E-series
Articulated Dump Trucks
B35E | B40E | B45E | B50E | B60E | Mk 2.1

Stage IV/Tier 4f Certified
E is for evolution

Your business is our business. Bell Articulated Dump Trucks haul more, for longer at the lowest cost-per-ton to deliver more on your profit margins.

As a global leader in Articulated Dump Trucks, Bell Equipment brings you the world class E-series range. The evolutionary E-series is packed with class leading features that deliver production boosting payloads, lower daily operating costs, superior ride quality and uncompromised safety standards. Bell E-series ADTs will give your business the competitive edge you need.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>B35E</th>
<th>B40E</th>
<th>B45E</th>
<th>B50E</th>
<th>B60E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross power</strong></td>
<td>320 kW (429 hp)</td>
<td>380 kW (510 hp)</td>
<td>390 kW (523 hp)</td>
<td>430 kW (577 hp)</td>
<td>430 kW (577 hp)</td>
</tr>
<tr>
<td><strong>Operating mass</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empty</td>
<td>30 379 kg (66 974 lb)</td>
<td>32 233 kg (71 062 lb)</td>
<td>32 326 kg (71 267 lb)</td>
<td>35 675 kg (78 650 lb)</td>
<td>42 476 kg (93 644 lb)</td>
</tr>
<tr>
<td>Loaded</td>
<td>63 879 kg (140 829 lb)</td>
<td>71 233 kg (157 042 lb)</td>
<td>73 326 kg (161 656 lb)</td>
<td>81 075 kg (178 740 lb)</td>
<td>97 476 kg (214 898 lb)</td>
</tr>
<tr>
<td><strong>Rated payload</strong></td>
<td>33 500 kg (73 855 lb)</td>
<td>39 000 kg (85 980 lb)</td>
<td>41 000 kg (90 390 lb)</td>
<td>45 400 kg (100 090 lb)</td>
<td>55 000 kg (121 254 lb)</td>
</tr>
<tr>
<td><strong>2:1 heaped capacity</strong></td>
<td>20.5 m³ (27 yd³)</td>
<td>24 m³ (31 yd³)</td>
<td>25 m³ (33 yd³)</td>
<td>27.5 m³ (36 yd³)</td>
<td>35 m³ (45.8 yd³)</td>
</tr>
</tbody>
</table>
The new E-series range takes ADT functionality to new industry standards, with customer-focused enhancements and the highest level of automated machine protection available.

Through substantial investments in Research and Development and employing industry leading technology, advancements have been made in the key areas of performance and fuel efficiency – helping you to move more material at lower operating costs and environmental impact.
Automatic Traction Control (ATC) is achieved with speed sensors providing feedback to the truck on-board computer. The computer then controls differential lock activation as needed. This coupled with best in class rear suspension travel results in unparalleled off-road ability.

Optimised payload-to-weight ratio decreases your cost per tonne because more of your fuel cost is spent moving the material, not running the machine.

An industry leading, fully automatic seven-speed (six-speed on B35E) planetary transmission with torque converter lock-up maximises fuel efficiency.

Automatic retardation slows the truck when the operator backs off the accelerator pedal for more confidence on steep grades.

Electronic common rail fuel system provides high injection pressures even at low engine speed for improved cold-starting ability, low-speed response and reduced emissions.

Careful engine packaging and front chassis design gives the best approach angle to allow these ADTs to attack steep terrain.

High-travel suspension keeps all tyres in constant contact with the ground, for optimum traction.

Building on from the D-series platform, Bell Equipment’s evolutionary approach to design delivers optimised power-to-weight ratio and legendary fuel efficiency.

Planetary powershift transmission optimises shift points to match conditions and vehicle weight while protecting the transmission from operator error and abuse.

The transfer case inter-axle differential delivers equal torque to each axle when traction is favourable. When conditions deteriorate, the diff-lock automatically engages to deliver torque to the tyres that can best use it.

High-strength steel and widely spaced taper roller bearings in the articulation area enhance long-term durability.

A tailgate is available as an option for better material retention. The tailgate opens as the bin is raised for dumping. Spring steel straps maintain positive seal throughout the haul, ensuring minimal material is lost.
Our innovative front and rear comfort ride suspension options are offered to even further enhance ride quality and ensure minimal whole body vibration exposure.

Productivity increases through reduced cycle times, and reduced haul road maintenance are even further benefits of these extremely successful systems. Experienced ADT operators who have driven trucks installed with these systems have come away amazed by the comfort of the machine, as well as the confidence that the adaptive front suspension engenders.
Built smarter, to work harder. Bell ADTs offer optimised machine weights so you spend more time and money moving material and not running the machine.

With decades of ADT experience, the new Bell E-series articulated hauler is designed and manufactured using purpose built, reliable Bell components best suited for the toughest of conditions. The central oscillation joint, high suspension travel on all axles, and balanced weight distribution provide the agility and ability to navigate hostile terrain.

Uncompromised durability

The high-strength steel chassis delivers strength and rigidity without excess weight.

For comfortable productivity, the A-frame suspension system coupled with hydro pneumatic suspension struts reduce the lateral vibration often experienced with off-road conditions. A superior suspension seat provides additional isolation for the operator.

Rough terrain demands tough suspensions. Heavy-duty components absorb shocks and come back for more. You get best-in-class suspension travel and ground clearance, too.
Other uptime-boosting features include world class on-board diagnostics with live stream functionality, solid-state sealed switches and satellite fleet management system.

High-strength welded-alloy steel chassis and reinforced articulation joints, offer superior strength and durability with optimised weight for class leading power-to-weight ratio. Lower machine mass reduces powertrain and structural stress.
Run leaner and cleaner

A combination of an optimally tuned engine and weight optimised complete machine package ensure that Bell ADTs have a minimal carbon footprint.

SCR uses AdBlue®/DEF which
- is non-toxic, odourless, low cost and simple to refill.
- is injected into the flow of the exhaust gases and reacts with the NOx gases in the catalytic convertor to form harmless nitrogen and water.
- is consumed at approximately 3-5% of your fuel usage.

EGR
- recirculates burnt exhaust gas back into the combustion chamber, lowering combustion temperatures and NOx production.
- on the Mercedes Benz engine, optimised for off-highway use by MTU, does not require a diesel particulate filter (DPF) and associated regeneration.
Our E-series truck platform easily accommodates the new engine and related emissions control technology and reflects our strategy of continuous improvement.

Bell Equipment’s evolutionary E-series runs SCR-technology (Selective Catalytic Reduction) in combination with EGR to give an industry leading standard in fuel-efficient emission control, designed specifically for the off-highway market to be compliant to Stage IV and Tier 4f. Engine power and fuel consumption have been further optimised through event dependant software that controls retardation, cooling and charging of accumulators.
Operate with ease

Using the latest in automotive technology and state-of-the-art tooling, the E-series takes operator experience to new heights.

Climb into the cab of a Bell ADT and you will feel right at home. Its quiet, spacious interior, ergonomically positioned operator station and climate-controlled cabin is loaded with productivity-boosting comfort and convenience features that minimise operator fatigue and enhance the operator’s experience. Modern flowing lines, in keeping with current styling trends on road vehicles, offer unsurpassed levels of visibility.

From the state-of-the-art 10” full colour screen, automotive mouse interface and sealed switch module with centrally located sealed display unit to air suspension seat, tilt/telescoping steering wheel and optional CD player with high-output speakers, the E-series provides everything your operators need to perform at their best.

Easy-to-understand instruments and intuitive controls wrap around the operator so they’re easier to view and operate.

A user friendly 10” colour monitor offers vital operating information, safety warnings, detailed diagnostic readings and dump body function settings.

An automotive controller provides menu navigation on the colour monitor to extract information on machine operation and adjustment of machine settings.
The standard sound-suppression package significantly reduces noise levels and operator fatigue.

The adaptive transmission control adjusts clutch engagement to ensure smooth, consistent shifts throughout the life of the truck.

A fully adjustable air-suspension seat with variable damping, auto height adjust according to operator weight, pneumatic lumbar support and multipoint harness for class-leading comfort and safety.

A purpose designed HVAC climate-control system with automotive-style louvres keeps the glass clear and the cab comfortable.

New machine styling and cabin design improvements, which include full glass access door and high visibility mirror package, provide exceptional all-round visibility.

You won’t find retarder pedals or levers in a Bell truck. Retarder aggressiveness is simply set on the switch pad. Or Hill Descent Control can set it for you automatically.
Safety, our business too

By listening to users and delivering on expectations in an ever changing workplace, we provide a truck that leads in application safety with numerous groundbreaking innovations.

Independent features such as Keyless Start, Hill Assist, Bin Tip Prevention, Auto Park Application (APA), Standard Turbo Spin Protection and On-Board Weighing (OBW) are still standard on the E-series. For improved safety and productivity, the E-series has Automatic Traction Control (ATC).

Our quiet operator cabins are ROPS/FOPS certified with an air suspension operator seat. The trainer seat has a retractable lap belt while the operator seat has a standard 3 point seat belt. Both have automatically locking retractor.

A standard integrated reverse camera and high visibility mirrors ensure superior all round visibility.

Keyless start, driver identity and access codes ensure no unauthorised operation of your equipment.
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- Full handrails (to ISO 2876) installed to offer improved safety when performing engine checks.

- The park brake automatically applies when neutral is selected and it is not possible to engage neutral at speed. Torque dependent park brake release (Hill Assist) ensures no roll back on slopes.

- Best-in-class retarder and engine braking automatically applies when the operator lifts his foot off the accelerator. Retarder aggressiveness can be simply adjusted on the sealed switch module ensuring maximum descent control for all conditions.

- All trucks can be set up to automatically sound the horn when starting or switching between forward and reverse.

- Multiple geofencing in challenging site conditions ensures safe machine operation, such as downhill speed control, geofence speed limits and bin restrictions.

The exclusive on-board weighing presents the operator with real time information on the payload while the machine is being loaded. A “speed restriction” mode can also be activated if the machine is significantly overloaded.

The incorporation of a pitch and roll sensor in the vehicle prevents bin operation if the truck is in an unsafe position.

Both operator or site selectable maximum speed control allows the vehicle to automatically decelerate and apply the retarder to prevent onsite speeding.
Maximise your uptime

The E-series is loaded with features that make it as easy to maintain as it is to operate. Spend less time and expense getting ready for work and more time getting work done.

Easy-to-reach dipsticks (available from PIN 1.3) and grouped service points make quick work of the daily routine. Quick-change filters, extended engine and hydraulic oil-service intervals lower daily operating costs and provide superior machine uptime. An industry leading 10” colour monitor offers on-board machine diagnostics as well as automated daily service functionality, this coupled with diagnostic test ports help you troubleshoot and make informed maintenance decisions on site.

- Automated daily service checks can be done with ease and comfort from inside the operator station using the 10” colour LCD monitor and sealed display controller.
- The load-sensing hydraulic system was designed with simplicity in mind, while maintaining efficiency. Fewer components for improved reliability and serviceability.
- Extended engine transmission and hydraulic oil-change for increased uptime and lower operating cost.
- Available environmental drains allow quick, no-spill changes.
- Your Bell Service Centre has the parts and backup you need to stay productive and offers a wide variety of preventative maintenance and support programmes to help you control costs.

If something goes wrong, the diagnostic monitor provides service codes and supporting info to help diagnose the problem.

The cab can be tilted in minutes without special tools, for convenient service access to drivetrain components.

An in-cab load centre simplifies fuse replacement. Fewer relays, connectors and harnesses mean higher reliability.

We offer a remote transmission filter option. They make transmission filter replacement a fast and clean task.
The centralised lube bank places difficult-to-reach grease points within reach.

The convenient and easy to understand RSG decal details daily checks and actions (eg: greasing).

Easily accessible test ports allow technicians to troubleshoot problems more quickly.

Through the comprehensive installation of level gauges and sensors, a large number of daily checks can be done from the convenience of the operator station.
B60E  All Wheel

The Bell B60E offers our customers more tonnage than ever before, and at a related lower cost per tonne. It keeps all of the traditional Bell safety and productivity features while still offering off-road capability that non-ADT solutions cannot match.

Bell has a history of leading the ADT industry and offering our customers more in two distinct ways - through the innovations that we apply to our products and our principle that larger trucks give lower cost per tonne. These two factors are ideally combined in the B60E to give a real value adding package.

The Bell B60E has been developed as a result of the Bell tradition of listening to our customers. They were looking for a machine that would perform better than conventional haulage solutions in slippery and undulating conditions, but didn’t need the ‘go anywhere’ ability of a 3 axle 6x6 ADT. In response Bell has filled this conspicuous gap in the market with the B60E crossover solution. The B60E has been enthusiastically received, giving productivity during adverse weather conditions when other machines are unable to operate, and also tolerating less site maintenance, which has large cost and hassle implications for many sites.

The oscillation joint is what makes an ADT. It keeps the wheels on the ground ensuring traction when driving over rough terrain. The B60E has inherited the oscillation joint of the B50E, which has been strengthened appropriately.

Articulated steering between the front and rear chassis produces much tighter turning circles than a steered axle, and makes the B60E an ideal machine for tight sites.
By configuring the driveline to direct drive to all wheels, the Bell B60E can go places where conventional trucks cannot.

In deep soft mud it won’t necessarily match its 3 axle counterparts but it has proven itself to be a more than capable machine in challenging conditions.

At 35m$^3$ this is the largest ADT bin in the world today. You can carry more material and make more money, it’s that simple.
Where ever you are...

Through our own network as well as approved dealers and strategic alliances we ensure supply and support to the global market.

Develop a lasting and meaningful partnership with Bell Equipment through our tailor-made support structure furnished with all the after-sales tools you need to give you best value, peace of mind and a unique after-sales experience.

...we have you covered
Cutting edge technology, helping you run your fleet smarter. Providing accurate, up-to-date operational data, production data and diagnostic data.

The key to a productive and profitable fleet, lies in the ability to monitor and manage your machines and operators efficiently. Machine operational data is processed and compiled into useful production and performance statistics, accessible via the Bell Fleetm@tic® website. These reports are also automated and emailed directly to you. The two monitoring packages that we have available, are:

- The Classic Package supplies you with good enough information for you to have a very good understanding of how your machines is operating for each shift that it runs. This package comes standard with the machine for 2 years.

- The Premium Package is focused on customers who need to have extremely detailed information of the machine's operation. For this package we offer similar information to that of the Classic Package but for each individual laden - unladen cycle. In addition, live tracking is available on the Fleetm@tic® website on a per minute basis.

**Fleetm@tic®:**
- Maximise productivity
- Generate machine utilisation reports
- Identify operator training requirements
- Pro-active maintenance planning
- Receive machine health data
- Implement safety features
- Protect investments
- Receive real time geospatial data
**Technical Data - B35E**

**ENGINE**
- **Manufacturer**: Mercedes Benz (MTU)
- **Model**: OM470LA (MTU 6R 1100)
- **Configuration**: Inline 6, turbocharged and intercooled.
- **Gross Power**: 320 kW (429 hp) @ 1,700 rpm
- **Net Power**: 301 kW (404 hp) @ 1,700 rpm
- **Gross Torque**: 2,100 Nm (1,549 lbft) @ 1,300 rpm
- **Displacement**: 10,7 litres (653 cu.in)
- **Auxiliary Brake**: Exhaust Valve Brake
- **Fuel Tank Capacity**: 352 litres (93 US gal)
- **AdBlue® Tank Capacity**: 40 litres (11 US gal)
- **Certification**: OM470LA (MTU 6R 1100) meets EU Stage IV / EPA Tier 4 Final emissions regulations.

**TRANSMISSION**
- **Manufacturer**: Allison
- **Model**: 4500 ORS
- **Configuration**: Fully automatic planetary transmission.
- **Layout**: Engine mounted
- **Gear Layout**: Constant meshing planetary gears, clutch operated
- **Gears**: 6 Forward, 1 Reverse
- **Clutch Type**: Hydraulically operated multi-disc
- **Control Type**: Electronic

**TRANSFER CASE**
- **Manufacturer**: Kassiter
- **Series**: W2400
- **Layout**: Remote mounted
- **Gear Layout**: Three in-line helical gears

**AXLES**
- **Manufacturer**: Bell
- **Model**: 30T
- **Differential**: High input controlled traction differential with spiral bevel gears
- **Final Drive**: Outboard heavy duty planetary on all axles.

**BRAKING SYSTEM**
- **Service Brake**: Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.
- **Maximum brake force**: 352 kN (79 133 lbf)
- **Park & Emergency**: Spring applied, air released driveline mounted disc.
- **Maximum brake force**: 206 kN (46 311 lbf)
- **Auxiliary Brake**: Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.

**HYDRAULIC SYSTEM**
- Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven load sensing emergency steering pump is integrated into the main system.
- **Pump Type**: Variable displacement load sensing piston
- **Flow**: 330 L/min (87 gal/min)
- **Pressure**: 315 bar (4 569 psi)
- **Filter**: 5 microns

**STEERING SYSTEM**
- Double acting cylinders, with ground-driven emergency steering pump.
- **Lock to lock turns**: 5
- **Steering Angle**: 42º

**DUMPING SYSTEM**
- Two double-acting, single stage, dump cylinders.
- **Raise Time**: 11 seconds
- **Lowering Time**: 6 seconds
- **Tipping Angle**: 70 deg standard, or any lower angle programmable

**PNEUMATIC SYSTEM**
- Air dryer with heater and integral unloader valve, serving park brake and auxiliary functions.
- **System Pressure**: 810 kPa (117 psi)

**ELECTRICAL SYSTEM**
- **Voltage**: 24 V
- **Battery Type**: Two AGM (Absorption Glass Mat) type.
- **Battery Capacity**: 2 X 75 Ah
- **Alternator Rating**: 28V 80A

**MAX. VEHICLE SPEED**
- 1st: 7 km/h (4 mph)
- 2nd: 15 km/h (9 mph)
- 3rd: 22 km/h (14 mph)
- 4th: 34 km/h (21 mph)
- 5th: 45 km/h (28 mph)
- 6th: 51 km/h (32 mph)

**R**: 6 km/h (4 mph)

**CAB**
- ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

**OPERATING WEIGHTS**

<table>
<thead>
<tr>
<th>UNLADEN</th>
<th>LADEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg (lb)</td>
<td>kg (lb)</td>
</tr>
<tr>
<td>Front</td>
<td>16 279 (35 889)</td>
</tr>
<tr>
<td>Middle</td>
<td>7 341 (16 184)</td>
</tr>
<tr>
<td>Rear</td>
<td>6 759 (14 901)</td>
</tr>
<tr>
<td>Total</td>
<td>30 379 (66 974)</td>
</tr>
</tbody>
</table>

**GROUND PRESSURE**

<table>
<thead>
<tr>
<th>OPERATING WEIGHTS</th>
<th>(No sinkage/Total Contact Area Method)</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg (lb)</td>
<td>kg (lb)</td>
</tr>
<tr>
<td>Front</td>
<td>Middle</td>
</tr>
</tbody>
</table>

**LOAD CAPACITY**

<table>
<thead>
<tr>
<th>BODY</th>
<th>SAE 2:1 Capacity</th>
<th>SAE 1:1 Capacity</th>
<th>Rated Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>m³ (yd³)</td>
<td>kPa (Psi)</td>
<td>kPa (Psi)</td>
<td>kg (lb)</td>
</tr>
<tr>
<td>Struck Capacity</td>
<td>16 (21)</td>
<td>20,5 (27)</td>
<td>33 500 kg (73 855 lb)</td>
</tr>
<tr>
<td>Bin liner</td>
<td>1 216 (2 681)</td>
<td>Tailgate</td>
<td>906 (1 997)</td>
</tr>
<tr>
<td>Tailgate</td>
<td>26.5 R 25</td>
<td>24,5 (32)</td>
<td>26.5 R 25</td>
</tr>
</tbody>
</table>

**OPTION WEIGTHS**

<table>
<thead>
<tr>
<th>kg (lb)</th>
<th>kg (lb)</th>
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</thead>
<tbody>
<tr>
<td>Bin liner</td>
<td>1 216 (2 681)</td>
</tr>
<tr>
<td>Tailgate</td>
<td>906 (1 997)</td>
</tr>
<tr>
<td>EXTRA WHEELSET</td>
<td>26.5 R 25</td>
</tr>
</tbody>
</table>

*All Groundpressures calculated with Michelin XADN+ Tyre

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**Load Capacity & Ground Pressure**

<table>
<thead>
<tr>
<th>OPERATING WEIGHTS</th>
<th>GROUND PRESSURE</th>
<th>LOAD CAPACITY</th>
<th>OPTION WEIGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLADEN</td>
<td>LADEN</td>
<td>BODY</td>
<td>m³ (yd³)</td>
</tr>
<tr>
<td>kg (lb)</td>
<td>kg (lb)</td>
<td>SAE 2:1 Capacity</td>
<td>20,5 (27)</td>
</tr>
<tr>
<td>Front</td>
<td>16 279 (35 889)</td>
<td>26.5 R 25</td>
<td>361 (52)</td>
</tr>
<tr>
<td>Middle</td>
<td>7 341 (16 184)</td>
<td>26.5 R 25</td>
<td>361 (52)</td>
</tr>
<tr>
<td>Rear</td>
<td>6 759 (14 901)</td>
<td>26.5 R 25</td>
<td>361 (52)</td>
</tr>
<tr>
<td>Total</td>
<td>30 379 (66 974)</td>
<td>26.5 R 25</td>
<td>361 (52)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXTRA WHEELSET</th>
<th>26.5 R 25</th>
<th>672 (1 482)</th>
</tr>
</thead>
</table>

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*All Groundpressures calculated with Michelin XADN+ Tyre
### Grade Ability/Rimpull

1. Determine tractive force 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.

### Retardation

1. Determine retardation force 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 the curve. 
3. Read down from this point to determine maximum speed.

### Machine Dimensions

| A | Length - Transport Position with Tailgate | 11268 mm (37 ft.) |
| A1 | Length - Bin Fully Tipped | 11631 mm (38 ft. 2 in.) |
| B | Height - Transport Position | 3752 mm (12 ft. 4 in.) |
| B1 | Height - Rotating Beacon | 3988 mm (13 ft. 1 in.) |
| B2 | Height - Load Light | 4076 mm (13 ft. 4 in.) |
| B3 | Bin Height - Fully Tipped | 7213 mm (23 ft. 8 in.) |
| C | Width over Mudguards | 3495 mm (11 ft. 6 in.) |
| D | Width over Tyres - 26.5R25 | 3438 mm (11 ft. 3 in.) |
| E | Tyre Track Width - 26.5R25 | 2768 mm (9 ft. 1 in.) |
| F | Width over Bin | 3112 mm (10 ft 3 in.) |
| F1 | Width over Tailgate | 3402 mm (11 ft 2 in.) |
| G | Width over Mirrors - Operating Position | 3614 mm (11 ft. 10 in.) |
| H | Ground Clearance - Artic | 493 mm (16.41 in.) |
| I | Ground Clearance - Front Axle | 493 mm (16.41 in.) |
| J | Ground Clearance - Bin Fully Tipped | 822 mm (32.4 in.) |
| K | Bin Lip Height - Transport Position | 2463 mm (8 ft. 1 in.) |
| L | Bin Length | 5709 mm (18 ft. 9 in.) |
| M | Load over Height | 3084 mm (10 ft. 1 in.) |
| N | Rear Axle Centre to Bin Rear | 1545 mm (5 ft.) |
| O | Mid Axle Centre to Rear Axle Centre | 1950 mm (6 ft. 4 in.) |
| P | Mid Axle Centre to Front Axle Centre | 4438 mm (14 ft. 7 in.) |
| Q | Front Axle Centre to Machine Front | 3255 mm (10 ft. 8 in.) |
| R | Front Axle Centre to Artic Centre | 1558 mm (5 ft. 1 in.) |
| S | Approach Angle | 23° |
| T | Maximum Bin Tip Angle | 70° |
| U | Maximum Articulation Angle | 42° |
| V | Front Tie Down Height | 1215 mm (4 ft.) |
| W | Machine Lifting Centres | 10655 mm (34 ft. 11 in.) |
| X | Inner Turning Circle Radius - 26.5R25 | 4891 mm (16 ft.) |
| Y | Outer Turning Circle Radius - 26.5R25 | 9211 mm (30 ft. 3 in.) |
## Technical Data - B40E

### ENGINE
- **Manufacturer**: Mercedes Benz (MTU)
- **Model**: OM471LA (MTU 6R 1300)
- **Configuration**: Inline 6, turbocharged and intercooled.
- **Gross Power**: 380 kW (510 hp) @ 1 700 rpm
- **Net Power**: 359 kW (481 hp) @ 1 700 rpm
- **Gross Torque**: 2 380 Nm (1 755 lbft) @ 1 300 rpm
- **Displacement**: 12.8 litres (781 cu.in)
- **Auxiliary Brake**: Exhaust Valve Brake
- **Fuel Tank Capacity**: 40 litres (11 US gal)
- **AdBlue® Tank Capacity**: 352 litres (93 US gal)
- **Certification**: OM471LA (MTU 6R 1300) meets EU Stage IV / EPA Tier 4 Final emissions regulations.
- **Engine Type**: OM471LA (MTU 6R 1300)
- **Manufacturer**: Mercedes Benz (MTU)

### TRANSFER CASE
- **Manufacturer**: Kassler
- **Series**: W2400
- **Layout**: Remote mounted
- **Gear Layout**: Three in-line helical gears
- **Output Differential**: Inter axe 29/71 proportional differential. Automatic inter-axe differential lock.

### AXLES
- **Manufacturer**: Bell
- **Model**: 30T
- **Differential**: High input controlled traction differential with spiral bevel gears
- **Final Drive**: Outboard heavy duty planetary on all axles.

### BRAKING SYSTEM
- **Service Brake**: Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.
- **Maximum brake force**: 218 kN (49 008 lbf)
- **Auxiliary Brake**: Spring applied, air released driveline parking and emergency system.
- **Maximum brake force**: 327 kN (73 513 lbf)

### HYDRAULIC SYSTEM
- **Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven load sensing emergency steering pump is integrated into the main system.**

### DUMPING SYSTEM
- **Two double-acting, single stage, dump cylinders.**
- **Raise Time**: 11 seconds
- **Lowering Time**: 6 seconds
- **Tipping Angle**: 70 deg standard, or any lower angle programmable

### FRONT SUSPENSION
- **Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.**
- **Option**: Electronically controlled adaptive suspension with ride height adjustment.

### REAR SUSPENSION
- **Pivoting walking beams with laminated rubber suspension blocks.**
- **Option**: Comfort Ride suspension walking beams, with two-stage sandwich block.

### PNEUMATIC SYSTEM
- **Air dryer with heater and integral unloader valve, serving park brake and auxiliary functions.**
- **System Pressure**: 810 kPa (117 psi)

### ELECTRICAL SYSTEM
- **Voltage**: 24 V
- **Battery Type**: Two AGM (Absorption Glass Mat) type.
- **Battery Capacity**: 2 X 75 Ah
- **Alternator Rating**: 28V 80A

### MAX. VEHICLE SPEED
- **1st**: 4 km/h (2,5 mph)
- **2nd**: 9 km/h (5,6 mph)
- **3rd**: 17 km/h (11 mph)
- **4th**: 23 km/h (14 mph)
- **5th**: 33 km/h (21 mph)
- **6th**: 44 km/h (27,3 mph)
- **7th**: 51 km/h (32 mph)
- **R**: 7 km/h (4 mph)

### CAB
- **ROPS/FOPS certified 74 dB(A) internal sound level measured according to ISO 6396.**

### STEERING SYSTEM
- **Double acting cylinders, with ground-driven emergency steering pump.**
- **Lock to lock turns**: 5
- **Steering Angle**: 42°

### Load Capacity & Ground Pressure

<table>
<thead>
<tr>
<th>OPERATING WEIGHTS</th>
<th>GROUND PRESSURE*</th>
<th>LOAD CAPACITY</th>
<th>OPTION WEIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNLADEN</strong></td>
<td><strong>BODY</strong></td>
<td><strong>m³ (yd³)</strong></td>
<td><strong>kg (lb)</strong></td>
</tr>
<tr>
<td>Front</td>
<td>Struck Capacity</td>
<td>19 (25)</td>
<td>1 369 (3 018)</td>
</tr>
<tr>
<td>Middie</td>
<td>SAE:1 Capacity</td>
<td>24 (31)</td>
<td>984 (2 169)</td>
</tr>
<tr>
<td>Rear</td>
<td>SAE:1 Capacity</td>
<td>28,5 (37)</td>
<td>875/65 R29</td>
</tr>
<tr>
<td>Total</td>
<td>SAE:1 Capacity</td>
<td>34 (50)</td>
<td>875/65 R29</td>
</tr>
<tr>
<td><strong>LADEN</strong></td>
<td>with Tailgate</td>
<td>24,5 (32)</td>
<td>1 182 (2 606)</td>
</tr>
<tr>
<td>Front</td>
<td></td>
<td>875/65 R29</td>
<td>EXTRA WHEELSET</td>
</tr>
<tr>
<td>Middie</td>
<td></td>
<td>29.5 R25</td>
<td>1 056 (2 301)</td>
</tr>
<tr>
<td>Rear</td>
<td></td>
<td>329 (43)</td>
<td>875/65 R29</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>329 (43)</td>
<td>875/65 R29</td>
</tr>
</tbody>
</table>

* 29.5R25 Groundpressures calculated with Michelin XADN+ Tyre. 875/65R29 Groundpressures calculated with Michelin XAD65-1 Tyre.

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* 29.5R25 Groundpressures calculated with Michelin XADN+ Tyre. 875/65R29 Groundpressures calculated with Michelin XAD65-1 Tyre.
1. Determine tractive force 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.

1. Determine retardation force 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 the curve.
3. Read down from this point to determine maximum speed.
**Technical Data - B45E**

**ENGINE**
- **Manufacturer**: Mercedes Benz (MTU)
- **Model**: OM471LA (MTU 6R 1300)
- **Configuration**: Inline 6, turbocharged and intercooled.
- **Gross Power**: 390 kW (523 hp) @ 1 700 rpm
- **Net Power**: 369 kW (495 hp) @ 1 700 rpm
- **Gross Torque**: 2 460 Nm (1 814 lbft) @ 1 300 rpm
- **Displacement**: 12.8 litres (781 cu.in)
- **Auxiliary Brake**: Engine Valve Brake
- **Fuel Tank Capacity**: 40 litres (11 US gal)
- **AdBlue® Tank Capacity**: 352 litres (93 US gal)
- **Engine Valve Brake**
  - **Engine Valve Brake**
  - **Auxiliary Brake**
- **Engine Type**: Inline 6, turbocharged and intercooled.
- **Configuration**: OM471LA (MTU 6R 1300)
- **Engine Valve Brake**
- **Auxiliary Brake**

**TRANSFER CASE**
- **Manufacturer**: Kassler
- **Model**: W2400
- **Layout**: Remote mounted
- **Gear Layout**: Three in-line helical gears
- **Output Differential**: Interaxle 29/71 proportional differential, Automatic inter-axe differential lock.

**AXLES**
- **Manufacturer**: Bell
- **Model**: 30T
- **Differential**: High input controlled traction differential with spiral bevel gears
- **Final Drive**: Outboard heavy duty planetary on all axles.

**BRAKING SYSTEM**
- **Service Brake**: Dual circuit, full hydraulic actuation
- **Wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.
- **Maximum brake force**: 327 kN (73 513 lbf)
- **Park & Emergency**: Spring applied, air released driveline mounted disc.
- **Maximum brake force**: 218 kN (49 008 lbf)
- **Auxiliary Brake**: Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.

**HYDRAULIC SYSTEM**
- **Pump Type**: Variable displacement load sensing piston
- **Flow**: 330 L/min (87 gal/min)
- **Pressure**: 315 bar (4 569 psi)
- **Filter**: 5 microns

**ELECTRICAL SYSTEM**
- **Voltage**: 24 V
- **Battery Type**: Two AGM (Absorption Glass Mat) type.
- **Battery Capacity**: 2 X 75 Ah
- **Alternator Rating**: 28V 80A

**MAX. VEHICLE SPEED**
- 1st: 4 km/h (2.5 mph)
- 2nd: 9 km/h (5.6 mph)
- 3rd: 17 km/h (11 mph)
- 4th: 23 km/h (14 mph)
- 5th: 33 km/h (21 mph)
- 6th: 44 km/h (27.3 mph)
- 7th: 51 km/h (32 mph)
- R: 7 km/h (4 mph)

**DUMPING SYSTEM**
- Two double-acting, single stage, dump cylinders.
- **Raise Time**: 11 seconds
- **Lowering Time**: 6 seconds
- **Tipping Angle**: 70 deg standard, or any lower angle programmable

**PNEUMATIC SYSTEM**
- Air dryer with heater and integral unloader valve, serving park brake and auxiliary functions.
- **System Pressure**: 810 kPa (117 psi)

**LOADING SYSTEM**
- **Rated Payload**: 41 000 kg
- **Max. VEHICLE COMBINED WEIGHT**: 106 500 kg (234 240 lbs)

**STEERING SYSTEM**
- Double acting cylinders, with ground-driven emergency steering pump.
- **Lock to lock turns**: 5
- **Steering Angle**: 42º

**CAB**
- ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

---

### Load Capacity & Ground Pressure

<table>
<thead>
<tr>
<th>OPERATING WEIGHTS</th>
<th>GROUND PRESSURE</th>
<th>LOAD CAPACITY</th>
<th>OPTION WEIGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNLADEN</strong> (kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LADEN</strong> (kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GROUND PRESSURE**
- (No sinkage/Total Contact Area Method)

**LOAD CAPACITY**
- **BODY**: 29.5 R 25 (875/65 R 29 optional)

**OPTION WEIGTHS**
- **Bin liner**: 1 404 (3 095 lbs)
- **Tailgate**: 1 013 (2 233 lbs)
- **Tongue**: 1 182 (2 606 lbs)

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*29.5R25 Groundpressures calculated with Michelin XADN+ Tyre. 875/65R29 Groundpressures calculated with Michelin XAD05-1 Tyre.
Machine Dimensions

- **A** Length - Transport Position with Tailgate: 11184 mm (36 ft. 8 in.)
- **A** Length - Transport Position w/o Tailgate: 11184 mm (36 ft. 8 in.)
- **B1** Height - Bin Fully Tipped: 11778 mm (38 ft. 8 in.)
- **B** Height - Transport Position w/o Rock Guard: 3802 mm (12 ft. 6 in.)
- **B** Height - Transport Position with Rock Guard: 3844 mm (12 ft. 7 in.)
- **B2** Height - Load Light: 4127 mm (13 ft. 6 in.)
- **B3** Bin Height - Fully Tipped w/o Rock Guard: 7740 mm (24 ft. 1 in.)
- **B4** Bin Height - Fully Tipped with Rock Guard: 7448 mm (24 ft. 5 in.)
- **B5** Height - Rock Guard Operating Position: 4123 mm (13 ft. 6 in.)
- **B6** Height - Cab: 3502 mm (12 ft. 6 in.)
- **C** Width over Mudguards: 3495 mm (11 ft. 6 in.)
- **D** Width over Tyres - 875/65 R29: 3656 mm (12 ft.)
- **D** Width over Tyres - 29.5R25: 3487 mm (11 ft. 5 in.)
- **E** Tyre Track Width - 875/65 R29: 2773 mm (9 ft. 1 in.)
- **E** Tyre Track Width - 29.5R25: 2725 mm (8 ft. 11 in.)
- **F** Width over Bin: 3448 mm (11 ft. 4 in.)
- **F1** Width over Tailgate: 3738 mm (12 ft. 3 in.)
- **G** Width over Mirrors - Operating Position: 3614 mm (11 ft. 10 in.)
- **H** Ground Clearance - Artic: 545 mm (21.46 in.)
- **I** Ground Clearance - Front Axle: 543 mm (21.34 in.)
- **J** Ground Clearance - Bin Fully Tipped: 880 mm (34.05 in.)
- **K** Bin Lip Height - Transport Position: 2521 mm (8 ft. 3 in.)
- **L** Bin Length: 5753 mm (18 ft. 10 in.)
- **M** Load over Height: 3316 mm (10 ft. 11 in.)
- **N** Rear Axle Centre to Bin Rear: 1540 mm (5 ft.)
- **O** Mid Axle Centre to Rear Axle Centre: 1950 mm (6 ft. 5 in.)
- **P** Mid Axle Centre to Front Axle Centre: 4438 mm (14 ft. 7 in.)
- **Q** Front Axle Centre to Machine Front: 3256 mm (10 ft. 8 in.)
- **R** Front Axle Centre to Artic Centre: 1558 mm (5 ft. 1 in.)
- **S** Approach Angle: 24 °
- **T** Maximum Bin Tip Angle: 70 °
- **U** Maximum Articulation Angle: 42 °
- **V** Front Tie Down Height: 1282 mm (4 ft. 2 in.)
- **W** Machine Lifting Centres: 10569 mm (34 ft. 8 in.)
- **X** Inner Turning Circle Radius - 875/65 R29: 4782 mm (15 ft. 8 in.)
- **X** Inner Turning Circle Radius - 29.5R25: 4866 mm (16 ft.)
- **Y** Outer Turning Circle Radius - 875/65 R29: 9320 mm (30 ft. 7 in.)
- **Y** Outer Turning Circle Radius - 29.5R25: 9235 mm (30 ft. 4 in.)

Grade Ability/Rimpull

1. Determine tractive force by finding intersection of vehicle mass line 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.

Retardation

1. Determine retardation force by finding intersection of vehicle mass line and grade line.
2. From this intersection, move straight right across charts until line intersects the curve.
3. Read down from this point to determine maximum speed.
**Technical Data - B50E**

**ENGINE**
- Manufacturer: Mercedes Benz (MTU)
- Model: OM473LA (MTU 6R 1500)
- Configuration: Inline 6, turbocharged and intercooled.
- Gross Power: 430 kW (577 hp) @ 1 700 rpm
- Net Power: 405 kW (543 hp) @ 1 700 rpm
- Gross Torque: 2 750 Nm (2 028 lbft) @ 1 300 rpm
- Fuel Tank Capacity: 40 litres (11 US gal)
- AdBlue® Capacity: 494 litres (130 US gal)
- Tank Capacity: 4800 ORS
- Model: Allison
- Manufacturer: Bell
- Series: W2400
- Layout: Remote mounted
- Gear Layout: Three in-line helical gears
- Gear Layout: Constant meshing planetary gears, Gear Layout: Engine mounted
- Configuration: Fully automatic planetary transmission.
- Layout: Outboard heavy duty planetary on all axles.
- Torque Control: Hydrodynamic with lock-up in all gears.
- Total Retardation Power: Continuous: 546 kW (732 hp) Maximum: 963 kW (1 291 hp)

**TRANSFER CASE**
- Manufacturer: Kassiter
- Series: W2400
- Layout: Remote mounted
- Gear Layout: Three in-line helical gears
- Final Drive: Outboard heavy duty planetary on all axles.

**AXLES**
- Manufacturer: Bell
- Model: 3OT
- Differential: High input controlled traction differential with spiral bevel gears
- Final Drive: Outboard heavy duty planetary on all axles.

**BRAKING SYSTEM**
- Service Brake: Dual circuit, full hydraulic actuation wet disc brakes on front, middle and rear axles. Wet brake oil is circulated through a filtration and cooling system.
- Maximum brake force: 488 kN (109 707 lbf)
- Parking & Emergency: Spring applied, air released driveline mounted disc.
- Maximum brake force: 215,5 kN (48 446 lbf)

**HYDRAULIC SYSTEM**
- Full load sensing system serving the prioritized steering, body tipping, suspension and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.
- Pump Type: Variable displacement load sensing piston
- Flow: 330 L/min (87 gal/min)
- Pressure: 315 bar (4 569 psi)
- Filter: 5 microns

**LOADING SYSTEM**
- DUMPING SYSTEM: Two double-acting, single stage, dump cylinders.
- Raise Time: 11,5 seconds
- Lowering Time: 6 seconds
- Tipping Angle: 70 deg standard, or any lower angle programmable

**PNEUMATIC SYSTEM**
- Air dryer with heater and integral unloader valve, serving park brake and auxiliary functions.
- System Pressure: 810 kPa (117 ps)

**ELECTRICAL SYSTEM**
- Voltage: 24 V
- Battery Type: Two AGM (Absorption Glass Mat) type.
- Battery Capacity: 2 X 75 Ah
- Alternator Rating: 28V 80A

**MAX. VEHICLE SPEED**
- 1st: 4 km/h 2,5 mph
- 2nd: 9 km/h 6 mph
- 3rd: 17 km/h 11 mph
- 4th: 23 km/h 14 mph
- 5th: 33 km/h 21 mph
- 6th: 44 km/h 27,3 mph
- 7th: 51 km/h 32 mph
- R: 7 km/h 4 mph

**CAB**
- ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

**STEERING SYSTEM**
- Double acting cylinders, with ground-driven emergency steering pump.
- Lock to lock turns: 4,9
- Steering Angle: 42º

**Load Capacity & Ground Pressure**

<table>
<thead>
<tr>
<th>OPERATING WEIGHTS</th>
<th>GROUND PRESSURE</th>
<th>LOAD CAPACITY</th>
<th>OPTION WEIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNladen</td>
<td>Laden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td>18 484 (40 750)</td>
<td>875/65 R 29 kPa (Psi)</td>
<td>21,5 (28)</td>
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<tr>
<td>Middie</td>
<td>8 648 (19 066)</td>
<td>SAE 2:1 Capacity</td>
<td>27,5 (36)</td>
</tr>
<tr>
<td>Rear</td>
<td>8 543 (18 834)</td>
<td>SAE 1:1 Capacity</td>
<td>33 (43)</td>
</tr>
<tr>
<td>Total</td>
<td>35 675 (78 650)</td>
<td>SAE 2:1 Capacity with Tailgate</td>
<td>29 (38)</td>
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<tr>
<td>LADEN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td>24 204 (53 361)</td>
<td>29.5 R 25 kPa (Psi)</td>
<td>875/65 R 29 (29.5 R 25 optional)</td>
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<tr>
<td>Middie</td>
<td>28 488 (62 805)</td>
<td>Front</td>
<td>326 (47)</td>
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<tr>
<td>Rear</td>
<td>28 383 (62 574)</td>
<td>Middie &amp; Rear</td>
<td>395 (57)</td>
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<tr>
<td>Total</td>
<td>81 075 (178 740)</td>
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</table>

* 29.5 R 25 Groundpressures calculated with Michelin XADN+ Tyre. 875/65 R29 Groundpressures calculated with Michelin XAD05-1 Tyre.
**Dimensions**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Machine Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Length - Transport Position with Tailgate 11272 mm (37 ft.)</td>
</tr>
<tr>
<td>A</td>
<td>Length - Transport Position w/o Tailgate 11272 mm (37 ft.)</td>
</tr>
<tr>
<td>A1</td>
<td>Length - Bin Fully Tipped 11916 mm (39 ft. 1 in.)</td>
</tr>
<tr>
<td>B</td>
<td>Height - Transport Position w/o Rock Guard 3822 mm (12 ft. 6 in.)</td>
</tr>
<tr>
<td>B</td>
<td>Height - Transport Position with Rock Guard 3870 mm (12 ft. 8 in.)</td>
</tr>
<tr>
<td>B1</td>
<td>Height - Rotating Beacon 4050 mm (13 ft. 3 in.)</td>
</tr>
<tr>
<td>B2</td>
<td>Height - Load Light 4141 mm (13 ft. 7 in.)</td>
</tr>
<tr>
<td>B3</td>
<td>Bin Height - Fully Tipped w/o Rock Guard 7325 mm (24 ft.)</td>
</tr>
<tr>
<td>B4</td>
<td>Bin Height - Fully Tipped with Rock Guard 7430 mm (24 ft. 5 in.)</td>
</tr>
<tr>
<td>B5</td>
<td>Height - Rock Guard Operating Position 4148 mm (13 ft. 7 in.)</td>
</tr>
<tr>
<td>B6</td>
<td>Height - Cab 3813 mm (12 ft. 6 in.)</td>
</tr>
<tr>
<td>C</td>
<td>Width over Mudguards 3790 mm (12 ft. 5 in.)</td>
</tr>
<tr>
<td>D</td>
<td>Width over Tyres - 875/65R29 3832 mm (12 ft. 7 in.)</td>
</tr>
<tr>
<td>E</td>
<td>Width over Tyres - 29.5R25 3714 mm (12 ft. 2 in.)</td>
</tr>
<tr>
<td>E</td>
<td>Tyre Track Width - 875/65R29 2949 mm (9 ft. 8 in.)</td>
</tr>
<tr>
<td>E</td>
<td>Tyre Track Width - 29.5R25 2952 mm (9 ft. 8 in.)</td>
</tr>
<tr>
<td>F</td>
<td>Width over Bin 3735 mm (12 ft. 3 in.)</td>
</tr>
<tr>
<td>F1</td>
<td>Width over Tailgate 4057 mm (13 ft. 4 in.)</td>
</tr>
<tr>
<td>G</td>
<td>Width over Mirrors - Operating Position 4027 mm (13 ft. 2 in.)</td>
</tr>
<tr>
<td>H</td>
<td>Ground Clearance - Artic 558 mm (21.97 in.)</td>
</tr>
<tr>
<td>I</td>
<td>Ground Clearance - Front Axle 555 mm (21.85 in.)</td>
</tr>
<tr>
<td>J</td>
<td>Ground Clearance - Bin Fully Tipped 907 mm (35.71 in.)</td>
</tr>
<tr>
<td>K</td>
<td>Bin Lip Height - Transport Position 2542 mm (8 ft. 4 in.)</td>
</tr>
<tr>
<td>L</td>
<td>Bin Length 5714 mm (18 ft. 9 in.)</td>
</tr>
<tr>
<td>M</td>
<td>Load over Height 3390 mm (11 ft. 1 in.)</td>
</tr>
<tr>
<td>N</td>
<td>Rear Axle Centre to Bin Rear 1533 mm (5 ft.)</td>
</tr>
<tr>
<td>O</td>
<td>Mid Axle Centre to Rear Axle Centre 1950 mm (6 ft. 5 in.)</td>
</tr>
<tr>
<td>P</td>
<td>Mid Axle Centre to Front Axle Centre 4438 mm (14 ft. 7 in.)</td>
</tr>
<tr>
<td>Q</td>
<td>Front Axle Centre to Machine Front 3351 mm (11 ft.)</td>
</tr>
<tr>
<td>R</td>
<td>Front Axle Centre to Artic Centre 1558 mm (5 ft. 1 in.)</td>
</tr>
<tr>
<td>S</td>
<td>Approach Angle 23 °</td>
</tr>
<tr>
<td>T</td>
<td>Maximum Bin Tip Angle 70 °</td>
</tr>
<tr>
<td>U</td>
<td>Maximum Articulation Angle 42 °</td>
</tr>
<tr>
<td>V</td>
<td>Front Tie Down Height 1269 mm (4 ft. 2 in.)</td>
</tr>
<tr>
<td>W</td>
<td>Machine Lifting Centres 10632 mm (34 ft. 11 in.)</td>
</tr>
<tr>
<td>X</td>
<td>Inner Turning Circle Radius - 875/65R29 4694 mm (15 ft. 5 in.)</td>
</tr>
<tr>
<td>X</td>
<td>Inner Turning Circle Radius - 29.5R25 4753 mm (15 ft. 7 in.)</td>
</tr>
<tr>
<td>Y</td>
<td>Outer Turning Circle Radius - 875/65R29 4908 mm (16 ft. 1 in.)</td>
</tr>
<tr>
<td>Y</td>
<td>Outer Turning Circle Radius - 29.5R25 9349 mm (30 ft. 8 in.)</td>
</tr>
</tbody>
</table>

**Grade Ability/Rimpull**

1. Determine tractive force 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.

**Retardation**

1. Determine retardation force 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 the curve.
3. Read down from this point to determine maximum speed.
**ENGINE**

Manufacturer: Mercedes-Benz (MTU)

Model: OM473LA (MTU 6R 1500)

Configuration: Inline 6, turbocharged and intercooled.

Gross Power: 430 kW (577 hp) @ 1 700 rpm

Net Power: 405 kW (543 hp) @ 1 700 rpm

Gross Torque: 2 750 Nm (2 028 lbft) @ 1 300 rpm

Displacement: 15.6 litres (952 cu.in)

Auxiliary Brake: Engine Valve Brake

Fuel Tank Capacity: 40 litres (11 US gal)

AdBlue® Tank Capacity: 494 litres (130 US gal)

**TRANSMISSION**

Manufacturer: Allison

Model: 4800 ORS

Configuration: Fully automatic planetary transmission

Layout: Engine mounted

Gear Layout: Constant meshing planetary gears, clutch operated

Gears: 7 Forward, 1 Reverse

Clutch Type: Hydraulically operated multi-disc

Control Type: Electronic

Torque Control: Hydodynamic with lock-up in all gears.

**TRANSFER CASE**

Manufacturer: Kessler

Series: W2400

Layout: Remote mounted

Gear Layout: Three in-line helical gears


**AXLES**

Manufacturer: Front - Bell

Rear - Kessler

Model: Front: 30T

Rear: 71T

Differential: Front: High input controlled traction differential with spiral bevel gears

Rear: Centre input open differential with spiral bevel gears

Final Drive: Outboard heavy duty planetary on all axles.

**FRONT SUSPENSION**

Type: Radial Earthmover

Tyre: Front: 875/65 R29

Rear: Twin 24.00 R35

**REAR SUSPENSION**

Trailing arm cradle supported by hydro-pneumatic suspension struts, with an additional lateral stabiliser.

**HYDRAULIC SYSTEM**

Full load sensing system serving the prioritized steering, body tipping, suspension and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.

Pump Type: Variable displacement load sensing piston

Flow: 330 L/min (87 gal/min)

Pressure: 250 bar (3 626 psi)

Filter: 5 microns

**STEERING SYSTEM**

Double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns: 4.9

Steering Angle: 42°

**OPERATING WEIGTHS**

<table>
<thead>
<tr>
<th>UNLADEN</th>
<th>kg (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>20 211 (44 558)</td>
</tr>
<tr>
<td>Rear</td>
<td>22 265 (49 086)</td>
</tr>
<tr>
<td>Total</td>
<td>42 476 (93 644)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LADEN</th>
<th>kg (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>26 811 (59 108)</td>
</tr>
<tr>
<td>Rear</td>
<td>70 665 (155 768)</td>
</tr>
<tr>
<td>Total</td>
<td>97 476 (214 898)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOAD CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BODY</td>
</tr>
<tr>
<td>Struck Capacity</td>
</tr>
<tr>
<td>SAE 2:1 Capacity</td>
</tr>
<tr>
<td>SAE 1:1 Capacity</td>
</tr>
<tr>
<td>SAE 2:1 Capacity with Tailgate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTION WEIGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin liner</td>
</tr>
<tr>
<td>Tailgate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXTRA WHEELSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>875/65 R29</td>
</tr>
<tr>
<td>24.00 R35</td>
</tr>
</tbody>
</table>

**GROUND PRESSURE**

<table>
<thead>
<tr>
<th>OPERATING WEIGTHS</th>
<th>GROUND PRESSURE</th>
<th>LOAD CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLADEN</td>
<td>LADEN</td>
<td>BODY</td>
</tr>
<tr>
<td>Front</td>
<td>Rear</td>
<td>Front</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Max. Vehicle Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
</tr>
<tr>
<td>2nd</td>
</tr>
<tr>
<td>3rd</td>
</tr>
<tr>
<td>4th</td>
</tr>
<tr>
<td>5th</td>
</tr>
<tr>
<td>6th</td>
</tr>
<tr>
<td>7th</td>
</tr>
<tr>
<td>R</td>
</tr>
</tbody>
</table>

**CAB**

ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

**ELECTRICAL SYSTEM**

Voltage: 24 V

Battery Type: Two AGM (Absorption Glass Mat) type.

Battery Capacity: 2 x 75 Ah

Alternator Rating: 28V 80A

**DUMPING SYSTEM**

Two double-acting, two stage telescopic, dump cylinders.

Raise Time: 17 seconds

Lowering Time: 18 seconds

Tipping Angle: 55 deg standard, or any lower angle programmable

**PNEUMATIC SYSTEM**

Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.

System Pressure: 810 kPa (117 psi)

**HYDRAULIC SYSTEM**

Full load sensing system serving the prioritized steering, body tipping, suspension and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.

**STEERING SYSTEM**

Double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns: 4.9

Steering Angle: 42°

**LOAD CAPACITY & GROUND PRESSURE**

<table>
<thead>
<tr>
<th>OPERATING WEIGTHS</th>
<th>GROUND PRESSURE</th>
<th>LOAD CAPACITY</th>
<th>OPTION WEIGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLADEN</td>
<td>kg (lb)</td>
<td>LADEN</td>
<td>BODY</td>
</tr>
<tr>
<td>Front</td>
<td>Rear</td>
<td>Front</td>
<td>28V 80A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Max. Vehicle Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
</tr>
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<tr>
<td>6th</td>
</tr>
<tr>
<td>7th</td>
</tr>
<tr>
<td>R</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.</td>
</tr>
</tbody>
</table>

*Front ground pressure calculated with Michelin XAD65-1 tyre. Rear ground pressure calculated with Michelin XDT B tyre.
Dimensions

Machine Dimensions

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Length - Transport Position</td>
<td>11114 mm (36 ft. 6 in.)</td>
</tr>
<tr>
<td>A1</td>
<td>Length - Bin Fully Tipped</td>
<td>11178 mm (36 ft. 8 in.)</td>
</tr>
<tr>
<td>B</td>
<td>Height - Transport Position w/o Rock Guard</td>
<td>4209 mm (13 ft. 10 in.)</td>
</tr>
<tr>
<td>B1</td>
<td>Height - Transport Position with Rock Guard</td>
<td>4212 mm (13 ft. 10 in.)</td>
</tr>
<tr>
<td>B2</td>
<td>Height - Load Light</td>
<td>4050 mm (13 ft. 3 in.)</td>
</tr>
<tr>
<td>B3</td>
<td>Bin Height - Fully Tipped w/o Rock Guard</td>
<td>7476 mm (24 ft. 6 in.)</td>
</tr>
<tr>
<td>B4</td>
<td>Bin Height - Fully Tipped with Rock Guard</td>
<td>7692 mm (25 ft. 3 in.)</td>
</tr>
<tr>
<td>B5</td>
<td>Height - Rock Guard Operating Position</td>
<td>4675 mm (15 ft. 4 in.)</td>
</tr>
<tr>
<td>B6</td>
<td>Height - Cab</td>
<td>3813 mm (12 ft. 6 in.)</td>
</tr>
<tr>
<td>C</td>
<td>Width over Mudguards</td>
<td>3790 mm (12 ft. 5 in.)</td>
</tr>
<tr>
<td>D</td>
<td>Width over Tyres - Front - 875/65 R29</td>
<td>2949 mm (9 ft. 8 in.)</td>
</tr>
<tr>
<td>E</td>
<td>Width over Tyres - Rear - 24.00R35</td>
<td>2992 mm (9 ft. 10 in.)</td>
</tr>
<tr>
<td>F</td>
<td>Tyre Track Width - Front</td>
<td>2949 mm (9 ft. 8 in.)</td>
</tr>
<tr>
<td>G</td>
<td>Tyre Track Width - Rear</td>
<td>2992 mm (9 ft. 10 in.)</td>
</tr>
<tr>
<td>H</td>
<td>Width over Bin</td>
<td>4487 mm (14 ft. 9 in.)</td>
</tr>
<tr>
<td>I</td>
<td>Ground Clearance - Artic</td>
<td>561 mm (22.09 in.)</td>
</tr>
<tr>
<td>J</td>
<td>Ground Clearance - Front Axle</td>
<td>554 mm (21.81 in.)</td>
</tr>
<tr>
<td>K</td>
<td>Ground Clearance - Bin Fully Tipped</td>
<td>851 mm (33.5 in.)</td>
</tr>
<tr>
<td>L</td>
<td>Bin Lip Height - Transport Position</td>
<td>2952 mm (9 ft. 8 in.)</td>
</tr>
<tr>
<td>M</td>
<td>Bin Length</td>
<td>5036 mm (16 ft. 6 in.)</td>
</tr>
<tr>
<td>N</td>
<td>Load over Height</td>
<td>3824 mm (12 ft. 7 in.)</td>
</tr>
<tr>
<td>O</td>
<td>Rear Axle Centre to Bin Rear</td>
<td>2477 mm (8 ft. 2 in.)</td>
</tr>
<tr>
<td>P</td>
<td>Rear Axle Centre to Front Axle Centre</td>
<td>5285 mm (17 ft. 4 in.)</td>
</tr>
<tr>
<td>Q</td>
<td>Front Axle Centre to Machine Front</td>
<td>3352 mm (11 ft.)</td>
</tr>
<tr>
<td>R</td>
<td>Front Axle Centre to Artic Centre</td>
<td>1558 mm (5 ft. 1 in.)</td>
</tr>
<tr>
<td>S</td>
<td>Approach Angle</td>
<td>22 °</td>
</tr>
<tr>
<td>T</td>
<td>Maximum Bin Tip Angle</td>
<td>55 °</td>
</tr>
<tr>
<td>U</td>
<td>Maximum Articulation Angle</td>
<td>42 °</td>
</tr>
<tr>
<td>V</td>
<td>Front Tie Down Height</td>
<td>1263 mm (4 ft. 2 in.)</td>
</tr>
<tr>
<td>W</td>
<td>Machine Lifting Centres</td>
<td>10116 mm (33 ft. 2 in.)</td>
</tr>
<tr>
<td>X</td>
<td>Inner Turning Circle Radius</td>
<td>4246 mm (13 ft. 11 in.)</td>
</tr>
<tr>
<td>Y</td>
<td>Outer Turning Circle Radius</td>
<td>9216 mm (30 ft. 3 in.)</td>
</tr>
</tbody>
</table>

Grade Ability / Rimpull

1. Determine tractive force 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.

Retardation

1. Determine retardation force 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 the curve.
3. Read down from this point to determine maximum speed.
Features and Options

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>OPTION</th>
</tr>
</thead>
</table>

**ENGINE**
- Engine valve brake
- Dual element air cleaner with dust ejector valve
- Pre-cleaner with automatic dust scavenging
- Water separator
- Serpentine drive belt with automatic tensioner
- Provision for fast fill
- Wet-sleeve cylinder liners

**COOLING**
- Crankshaft mounted electronically controlled viscous fan drive
- Fan guard

**PNEUMATIC SYSTEM**
- Engine-mounted compressor
- Air drier with heater
- Integral unloader valve

**ELECTRICAL SYSTEM**
- Battery disconnect
- Halogen drive lights
- LED drive lights
- Air horn
- Reverse alarm
- White noise reverse alarm
- Rotating beacon
- Pitch Roll Sensor
- Artic reverse light
- Halogen reverse lights
- LED reverse lights

**STEERING SYSTEM**
- Bi-directional ground-driven secondary steering pump

**CAB**
- ROPS/FOPS certification
- Tilt cab
- Gas strut-supported door
- I-Tip programmable dump-body tip settings
- HVAC Climate control system
- AM/FM radio with Aux + USB
- Rear window guard
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Centre-mount air-suspension seat
- Forward work lights
- LED work lights
- Rotating beacon: seat belt installation
- Remote engine and machine isolation
- Remote battery jump start
- Retractable 3 point seat belt
- Heated seat
- Foldaway trainer seat with retractable seat belt
- 12-volt power outlet
- Cab utility bin (removable)
- Cup holder

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>OPTION</th>
</tr>
</thead>
</table>

**CAB (continued)**
- Cooled/heated lunch box
- Manually adjusted mirrors
- Heated mirrors
- Electrically adjusted and 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 / Tip counter
  - 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
  - Dump-body tip limit / Automatic dump-body tip settings / Airconditioner/ Heater controls / Preselected Speed Control

**DUMP BODY**
- Dump body mechanical locks (x2). Partially up and fully up
- Body liner (Partial body liner in B60E)
- Tailgate
- Body heater
- Less dump body and cylinders
- Low SG bin extensions
- Bin pole lockout
- Rear wheel mudguards

**OTHER**
- Automatic Traction Control (ATC)
- Wet disc brakes
- 26.5 R 25 Radial Earthmover tyres
- 29.5 R 25 Radial Earthmover tyres
- 875/65 R 29 Radial Earthmover tyres
- Remote grease banks
- Automatic greasing
- Onboard weighing
- Load lights: stack
- Comfort ride suspension (Front)
- Comfort ride suspension (Rear)
- Reverse camera
- Hand rails
- Cab peak
- High pressure hydraulic filter
- Fuel heater
- Belly cover
- Remote transmission filters
- Engine and transmission remote drain-gravity
- Engine and transmission remote drain-scavenger
- Window smash button
- High visibility mirrors
- Fleetm@tic® Classic Package for 2 years

The compilation of standard and optional equipment may vary by market region. Please check with your local distributor.
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Strong Reliable Machines
Strong Reliable Support