
TA 230 Litronic

LIEBHERR

Articulated dump truck



Generation
8

Empty vehicle weight
54,200 lb

Engine
355 HP / 265 kW
Stage V
Tier 4 Final
Non-regulated

Dump body capacity
23.7 yd³

Payload
61,700 lb

Performance

Powerful drawbar pull
for excellent off-road use

Economy

Short cycle times result
in maximum efficiency

Reliability

Robust construction and
quality for durability

Comfort

Ergonomic excellence – superior cab design
for operator comfort and wellbeing

Maintainability

Service every step of the way –
simple, fast and reliable





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Performance



Powerful drawbar pull for excellent off-road use

The Liebherr dump truck was developed for maximum productivity. Its powerful drivetrain enables more material movement in less time.

Maximum performance

Drive performance

Under the hood of the newly developed Liebherr TA 230 is a 6-cylinder construction machinery engine with a displacement of 732.3 in³, developing 265 kW / 355 HP (at 2,100 rpm). Thanks to its powerful engine and efficient drivetrain, the TA 230 generates enormous drawbar pull on difficult terrain and challenging gradients. At full speed, the machine can reach speeds of up to 35.4 mph (up to 9.9 mph in reverse).

Braking performance

In addition to hydraulic multi-disc brakes on all axles, the TA 230 also features a zero wear upstream braking system. This comprises an engine brake and a hydrodynamic primary retarder. The continuous-operation brake is activated automatically as soon as the brake pedal is pressed, it is highly controllable, protects the components and provides additional safety due to its significant deceleration on gradients.

Simplified maintenance concept

Designed for off-road use

The interaction of balanced weight distribution, permanent 6x6 all-wheel drive, solid, flexible axle mounting and large bank angle as well as its high ground clearance enable the TA 230 to deliver unbeatable performance on uneven terrain. Despite challenging ground conditions, the new Liebherr dump truck delivers traction and control in all situations. A selection of tires can be used to further tailor the machine to specific applications.

Automatic differential lock

The Liebherr TA 230 is equipped with four powerful differential locks for maximum operational readiness off-road. The automatic inter-axle differential lock detects slippage at an early stage and intelligently distributes the torque between the front and rear axles - for constant propulsion, even in demanding conditions. In addition, the lateral differential locks can be engaged manually to provide additional traction if necessary. The result: high drawbar pull, driving stability and maximum performance in off-road use.



Powerful engine

- Powerful and robust construction machinery motor for continuous use at full load
- Automatic 8-speed powershift transmission for excellent power transfer
- Power shifting inter-axle differential locks for permanent traction



Efficient loading

- Innovative weighing system, fitted as standard, displays the payload weight during the loading process
- Optional loading traffic light system - to make the load status visible externally
- Machine productivity levels shown on display and through MyLiebherr Performance
- Protects the machine components and reduces fuel consumption



Improved dump body

- Large, solidly designed dump body
- Straight dump body front and low side edge for easier loading
- Long dump body chute to prevent material loss
- Optional dump body cladding and dump body heating system available

Economy



Short cycle times result in maximum efficiency

Thanks to its robust design and short cycle times, the TA 230 is an excellent investment. It can withstand the rigors of hard and continuous work while delivering excellent productivity. The perfect combination for a successful future.

Maximum efficiency

Maximum readiness

The Liebherr TA 230 travel drive increases efficiency significantly. Short cycle times due to maximum efficiency in acceleration, transport and deceleration performance deliver enormous handling capacity and therefore maximum economy.

Powerful construction machinery engine

The Liebherr D956 diesel engine provides power combined with fuel efficiency. The engine design, injection system and engine management system are perfectly coordinated with each other to achieve top performance. The engine design, injection system and engine management system are perfectly coordinated with each other to achieve top performance. When combined with the company's own injection and engine control systems, the result is minimal generation of soot particles.

Increased productivity

Efficient management

MyLiebherr is the central online portal for Liebherr machines, enabling efficient management, monitoring and organisation of entire machine fleets. Structured operating, service and machine data is available at any time via a web browser, supporting analysis, deployment planning and fleet management. By connecting machine-specific data acquisition systems, users can access performance and operational data to support a measurable assessment of productivity. Comprehensive maintenance and service information is also available for all stored machines, providing clear visibility of technical status and helping to streamline service processes.

Smart gear selection

The Liebherr TA 230 combines maximum efficiency with high loading capacities. The automatic gear selection enables the machine to adjust automatically to its current speed and load so that it always has the optimum torque and fuel consumption level. The machine therefore automatically reduces its fuel consumption per tonne of transported material.



Liebherr SCRFilter

- Emissions treatment system for stage V combines DOC catalytic converter, SCR catalytic converter and SCR-coated particulate filter
- The DOC catalyst requires no maintenance and the coated particulate filter can be actively regenerated by the machine



Simple transport

With wide tyres, a tailgate and side mirrors that fold in without tools, the Liebherr TA 230 has an overall transport width of under 3m, making it easy to move between sites. This means that there are no complicated and expensive logistics involved.



Flexible in action

- The design takes account of a wide range of operating scenarios for rapid transfers between sites
- Also ideal for specialized jobs in industry, tunnels, etc.

Reliability



Robust construction and quality for durability

The Liebherr TA 230 gives maximum performance even in the most challenging conditions. Specially developed components, sophisticated technology and a high quality build guarantee maximum reliability and availability.

High machine availability

Durable and powerful

Liebherr has decades of experience in the development, design and production of components. When coordinated perfectly with each other, they guarantee maximum performance and reliability. The new TA 230 has been developed and designed on the back of extensive test trials to ensure the resilience and quality of the component parts time after time. Even in the most adverse of conditions, the TA 230 still satisfies Liebherr's high quality standards.

Work without interruption

The diesel particulate filter is regenerated during operation by an active regeneration process, enabling you to work without any interruption. The long intervals between the regeneration cycles increase productivity, save fuel and reduce running costs.

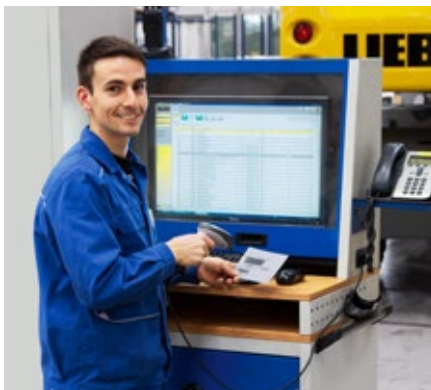
Greater safety

Assistance systems

Modern operator assistance systems provide support and enhance productivity and safety in operation. In addition to a hill start assistant, the TA 230 is equipped with a speed limiter as standard. Furthermore, the limit position dampening of the dump body cylinders can be activated or deactivated at the touch of a button (hard stop). If work is being carried out in an area with critical height, the dump body lift height can be limited.

Robust construction

All structural components and load-bearing parts were developed during the design phase to provide extreme robustness and rigidity. FEM simulations and real-life site conditions at the test center and on customer sites were vital in the component developmental phase. They guarantee that all applied forces will be absorbed perfectly to ensure that the TA 230 will exceed customer expectation with its reliability and long service life.



QPDM – quality and process data management

- QPDM allows production data to be logged, documented and evaluated
- Automation of documentation and test specifications
- Ability to handle large quantities and maintain uniform high quality



Safe working environment

- Welded cab structure combined with the floor plate and cab mount form a stable ROPS for maximum accident protection
- All-round tinted safety glass
- Quiet, low vibration working environment created by the use of special materials and specially developed cab suspension mounts



Development and demonstration center

- Partly autonomous long-term load tests on the TA 230 in the only testing center of its kind in Europe
- Structural test with a wide range of loads (potholes, bumps, inclines, etc.)
- Specially designed poor surface track with 12 function lanes as well as gravel and soil surfaces

Comfort



Ergonomic excellence – superior cab design for operator comfort and wellbeing

The newly developed cab on the TA 230 with standard roll-over protection system (ROPS) provides the perfect environment for comfort, concentrated and productive work. Thanks to large all-round glass windows and the short, angled hood, the operator has perfect visibility of the machine's driving, working and articulation areas. The ergonomic control elements and touchscreen display with integrated rear-view camera simplify operation and extend visibility at the rear of the machine.

First-class cab

Feel-good cab

The workstation in the TA 230 has a roomy design to keep operators feeling good even on long, hard working days. Various storage trays, storage areas, cup holders and the standard air-conditioned compartment deliver additional space and enable the operator to store personal items safely. The sound-insulated cab and its visco-elastic mounts produce a significant reduction in noise level inside the cab. The pressurized ventilation and automatic air-conditioning system with improved cooling capacity delivers a dust-free environment and a pleasant temperature at all times.

Operator seats

As for other Liebherr machines, there is a range of high quality, modern, robust operator seats available for the TA 230. In addition to extensive adjustment capabilities, the Comfort seat features pneumatic suspension with automatic weight adjustment, a lumbar support, seat heating and passive seat air conditioning. This enables operators to work without fatigue throughout long days while protecting their backs.



Everything at a glance

- Operator's cab with large areas of glass for excellent visibility of the front, sides and articulation area
- Standard rear window heating
- Electrically adjusted and heated rear mirror, optional

Comfortable operation

Speed-dependent steering

The adaptive steering system in the TA 230 continuously adjusts the transmission ratio of the steering movements to the current speed. This makes easy, precise maneuvering possible at low speeds. Furthermore, more pronounced steering movements are required at high speeds to maneuver the machine. This ensures you can move around your site in safety and comfort at all times.

Liebherr control concept

Liebherr delivers an operator-focused control system which uses the same logic in all machine classes and generations. Clarity, ergonomics and safety are the principles we follow in the design phase. That means we avoid time-consuming re-familiarization phases and allow the operator to work efficiently in his machine straight away.



Working area lighting

- Superb illumination of the roadway using LED headlights with integrated highbeam light
- Extra powerful LED headlights on the front of the cab to illuminate the entire working area
- Headlights on the mudguards and rear of the dumper truck to safely illuminate the maneuvering area at night
- Optional access ladder lighting



Intuitive control

- Display of the machine data and camera image on the 9-inch indicating unit with touchscreen and direct access via menu bar
- Rear view monitoring with camera as standard
- Mobile phone holder and USB charging sockets as standard
- DIN installation frame to install your own devices (CB radios, etc.)

Maintainability



Service every step of the way – simple, fast and reliable

The TA 230 is not only powerful, robust, precise and efficient, but also features fast, simple and safe maintenance. This minimizes the construction machine's costs and down times.

Simplified maintenance concept

Service-based machine design

The electro-hydraulic hood and integral access ladder with non-slip steps provides safe, clear access to the entire engine compartment. The service points are clearly visible and easy to reach. All maintenance work can be carried out conveniently and safely from a standing area. A solid step provides easy access to the windshield. Sturdy handrails and a surrounding roof rail provide a secure hold for cleaning and maintenance.

Smart machine check-up

When the TA 230 is started at the beginning of each day, it automatically runs through a series of tests during which various levels are monitored. The levels of the engine and hydraulic oil, coolant and the level of grease in the central lubrication system are all checked. This increases the reliability of the components and reduce the daily set-up time for the operator. Any messages are shown on the display.

Your competent service partner

Partnership with efficient service

With every Liebherr dump truck, not only has the customer decided to buy a premium product, but also to enter a solid, long term partnership. An extensive worldwide service network combined with a state-of-the-art central parts facility ensures excellent service and fast spare part deliveries. This guarantees direct communication and fast support around the clock when necessary.

Competent Liebherr service

Extensive expertise ensures that all service and maintenance work is complete with first class quality. This makes a major contribution to the availability and profitability of the machine. All Liebherr service partner personnel receive regular advanced training. They have extensive knowledge to carry out service work quickly and safely and have access to the expertise available at the factories at all times.



Braking system

- Maintenance-free continuous-operation brake, consisting of retarder and engine brake
- Automatic retarder system for maximum control
- Braking capacity distributed to all axles
- Long service life for hydraulic multi-disc brakes

Central lubrication system

- Standard central lubrication system provides automatic lubrication
- Sensor-supported tank notifies the operator if the tank content falls below the minimum level
- Sturdy housing and easy access for filling up

Practical tool compartment

- Storage compartment for toolbox and grease cartridges, with optional pull-out drawer
- Easily accessible and safely stowed
- Lockable

Articulated dump truck TA 230 Litronic overview

Simplified maintenance concept for maximum productivity

- Service-based machine design with easy access to the maintenance points
- Smart machine check-up
- Central lubrication system, sensor-controlled
- Storage compartment for toolbox and grease cartridges
- Qualified, experienced specialists for competent advice

Superior technology for highest economy

- 6-cylinder Liebherr construction machinery engine with emissions Stage V, Tier 4 Final and Non-regulated
- MyLiebherr – Liebherr’s information system for efficient fleet management and evaluation

Perfect combination for highest possible performance

- Permanent 6 x 6 all-wheel drive
- Automatic 8-speed powershift transmission
- Continuous-operation brake (engine brake, hydrodynamic primary retarder), zero wear
- Power shifting inter-axle and lateral differential locks for permanent traction
- Innovative weighing system to show the current payload
- Optional loading traffic light system
- Large, solidly designed dump body
- Optional dump body tailgate
- Optional dump body cladding and heating





Ergonomic operator's work station for maximum comfort

- Cab with large glass areas for improved visibility
- Rear window heating
- Electrically adjusted and heated rear mirror, optional
- Sound-insulated cab
- Sealed pressurized ventilation
- 9" large color touchscreen
- Rear monitor
- Convenient radio control with hands-free kit
- Mobile phone holder and USB charging sockets
- Additional DIN installation frame
- Automatic air-conditioning system
- High quality operator's seats in a range of versions
- Air-conditioned compartment
- LED dipped headlights with integral high-beam light
- Extra powerful LED headlights to illuminate the working area
- Maneuvering lights for reversing
- Optional access ladder lighting

Excellent machine concept for maximum reliability

- Painstakingly developed structural components
- Robust construction made of high-tensile steel
- Partly autonomous long-term load tests at the only testing center of its kind in Europe
- ROPS/FOPS cab structure
- Tinted safety glass
- Hill start assistant
- Speed limiter
- Activation and deactivation of limit position dampening on the dump body cylinders
- Height limitation

Technical data

Diesel engine

Rating	
per SAE J1349	355 HP (265 kW) at 2,100 rpm
per ISO 9249	360 HP (265 kW) at 2,100 rpm
Model	Liebherr D956
Type	6 cylinder in-line
Bore / Stroke	5.1 / 5.9 in
Displacement	732.3 in ³
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooled Reduced emissions
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Electrical system	
Voltage	24 V
Batteries	2 x 12 V / 180 Ah
Alternator	Three-phase current 28 V / 140 A
Starter	6.5 kW
Stage V	
Harmful emissions values	According to regulation (EU) 2016/1628
Emission control	Liebherr-SCRFilter technology
Tier 4 Final	
Harmful emissions values	In accordance with 40CFR1039 (EPA) / 13CCR (CARB)
Emission control	Liebherr-SCR technology
Non-regulated	Only for selected markets
Emission control	Without Liebherr-EGR technology

Cooling system

Diesel engine	Water-cooled Compact cooling system consisting of: cooling units for water, hydraulic oil, fuel and climate condenser, charge the air with stepless thermostatically controlled fan. Foldable radiator allowing easy cleaning
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Drive train

Transmission	Automatic powershift transmission with torque converter and converter bypass clutch, 8 forward and 4 reverse speeds, integral distributor gear box with load-switchable inter-axle differential lock
Speeds	57 km/h forward 16 km/h backwards
Drive train	6 x 6 permanent all-wheel drive with automatic inter-axle differential lock, switchable lateral differential lock on all axles (can be activated manually)

Axles

Front axle	External planetary axle with load-switchable differential lock, four-point suspension with hydro-pneumatic spring cylinders, maintenance-free bearings
Rear axles	External planetary axle with load-switchable differential lock, four-point suspension, maintenance-free bearings

Brakes

Continuous-operation brake system	Electronically controlled continuous-operation brake system consisting of engine brake and hydro-dynamic primary retarder
Operating brake*	Hydraulic multi-disc brakes, 2 brake circuits acting on all wheels
Parking brake*	Disc brake with hydraulic spring accumulator cylinder acting on rear axles

* Brake system complies with standard DIN EN ISO 3450

Steering

Design	Electro-hydraulic, speed-dependent steering, 2 dual-action cylinders combined with articulated steering
Steering angle	± 45°
Steering wheel turns from stop to stop	4.5

Hydraulic system

Hydraulic circuit	On-demand flow control, engine driven axial piston pump, wheel driven piston pump for emergency steering
Max. flow	93 gpm
Max. pressure	3,481 psi
Operation	
Dumping	Dump body operating lever with automatic engine rpm increase
Filtration	Return filter (10 µm), integral magnetic rod

Filling quantities

Fuel tank	96 gal
Urea tank	12 gal
(only Stage V / Tier 4 Final)	
Cooling system	30 gal
Engine oil (incl. filter)	11 gal
Hydraulic tank	44 gal
Gear oil (replacement volume)	13 gal
Axles	28 gal



Tires

Design	Earthmoving radial, tubeless
Wide base tires	750/65 R 25
Rock tires	23.5 R 25
Standard tires	23.5 R 25



Dump body capacity

Volume	
Swept	17.8 yd ³
Stacked 2:1	22.9 yd ³ according to ISO 6483
With flap swept	18.2 yd ³
With flap stacked 2:1	23.7 yd ³ according to ISO 6483
Payload	61,700 lb
Dumping time	12 s
Lowering time	8 s
Dump angle	70°



Operating weight

Axle loads (unladen)	
Front axle	31,100 lb
Middle axle	11,700 lb
Rear axle	11,500 lb
Gross weight	54,200 lb
Axle loads (with maximum load)	
Front axle	35,900 lb
Middle axle	40,100 lb
Rear axle	39,900 lb
Gross weight	116,000 lb



Complete machine

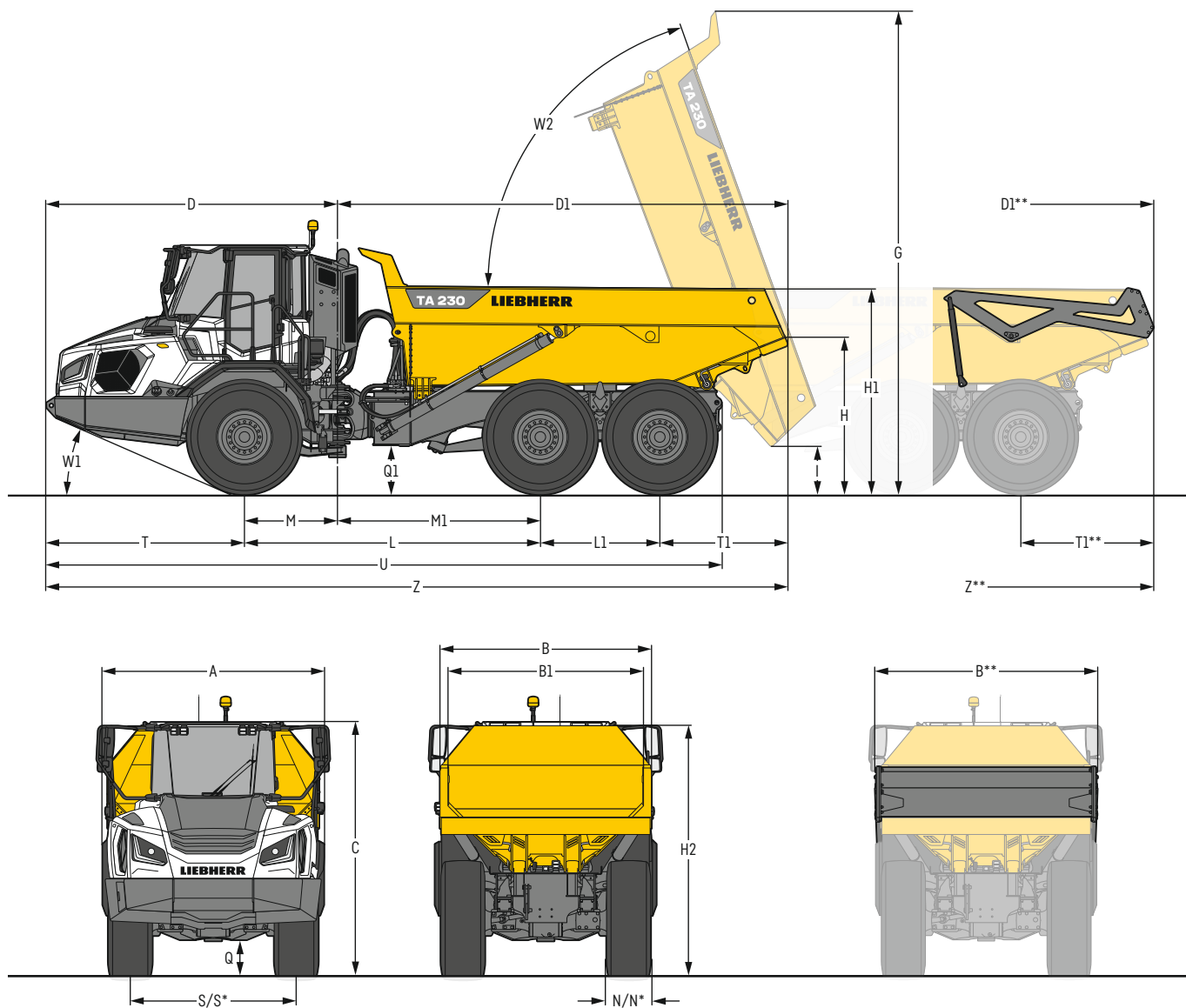
Type	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of dump body and cylinder
Hydraulic cylinders	Hydraulic cylinders with special sealing and guide system and shock absorption which can be activated and deactivated at the touch of a button
Bearings	Sealed, low maintenance
Lubrication	Liebherr automatic central lubrication system for front and rear of the truck
Noise emission	
ISO 6396 (Stage V)	72 dB(A) = L _{PA} (inside cab)
2000/14/EC	109 dB(A) = L _{WA} (surround noise)

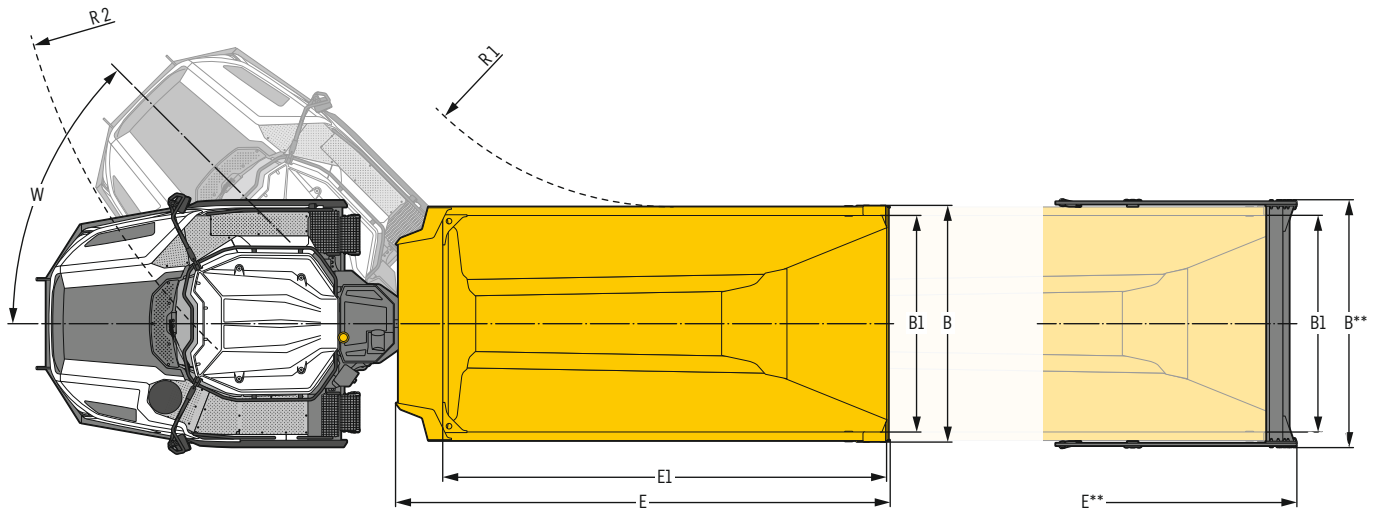


Cab

Cab	Elastically mounted, noise-insulated, integral ROPS / FOPS structure, seal pressurized ventilation system, fresh air filter with initial filter, additional recirculated air filter, operator's cab with excellent visibility to the front and side and in the articulation zone, tinted safety glass all-round, sliding window on the right, rear window heating, wash / wipe system with multi-setting intermittent function for windshield, wide roll-down sun visor for windshield, steering column can be swivelled and telescoped with dirt seal, grab handles for the safety of the operator and passenger, convertible footrest, lots of storage trays with removable inserts, tilt-and-turn drawer, glasses holder, smartphone holder with USB interface charging facility, air conditioned cooling compartment with adjustable nozzle, roof casing with enhanced water flow, surrounding roof railing
Operator's seat Comfort	Operator's seat with adjustable armrests, headrest, lap belt with belt buckle monitor, additional instructor seat, pneumatic suspension with automatic weight adjustment, lockable longitudinal horizontal suspension, adjustable seat cushion inclination and length, adjustable suspension stiffness, pneumatic lumbar vertebrae support, seat heater and passive seat climatization with active coal
Operator's seat Premium (Option)	In addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), additionally locking lateral horizontal suspension, pneumatic low frequency suspension
Operation and displays	Large high-resolution operating unit with touchscreen control, self-explanatory, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine parameters, positions of control elements for intuitive use in the front and top comfort area
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing (Defrost) and demisting at the press of a button, air vents can be operated via a menu; airflow can be directed at door and side windows, recirculated air and fresh air filters can be easily replaced, initial filter can be cleaned; all filters accessible from outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures

Dimensions





	ft in
A	9'10"
B	9' 5"
B**	9'10"
B1	8' 8"
C	11' 2"
D	13' 4"
D1	20' 8"
D1**	20'11"
E	19' 8"
E**	19'11"
E1	17' 8"
G	21'11"
H	6'11"
H1	9' 3"
H2	11'
I	1'11"
L	13' 7"
L1	5' 6"
M	4' 3"

	ft in
M1	9' 4"
N	2'
N*	2' 5"
Q	1' 5"
Q1	1'11"
R1	13' 5"
R2	26' 5"
S	7' 4"
S*	7' 4"
T	9' 1"
T1	5'10"
T1**	6' 1"
U	31'
W	45.0°
W1	23.4°
W2	70.0°
Z	34'
Z**	34' 3"

* = with wide base tires

** = with tailgate

Equipment

Complete machine

General	
Traffic light loading indicator in cab	+
Body-up alarm*	+
Extended tool kit	+
Travel light LED	●
Bonnet opening, electrohydraulic	●
Main disconnect switch for electrical system	●
Wiggins coupling for fuel	+
Emergency off switch in cab and cab access	+
Reversing lights on mudguards, both sides, LED	+
Rear view monitoring with camera	+
Drive system	
Axles, powershift mechanism 100%	●
Wide base tires 750/65 R 25	+
Permanent braking system, electronically controlled (wear-free)	●
Automatic differential lock	●
Rock tires 23.5 R 25	+
Integral tire pressure monitoring system	+
Standard tires 23.5 R 25	+
Wheel chock	+
Dump body	
Full-cover tailgate	+
Tailgate with bottom hinge	+
Dump body liner	+
Dump body heating system (exhaust gas driven)	+
Special paint for dump body	+
Lubrication	
Lubricants and operating fluids Standard (-4 to +104 °F)	●
Front truck and rear truck lubrication (decentralized), manual (lubrication bars and nipples)	+
Automatic central lubrication system, front and rear truck	+

Powertrain & hydraulic

Hydraulic oil, Liebherr Hydraulic Basic 100 (32 to 131 °F)*	+
Hydraulic oil, Liebherr Hydraulic HVI (-4 to +104 °F)*	+
Hydraulic oil, Liebherr Hydraulic Plus 37 (-22 to +104 °F)*	+
Hydraulic oil, Liebherr Hydraulic Plus Arctic, high performance oil (-40 to +86 °F)	+
Hydraulic oil, Liebherr Hydraulic Plus, high performance oil (-22 to +113 °F)	+
Power Pack EU Stage V*	+
Power Pack Stage 0*	+
Power Pack USA Tier 4 Final*	+
Preheating fuel	+

Cab


3" seat belt with retractor*	+
Lighting for cab access, both sides, LED	+
Operator's seat Comfort	+
Operator's seat Premium (with active seat climate control)	+
Operator's seat Premium (with passive seat climate control)	+
Fire extinguisher*	+
Belt warning device (optical) – green flashing warning light on cab	+
Automatic air conditioning	●
MyLiebherr Maintenance	+
MyLiebherr Performance	+
MyLiebherr Portal ¹⁾	●
On-board scales	●
Radio Comfort	+
Radio preparation	●
ROPS & FOPS protection	●
Acoustic back-up alarm, switchable	+
Acoustic back-up warning system, not switchable	+
Electrically adjustable and heated rear-view mirrors	+
Standard rear mirror	+
Amber beacon on cab, 1 piece	+
Wipers on side windscreens	+
Front headlights on cab, 4 pieces	+
Auxiliary heater programmable	+
Air-conditioned storage compartment	●
First aid box	+
Warning triangle	+

● = Standard, + = Option
* country-dependent, ¹⁾ free activation required


Options and / or special equipment, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.

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 **WARNING**

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.P65warnings.ca.gov.

 **WARNING**

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.