

# Articulated Truck

**TA 230**  
Litronic®

Operating Weight:	23,300 kg
Engine Output:	270 kW / 367 HP
Dump Body Capacity:	19.0 m <sup>3</sup>
Payload:	30,000 kg



# LIEBHERR

# Technical Data



## Engine

Liebherr Diesel Engine	D 936 L A6
Design	6-cylinder inline engine, water cooled, turbo-charger, water cooled intercooler, emission improved
Displacement	10.5 l
Performance (ISO 3046)	270 KW/367 HP at 1,900 rpm
Max. torque	1,800 Nm at 1,400 rpm
Exhaust emissions	according to guideline 97/68/EG stage IIIA and EPA/CARB Tier 3
Injection	electronic direct injection
Air filter	dry air filter with precleaner, main and safety element
Cooling	fan hydrostatically driven and temperature regulated
Operating voltage	24 V
Battery	2 x 12 V/170 Ah
Alternator	2 x 3-phase generator 28 V/80 A
Starter	7.8 kW



## Drive Train

Transmission	electronically controlled, automatic powershift transmission, torque converter with lock-up clutch, 8 gears forward, 4 gears reverse, integrated distributor gear with powershift lateral differential
Speeds	57 km/h forward with reduced engine rpm 16 km/h backwards (electronically limited)
Drive train	6 x 6 standard drive train with powershift lateral differential between front axle and rear axles



## Axles

Front axle	two swinging half axles with two hydro-pneumatic cushioning cylinders, cushioning travel $\pm 75$ mm, maintenance-free bearings, self-locking transverse differential, 45 % locking effect
Rear axles	heavy duty axles with self-locking transverse differentials, 40 % lock value
Gear ratio	planetary gears in the wheel hubs



## Brakes

Operating brake	retarder function consisting of engine brake and transmission retarder, variable adjustment, acting upon all wheels
Safety brake	2 circuit, hydraulically operated, oil cooled wet disc brake acting on front and middle axle
Parking brake	spring applied disc brake acting upon the driveshaft of rear axles (hydraulically releasable)



## Steering

Design	hydraulic, 2 dual acting cylinders, combined articulated and oscillating joint with Liebherr ball bearing ring
Steering angle	$\pm 45^\circ$
Steering wheel turns from stop to stop	4.5



## Tires

Standard tires	23.5R25
Design	earthmoving radial, tubeless
Special tires	750/65R25



## Hydraulic System

Hydraulic circuit	on-demand flow control, engine driven axial piston pump, wheel driven piston pump for emergency steering
Max. flow	344 l/min.
Max. operating pressure	25 MPa
Operation	
Dumping	dump body operating lever with automatic engine rpm increase
Retarder	variably adjustable hand lever, retarder steps preselectable, gas pedal overrides retarder
Transmission	automatic mode, gear preselection, manual shift possible
Filtration	return filter, 12 $\mu$ m



## Operator's Cab

Cab	elastic suspension, closed pressure ventilation, electro-hydraulically tiltable by $45^\circ$ to the right, integrated ROPS/FOPS structure, tinted safety glass, wiper/washing system with interval operation for front window, sound isolated, telescopic and horizontally adjustable steering column, sliding window left and right, fresh air filter with prefilter, additional recirculated air filter, exterior mirror and front window heater
Operator's seat	6-way adjustable, cushioned operator's seat with automatic seat belt, adjustable to the weight of the operator, additional trainer's seat
Ventilation	heater and air conditioning, pressure ventilation with fresh air intake and filtration, variable fan
Heating	warm water heater, defrost function for front and side windows



## Filling Quantities

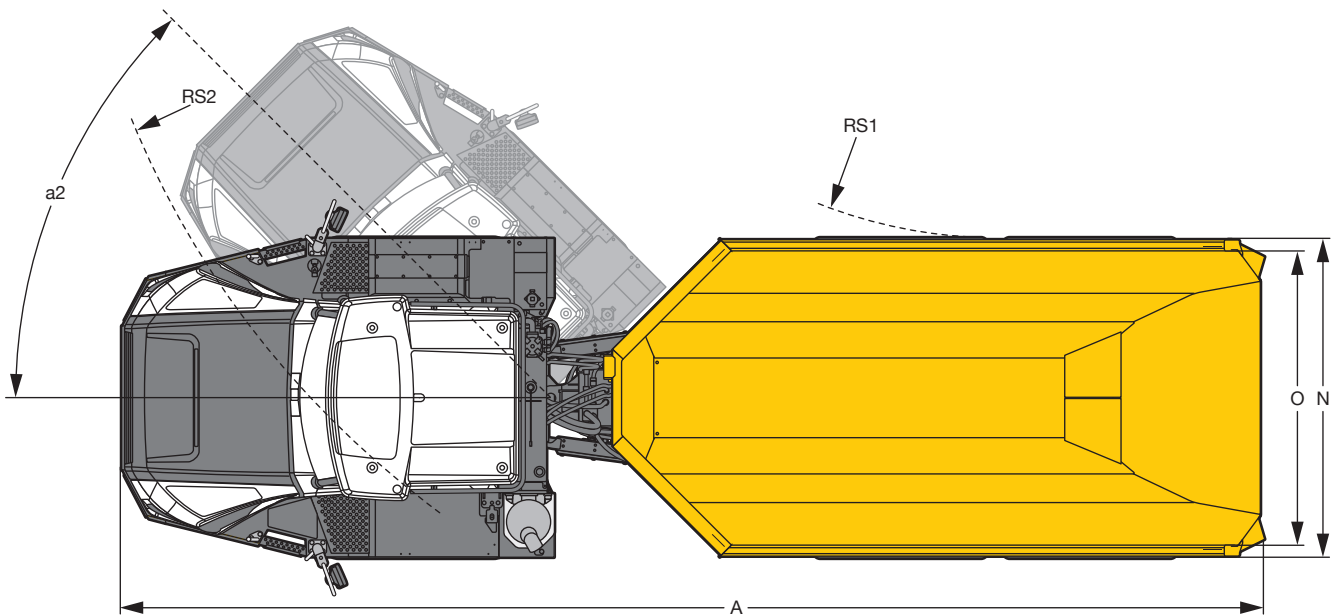
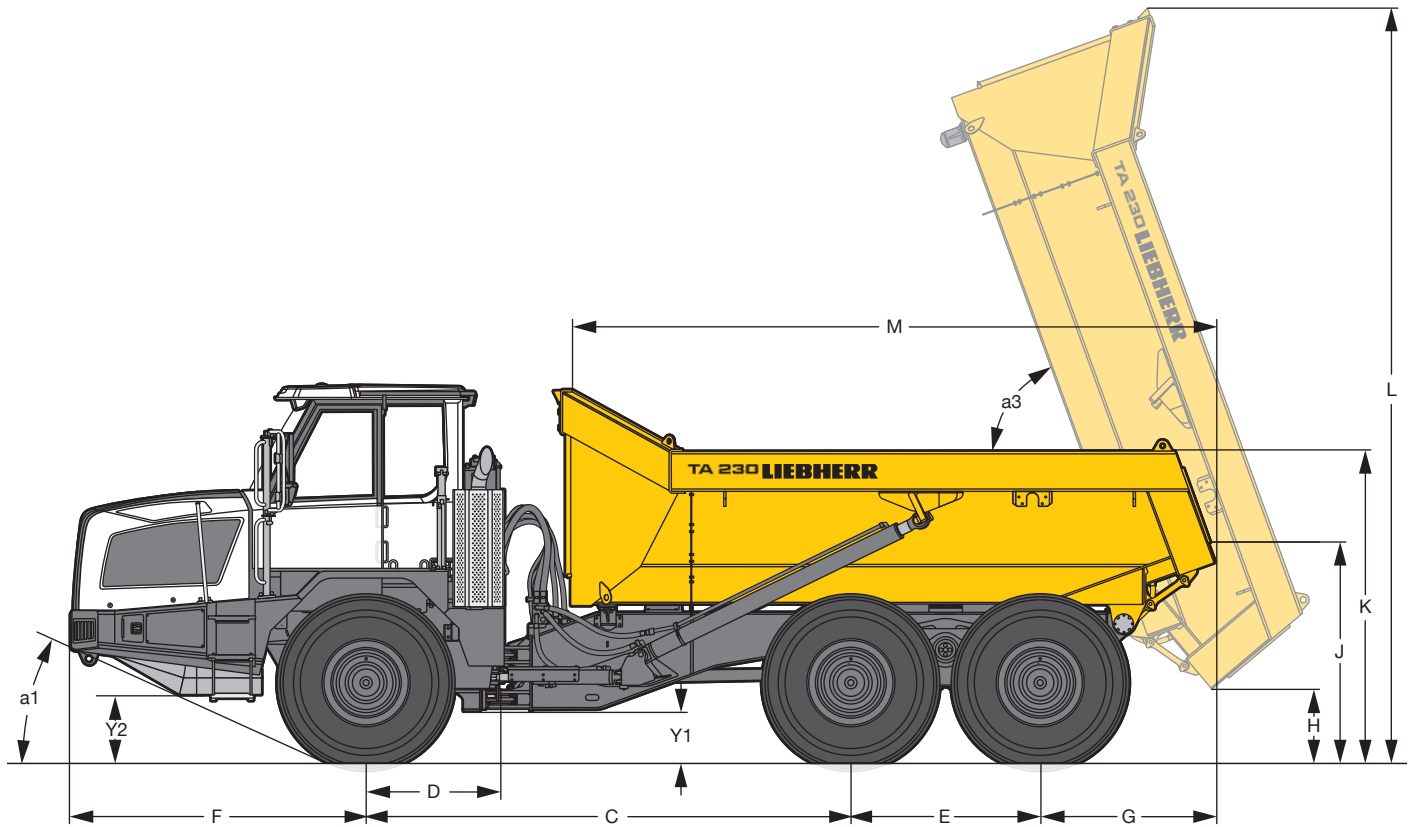
Fuel tank	400 l
Cooling system	120 l
Engine oil (incl. filter)	34 l
Hydraulic tank	250 l
Cooling oil tank brake	64 l
Transmission	55 l
Wheel hub each	3.3 l
Axles	33 l
Differential	18 l



## Dump Body Capacity

Volume	
swept	14.2 m <sup>3</sup>
stacked 2:1	18.0 m <sup>3</sup> according to ISO 6483
with flap swept	14.8 m <sup>3</sup>
with flap stacked 2:1	19.0 m <sup>3</sup> according to ISO 6483
Payload	30,000 kg
Dumping time	12 s
Lowering time	8 s
Dump angle	70°

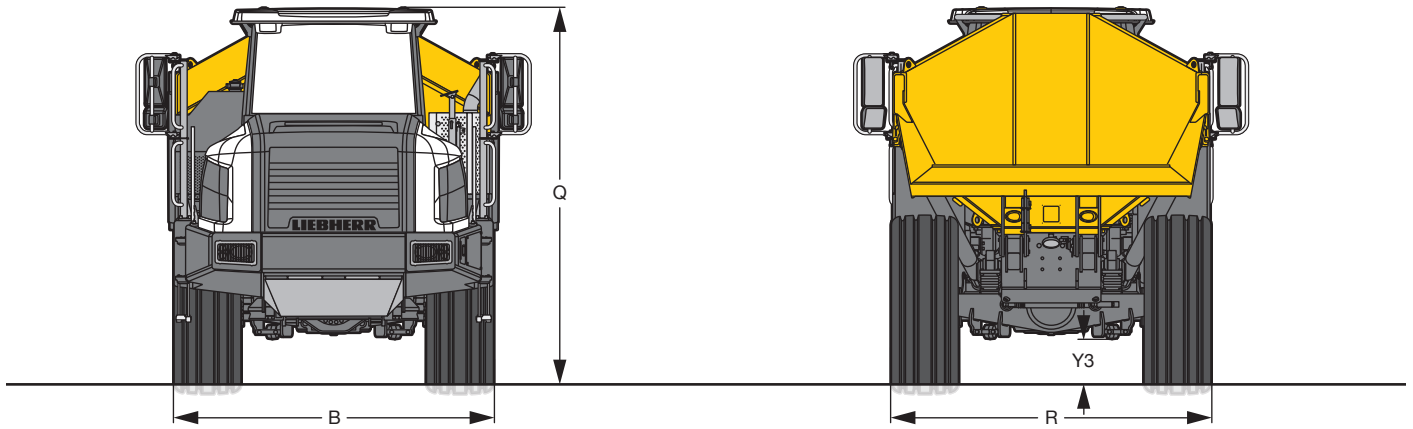
# Dimensions



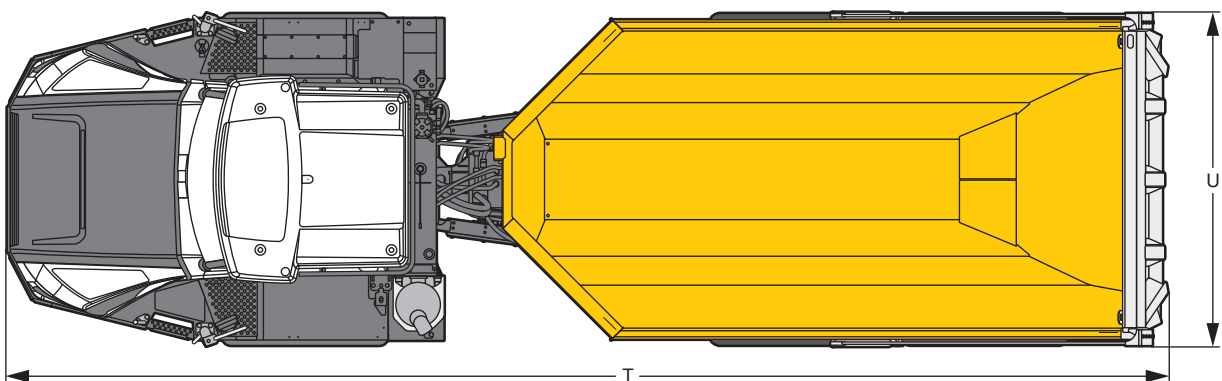
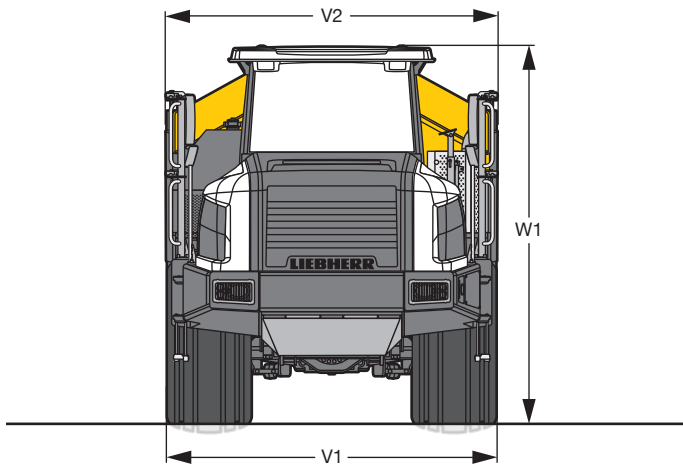
	mm
A	10,225
C	4,350
D	1,210
E	1,700
F	2,650
G	1,525
H	670
J	1,985
K	2,815
L	6,775
M	5,725

	mm
N	2,845
O	2,645
RS1	4,260
RS2	8,385
Y1	465
Y2	615
a1	24°
a2	45°
a3	70°

# Dimensions



## Transport Dimensions Incl. option for dump body flap and including special tires



	mm
B	2,885
Q	3,395
R	2,885
T	10,325
U	2,960

	mm
V1	2,960
V2	2,980
W1	3,395
Y3	410

# Equipment



## Vehicle

Steps (all) on front carriage in visual range of operator	•
Tires 750/65 R25 earthmover radial, tubeless	+
Refueling from the ground	•
Cabine tiltable electro-hydraulically to the right	•
Low temperature equipment	+
Articulating lock	•
Wet disk brakes	•
Liebherr particle filter	+
Engine hood opening electro-hydraulically	•
Engine preheating	+
Dump body heating	+
Dump body flap	+
Dump body safety support	•
Oil filling – Liebherr-Hydraulic-Plus	•
Transverse differentials self-locking	•
Retarder function highly effective, consisting of a combination of engine brake and transmission retarder	•
Retarder function variably adjustable, overridable by the gas pedal	•
Additional back-up light on the rear carriage (dump body)	•
Back-up alarm acoustic	•
Rear-view mirrors electrically adjustable and heatable	•
Rear-view mirror standard and wide angle	•
Standard 6 x 6 drive train with powershiftable lateral differential between front axle and rear axle	•
Custom paint	+
Wear protection for dump body (therefore reduced payload)	+
Maintenance reduced	•
Immobilizer electronic	•
Two-circuit brake system	•



## Operator's Cab

Storage bins	•
Analog instruments for speed, rpm, fuel tank, coolant temperature	•
Working floodlights on cabine back	+
Working floodlights front	•
Ashtray	•
Ventilation system pressure cabine for special applications	+
On-board computer with multifunctional display	•
Document pocket	•
Operator's seat with automatic seat belt, 6-way adjustable, air suspended	•
Premium operator's seat (seat heater, pneumatic lumbar vertebrae support)	+
Vehicle operating data transfer via GSM-GPRS-network	+
Vehicle position determination via GSM- or GPRS-network	+
Fire extinguisher	•
Floor mat removable	•
Bottle holder small and large	•
Rear window protective grid	+
Interior light	•
Coat hook	•
Air conditioner	•
Electrical cooler	+
Radio system	+
Radio preparation	•
ROPS and FOPS structure integrated	•
Rear view camera	•
Single beacon	+
Double beacon	+
Window heater front window	•
Sliding window front left and right	•
Sun blind front window	•
Auxiliary heater	+
Additional power socket 12 V	•
Additional power socket 24 V	•
Trainer seat with automatic seat belt	•
Cigarette lighter	•

• = Standard, + = Option

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

All illustrations and data may differ from standard equipment. Subject to change without notice.

# The Liebherr Group of Companies

## Wide product range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

## Exceptional customer benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

## State-of-the-art technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

## Worldwide and independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 100 companies with over 32,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

[www.liebherr.com](http://www.liebherr.com)



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