

# AR 80<sup>E</sup>

**Operation weight:**

**6220 kg**

**Power:**

**70 kW** (95 HP)

**Shovel capacity:**

**1,0 - 1,2 m<sup>3</sup>**



**ATLAS**  
**WEYCOR**



# AR 80<sup>E</sup>





# Small e. Big effect.



**ATLAS 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: 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.



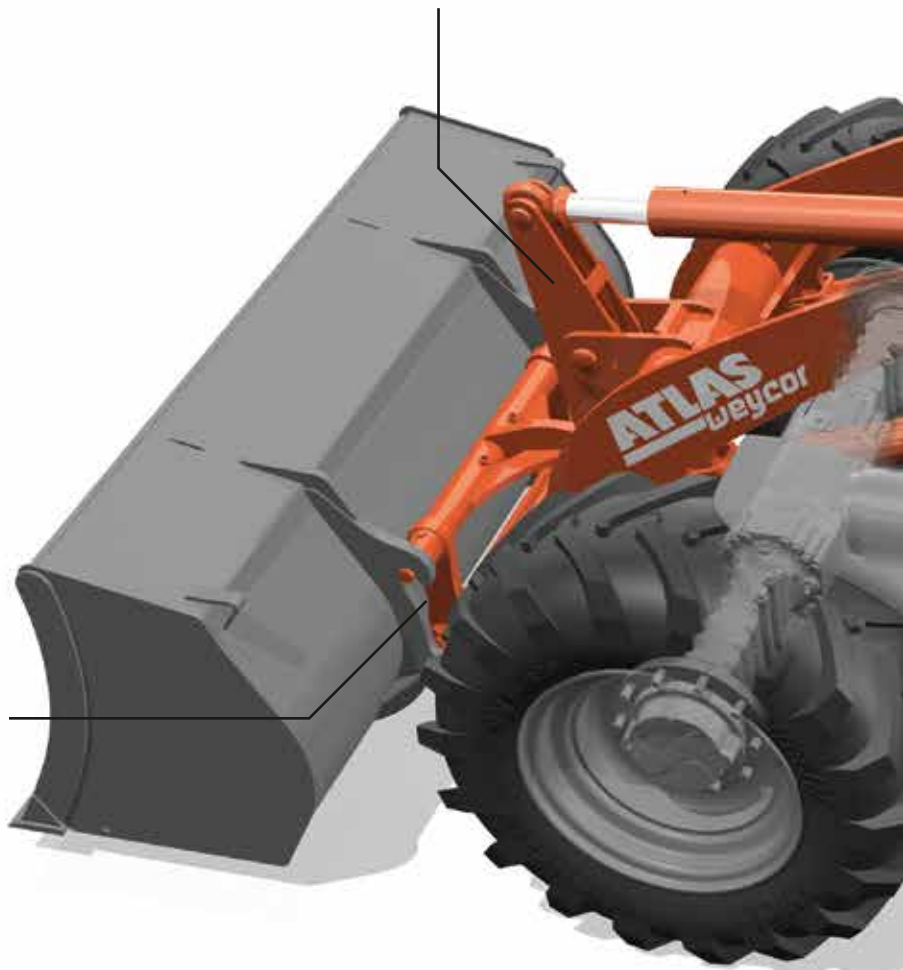
## Hydraulic quick-change attachment

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 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.



## 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

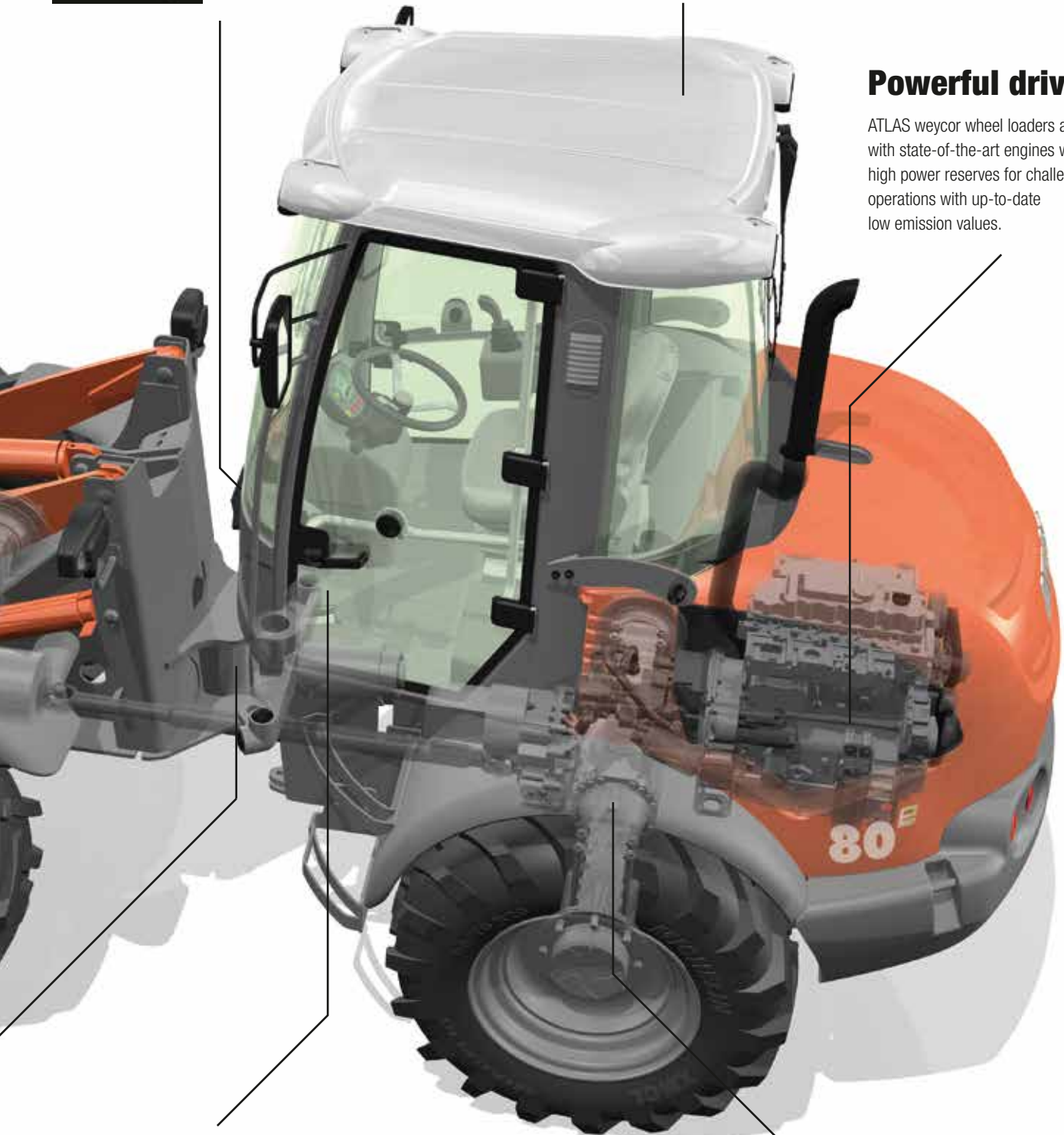
Low-maintenance and quick, easy servicing is achieved by central, consolidated, easy-to-reach service points.

## 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.

## TECHNICAL DATA

### Engine

**Make:** \_\_\_\_\_ TCD 3.6 L4  
**Type:** \_\_\_\_\_ water cooled  
**Power\*\*\*:** \_\_\_\_\_ set to 70 kW (95 HP)  
 at 2200 min<sup>-1</sup>  
**Max. torque:** \_\_\_\_\_ 390 Nm at 1600 min<sup>-1</sup>  
**Stroke:** \_\_\_\_\_ 3621 cm<sup>3</sup>  
**Cylinders:** \_\_\_\_\_ 4 in line

Diesel engine ready for EU Stage IIIB.  
 Common Rail injection system with cooled external exhaust gas recirculation and oxidation catalyst.  
 No regeneration necessary.

### Electrical System

**Operating voltage** \_\_\_\_\_ 12 V  
**Battery** \_\_\_\_\_ 12 V/100 Ah  
**Alternator** \_\_\_\_\_ 14 V/80 A  
**Starter** \_\_\_\_\_ 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 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.

### 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

More 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 ATLAS joystick, including float position
- Operating pressure 280 bar, Delivery of pump 60 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 6,0 s**

**Lowering 3,8 s**

**Tipping 1,2 s**

### Fuel/oil capacities

Diesel: 100 l

Hydraulic oil: 72 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/m<sup>3</sup>)

#### 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

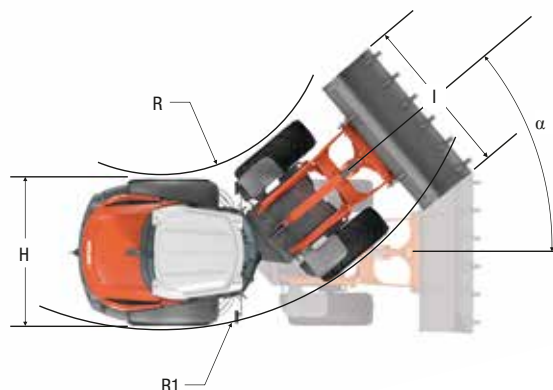
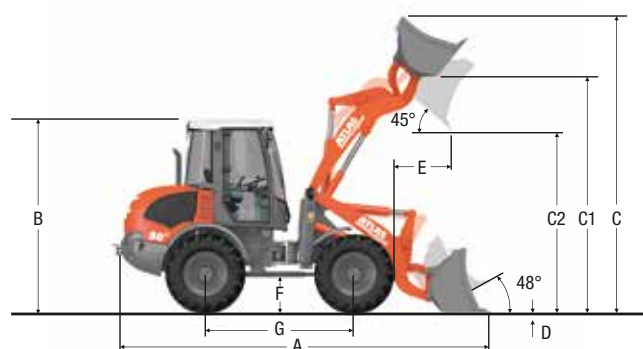
#### INDUSTRY

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 80e with standard shovel



- A 5556 mm
- B 2796 mm
- C 4237 mm
- C1 3392 mm
- C2 2598 mm
- D 105 mm
- E 830 mm
- F 454 mm
- G 2230 mm
- H 2079 mm
- I 2150 mm
- R 2005 mm
- R1 4060 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
- 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

- 4<sup>th</sup> 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
- Trailer coupling
- Main battery switch
- Corrosion prevention against salt
- Special paintings and oils
- Cyclone dust separator
- 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
- Canopy cab
- Radio
- Doors with sliding windows, left and right side

More options upon request

## OPERATING DATA

Shovel capacity acc. to SAE: \_\_\_\_\_ 1,0 - 1,2 m<sup>3</sup>  
 Track width: \_\_\_\_\_ 1640 mm  
 Turning radius  
 (outer shovel edge): \_\_\_\_\_ 4478 mm  
 Tear out force: \_\_\_\_\_ 6800 daN  
 Torque: \_\_\_\_\_ 5250 daN  
 Tipping load, straight: \_\_\_\_\_ 5526 kg  
 Tipping load, articulated: \_\_\_\_\_ 4871 kg  
 Lifting capacity at ground level: \_\_\_\_\_ 6035 daN  
 Service weight: \_\_\_\_\_ 6220 kg

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

Static tipping load, straight  
 and articulated: \_\_\_\_\_ 3150 kg  
 Lifting capacity: \_\_\_\_\_ 4810 daN  
 Payload 80% even surface\*\*: \_\_\_\_\_ 2550 kg  
 Payload 60% uneven surface\*\*: \_\_\_\_\_ 1900 kg

### Sound level

Average acoustic  
 power-level  $L_{WA}^{(1)}$ : \_\_\_\_\_ 98,2 dB(A)

Guaranteed acoustic  
 power-level  $L_{WA}^{(2)}$ : \_\_\_\_\_ 99,0 dB(A)

Sound pressure level  $L_p^{(3)}$ : \_\_\_\_\_ 75,0 dB(A)

### Specific vibration-data

Hand- / arm- / body

-vibration<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.

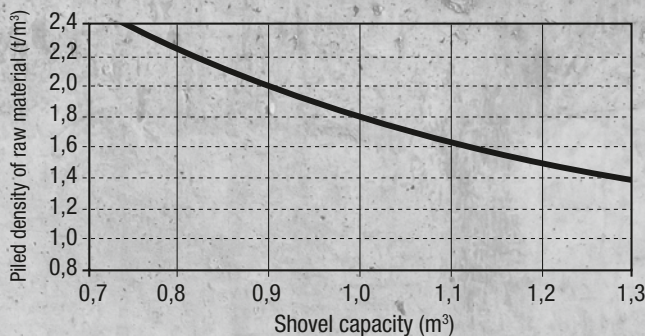
(1) According to 2000/14/EG & appendixes.

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

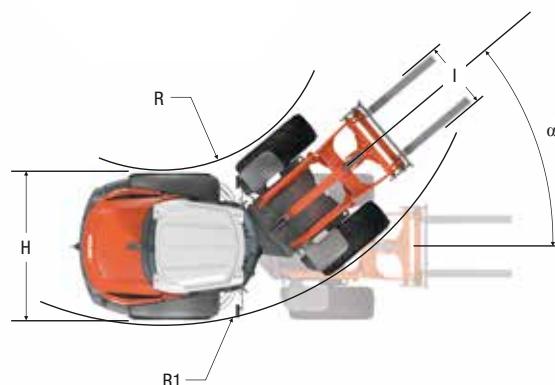
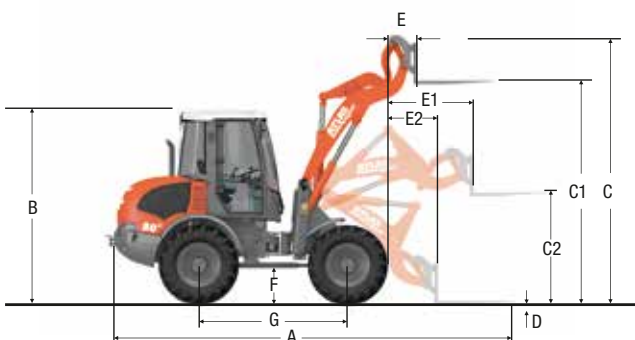
(3) According to ISO 6396.

(4) According to ISO 8041.

### Diagram for shovel selection



### Technical data AR 80e with pallet forks



A	5885 mm
B	2796 mm
C	3700 mm
C1	3180 mm
C2	1480 mm
D	90 mm
E	515 mm
E1	1310 mm
E2	800 mm
F	454 mm
G	2230 mm
H	2079 mm
I	1080 mm
R	2005 mm
R1	4060 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