

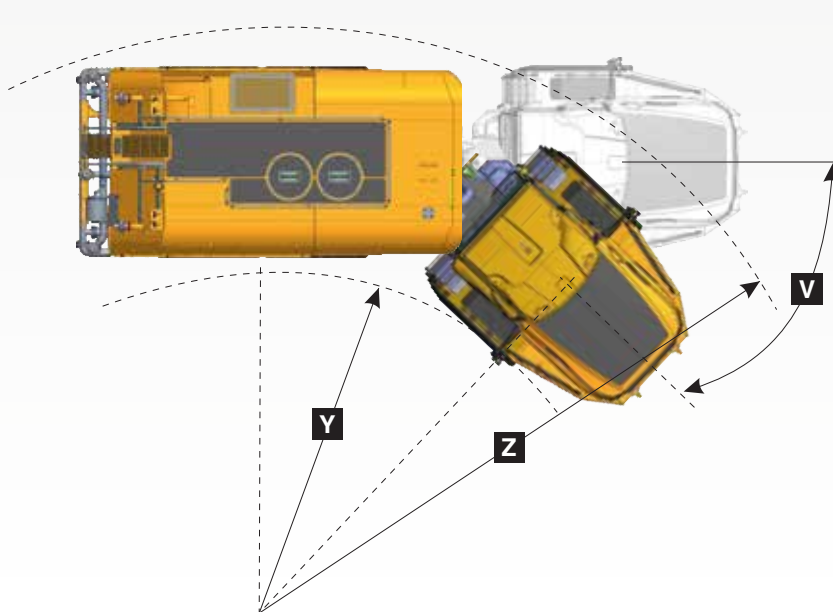
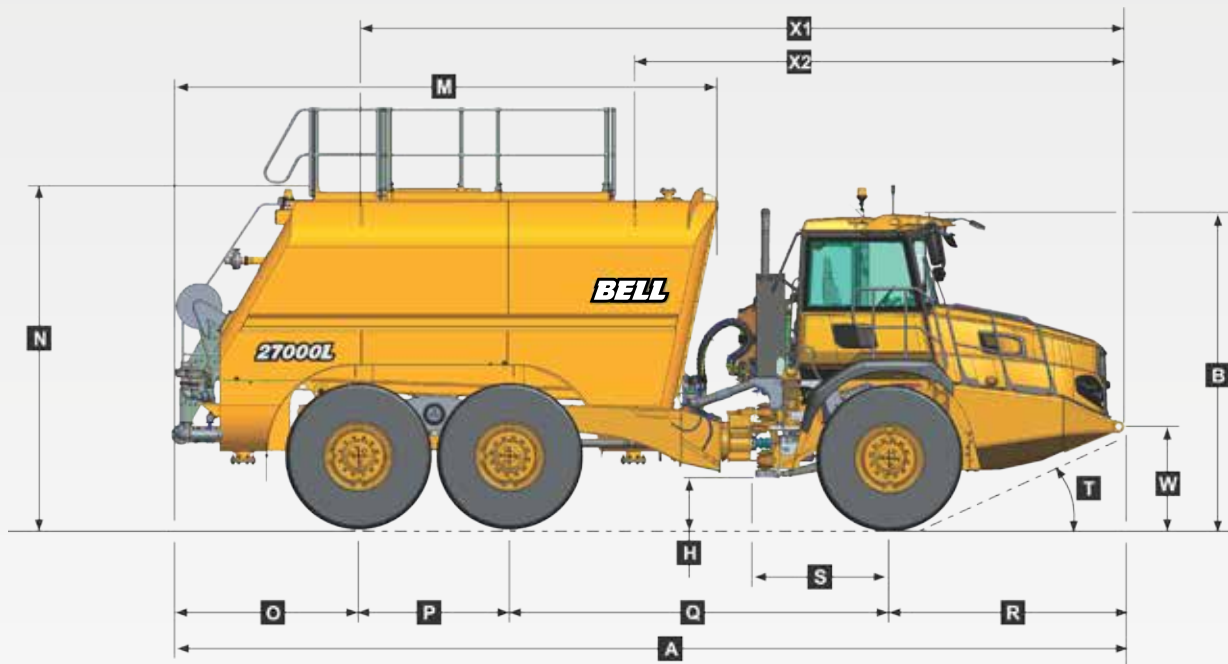
# B30E 6x6 27 000 L Articulated Water Truck

ENGINE	TRANSFER CASE	WHEELS	ELECTRICAL SYSTEM
<b>Manufacturer</b> Mercedes Benz	<b>Manufacturer</b> Kessler	<b>Type</b> Radial Earthmover	<b>Voltage</b> 24 V
<b>Model</b> OM926LA	<b>Series</b> W1400	<b>Tyre</b> 23.5 R 25	<b>Battery Type</b> Two AGM (Absorption Glass Mat) type
<b>Configuration</b> Inline 6, turbocharged and intercooled.	<b>Layout</b> Remote mounted	<b>FRONT SUSPENSION</b> Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.	<b>Battery Capacity</b> 2 X 75 Ah
<b>Net Power</b> 240 kW (322 hp) @ 2 200 rpm in accordance with UN ECE R120	<b>Gear Layout</b> Three in-line helical gears	<b>REAR SUSPENSION</b> Pivoting walking beams with laminated rubber suspension blocks	<b>Alternator Rating</b> 28 V 80 A
<b>Gross Torque</b> 1 300 Nm (959 lbft) @ 1 200 -1 600 rpm	<b>Output Differential</b> Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.		
<b>Displacement</b> 7,2 litres (439 cu.in)	<b>AXLES</b>	<b>VEHICLE SPEEDS</b>	
<b>Auxiliary Brake</b> Exhaust Valve Brake Engine Valve Brake	<b>Manufacturer</b> Bell	1st            8 km/h            5 mph	
	<b>Model</b> 18T	2nd           14 km/h           9 mph	
<b>Fuel Tank Capacity</b> 379 litres (100 US gal)	<b>Differential</b> High input limited slip differential with spiral bevel gears.	3rd           20 km/h           12 mph	
		4th           29 km/h           18 mph	
<b>Certification</b> OM926LA meets EU Stage II/EPA Tier 2 emissions regulations.	<b>Final Drive</b> Outboard heavy duty planetary on all axles	5th           43 km/h           26 mph	
		6th           50 km/h           31 mph	
		R             8 km/h            5 mph	
<b>TRANSMISSION</b>	<b>BRAKING SYSTEM</b>	<b>WATER TANK</b>	
<b>Manufacturer</b> Allison	<b>Service Brake</b> Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.	<b>Tank capacity</b> 27 000 Litres	
<b>Model</b> 3400P ORS	<b>Maximum brake force:</b> 187 kN (42 000 lbf)	<b>WATER TANKER PLUMBING</b>	
<b>Configuration</b> Fully automatic planetary transmission	<b>Park &amp; Emergency</b> Spring applied, air released driveline mounted disc.	Centrifugal water pump	
<b>Layout</b> Engine mounted	<b>Maximum brake force:</b> 251 kN (56 400 lbf)	<b>Rate of Flow</b> Standard: 1 800 L/min with 50 m head	
<b>Gear layout</b> Constant meshing planetary gears, clutch operated	<b>Auxiliary Brake</b> Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.	Option: 5 400 L/min with 70 m head	
<b>Gears</b> 6 Forward, 1 Reverse	<b>Total Retardation Power</b> 265 kW (355 hp) Continuous 494 kW (662 hp) Maximum	<b>CAB</b> ROPS/FOPS certified 72 dBA internal sound level measured according to ISO 6396.	
<b>Clutch Type</b> Hydraulically operated multi-disc			
<b>Control Type</b> Electronic			
<b>Torque Control</b> Hydrodynamic with lock-up in all gears.			

## Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN		LADEN (No sinkage/Total Contact Area Method)		Rated Payload	27 000 litres (7 100 gallons)
	kg (lb)	23.5 R 25	kPa (Psi)		
Total	24 082 (53 091)	Front	298 (43,2)		
		Middle/ Rear	405 (58,7)		
LADEN		Calculation method used by competition			
	kg (lb)				
Front	14 323 (31 577)	Front	134 (19,4)		
Middle	18 509 (40 805)	Middle/ Rear	169 (24,5)		
Rear	18 053 (39 800)				
Total	50 885 (112 182)				

## Dimensions

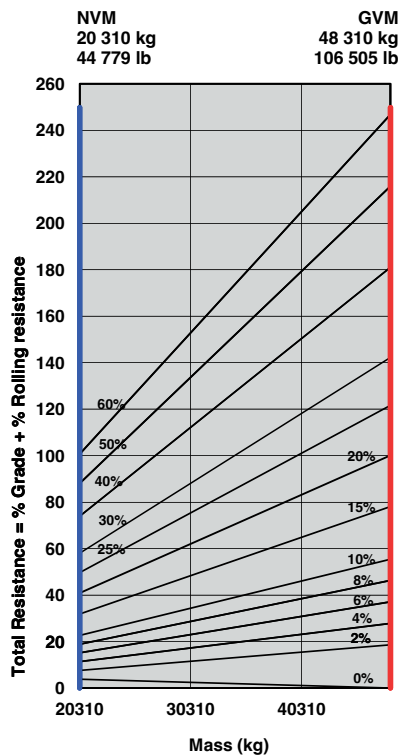


### Machine Dimensions

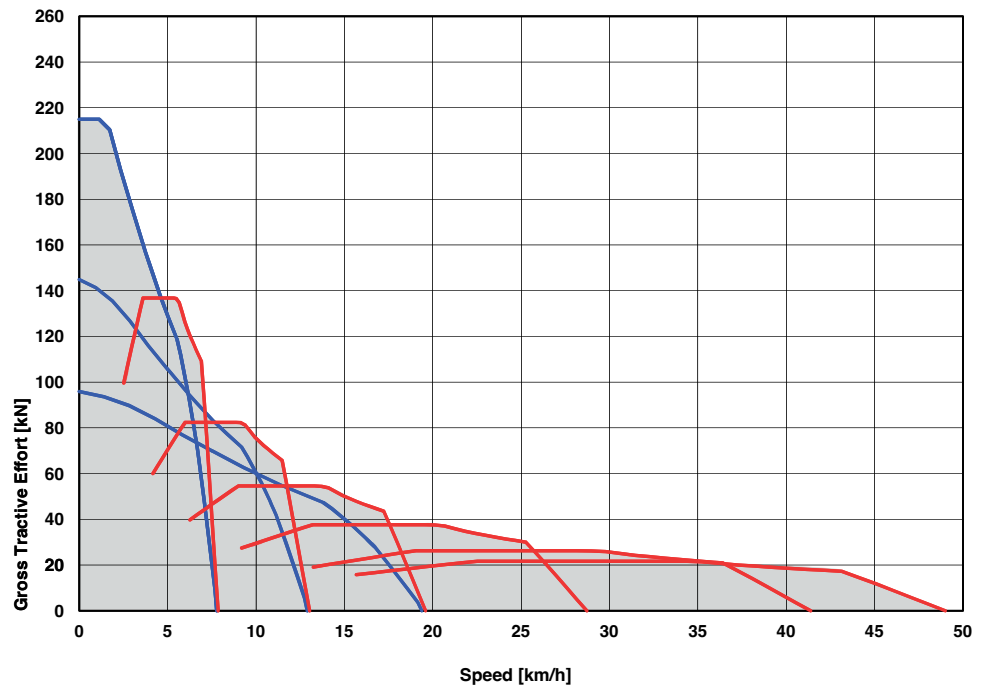
A	Length - Transport Position	10 525 mm	(34 ft. 6 in.)	P	Mid Axle Centre to Rear Axle Centre	1 670 mm	(5 ft. 6 in.)
B	Height - Transport Position	3 436 mm	(11 ft. 3 in.)	Q	Mid Axle Centre to Front Axle Centre	4 181 mm	(13 ft. 9 in.)
C	Width over Mudguards	2 985 mm	(9 ft. 6 in.)	R	Front Axle Centre to Machine Front	2 602 mm	(8 ft. 9 in.)
D	Width over Tyres - 23.5R25	2 940 mm	(9 ft. 8 in.)	S	Front Axle Centre to Artic Centre	1 362 mm	(4 ft. 6 in.)
E	Tyre Track Width - 23.5R25	2 356 mm	(7 ft. 9 in.)	T	Approach Angle	25°	
F	Width over Tank / Bowser	2 855 mm	(9 ft. 4 in.)	V	Maximum Articulation Angle	45°	
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)	W	Front Tie Down Height	1 075 mm	(3 ft. 6 in.)
H	Ground Clearance - Artic	537 mm	(1 ft. 9 in.)	X1	Tank Lifting Centres	8 359 mm	(27 ft. 5 in.)
I	Ground Clearance - Front Axle	488 mm	(1 ft. 7 in.)	X2	Front Lifting Centre to Tank Lifting Centre	5 334 mm	(17 ft. 6 in.)
M	Tank / Bowser Length	6 030 mm	(19 ft. 9 in.)	Y	Inner Turning Circle Radius - 23.5R25	4 110 mm	(13 ft. 6 in.)
N	Maximum Tank Height	3 780 mm	(12 ft. 8 in.)	Z	Outer Turning Circle Radius - 23.5R25	8 000 mm	(26 ft. 3 in.)
O	Rear Axle Centre to Bowser / Tank Rear	2 072 mm	(6 ft. 10 in.)				

## Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

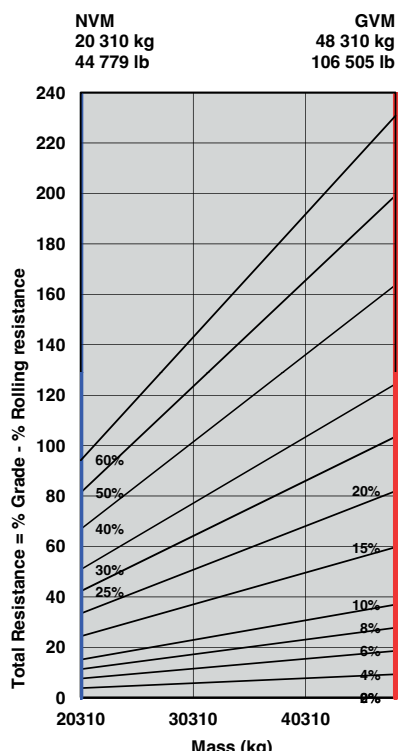


**B30E 6x6 27 000 Ltr Water Tanker - Tractive Effort**

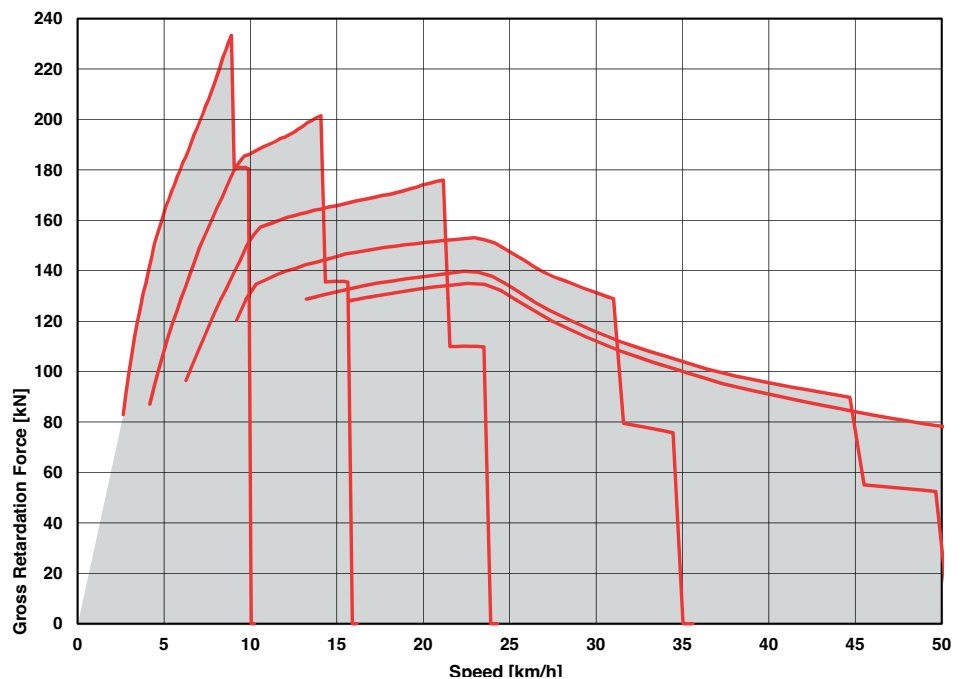


## Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



**B30E 6x6 27 000 Ltr Water Tanker - Retardation**



## BATTER SPRAYS

- Two additional spray valves that expand the spray patterns reach on the sides of the tank
- Remotely activated from inside the cab



## HOSE REEL

- 30m hose reel
- 1.5" adjustable fog/stream nozzle
- Spring retractable



## DRIBBLE BAR

- Gravity fed dribble bar
- Remotely activated from inside the cab
- Even spread pattern covering the width of the vehicle



## PENETRATION SPRAY BARS

- Available with nozzles or holes
- Remotely activated from inside the cab
- Pressurised by the pump to create a jet of water







## REMOTE WATER CANNON

- Adjustable fog/stream pattern
- A variety of flow settings between 250 and 700 GPM
- Remotely controlled via a joystick inside the cab
- High quality components built to last in heavy duty applications

## MANUAL WATER CANNON

- Long range spray nozzle
- High quality components built to last in heavy duty applications



16 000 L	18 000 L	23 000 L	27 000 L	35 000 L	38 000 L	45 000 L	
●	●	●	●	●	●	●	<b>ENGINE</b>
●	●	●	●	●	●	●	Engine valve brake and exhaust brake
●	●	●	●	●	●	●	Dual element air cleaner with dust ejector valve
●	●	●	●	●	●	●	Precleaner with auto dust scavenging
●	●	●	●	●	●	●	Water separator
●	●	●	●	●	●	●	Serpentine drive belt with automatic tensioner
▲	▲	▲	▲	●	●	●	Provision for fast fill
▲	▲	▲	▲	●	●	●	Wet-sleeve cylinder liners
							<b>COOLING</b>
●	●	●	●	●	●	●	Crank-shaft mounted viscous-drive fan
●	●	●	●	●	●	●	Fan guard
							<b>PNEUMATIC SYSTEM</b>
●	●	●	●	●	●	●	Engine-mounted compressor
●	●	●	●	●	●	●	Air drier with heater
●	●	●	●	●	●	●	Integral unloader valve
							<b>ELECTRICAL SYSTEM</b>
●	●	●	●	●	●	●	Battery disconnect
●	●	●	●	●	●	●	Drive lights
●	●	●	●	●	●	●	Air horn
●	●	●	●	●	●	●	Reverse alarm
●	▲	▲	▲	▲	▲	▲	White noise reverse alarm
●	●	●	●	●	●	●	Rotating beacon
●	●	●	●	●	●	●	Pitch roll sensor
▲	▲	▲	▲	▲	▲	▲	LED drive lights
▲	▲	▲	▲	●	●	●	Halogen artic reverse light
▲	▲	▲	▲	▲	▲	▲	LED artic reverse light
●	●	●	●	●	●	●	LED reverse light
							<b>STEERING SYSTEM</b>
●	●	●	●	●	●	●	Uni-directional ground-driven secondary steering pump
▲	▲	▲	▲	▲	▲	▲	Bi-directional ground-driven secondary steering pump
							<b>CAB</b>
●	●	●	●	●	●	●	ROPS/FOPS certification
●	●	●	●	●	●	●	Tilt cab
●	●	●	●	●	●	●	Gas strut-supported door
●	●	●	●	●	●	●	HVAC Climate control system
●	●	●	●	●	●	●	AM/FM radio/CD player + USB
●	●	●	●	●	●	●	Rear window guard
●	●	●	●	●	●	●	Wiper/washer with intermittent control
●	●	●	●	●	●	●	Tilt and telescoping steering wheel
●	●	●	●	●	●	●	Centre-mount air-suspension seat
●	●	●	●	●	●	●	Halogen work lights
▲	▲	▲	▲	▲	▲	▲	LED work lights
▲	▲	▲	▲	▲	▲	▲	Rotating beacon: seat belt installation
▲	▲	▲	▲	▲	▲	▲	Remote engine and machine isolation
●	●	●	●	●	●	●	Remote battery jump start
●	●	▲	▲	●	●	●	High visibility mirrors
●	●	●	●	●	●	●	Retractable 3-point seat belt
●	●	●	●	●	●	●	Foldaway trainer seat with retractable seat belt
							<b>CAB (continued)</b>
●	●	●	●	●	●	●	12-volt power outlet
●	●	●	●	●	●	●	Cup holder
●	●	●	●	●	●	●	Cooled/heated lunch box
●	●	●	●	●	●	●	Utility bin (removable)
●	●	●	●	●	●	●	Manually adjustable mirrors
▲	▲	▲	▲	▲	▲	▲	Electric adjustable & heated mirrors
●	●	●	●	●	●	●	Deluxe 10" colour LCD:
							Speedometer / Fuel gauge /
							Transmission oil temperature gauge /
							Engine coolant temperature gauge /
							LED function/warning indicators and
							audible alarm / Transmission gear
							selection / Tachometer / Battery
							voltage / Hour meter / Odometer /
							Fuel consumption / Trip timer /
							Trip distance / Metric/English units /
							Service codes/diagnostics
●	●	●	●	●	●	●	Backlit sealed switch module
							functions with:
							Wiper control / Lights / Heated mirrors /
							Retarding aggressiveness / Transfer
							case differential lock / Transmission
							gear hold / Airconditioner/ Heater
							controls / Preselected Speed Control
●	●	●	●	●	●	●	Backlit Plumbing sealed switch module
							functions with:
							Battery / Spray / Pulse / Tank fill /
							Hose reel / Pump / Dribble bar
							<b>PLUMBING</b>
●	●	●	●	●	●	●	Dribble bar
●	●	●	●	●	●	●	1 800 lpm 50 m head pump
▲	▲	▲	▲	●	●	●	5 400 lpm 70 m head pump*
▲	▲	▲	▲	▲	▲	▲	Pressurised dribble bar system
							with nozzles
●	●	●	●	●	●	●	Spray valves (in-cab activation)
●	●	●	●	●	●	●	Batter spray valves
●	●	●	●	●	●	●	Fold down top rails
▲	▲	▲	▲	▲	▲	▲	Suction pipe for filling from dam
●	●	●	●	●	●	●	Step ladder access
●	●	●	●	●	●	●	Inspection access
▲	▲	▲	▲	▲	▲	▲	Manual water canon
▲	▲	▲	▲	▲	▲	▲	Remote control water canon
▲	▲	▲	▲	▲	▲	▲	Hose reel
							<b>OTHER</b>
●	●	●	●	●	●	●	20.5 R 25 Radial earthmover tyres
▲							23.5 R 25 tyres
	●	●	●				620/75 R26 tyres
				●	●	▲	29.5 R 25 Radial Earthmover tyres
					▲	▲	875/65 R 29 Radial Earthmover tyres
●	●	●	●	●	●	●	Remote grease banks
▲	▲	▲	▲	▲	▲	▲	Automatic greasing
●	●	●	●	●	●	●	Cab peak
▲	▲	▲	▲	▲	▲	▲	High pressure hydraulic filter
▲	▲	▲	▲	▲	▲	▲	Fuel heater
●	●	●	●	●	●	●	Belly cover
▲	▲	▲	▲	▲	▲	▲	Handrails
▲	▲	▲	▲	▲	▲	▲	Remote transmission filter
●	▲	▲	▲	▲	▲	▲	Reverse camera

\* (Option only): Larger centrifugal pump available if suction pipe option is not fitted.

## FEATURES OF THE ARTICULATED WATER TRUCK

- **PRODUCTIVE:** Powerful built-for hauling ADT drivetrains are well matched for pulling and retarding heavy loads. Nitrogen over oil strut suspension smooths the ride for operator and machine.
- **ECONOMY:** Modern fuel efficient engine, lockup torque converter and planetary transmission deliver more work per unit of fuel used
- **EASY TO OPERATE:** High quality cab is conducive to operator care. Simple to use controls and electronic interfaces protect the machine from accidental misuse.