

KOMATSU

CK
20/30



Skid Steer Loader

CK20-1

CK30-1

ENGINE POWER

CK20-1: 52,1 kW / 69,9 HP @ 2.500 rpm

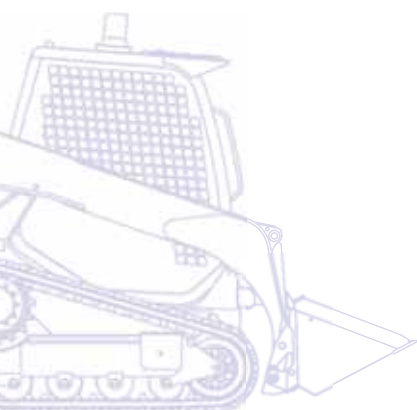
CK30-1: 63,9 kW / 85,7 HP @ 2.500 rpm

OPERATING WEIGHT

CK20-1: 3.750 kg - CK30-1: 4.290 kg

OPERATING CAPACITY

CK20-1: 930 kg - CK30-1: 1.130 kg



Walk-Around

The Komatsu CK20-1 and CK30-1 crawler skid steer loaders are powerful, fast and easy to use. These machines perfectly combine the compactness and manoeuvrability that typically characterise the wheeled versions, with the exceptional floating and traction ability of the tracks to offer an ideal solution for the toughest applications on soft and slippery soil.

Outstanding performances

- PPC hydraulic servo-controls
- Closed-centre Load Sensing System (CLSS)
- 2 speed transmission
- Bucket self-levelling
- Automatic Power Control device

Highest safety standards

- ROPS-FOPS cab
- Safety sensors
- Excellent all around visibility
- Negative action brakes



CK20/30

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First-class operator comfort

- Spacious cab
- LCD panel
- Accelerator pedal



Easy serviceability

- Easy access to all daily inspection points
- Tilting cab for full maintenance
- Extended 250-hour service interval



Crawler undercarriage

- Highest traction
- Excellent stability
- Reduced vibrations, higher comfort
- Long track life

KOMTRAX

Komatsu Satellite
Monitoring System

Outstanding Performances

Highly efficient

A self-levelling bucket is one of the many standard features of this Komatsu skid steer loader that make it highly efficient in any application. The accelerator pedal and a 2 speed transmission further increase operator productivity.

PPC servo-controls

The PPC servo-controls make the CK20/30 easy to use. Natural movements and maximum precision guarantee unique efficiency and greatly contribute to reduce operator fatigue. The right joystick controls the movements of the arm and of the bucket; the left one controls the translation.

Automatic Power Control device (APC)

Thanks to the APC device, the operator can always use the engine's full capacity, with no waste of power or overloads. It gives priority to the work equipment, makes the most of the residual power by sending it to the travelling motors, and prevents engine shutdown – even during the toughest operations.



First-Class Operator Comfort



Spacious cab

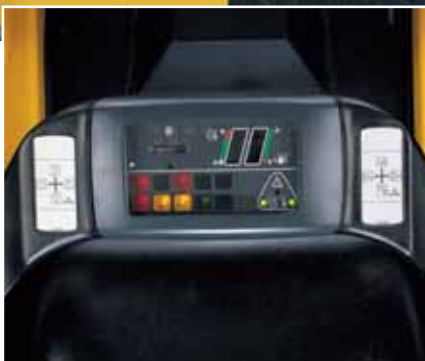
A spacious cab, with a wide entrance and comfortable seat, provides a level of comfort that is unmatched in this class of machines. Ergonomic controls and the excellent 360° visibility make the operator's work much easier and safer on any job site. On request, the CK20/30 can be equipped with an exclusive front door that fits under the roof, and with side windows and heating or air conditioning for maximum comfort in all seasons.

LCD panel

The LCD panel on the safety bar allows to closely monitor all the machine's main functions: from fuel level to water temperature, air filter condition, engine oil pressure and more.

Accelerator pedal

For an optimised engine usage, lower fuel consumption and improved acoustic comfort the operator can also adjust engine rpm with the accelerator pedal without removing the hand from the joystick.



Highest Safety Standards



Safety sensors

In case of unauthorised manoeuvres, a sophisticated system of sensors located on the safety bars and on the seat prevents all machine movements by automatically braking on the transmission and inhibiting the PPC controls. The ROPS-FOPS cab, the excellent dynamic stability of the machine and a 360° visibility combine to give the operator complete confidence in any situation.



Brakes

The service and parking brakes are incorporated into the translation motors. They are hydraulic negative action brakes and can be set "on" or "off" with a button located on the board to the left of the operator. The brakes are always "on" when the engine is not running.

Crawler Undercarriage

Undercarriage

The tracks ensure exceptional stability and traction on all types of soil including mud and snow, minimizing weather-related downtime. The wide base gives excellent stability to the machine, greatly reducing vibrations and increasing operator comfort. The hard steel

ensures high resistance to all parts that are most subject to wear, such as gears, rollers and idlers. At the same time, a bigger section and multiple rubber covered steel reinforcements give the shoes a longer duration.



Easy Maintenance

Easy access to inspection points

Routine maintenance and check-ups can be performed by simply opening a rear bonnet that also allows the user to clean the inclinable radiators. For extra servicing, the tilting cab offers complete access to the transmission and to the main components of the hydraulic system. Special self-lubricating bushings increase the greasing intervals for all pins up to 250 hours.



The bonnet: quick engine check



The hatchback: simple inspection and cleaning of the radiators

Komatsu Satellite Monitoring System



KOMTRAX™ is a revolutionary machine tracking system designed to save you time and money. You can now monitor your equipment anytime and anywhere. Use valuable machine data received via the KOMTRAX™ web site to optimise your maintenance planning and machine performances.

With KOMTRAX™, you can:

- Check when & where your machines are at work
- Be informed of unauthorized machine use or movement
- Set and receive e-mail notification for security alarms

For further details on KOMTRAX™, please ask your Komatsu dealer for the latest KOMTRAX™ brochure.



Machine working time - With the "daily working record" chart, get precise engine running time data: when your machine was started and when it was shut down, as well as total engine running time.



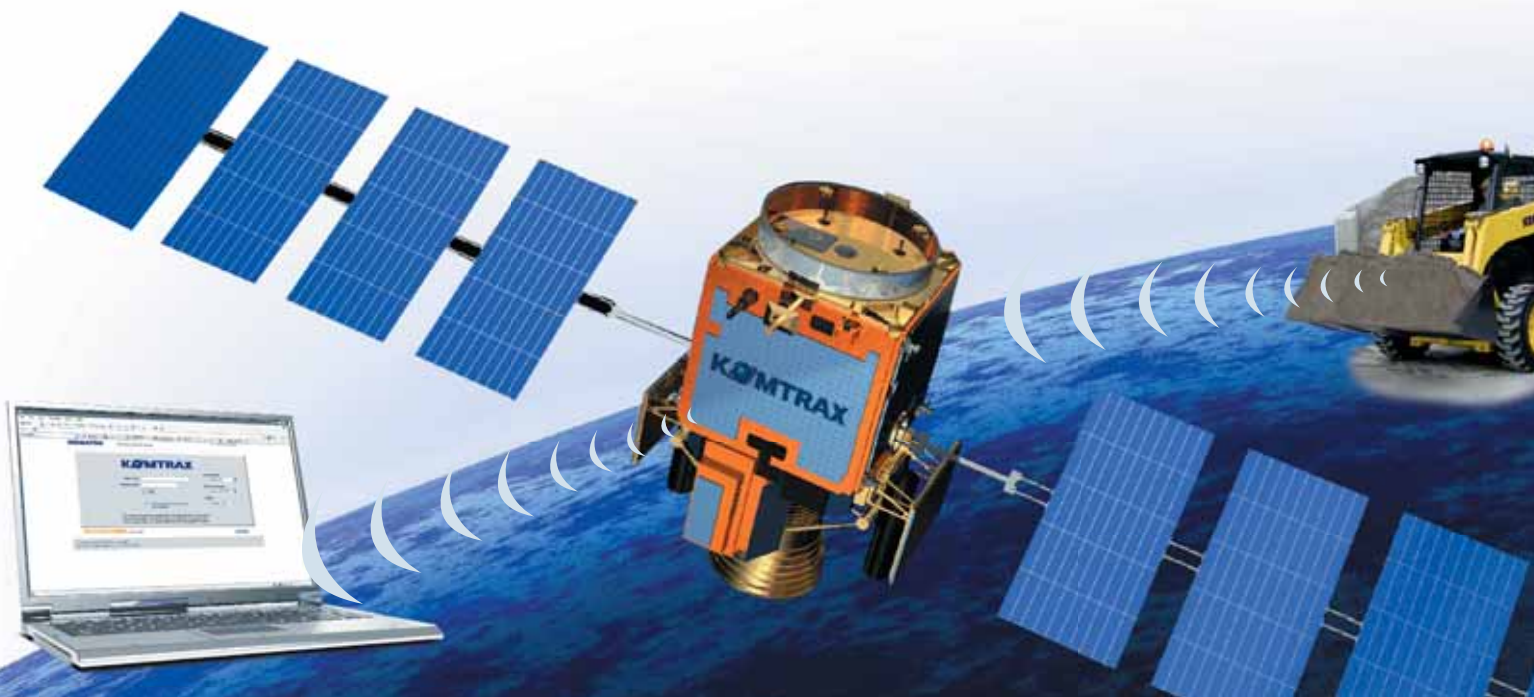
Fleet location - The machine list instantly locates all your machines, even those in other countries.



Alarm notifications - You can receive notification of alarms both via the KOMTRAX™ website and by e-mail.



Added security - The "engine lock" feature allows to program when a machine's engine can be started. And with "geo-fence", KOMTRAX™ sends notification every time your machine moves in or out of a predetermined operating area.



Specifications CK20-1

ENGINE

The new generation engine has been developed to comply with the strictest emission controls.

Model	Komatsu 4D98E-2NFE
Type	emissionised, direct injection, diesel engine, 16 valves
Displacement.....	3.319 cc
Bore x stroke.....	98 x 110 mm
N° of cylinders	4
Engine power	
at rated engine speed	2.500 rpm
ISO 14396	52,1 kW / 69,9 HP
SAE J1349 (net engine power)	51,8 kW / 69,5 HP
Max. torque	235 Nm @ 1.600 rpm
Cooling system.....	water
Air filter	dry with safety element
Starting	electric motor with pre-heating air system for cold climate

OPERATING WEIGHT

Operating weight with standard bucket, fully serviced, +75 kg operator (ISO 6016)	3.750 kg
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HYDRAULIC SYSTEM

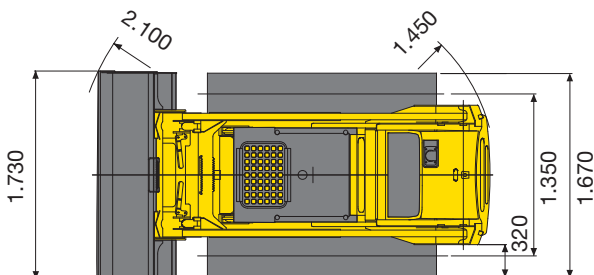
Type	Komatsu CLSS (Closed Load Sensing System)
Hydraulic pump	gear pump
Std. flow	62 ltr/min
Max. pressure.....	205 bar
Super flow (opt.)	100 ltr/min
Max. pressure.....	205 bar
Main valve	3 fully servo-controlled elements

CONTROLS

Proportional servo-controls (PPC). The left lever controls the machine movements, the right one controls the working equipment. The pedal controls the auxiliary circuit for attachments. A safety system neutralises all operations when the safety bars are risen or the operator is not seated.

LOADER

Operating capacity (ISO 14397)	930 kg
Tipping load (ISO 14397).....	2.660 kg
Standard bucket capacity (ISO 7546)	0,4 m ³
Bucket breakout force (ISO 14397)	1.716 daN (1.750 kg)



TRANSMISSION

Type	hydrostatic
Pumps	2 x variable displacement
Hydraulic motors	2 x axial pistons
Travel speeds	2
Max. travel speed.....	12 km/h
Max. drawbar pull.....	3.678 daN
Oil immersed discs for both parking and working breaks with negative action and automatic insertion.	

TRACKS

Standard track width	320 mm
Ground pressure.....	0,37 kg/cm ²
Track rollers (each side).....	4
Track tensioning	grease

ELECTRIC SYSTEM

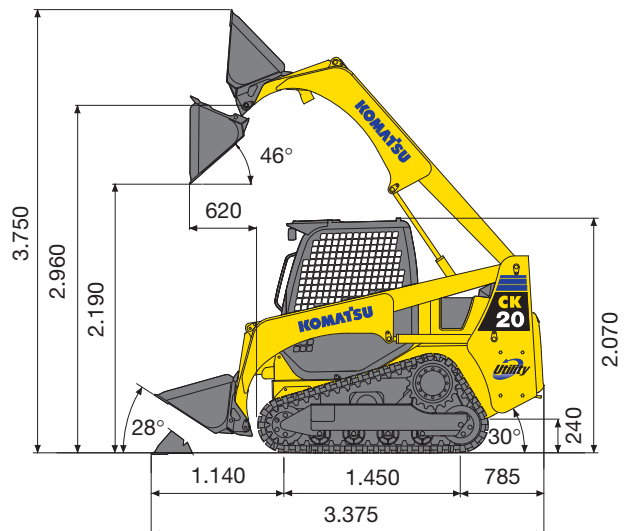
Voltage.....	12 V
Battery	100 Ah
Alternator.....	40 A

SERVICE CAPACITIES

Hydraulic system	38 ltr
Fuel tank.....	64 ltr
Engine oil.....	12,5 ltr

ENVIRONMENT

Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 1,2 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,2 m/s ²)
* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.	



Specifications CK30-1

ENGINE

The new generation engine has been developed to comply with the strictest emission controls.

Model	Komatsu S4D98E-2NFE
Type	emissionised, direct injection, turbo-charged diesel engine, 16 valves
Displacement.....	3.319 cc
Bore x stroke.....	98 x 110 mm
N° of cylinders.....	4
Engine power	
at rated engine speed	2.500 rpm
ISO 14396	63,9 kW / 85,7 HP
SAE J1349 (net engine power)	62,0 kW / 83,1 HP
Max. torque	286 Nm @ 1.600 rpm
Cooling system.....	water
Air filter	dry with safety element
Starting ..	electric motor with pre-heating air system for cold climate

OPERATING WEIGHT

Operating weight with standard bucket, fully serviced, +75 kg operator (ISO 6016).....	4.290 kg
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HYDRAULIC SYSTEM

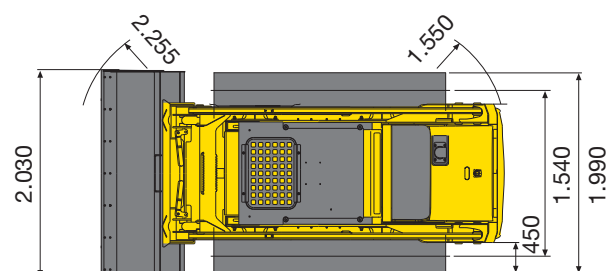
Type	Komatsu CLSS (Closed Load Sensing System)
Hydraulic pump	gear pump
Std. flow	80 ltr/min
Max. pressure.....	205 bar
Super flow (opt.)	130 ltr/min
Max. pressure.....	205 bar
Main valve	3 fully servo-controlled elements

CONTROLS

Proportional servo-controls (PPC). The left lever controls the machine movements, the right one controls the working equipment. The pedal controls the auxiliary circuit for attachments. A safety system neutralises all operations when the safety bars are risen or the operator is not seated.

LOADER

Operating capacity (ISO 14397)	1.130 kg
Tipping load (ISO 14397).....	3.220 kg
Standard bucket capacity (ISO 7546)	0,45 m³
Bucket breakout force (ISO 14397)	2.242 daN (2.280 kg)



TRANSMISSION

Type	hydrostatic
Pumps	2 x variable displacement
Hydraulic motors	2 x axial pistons
Travel speeds	2
Max. travel speed.....	12 km/h
Max. drawbar pull.....	4.185 daN
Oil immersed discs for both parking and working breaks with negative action and automatic insertion	

TRACKS

Standard track width.....	450 mm
Optional track width	320 mm
Ground pressure.....	0,32 kg/cm²
Track rollers (each side).....	5
Track tensioning	grease

ELECTRIC SYSTEM

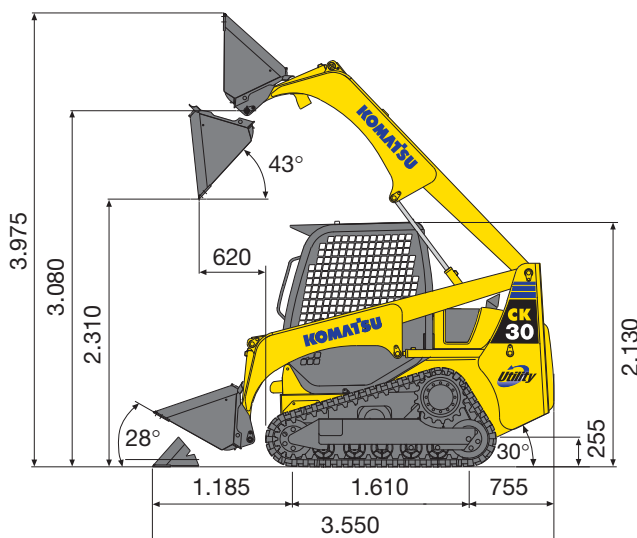
Voltage.....	12 V
Battery	100 Ah
Alternator.....	40 A

SERVICE CAPACITIES

Hydraulic system	50 ltr
Fuel tank.....	73 ltr
Engine oil.....	12,5 ltr

ENVIRONMENT

Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s² (uncertainty K = 1,2 m/s²)
Body	≤ 0,5 m/s² (uncertainty K = 0,2 m/s²)
* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.	



Skid Steer Loader

CK20-1 / CK30-1

Standard and Optional Equipment

ENGINE

Komatsu 4D98E-2NFE direct injection diesel engine (CK20-1)	●
Komatsu S4D98E-2NFE turbocharged, direct injection diesel engine (CK30-1)	●
Alternator 40 A	●
Battery 100 Ah	●

TRANSMISSION

2 speed transmission	●
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HYDRAULIC SYSTEM

Auxiliary hydraulic circuit for attachments	●
Universal quick-coupler	●
Bucket floating function	●
SUPER FLOW version with 3 elements main valve (with drain line and electric connection)	○

TRACKS

320 mm rubber shoes (CK20-1)	●
450 mm rubber shoes (CK30-1)	●
320 mm rubber shoes (CK30-1)	○

SERVICE AND MAINTENANCE

KOMTRAX™ - Komatsu satellite monitoring system	●
Cyclone air pre-filter	○

CABIN

ROPS / FOPS (Class 1) tilting cab	●
Adjustable seat with safety belt	●
Safety bars with incorporated display	●
Instrument panel including:	
- hour meter	
- LCD fuel level indicator	
- LCD engine water temperature indicator	
- safety warning lights: operator onboard, safety bars lowered	●
- other pilot lights: air filter clogging, engine oil pressure, generator, hydraulic oil filter, engine pre-heating, parking brake, working lights, direction indicators, floating	
Accelerator pedal	●
12 V external power supply	●
Closed cab with side windows, door (with wiper) and heating or air conditioning	○
Deluxe suspension seat with safety belt	○
Fixed or sliding side windows	○
12 V internal power supply	○
Tilting cab auxiliary device	○

SAFETY EQUIPMENT

Back-up alarm	●
Horn	●
Battery main switch	●
Rotating beacon	○
Accessories for road homologation	○
Rear-view mirrors	○
FOPS Class 2 cab	○

LIGHTING SYSTEM

Two front working lights	●
2 rear working lights	○

OTHER EQUIPMENT

Bucket self-levelling	●
Additional modular rear counterweight (6 pieces, total 126 kg)	○
Cold area arrangement	○

ATTACHMENTS

1.730 mm bucket with or without teeth (CK20-1)	●
2.030 mm bucket with or without teeth (CK30-1)	●
1.880 mm narrow bucket with or without teeth (CK20-1, CK30-1)	○
Cutting edge on teeth	○
Bolt-on cutting edge	○
Pallet forks	○
Lifting hooks	○

A wide range of attachments is available. Please consult your distributor for details of the full range.

Other attachments on request

- standard equipment
- optional equipment

Your Komatsu partner:

KOMATSU

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