G160 SPECIFICATIONS

ENGINE	6x4	6x6
MANUFACTURER AND MODEL	Cummins QSL9	
EMISSIONS LEVEL	Stage 3A	
NUMBER OF CYLINDERS	6	
DISPLACEMENT	9 L (543 cu. in.)	
ENGINE OUTPUT - Nett	209 kW (280 hp)	229 kW (307 hp)
PEAK ENGINE TORQUE	1 424 Nm (1 050 lb.ft) @ 1 300 rpm	
TORQUE RISE	15%	
NET ENGINE POWER		
Gear 1	209 kW (280 hp)	229 kW (307 hp)
Gear 2	209 kW (280 hp)	229 kW (307 hp)
Gear 3	209 kW (280 hp)	229 kW (307 hp)
Gear 4	209 kW (280 hp)	229 kW (307 hp)
Gear D	209 kW (280 hp)	229 kW (307 hp)
Reverse Gear 1	209 kW (280 hp)	229 kW (307 hp)
Reverse Gear 2	209 kW (280 hp)	229 kW (307 hp)
Reverse Gear 3	209 kW (280 hp)	229 kW (307 hp)
Reverse Gear 4	209 kW (280 hp)	229 kW (307 hp)
Reverse Gear D	209 kW (307 hp)	229 kW (307 hp)

DRIVETRAIN	6x4	6x6
MANUFACTURER AND MODEL	ZF CP230	
TRANSMISSION DESCRIPTION	cPower	
NUMBER OF SPEEDS: Forward	Inf	
NUMBER OF SPEEDS: Reverse	Inf	
FRONT AXLE	Heavy duty welded fabrication with integrated lean bar lock	
FINAL DRIVES	Inboard-mounted planetary sealed in cooled, filtered oil	
BRAKES	Foot-controlled, hydraulically operated, multiple wet-disc brakes sealed in pressurized, cooled, filtered oil; both independent systems effective on all 4 tandem wheels	
PRIMARY AND SECONDARY BRAKES	Hydraulically actuated, inboard of tandem pivot, self-adjusting, sealed in cooled and filtered oil, multi-disc (ISO 3450).	
PARK BRAKE	Automatically spring applied, hydraulically released disc brake (ISO 3450).	
FRONT AXLE OSCILLATION (Total)	32 deg.	
FRONT WHEEL LEAN	20 deg.	
DIFFERENTIAL	Spiral bevel gear system, hydraulically actuated with a clutch-type mechanism, allowing differential lock engagement while the machine is in motion. It can be applied in both manual and automatic differential lock modes.	
TANDEM AXLE OSCILLATION	30 deg. (Total)	
STEERING	Hydraulic frame articulation for maneuverability and productivity; crab steering reduces side drift, positions tandems on firm ground, and increases side-slope stability	
TYRE SIZE - Standard	17.5R25	
SERVICE BRAKE TYPE	Multiple Wet Discs	
SERVICE BRAKE ACTUATION	Hydraulic	
GROUND CLEARANCE FRONT AXLE	546 mm (21.5 in.)	

G160 SPECIFICATIONS

PERFORMANCE	6x4	6x6
LOADING - Front Axle	5 114 kg (11 274 lbs)	5 362 kg (11 821 lbs)
LOADING - Rear Axle / Tandem	13 646 kg (30 084 lbs)	14 088 kg (31 059 lbs)
SPEED		
Forward Gear 1	3.8 kph (2 mph)	
Forward Gear 2	5.5 kph (3 mph)	
Forward Gear 3	8.2 kph (5 mph)	
Forward Gear 4	12.1 kph (7 mph)	
Forward Gear D	0 - 45 kph (0 - 28 mph)	
Reverse Gear 1	3.7 kph (2 mph)	
Reverse Gear 2	5.3 kph (3 mph)	
Reverse Gear 3	7.9 kph (5 mph)	
Reverse Gear 4	11.6 kph (7 mph)	
Reverse Gear D	0 - 45 kph (0 - 28 mph)	
Top Speed Forward	45 kph (28 mph)	
Top Speed Reverse	45 kph (28 mph)	

6-WHEEL DRIVE	6x4	6x6
FRONT WHEEL DRIVE		Yes
DESCRIPTION		A hydrostatic drive to improve vehicle traction and benefit control of the front wheels. The system can be activated electronically in realtime whilst operating. It consists of independent left/right circuits, utilising variable displacement pumps coupled to auto-shifting two speed motors. When not active the circuits use an efficient freewheeling mode. The system enables inching mode as well as precision mode (a front wheel only drive mode).
PUMPS		Rexroth
PUMP DISPLACEMENT		53 cm3 (3.4 cu. in.)
FRONT WHEEL MOTORS		Poclain
MOTOR DISPLACEMENT		2 238 cm^3 (137 cu. in.)
REDUCTION		None
6WD MAX SPEED		35 kph (22 mph)
PRECISION MODE MAX SPEED		10 kph (6 mph)

HYDRAULICS	6x4	6x6
TYPE	Variable displacement axial piston pump	
PUMP DISPLACEMENT	100 cc / rev	
PUMP FLOW, L / min (US-Gallons / min)	220 L / min (58 gal / min)	
RELIEF PRESSURE	18 961 kPa (2 750 Psi)	

G160 SPECIFICATIONS

KINEMATICS	6x4	6x6
CIRCLE SIDE SHIFT	789 mm (31 in.)	
FRAME CIRCLE DIAMETER	1 500 mm (59 in.)	
CIRCLE DRIVE	Hydraulic geroller motor driving a reduction worm box with overload wetplate clutch.	
CIRCLE TYPE	Precision Circle: Sealed and lubricated slewing bearing, requiring no adjustment. Mounted between the drawbar and circleframe, which are welded and machined structures.	
CIRCLE ROTATION	360 deg.	
STEERING ANGLE, DEG	48 deg.	
TURNING RADIUS - MINIMUM	7,2 m (23 ft. 8 in.)	
FRAME ARTICULATION (Each way)	22 deg.	

CAPACITIES	6x4	6x6
FUEL TANK (Refilling capacity)	400 L (106 US gal.)	
HYDRAULIC TANK (Refilling Capacity)	68,75 L (18 US gal.)	
COOLING SYSTEM	36 L (10 US gal.)	
ENGINE OIL WITH FILTER	21 L (6 US gal.)	
TRANSMISSION FLUID	36 L (10 US gal.)	
DIFF HOUSING	32 L (8 US gal.)	
TANDEM	158 L (42 US gal.)	
CIRCLE GEARBOX	5 L (1 US gal.)	

MOLDBOARD / BLADE	6x4	6x6
DESCRIPTION	High strength welded construction, using wear resistant high carbon steel materials. Underlays/overlays & cutting edges can exchanged left to right. Moldboard bronze guides are easily replaceable and adjustable for precision.	
WIDTH - Moldboard	4 270 mm (14 ft. 0 in.)	
MOLDBOARD HEIGHT	686 mm (27 in.)	
THICKNESS - Moldboard	20/25 mm (7.8 / 9.8) combination	
MOLDBOARD SIDESHIFT - Right	685,5 mm (27 in)	
MOLDBOARD SIDESHIFT - Left	685,5 mm (27 in)	
SHOULDER REACH	2 287 mm (7 ft. 6 in.)	
HYDRAULIC BLADE TIP - Forward	42 deg.	
HYDRAULIC BLADE TIP - Rearward	5 deg.	
MOLDBOARD - Lift above ground	490 mm (19.3 in.)	
MOLDBOARD ARC RADIUS	426 mm (16.8 in.)	
THROAT CLEARANCE	111 mm (4.4 in.)	
BANK ANGLE	90 deg.	
DRAWBAR (DRAFT FRAME) Description	Welded box construction machined for flatness with variable height double ball-&-socket pivot connection	
BLADE DOWN FORCE AT MAX WEIGHT	12 741 kg (28 089 lbs)	12 741 kg (28 089 lbs)
BLADE DOWN FORCE AT NORMAL WEIGHT	10 439 kg (23 014 lbs)	10 964 kg (24 171 lbs)
BLADE DOWN FORCE AT BASE WEIGHT	8 678 kg (30 916 lbs)	8 868 kg (30 502 lbs)
BLADE PULL AT MAX WEIGHT	15 750 kg (34 723 lbs)	22 500 kg (49 604 lbs)
BLADE PULL AT NORMAL WEIGHT	14 002 kg (30 870 lbs)	20 095 kg (44 302 lbs)
BLADE PULL AT BASE WEIGHT	12 281 kg (27 076 lbs)	17 505 kg (38 592 lbs)

G160 SPECIFICATIONS

CUTTING EDGE	6x4	6x6
DESCRIPTION	Through hardened Boron steel edge	
THICKNESS	19 mm (0.7 in.)	
WIDTH	203 mm (8 in.)	

ELECTRICAL	6x4	6x6
SYSTEM VOLTAGE	24 V	
NUMBER OF BATTERIES	2	
BATTERY CAPACITY	1 352 CCA	
RESERVE CAPACITY	400 min.	
AMP HOUR RATING	230 amp-hour	
ALTERNATOR RATING	122 amp	
NUMBER OF LED WORKLIGHTS		
Grading Option	4	
Deluxe Option	8	
Engine Bay - Standard	3	

WEIGHTS	6x4	6x6
GROSS VEHICLE WEIGHT - Base - Front Axle	5 114 kg (11 274 lbs)	5 362 kg (11 821 lbs)
GROSS VEHICLE WEIGHT - Base - Rear Axle	13 646 kg (30 084 lbs)	14 088 kg (31 059 lbs)
OPERATING WEIGHT	18 760 kg (41 359 lbs)	19 450 kg (42 880 lbs)
GROSS VEHICLE WEIGHT - Typical - Front Axle	6 080 kg (13 404 lbs)	6 328 kg (13 951 lbs)
GROSS VEHICLE WEIGHT - Typical - Rear Axle	15 558 kg (34 299 lbs)	16 000 kg (35 274 lbs)
WEIGHT WITH PUSH BLOCK & RIPPER	21 638 kg (47 704 lbs)	22 328 kg (49 225 lbs)
GROSS VEHICLE WEIGHT - Maximum - Front Axle	7 500 kg (16 535 lbs)	
GROSS VEHICLE WEIGHT - Maximum - Rear Axle	17 500 kg (38 581 lbs)	
OPERATING WEIGHT - Maximum	25 000 kg (55 116 lbs)	

REAR RIPPER & SCARIFIER	6x4	6x6
DESCRIPTION	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch 3	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch 4
WIDTH OF CUT		
Ripper	2 300 mm (7 ft. 6 in.)	
Scarifier	2 300 mm (7 ft. 6 in.)	
MAX NUMBER OF SHANKS/TEETH		
Ripper	5	
Scarifier	9	
LIFT ABOVE GROUND		
Ripper	645 mm (25,4 in.)	
Scarifier	815 mm (32,1 in.)	
MAXIMUM DEPTH		
Ripper	370 mm (14,6 in.)	
Scarifier	240 mm (9,4 in.)	
RIPPER PRY-OUT FORCE (Hydraulic limit)	25 500 kg (56 218 lbs)	
RIPPER PENETRATION FORCE (Hydraulic limit)	9 268 kg (20 432 lbs)	
SHANK SIZE		
Ripper	59 x 137 mm (2.4 x 5.4 in.)	
Scarifier	27,5 x 78 mm (1.0 x 3.1 in.)	

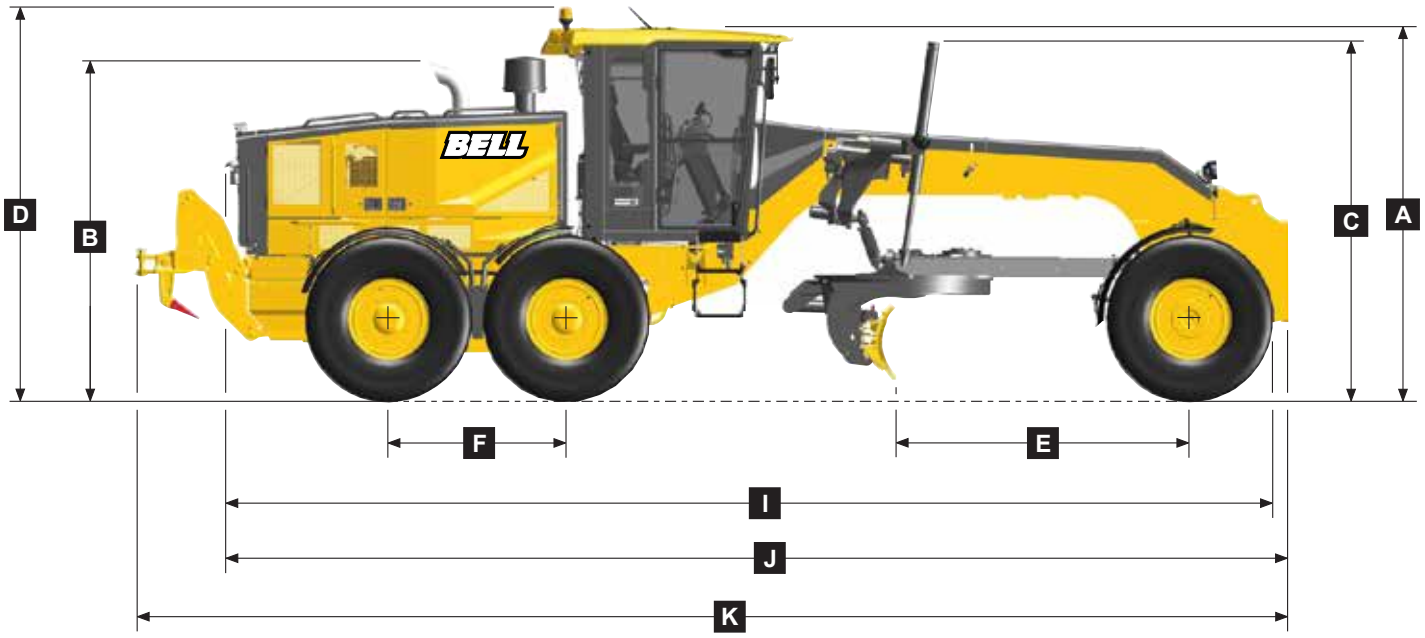
G160 SPECIFICATIONS

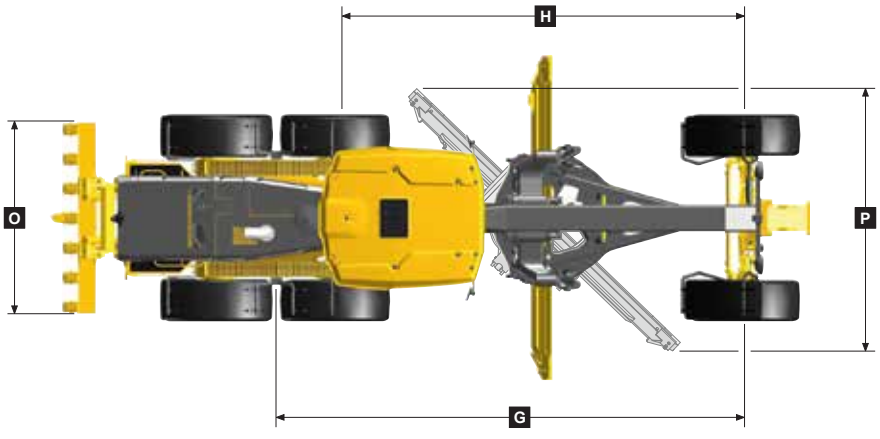
MID SCARIFIER	6x4	6x6
TYPE	Radial arm linkage with maintenance free bearings and underslung lift cylinder and hydraulic float. V-type scarifier beam with 3 pitch angle positions.	
WIDTH OF CUT	1 188 mm (46.8 in.)	
NUMBER OF SHANKS/TEETH	11	
LIFT ABOVE GROUND	300 mm (11,8 in.)	
MAX DEPTH	241 mm (9,5 in.)	
SHANK SPACING	114 mm (4,5 in.)	
SHANK SIZE	27.5 x 78 mm (1,0 x 3,1 in.)	

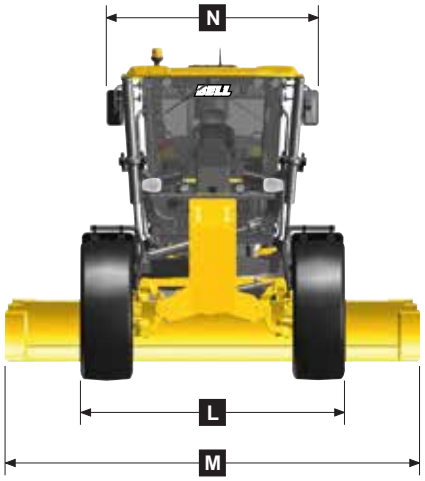
CAB	6x4	6x6
DESCRIPTION	Steel cab frame with GRP roof	
ROPS/FOPS	Yes (ROPS ISO 3471:2008 / FOPS ISO 3449:2005)	

G160 SPECIFICATIONS

MACHINE DIMENSIONS			
A	Height-Cab	3 161 mm	(10 ft. 4 in.)
B	Height-Exhaust-T3A	2 861 mm	(9 ft. 5 in.)
C	Height-Blade Lift Cylinders	2 974 mm	(9 ft. 9 in.)
D	Height-Beacon Light	3 333 mm	(10 ft. 11 in.)
E	Front Axle Centre to Blade	2 580 mm	(8 ft. 6 in.)
F	Tandem Axle Wheel Centres	1 567 mm	(5 ft. 2 in.)
G	Front Axle Centre to Tandem Axle Pivot	6 272 mm	(20 ft. 7 in.)
H	Front Axle Centre to Artic Centre	5 392 mm	(17 ft. 8 in.)
I	Length-Overall w/o Pushblock/Ripper	9 165 mm	(30 ft. 1 in.)
J	Length-Overall with Pushblock	9 353 mm	(30 ft. 8 in.)
K	Length-Overall with Pushblock and Ripper	10 138 mm	(33 ft. 3 in.)
L	Width over Tyre 17,5 R25 (Std G140/G160)	2 634 mm	(8 ft. 8 in.)
M	Width over Blade-14 ft. (Std G140/G160)	4 273 mm	(14 ft. 0 in.)
N	Width over Mirrors-Operating Position	2 212 mm	(7 ft. 3 in.)
O	Width over Ripper	2 300 mm	(7 ft. 7 in.)
P	Width Transport Position - 14 ft. Blade	2 970 mm	(9 ft. 9 in.)







Advanced technological solutions for monitoring, accuracy and safety

Bell Motor Graders combine cutting-edge technology with seamless system integration to maximize productivity, grading precision, and on-site safety.

Grading System Integration
Bell Motor Graders are agnostic and can seamlessly integrate with a variety of third-party technologies, including 2D and 3D grading systems of the customer's choice. This versatility allows customers to connect the grader to their preferred precision grading solutions, enabling high levels of grading accuracy and operational efficiency.

Fleetm@tic® Monitoring & Efficiency Management
Bell Fleetm@tic® monitors and manages both the machine and the operator's performance. Machine operational data is collected, processed, and compiled into valuable production and performance statistics, which are accessible via automated reports or the Fleetm@tic® website.

Enhanced Safety Through System Connectivity
Bell Motor Graders support connectivity with third-party L9 pedestrian detection systems and collision avoidance systems through the ISO 21815-2 Interface. This advanced safety integration helps enhance job site awareness and reduce incidents, making the Bell grader a safer, smarter machine.

Features & Options

Key: ● Standard ▲ Optional

G140	G160	G200	
			CAB
●	●	●	ROPS/FOPS certified
●	●	▲	Standard cab
▲	▲	●	Deluxe cab
▲	▲	●	Powered cab air precleaner
▲	▲	▲	Radio
●	●	●	HVAC Climate control
▲	▲	▲	EOH Joystick controls
			ELECTRICAL
▲	▲	▲	PDS ready
▲	▲	▲	Rear camera
▲	▲	▲	Front camera
●	●	●	Reverse alarm
▲	▲	▲	White noise reverse alarm
●	●	●	LED grading worklights
▲	▲	●	LED Deluxe worklights
●	●	●	Engine bay lights
●	●	●	Rotating beacon lights
●	●	●	Wiper/washer with intermittent control
●	●	●	Rear wipers
●	●	●	Headlights: Halogen
▲	▲	▲	Headlights: LED
●	●	●	Reversing fan motor
●	●	●	Battery 1 350 CCA
			GROUND ENGAGING TOOLS (GET)
▲	▲		9 extra Scarifier shanks with tips
▲	▲		2 extra Ripper shanks with tips
▲	▲		All extra Ripper and scarifier shanks
▲	▲	▲	Reverse overlay end bids

G140	G160	G200	
			MOLDBOARD
▲			12 ft x 24 in
●	▲		14 ft x 24 in
▲	●	▲	14 ft x 27 in
		●	16 ft x 27 in
			WHEELSET
●	●	▲	17.5R25
		●	20.5R25
▲	▲	▲	550/65R25
			MUDGUARDS
▲	▲	▲	Front
▲	▲	▲	Front and rear
			OTHERS
▲	▲	●	Blade impact
▲	▲	▲	Quick service group
▲	▲	▲	Quick-fill fuel
●	●	●	Slip clutch
●	●	●	Sealed slew bearing
▲	▲	▲	Protection kit
			ATTACHMENTS
●	●		Rear ripper
▲	▲	▲	Rear hitch
		●	Wider ripper
▲	▲	▲	Mid scarifier