

AR 85^E

Operation weight:

7000 kg

Power:

80 kW (109 HP)

Shovel capacity:

1,3 - 1,4 m³



ATLAS
weycor

AR 85^E





Small e. Big effect.



ATLAS Weyhausen 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: even lower emissions than statutory requirements*
- efficient: higher power, lower consumption
- evolutionary: advanced designs that are optimised down to the smallest detail

ATLAS WEYCOR: POWERFUL.



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.



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.



Latest kinematics technology

The proven and tested ATLAS 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.



Articulated pendulum joint

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

PRECISE. RELIABLE.



Easy maintenance

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

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

ATLAS 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.



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.

AR 85^E

TECHNICAL DATA

Engine

Make: _____ TCD 3.6 L4
Type: _____ water cooled
Power*:** _____ set to 80 kW (109 HP)
 at 2200 min⁻¹
Max. torque: _____ 430 Nm at 1600 min⁻¹
Stroke: _____ 3620 cm³
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 ATLAS 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 re-activated.

Axes

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

More 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 ATLAS 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 ATLAS 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 l

Hydraulic oil: 75 l

Front axle: 4,5 l

Gear oil: 2,5 l

Engine oil: 9,5 l

Rear axle: 4,2 l

Cooling liquid: 16 l

Specific gravity for material handling weight (t/m³)

CONSTRUCTION

concrete _____ 1,9
 soil (dry) _____ 1,5
 soil (watery) _____ 2,0
 rock (fill) _____ 2,4
 granite _____ 1,8
 limestone _____ 1,6
 gravel (dry) _____ 1,9
 gravel (watery) _____ 2,1
 loam _____ 1,7
 plaster _____ 2,2
 sand (dry) _____ 1,9
 sand (watery) _____ 2,1

sandstone _____ 2,4
 shale _____ 2,2
 sediment _____ 2,1
 crushed stone _____ 1,5
 de-icing salt _____ 1,3
 clay _____ 1,6
 cement _____ 1,7
 clinker (stacked) _____ 1,8

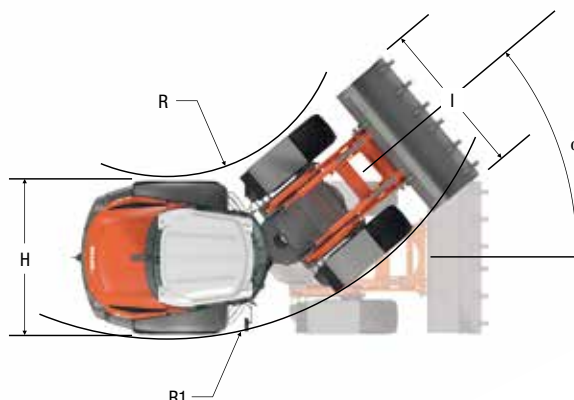
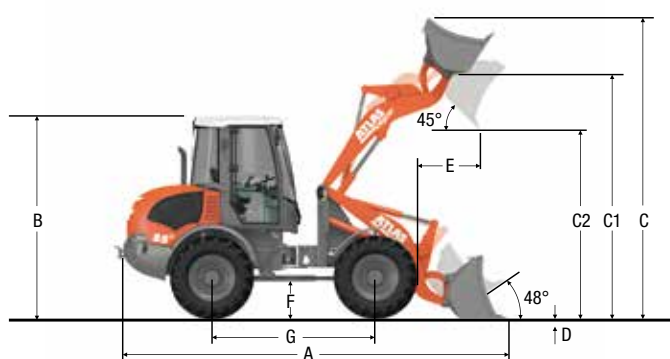
INDUSTRY

ember _____ 0,7
 brown coal briquette _____ 0,8
 ferrous product _____ 7,8
 iron ore _____ 2,3
 cullet _____ 1,9
 gas coke _____ 0,4
 timber _____ 0,8
 mineral coal _____ 1,2
 paper _____ 0,9
 slag _____ 1,0
 slag concrete _____ 2,7

LANDSCAPING, AGRICULTURE

agricultural crop _____ 0,7
 grain _____ 0,6
 hay _____ 0,3
 potash _____ 1,1
 compost _____ 1,0
 flour _____ 0,5
 clay (watery) _____ 2,3
 phosphate fertilizer _____ 2,2
 turf (watery) _____ 1,1
 turf (dry) _____ 0,4
 mineral fertiliser _____ 1,0

Technical data AR 85 e with standard shovel



- A 5665 mm
- B 2820 mm
- C 4431 mm
- C1 3500 mm
- C2 2665 mm
- D 100 mm
- E 880 mm
- F 510 mm
- G 2280 mm
- H 2040 mm
- I 2250 mm
- R 2075 mm
- R1 4110 mm
- α 40°

STANDARD EQUIPMENT

Inclusive

- Rear driving mirrors, foldable
- Heatable rear screen
- Comfortable access to cab from both side
- Activation of all functions by ATLAS 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
- Engine 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)
- ATLAS 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, canopy cab
- Radio
- Doors with sliding windows, left and right side

More options upon request

OPERATING DATA

Shovel capacity acc. to SAE: _____ 1,3-1,4 m³
 Track width: _____ 1640 mm
 Turning radius
 (outer shovel edge): _____ 4660 mm
 Tear out force: _____ 6800 daN
 Torque: _____ 5850 daN
 Tipping load, straight: _____ 5968 kg
 Tipping load, articulated: _____ 5294 kg
 Lifting capacity at ground level: _ 6000 daN
 Service weight: _____ 7000 kg

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

Static tipping load, straight
 and articulated: _____ 3925 kg
 Lifting capacity: _____ 5100 daN
 Payload 80% even surface** : _____ 3140 kg
 Payload 60% uneven surface** : _____ 2355 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- / body

-vibration⁽⁴⁾: _____ < 2,5 / 0,5 m/s²

* 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.

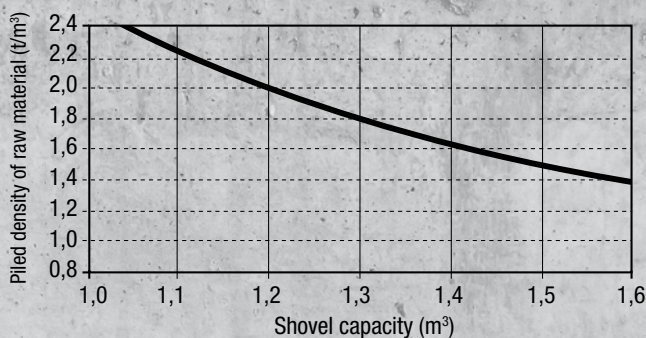
(1) According to 2000/14/EG & appendixes.

(2) According to 2000/14/EG & appendixes.

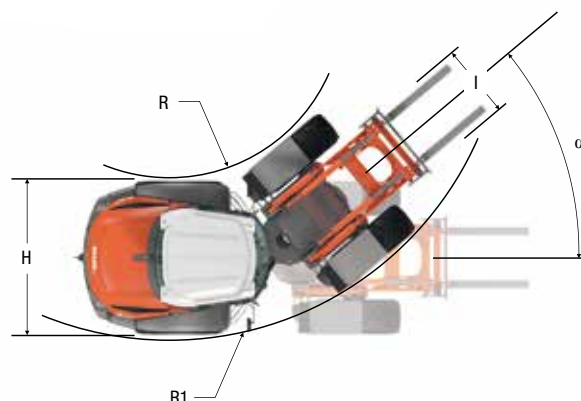
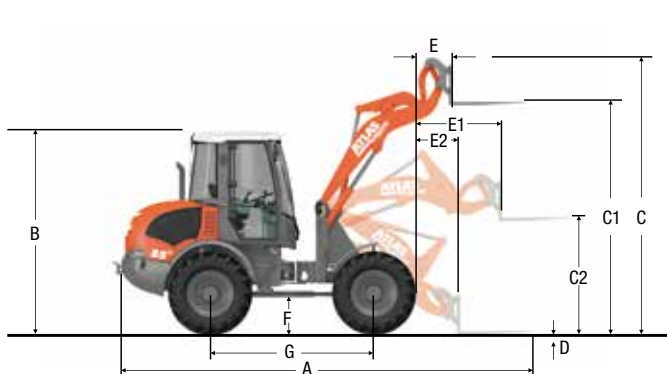
(3) According to ISO 6396.

(4) According to ISO 8041.

Diagram for shovel selection



Technical data AR 85 e with pallet forks



A	5830 mm
B	2810 mm
C	3790 mm
C1	3335 mm
C2	1615 mm
D	90 mm
E	440 mm
E1	1160 mm
E2	560 mm
F	510 mm
G	2280 mm
H	2040 mm
I	1080 mm
R	2075 mm
R1	4110 mm
α	40°

Product range



AR 30

Operation weight 2150 kg
Power 24,6 kW/33,5 HP
Shovel capacity 0,32 m³



AR 35 / AR 35 Super

Operation weight 2500 kg/2875 kg
Power 24,6 kW/33,5 HP
 29,4 kW/40 HP
Shovel capacity 0,34 m³/0,40 m³



AR 40

Operation weight 3300 kg
Power 29,4 kW/40 HP
Shovel capacity 0,50 m³



AR 60

Operation weight 4300 kg/4650 kg
Power 36,5 kW/49,7 HP
Shovel capacity 0,80 m³



AR 65 e

Operation weight 5150 kg
Power 54 kW/73 HP
Shovel capacity 0,8 - 1,00 m³



AR 75 e

Operation weight 5760 kg
Power 54 kW/73 HP
Shovel capacity 1,00 m³



AR 75 e S

Operation weight 6280 kg
Power 54 kW/73 HP
Shovel capacity 0,80 m³



AR 75 e T

Operation weight 6000 kg
Power 54 kW/73 HP
Shovel capacity 1,00 m³



AR 80 e

Operation weight 6220 kg
Power 70 kW/95 HP
Shovel capacity 1,00 - 1,20 m³



AR 85 e

Operation weight 7000 kg
Power 80 kW/109 HP
Shovel capacity 1,30 - 1,40 m³



AR 95 e / AR 95 e Super

Operation weight 7900 kg/8200 kg
Power 85 kW/115,5 HP
 95 kW/129 HP
Shovel capacity 1,40 m³/1,60 m³



AR 105 e

Operation weight 9450 kg
Power 105 kW/143 HP
Shovel capacity 1,60 - 1,80 m³

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 "ATLAS weycor".

*ATLAS WEYCOR is an ATLAS WEYHAUSEN GMBH brand

ATLAS weycor