KOMATSU
THE QUALITY IS STANDARD

PC200LC-3

HYDRAULIC EXCAVATOR

KOMATSU: The Quality is Standard.

ENGINE MODEL: KOMATSU S6D105

FLYWHEEL HORSEPOWER: 116 HP (87 kW) at 2100 RPM

OPERATING WEIGHT: 19140 kg (42,200 lb)

BUCKET CAPACITY (JIS Heaped): 0.33 ~ 1.20 m³ (0.43 ~ 1.57 cu.yd)
(SAE heaped): 0.36 ~ 1.40 m³ (0.47 ~ 1.83 cu.yd)

Photo shown includes a light-duty bucket.

Enhanced operator comfort and smooth controls maximize operating efficiency

Human engineered cab: 940 mm (3'1") wide cab meet: ISO standards as well as passes the world's strictest regulations that are required in European countries. It provides ample work space, plus excellent visibility via the tinted, glare-free, glass window that not only softens strong sunshine but also increases the cooling efficiency of the optional air conditioner. Other features include: reclining seat with armrests and a pillow-type height-adjustable headrest, pull-up front glass window, and easy-to-clean floor with floor mat.

Low-noise operation: Sophisticated EOLSS hydraulics, quiet engine, rubber-pad mounted control valves, closed engine room, auto-decelerator, and others—all help reduce operating noise to a low level.

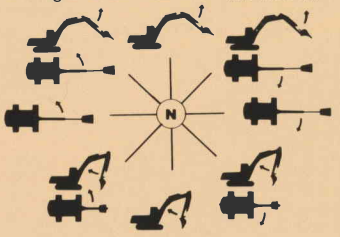
Smooth swing action is assured by control-valve-operated swing system. Swing starts and stops are always positive and smooth.

Travel/steering controls can be made with either the hand levers or the foot pedals, depending on operating conditions.

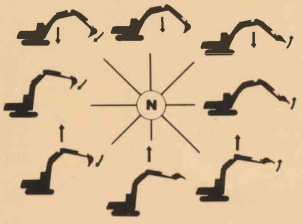
Advanced hydraulics assure smooth compound movements

Rational hydraulic system allows smooth compound movements. When arm and swing actions are carried out simultaneously, hydraulic oil is sent to the swing system with top priority to attain smooth swinging. When only an arm is actuated, hydraulic oil from two pumps is sent to the arm cylinder, accelerating arm speed for increased productivity. The automatic control valve assures straight traveling of the machine even when the work equipment is actuated at the same time.

Swing and arm control (left lever)



Boom and bucket control (right lever)



Wrist-control levers: Light-touch, short-stroke lever manipulation is assured by the proportional pressure control (PPC) system for smooth, responsive work-equipment control.

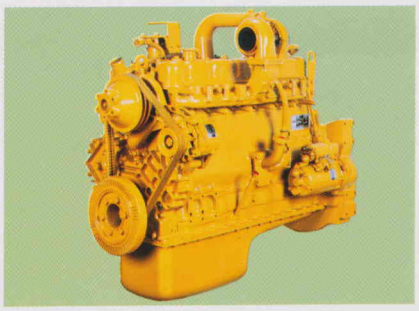
Swing holding brake automatically goes into action as soon as the machine comes to a complete halt after the swing control lever has been returned to neutral; this effectively prevents swinging caused by hydraulic drifting even when the machine is on an incline.

Simple and easy maintenance requirements

Monitoring system not only allows fast daily checks but also keeps the operator constantly informed of any abnormality during operation.

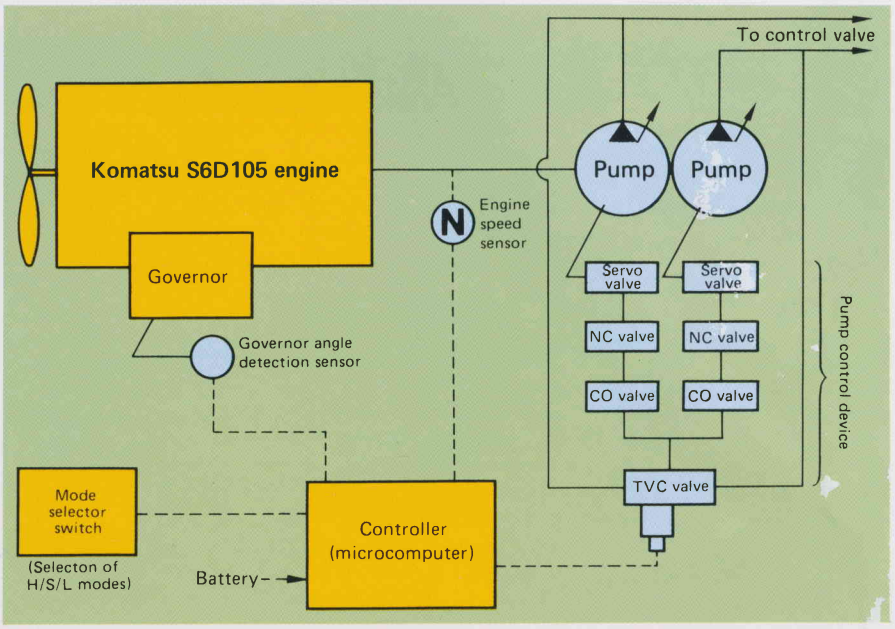
Full-open type machine covers: Hinged hood and side covers allow quick access to internal components such as engine, hydraulic equipment, etc.

Low fuel consumption assures high operational economy



Komatsu S6D105 diesel engine with direct-injection system for reduced fuel consumption. Engine power is full used thanks to the sophisticated power-efficient hydraulic system. The turbo-charger allows the S6D105 to attain high performance even on high-altitude jobsite without fuel adjustment.

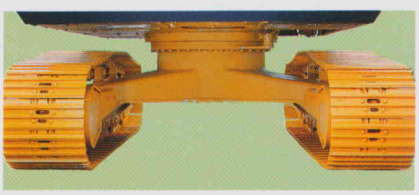
Auto-deceleration system: When the work-equipment control levers are returned to neutral, engine speed is automatically lowered to a 1200 RPM in several seconds (by electric timer), thus reducing fuel consumption significantly. An auto-deceleration cancel switch is provided. When it is switched off, engine speed can be set to any desired value with the fuel control lever.



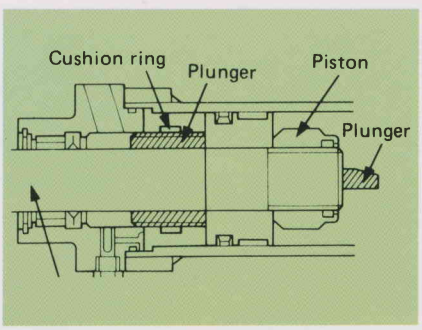
EOLSS (Electronic Open-Center Load Sensing System) electronically controls oil discharge volume from two variable-capacity piston pumps to reduce fuel consumption significantly. With the EOLSS, since engine speed is adjusted by the microcomputer, maximum engine power is effectively utilized. Furthermore, even at high-altitude operation, output of the pumps is automatically matched with engine speed due to this system.

- **Selection of HEAVY-DUTY/STANDARD/LIGHT-DUTY modes:** Three operating modes—H (Heavy-duty), S (Standard) and L (Light-duty)—are provided to meet various types of operating conditions. Best-matched selection results in reduced fuel consumption. On the H mode, full engine power is utilized and large hourly production is obtainable even with heavy-duty job. The S mode is selected for general digging/loading operations. The L mode is recommended for light-duty jobs such as loading operation of lightweight material or light lifting works, etc.
- **Engine speed sensing control:** Since the microcomputer precisely controls oil discharge volume from pumps in response to engine speed, engine output power is effectively converted into hydraulic power.
- **Pump Neutral Control (PNC) and Pump Fine Control (PFC) functions:** When control levers are positioned in neutral (e.g.; when the excavator waits for a dump truck) or when they are precisely controlled (e.g.; during a finishing work which does not need so much oil volume), oil discharge volume from pumps is automatically reduced to decrease energy loss for minimum fuel consumption.
- **Cut-Off (CO) function:** Whenever oil pressure rises close to the relief pressure, the CO valve reduces oil discharge volume to a minimum, resulting in decreased relief loss for minimum fuel consumption.

High durability reduces down-time for increased productivity



Travel motors are the in-shoe type, with hydraulic piping built into the X-leg type center frame; this prevents damage due to external obstructions.



Cushion mechanism adopted in the arm cylinder absorbs shocks due to arm retraction or extension; this adds to operating comfort and extends component life.

Long 4440 mm (14'7") tracks and wide shoes keep the PC200LC stable as it carries out heavy excavation work on rough terrain. Its low ground pressure enables it to maneuver in relatively soft terrain, thus diversifying applications.

SPECIFICATIONS

ENGINE

Komatsu S6D105, 4-cycle, water-cooled turbocharged diesel engine. 6 cylinders, 105 mm (4.13") bore x 125 mm (4.92") stroke and 6.49 ltr. (396 cu.in) piston displacement.
Flywheel horsepower . . . . . 116 HP (87 kW) at 2100 RPM
Max. torque . . . . 46 kg-m (333 ft-lb/451 N-m) at 1600 RPM
Performance of standard engine equipped with fan, air cleaner, alternator, water pump, lubricating oil pump, muffler and fuel pump under SAE standard ambient temperature (29.4°C, 85°F) and barometric conditions (745 mm Hg, 29.3" Hg).
Direct-injection fuel system. All-speed mechanical governor. Force-lubrication driven by gear pump. Full-flow filter for lube purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 24 V/7.5 kW electrical starter motor. Auto-deceleration system. 24 V/25 A alternator.

HYDRAULIC SYSTEM

Two variable-capacity piston pumps with Electronic Open-center Load Sensing System (EOLSS).

Hydraulic pumps

- Two variable-capacity piston pumps power boom, arm, bucket, swing and travel circuits.
  Capacity (discharge flow) at engine 2100 RPM
  Minimum flow . . . . . 2 x 26 ltr. (6.9 U.S. gal)/min. at 320 kg/cm^2 (4,550 PSI/31.4 MPa)
  Maximum flow . . . . . 2 x 193 ltr. (51 U.S. gal)/min. at 113 kg/cm^2 (1,610 PSI/11.1 MPa)
- One gear pump powers pilot control circuits.
  Capacity (discharge flow) at engine 2100 RPM . . . 50 ltr. (13.2 U.S. gal)/min. at 30 kg/cm^2 (430 PSI/2.94 MPa)

Hydraulic motors

Travel . . . . . Two axial piston motors with counterbalance valve and parking brake
Swing . . . . One axial piston motor with swing holding brake

Relief valve setting

Implement circuits . . . . 320 kg/cm^2 (4,550 PSI/31.4 MPa)
Swing circuits . . . . . 275 kg/cm^2 (3,910 PSI/27.0 MPa)
Pilot circuits . . . . . 30 kg/cm^2 (430 PSI/2.9 MPa)

Control valves

4-spool and 5-spool valves with a service valve.

Hydraulic cylinders

Cylinder	Numbers	Bore x stroke
Boom	2	120 mm x 1260 mm (4.72" x 4'2")
Arm	1	130 mm x 1570 mm (5.12" x 5'2")
Bucket	1	110 mm x 1120 mm (4.33" x 3'8")

STEERING

Steering/traveling controls are activated with either hand levers or foot pedals. Pushing both levers (or pedals) moves machine forward. Pulling them back makes machine go into reverse. Setting one lever (or pedal) in neutral and the other in forward enables machine to make a pivot turn. Pushing one forward while pulling the other backward makes machine counterrotate on the spot.

DRIVES

Fully hydrostatic type. Each track is independently driven by an axial-piston motor. Power goes through planetary eccentric single-reduction gear to track. Travel motors are neatly installed within track shoe's width (in-shoe design).
Max. drawbar pull . . . . . 15700 kg (34,610 lb/154.0 kN)
Max. travel speed . . . . . 3.4 km/h (2.1 MPH)

BRAKES

Hydraulic lock type travel motors equipped with counterbalance valve. When travel/steering levers are positioned in neutral, brakes automatically lock. Counterbalance valve lessens shocks as well as assures smooth starts. It also limits travel speed during descent. Spring applied and hydraulically released oil disc parking brakes are built into each travel motor.

SWING SYSTEM

Hydraulic motor-driven through spur and planetary reduction gears. Single-row shear type ball bearings with induction-hardened internal gears are built into swing circle. Grease-bathed swing pinion. Pin-lock type swing lock and swing holding brake are provided. Swing speed is proportional to swing control lever stroke.
Swing speed . . . . . 13 RPM
Tail swing radius . . . . . 2700 mm (8'10")
Min. swing radius . . . . . 3775 mm (12'5")
(work equipment, fully retracted)

UNDERCARRIAGE

X-leg type center frame is integrally welded with reinforced box-section track frames. Sealed track. Lubricated rollers and idlers. Hydraulic track adjusters with shock absorbing springs. Assembled track-type tractor shoes with triple grousers.
Shoe width . . . . . 700 mm (28")
Grouser height . . . . . 26 mm (1")
Number of shoes . . . . . 49 each side
Number of carrier rollers . . . . . 2 each side
Number of track rollers . . . . . 9 each side
Ground pressure . . . . . 0.34 kg/cm^2 (4.83 PSI/33.3 kPa)

COOLANT & LUBRICANT CAPACITY (refilling)

	Liter	U.S. gallon
Fuel tank	280	73.9
Radiator	20	5.3
Engine	24	6.3
Final drive, each side	3.7	1.0
Swing drive	7	1.9
Hydraulic tank	150	39.6

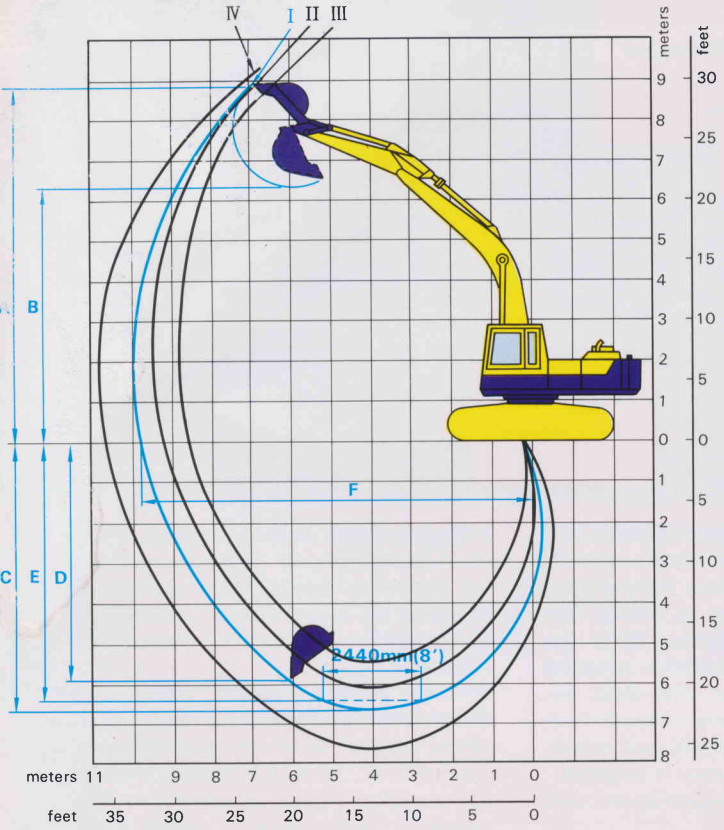
OPERATING WEIGHT (approximate)

Operating weight including 5700 mm (18'8") one-piece boom, 2925 mm (9'7") arm, JIS heaped 0.70 m^3 (0.92 cu.yd) backhoe bucket, operator, lubricant, coolant and full fuel tank . . . . . 19140 kg (42,200 lb)

STANDARD EQUIPMENT

24 V/7.5 kW electric starting motor. 25 A alternator. Dry-type air cleaner. PPC hydraulic control. EOLSS system. Auto-decelerator. 700 mm (28") triple-grouser shoes. Track guiding guards (center section). Hydraulic track adjusters. Full hydrostatic drive. Suction fan. 2 x 12V/110Ah batteries. Front lights (2). Bolt-on sprocket. 2910 kg (6,420 lb) counterweight. All-weather steel cab (with safety glass windows, pull-up type front window, rear-view mirror, lockable door, window wiper, cigarette lighter, ashtray, heater, electric horn, room lamp, adjustable pillow-type seat with reclining device and floor mat). Monitor system. Air cleaner service indicator. Fuel level sight gauge. Hydraulic oil level sight gauge.

WORKING RANGE



	Arm length	I. 2925 mm (9'7")	II. 2400 mm (7'10")
A	Max. digging height	8.96 m (29' 5")	8.91 m (29' 3")
B	Max. dumping height	6.23 m (20' 6")	6.18 m (20' 3")
C	Max. digging depth	6.55 m (21' 6")	6.04 m (19'10")
D	Max. vertical wall digging depth	5.97 m (19' 7")	5.58 m (18' 4")
E	Max. digging depth of cut for 2440 mm (8') level bottom	6.35 m (20'10")	5.81 m (19' 1")
F	Max. digging reach at ground level	9.66 m (31' 8")	9.23 m (30' 3")
	Bucket digging force	10700 kg (23,590 lb/105 kN)	10700 kg (23,590 lb/105 kN)
	Arm crowd force	8800 kg (19,400 lb/ 86 kN)	10300 kg (22,710 lb/101 kN)

	Arm length	III. 1800 mm (6'11")	IV. 2925 mm (9'7") + 1130 mm (3'8")
A	Max. digging height	8.63 m (28' 4")	9.31 m (30' 7")
B	Max. dumping height	5.91 m (19' 5")	6.61 m (21' 8")
C	Max. digging depth	5.43 m (17'10")	7.68 m (25' 2")
D	Max. vertical wall digging depth	4.95 m (16' 3")	7.09 m (23' 3")
E	Max. digging depth of cut for 2440 mm (8') level bottom	5.17 m (16'11")	7.52 m (24'8")
F	Max. digging reach at ground level	8.65 m (28' 5")	10.69 m (35' 1")
	Bucket digging force	10700 kg (23,590 lb/105 kN)	10700 kg (23,590 lb/105 kN)
	Arm crowd force	11900 kg (26,230 lb/117 kN)	7000 kg (15,430 lb/68.6 kN)

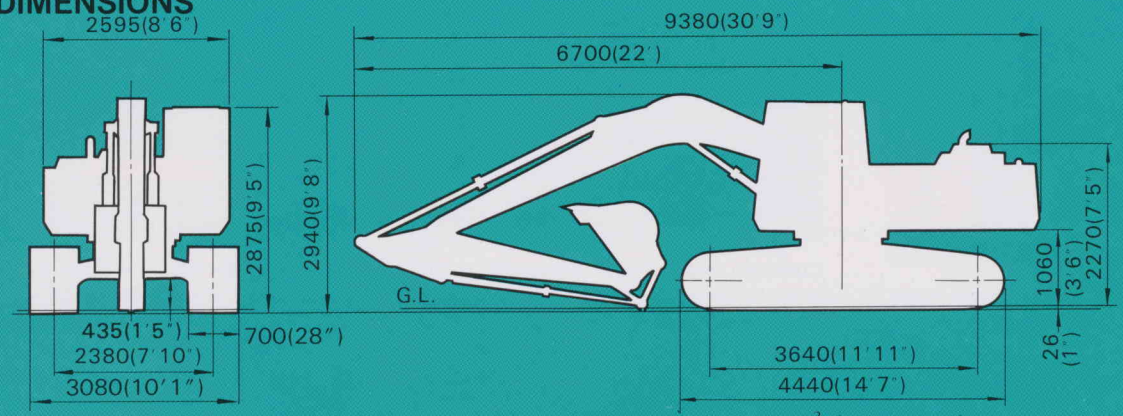
● 12050 mm (40') and 15370 mm (50') super-long fronts are also available.

BACKHOE BUCKETS

Bucket capacity : m^3 (yd^3)							
JIS, CECE heaped	0.33 (0.43)	0.45 (0.59)	0.70 (0.92)	0.80 (1.05)	0.90 (1.12)	1.00 (1.31)	1.20 (1.57)
SAE, PCSA heaped	0.36 (0.47)	0.50 (0.65)	0.80 (1.05)	0.93 (1.22)	1.05 (1.37)	1.17 (1.53)	1.40 (1.83)
Struck	0.29 (0.38)	0.39 (0.51)	0.60 (0.78)	0.67 (0.88)	0.75 (0.98)	0.83 (1.09)	0.99 (1.29)
Bucket width : mm (in)							
without side cutters	560 (22.0)	750 (29.5)	1045 (44.1)	1200 (47.2)	1330 (52.4	1450 (57.1)	1680 (66.1)
with side cutters	665 (26.2)	855 (33.7)	1150 (45.3)	1305 (51.4)	—	—	—
Bucket weight : kg (lb) (with teeth)							
without side cutters	376 (829)	406 (895)	542 (1,195)	556 (1,226)	620 (1,367)	660 (1,455)	710 (1,565)
with side cutters	410 (904)	440 (970)	576 (1,270)	590 (1,301)	—	—	—
No. of bucket teeth	3	3	5	5	6	6	6
Bucket type	Narrow bucket		Std. bucket	Light-duty bucket			

DIMENSIONS

Unit: mm (ft.in)

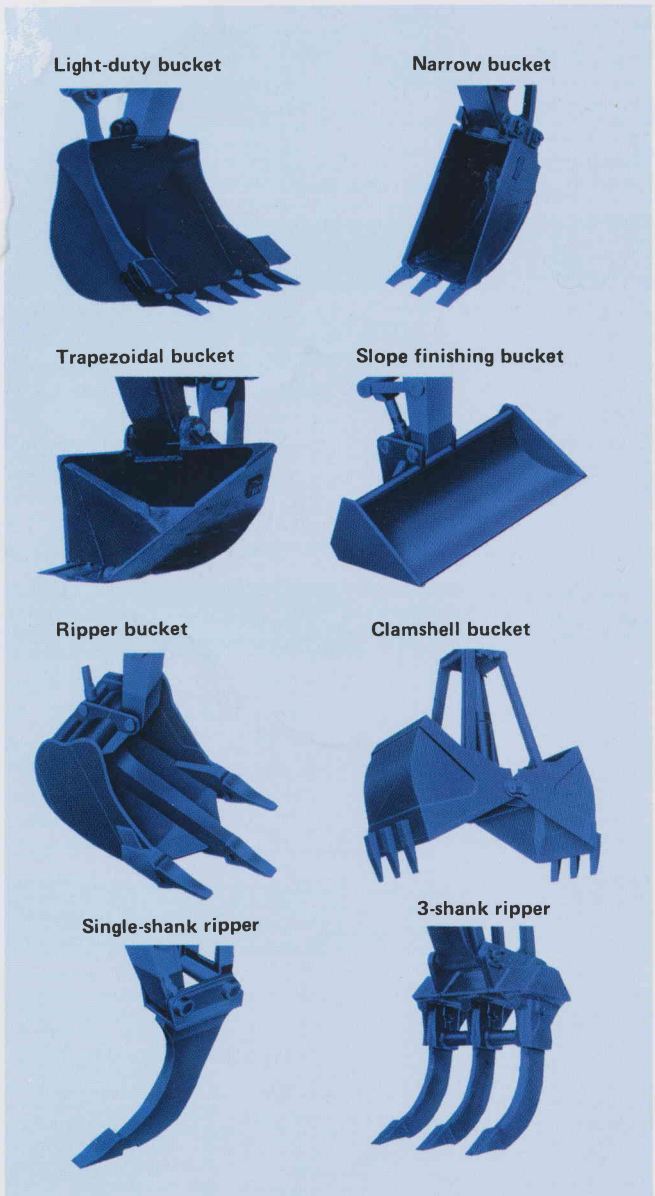


With 5700 mm (18'8") one-piece boom, 2925 mm (9'7") arm, JIS heaped 0.70 m^3 (0.92 cu.yd) backhoe bucket.

ATTACHMENTS

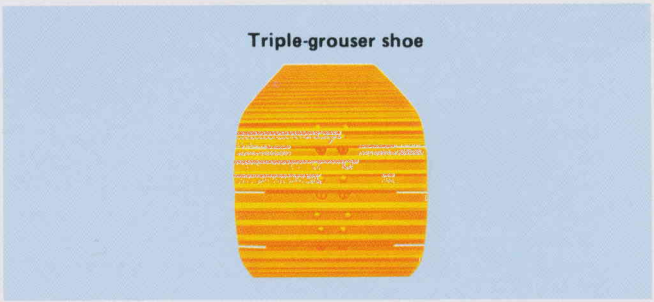
Backhoe bucket selection: Backhoe buckets of different capacities are available, so you can choose on the basis of specific job requirement.
Trapezoidal bucket is ideal for digging ditches and for drainage works. 0.50 m^3 (0.65 cu.yd) capacity.
Slope finishing bucket for scraping slopes or banks. 0.35 m^3 (0.46 cu.yd) capacity. 2000 mm (78.7") width.
Ripper bucket for hard, rocky ground. 0.56 m^3 (0.73 cu.yd) capacity. 990 mm (39") width.
Clamshell bucket is recommended for vertical digging. 0.60 m^3 (0.78 cu.yd) capacity. Two types available; digging and loading types.
Rippers. Choice of single-shank or three-shank ripper. For rock-digging and crushing, hard-soil digging, pavement-removal work, etc.

(Bucket capacity: JIS heaped)

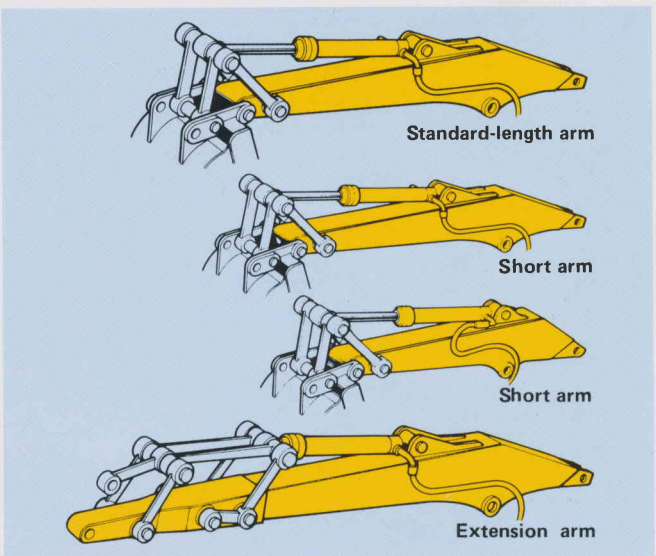


Track shoes: Triple-grouser shoes for all applications.

Type of shoes	Ground pressure kg/cm² (PSI/MPa)
600 mm (24") triple-grouser shoes	0.39 (5.55/38.2)
800 mm (31") triple-grouser shoes	0.30 (4.27/29.4)
900 mm (35") triple-grouser shoes	0.28 (3.98/27.5)



2925 mm (9'7") standard arm is recommended for general digging operation. Weight: 608 kg (1,340 lb)
2400 mm (7'10") short arm is recommended for heavy-duty excavation. Weight: 520 kg (1,150 lb)
1800 mm (5'11") short arm is recommended for extra heavy-duty excavation. Weight: 580 kg (1,280 lb)
1130 mm (3'8") extension arm for attaining extra reach. Weight: 450 kg (990 lb)
12050 mm (40') and 15370 mm (50') super-long fronts are also available.



Other options
Windshield washer. Car cooler. Air conditioner. Electric fuel pump. Additional piping for hydraulic breaker and other attachments. Seat belt. Tool kit and ordinary spare parts.

This specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

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