

PRODUCT SPECIFICATIONS FOR 6020B



GENERAL

Engine Output - SAE J1995	776 kW
Bucket Payload	21.6 t
Operating Weight	230.2 t
Note	Specifications shown above apply to a Backhoe configuration. A frontless configuration is also available.
Standard Bucket Capacity	12 m ³

ELECTRICAL SYSTEM

Batteries (12V each) - In Series/Parallel Installation	630 Ah – 24V
Components (3)	9 LED high-brightness working flood lights: – 7 for working area – 2 for rear end
Batteries (12V each)	6 × 210 Ah
Components (1)	Emergency stop buttons inside cab, accessible from all seating locations, and engine module
Components (2)	Additional ground-level emergency stop
System Voltage	24V
Battery Isolation Relays	manual lockable disconnect switch and automatic disconnect relay
Components (6)	1 beacon lamp on cab roof
Components (5)	7 LED service lights

Components (4)

2 LED high-brightness access flood lights

HYDRAULIC OIL COOLING

Features (2)

Variable electronically controlled flow of oil through cooler and fan speed

Oil Flow of Cooling Pumps

800 l/min

Diameter - Fan

1500 mm

Features (1)

Cooling system fully independent of all main circuits, i.e. controlled cooling capacity available whenever engine is running

Features (3)

Superior cooling efficiency to ensure optimum oil temperature

OPERATOR'S CAB

Components (5)

Full sized trainer seat with safety belt and work table

Internal Dimensions of Cab - Width

1625 mm

Components (7)

Operator Protective Guard (rock guard; approved according to ISO 10262:1998 [Top Guard]) compliant

Components (9)

Roller blinds

Components (11)

Additional emergency ladder in close proximity to emergency escape window

Internal Dimensions of Cab - Length

2230 mm

Components (8)

Windshield with parallel intermittent wiper/washer

Components (2)

Pneumatically cushioned and multi-adjustable operator seat with lumbar support, safety belt, head- and armrests

New BCS Features (1)

Robust instrument panel including large (254 mm/10 in) color touch screen

New BCS Features (3)	Graphical data logging
New BCS Features (4)	Fault memory capabilities
Operator's Eye Level (approximate)	5.5 m
New BCS Features (2)	On-screen troubleshooting assistance
Components (10)	Machine access via retractable access stairway, stairway angle approximately 45°, hydraulically operated
New BCS Features (5)	USB, Lan (TCP/IP) and CAN BUS interfaces for data export
Components (3)	Safety switch in operator's seat for automatic motion shutdown
Internal Dimensions of Cab - Height	2070 mm
Components (1)	Large cab floor window with removable grating for easy cleaning
Components (4)	Joystick integrated in adjustable seat armrest
New Board Control System (BCS) Features:	Electronic monitoring, data logging and diagnostic system for vital signs & service data of engines, hydraulic & lube system
Components (6)	Auxiliary fold-away seat with safety belt for 3rd person

SWING SYSTEM

Swing Ring	Triple-race roller bearing with sealed internal gearing
Maximum Swing Speed	4.9 r/min
Swing Drive	2 compact planetary transmissions with axial piston motors
Parking Brake	Wet multiple-disc brake, spring-loaded/hydraulically released

Features (2) All slew ring raceways and grease tub for internal gearing supplied by automatic, central lubrication system

Features (1) Open swing circuit with auto slow down when joysticks in neutral

UNDERCARRIAGE

Track Pads - Each Side 45

Components (1) Forged double-grouser track pads

Components (6) Audible travel alarm

Bottom Rollers - Each Side 8

Travel Speed - 1st Stage - Maximum 1.1 km/h

Components (4) Fully hydraulic self-adjusting track tensioning system with accumulator

Components (5) Automatic hydraulic retarder valve to prevent overspeed on downhill travel

Parking Brakes Wet multiple disc brake, spring loaded/hydraulically released

Travel Speed - 2nd Stage - Maximum 2.4 km/h

Gradeability - Travel Drives Approximately 54%

Components (3) All running surfaces of sprockets, idlers, rollers and track chain links hardened

Maximum Tractive Force 1183 kN

Travel Drives - Each Side 1 planetary transmission with 2 two-stage axial piston motors

Components (2) Chain links connected by hardened pins and bushings

AUTOMATIC LUBRICATION SYSTEM

Type (3)	System condition and failures displayed by Board Control System
Capacity - Grease Barrel	205 l
Type (1)	Single-circuit progressive system with hydraulically driven heavy-duty pump and electronic time control
Type (2)	Grease supplied to swing roller bearing, all pivot points of attachment, and swing gearbox bearing

ATTACHMENT

Type (5)	Float valve for boom down function
Type (2)	High-tensile steel with solid steel castings at pivot areas
Type (3)	Boom and stick stress-relieved after welding
Type (1)	Boom and stick torsion-resistant with welded box design
Type (4)	Catwalks with rails at boom
Buckets Equipped With	<ul style="list-style-type: none"> – Special liner material covering main wear areas inside and outside – Lip shrouds – Wing shrouds – Heel shrouds

OPERATING WEIGHTS - BACKHOE

Standard Track Pads	800 mm
Operating Weight	230200 kg
Ground Pressure	22 N/cm ²

HYDRAULIC SYSTEM WITH ELECTRONIC PUMP MANAGEMENT

Maximum Swing Oil Flow	783 l/min
Maximum Pressure - Attachment	310 bar
Filters (4)	Pressure filters (6 µm) for servo circuit
Electronic Pump Management Contains (3)	Automatic return of main pumps to zero flow
Features (2)	Cooling of pump transmission gear oil
Maximum Pressure - Travel	310 bar
Maximum Pressure - Swing - Acceleration	310 bar
Filters (3)	Full-flow filters (10 µm) for cooling return circuit
Electronic Pump Management Contains (2)	Dedicated circuit pump allocation
Maximum Total Oil Flow	2350 l/min
Filters (2)	Full-flow filters (10 µm) for complete return circuit
Main Pumps	6 × variable swash plate pumps
Filters (1)	Full-flow high-pressure filters (100 µm) for main pumps, installed directly behind each pump
Electronic Pump Management Contains (4)	Automatic rpm reduction of engine speed during working breaks
Filters (5)	Transmission oil filter (40 µm)
Electronic Pump Management Contains (5)	Reduced oil flow of main pumps at high hydraulic oil temperature and at high engine temperature

Electronic Pump Management Contains (1)	Electronic load limit control
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Features (1)	Pressure cut-off function for all main pumps
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Total Volume of Hydraulic Oil	3500 l
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Hydraulic Tank Capacity	2800 l
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Maximum Pressure - Swing - Deceleration	350 bar
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CENTRALIZED SERVICE AREA

Equipped With (3)	Indicator light for hydraulic tank full
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Equipped With (1)	Quick couplings for: <ul style="list-style-type: none">– Diesel fuel– Engine coolant– Pump transmission gear oil– Engine oil (oil pan)– Hydraulic oil
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Features	Centralized service area accessible from ground level.
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Equipped With (2)	Cat jump-start socket
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DIGGING FORCES

Maximum Tearout Force	650 kN
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Maximum Breakout Force	730 kN
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WORKING RANGES

Maximum Digging Reach	15.9 m
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Maximum Digging Depth	8.1 m
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Maximum Digging Height	13.9 m
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OPERATING SPECIFICATIONS

Operating Weight	230 t
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Bucket Payload	22 t
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BUCKET

Standard Bucket Capacity - Backhoe (Heaped 1:1)	12 m ³
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ENGINE - EQUIVALENT TO U.S. EPA TIER 2

Gross Power - SAE J1995	776 kW
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Engine Model	Cat C32 ACERT
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Net Power - SAE J1349	770 kW
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DIESEL ENGINE - LESSER REGULATED

Gross Power - SAE J1995	776 kW
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Net Power - ISO 9249	774 kW
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Net Power - SAE J1349	770 kW
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Emissions	Meets China Nonroad Stage III emissions standards, equivalent to Tier 2
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DIESEL ENGINE - TIER 4 FINAL

Components (1)	Cat NOx reduction system
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Components (7)	Two-stage fuel filter
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Components (3)	MEUI™-C fuel system
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Alternator	275A
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Bore	145 mm
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Components (4)	Hydraulically driven radiator fan with variable electronically controlled fan speed
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No. of Cylinders	12
Displacement	32 l
Fuel Tank Capacity	3600 l
Components (5)	Micro processed engine management
Rated Speed	1,800 min ⁻¹ (1,800 rpm)
Aspiration	Turbocharged and air-to-air aftercooled
Components (2)	Dual Diesel Oxidation Catalysts (DOCs)
Components (8)	Additional high-capacity water separator including electric priming pump
Components (9)	Large fuel tank allows for 24 hour machine operation
Components (6)	Heavy-duty air filters
Maximum Altitude without Deration	2925 m (9,600 ft) – above sea level (a.s.l.)
Stroke	162 mm
Make and Model	Cat C32 ACERT

DIESEL ENGINE - EQUIVALENT TO TIER 2

Components (3)	Heavy-duty air filters
Components (4)	Two-stage fuel filter
Fuel Tank Capacity	3600 l
No. of Cylinders	12
Components (2)	Micro processed engine management

Displacement	32 l
Maximum Altitude without Deration	3622 m (11,884 ft) – above sea level (a.s.l.)
Bore	145 mm
Components (1)	Hydraulically driven radiator fan with variable electronically controlled fan speed
Stroke	162 mm
Aspiration	Turbocharged and air-to-air aftercooled
Components (5)	Additional high-capacity water separator including electric priming pump
Rated Speed	1800 min ⁻¹ (1,800 rpm)
Alternator	275A
Make and Model	Cat C32 ACERT
Components (6)	Large fuel tank allows for 24 hour machine operation

DIESEL ENGINE - HIGHLY REGULATED

Gross Power - SAE J1995	771 kW
Net Power - ISO 9249	764 kW
Net Power - SAE J1349	761 kW
Emissions	Meets Tier 4 Final and Stage V emissions standards

ENGINE - U.S. EPA TIER 4 FINAL

Net Power - SAE J1349	761 kW
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Gross Power - SAE J1995

771 kW

Engine Model

Cat® C32 ACERT™

6020B OPTIONAL EQUIPMENT

SUPERSTRUCTURE

Cold-weather package

Lube fast fill port

CAB

Redundant HVAC system

Camera system

Cat MineStar Health ready

UNDERCARRIAGE

Rough terrain undercarriage protection kit including belly plate and rear plumbing guard

Dirt scraper on swivel connection

Track pad width 1000 mm (3 ft 3 in)

ATTACHMENT

LED work lights on boom

BUCKETS

Additional buckets available, based on application, through your local Cat dealer