

PRODUCT SPECIFICATIONS FOR 825K



ENGINE

Engine Model	C15 Cat®
Net Power	302 kW
Rated Power (Net ISO 9249)	302 kW
Maximum Net Torque - 1,300 rpm	2005 N·m
Maximum Altitude - Without Derating (Tier 4 Final/Stage IV)	2834 m
Net Power - Converter Drive - Gross Power	324 kW
Stroke	171.4 mm
Net Power - Converter Drive - Torque Rise	8,5%
Gross Power	324 kW
High Idle Speed	2300 r/min
Rated Power (Net SAE J1349)	302 kW
Emissions	Meets U.S. EPA Tier 4 Final/EU Stage IV emission standards or meets U.S. EPA Tier 3/EU Stage IIIA equivalent emission standards
Low Idle Speed	800 r/min
Net Power - Direct Drive - Torque Rise	33%
Maximum Altitude - Without Derating (Tier 3 Final/Stage IIIA Equivalent)	2773 m

Net Power - Direct Drive - Gross Power	307 kW
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Bore	137.2 mm
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Displacement	15.2 l
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OPERATING SPECIFICATIONS

Operating Weight	35528 kg
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Operating Weight - Tier 3 Final/Stage IIIA Equivalent	35081 kg
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Operating Weight - Tier 4 Final/Stage IV	35528 kg
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TRANSMISSION

Travel Speeds - Reverse - First	6.2 km/h
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Travel Speeds - Forward - First	5.5 km/h
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Travel Speeds - Reverse - Third	19.7 km/h
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Travel Speeds - Reverse - Second	11.1 km/h
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Travel Speeds - Forward - Third	17.2 km/h
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Transmission Type	Planetengetriebe – Lastschaltgetriebe – ECPC (Electronic Clutch Pressure Control, Elektronische Kupplungsdrucksteuerung)
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Travel Speeds - Forward - Second	9.7 km/h
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CAB - STANDARD

Machine Sound Level (ISO 6395)	113 dB(A)
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Operator Sound Level - ISO 6396

73 dB(A)

DIMENSIONS (APPROXIMATE)

Ground Clearance	492 mm
Length - With Blade on Ground	8561 mm
Height - Top of Exhaust Pipe	4290 mm
Hitch to Centerline of Front Axle	1850 mm
Turning Radius - Inside of Push Arms	2627 mm
Centerline of Rear Axle to Edge of Counterweight	2830 mm
Wheel Base	3700 mm
Ground Clearance - Bumper	810 mm
Height - Top of Beacon	4381 mm
Height - ROPS/Canopy	4059 mm
Height - Top of Hood	3162 mm
Width - Over Wheels	3650 mm

SERVICE REFILL CAPACITIES

Hydraulic Tank Only	134 l
Differential - Final Drives - Rear	110 l
Fuel Tank	782 l
Cooling System	116 l
Differential - Final Drives - Front	100 l

Transmission	66 l
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Diesel Exhaust Fluid Tank (Tier 4 Final/Stage IV)	32 l
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Engine Crankcase	34 l
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AXLES

Oscillation Angle	±8°
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Rear	Planetary – Oscillating
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Front	Planetary – Fixed
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HYDRAULIC SYSTEM

Maximum Supply Pressure	24100 kPa
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Main Relief Pressure	24100 kPa
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Cylinders, Double Acting - Tilt, Bore and Stroke	95.25 mm × 216 mm (3.75 in × 8.5 in)
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Pump Flow at 1,800 rpm	117 l/min
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Cylinders, Double Acting - Lift, Bore and Stroke	120 mm × 1070 mm (4.7 in × 42.1 in)
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BLADES

Total Tilt Adjustment	890 mm
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Maximum Lift Above Ground	958 mm
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Moldboard - Length	4390 mm
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Blade Tilt Angle - Left - Mechanical	4,1°
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Width - Over End Bits	4628 mm
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Blade Tilt Angle - Left - Hydraulic	5,4°
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Blade Tip Angle - Total	14,8°
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Maximum Depth of Cut	602 mm
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Height - Including Cutting Edge	1032 mm
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Blade Tip Angle - Forward	7,3°
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Blade Tilt Angle - Right - Mechanical	5,1°
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Blade Tip Angle - Back	7,5°
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Blade Tilt Angle - Right - Hydraulic	6,3°
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Blade Tilt Angle - Left Full	10,1°
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Blade Tilt Angle - Right Full	10,8°
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HYDRAULIC SYSTEM - STEERING

Maximum System Flow	170 L/min @ 1,800 rpm (44.9 gal/min @ 1,800 rpm)
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Stroke	576 mm
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Steering System - Circuit	Double Acting – End Mounted
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Vehicle Articulation Angle	86 degrees
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Bore	114.3 mm
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Steering Pressure Limited	24000 kPa
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Steering System - Pump	Piston – Variable Displacement
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WHEELS

Weight	7333 kg
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Drum Width	1125 mm
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Drum Diameter	1299 mm
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Tips per Wheel	65
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Width - Over Drums	3650 mm
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Outside Diameter	1672 mm
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CAB - SUPPRESSION

Operator Sound Level - ISO 6396	72 dB(A)
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Machine Sound Level (ISO 6395)	110 dB(A)
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BRAKING SYSTEM

Parking Brake	Drum and Shoe, Spring Applied, Hydraulic Released
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825K STANDARD EQUIPMENT

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

POWER TRAIN

Air to air aftercooler

Autoshift

Brakes, full hydraulic, enclosed, wet multiple disc service brakes

Cat clean emission module (Tier 4 Final/Stage IV)

Electro-hydraulic parking brake

Electronic Clutch Pressure Control (ECPC)

Engine, Cat C15: – Tier 4 Final/Stage IV – Tier 3/Stage IIIA equivalent

Fuel priming pump (electric)

Fuel to air cooler

Ground level engine shutoff

Hydraulically driven demand fan

Integrated braking system

Muffler (under hood) (Tier 3/Stage IIIA equivalent)

Radiator, Aluminum Modular (AMR)

Separated cooling system

Single Clutch Speed Shifting (SCSS)

Starting aid (ether) automatic

Throttle lock

Torque converter with Lock Up Clutch (LUC)

Transmission, planetary, with 3F/3R speed range control

ELECTRICAL

Alarm, back-up

Alternator, 150 amp

Batteries, maintenance-free (4 – 1,000 CCA)

Electrical system, 24V

Ground level lockable master disconnect switch

Light, warning unswitched (LED strobe)

Lighting, access stairway

Lighting, under hood

Lighting system, halogen (front and rear)

Lights, directional (rear)

Starter, electric (heavy duty)

Starting receptacle for emergency start

OPERATOR ENVIRONMENT

12V power port for mobile phone or laptop connection

AccuGrade™ mapping (ready)

Air conditioner

Cab, sound-suppressed pressurized

Cab door, sliding window (LH)

Compaction control (ready)

Coat and hard hat hooks

Electro-hydraulic tilt and lift controls

Finger tip shifting controls

Flip-up armrest

Heater and defroster

Horn, electric

Implement hydraulic lockout

Instrumentation, gauges: – DEF fluid level (Tier 4 Final/Stage IV) – Engine coolant temperature – Fuel level – Hydraulic oil temperature – Speedometer/tachometer – Torque converter temperature

Instrumentation, warning indicators: – Action alert system, three categories – Brake oil pressure – Electrical system, low voltage – Engine failure malfunction alert and action lamp – Parking brake status

Internal four-post rollover protective structure (ROPS/FOPS)

Laminated glass

Light, (dome) cab

Lunch box and beverage holders

Mirror, internal (panoramic)

Mirrors, heated ready

Mirrors, rearview (externally mounted)

Radio ready for entertainment: – Antenna – Speakers – Converter (12V, 10-15 amp)

Seat, Cat Comfort (cloth) air suspension

Seat belt with minder, retractable, 76 mm (3 in) wide

STIC control system with lockout

Sun visor, front

Tinted glass

Transmission gear (indicator)

Vital Information Management System (VIMS): – Graphical information display – External data port –

Customizable operator profiles

Wet-arm wipers/washers (front and rear)

Intermittent wipers (front and rear)

TIRES, RIMS AND WHEELS

Wheels, tamping tips

GUARDS

Guard, driveshaft

Guards, crankcase and power train

BLADES

Bulldozer straight blade, hydraulics, and linkage are included in the base machine

FLUIDS

Antifreeze, premixed 50% concentration extended life (-34° C/-29° F)

OTHER STANDARD EQUIPMENT

Cleaner bars with teeth

Doors, service access (locking)

Ecology drains for engine, radiator, transmission, hydraulic tank

Emergency platform egress

Engine, crankcase, 500 hour interval with CJ-4 oil

Engine idle management features: – Auto idle kickdown – Delayed engine shutdown – Engine idle shutdown

Fast fuel system

Fire suppression ready

Fuel tank, Fast Fill, 782 L (207 gal)

Hitch, drawbar with pin

Hoses, Cat

Hydraulic, engine, and transmission oil coolers

Oil change system, high speed

Oil sampling valves

Product Link

Stairway, left and right rear access

Steering, load sensing

Toe kicks

Total hydraulic filtration system

Vandalism protection caplocks

Venturi stack

Fold down exhaust stack for shipping

825K OPTIONAL EQUIPMENT

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

OPERATOR ENVIRONMENT

Camera, rear vision

Radio, AM/FM/AUX/USB/BLUETOOTH

Radio, CB (ready)

TECHNOLOGY PRODUCTS

Compaction control, basic

FLUIDS

Antifreeze, -50° C (-58° F)

STARTING AIDS

Heater, engine coolant, 120V

Heater, engine coolant, 240V

MISCELLANEOUS

Film (ANSI) (Tier 4 Final/Stage IV)

EU certification (Tier 4 Final/Stage IV)

Plate - year of manufacture (Tier 3/Stage III Equivalent)