

# **PC30MR-5 PC35MR-5**

U.S. EPA Tier 4 Final Engine

Australian - NZ specifications



The photo shows Japanese specification

## **HORSEPOWER**

PC30MR-5

Gross: 18.2 kW 24.4 HP/2200 min<sup>-1</sup> Net: 17.4 kW 23.3 HP/2200 min<sup>-1</sup>

PC35MR-5

Gross: 18.2 kW 24.4 HP/2200 min<sup>-1</sup> Net: 17.4 kW 23.3 HP/2200 min<sup>-1</sup>

## **OPERATING WEIGHT**

PC30MR-5: 3150 kg (Canopy) 3300 kg (Cab)

PC35MR-5: 3620 kg (Canopy) 3770 kg (Cab)

## **BUCKET CAPACITY**

PC30MR-5: 0.035 - 0.11 m<sup>3</sup> PC35MR-5: 0.044 - 0.13 m<sup>3</sup>

CEN00798-00

https://home.komatsu/en/

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# **WALK-AROUND**

# Evolution of "skills" and inheritance of "power".

Installation of various new functions and balanced low fuel consumption and high working capacity.

Cutting-edge compact hydraulic excavators, the PC30MR/35MR-5.



The photo shows Japanese specification

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# \_\_Economy & Workability Features

- U.S. EPA Tier 4 Final emission regulations-compliant engine
- 7% reduction in fuel consumption per hour (Compared with Komatsu's current models)

- Automatic travel speed change increases work efficiency and makes gear changes smoother
- Dial type fuel controls **ENEW**

# <u> Information & Communication Technology (ICT)</u>

- Multi-function monitor for displaying much information **NEW**
- High resolution 3.5" Liquid Crystal Display (LCD) color monitor

# Safety Features

- Two-post canopy compliant with ROPS (ISO 3471) and OPG top guard (ISO 10262) standards
- Lock lever and lock lever auto lock function **ENEW**
- Engine shutdown secondary switch
- Seat belt caution indicator

## \_Gomforfable\_Teafures

- Spacious and comfortable operator's compartment
- Multiple accessories around the operator's seat
- Newly designed cab

## \_\_Matriterance Features

- Tilt-up floor mechanism and wide cover for easy maintenance
- Maintenance information is displayed on the monitor
- Quick release battery terminal (−)

## 

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# **ECONOMY & WORKABILITY FEATURES**

## **Balanced High Performance** and Low Fuel Consumption

The PC30MR/35MR-5 effectively uses the engine output with Komatsu's unique electronic control system, combined with the latest engine technologies, including heavy-duty cooled Exhaust Gas Recirculation (EGR) system. It reduces fuel consumption 7%\*, while inheriting the high performance of former models.

\* Compared with Komatsu's current models The above data may differ from actual fuel consumption depending on the type of work. The fuel consumption data is based on in-house comparison test results.

## **Electronic control system**

The engine and hydraulic system are properly controlled, according to the operating condition. The fuel consumption reduction and working performance are well balanced by employing the hydraulic circuit loss reduction system.



The photo shows Japanese specification

## **Auto-decelerator and Auto Idle Shutdown**

Auto-decelerator and auto idle shutdown functions are provided as standard. The auto-decelerator function automatically reduces the engine speed a few seconds after the work equipment levers are moved to the neutral posi-

Selection screen of two working modes

tion. The auto idle shutdown function\* automatically stops the engine after a preset time to reduce unnecessary fuel consumption.

E mode

\* Default setting is OFF



## **Dial Type Fuel Control**

selected speed range.

**Automatic Travel Speed** 

The travel speed selector

travel. Once engaged, the

travel speed automatically

The dial type fuel control makes operation and engine speed adjustment much easier.





## **Large Vertical Pin and Steel Bushing**

A large vertical pin and steel bushing are used at the boom foot for improved durability. An abrasion-resistant steel bushing further improves service life.



## **Attachment Selector Valve**

Allows the operator to switch between oneway (Breaker) and twoway auxiliary hydraulic flow (Thumb).



## **Strengthened Boom Cylinder Guard**

A strengthened boom cylinder guard helps protect the boom cylinder from damage.



A working light for work equipment is located at the boom base for better protection.



## **Working Light on Canopy or Cab**

A working light provides good illumination working at





## **Travel Pedals Operable by Foot**

Since the travel pedals are installed, the operator can control the travel levers by foot. When the travel pedals are not used, they can be folded so that they are not obstacles.



# **ICT**



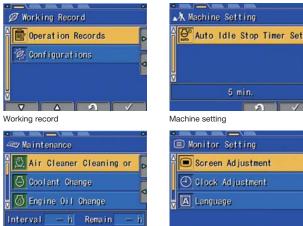
## **High Resolution 3.5" LCD Color Monitor**

The high resolution LCD color monitor is less affected by the viewing angle and surrounding brightness, ensuring excellent visibility.



## Indicators, basic operation switches

- 1 Message
- 3 Work equipment lock
- 4 Engine preheating
- 5 Engine coolant temperature gauge
- 6 Service meter, clock 7 Working mode
- 2 Seat belt
- 8 Travel mode
- 9 Engine coolant temperature
- 10 Auto-decelerator
- 11 Fuel gauge
- 12 Fuel
- 13 Guidance icons
  - 14 Function switches





Monitor setting

The photo shows North American specification.



# **SAFETY FEATURES**





The photo shows North American specification.

## **Lock Lever and Lock Lever Auto Lock Function**

The engine can be started only in the lock position. The function to detect the neutral position of the work equipment lever prevents accidental operation due to touching the work equipment lever when the lock lever is released. If the lock lever is released with the work equipment lever not in the neutral position, the work equipment automatically stops to prevent accidents.





**Short Tail Swing for Operation in Confined Areas** 

The short tail swing radius with minimum rear overhang from the track (95 mm for PC30MR-5 and 80 mm for PC35MR-5) allows the operator to concentrate on work in confined areas without worrying about the counterweight clearance.

## **Engine Shutdown Secondary Switch**

Engine shutdown secondary switch at base of seat is added to shutdown engine.



## **Seat Belt Indicator**

A warning indicator on the monitor appears when the seat belt is not engaged.



## **Other Equipment**

## Hose covers

Pressure hoses are provided with protective covers.





## Thermal guard and fan guard

Thermal guard and fan guard are installed to prevent workers from touching hot parts around engine and cooling fan during inspection and maintenance.



Retractable seat belt **Accumulator** Travel alarm

# **COMFORTABLE FEATURES**



The photo shows North American specification.

## **Spacious and Comfortable Operator's Compartment**

The two-post canopy provides spacious leg room and a wide forward view without blind spots. The newly designed high-quality interior and semi-high back reclining seat help keep the operator comfortable.

## **Standard Accessories**

Seat with a semi-high back











## OPTIONAL ENCLOSED CAB

**Newly Designed Cab Provides Excellent Visibility** and Wide Operator Space

Visibility is improved by employing large-sized flat glass. Width is also increased to realize wide operator space. This cab conforms to ROPS (ISO 3471) and OPG (Top guard) Level I (ISO 10262).

Rear left of cab protrudes from track by 80 mm (PC30MR-5) or 40 mm (PC35MR-5) when upper structure swings.

## Newly designed large-sized door

Cab entrance area is increased 17% (Compared with Komatsu's current models) by employing newly designed large-sized door.





## **Standard Accessories for Cab**

## Sliding window glass (Right side)







## **Rear view mirrors**



Cup holder (For cab)



Reinforced front glass Heater with fresh air input Escape hammer/ Room lamp/Hanger

## **Optional Accessories for Cab**

## Large-capacity air conditioner with fresh air filter

The large-capacity air conditioner, high defrosting performance, and optimum air outlet design keep a comfortable environment in the cab all year round.



## **Ashtray**



Additional working light



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# **MAINTENANCE FEATURES**



## **Easy Maintenance**

## Side-by-side cooling

Since radiator and aftercooler are arranged in parallel, it is easy to clean, remove and install them.



## Large fuel fill port

Allows easy fuel filling.



Long-life oil and a high-performance filter are used. The replacement interval for the engine oil and engine oil filter is 500 hours, and those for the hydraulic oil filter and hydraulic oil are 1000 hours and 2000 hours, respectively. These long replacement intervals reduce costs and contribute to effective use of resources.

**Quick release battery** 

When maintaining the electric circuit, etc., you can disconnect battery power without tools.

terminal (-)



## Large fuel filter and fuel pre-filter with water separator

A large filter with enhanced filtering performance is used. The fuel pre-filter with a water separator removes water and dirt in fuel to prevent fuel system troubles.



Large fuel filter Fuel pre-filter (With water separator)

## Long-life oil, filter



# Tilt-up floor mechanism and full-open cover for the cab model (PC35MR-5) The photo shows Japanese High strength X-track frame **Maintenance Information Is Displayed in** a Simple Format on the Monitor X-track frame is a large hydraulic excavator concept that helps minimize "Maintenance time caution lamp" display dirt build up and is easier to clean. When the remaining time to maintenance becomes less than

30 hours\*, the maintenance time monitor appears. Pressing the key switches the monitor to the maintenance screen.

\* The setting can be changed within the range between 10 and 200 hours.





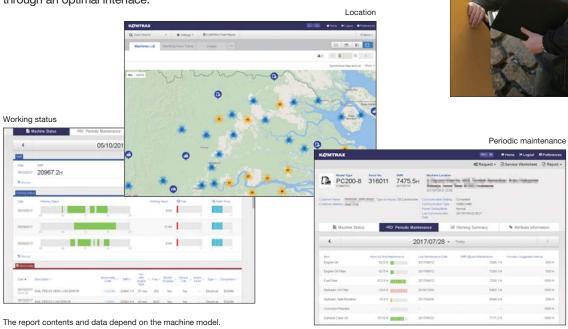
# **KOMTRAX**

# **KOMTRAX**

The Komatsu remote monitoring and management technology provides insightful data about your equipment and fleet in user-friendly format.

## **Equipment Management Support**

Through the web application, a variety of search parameters are available to quickly find information about specific machines based on key factors. Moreover, KOMTRAX finds out machines with problems from your fleet and shows you through an optimal interface.



## **Optimal Strategy for Efficient Work**

The detailed information that KOMTRAX puts at your fingertips helps you manage your fleet conveniently on the web anytime, anywhere. It gives you the power to make better daily and long-term strategic decisions.



# **SPECIFICATIONS**



### NGINE

Model Komatsu 3D88E-7
Type
Aspiration Cooled EGR
Number of cylinders
Bore
Stroke
Piston displacement
Horsepower:
SAE J1995 Gross 18.2 kW 24.4 HP
ISO 9249 / SAE J1349 Net 17.4 kW 23.3 HP
Rated rpm
Fan drive method for radiator cooling Mechanical
Governor All-speed control, electronic

U.S. EPA Tier 4 Final and EU Stage 3A emissions certified.



## **HYDRAULICS**

Type Hydraulic Mechanical Intelligence New Design (HydrauMind) Number of selectable working modes
Main pump:
Pumps for
Type Fixed displacement gear
Maximum flow
Hydraulic motors:
Travel 2 x axial piston motors with parking brake
Swing 1 x axial piston motor with swing holding brake
Relief valve setting:
Implement circuits
Travel circuit
Swing circuit21.6 MPa 220 kg/cm <sup>2</sup>
Pilot circuit
Blade circuits (Raise, lower)21.6 MPa 220 kg/cm <sup>2</sup>
Hydraulic cylinders:
(Number of cylinders – bore x stroke x rod diameter)
Boom (PC30MR-5) 1–80 mm x 550 mm x 45 mm
(PC35MR-5) 1–80 mm x 585 mm x 45 mm
Arm (PC30MR-5) 1–75 mm x 495 mm x 45 mm
(PC35MR-5) 1–75 mm x 595 mm x 45 mm
Bucket
Boom swing (PC30MR-5) 1–80 mm x 500 mm x 40 mm
(PC35MR-5) 1–95 mm x 482 mm x 50 mm
Blade (PC30MR-5) 1–85 mm x 135 mm x 45 mm
(PC35MR-5) 1–95 mm x 140 mm x 45 mm
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Steering control	Two levers with pedals
Drive method	
Maximum drawbar pull	33.2 kN 3400 kg
Gradeability	
Maximum travel speed: I	High4.6 km/h
(Auto-shift)	Low 2.6 km/h
Service brake	
Parking brake	Mechanical disc brake



## **SWING SYSTEM**

Drive method	Hydrostatic
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Swing lock	Mechanical disc brake
Swing speed	9 min <sup>-1</sup>



## UNDERCARRIAGE

Center frame
rack frame
Seal of track Sealed track
rack adjuster
lumber of shoes (Each side)
lumber of carrier rollers (Each side)
lumber of track rollers (Each side) 4



# COOLANT AND LUBRICANT CAPACITY (REFILL)

uel tank	40.6 L
oolant	3.3 L
ngine	6.7 L
inal drive (Each side)	0.6 L
ydraulic tank (PC30MR-5)	.34(20) L
(PC35MR-5)	.39(20) L



## **OPERATING WEIGHT (APPROXIMATE)**

Operating weight including 2285 mm (PC30MR-5), 2540 mm (PC35MR-5) one-piece boom, 1240 mm (PC30MR-5), 1370 mm (PC35MR-5) arm, ISO 7451 heaped 0.09 m³ (PC30MR-5), 0.11 m³ (PC35MR-5) bucket, blade, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

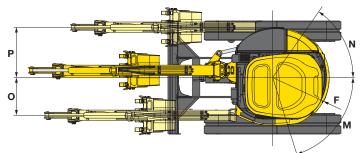
		PC30	MR-5	
		y (ISO 3471), r Shoe		(ISO 3471) <b>,</b> <b>r Shoe</b>
Shoes	Operating Grow Weight Pres		Operating Weight	Ground Pressure
300 mm	3150 kg	28.5 kPa 0.29 kg/cm <sup>2</sup>	3300 kg	29.8 kPa 0.30 kg/cm <sup>2</sup>

	PC35MR-5					
		y (ISO 3471), r Shoe	ROPS Cab (ISO 3471), Rubber Shoe			
Shoes	Operating Weight	Ground Pressure	Operating Ground Weight Pressur			
300 mm	3620 kg	35.8 kPa 0.37 kg/cm <sup>2</sup>	3770 kg	37.2 kPa 0.38 kg/cm <sup>2</sup>		

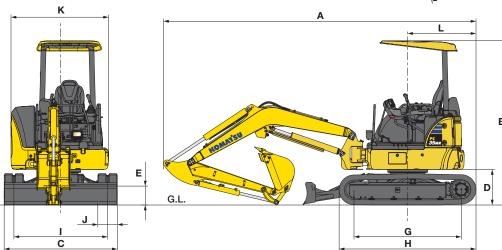
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## DIMENSIONS

Mode	el	PC30MR-5	PC35MR-5
Boon	n Length	2285 mm	2540 mm
Arm	Length	1240 mm	1370 mm
Α	Overall length	4560 mm	4905 mm
В	Overall height	2520 mm	2520 mm
С	Overall width	1550 mm	1740 mm
D	Ground clearance, counterweight	545 mm	545 mm
E	Ground clearance (Minimum)	305 mm	290 mm
F	Tail swing radius	870 mm	950 mm
G	Track length on ground	1650 mm	1650 mm
Н	Track length	2105 mm	2105 mm
I	Track gauge	1250 mm	1440 mm
J	Shoe width	300 mm	300 mm
K	Machine upper width	1500 mm	1500 mm
L	Distance, swing center to rear end	1050 mm	1050 mm
M/N	Boom swing angle deg.	LH80°/RH50°	LH75°/RH55°
0	Bucket offset LH	580 mm	580 mm
Р	Bucket offset RH	845 mm	770 mm



With rubber shoe





## **BACKHOE BUCKET**

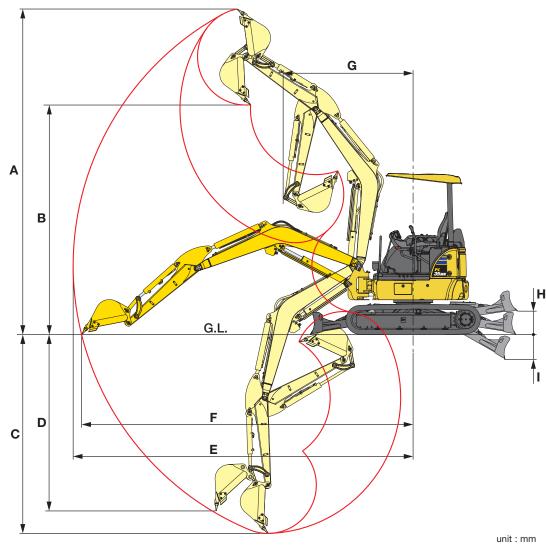
<b>Bucket Capacity</b> (Heaped)		Width		Weight (With Side Cutters)		Number	DOGGMD F	DOOFIED F
ISO 7451, PCSA	SO 7451, PCSA CECE		With Side Cutters	PC30MR-5	PC35MR-5	of Teeth	PC30MR-5	PC35MR-5
0.035 m <sup>3</sup>	0.03 m <sup>3</sup>	250 mm	320 mm	52 kg –		3	0	Х
0.044 m <sup>3</sup>	<b>0.044 m³ 0.04 m³</b> 280 mm		350 mm	53 kg	60 kg	3	0	0
<b>0.055 m³ 0.05 m³</b> 350 mm 420 mi		420 mm	60 kg	67 kg	3	0	0	
0.09 m <sup>3</sup>	0.08 m <sup>3</sup>	430 mm	500 mm	63 kg	78 kg	4	•	0
0.11 m <sup>3</sup>	0.10 m <sup>3</sup>	530 mm	600 mm	81 kg	79 kg	4	0	•
0.13 m <sup>3</sup>	0.12 m <sup>3</sup>	630 mm	700 mm	-	98 kg	5	Х	0



## **WORKING RANGE**

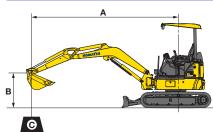
Mod	el	PC30MR-5	PC35MR-5	
Boor	n Length	2285 mm 2540 mm		
Arm	Length	1240 mm	1370 mm	
Α	Maximum digging height	4840 mm	5000 mm	
В	Maximum dumping height	3350 mm	3530 mm	
C	Maximum digging depth	2760 mm	3110 mm	
D	Maximum vertical wall digging depth	2400 mm	2690 mm	
E	Maximum digging reach	5050 mm	5300 mm	
F	Maximum digging reach at ground	4910 mm	5170 mm	
G	Minimum swing radius (When boom swing)	2055 (1560) mm	2030 (1600) mm	
Н	Maximum blade lift	360 mm	360 mm	
ı	Maximum blade depth	310 mm	390 mm	
SO 6015 Rating	Bucket digging force	29.5 kN 3000 kg	29.9 kN 3050 kg	
ISO ( Rat	Arm crowd force	17.7 kN 1800 kg	20.6 kN 2100 kg	

With rubber shoe





## LIFTING CAPACITY WITH LIFTING MODE



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊕: Rating at maximum reach

PC30MR-5 Canopy Boom: 2285 mm Arm: 1240 mm Bucket: 0.09 m³ ISO 7451 heaped Shoe width: 300 mm rubber shoe Blade on ground								
A	€Max	kimum	4.0 m		3.0 m		2.0 m	
В	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
3.0 m	760 kg	430 kg	_	_	880 kg	615 kg	_	-
2.0 m	735 kg	330 kg	960 kg	360 kg	1060 kg	595 kg	_	_
1.0 m	795 kg	295 kg	1065 kg	345 kg	1455 kg	555 kg	_	_
0 m	950 kg	295 kg	1145 kg	335 kg	1720 kg	515 kg	1485 kg	965 kg
-1.0 m	1075 kg	345 kg	_	_	1645 kg	510 kg	2355 kg	970 kg

PC35MR-5 Canopy Boom: 2540 mm Arm: 1370 mm Bucket: 0.09 m³ ISO 7451 heaped Shoe width: 300 mm rubber shoe Blade on ground								
B A	€Maximum		4.0 m		3.0 m		2.0 m	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
3.0 m	775 kg	450 kg	800 kg	450 kg	_	_	_	_
2.0 m	780 kg	360 kg	885 kg	445 kg	1005 kg	730 kg	_	_
1.0 m	855 kg	330 kg	1030 kg	430 kg	1425 kg	680 kg	_	_
0 m	965 kg	335 kg	1145 kg	410 kg	1710 kg	640 kg	1545 kg	1220 kg
-1.0 m	1035 kg	380 kg	1120 kg	405 kg	1705 kg	630 kg	2600 kg	1235 kg

Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.





## STANDARD EQUIPMENT

## **ENGINE**

- Air cleaner, double element with auto dust evacuator
- Cooling fan, suction type

## **ELECTRICAL SYSTEM**

- Alternator, 12 V/55 A
- Auto-decelerator
- Battery, 1 x 12 V/58 Ah
- Starting motor 12 V/1.7 kW
- Working light on boom
- Working light on canopy or cab

## HYDRAULIC SYSTEM

Auxiliary hydraulics with selector valve

## **GUARDS AND COVERS**

- Fan guard structure
- Thermal guard

## **UNDERCARRIAGE**

- Shoes
- 300 mm rubber shoe

## **OPERATOR ENVIRONMENT**

- 1 x 12 V power supply
- Automatic two-speed travel control
- High resolution 3.5" LCD color monitor
- Lock lever auto lock function
- Rear view mirrors (RH, LH, and rear)Retractable seat belt, 50 mm
- Suspension seat
- Travel alarm
- Two-post ROPS (ISO 3471) canopy

## **WORK EQUIPMENT**

### Arms

- 1240 mm arm assembly with piping (PC30MR-5)
- 1370 mm arm assembly with piping (PC35MR-5)
- Backfill blade
- Booms
- 2285 mm boom assembly with piping (PC30MR-5)
- 2540 mm boom assembly with piping (PC35MR-5)

## OTHER EQUIPMENT

- Auto idle shutdown function
- KOMTRAX
- Quick release buttery terminal (-)
- Swing holding brake



## **OPTIONAL EQUIPMENT**

## HYDRAULIC SYSTEM

Pattern change valve (ISO - backhoe)

## UNDERCARRIAGE

- Shoes
- 300 mm road liner shoe
- 300 mm steel shoe

## OPERATOR ENVIRONMENT

- Cab
- Heater with defroster (Standard)Air conditioner with defroster (Optional)
- Working light, left side (Standard)
- Working light, left side (standard)
   Additional working light, right side
- (Optional)

   AM/FM radio & auxiliary input
- (3.5 mm jack) ready (Optional)
- Proportional switch (For attachment line)
- Retractable seat belt, 78 mm

## WORK EQUIPMENT

• Wide variety of attachments



## **AUSTRALIAN - NZ SPECIFICATIONS**

## **ENGINE**

Air pre-cleaner

## HYDRAULIC SYSTEM

• Pattern change valve (ISO - backhoe)

## **OPERATOR ENVIRONMENT**

- Cab
- CabAir conditioner with defroster
- Two front working lights
- AM/FM radio & auxiliary input
   (3.5 mm jack)
- Proportional switch (For attachment line)
- Retractable seat belt, 78 mm

## OTHER EQUIPMENT

• Quick coupler unit