

# KOMATSU MINI-EXCAVATOR



*The machine shown may vary according to territory specifications.*

## A familiar feel for better control

Speed, comfort, manoeuvrability and economy make this Komatsu mini-excavator the most productive in its range.

The PC20-6 enables the operator, in total comfort, to dig more in less time and using less fuel on any job site.

## PC20-6 HYDRAULIC EXCAVATOR

---

FLYWHEEL HORSEPOWER: **19.5 kW (26.5 PS)** at 2600 RPM

---

BUCKET CAPACITIES: **0.03 ~ 0.12 m<sup>3</sup> (0.04 ~ 0.16 cu.yd)**  
(SAE heaped)

---

OPERATING WEIGHT\*: **3390 kg (7470 lb)**

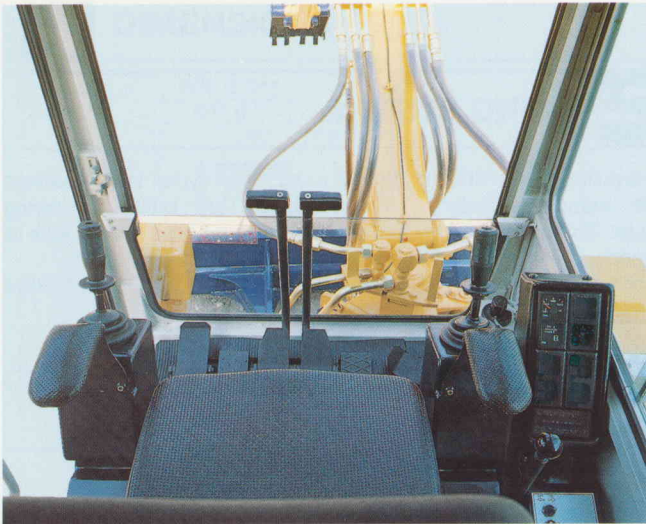
---

 **KOMATSU**



# PC20-6

**Greater efficiency  
with less**



**Larger floorspace and greater visibility** improve operator's comfort. The human-engineered lay-out of the cabin with centrally placed controls, meters and gauges reduce operator fatigue and boost operating efficiency. The "walk-through" design enables easy entrance into the cabin. A sliding windscreen, opening right hand window and ceiling hatch provide ample ventilation within the cabin.



**The servo assisted wrist-control "joy-sticks" with armrest** provide exceptional working comfort and precise operation.

**The adjustable seat** keeps the operator fatigue-free throughout the day.

**The ergonomically mounted monitoring panel** controls several parameters to ensure safe machine operation. If any malfunction occurs the operator is immediately alerted. The engine is stopped by simply turning the ignition key to "off" as with any family car.



**A convenient storage compartment** is provided for personal items and tools.



**The standard mounted cabin heater** contributes to the operator's comfort even in the strongest winters.



**Extra small swing radius and convenient boom offset** enable fast dig and load operations in extra-tight quarters when close to obstacles.

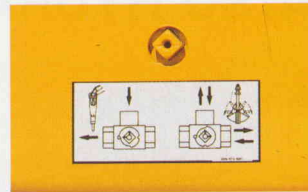




s effort



**Protection kits** are installed to protect the mini excavator against vandalism.



**Greasing points** are concentrated on the right side of the machine, for ease of maintenance. 100 hours greasing intervals greatly reduce servicing time.



A **switch** is located at the left side of the machine to divert oil from the third pump to power either an hydraulic breaker or other optional attachments.

A **fully opening machine cover** allows easy access to engine and hydraulic equipment for quick checks and repairs.



**Side protectors** placed near the engine hood prevent damage when working in narrow spaces.



The boom swings 50° to the left and 90° to the right giving the machine a wide working range.



The **larger dozer blade** with cutting edge is specially designed for fast back filling and precise levelling. The blade also provides a safe and stable platform for digging operations.



**In-shoe type travel motors and concealed undercarriage-piping** ensure safe travel over rough terrain.

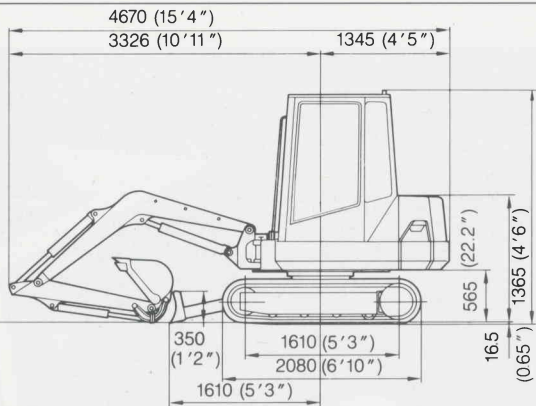
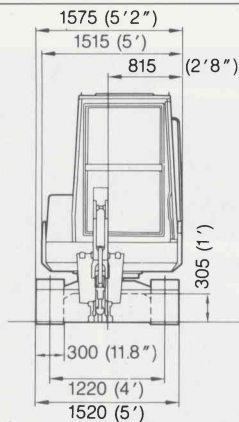


The **boom offset** is activated by a pedal placed near the operator's right foot enabling simultaneous boomswing and cab rotation thus increasing job efficiency.

**Interchangeability of steel and rubber track assemblies** is possible as track rollers, sprockets and idlers are common to both types. Assemblies can be speedily changed to adapt the machine for operation in any type of ground.



## DIMENSIONS



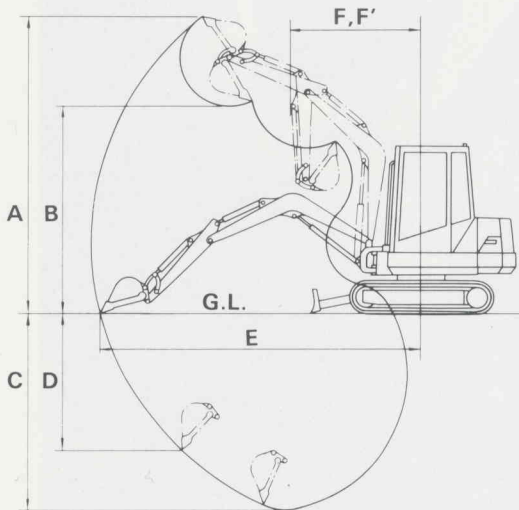
Unit: mm (ft.in)

Overall height  
With canopy: 2420 mm (7'11")  
With cab: 2450 mm (8')

With 2350 mm (7'9") one-piece boom, 1250 mm (4'1") arm, SAE heaped 0.09 m<sup>3</sup> (0.12 cu.yd) backhoe bucket



## WORKING RANGE



Arm length		with 1250 mm (4'1") arm	with 1650 mm (5'5") arm
A	Max. digging height	4245 mm (13'11") [4735 mm (15'6")]	4365 mm (14'4")
B	Max. dumping height	2960 mm (9'9") [3375 mm (11'1")]	3155 mm (10'4")
C	Max. digging depth	2800 mm (9'2") [2650 mm (8'8")]	3160 mm (10'4")
D	Max. vertical wall digging depth	1960 mm (6'5")	2320 mm (7'7")
E	Max. digging reach at ground level	4670 mm (15'41")	4995 (16'5")
F	Min. swing radius with boom swung	1520 mm (5') [1290 mm (4'3")]	1720 mm (5'8")
F'	Min. swing radius without boom swung	1910 mm (6'3") [1595 mm (5'3")]	2095 mm (6'10")
Bucket digging force		20.1 kN (2050 kg/4,520 lb)	21.0 kN (2150 kg/4,740 lb)
Arm crowd force		12.3 kN (1250 kg/2,760 lb)	11.1 kN (1140 kg/2,510 lb)

**Boom swing:** Boom can be swung 50° to left and 90° to right by boom offset cylinder independent of upper structure swinging.

**Boom offset distance:** Left ..... 710 mm (2'4")  
Right ..... 455 mm (1'6")

Figures in [ ] are for smaller swing radius models that are optionally available on canopy-type machines.



## LIFTING CAPACITY with 1250 mm (4'1") arm and 52 kg (115 lb) bucket (incl. teeth and side cutters)

Bucket capacity (SAE heaped): 0.09 m<sup>3</sup> (0.12 cu.yd)  
Rating at maximum reach

A – Reach from swing centerline  
B – Bucket hook height

With blade on ground										With blade above ground									
A		4 m (13'1")		3 m (9'10")		2 m (6'7")		1 m (3'3")		4 m (13'1")		3 m (9'10")		2 m (6'7")		1 m (3'3")			
B		kg (lb)		kg (lb)		kg (lb)		kg (lb)		kg (lb)		kg (lb)		kg (lb)		kg (lb)			
3 m (9'10")	kg (lb)	*600 (1300)	500 (1050)			*600 (1300)	*600 (1300)			600 (1300)	500 (1050)			*600 (1300)	600 (1300)				
2 m (6'7")	kg (lb)	*600 (1300)	450 (950)			*700 (1500)	650 (1400)			500 (1050)	450 (950)			*700 (1500)	650 (1400)				
1 m (3'3")	kg (lb)	*650 (1400)	350 (850)	*650 (1400)	350 (850)	*900 (2000)	600 (1300)			450 (950)	350 (850)	500 (1050)	350 (850)	700 (1500)	600 (1300)				
0 m (0')	kg (lb)	*700 (1500)	350 (850)			*1000 (2200)	550 (1150)	*1250 (2800)	1000 (2250)	500 (1050)	350 (850)			700 (1500)	550 (1150)	*1250 (2800)	1000 (2150)		
-1 m (-3'3")	kg (lb)	*750 (1600)	500 (1050)			*900 (2000)	550 (1150)	*1550 (3500)	1000 (2250)	*1400 (3100)	*1400 (3100)	600 (1300)	500 (1050)	700 (1500)	550 (1150)	1350 (3000)	1000 (2150)	*1400 (3100)	*1400 (3100)
-2 m (-6'7")	kg (lb)	*700 (1500)	*700 (1500)					*800 (1800)	*800 (1800)			*700 (1500)	*700 (1500)			*800 (1800)	*800 (1800)		

- Notes:
1. Ratings are based on DIN 15019.
  2. Lifting capacities include a safety margin of 20%.
  3. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.

4. Lifting capacities assume the machine equipped with 300 mm (11.8") shoe is standing level on a firm, uniform supporting surface.
5. The load point is an optional hook located on back of the bucket.



## ATTACHMENTS

Buckets						ARM:					
Capacity: Heaped (struck x 2)	0.05 m <sup>3</sup> (0.07 cu.yd)	0.07 m <sup>3</sup> (0.09 cu.yd)	0.12 m <sup>3</sup> (0.13 cu.yd)	0.13 m <sup>3</sup> (0.17 cu.yd)	0.16 m <sup>3</sup> (0.21 cu.yd)	1250 mm (4'1") arm	1650 mm (5'5") arm				
SAE, PCSA heaped	0.025 m <sup>3</sup> (0.04 cu.yd)	0.037 m <sup>3</sup> (0.05 cu.yd)	0.06 m <sup>3</sup> (0.08 cu.yd)	0.07 m <sup>3</sup> (0.09 cu.yd)	0.08 m <sup>3</sup> (0.10 cu.yd)	1250 mm (4'1") arm	1650 mm (5'5") arm				
Struck	0.025 m <sup>3</sup> (0.03 cu.yd)	0.037 m <sup>3</sup> (0.05 cu.yd)	0.06 m <sup>3</sup> (0.08 cu.yd)	0.07 m <sup>3</sup> (0.09 cu.yd)	0.08 m <sup>3</sup> (0.10 cu.yd)						
Bucket width: without side cutters	250 mm (9.8")	350 mm (13.8")	450 mm (17.7")	600 mm (23.6")	650 mm (25.6")						
with side cutters	270 mm (11.0")	370 mm (14.6")	480 mm (18.9")	620 mm (23.6")	680 mm (26.8")						
No. of bucket teeth	3	3	4	5	5						
Bucket type	Narrow		Standard		Light-duty						

**BOOM:**  
2350 mm (7'9") boom

**Other track shoes:**  
Choose the rubber shoes when the machine works on paved areas.



# SPECIFICATIONS PC20-6



## ENGINE

Model ..... Komatsu 3D84-2F  
Type ..... 4-cycle, water-cooled, overhead valve diesel engine  
No. of cylinders ..... 3  
Bore ..... 84 mm (3.3")  
Stroke ..... 86 mm (3.34")  
Piston displacement ..... 1.429 ltr. (87.2 cu.in)  
Flywheel horsepower  
(DIN 6270 B) ..... 19.5 kW (26.5 PS) at 2600 RPM  
(SAE J1349) ..... 19.5 kW (26.1 HP) at 2600 RPM  
Direct injection.  
Governor ..... All-speed, mechanical  
Lube purification ..... Full-flow filter



## HYDRAULIC SYSTEM

### Hydraulic pumps

Three gear pumps power the boom, arm, bucket, travel, swing, blade and boom offset circuits

Capacity (discharge flow)

at engine 2600 RPM ..... 26.8 ltr./min. x 2 + 20.4 ltr./min. x 1

### Hydraulic motors

Travel ..... Two axial piston motors with brake valve

Swing ..... One axial piston motor with brake valve

### Relief valve setting

Implement circuits ..... 20.6 MPa (210 kg/cm<sup>2</sup> - 2,986 PSI)

Travel circuit ..... 20.6 MPa (210 kg/cm<sup>2</sup> - 2,986 PSI)

Swing circuit ..... 14.7 MPa (150 kg/cm<sup>2</sup> - 2,133 PSI)

### Control valves

6-spool, 2-spool control valve (4 elements servo-assisted).

### Hydraulic cylinders

No. of cylinders – bore x stroke:

Boom ..... 1 – 80 mm x 545 mm (3.1" x 21.5")

Arm ..... 1 – 75 mm x 440 mm (3.0" x 17.3")

Bucket ..... 1 – 65 mm x 410 mm (2.6" x 16.1")

Boom offset ..... 1 – 85 mm x 585 mm (3.3" x 23.0")

Blade ..... 1 – 90 mm x 120 mm (3.5" x 4.7")



## STEERING

Steering/travelling 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 & BRAKES

### Drive method

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 ..... 21.2 kN (2160 kg/4,760 lb)

Max. travel speed ..... 2.4 km/h (1.5 MPH)

### Brake method

Hydraulic lock-type travel motors equipped with brake valve. When travel/steering levers are positioned in neutral, brakes automatically lock. Brake valve limits travel speed during descent.



## SWING SYSTEM

Hydraulic motor-driven. 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 is provided.

Swing speed ..... 11.5 RPM



## BLADE

Welded, unitized construction of blade and frame.

Blade width x height ..... 1520 mm (5') x 350 mm (1'2")

Blade cutting angle ..... 62°

Max. lift above ground ..... 350 mm (1'2")

Max. drop below ground ..... 390 mm (1'3")



## UNDERCARRIAGE

Box-section track frames. Sealed track. Lubricated rollers and idlers. Hydraulic track adjusters with shock absorbing springs. Welded track-type tractor shoes with double grousers.

Shoe width ..... 300 mm (11.8")

Grouser height ..... 16.5 mm (0.65")

Number of shoes ..... 43 each side

Number of track rollers ..... 4 each side

Ground pressure ..... 30.4 kPa (0.31 kg/cm<sup>2</sup> - 4.41 PSI)



## CAB

Sound-insulated all-weather steel cab, safety glass windows, pull-up front window, lockable door, window wiper, electric horn, cab lamp, adjustable suspension seat with reclining devices, monitor system and gauges.



## COOLANT & LUBRICANT CAPACITY (refilling)

Fuel tank ..... 55 ltr.

Radiator ..... 5 ltr.

Engine ..... 7.3 ltr.

Final drive, each side ..... 1.2 ltr.

Hydraulic tank ..... 35 ltr.



## OPERATING WEIGHT (approximate)

Operating weight, including 2350 mm (7'9") one-piece boom, 1250 mm (4'1") arm, SAE heaped 0.09 m<sup>3</sup> (0.12 cu.yd.) backhoe bucket, lubricant, coolant, full fuel tank, standard equipment, operator and cab ..... 3390 kg (7,470 lb)

Type of shoes	Operating weight	Ground pressure
300 mm (11.8") Standard shoe	3390 kg (7470 lb)	30.4 kPa (0.31 kg/cm <sup>2</sup> - 4.41 PSI)
300 mm (11.8") Rubber shoe	3330 kg (7330 lb)	30.4 kPa (0.31 kg/cm <sup>2</sup> - 4.41 PSI)

# KOMATSU HYDRAULIC MINI-EXCAVATOR PC20-6



Model shown may include optional equipment.

## MAIN FEATURES

### A FAMILIAR FEEL FOR BETTER CONTROL

- Boom cushion cylinder
- Neutral lock on operating levers
- Operator seat
- Spacious cab with large foot space
- Servo assisted wristcontrols with armrest
- Wrist controls with adjustable armrests

### GREATER EFFICIENCY WITH LESS EFFORT

- Concealed piping and well-formed undercarriage
- Field-proven welded assembly shoes and in-shoe travel motor
- Full-open engine cover with side protectors
- Large boom offset for easy side ditching
- Sealed implement pins
- Wide working range, small swing radius, high dumping height

## STANDARD EQUIPMENT

Standard and optional equipment may vary. Consult your Komatsu dealer for more information.

- Alternator charge lamp
- Alternator 12 V/40 A
- Battery 12 V/80 Ah
- Double-grouser shoes 300 mm (11.8")
- Dozer blade with cylinder cover
- Dry-type air cleaner
- Electric horn
- Electric starting motor 12 V/1.8 kW

- Floor mat
- Front light
- Fuel level gauge
- Full hydrostatic drive
- Hydraulic track adjusters
- Lubricated rollers and idlers
- Service meter
- Side protectors for engine hood

- Steel cab includes: room lamp, wiper, heater, ash tray, windshield washer and lockable door
- Suspension operator's seat
- Tool kit and ordinary spare parts
- Vandalism protection kit
- Warning lamp for engine oil pressure and temperature
- Water separator
- Wrist controls with adjustable armrests

## OPTIONAL EQUIPMENT

- Dust indicator
- Hydraulic control unit for hydraulic breaker

- Plastic canopy
- Radio
- ROPS canopy

- ROPS cab
- Rubber shoe
- Seat belt

Printed in Belgium – 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.

\* Operating weight, including 2350 mm (7'9") one-piece boom, 1250 mm (4'1") arm, SAE heaped 0.09 m<sup>3</sup> bucket, standard equipment.

### KOMATSU EUROPE N.V./S.A.

Mechelsesteenweg 586 - B 1800 VILVOORDE (BELGIUM)  
Tel. (+32)2/254 04 11 Fax (+32)2/252 19 81 Telex 24.380 Eukom b  
Cable: KOMASEI, Bru B

# NEM

Nordisk Entreprenør-Materiel a/s  
Industrisvinget 2  
6600 Vejlen  
Tlf.: 75 36 22 33

Printing  
& Services  
Centre