft. 9 in)
Standard bucket	38 m <sup>3</sup> (49.4 yd <sup>3</sup> )
Shoe width and weight (1 500 mm)	1 500 mm (59 in)
Ground pressure	25.6 N/cm <sup>2</sup> (38.14 psi)
Operating weight	690 MT (1,521,000 lbs.)
Shoe width and weight (1 900 mm)	1 900 mm (75 in)
Ground pressure	20.5 N/cm <sup>2</sup> (30.74 psi)
Operating weight	700 MT (1,543,000 lbs.)

### PC7000-11 Truck shovel match



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