

## Wheel Loader Technical Data

# L 45.5



Service weight	up to 23 t
Engine output	177 kW
Bucket capacity	3.4 – 6.0 m <sup>3</sup>

- Load-Sensing hydraulics
- Powershift, shifting under load
- Multi-disc self-locking differentials
- Wet, fully enclosed multi-disc brake
- Deluxe cab with multifunctional lever



Top of the 4 m<sup>3</sup> class: The L 45.5 from O&K.



Load-sensing hydraulics with output control.

Rugged Z-geometry for enormous breakout forces and high dumping speeds.



O&K was the first German manufacturer of wheel loaders to be certified for compliance with DIN EN ISO 9001.

Conformity with the EC Machinery Directive

Optional quick-hitch for instant attachment replacement.

Safety through optimum visibility in all directions.

Spacious, comfortable cab

Water-cooled Cummins diesel, clean and conforming with EU and EC emission requirements.

Easy accessibility significantly reduces maintenance input



Inboard wet-type multi-disc brakes in both axles.

Adjustment-free artic joint with widely-spaced spherical articulating bearings.

Rigid axles front and rear with multi-disc self-locking differentials, rear axle oscillates, planetary gears in the wheel hubs.



## A model of ergonomics and comfort. A cab to feel at home in.



The spacious elastically mounted ROPS/FOPS cab allows easy access through a wide-opening hinged door. Comfortably appointed and spring-mounted, it offers just the right surroundings for relaxed work. The sprung seat with armrest and the steering column are both fully adjustable to enable the operator to assume an agreeable non-tiring position. All the instruments and controls are designed and laid out to the latest ergonomic research, easily readable and operable. A highly effective heater/ventilation creates an agreeable working climate and good visibility through the windows whatever the season of year.

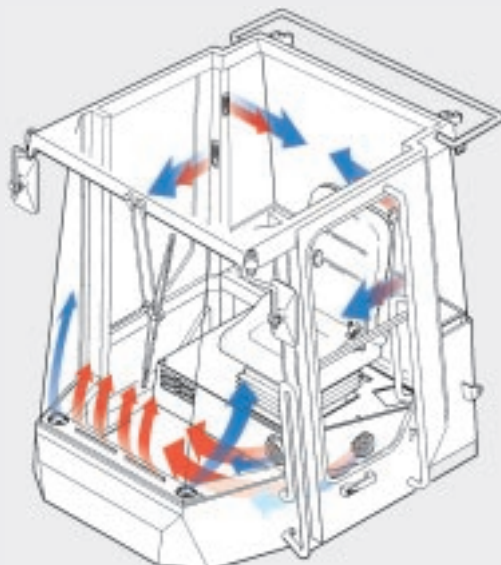


### Electronic monitoring system

A computer monitors all the essential functions, alerting the operator to any variances so that problems are remedied before any damage is caused.

### Electronic immobilizer prevents theft.

A standard feature on the L 45.5 is an electronic immobilizer. The engine will only start once a programmable code has been entered. The immobilizing function is overridden with the operating panel keys. During daytime, the immobilizer can be switched off. After work, it is reactivated to prevent theft, of increasing frequency on construction sites.



**An ingenious air-flow system ensures agreeable temperatures at any time.**

### Seeing for safety

Panoramic glazing allows the operator full allround visibility in every direction, rearward in particular due to the sloping tail end.



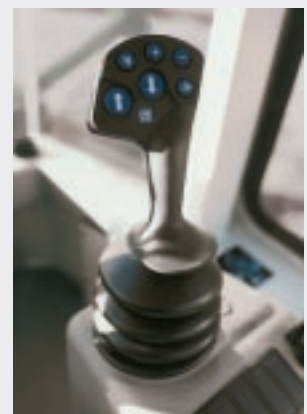
**Easy access and exit and convenient seating position thanks to any-angle steering wheel**

### Single-handed operation

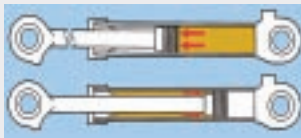
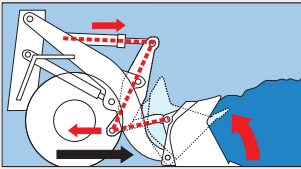
The multi-functional lever performs the following functions:

- Lift, lower, tilt back, dump
- Horizontal bucket control activation and auxiliary functions
- Gearshifting, reversing, kick-down, including instrument panel status display.

The left hand need never leave the steering wheel, hence improved operating comfort and safety.



# Maximized productivity, minimized fuel consumption, less operator stress



Rugged Z-geometry for enormous breakout forces and high loading speeds.



## Highly efficient and very reliable

Tremendous forces across the entire tilt back range and easily modulating dump speeds are assured by the ingenious single-cylinder Z-geometry. The rugged design is remarkable for its dependability and an additional factor contributing to L 45.5 productivity.

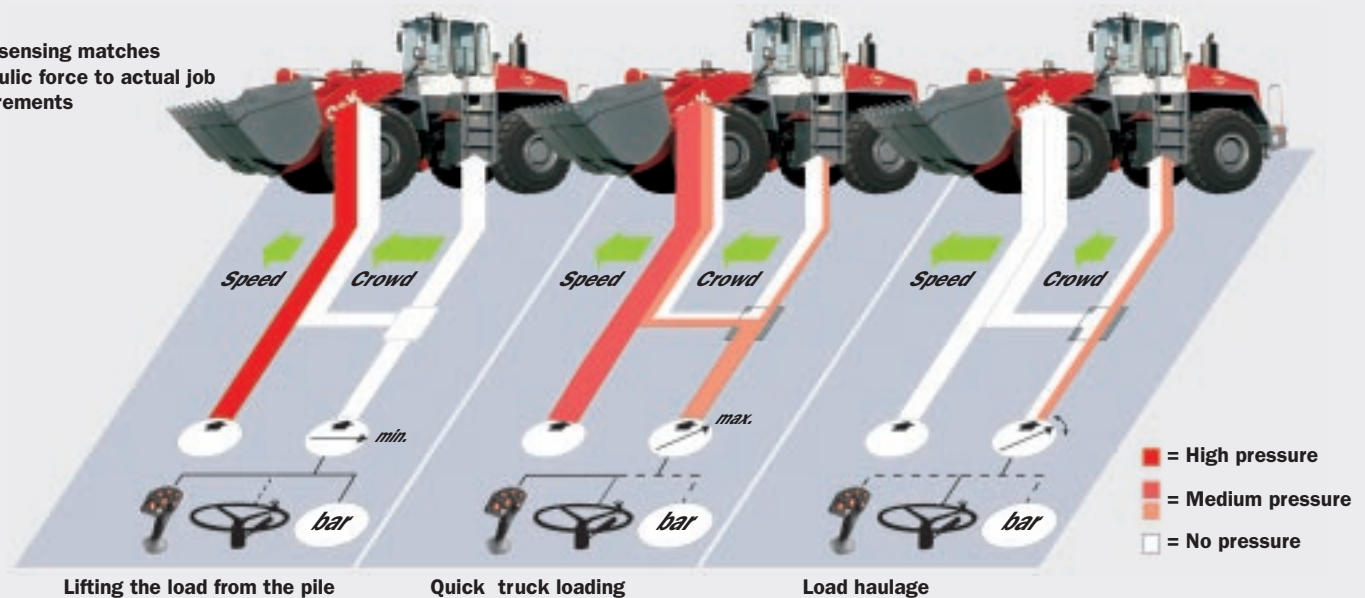
## OLS for improved productivity and durability

Volume multiplied by distance defines the machine's productivity and productivity spells ROI. OLS reduces pitching during travel for higher speeds and less spillage. Greater operator comfort, enhanced safety and less wear are added spin-offs.

## Load Sensing boosts productivity

The variable displacement hydraulic pump converts engine power into hydraulic output with maximum efficiency so that the various functions are fed according to their actual needs. Load sensors regulate pressure, depending whether speed or precision is of the essence on a particular job. This reduces wastage and fuel consumption. The steering system has its own hydraulic circuit. During travel it delivers added directional stability while reducing steering effort on the job. This makes life easier for the operator while enhancing travel safety.

Load sensing matches hydraulic force to actual job requirements





## Engineered to your advantage

### Optimum force flow

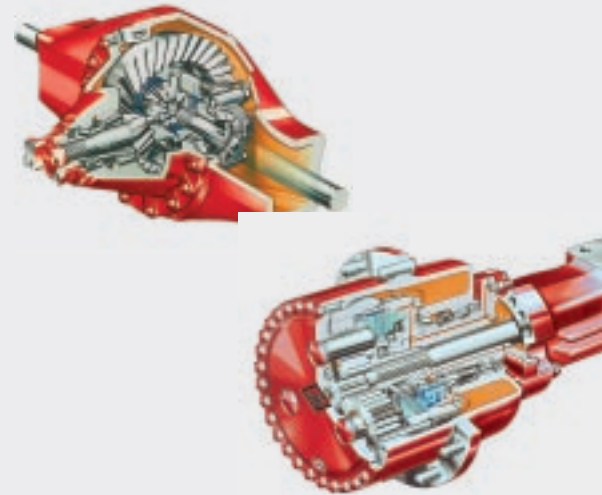
The adjustment-free artic joint with widely-spaced spherical articulating bearings combines mobility with efficient force distribution. The bearings are oversized and sealed; elastic stops cushion any shocks. Easy-to-reach mini measuring points and always good accessibility facilitate precise maintenance.



### Outstanding power transfer and more effective braking response

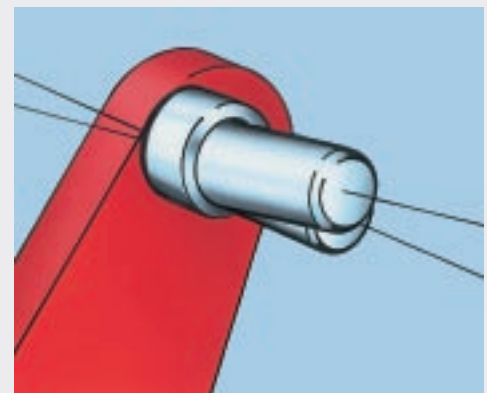
Multi-disc self-locking differentials in both axles ensure excellent power sharing even on slippery terrain plus positive crowd for generously full bucket loads. The rugged frame, the proven planetary axles, the ample oscillating angle and high ground clearance are an assurance of the L 45.5's outstanding ability to negotiate terrain.

The hydraulic dual-circuit system uses wet-type disc brakes mounted in the wheel hubs for powerful deceleration on all kinds of substrate. A hydraulically operated spring-loaded multi-disc brake serves for parking purposes. The brakes are virtually maintenance free and easily accessible without the wheels having to be removed.



### Less stress thanks to spherical bearings

Spherical bearings at the lift frame and cylinder articulating points. Hence reduced stress, even under punishing conditions.



## Service and maintenance system for even more dependability



The hinged service station contains measuring points and oil filters. The lube points normally scattered across the machine, are now grouped on a rail mounted at the articulating joint and easily accessible from the ground.

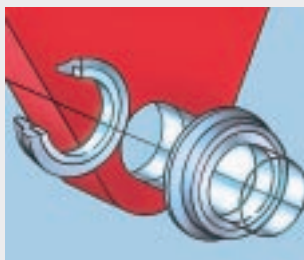


Swing-out step for easy maintenance access.



Uptime is essential to profitability and time spent on maintenance or repair is time lost. O&K has taken the necessary precautions: clearly laid-out components and assemblies, with all service points quickly and easily accessed; an electronic early warning system that alerts the operator visually and acoustically to any variances from target values. Regular maintenance work is completed in no time at all while potential trouble spots are spotted before any real damage is caused.

Sealed bearings for extended maintenance intervals and durability on the bushings and pins.



The engine hood opens with a flick of the wrist so that routine maintenance jobs (such as filter replacement) are completed fast and easily.







## Engine

Cummins diesel engine M 11-C250  
 Water-cooled, direct injection, turbocharged

Engine output to ISO 9249	177 kW / 2100 RPM
Maximum torque at 2100 RPM	1146 Nm
Cylinders / displacement	6 / 10800 cm <sup>3</sup>
Bore/stroke	125 mm / 147 mm
Voltage	12 V
2 Batteries	12 V / 143 Ah
Generator	75 A
Starter	8.0 kW



## Axles

All-wheel drive\* • Planetary gears in the wheel hubs  
 Front axle: Rigid with multi-disc self-locking differential  
 Rear axle: Rigid with multi-disc self-locking differential, oscillating angle +/-14°



## Travel speeds

Speeds in km/h with 26.5 R 25, L-3 tyres

Gear	Forward	Reverse
1.	6.0	6.0
2.	13.4	13.4
3.	22.6	22.6
4.	37.6	37.6



## Hydraulics

Load-Sensing hydraulic • Output controlled variable-displacement duopump • On-demand oil delivery control

Maximum output	
Loading/steering hydraulics	70 l/min
Operating pressure, loader	230 bar
Operating pressure, steering	175 bar



## Tyres

Standard 26.5 R 25, L-3

Inquire for others  
 Tyre chains available with 26.5-25, only on L-3 tyres



## Cylinders

Double-acting lift and tilt cylinders • Operation: single-lever control with lockup for road travel, automatic central position • Float position • 3rd control circuit for quick-hitch and attachment with hydraulic function

	Lift	Dump	Lower	Total
Cycle time (sec.)	6.2	1.9	3.2	11.4



## Brakes

Hydraulic dual-circuit accumulator-type brake circuit with wet multi-disc brakes in the wheel hubs • The brake pedal additionally automatically disconnects power transfer in the transmission when the machine is operating.

Parking brake: multi-disc brake, hydraulically released and mechanically acting on the transmission shaft.



## Drive

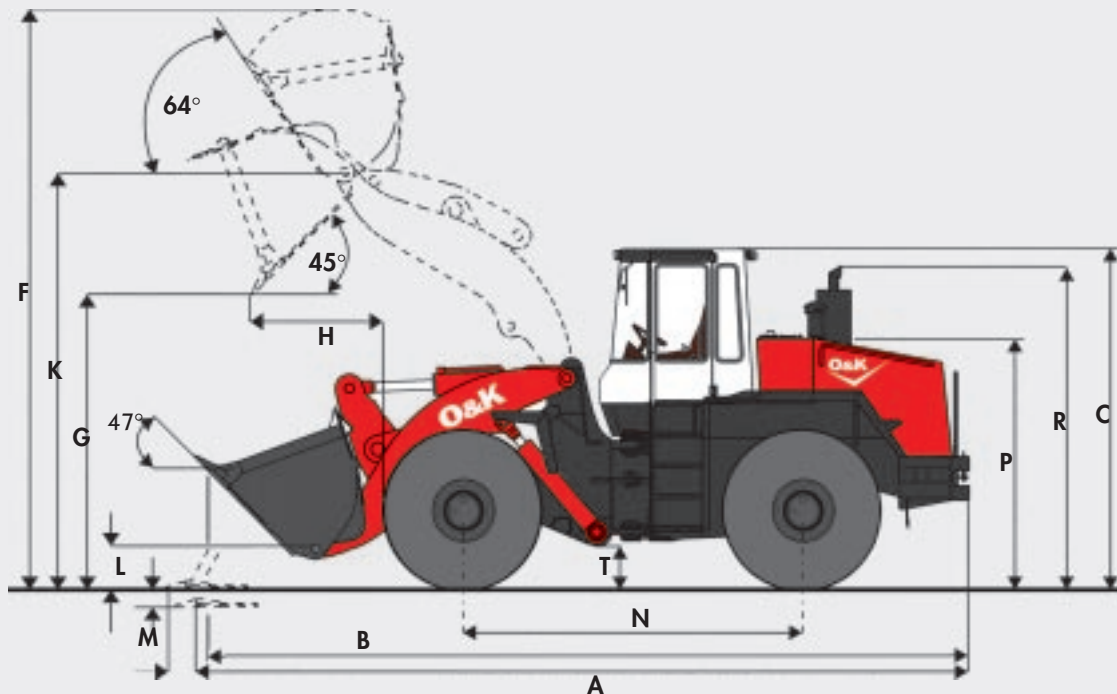
Output-controlled hydrodynamic transmission with automotive-style control • Tractive force and speed are automatically adapted • Inching pedal for lowering travel speed at full engine RPM and hence added power for attachment hydraulics • On-the-go shifting



## Steering

Variable steering ratio, adapting automatically to the working conditions • Any-height, any-angle steering wheel • Central hydraulic artic steering with load sensing • Variable displacement pump • Two double-acting hydraulic cylinders • Adjustment-free artic joint • Artic joint angle 41° either side

## Dimensions and operating data



<b>B</b>	= 7836 mm	<b>N</b>	= 3530 mm	<b>with tyres</b>	26.5 R 25 L-3	<b>with tyres</b>	23.5 R 25,L-3
<b>C</b>	= 3521 mm	<b>P</b>	= 2586 mm	<b>gauge</b>	2135 mm	<b>gauge</b>	2 235 mm
<b>K</b>	= 4327 mm	<b>R</b>	= 3346 mm	<b>width across tyres</b>	2810 mm	<b>width across tyres</b>	2 810 mm
<b>L</b>	= 519 mm	<b>T</b>	= 411 mm	<b>artic angle</b>	+/- 40°		
<b>M</b>	= 104 mm					<b>vertical dimensions</b>	- 60 mm

Operating data		Loading bucket with teeth	Loading bucket with teeth	Rock bucket with level blade and teeth
Bucket capacity (ISO 7546,7546-heaped)	m <sup>3</sup>	3.8	4.2	3.4
Actual bucket capacity (100-120%)	m <sup>3</sup>	3.8 – 4.5	4.2 – 5.0	3.4 – 4.0
Bucket width	mm	3000	3000	3000
Bucket weight	kg	2190	2240	2100
Dump height at max. lift and 45° dump	(G) mm	3182	3104	3243
Reach at max. lift and 45° dump	(H) mm	1186	1264	1121
Reach at 2130 mm height and 45° dump	mm	1834	1881	1790
Overall length	(A) mm	8096	8206	8008
Max. height (bucket raised)	(F) mm	5830	5870	5740
Turning radius (bucket in carry position)	mm	6 886	6 907	6 862
Breakout force (ISO 8313)	kN	182	167	197
* Tipping load, straight (static)	kg	18303	18146	18475
* Tipping load, articulated 40° to DIN	kg	16038	15895	16206
* Service weight	kg	22462	22512	22372

Including all lubricants, full tank, 26.5 R25L-3 tyres, ROPS/FOPS cab and operator.  
Service weight and static tipping load depend on tyres and attachments

## Standard equipment and bucket options

### Standard equipment

Noise-insulated, removable ROPS/FOPS cab with engine oil heating and defroster nozzles • Ventilation may be switched to recirculation and outside air with filter unit • Electrical wipers front/rear • Windscreen washer front • Steplessly adjustable, vibration-dampening seat • Any-angle, any-height steering wheel • Multi-functional lever and automatic shifting • Horizontal bucket positioning  
Noise emission inside and outside the cab complies with EC Directive 95/27 (dynamic measurements)

### Electronic monitoring with warning lights for the following functions:

- Torque converter oil temperature
- Transmission oil pressure
- Engine air filter
- Engine oil pressure
- Short circuit and failure in the analogue sensor
- Headlamps
- Parking brake
- Flasher
- Service brake pressure
- Battery charge
- Steering and emergency steering pump

### Other displays and warning lights

- Fuel
- Operating hours
- Speedometer
- Coolant temperature
- Beacon
- Tank-located hydraulic oil warning light
- Air-filter contamination indicator

### Options

Road travel kit • Safety kit to German Safety Regulations, CE sign and TÜV certificate conformity to ISO 9001/EN 29001.

Loading bucket with/without teeth • Light-materials bucket • Rock bucket with teeth • High-dump bucket • Cutting edge • Dozer corner plate • Forklift • Log clamp • 3rd control circuit for hydraulic attachments • Hydraulic quick-hitch • Additional spotlight • Speed limiter to 20/25 km/h • Acoustic back-up alarm • Amber beacon • Additional toolkit • Air conditioning, soot filter, OLS

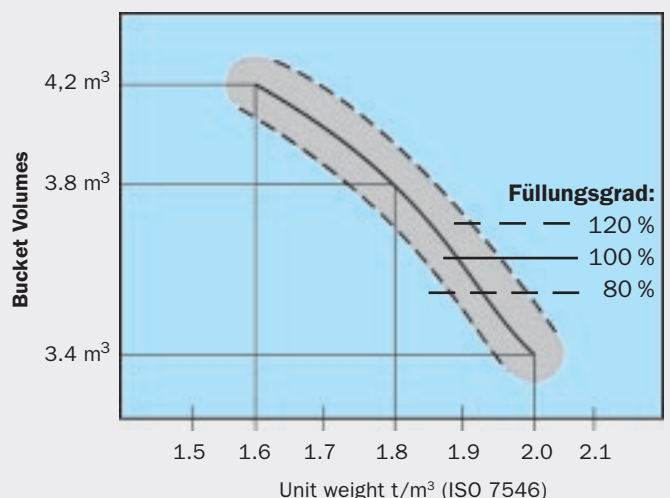
## Bucket options – unit weights – degree of fill

Type of bucket	Contents	Unit weight
<b>Standard</b>	3.8 m <sup>3</sup>	1.8 t/m <sup>3</sup>
<b>Standard</b>	4.2 m <sup>3</sup>	1.6 t/m <sup>3</sup>
<b>Rock</b>	3.4 m <sup>3</sup>	2.0 t/m <sup>3</sup>
<b>Light material</b>	6.0 m <sup>3</sup>	1.0 t/m <sup>3</sup>

Specials (e.g., high-dump bucket) on request

Material	Density	Bucket fill
<b>Soil</b>	1.5 – 1.6 t/m <sup>3</sup>	100 – 115 %
<b>Clay</b>	1.5 – 1.7 t/m <sup>3</sup>	100 – 120 %
<b>Sand</b>	1.4 – 1.8 t/m <sup>3</sup>	100 – 110 %
<b>Gravel</b>	1.5 – 2.0 t/m <sup>3</sup>	100 – 110 %
<b>Rock</b>	1.6 – 2.0 t/m <sup>3</sup>	75 – 100 %

Actual bucket volumes normally exceed ISO/SAE figures.





## Round-the-clock reliability



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