



ENGINE	6x4	6x6
MANUFACTURER AND MODEL	Cummins QSL9	
EMISSIONS LEVEL	Stag	ge 3A
NUMBER OF CYLINDERS		6
DISPLACEMENT	9 L (543	3 cu. in.)
ENGINE OUTPUT - NETT	231 kW (310 hp)	245 kW (329 hp)
PEAK ENGINE TORQUE	1 424 Nm (1 050	lb.ft) @ 1 500 rpm
TORQUE RISE	9	%
NET ENGINE POWER		
Gear 1	231 kW (310 hp)	245 kW (329 hp)
Gear 2	231 kW (310 hp)	245 kW (329 hp)
Gear 3	231 kW (310 hp)	245 kW (329 hp)
Gear 4	231 kW (310 hp)	245 kW (329 hp)
Gear D	231 kW (310 hp)	245 kW (329 hp)
Reverse Gear 1	231 kW (310 hp)	245 kW (329 hp)
Reverse Gear 2	231 kW (310 hp)	245 kW (329 hp)
Reverse Gear 3	231 kW (310 hp)	245 kW (329 hp)

DRIVETRAIN	6x4	6x6	
MANUFACTURER AND MODEL	ZF CP	ZF CP290	
TRANSMISSION DESCRIPTION	cPov	wer	
NUMBER OF SPEEDS: Forward	In	f	
NUMBER OF SPEEDS: Reverse	In	f	
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 filtered oil; both independent system		
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 re	Automatically spring applied, hydraulically released, oil cooled, self-adjusting (ISO 3450)	
FRONT AXLE OSCILLATION (Total)	32 deg.		
FRONT WHEEL LEAN	20 deg.		
DIFFERENTIAL	Spiral bevel gear system, hydraulically actuated wi lock engagement while the machine is manual and automatic d	s in motion. It can be applied in both	
TANDEM AXLE OSCILLATION (Total)	30 d	eg.	
STEERING	Hydraulic frame articulation for maneuverability a positions tandems on firm ground,		
TYRE SIZE - STANDARD	20.5R25		
SERVICE BRAKE TYPE	Multiple W	Multiple Wet Discs	
SERVICE BRAKE ACTUATION	Hydra	Hydraulic	
GROUND CLEARANCE FRONT AXLE	605 mm (605 mm (23.8 in.)	

PERFORMANCE	6x4	6x6
LOADING - FRONT AXLE	5 351 kg (11 797 lbs)	5 599 kg (12 344 lbs)
LOADING - REAR AXLE / TANDEM	14 184 kg (31 270 lbs)	14 626 kg (32 245 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 - 44,8 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 - 44.8 kph (0 - 28 mph)	
Top Speed Forward	44,8 kph (28 mph)	
Top Speed Reverse	44,8 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		56 cm3 (3.4 cu. in.)
FRONT WHEEL MOTORS		Poclain
MOTOR DISPLACEMENT		2 238 cm3 (137 cu. in.)
REDUCTION		None
6WD MAX SPEED		35 kph (22 mph)
PRECISION MODE MAX SPEED		10 kph (6 mph)

HYDRAULICS	6x4	6x6
ТҮРЕ	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)	

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	7,22 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	47 L (12 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	4 880 mm ((16 ft. 0 in.)
MOLDBOARD HEIGHT	686 mm	(27 in.)
THICKNESS - Moldboard	20/25 mm (0.7 /	0.9) combination
MOLDBOARD SIDESHIFT - Right	685,5 mi	m (27 in)
MOLDBOARD SIDESHIFT - Left	685,5 mi	m (27 in)
SHOULDER REACH	2 478 mm	(8 ft. 2 in.)
HYDRAULIC BLADE TIP - Forward	44 0	deg.
HYDRAULIC BLADE TIP - Rearward	3 d	eg.
MOLDBOARD - Lift Above Ground	490 mm	(19.3 in.)
MOLDBOARD - Depth of Cut		
MOLDBOARD ARC RADIUS	426 mm (16.8 in.)	
THROAT CLEARANCE	87 mm (3.4 in.)	
BANK ANGLE	90 deg.	
DRAWBAR (DRAFT FRAME) DESCRIPTION	Welded box construction machined for flatness with variable height double ball-and-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	10 242 kg (22 580 lbs)	10 767 kg (23 737 lbs)
BLADE DOWN FORCE AT BASE WEIGHT	8 678 kg (30 734 lbs)	8 868 kg (31 189 lbs)
BLADE PULL AT MAX WEIGHT	15 750 kg (34 723 lbs)	22 500 kg (49 604 lbs)
BLADE PULL AT NORMAL WEIGHT	14 648 kg (32 294 lbs)	20 905 kg (46 088 lbs)
BLADE PULL AT BASE WEIGHT	12 766 kg (28 143 lbs)	18 203 kg (40 130 lbs)

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	1 353	CCA
RESERVE CAPACITY	400 min.	
AMP HOUR RATING	230 amp-hour	
ALTERNATOR RATING	122 amp	
NUMBER OF LED WORKLIGHTS		
Grading Option	4	
Delux Option	8	
Engine Bay - Standard	3	

WEIGHTS	6x4	6x6
GROSS VEHICLE WEIGHT - Base - Front Axle	5 351 kg (11 797 lbs)	5 599 kg (12 344 lbs)
GROSS VEHICLE WEIGHT - Base - Rear Axle	14 184 kg (31 270 lbs)	14 626 kg (32 245 lbs)
OPERATING WEIGHT	19 535 kg (43 067 lbs)	20 225 kg (44 588 lbs)
GROSS VEHICLE WEIGHT - Typical - Front Axle	6 262 kg (13 805 lbs)	6 510 kg (14 352 lbs)
GROSS VEHICLE WEIGHT - Typical - Rear Axle	16 276 kg (35 882 lbs)	16 718 kg (36 857 lbs)
WEIGHT WITH PUSH BLOCK & RIPPER	22 538 kg (49 688 lbs)	23 228 kg (51 209 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 5	
WIDTH OF CUT		
Ripper	2 550 mm	(8 ft. 4 in.)
Scarifier	N/	Α
MAX NUMBER OF SHANKS/TEETH		
Ripper	7	,
Scarifier	N/	Α
LIFT ABOVE GROUND		
Ripper	712 mm	(28 in.)
Scarifier	N/A	
MAXIMUM DEPTH		
Ripper	302 mm (11,89 in.)
Scarifier	N/A	
RIPPER PRY-OUT FORCE (HYDRAULIC LIMIT)	25 500 kg (56 218 lbs)	
RIPPER PENETRATION FORCE (HYDRAULIC LIMIT)	10 092 kg (22 249 lbs)	
SHANK SIZE		
Ripper	58 x 137 mm (2	2.28 x 5.39 in.)
Scarifier	N/A	

MID SCARIFIER	6x4	6x6
ТҮРЕ	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	1 189 mm (46.8 in.)	
NUMBER OF SHANKS/TEETH	12	
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)	

	MACHINE DIMENSIONS	
Α	Height-Cab	3 216 mm (10 ft. 7 in.)
В	Height-Exhaust-T3A	2 915 mm (9 ft. 7 in.)
C	Height-Blade Lift Cylinders	3 015 mm (9 ft. 11 in.)
D	Height-Beacon Light	3 388 mm (11 ft. 1 in.)
Е	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.)
Н	Front Axle Centre to Artic Centre	5 392 mm (17 ft. 8 in.)
ı	Length-Overall w/o Pushblock/Ripper	9 228 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 (Option G200)	2 634 mm (8 ft. 8 in.)
L	Width over Tyre 20,5 R25 (Std G200)	2 743 mm (8 ft. 12 in.)
M	Width over Blade-14 ft. (Option G200)	4 273 mm (14 ft.)
M	Width over Blade-16 ft. (Std G200)	4 883 mm (16 ft.)
N	Width over Mirrors-Operating Position	2 212 mm (7 ft. 3 in.)
0	Width over Ripper	2 550 mm (8 ft. 4 in.)
P	Width Transport Position - 14 ft. Blade	2 970 mm (9 ft. 9 in.)
P	Width Transport Position - 16 ft. Blade	3 380 mm (11 ft. 1 in.)
D		C A
0		N
		✓ M

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 thirdparty 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

GIAO GIE	8 38
	САВ
• • • • • • • • • • • • • • • • • • •	 ROPS/FOPS certified Standard cab Deluxe cab Powered cab air precleaner Radio HVAC Climate control
A A	▲ EOH Joystick controls
	ELECTRICAL
	 ▶ PDS ready ▶ Rear camera ▶ Front camera ▶ 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
A A A A A	9 extra Scarifier shanks with tips 2 extra Ripper shanks with tips All extra Ripper and scarifier shanks Reverse overlay end bids

STAD STE	860
	MOLDBOARD
A A O	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
A A	Front A Front and rear
	OTHERS
A A A O O O O O O O O O O O O O O O O O	▲ Quick-fill fuel
	ATTACHMENTS
• • A A	Rear ripper Rear hitch Wider ripper Mid scarifier

