



KOMATSU

PC7000-11

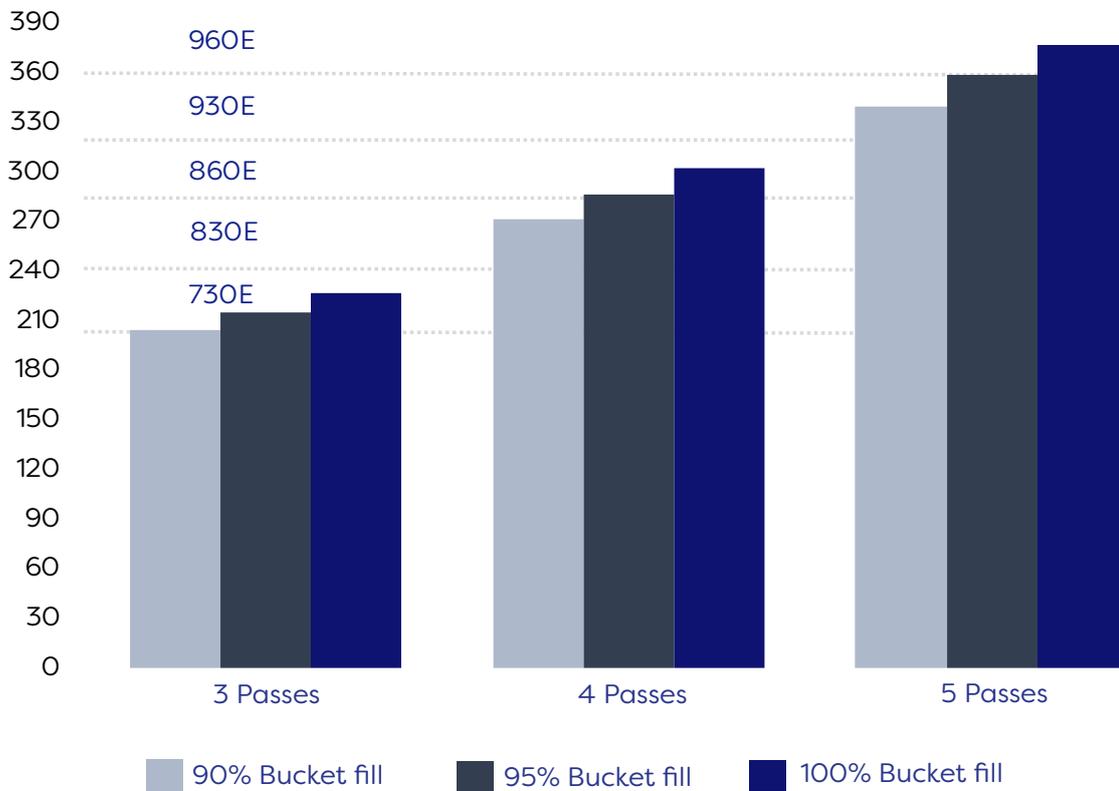
**HYDRAULIC
EXCAVATOR**

MATCHES:

Truck	Short tons	Passes per Truck
730E	200	3
830E	240	4
860E	280	4-5
930E	320	5
960E	360	5-6

TRUCK SHOVEL COMPARISON:

Short tons



PC7000-11 BACKHOE

Operating weight including 11,000 mm (36'1") boom, 5,100 mm (16'9") stick, 38 m³ (49 yd³) backhoe bucket, operator, lubricant, coolant, 1/3 fuel and standard equipment.

Tier	Shoe width	Operating weight	Ground pressure
2	1,500 mm 59"	686 t 1512371,12 lb	26.13 N/cm ² 37.90 psi
2	1,900 mm 59"	696 t 1534417,34 lb	20.94 N/cm ² 30.36 psi
4	1,500 mm 59"	690 t 1521189,61 lb	26.31 N/cm ² 38.15 psi
4	1,900 mm 75"	699 t 1541031,21 lb	21.06 N/cm ² 30.54 psi

PC7000-11 FRONT SHOVEL

Operating weight including 8,000 mm (26'3") boom, 5,500 mm (18'1") stick, 38 m³ (49 yd³) shovel bucket, operator, lubricant, coolant, 1/3 fuel and standard equipment.

Tier	Shoe width	Operating weight	Ground pressure
2	1,500 mm 59"	678 t 1494734,14 lb	25.84 N/cm ² 37.47 psi
2	1,900 mm 59"	688 t 1516780,36 lb	20.71 N/cm ² 30.03 psi
4	1,500 mm 59"	682 t 1503552,63 lb	26.03 N/cm ² 37.74 psi
4	1,900 mm 75"	692 t 1525598,85 lb	20.84 N/cm ² 30.22 psi

DIESEL DRIVE T4

Model	2 x Komatsu SSDA16V159E-3
Type	4-cycle, water-cooled, dir. injection
Aspiration	2-stage turbocharged and aftercooled
Number of cylinders	16
Rated power (SAE J1995)	2 x 1,250 kW 1,675 HP @ 1,800 rpm
Governor	All-speed, electronic
DEF tank capacity	2x 498 ltr / 2x 132 U.S. gal

DIESEL DRIVE T2

Model	2 x Komatsu SSDA16V159E-2
Type	4-cycle, water-cooled, dir. injection
Aspiration	2-stage turbocharged and aftercooled
Number of cylinders	16
Rated power (SAE J1995)	2 x 1,250 kW 1,675 HP @ 1,800 rpm
Governor	All-speed, electronic

The integrated engine oil and filter system combining the oil stabilising systems, Reserve and Centinel, with Eliminator oil filter extends the oil change interval up to 4,000 hours based on oil analysis. The high capacity Mesabi engine radiators are cooled by a hydraulically driven fan for superior cooling efficiency.

ELECTRIC DRIVE -6

Type	2 x squirrel cage induction motor
Power output	2 x 1,200 kW
Voltage	6,000 - 7,200 V *(other on request)
Amperage (approx.)	2 x 128 A - 2 x 107 A
Frequency standard	60 Hz @ 1,800 rpm
Frequency option	50 Hz @ 1,500 rpm

The -6 version does not include certain features, for instance Simplified System or Komtrax Plus 2.

ELECTRIC SYSTEM (DIESEL)

System	24 V
Batteries (series/parallel)	8 x 12 V
Alternator	2 x 260 A
Standard working lights	16 LED lights
Standard service lights	Throughout the platform including emergency egresses and stairways

UNDERCARRIAGE

Undercarriage consists of one centre carbody and two track frames, each side attached by high torque bolts.

Centre frame	H-type
Track frame	Steel box-section

CRAWLER ASSEMBLY

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

TRAVEL AND BRAKE SYSTEMS

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

SWING SYSTEM

Hydraulic motors and drives	3
Swing brake, service	Hydraulic brake
Swing brake, parking	Multiple-disc
Swing ring teeth	External
Swing speed	3.1 rpm

HYDRAULIC SYSTEM

The power train consists of two main drives. Each of the two gearboxes drives three identical pumps which draw hydraulic oil from an unpressurised hydraulic tank. Open circuit hydraulics provide maximum cooling and filtering efficiency.

Rated flow (total output)	6,210 ltr/min 1,640 gpm
Relief valve setting	310 bar / 4,495 psi
Swing flow rate	1,035 ltr/min / 273 gpm

High pressure in line filters
one per pump located at the valve blocks 200 microns

Full flow return line filters at head of hydraulic tank 10 microns

Case drain/by-pass return line filters 3 microns

The four-circuit system features a load-limiting governor with oil delivery summation to the working circuits and incorporates pressure cut-off control. Hydropilot prioritises 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 CENTRALISED LUBRICATION

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 litres (total 238 gal). Replenishment of the containers is through the Wig-gins connections on the service arm.

SERVICE CAPACITIES

Hydraulic oil tank	4,750 ltr / 1,255 U.S. gal
Hydraulic system	9,500 ltr / 2,510 U.S. gal
Fuel	13,033 ltr / 3,443 U.S. gal
Engine coolant	2 x 440 ltr / 2 x 116 U.S. gal
Engine oil	2 x 236 ltr / 2 x 62 U.S. gal
Reserve engine oil make up tank	2 x 665 ltr / 2 x 176 U.S. gal
Lubrication system (total)	900 ltr / 238 U.S. gal

COMFORT AND ENVIRONMENT

Vibrations levels	
Hand-lever (ISO 5349-1)	lower than 2.5m/s ²
Whole body vibration and shock (ISO 2631-1)	below 0.5m/s ²

Contains fluorinated greenhouse gas HFC-134a (GWP 1430)

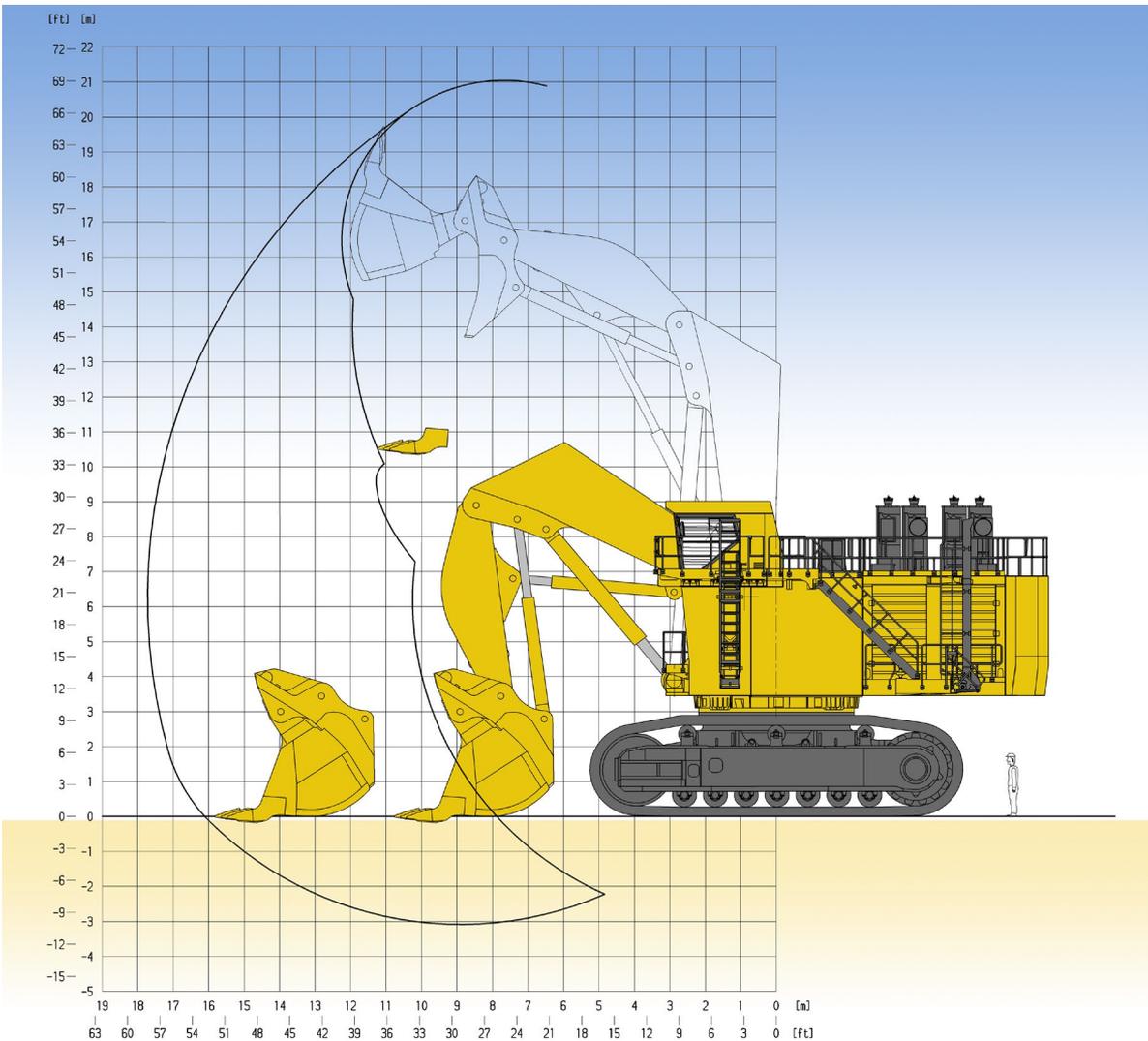
PC7000-11 D T4 Quantity of gas 5.5-10,0 kg, CO2 equivalent 7.86-14.30t

PC7000-11 D T2 Quantity of gas 7.9-12,4 kg, CO2 equivalent 11.29-17.73t

FRONT SHOVEL ATTACHMENT

Boom length	Stick length	Max. cutting height	Max. dumping height
8,000 mm (26'3")	5,500 mm (18'1")	21,049 mm (69'1")	13,682 mm (44'9")
Max. digging depth	Max. digging reach	Break-out force (ISO)	Crowd force (ISO)
3,085 mm (10'1")	17,722 mm (58'2")	2,023 kN (454788,4 lb)	2,151 kN (483563,94 lb)

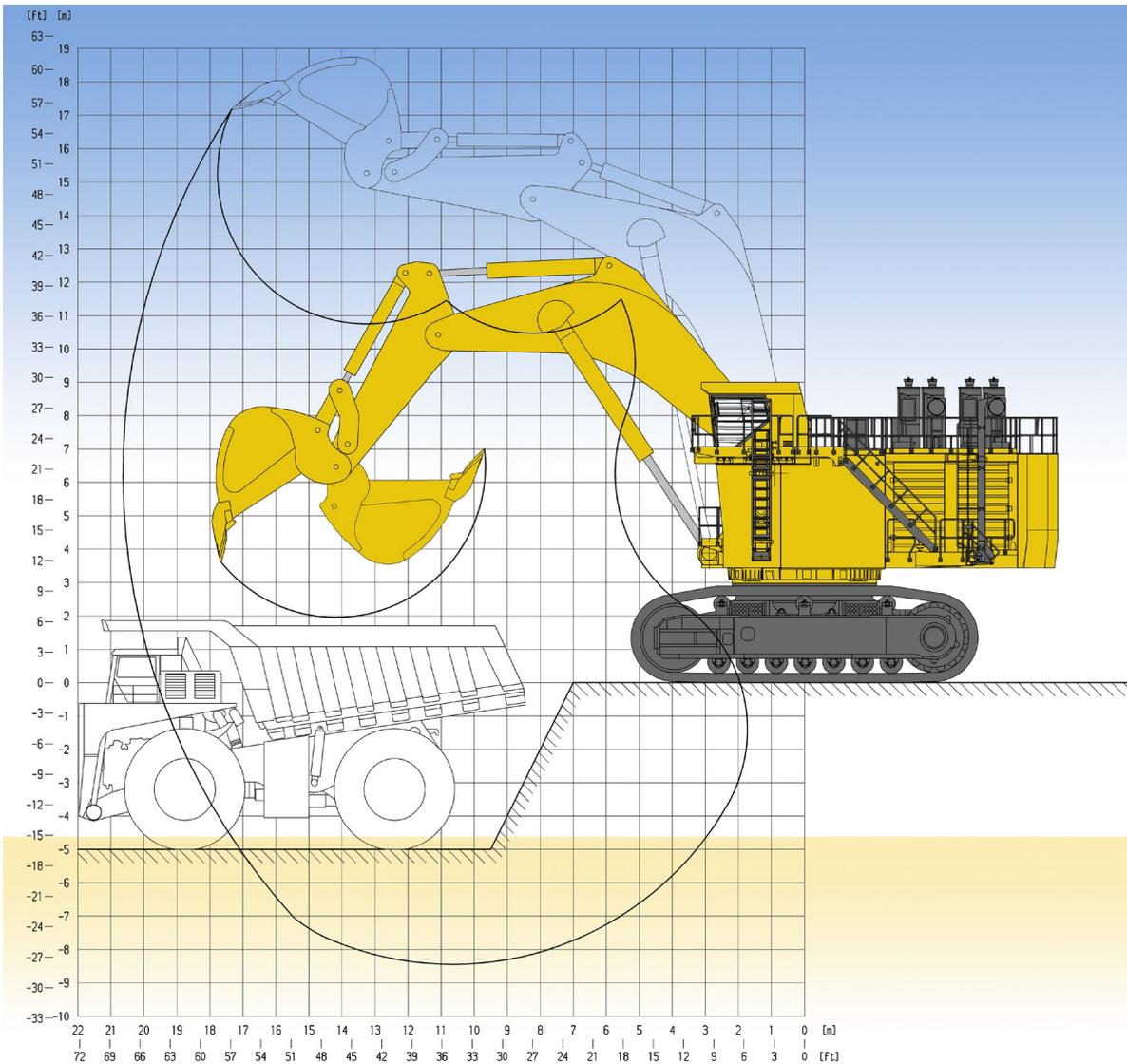
Bucket capacity	Width	Teeth	Wear package	GET system	Material density
38 m ³ (Standard)	5,208 mm	6	Light	Hensley XS 644	1.8 (t/cum)
36 m ³ (Option)	5,208 mm	6	Standard	Hensley XS 644	1.9 (t/cum)
34 m ³ (Option)	5,208 mm	6	Heavy Duty	Hensley XS 644	2.0 (t/cum)



BACKHOE ATTACHMENT

Boom length	Stick length	Max. digging height	Max. dumping height
11,000 mm (36'1")	5,100 mm (16'7")	17,179 mm (56'4")	10,752 mm (35'3")
Max. digging depth	Max. digging reach	Break-out force (ISO)	Tear-out force (ISO)
8,446 mm (27'7")	20,630 mm (67'7")	1,648 kN (370485,06 lb)	1,473 kN (331143,51 lb)

Bucket capacity	Width	Teeth	Wear package	GET system	Material density
38 m ³ (Standard)	4,815 mm	6	Light, standard	Hensley XS 644	1.8 (t/cum)
36 m ³ (Option)	4,815 mm	6	Light, standard, heavy	Hensley XS 644	1.9 (t/cum)
34 m ³ (Option)	4,815 mm	6	Light, standard, heavy	Hensley XS 644	2.0 (t/cum)



FRONT SHOVEL ATTACHMENT

- 8,0 m 26'3" boom, 5,5 m 18'1" stick
- 38 m³ (SAE 2:1) shovel bucket
- incl. standard wear package with Hammerless GET system
- *Alternative buckets and GETs
- *Boom cylinder sliding guard
- *Stick cylinder sliding guard

BACKHOE ATTACHMENT

- 11,0 m 36'1" boom, 5,1 m 16'9" stick
- 38 m³ (SAE 1:1) bucket incl. standard wear package with Hammerless GET
- *Alternative buckets and GETs
- *Buckets cylinder sliding guard

CRAWLER UNDERCARRIAGE

- Heavy-duty shovel type undercarriage
- Centre carbody
- 2 heavy box-type track frames
- 7 bottom rollers and 3 top rollers side
- 1500 mm 59" cast track shoes
- *1900 mm 75" cast track shoes
- Hydraulic track adjustment and parking brake
- Drive gear box protection

CRAWLER UNDERCARRIAGE

- Heavy-duty shovel type undercarriage
- Centre carbody
- 2 heavy box-type track frames
- 7 bottom rollers and 3 top rollers / side
- 1500 mm 59" cast track shoes
- *1900 mm 75" cast track shoes
- Hydraulic track adjustment and parking brake
- Drive gear box protection

OTHER EQUIPMENT

- *Fire suppression system, Ansul (Agent LVS and Powder), diesel drive (on request)
- *Biodegradable hydraulic oil (on request)

Standard equipment
*Optional equipment

LIGHTING

- 16 LED high performance working lights
- Service lights throughout the platform incl. emergency egresses and stairways
- Rotafare warning lights

OPERATOR CAB

- Enclosed steel cab mounted on viscous pads
- FOPS according ISO 10262
- Air-conditioning unit Süttrak
- Full suspension operator seat with belt
- Controls ergonomic
- KOMTRAX Plus (Monitoring System)
- Joysticks are electro-hydraulic
- 1 large parallel windshield wash wiper
- AM-FM radio with MP3 ready CD player and AUX in
- Internal and external sun blinds
- Impact resistant front window (19mm)
- All windows tinted parsol green
- Walkway around the cab
- *Additional cab A/C
- *Additional cab heater (only diesel)

COLD WEATHER

- *Cold weather package down to -40° C (diesel and electro drive)
- *Arctic weather package down to -50° C (diesel and electro drive)
- *Hotstart temperature treatment for ambient temperature down to -50° C (diesel and electro drive), external power source not included

SUPERSTRUCTURE

- Main frame mounted over an externally toothed swing circle carries the drive module
- 2 x Komatsu SSDA16V159E-2
- Tier 2 diesel engines
- *2 x Komatsu SSDA16V159E-3
- *Tier 4 diesel engines
- *Electric drive various voltages
- *Cable drum without cable

ACCESS AND EGRESS SYSTEM

- 45° stairway design
- Hydraulically operated
- Equipped with hand rails
- All steps with antislip edge
- Illuminated system

EMERGENCY EGRESS SYSTEM

- Two pieces flip down solid antislip steel ladder
- Easy release with foot lever
- One system on cab site
- One system on opposite site
- One machinery house escape system (ladder and hatch)
- Acoustic travel alarm
- Electric air horn
- Engine turbo and exhaust pipe covers
- Engine emergency stop at ground level
- Camera system acc. ISO5006
- Sidewalks and stairs are provided with skid resistant plates
- Hand rails and steps on boom; Tie off points on boom

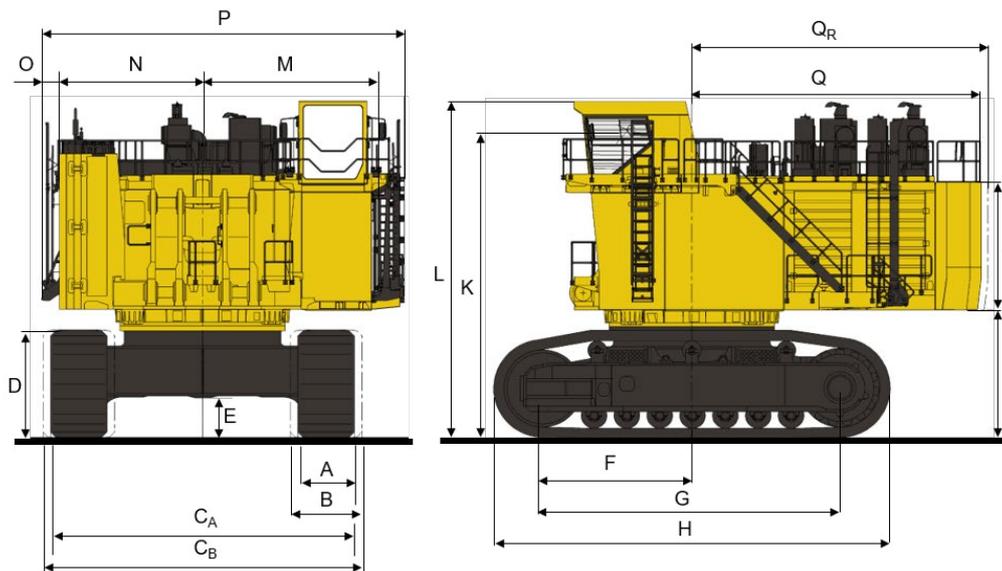
SERVICE AND LUBRICATION

- LINCOLN central lubrication for basic machine and attachment
- LINCOLN central lubrication for bucket and stick assembly
- LINCOLN automatic pinion lubrication system for swing circle teeth
- WIGGINS service arm carrying fluid, receiving connectors for filling of fuel, engine oil and coolant, hydraulic oil, grease and the evacuation of coolant, hydraulic and engine oils
- Service transfer oil pump
- Engine oil management package
- Service Monitor (incl. all relevant manuals)

Further equipment on request.

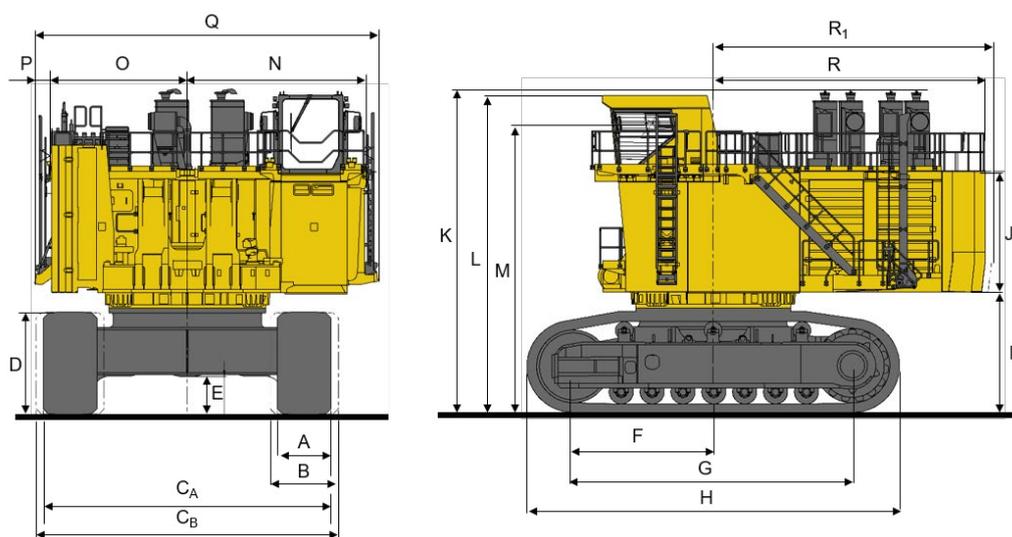


TIER 2 (BASIC MACHINE)



A	1500 mm (4'11")	B	1900 mm (6'3")	CA	8050 mm (26'5")	CB	8450 mm (27'9")
D	2895 mm (9'6")	E	1065 mm (3'9")	F	3945 mm (12'11")	G	7875 mm (25'10")
H	10500 mm (34'6")	I	3437 mm (11'3")	J	3430 mm (11'3")	K	8304 mm (27'3")
L	9001 mm (29'6")	M	4480 mm (14'8")	N	3790 mm (12'5")	O	480 mm (1'7")
P	9620 mm (31'7")	O	7670 mm (25'2")	O	7850 mm (25'9")		

TIER 4 (BASIC MACHINE)



A	1500 mm (4'11")	B	1900 mm (6'3")	CA	8050 mm (26'5")	CB	8450 mm (27'9")
D	2895 mm (9'6")	E	1065 mm (3'9")	F	3945 mm (12'11")	G	7875 mm (25'10")
H	10500 mm (34'6")	I	3452 mm (11'4")	J	3420 mm (11'3")	K	9200 mm (30'2")
L	9016 mm (29'6")	M	8255 mm (27'3")	N	4990 mm (16'4")	O	3839 mm (12'7")
P	425 mm (1'5")	Q	9610 mm (31'6")	R	7670 mm (25'2")	R1	7850 mm (25'9")

KOMATSU GERMANY
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