

Product Specifications For 309 CR



Engine

Net Power	51.2 kW
Engine Model	Cat® C2.8 Turbo
Net Power - 2,400 rpm - ISO 9249, 80/1269/EEC	51.2 kW
Gross Power - ISO 14396	74.3 hp
Bore	90 mm
Stroke	110 mm
Displacement	2.8 l
Note	Meets U.S. EPA Tier 4 Final and EU Stage V emissions standards.
Note (1)	Advertised power is tested per the specified standard in effect at the time of manufacture.
Note (2)	Net power advertised is the power available at the flywheel when the engine is at the rated speed of 2,400 rpm and the engine is installed with the factory configured fan, air intake system, exhaust system and alternator with a minimum alternator load.

Weights

Operating Weight	9465 kg
Minimum Operating Weight with Cab*	8565 kg
Maximum Operating Weight with Cab**	9465 kg

Note (1)

*Minimum Weight is based on steel tracks, no counterweight, operator, full fuel tank, standard stick, blade and no bucket.

Note (2)

**Maximum Weight is based on steel tracks with rubber pads, counterweight, operator, full fuel tank, long stick, blade and no bucket.

Dimensions - Long Stick

Dig Depth	4642 mm
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Vertical Wall	3404 mm
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Maximum Reach - Ground Level	7460 mm
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Maximum Reach	7637 mm
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Maximum Dig Height	7039 mm
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Maximum Dump Clearance	5072 mm
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Boom In Reach	3215 mm
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Tail Swing with Counterweight	1585 mm
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Tail Swing without Counterweight	1450 mm
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Maximum Blade Height	408 mm
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Maximum Blade Depth	671 mm
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Height - Boom Transport - No Tools*	2260 mm
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Height - Boom Working - With Tools**	3050 mm
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Cab Height	2541 mm
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Swing Bearing - Height	756 mm
O/A Undercarriage Length	3200 mm
Overall Shipping Length - with Counterweight	7052 mm (277.6 in)***
Overall Shipping Length - without Counterweight	7052 mm (277.6 in)***
Track Belt/Shoe Width	450 mm
O/A Track Width	2470 mm
Ground Clearance	356 mm
Stick Length	2358 mm
Note	*Boom Height when stick is pinned in transport position with no attachments.
Note (1)	**Boom Height when stick is pinned in working position with attachments Standard Stick offers only one pin position.
Note (2)	***With blade positioned at the rear of the machine.

Dimensions - Standard Stick

Dig Depth	4108 mm
Vertical Wall	2991 mm
Maximum Reach - Ground Level	6949 mm
Maximum Reach	7141 mm
Maximum Dig Height	6736 mm
Maximum Dump Clearance	4760 mm

Boom In Reach	3059 mm
Tail Swing with Counterweight	1585 mm
Tail Swing without Counterweight	1450 mm
Maximum Blade Height	408 mm
Maximum Blade Depth	671 mm
Height - Boom Transport - No Tools*	2430 mm
Height - Boom Working - With Tools**	2660 mm
Cab Height	2541 mm
Swing Bearing - Height	756 mm
O/A Undercarriage Length	3200 mm
Overall Shipping Length - with Counterweight	6774 mm
Overall Shipping Length - without Counterweight	6774 mm
Track Belt/Shoe Width	450 mm
O/A Track Width	2470 mm
Ground Clearance	356 mm
Stick Length	1820 mm
Note	*Boom Height when stick is pinned in transport position with no attachments.

Note (1)

**Boom Height when stick is pinned in working position with attachments Standard Stick offers only one pin position.

Note (2)

***With blade positioned at the rear of the machine.

Weight Increase From Minimum Configuration

Counterweight	250 kg
Long Stick	66 kg
Steel Tracks with Pads	330 kg

Travel System

Travel Speed - High	4.9 km/h
Travel Speed - Low	2.6 km/h
Maximum Traction Force - High Speed	28.9 kN
Maximum Traction Force - Low Speed	84.8 kN
Ground Pressure - Minimum Weight	37.5 kPa
Ground Pressure - Maximum Weight	41.4 kPa
Gradeability - Maximum	30 degrees

Service Refill Capacities

Cooling System	10 l
Engine Oil	8.8 l
Fuel Tank	147 l
Hydraulic Tank	53 l

Hydraulic System

Type	Load Sensing Hydraulics with Variable Displacement Piston Pump
Pump Flow at 2,400 rpm	233 L/min
Operating Pressure - Equipment	285 bar
Operating Pressure - Travel	285 bar
Operating Pressure - Swing	250 bar
Maximum Auxiliary Circuit - Primary - Flow at Pump	131 L/min
Maximum Auxiliary Circuit - Primary - Pressure at Pump	285 bar
Maximum Auxiliary Circuit - High Flow - Flow at Pump	140 L/min
Maximum Auxiliary Circuit - High Flow - Pressure at Pump	285 bar
Digging Force - Stick - Standard	42.3 kN
Digging Force - Stick - Long	35.7 kN
Digging Force - Bucket	62 kN
Note	Flow and pressure are not combinable. Under load, as flow rises pressure goes down.

Swing System

Machine Swing Speed	10 r/min
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Boom Swing - Left	60 degrees
Boom Swing - Right	50 degrees

Blade

Width - Standard	2470 mm
Width - Wide	2640 mm
Height	431 mm

Certification - Cab

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Top Guard	ISO 10262:1998 (Level I)

Air Conditioning System

Air Conditioning	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf (Europe) (Global Warming Potential = 1430). See label or instruction manual for gas refrigerant identification. The system contains 0.75 kg (1.65 lb), 0.90 kg (1.98 lb) or 1 kg (2.20 lb) of refrigerant which has a CO2 equivalent of 1.430 metric tonnes (1.576 tons) for R134a and 0.001 tonnes (0.001 tons) for R1234yf (Europe).
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Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	99 dB(A)
Note	European Union Directive "2000/14/EC"

Sustainability

Recyclability	96%
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Specifications

Note

The 309 CR specifications are based on a machine configured with a Long (L) Undercarriage.

309 CR Standard Equipment

ENGINE

Cat C2.8 Diesel Engine (U.S. EPA Tier 4 Final/EU Stage V) – Electronic Engine, Turbo, Fit-For-Life Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC) Aftertreatment System

Automatic Engine Idle

Automatic Engine Shutdown

Automatic Swing Brake

Automatic Two Speed Travel

Fuel Water Separator with Indicator

Radial Seal – Double Element Air Filter

Extended Life Coolant, -37° C (-35° F)

HYDRAULICS

Electronic Variable Displacement Piston Pump

Load Sensing/Flow Sharing Hydraulics

Dedicated Auxiliary Hydraulic Pump

Power On Demand

Hydraulic Temperature Monitoring

Certified Accumulator

HYDO Advanced Hydraulic Oil

Ecology Drain

OPERATOR ENVIRONMENT

Top Guard ISO 10262:1998 (Level I)

ROPS ISO 12117-2:2008

Stick Steer Mode

Travel Cruise Control

Control Pattern Changer

Adjustable Wrist Rests

Molded Footrests

Removable, Washable Floor Mat

Travel Pedals and Hand Levers

Cat Key with Passcode Option

HVAC with Automatic Temperature Control

Hydraulic Lockout Controls

Integrated Lower Front Window

Assisted Front Window Overhead Storage

Rear Window Emergency Exit

Cab Mirrors (vary by region)

Fabric, High Back, Suspension Seat

Retractable Seat Belt (75 mm/3 in)

Coat Hook
Cup Holder
LED Interior Light
Literature Holder
Mounting Bosses for Top and Front Guards
12V Power Socket
Radio – Bluetooth, Auxiliary, Microphone, USB (charging only)
Skylight
Signaling/Warning Horn
Cab and (left side) Boom Work Lights
Utility Space for Mobile Phone
Next Generation Color LCD Monitor (IP66)
– Jog Dial Interface
– Fuel Level and Coolant Temperature Gauges
– Maintenance and Machine Monitoring
– Performance and Machine Adjustments
– Numeric Security Code
– Multiple Languages
– Camera Ready (IP68 & IP69K)
– Hour Meter with Wake Up Switch

TECHNOLOGY (Availability Varies By Region)

Product Link™ Elite (regulations apply)

UNDERCARRIAGE

Greased and Lubricated Track
Tie Down Eyes on Track Frame
Dozer Blade
Dozer Float
Bolt-on, Reversible Wear Edge

BOOM, STICK AND LINKAGES

One Piece Boom (3400 mm/133.9 in)
Standard Stick (1820 mm/71.7 in)
Front Shovel Capable – Pin-on/Manual Coupler/Hydraulic Coupler (not available in all regions)
Thumb Ready (not available in all regions)

ELECTRICAL

12 Volt Electrical System
60 Ampere Alternator
Circuit Breaker
900 CCA Maintenance Free Battery
Lock Out/Tag Out Battery Disconnect
Ignition Key Stop Switch
Travel Alarm

GUARDING

ROPS ISO 12117-2:2008

Top Guard ISO 10262:1998 (Level I)

OTHER

Locks on External Enclosure Doors

Lockable Fuel Cap

Beacon Socket

Rear Reflectors

309 CR Optional Equipment

HYDRAULICS

Third Auxiliary

OPERATOR ENVIRONMENT

Push to Start with Bluetooth® Key

Air Suspension Heated Seat

Seat Belt Reminder System

Rain Visor

Next Generation Advanced Monitor (below are all included with Next Generation Advanced Monitor option)

- Touch Screen
- Site Reference System
- High Definition Camera Capable (IP68 & IP69K)
- Numeric Security Code

TECHNOLOGY (Availability Varies By Region)

Ease of Use Indicate

Ease of Use E-Fence

Ease of Use Laser Catcher

Cat Grade Advanced 2D

Cat Grade 3D

UNDERCARRIAGE

Wide Dozer Blade

Steel Tracks (450 mm/17.7 in wide)

Wide Steel Tracks (600 mm/23.6 in)

Steel Track with Rubber Pads

Track Guides

BOOM, STICK AND LINKAGES

Long Stick (2360 mm/92.9 in)

Attachments including Buckets, Augers and Hammers
2nd Auxiliary Hydraulic Lines with Case Drain
Boom Lowering Check Valve
Stick Lowering Check Valve
Certified Lifting Eye

ELECTRICAL

Rear and Side Camera
Rotating Beacon

GUARDING

Top Guard ISO 10262:1998 (Level II)
Front Guard (Mesh) ISO 10262:1998 (Level I)
Front Guard (Heavy Duty) ISO 10262:1998 (Level II)
Track Guards

OTHER

Counterweight (250 kg/551 lb)
Counterweight (500 kg/1103 lb)
Water Jacket Heater
Refueling Pump
Variable Angle Boom (refer to 309 CR VAB brochure for VAB specs and additional information)