

AR 85^e

Operation weight:
7,000 kg

Power:
80 kW (109 HP)

Shovel capacity:
1.3 - 1.5 m³



 **Weycor**
BY ATLAS WEYHAUSEN

AR 85^e

SMALL e. BIG EFFECT.

weycor wheel loaders are more than the sum of their parts. They reflect true passion, a fascination with technology and 'Made in Germany' quality.

It's thanks to the innovative spirit of our people, their dedication to detail and their passion for powerful engine technology that this new **e-generation of wheel loaders** has been developed.

The small '**e**' stands for

- emission reduction: Keeps the required NOx and PM limits in accordance with the most stringent emission regulations
- efficient: higher power, lower consumption
- evolutionary: advanced designs that are optimised down to the smallest detail



WEYCOR: POWERFUL, PRECISE, RELIABLE.



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

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.

AR 85^e

TECHNICAL DATA

ENGINE

Make	TCD 3.6 L4
Type	water cooled
Power***	set to 80 kW (109 HP) at 2,200 min ⁻¹
Max. torque	430 Nm at 1,600 min ⁻¹
Stroke	3,620 cm ³
Cylinders	4 in line

ELECTRICAL SYSTEM

Operating voltage	12 V
Battery	12 V / 100 Ah
Alternator	14 V / 95 A
Starter	12 V / 3.2 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 R24 EM – Construction machine tires for clay, sand, gravel, asphalt, roads, gardening and landscaping
Special tires: 460/70 R24 – 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
- Two lifting and tipping cylinders each
- 3rd hydraulic section serial
- Loading hydraulic hydraulically pre-activated by weycor joystick, including float position
- Operating pressure 235 bar, Delivery of pump 86 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 5.1 s
Lowering 3.6 s
Tipping 1.2 s

FUEL/OIL CAPACITIES

Diesel.....	120 Liter
Hydraulic oil.....	75 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

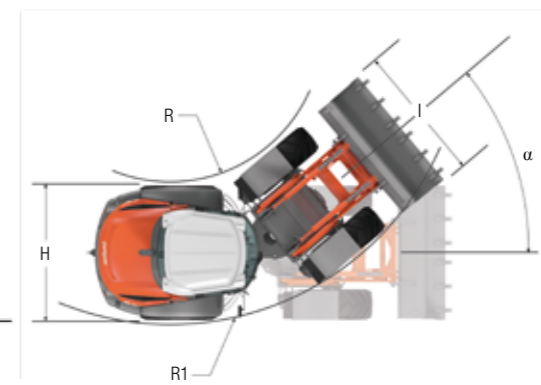
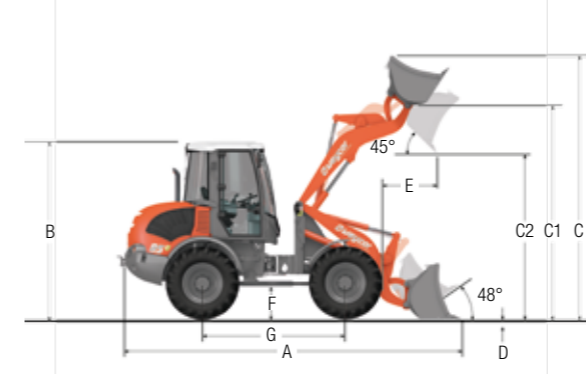
OPTIONS

TECHNICAL OPTIONS

- 4th hydraulic section front or rear
- Stability damping system
- Slow drive inching pedal
- High speed version 40 km/h
- Extended lifting frame
- Preparation for Hydraulic hammer, Hand throttle device
- Load check valve for lifting and working cylinders
- FOPS-roof
- Trailer coupling
- Main battery switch
- Corrosion prevention against salt
- Special paintings and oils
- Joystick with integrated proportional steering for 3rd section (only with ADS)
- weycor diagnostic system (ADS) for monitoring engine parameters with integrated electronic anti-theft device
- Warning beacon
- Anti-theft-device with code stick
- Heatable and air cushioned seats
- Auxiliary heating, comfort cab
- Radio
- Doors with sliding windows, left and right side

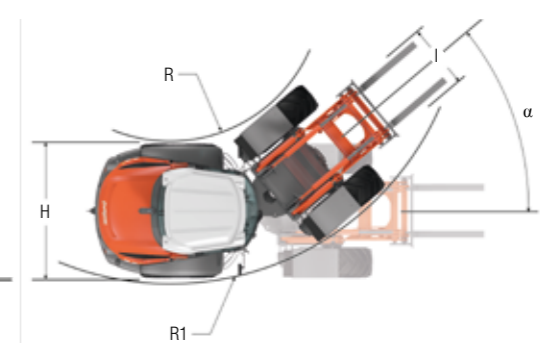
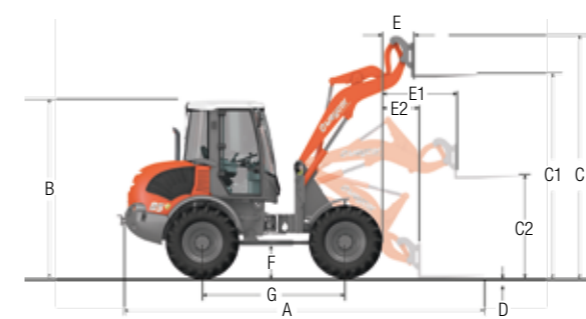
More options upon request

TECHNICAL DATA AR 85e WITH STANDARD SHOVEL



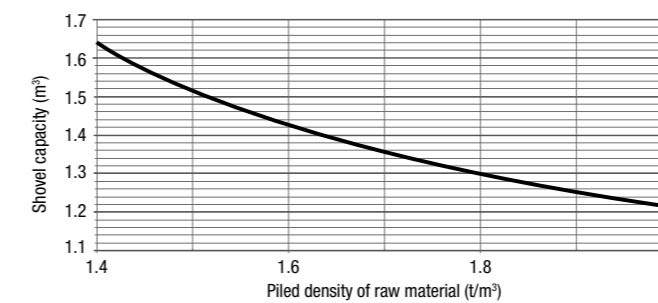
A	5,665 mm
B	2,820 mm
C	4,431 mm
C1	3,500 mm
C2	2,665 mm
D	100 mm
E	880 mm
F	510 mm
G	2,280 mm
H	2,040 mm
I	2,250 mm
R	2,075 mm
R1	4,110 mm
α	40°

TECHNICAL DATA AR 85e WITH PALLET FORKS



A	5,830 mm
B	2,810 mm
C	3,790 mm
C1	3,335 mm
C2	1,615 mm
D	90 mm
E	440 mm
E1	1,160 mm
E2	560 mm
F	510 mm
G	2,280 mm
H	2,040 mm
I	1,080 mm
R	2,075 mm
R1	4,110 mm
α	40°

DIAGRAM FOR SHOVEL SELECTION



SPECIFIC GRAVITY FOR MATERIAL HANDLING WEIGHT (t/m³)

Construction	Industry	
concrete.....1.9	ember.....0.7	phosphate fertiliser.....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	Landscaping, Agriculture	
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	1.3 m ³
Track width	1,640 mm
Turning radius (outer shovel edge)	4,660 mm
Tear out force	6,800 daN
Torque	5,850 daN
Tipping load, straight	5,968 kg
Tipping load, articulated	5,294 kg
Lifting capacity at ground level	6,000 daN
Service weight	7,000 kg

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

Static tipping load, straight and articulated	3,925 kg
Lifting capacity	5,100 daN
Payload 80% even surface**	3,140 kg
Payload 60% uneven surface***	2,355 kg

Sound level

Average acoustic power-level L_{WA}⁽¹⁾	98.1 dB(A)
Guaranteed acoustic power-level L_{WA}⁽²⁾	99.0 dB(A)
Sound pressure level L_{pA}⁽³⁾	76.0 dB(A)
Specific vibration-data Hand- / arm- / bodyvibration⁽⁴⁾	< 2.5/0.5 m/s ²

* 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.

PRODUCT RANGE

S

AR 30	
Operation weight	2,150 kg
Power	24.6 kW (33.5 HP)
Shovel capacity	0.32 - 0.45 m ³

AR 35	
Operation weight	2,500 kg
Power	24.6 kW (33.5 HP)
Shovel capacity	0.34 - 0.45 m ³

AR 35 Super	
Operation weight	2,875 kg
Power	29.4 kW (40.0 HP)
Shovel capacity	0.34 - 0.50 m ³

AR 40	
Operation weight	3,500 kg
Power	29.4 kW (40.0 HP)
Shovel capacity	0.50 - 0.60 m ³

Operation weight	
Power	
Shovel capacity	

L

AR 60	
Operation weight	4,300 kg / 4,650 kg
Power	36.5 kW (50.0 HP)
Shovel capacity	0.65 - 1.00 m ³

AR 65 ^e	
Operation weight	5,150 kg
Power	54.0 kW (73.0 HP)
Shovel capacity	0.80 - 1.05 m ³

AR 75 ^e	
Operation weight	5,760 kg
Power	54.0 kW (73.0 HP)
Shovel capacity	1.00 - 1.25 m ³

AR 75 ^e S	
Operation weight	6,280 kg
Power	54.0 kW (73.0 HP)
Shovel capacity	0.80 m ³

AR 75 ^e T	
Operation weight	6,000 kg
Power	54.0 kW (73.0 HP)
Shovel capacity	1.00 m ³

Model range XL



AR 80 ^e	
Operation weight	6,220 kg
Power	70.0 kW (95.0 HP)
Shovel capacity	1.10 - 1.30 m ³



AR 85 ^e	
Operation weight	7,000 kg
Power	80.0 kW (109.0 HP)
Shovel capacity	1.30 - 1.50 m ³



AR 95 ^e	
Operation weight	7,900 kg
Power	85.0 kW (115.5 HP)
Shovel capacity	1.40 - 2.00 m ³



AR 95 ^e Super	
Operation weight	8,200 kg
Power	95.0 kW (129.0 HP)
Shovel capacity	1.40 - 2.00 m ³

XXL

AR 105 ^e	
Operation weight	9,450 kg
Power	105.0 kW (143.0 HP)
Shovel capacity	1.60 - 2.00 m ³

AR 200 ^e	
Operation weight	12,400 kg
Power	115.0 kW (156.0 HP)
Shovel capacity	2.10 - 2.50 m ³

AR 250 ^e	
Operation weight	13,800 kg
Power	160.0 kW (218.0 HP)
Shovel capacity	2.40 - 3.00 m ³

Compliance with the new statutory limits for exhaust emissions is one thing. Deriving tangible benefits for our customers is another. We are proud to have incorporated both in the development of the new generation of wheel loaders.

Higher power - lower consumption plus a series of other innovative features that make a genuinely positive difference in a construction site environment. All the features inside are now represented on the outside by a small 'e' and the new product name 'weycor'.

weycor is an ATLAS WEYHAUSEN GMBH brand.