

# AR 320

OPERATING WEIGHT  
2,500 - 3,200 kg

ENGINE OUTPUT  
18.5 kW (25 HP)

SHOVEL CAPACITY  
0.34 - 0.7 m<sup>3</sup>



 **Weycor**  
BY ATLAS WEYHAUSEN



## FIRST IMPRESSIONS COUNT!

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 generation of wheel loaders has been developed.

**2,500\*** KG  
OPERATING WEIGHT

**18.5** KW (25 HP)  
ENGINE OUTPUT

**0.34** M<sup>3</sup>  
SHOVEL CAPACITY

### Operating data

Shovel capacity	<b>0.34 m<sup>3</sup></b>
Track width	<b>1,070 mm</b>
Turning radius (outer shovel edge)	<b>3,242 mm</b>
Tear out force	<b>2,430 daN</b>
Torque	<b>2,300 daN</b>
Tipping load, straight	<b>1,512 kg</b>
Tipping load, articulated	<b>1,336 kg</b>
Lifting capacity at ground level	<b>2,100 daN</b>
Operating weight	<b>2,500 kg</b>

### Specifications

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

Static tipping load, straight and articulated	<b>1,114 kg</b>
Lifting capacity	<b>1,600 daN</b>
Payload 80% even surface**	<b>891 kg</b>
Payload 60% uneven surface***	<b>668 kg</b>

#### Sound level

Average sound power level L <sub>WA</sub> <sup>(1)</sup>	<b>100.1 dB(A)</b>
Guaranteed sound power level L <sub>WA</sub> <sup>(2)</sup>	<b>101.0 dB(A)</b>
Sound pressure level L <sub>pA</sub> <sup>(3)</sup>	<b>83.0 dB(A)</b>
Vibration values hand/arm/whole body vibration <sup>(4)</sup>	<b>&lt; 2.5/0.5 m/s<sup>2</sup></b>

\*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.

### Important Information on Shovel Size / Shovel Contents:

The details contained in this brochure relate solely to the weycor shovels referred to in the respective data sheet, with the associated technical parameters and configurations on which the respective CE approval for the device is based. The volume of the specific usable shovel depends on the material-specific bulk weights (t/m<sup>3</sup>) of the shovel contents, which you can take as approximations from the data sheet's TABLE OF SPECIFIC WEIGHTS IN t/m<sup>3</sup>. Regardless of this, neither the wheel loader's permissible working weight nor its permissible tipping loads may be exceeded. If the wheel loader is equipped with shovels that are not manufactured and licenced by Atlas Weyhausen GmbH, the buyer and / or the operator is solely responsible for compliance with the relevant statutory regulations and licensing requirements – particularly those relating to road-traffic and road-traffic-licensing law.

\*The operating weight may vary with different equipment. All technical information refers exclusively to the standard device.

# DETAILS THAT MAKE AN IMPRESSION

It is demanding to meet the new legal requirements for exhaust emissions. The challenge is to create also tangible benefits for our customers. We are proud to have achieved both in the development of the current wheel loader generation: more power - less consumption, plus a number of others innovations that really make a difference on tough construction sites.

## 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.

## 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

In weycor wheel loaders, we use robust, low-maintenance articulated-swivel joints almost exclusively in conjunction with rigid axes. With an oscillation of  $\pm 12^\circ$  in the rear carriage and an articulation angle of  $40^\circ$ , these provide outstanding cross-country mobility, protect the ground and offer extreme manoeuvrability. With their low centre of gravity, weycor wheel loaders have a high tilt stability even under extreme conditions.

## Easy maintenance

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

## Optional cabin version

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

## Powerful drive unit

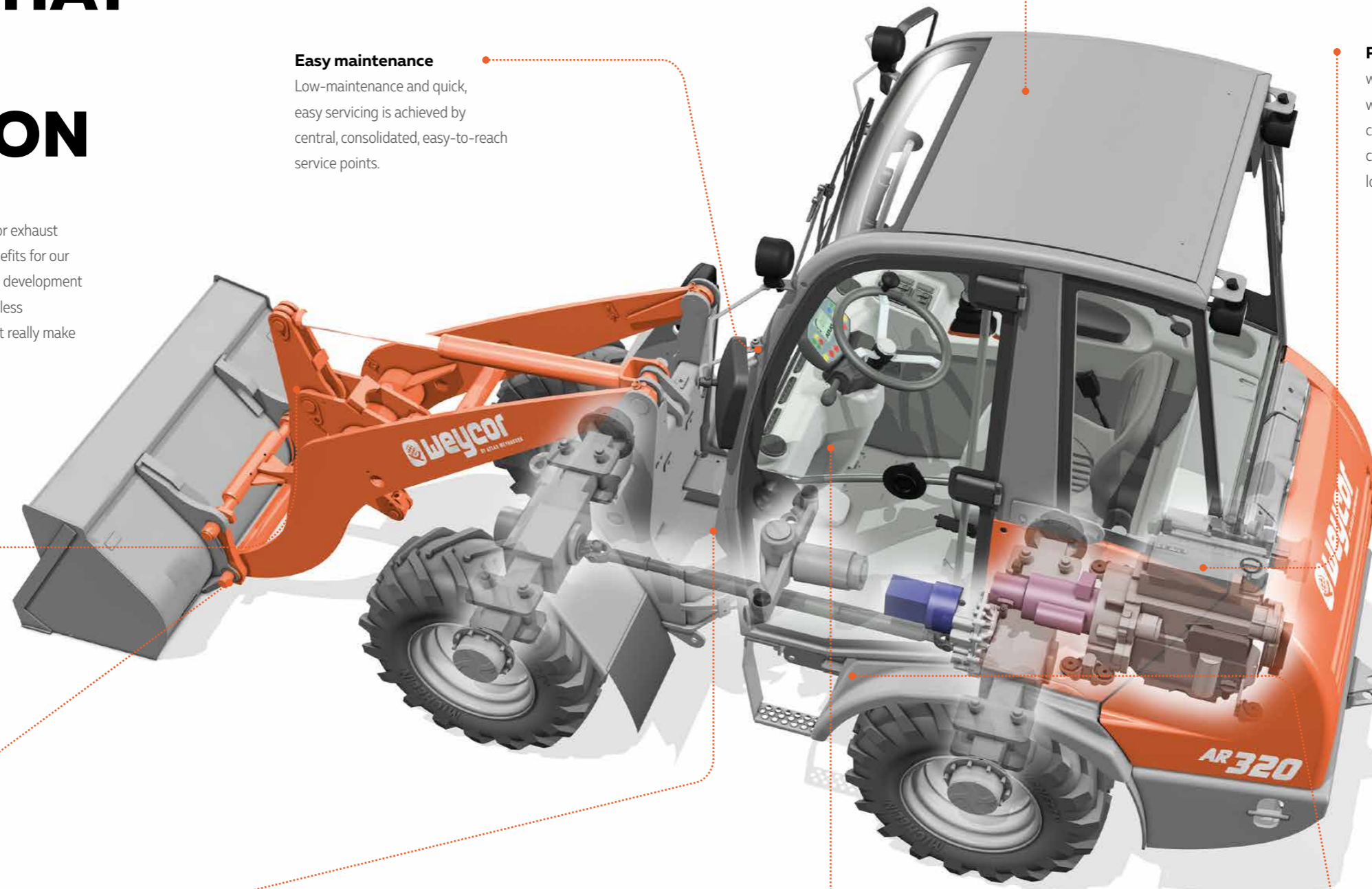
weycor wheel loaders are equipped with state-of-the-art engines which combine high power reserves for challenging operations with up-to-date low emission values.

## Inching Pedal

As the only manufacturer, our wheel loaders have a separate inching pedal as standard. This prevents the possibility of moving against the operating brake, in contrast to the combination of a brake/inch pedal. A generously proportioned inching range facilitates precise distribution of shearing and lifting forces. The result: less wear and lower fuel consumption.

## Low center of gravity

Thanks to their low center of gravity, weycor wheel loaders are secured against tipping, even under extreme circumstances.



# INNOVATIVE ENGINE TECHNOLOGY

## Yanmar 3TNV 76 – intelligent efficient

The motor convinces by an electronic motor control with intelligent connection to the drive management. This ensures the best engine performance with low fuel consumption.

## Mighty performance

18.5 kW at a maximum of 3,000 rpm

## Compliance with emission standards

EU Stufe IV, no EPA



## Reliable and durable

The TNV motors offer a long service life due to efficient motor cooling, lower vibrations and the use of optimized components with fine tolerances.



# TECHNICAL DATA

Engine	
Model	Yanmar 3TNV 76
Design	water-cooled
Output	18.5 kW (25 HP) at 3,000 rpm
Max. torque	96 Nm at 1,800 rpm
Cubic capacity	1,116 cm <sup>3</sup>
Number of cylinders	3 in line

Electrical system	
Operating voltage	12 V
Battery	12 V / 66 Ah
Generator	14 V / 40 A
Starter	12 V / 1,1 kW

Drive	
Output-regulated hydrostatic drive with pressure cut off and closed circuit acting on all 4 wheels. Speed with standard tires: <b>Operating speed range</b> 0–6.5 km/h <b>Road speed range</b> 0–19 km/h 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	
<b>Standard brake:</b> Drum brake on front axle via cardan acting on all 4 wheels. Supplementary brake functions via inching pedal and hydrostatic drive acting on all 4 wheels. <b>Parking brake:</b> Drum brake via funicular link acting on all 4 wheels with engine switch off.	

Axles	
Rigid axles with planetary reduction gears in wheel hubs. 27%-differential lock in front 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 145 bar Emergency steering function	

Tires <small>(Special tires upon request)</small>	
<b>Standard:</b> 10.0/75-15.3 MPT – Multi-purpose tires for sand and gravel surface, woodland, roads and paths <b>Special tires:</b> 11.5/80-15.3 MPT – Multi-purpose tires for sand and gravel surface, woodland, roads and paths 12-16.5 MT – Construction machine tires for soft surfaces, asphaltting, roads, gardening and landscaping 31x15.5 15E – Multi-purpose tires for earth moving machines, particularly surface friendly 15.5/55 R18 – Multi-purpose tires for earth moving machines, particularly surface friendly, gardening and landscaping	

Hydraulic system	
Gear pump for loading and steering hydraulics Priority valve favoring steering hydraulics 3rd steering section for loading hydraulics mechanically controlled by weycor joystick, including float position Operating pressure 230 bar, Delivery of pump 33 l/min	

Fuel/oil capacities	
Diesel	58 Liter
Hydraulic oil	28 Liter
Engine oil	3 Liter
Front axle	4 Liter
Rear axle	3.5 Liter
Gear oil	0.65 Liter
Cooling liquid	6 Liter

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 Automatic mid position of joystick Locking device acc. to German StVZO for road travel <b>Lifting</b> 5.0 s <b>Lowering</b> 3.5 s <b>Tipping</b> 1.0 s	

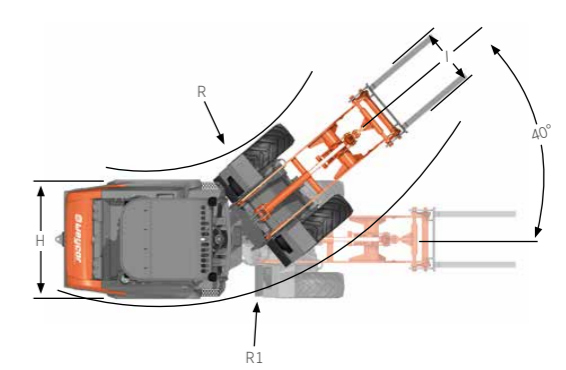
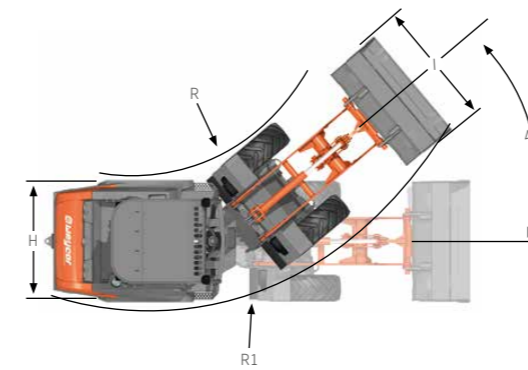
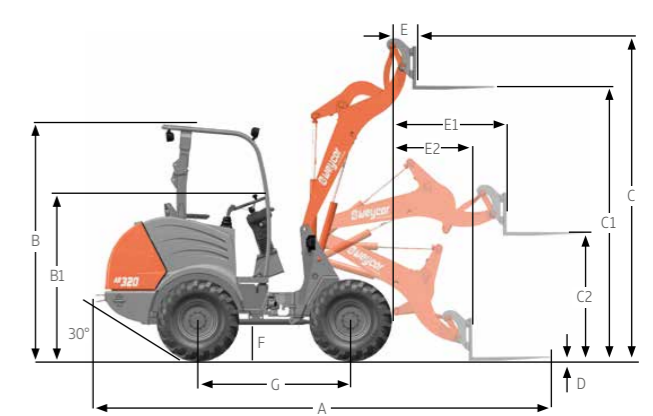
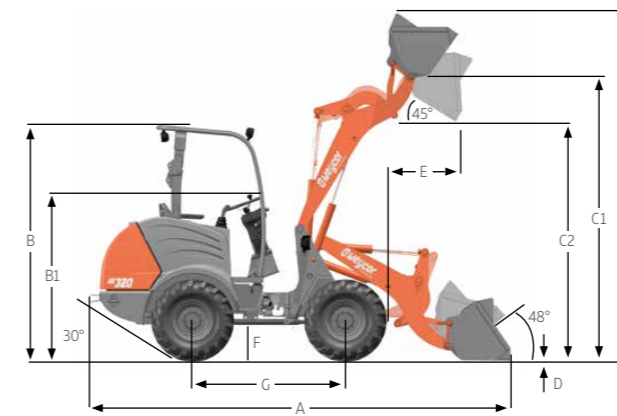
Equipment – Series	
weycor canopy cabin with roll-bar protection Activation of all functions by weycor joystick Control lights for speed range, forward/backward travel Lights acc. to German StVZO for road travel Individually adjustable driver's seat Control lights for engine oil pressure, overheating, hydraulic oil temperature, battery power, parking brake, air filter Central dashboard with indicators for preheating, fuel, working hour meter	

Equipment – Option	
4th section front or rear Main battery switch Special paintings and oils Cyclone dust separator Trailer coupling Left hinged adjustable window, right window to open can be fastened Hot water heating with heat exchange and 3-stage-fan Front windscreen ventilation, variable output Rear driving mirrors, foldable Sound absorbing ROPS cab Windscreen wipe and wash unit in front and rear Sun visor, ceiling lamp, stow facility Heat protection glazing with targetinted screens Anti-theft-device with code stick Radio Warning beacon Front and rear working lights Additional counterweight	

# TECHNICAL DATA

	AR 320 with standard shovel	AR 320 with pallet forks
A	4,240 mm	4,730 mm
B	2,366 mm	2,366 mm
B1	1,630 mm	1,630 mm
B2	2,340 mm*	2,340 mm*
C	3,340 mm	3,010 mm
C1	2,800 mm	2,550 mm
C2	2,300 mm	1,130 mm
D	55 mm	145 mm
E	595 mm	300 mm
E1	-	1,010 mm
E2	-	680 mm
F	350 mm	350 mm
G	1,580 mm	1,580 mm
H	1,350 mm	1,350 mm
I	1,350 mm	1,030 mm
R	1,495 mm	1,495 mm
R1	2,872 mm	2,872 mm

\* Cab Version



With standard shovel

With pallet forks

## Specific gravity for material handling weight (t/m<sup>3</sup>)

Construction		Industry		Landscaping, Agriculture			
Concrete	1.9	Sand (watery)	2.1	Ember	0.7	Agricultural crop	0.7
Soil (dry)	1.5	Sandstone	2.4	Brown coal briquette	0.8	Grain	0.6
Soil (watery)	2.0	Shale	2.2	Ferrous product	7.8	Hay	0.3
Rock (fill)	2.4	Sediment	2.1	Iron ore	2.3	Potash	1.1
Granite	1.8	Crushed stone	1.5	Cullet	1.9	Compost	1.0
Limestone	1.6	De-icing salt	1.3	Gas coke	0.4	Flour	0.5
Gravel (dry)	1.9	Clay	1.6	Timber	0.8	Clay (watery)	2.3
Gravel (watery)	2.1	Cement	1.7	Mineral coal	1.2	Phosphate fertiliser	2.2
Loam	1.7	Clinker (stacked)	1.8	Paper	0.9	Turf (watery)	1.1
Plaster	2.2			Slag	1.0	Turf (dry)	0.4
Sand (dry)	1.9			Slag concrete	2.7	Mineral fertiliser	1.0



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

Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice, errors expected. The technical data refer only to the standard version, illustrations do not necessarily show the standard version of the machine. Not all products are available in all markets.

weycor is a brand of ATLAS WEYHAUSEN GMBH.

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