

# AR500

**Operation weight:**  
6,220 kg

**Power:**  
55 kW (74 HP)

**Shovel capacity:**  
1.1 - 1.3 m<sup>3</sup>



 **Weycor**  
BY ATLAS WEYHAUSEN



# AR500

## POWERFUL. SUSTAINABLE. RELIABLE.

weycor wheel loaders are more than just the sum of all their 1,500 parts – they are the pure embodiment of passion at the highest level of quality. Just as you might expect from a German mid-sized company.

Thanks to our team's innovative spirit, our love for the environment and the joy of powerful engine technology, we are consistently developing our wheel loaders. The result: a new wheel loader generation that'll win you over in every detail.

The new AR 500 stands for:

**Sustainability** – complies with the required NOx and PM limits and in line with the most stringent international emission regulations

**Efficiency** – strong performance with a lower fuel consumption

**Innovation** – optimized and sophisticated solutions right down to the very last detail

Quality "Made in Germany"





# DETAILS THAT MAKE AN IMPRESSION



## LATEST KINEMATICS TECHNOLOGY

The proven and tested weycor kinematics with its exceptional tear-out force and excellent lifting heights. The tapered loading rocker makes sure you can always keep an eye on the attachment



## EASY MAINTENANCE

Low-maintenance and quick, easy servicing is achieved by central, consolidated, easy-to-reach service points.



## HYDRAULIC QUICK-CHANGE ATTACHMENT

By allowing you to change the wheel loader's attachments in a few seconds, it turns the vehicle into an all-rounder.



## ARTICULATED PENDULUM JOINT

Provides for excellent maneuverability and cross-country mobility. Even on challenging terrain, the low center of gravity ensures exceptional stability.



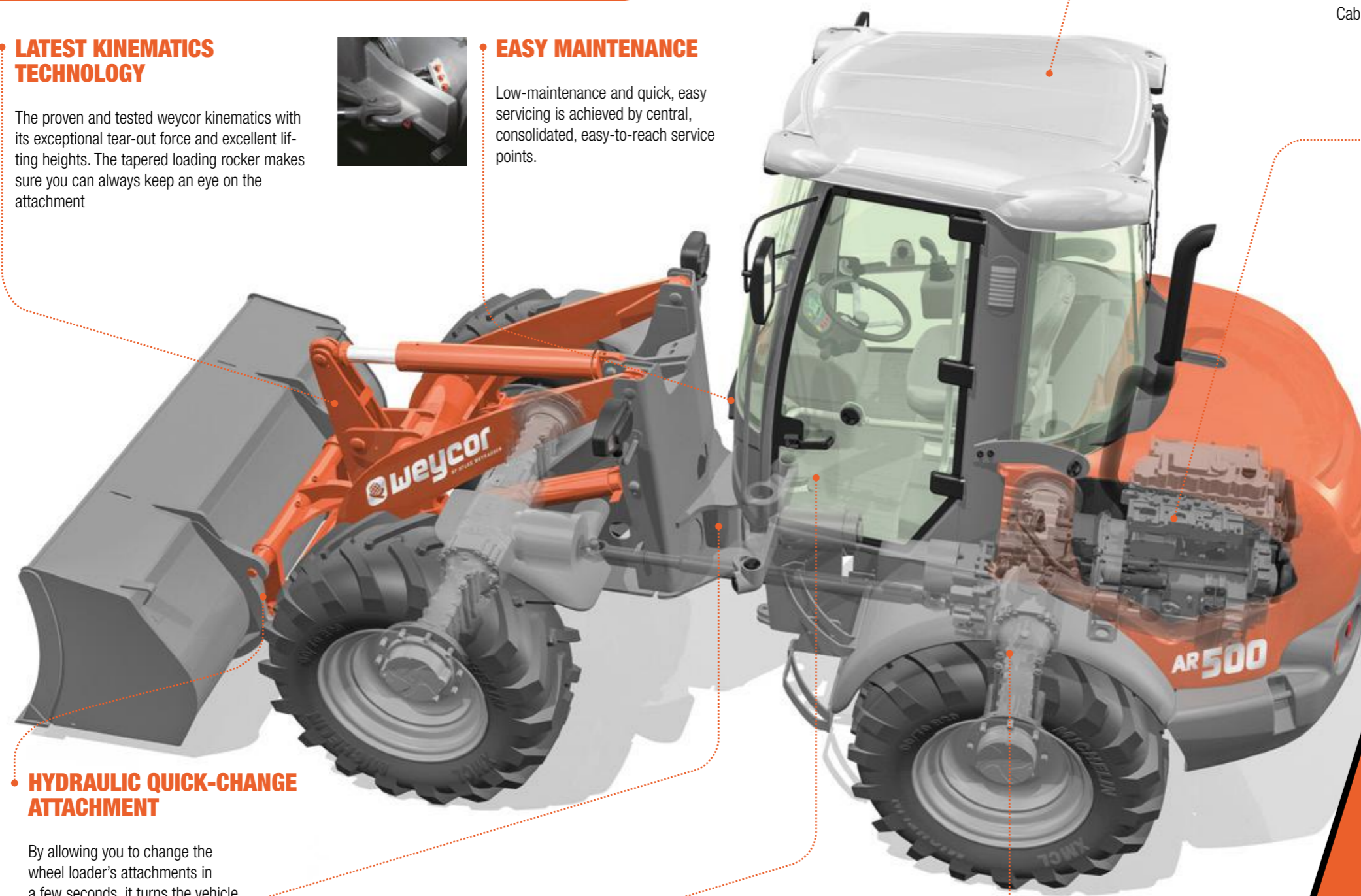
## SEPARATE INCHING PEDAL

Less wear & tear and fuel consumption: In contrast to the conventional combined brake/inching pedal, with the separate inching pedal, the risk of inadvertently activating the main brake while you drive is eliminated.



## NEGATIVE BRAKE

Serves to maintain a stable position while the wheel loader is driven on slopes with the brake or inching function activated. All four wheels are automatically blocked as soon as the engine is stopped.

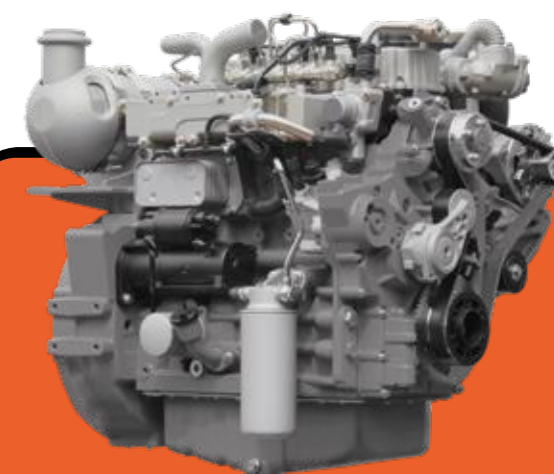


## COMFORTABLE CABIN

In addition to the excellent circumferential visibility in the wheel loader, its clearly arranged controls and its ergonomic design. Cab with tilt function.

## POWERFUL DRIVE UNIT

weycor wheel loaders are equipped with state-of-the-art engines which combine high power reserves for challenging operations with up-to-date low emission values.



## DEUTZ ENGINE TECHNOLOGY

### TCD 3.6 L4 High Torque

Newly-designed, water cooled 4-cylinder inline engine with cooled, external exhaust gas recirculation with and without turbocharging and optionally with and without charge air cooling. Use of DVERT® oxidation catalyst (DOC) enables maintenance-free operation under all application and ambient conditions. The powerful Common Rail injection system and highly-efficient combustion process with cooled external exhaust gas recirculation ensure optimum engine performance at low fuel consumption and exhaust emissions. Best cold starting performance even under extreme conditions. The engines meet the requirements of the EU Stage IIIB and US EPA TIER 4 interim with DVERT® oxidation catalyst. In the version of TIER 4 final additionally equipped with SCR. TIER 5 ready with optional DPF/DOC/SCR.

# AR500

## TECHNICAL DATA

### ENGINE

<b>Make</b> .....	TCD 3.6 L4 HT
<b>Type</b> .....	water cooled
<b>Power***</b> .....	set to 55 kW (74 HP) at 2,300 min <sup>-1</sup>
<b>Max. torque</b> .....	390 Nm at 1,300 min <sup>-1</sup>
<b>Stroke</b> .....	3,621 cm <sup>3</sup>
<b>Cylinders</b> .....	4 in line

Common Rail injection system with cooled external exhaust gas recirculation and oxidation catalyst. No regeneration necessary. In the version of TIER 4 final additionally equipped with SCR.

### ELECTRICAL SYSTEM

<b>Operating voltage</b> .....	12 V
<b>Battery</b> .....	12 V / 100 Ah
<b>Alternator</b> .....	14 V / 80 A
<b>Starter</b> .....	12 V / 2.3 kW

### DRIVE

- Output-regulated hydrostatic drive with pressure cut off and closed circuit acting on all 4 wheels
- Speed with standard tires:  
Operating speed range 0-6.5 km/h  
Road speed range 0-20 km/h  
Optional high speed 40 km/h (upon request)
- 1st and 2nd hydraulic gear can be engaged under load, forward/backward travel also
- Forward/backward travel, speed ranges and off-position operational via weycor joystick
- Drive operated by accelerator and separate inching pedal for best distribution of the hydraulic power for thrust and lifting forces

### BRAKES

**Standard brake:** Multi-disc brake in oil bath acting on all 4 wheels. Supplementary brake functions via inching pedal and hydrostatic drive acting on all 4 wheels.

**Parking brake:** Parking brake as spring-loaded brake acting on all 4 wheels. In case of standstill of engine the spring-loaded brake is automatically reactivated.

### AXLES

Rigid axles with planetary reduction gears in wheel hubs, connecting electrically 100%- differential lock in front and rear axle.

### STEERING

- Fully hydraulic center pivot steering
- Front and rear wheels follow the same track
- Steering angle of 40° to each side, ±12° angular movement at rear of vehicle
- Operating pressure of steering hydraulics 175 bar
- Emergency steering function

### TIRES

**Standard:** 405/70 R20 EM – Construction machine tires for clay, sand, gravel, asphalt, roads, gardening and landscaping  
**Special tires:** 400/70 R20 XMCL – Construction machine tires for clay, sand, gravel, fields and greenland, fortified roads

Special tires upon request

### HYDRAULIC SYSTEM

- Gear pump for loading and steering hydraulics
- Priority valve favoring steering hydraulics
- Lowering brake dependent of load
- 3rd hydraulic section serial
- Loading hydraulic hydraulically pre-activated by weycor joystick, including float position
- Operating pressure 280 bar, Delivery of pump 72 l/min

### LOADING EQUIPMENT

- Powerful and solid Z-kinematics with high tear out force
- Hydraulic quick change device
- Activation of all functions by weycor joystick
- Parallel movement while using pallet forks
- Automatic shovel return to excavation position
- Locking device acc. to German StVZO for road travel
- Lifting 5.0 s**
- Lowering 3.2 s**
- Tipping 1.2 s**

### FUEL/OIL CAPACITIES

Diesel.....	100 Liter
Hydraulic oil.....	72 Liter
Engine oil .....	9.5 Liter
Front axle .....	4.5 Liter
Rear axle .....	4.2 Liter
Gear oil .....	2.5 Liter
Cooling liquid.....	16 Liter

## STANDARD EQUIPMENT

### INCLUSIVE

- Rear driving mirrors, foldable
- Heatable rear screen
- Comfortable access to cab from both sides
- Activation of all functions by weycor joystick
- Control lights for speed range, forward/backward travel
- Lights acc. to German StVZO for road travel
- Individually adjustable driver's seat with adjustable right arm rest
- Water heating with heat exchange and 4-stage fan
- Front windscreen ventilation, variable output
- Sound absorbing ROPS cab
- Windscreen wipe and wash unit in front and rear
- Sun visor, coat hook, ceiling lamp, stow facility
- Adjustable steering column
- Heat protection glazing with targetinted screens
- Control lights for engine oil pressure, overheating, hydraulic oil temperature, battery power, parking brake and air filter
- Central dashboard with indicators for preheating, engine temperature, fuel, working hour meter

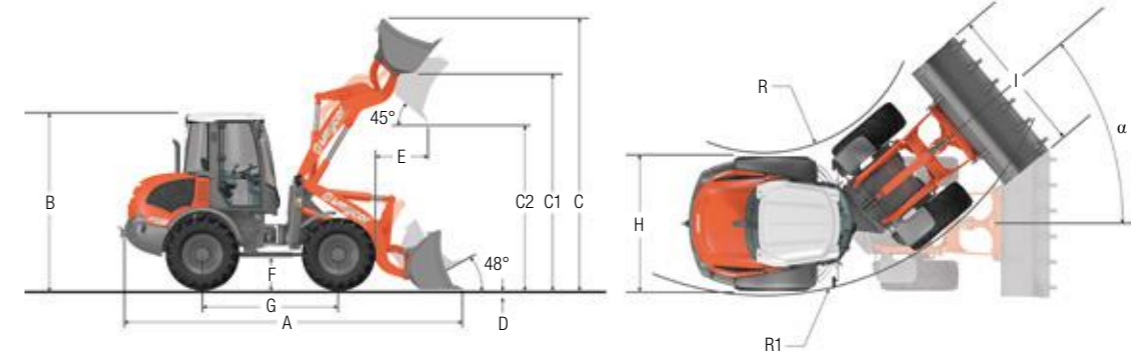
## OPTIONS

### TECHNICAL OPTIONS

- 4th hydraulic section front or rear
- Stability damping system
- Slow drive inching pedal
- Preparation for Hydraulic hammer, Hand throttle device
- Load check valve for lifting and working cylinders
- Trailer coupling
- Main battery switch
- Corrosion prevention against salt
- Special paintings and oils
- Warning beacon
- Anti-theft-device with code stick
- Heatable and air cushioned seats
- Radio
- Doors with sliding windows, left and right side

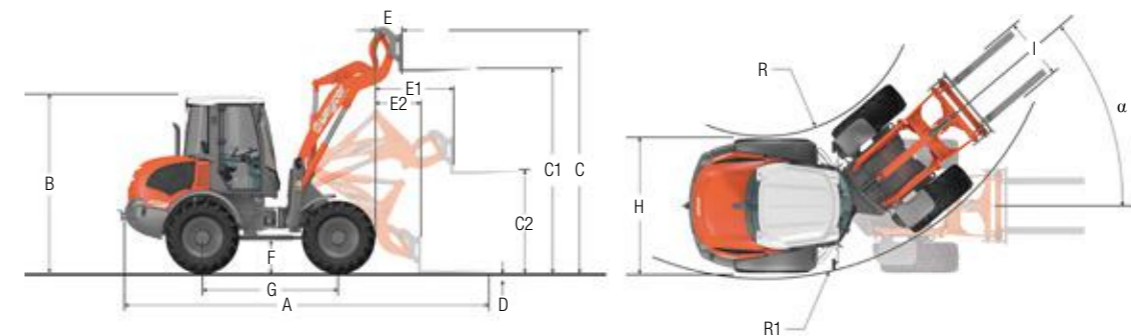
More options upon request

### TECHNICAL DATA AR 500 WITH STANDARD SHOVEL



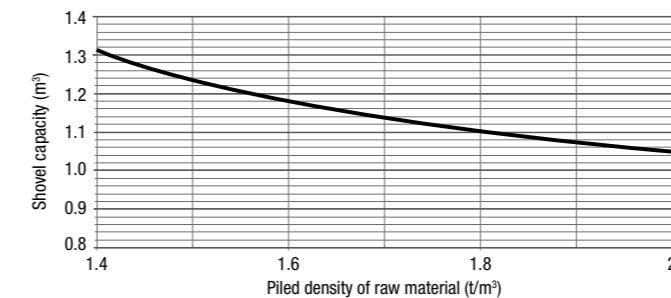
A	5,556 mm
B	2,796 mm
C	4,237 mm
C1	3,392 mm
C2	2,598 mm
D	105 mm
E	830 mm
F	454 mm
G	2,230 mm
H	2,079 mm
I	2,150 mm
R	2,005 mm
R1	4,060 mm
α	40°

### TECHNICAL DATA AR 500 WITH PALLET FORKS



A	5,885 mm
B	2,796 mm
C	3,700 mm
C1	3,180 mm
C2	1,480 mm
D	90 mm
E	515 mm
E1	1,310 mm
E2	800 mm
F	454 mm
G	2,230 mm
H	2,079 mm
I	1,080 mm
R	2,005 mm
R1	4,060 mm
α	40°

### DIAGRAM FOR SHOVEL SELECTION



### SPECIFIC GRAVITY FOR MATERIAL HANDLING WEIGHT (t/m³)

Construction	Industry	phosphate fertiliser
concrete.....1.9	ember.....0.7	.....2.2
soil (dry).....1.5	brown coal briquette.....0.8	turf (watery).....1.1
soil (watery).....2.0	ferrous product.....7.8	turf (dry).....0.4
rock (fill).....2.4	iron ore.....2.3	mineral fertiliser.....1.0
granite.....1.8	cullet.....1.9	
limestone.....1.6	gas coke.....0.4	
gravel (dry).....1.9	timber.....0.8	
gravel (watery).....2.1	mineral coal.....1.2	
loam.....1.7	paper.....0.9	
plaster.....2.2	slag.....1.0	
sand (dry).....1.9	slag concrete.....2.7	
sand (watery).....2.1		
sandstone.....2.4	<b>Landscaping, Agriculture</b>	
shale.....2.2	agricultural crop.....0.7	
sediment.....2.1	grain.....0.6	
crushed stone.....1.5	hay.....0.3	
de-icing salt.....1.3	potash.....1.1	
clay.....1.6	compost.....1.0	
cement.....1.7	flour.....0.5	
clinker (stacked).....1.8	clay (watery).....2.3	

## OPERATING DATA

Shovel capacity acc. to SAE	1.1 m <sup>3</sup>
Track width	1,640 mm
Turning radius (outer shovel edge)	4,478 mm
Tear out force	6,800 daN
Torque	5,250 daN
Tipping load, straight	5,526 kg
Tipping load, articulated	4,871 kg
Lifting capacity at ground level	6,035 daN
Service weight	6,220 kg

### Differing data for use of pallet forks (500 mm distance to center of gravity)\*

Static tipping load, straight and articulated	3,150 kg
Lifting capacity	4,810 daN
Payload 80% even surface**	2,550 kg
Payload 60% uneven surface***	1,900 kg

### Sound level

Average acoustic power-level L <sub>WA</sub> <sup>(1)</sup>	98.2 dB(A)
Guaranteed acoustic power-level L <sub>WA</sub> <sup>(2)</sup>	99.0 dB(A)
Sound pressure level L <sub>pA</sub> <sup>(3)</sup>	75.0 dB(A)
Specific vibration-data Hand- / arm- / bodyvibration <sup>(4)</sup>	< 2.5/0.5 m/s <sup>2</sup>

\* Travel with load only permitted close to the ground.  
\*\* According to ISO 8313 and EN 474-3. \*\*\* According to ISO 14396, EU RL97/68/EC. (1) According to 2000/14/EG & appendixes. (2) According to 2000/14/EG & appendixes. (3) According to ISO 6396. (4) According to ISO 8041.





You can find our current product range and more exciting details at: **[www.products.weycor.de](http://www.products.weycor.de)**

weycor is a brand of ATLAS WEYHAUSEN GMBH.

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