

## Wheel Loader Technical Data

# L 35.5



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

- Load-sensing hydraulics
- Powershift transmission, shifting on-the-go
- Multi-disc self-locking differentials
- Wet, fully enclosed multi-disc brake
- Deluxe cab with multifunctional lever

# O&K

## The multi-talent in the 3-m<sup>3</sup> class: the L35.5 from O&K

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

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

Load-sensing hydraulics with output control.



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.

## Productivity-enhancing deluxe cab.

Safety and comfort, these are the hallmarks of the low-noise ROPS/FOPS safety cab. Multi-functional lever, perfect allround visibility, heater/ventilator with defroster function and air filter system (air conditioning optional) combat stress and provide the operator with an agreeable working climate.

The any-angle steering wheel, the neatly laid out instrument panel, the deluxe seat with adjustable arm rest and the multi-functional lever help to make the operator's work more agreeable.

Bright, stimulating colours and stylish design boost motivation.



### Electronic immobilizer prevents theft.

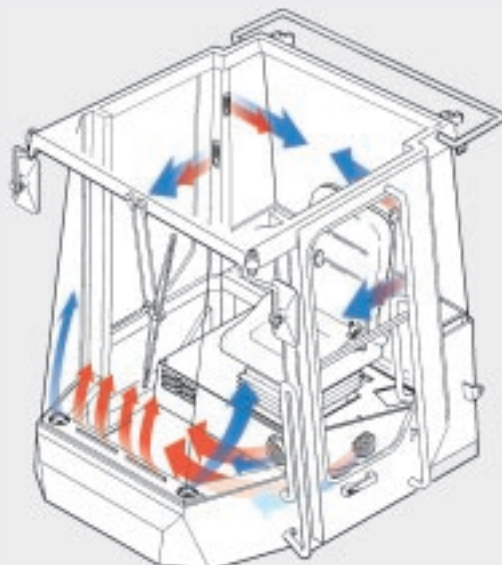
A standard feature on the L 35.5 is an electronic immobilizer. The engine will only start once a programmable code has been entered. The immobilizing function is overridden with the operating panel keys. During daytime, the immobilizer can be switched off. After work, it is reactivated to prevent theft, of increasing frequency on construction sites.

### Electronic monitoring system

The computer-controlled system monitors all essential operating functions and signalizes deviations from target values. In this way, problems can be avoided, before damage occurs.

### Excellent visibility to all sides

The elastically mounted ROPS/FOPS cab with panoramic windows at the front and rear and the drop-down door with integrated lowering window provide best possible visibility in all directions. Nowhere are there any posts or pillars to impede the operator's view.



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



### Single-handed operation

The multi-functional lever performs the following functions:

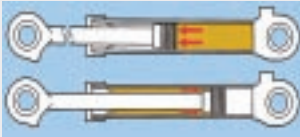
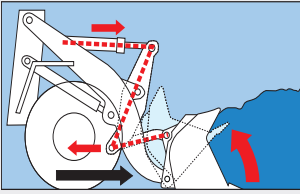
- Lift, lower, tilt back, dump
- Horizontal bucket control activation and auxiliary functions
- Gearshifting, reversing, kick-down, including instrument panel status display.

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



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

## Advanced technology ensures high productivity



Z-geometry boosts forces when breaking out and speed when loading.



### Rugged, powerful Z-geomrtry

Z-geometry with a single tilt cylinder delivers irresistible breakout forces and high dumping speeds. Central lubrication eases maintenance.

All the bearings are sealed for extend-ed durability. The outcome: reduced wear and on-site reliability for profitable performance.

### OLS reduces pitching (optional)

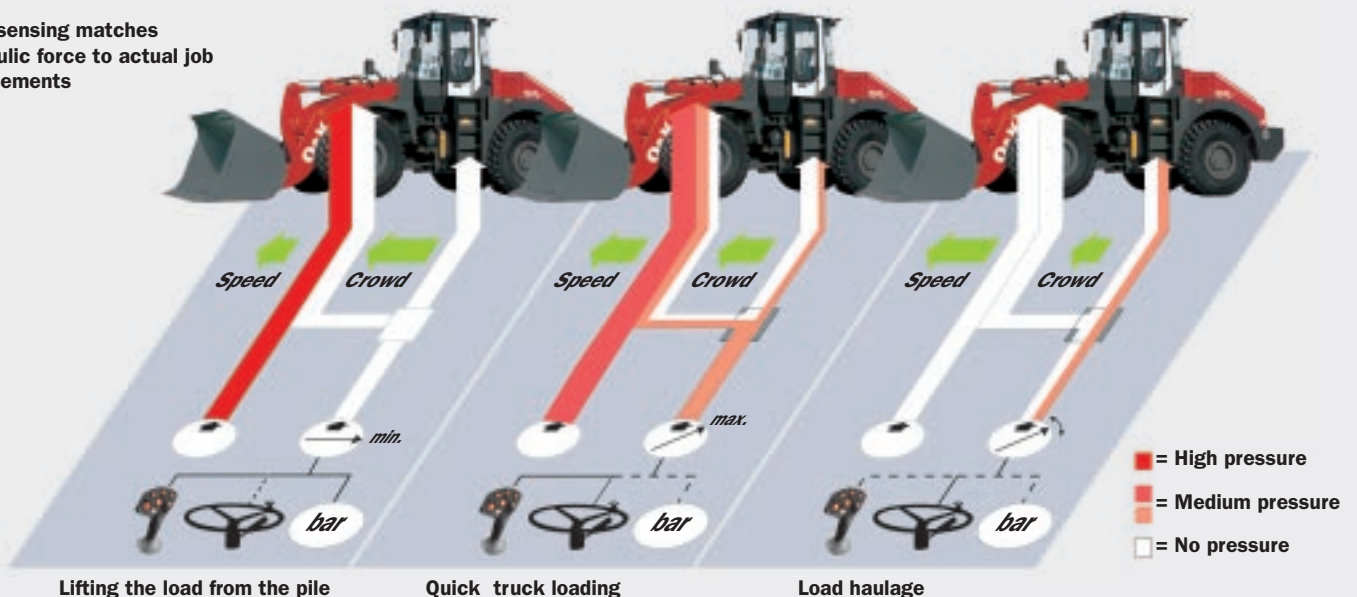
Advantages to your benefit:

- Improved ride comfort
- Increased productivity due to faster travel speeds and less load spillage
- Extended durability through minimum wear
- Enhanced productivity through favourable cost/benefit ratio.

### Load-sensing hydraulic system for 100% performance

The output-controlled variable-displacement pump translates engine output into hydraulic performance and supplies the individual functions carefully metered according to their individual energy requirements. Load sensors detect the required pressure for precise or speed. Hence, energy losses can be reduced and fuel consumption lowered. The steering hydraulics acting independently of the main hydraulic system provides added directional stability when driving fast and reduce steering effort when working. The driver has less work to do and drive safety is enhanced.

Load sensing matches hydraulic force to actual job requirements

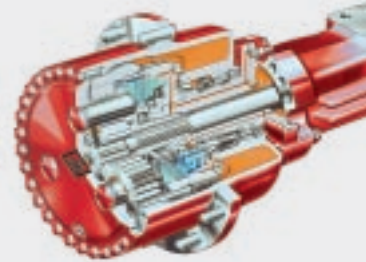


## Application-proven components ensure longevity

### Automatic multi-disc self-locking differentials and wet type multi-disc brakes

Automatic self-locking differentials in both axles provide optimum power transfer and excellent crowding effort on all types of terrain.

The all-hydraulic dual-circuit brake system with inboard wet brakes in both axles is impressive whatever the conditions. The brakes need no adjustment and are easily accessible, without wheel removal.



### Hydraulic quick-hitch

The quick hitch (optional) permits rapid replacement of attachments, e.g. replacing loading bucket with a high-dump bucket. This enhances flexibility and increases efficiency.



### Rugged frame, robust axles

The articulated frame, consisting of a front and rear section, is laser welded for absolute precision and a long service life. The sturdy axles and punishment-proven suspension systems easily absorb forces for good stability. Ample ground clearance assures excellent terrainability.



## Service and maintenance child's play.



Extended uptime is essential to profitable wheel loader operation and this is why this O&K loader has been engineered for short and easy maintenance. Standard-setting accessibility to all the maintenance points, long maintenance intervals combined with an electronic monitoring system keep the L 35.5 on the job, day in, day out.

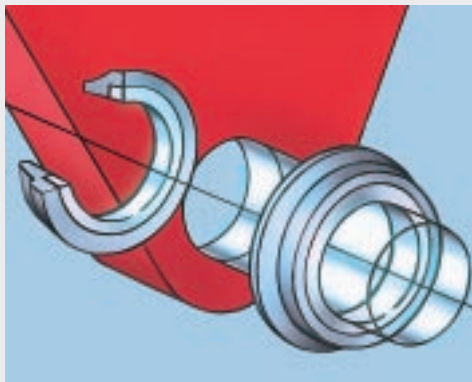
The easy-opening engine hoods and the lift-up radiator panel permit easy access to all the components.

The fuel tank on the right and the access step on the opposite side can be swung out for unobstructed access to the components.

**Engine oil level and battery checks or air filter replacement are easily performed on the L 35.5.**



**Sealed bearings for extended maintenance intervals and bushing and pin durability.**





## Engine

Deutz Diesel engine BF6M 1013 EC  
water-cooled

Engine output to ISO 9249	155 kW / 2200 min <sup>-1</sup>
Maximum torque at 1400 RPM	844 Nm
Cylinders / displacement	6 / 7140 cm <sup>3</sup>
Bore/stroke	108 mm / 130 mm
Voltage	24 V
2 Batteries	je 12 V / 110 Ah
Generator	75 A
Starter	4,0 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 +/-15°



## Fahrgeschwindigkeit

Speeds in km/h with 23.5 R 25, L-3 tyres

Gear	Forward	Reverse
1.	5.8	5.9
2.	11.2	11.3
3.	22.8	22.9
4.	35.4	-



## Hydraulics

Load-Sensing hydraulic • Output controlled variable-displacement duopump • Flow control independent of the load

Loading/steering hydraulics	230 l/min
Operating pressure, loader	280 bar
Operating pressure, steering	180 bar



## Bereifung

Standard (Radial tyres)

23.5 R 25, L-3

Inquire for others



## Cylinders

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

	Lift	Cump	Lower	Total
Cycle time (sec.)	5.8	1.9	4.0	11.7



## 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

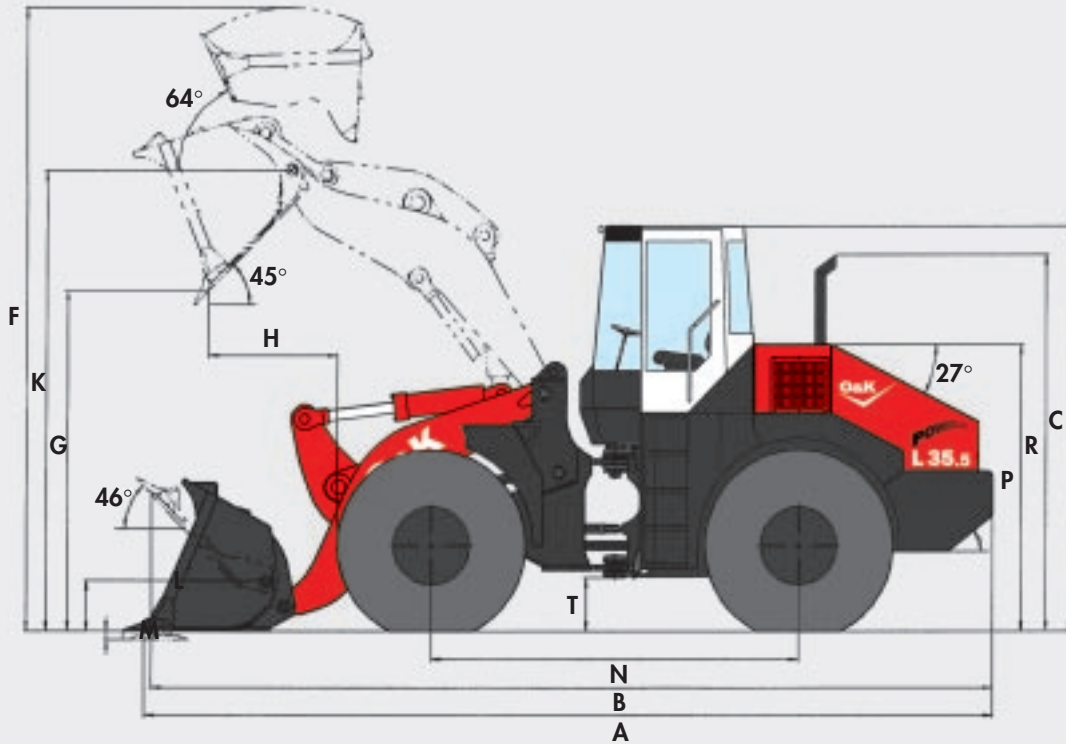
Output-controlled hydrodynamic drive with automotive-like pedal layout • Automatic matching of traction and speed • Drive speed can be lowered at full engine rev with the inching pedal, thus simultaneously delivering more power for the equipment hydraulics. • Gears can be shifted under load



## 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 • Articulating angle, both sides 41° • Emergency steering

## Dimensions and operating data



<b>B</b>	= 7580 mm	<b>N</b>	= 3340 mm	with tyres	23.5 R 25, L-3	with tyres	23.5 R25, L-5
<b>C</b>	= 3545 mm	<b>P</b>	= 2504 mm	gauge	1984 mm	gauge	1984 mm
<b>K</b>	= 4041 mm	<b>R</b>	= 3294 mm	width across tyres	2585 mm	width across tyres	2 628 mm
<b>L</b>	= 496 mm	<b>T</b>	= 449 mm	artic angle	+/- 41°		
<b>M</b>	= 103 mm					vertical dimensions	+ 25 mm

Operating data		Loading bucket with teeth	Loading bucket with teeth	Rock bucket with level blade and teeth
Bucket capacity (ISO 7546 -heaped)	m <sup>3</sup>	3.2	3.5	2.7
Actual bucket capacity (100-120%)	m <sup>3</sup>	3.2 – 3.8	3.5 – 4.2	2.7 – 3.2
Bucket width	mm	2750	2750	2750
Bucket weight	kg	1700	1740	1950
Dump height at max. lift and 45° dump	(G) mm	2987	2920	3026
Reach at max. lift and 45° dump	(H) mm	1206	1273	1160
Reach at 2130 mm height and 45° dump	mm	1723	1763	1692
Overall length	(A) mm	7809	7904	7753
Max. height (bucket raised)	(F) mm	5625	5685	5689
Turning radius (bucket in carry position)	mm	6352	6379	6327
Breakout force (ISO 8313)	kN	159	147	167
* Tipping load, straight (static)	kg	14742	14637	14572
* Tipping load, articulated 41°	kg	12869	12771	12678
* Service weight	kg	18265	18305	18515

\* Including all lubricants, full tank, 23.5 R25L-3 tyres, ROPS/FOPS cab and operator.  
Service weight and static tipping load depend on tyres and attachments

## Lieferumfang und Schaufel-Varianten

### Standard equipment

Noise-insulated, removable ROPS/FOPS cab with coolant 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 • Electric multi-functional lever (kickdown) and automatic shifting • Horizontal bucket positioning

Inside and outside noise in accordance with the new EC directive 95/27

### 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 • TÜV certificate • 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

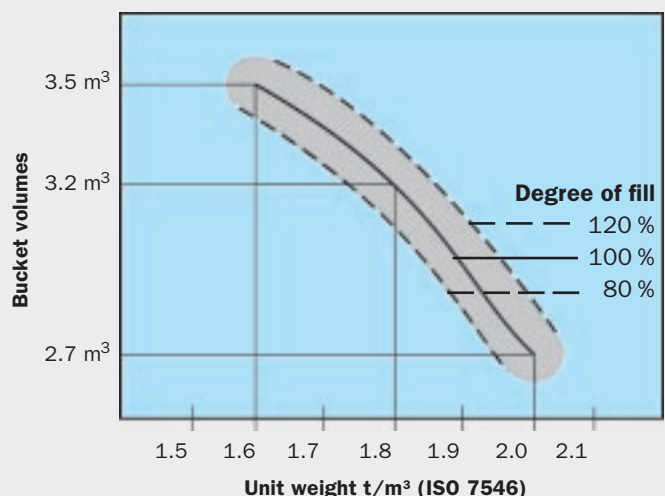
## Bucket options – unit weights – degree of fill

Type of bucket	Contents	Unit weight
Standard	3.2 m <sup>3</sup>	1.8 t/m <sup>3</sup>
Standard	3.5 m <sup>3</sup>	1.6 t/m <sup>3</sup>
Rock	2.7 m <sup>3</sup>	2.0 t/m <sup>3</sup>
Light material	4,5 m <sup>3</sup>	1.0 t/m <sup>3</sup>

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

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

Actual bucket volumes normally exceed ISO/SAE figures



Reliable even under continuous use



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