

**Axles:**

Torque proportioning (high traction) differential.  
**Front:** Planetary, steering, axle oscillates and is equipped with oscillation lockouts.  
**Rear:** planetary, rigid, non-steering, Differential locks optional.

**Tire Size**

Standard 17.5 – 25, 16PR; Optional 17.5 – 25, 20PR, Super Ground Grip; Optional 17.5 R 25, Michelin XHAT\*

**Travel Speeds** (Forward and reverse.)

Unit equipped with 17.5 – 25 tires.

Gear Ratios	High	Low
1 <sup>st</sup> mph	6.7	3.1
(km/h)	(10.8)	(5.0)
2 <sup>nd</sup> mph	12.7	5.9
(km/h)	(20.4)	(9.5)
3 <sup>rd</sup> mph	29.1	15.8
(km/h)	(46.8)	(25.4)

**Drawbar Pull**

Gear Ratios	High	Low
1 <sup>st</sup> lbf	12,016	27,856
(kN)	(53.4)	(123.9)
2 <sup>nd</sup> lbf	5,705	13,805
(kN)	(25.4)	(61.4)
3 <sup>rd</sup> lbf	1,477	4,339
(kN)	(6.6)	(19.3)

3% grade speed (max) 12.4 mph (20.0 km/h)

**Brakes:**

Service: Hydraulic dry disc on each wheel, foot operated; Parking: Spring applied, hydraulic released. Located on rear driveshaft

Working: Hydraulic at each wheel. Hand operated.

**Maximum Gradeability** (Paved Surface)

With no load and 17.5 – 25 tires 95%

**Note:** Gradeability is a measure of tractive effort only and does not represent grades on which the machine can operate.

**Turning Radius**

Inside curb 15'7" (4.75 m)  
 Outside 25'6" (7.77m)

**Service Capacities**

Fuel tank: 75gal (284 Liters)  
 Hydraulic system (complete) 75ga; (284 Liters)  
 Hydraulic reservoir 35 gal (132 Liters)  
 Cooling system 9gal (34 Liters)  
 Engine oil (with filter) 17 qts. (16.1 Liters)  
 Swing gearbox 8.5 qt (8 Liters)  
 Transmission 21qt (19.9 Liters)  
 And torque converter

**Operating Weights**

Standard excavator with rigid dipper, 17.5 – 25, 16 PR tires, std. cab with heater, rear (std.) outriggers, 60" (1.5 m); Ditching bucket, Wrist-O-Twist<sup>®</sup> full fuel. 175 lb. (79kg) operator; 42,980 lb. (19,470 kg); Standard excavator with Extendastick, 17.5 – 25, 16 PR tires, std. cab with heater, front & rear (opt.) outriggers, 36" backhoe bucket, full fuel, 175 lb (70 kg) operator: 42,260 lbs. (20,050 kg)

**Buckets**

Nominal Width	Bucket Weight	SAE Capacity (struck)
In. (mm)	Lb. (kg)	yd <sup>3</sup> (m <sup>3</sup> )
<b>General Purpose:</b>		
24" (610 mm)	925 lb (420 kg)	0.37 yd <sup>3</sup> (0.28 m <sup>3</sup> )
30" (762 mm)	1,030 lb (467 kg)	0.50 yd <sup>3</sup> (0.38 m <sup>3</sup> )
36" (914 mm)	1,130 lb (513 kg)	0.62 yd <sup>3</sup> (0.47 m <sup>3</sup> )
42" (1,067mm)	1,235 lb (560 kg)	0.74 yd <sup>3</sup> (0.57 m <sup>3</sup> )
<b>Ditch Forming:</b>		
60" (1,524mm)	1,005 lb (456 kg)	0.63 yd <sup>3</sup> (0.48 m <sup>3</sup> )
72" (1,829mm)	1,075 lb (488 kg)	0.75 yd <sup>3</sup> (0.57 m <sup>3</sup> )

**Front Loading:**  
 60" (1,524mm) 1,626 lb (738 kg) 1.5 yd<sup>3</sup> (1.15 m<sup>3</sup>)  
**Concrete Removal:**  
 48" (1,219 mm) 1,850 lb (839 kg) NA  
 Note: For heaped capacities, add approx. 20%

**Standard Equipment**

Enclosed, total vision, vandal-resistant cab. Tinted windows,. Adjustable bucket seat. Cab controls for all operations. Signal horn. Windshield wipers. Auxiliary hydraulic controls. 13'8" (4.2 m) grading and excavation boom. Fast hoist, crowd and tool. Swing brake. Positive oil cooler. Hydraulic oil filters. Hydraulic rear outriggers. Hydraulic service and working brakes. Parking brake – spring applied, hydraulic-released, on drive shaft. Turn signals. Head and taillights. Four-wheel drive. Planetary axles. Front-wheel full-power steering. 17.5 – 25, 16 PR tires. Power shift transmission, forward and reverse. Torque converter. Torque proportioning differentials. Electric engine hour meter. Fuel gauge. Dry-type air cleaner. Cold weather start kit. Remote boom and swing lubrication. Master battery disconnect switch. Back-up alarm.

**Optional Equipment**

15' (4.6 m) rigid dipper. 15' (4.6 m) Extendastick dipper, 17.5 – 25, 20 PR super ground grip tires. 17.5 R 25 XHAT\* (Michelin) tires. No-spin rear axle. Hydraulic front outriggers. Secondary steering. Upper vandal cover. Cab heater. LP gas. Excavator boom work light package. Tool box. Windshield washer. Pintle hitch. Wrist-O-Twist<sup>®</sup> with quick latch. Various buckets (See list.) Lift lugs.

**Operator's Cab**

All controls for both the lower and upper works are located in a single, all-steel, weatherproof cab. Windshield of tinted, tempered glass slides open and is stored in an up-and-over position. Side and rear windows are of tinted Lexan. Separate hand controls for digging and parking brakes, swing brake, ignition, directional lights, engine throttle and lock, and steering reversal are all standard controls in the cab. (Operator controls can be interchanges to satisfy techniques of most operators.

**Engine**

Make and model: Cummins 6BT5.9, turbocharged;; Fuel: No. 2 diesel; Number of cylinder: 6; Bore and stroke: 4.02 x 4.72" (102 x 120mm); Displacement: 359 in<sup>3</sup> (5883cm<sup>3</sup>); Fuel supply: Low pressure; Air Cleaner: Dual stage, dry-type; Oil filter: Renewable cartridge;; Lubrication: Positive pressure; Cooling system: :Pressurized radiator and lubricated bearing impeller pump; Horsepower:; SAE Gross: 148 (110 kW)@2200 rpm; SAE Net: 133 (99 kW) @ 2200 rpm  
 Torque, max. (SAE): 440lb –ft (597Nm) @ 1600rpm

**Note:** Horsepower specifications valid to 9873' (3000m) elevation. Gross and net horsepower and torque at flywheel per SAE Standard J1349

**Electrical**

Starting: 24-volt electric; Batteries (2) 700CCA @ 0°F (-18°C) at 30sec; Alternator: 70 amp

**Hydraulic System**

**Pumps:** One fixed displacement gear pump for the crowd circuits @ 52 gpm (197L/min). A tandem fixed displacement gear pump section for the hoist circuits @ 52 gpm (197L/min.) and one variable displacement pump section for the steering, brakes and pilot circuits @ 0 to 26 gpm (98 L/min.) Main relief valve pressure setting: 2650 psi (18,271 kpa)  
**Oil Cooler:** Positive radiator type hydraulic oil cooler

**Control Valves:** Quantity: 2; Type: Sectional – 4 spool; Functions controlled: Hoist, crowd, tool, swing and 2 auxiliary.

**Cylinders:** Double-acting hydraulic for hoist, crowd, outriggers, steering and optional equipment.

Hoist:6.5 x 55.4" (165mm x 1.41 m)  
 Dipper, backhoe 6.5x50.8" (165mm x 1.29m)  
 Tool: 5.5 x 37.5" (140 x 953 mm)  
 Outriggers (2 std, 4 opt.) 5.5x 7.5" (140 x 445mm)  
 Extendastick (opt.): 4x60" (102mm x 1.52m)  
 Wrist-O-Twist<sup>®</sup> (opt.): 4x7.5" (102 x 191mm)  
 Single-acting hydraulic cylinders for axle oscillation lock.

Axle-lock (2): 3.5 x 5.35: (89 x 136 mm

**Level Grading Capabilities U.S. (Metric)**

Style of dipper: Rigid Extendastick			
Type of bucket	Excav.	Excav.	Ditch*
LA Max. equipment height in level-grading use	20'5" (6.22 m)	15'9" (4.80 m)	16'3" (4.95 m)
LB Min. radius of level-grading cut	9'3" (2.82 m)	7'11" (2.41 m)	8'4" (2.54 m)
LC Max. length of level-grading cut	16'8" (5.08 m)	18'1" (5.51 m)	17'11" (5.46 m)
LD Depth below ground of level-grading cut	4'5" (1.44 mm)	0 (0)	0 (0)

**\* Ditching bucket with Wrist-O-Twist**

**Cylinder cycle times:** (full stroke seconds)

	Standard	Dual Flow
Hoist cylinder		
Extend	10.7	6
Retract.	7.0	4.3
Tool cylinder		
Extend	4.8	2.7
Retract	3.8	2.2
Backhoe dipper cylinder		
Extend	9.0	4.6
Retract	6.4	4.3
Extendastick arm (opt.)		
Extend	4.1	
Retract	3.1	
Wrist-O-Twist <sup>®</sup> (opt.)		
Extend	3.5 (approx.)	
Retract	2.5 (approx.)	

**Breakout Force**

**Dipper cylinder:**

Extendastick extended: 11,442 lbf (50,897 N)  
 Extendastick retracted: 15,596 lbf (69,374 N)

**Bucket:**

Standard pin position: 19,822 lbf (88,173 N)  
 Power pin position: 23,298 lbf (103,635 N)

**Swing System**

360° continuous @ 11.5 rpm. Positive operator control with hydraulic motor, disc brake, 24.23:1 gear reducer.  
 Swing torque: 24,884 lb/ft (33,738 Nm)

**Outriggers**

2 standard, 4 optional. Individually or simultaneously controlled from cab.: Lowering time 5.0 seconds; Raising time 5.5 seconds

**Transmission**

Make and model	Clark R18624	
Type	6-speed power shift	
Converter size	12.6" (320 mm)	
Gear Ratios	<b>High</b>	<b>Low</b>
1 <sup>st</sup>	3.94:1	8.81:1
2 <sup>nd</sup>	2.00:1	4.49:1
3 <sup>rd</sup>	0.70:1	1.58:1