

AR 320

OPERATING WEIGHT
2,500 - 3,200 kg

ENGINE OUTPUT
18.5 kW (25 HP)

SHOVEL CAPACITY
0.34 - 0.7 m³



 **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⁽¹⁾ KG OPERATING WEIGHT

18.5⁽²⁾ KW (25 HP) ENGINE OUTPUT

0.34 M³ SHOVEL CAPACITY

Operating data

Shovel capacity	0.34 m³
Track width	1,070 mm
Turning radius (outer shovel edge)	3,242 mm
Tear out force	2,430 daN
Torque	2,300 daN
Tipping load, straight	1,512 kg
Tipping load, articulated	1,336 kg
Lifting capacity at ground level	2,100 daN
Operating weight	2,500 kg

Specifications

Differing data for use of pallet forks⁽³⁾ (500 mm distance to center of gravity)

Static tipping load, straight and articulated	1,114 kg
Lifting capacity	1,600 daN
Payload 80% even surface ⁽⁴⁾	891 kg
Payload 60% uneven surface ⁽⁴⁾	668 kg

Sound level

Average sound power level L _{WA} ⁽⁵⁾	100.1 dB(A)
Guaranteed sound power level L _{WA} ⁽⁶⁾	101.0 dB(A)
Sound pressure level L _{PA} ⁽⁷⁾	83.0 dB(A)
Vibration values hand/arm/whole body vibration ⁽⁸⁾	< 2.5/0.5 m/s²

(3) Loads must always be moved to the ground. (4) According to ISO 8313 and EN 474-3.

(5) According to 2000/14/EC and Annexes. (6) According to 2000/14/EC and Annexes. (7) According to ISO 6396. (8) 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/m³) of the shovel contents, which you can take as approximations from the data sheet's TABLE OF SPECIFIC WEIGHTS IN t/m³. 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.

(1) Service weight may vary with different equipment.

(2) Power output ISO 14396, exhaust gas aftertreatment according to EU 2016/1628. All technical data refer exclusively to the standard unit.

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° , 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

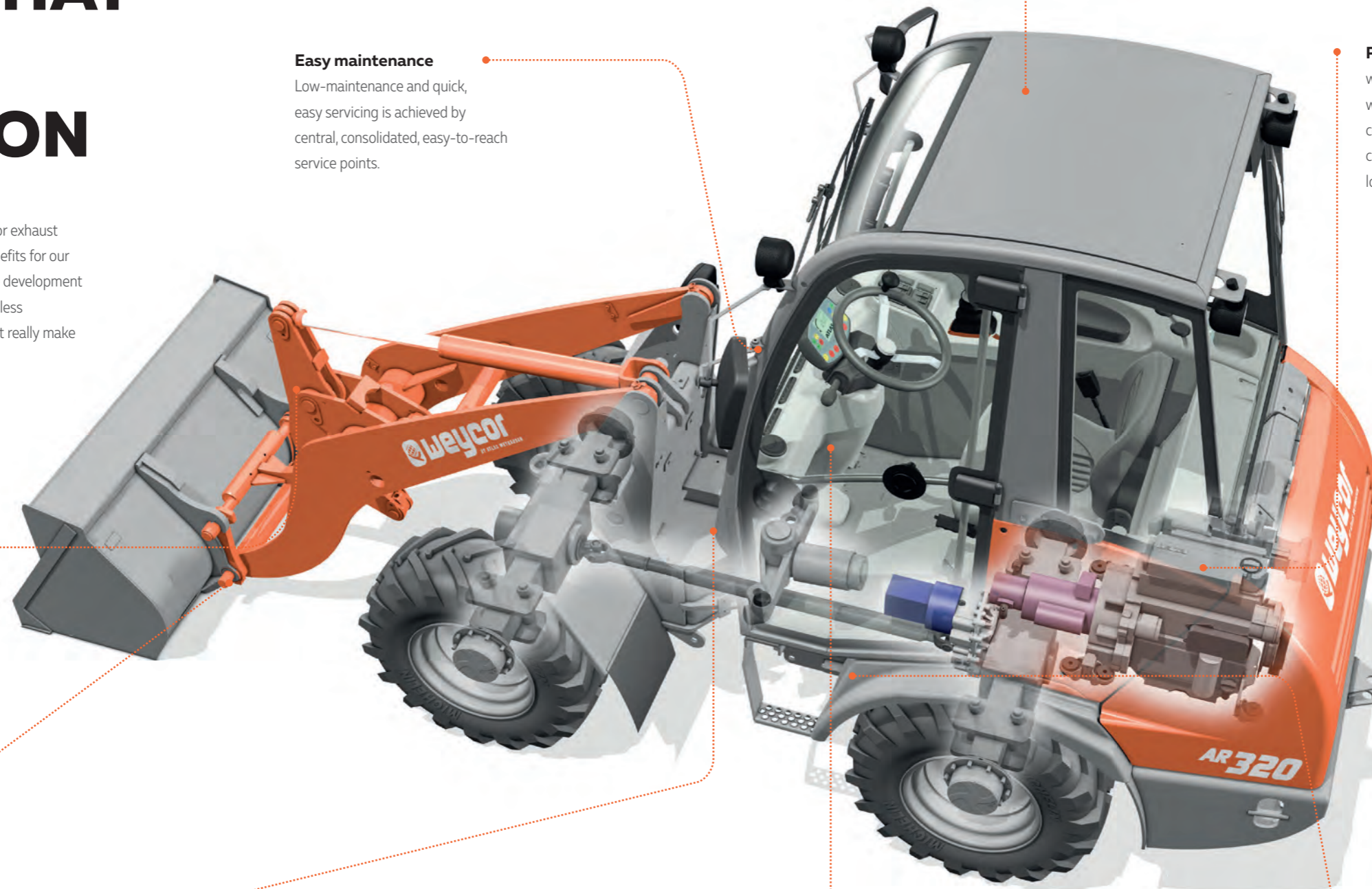
weycor wheel loaders are equipped with state-of-the-art engines which combine high power reserves for challenging operations with up-to-date low emission values.

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

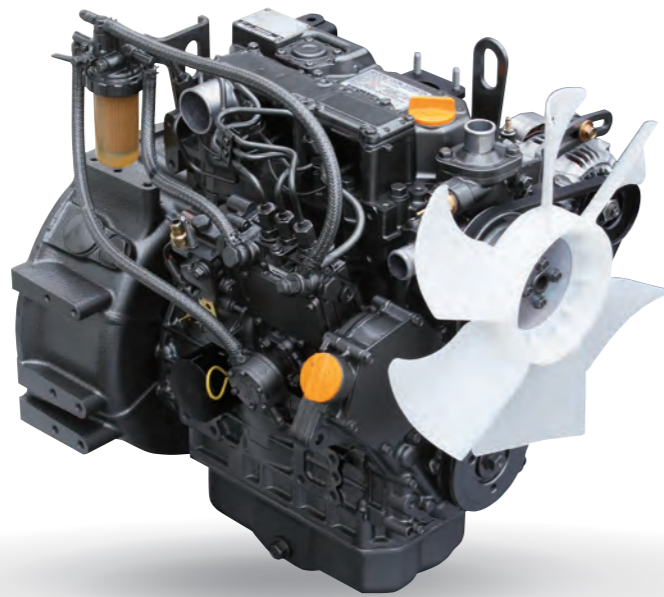
The motor convinces by an electronic motor control with intelligent connection to the drive management. This ensures the best engine performance with low fuel consumption.

Mighty performance

18.5 kW at a maximum of 3,000 rpm

Compliance with emission standards

EU Level V



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 ⁽¹⁾ (25 HP) at 3,000 rpm
Max. torque	96 Nm at 1,800 rpm
Cubic capacity	1,116 cm ³
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: Operating speed range 0–6.5 km/h Road speed range 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	
Standard brake: 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. Parking brake: 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 (Special tires upon request)	
Standard: 10.0/75-15.3 MPT – Multi-purpose tires for sand and gravel surface, woodland, roads and paths Special tires: 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 Lifting 5.0 s Lowering 3.5 s Tipping 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	

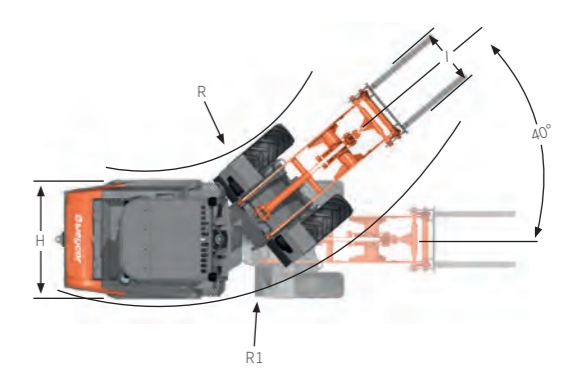
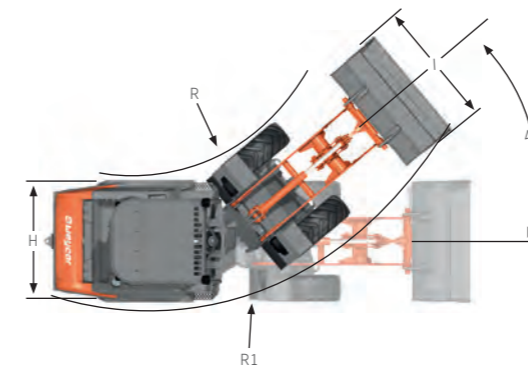
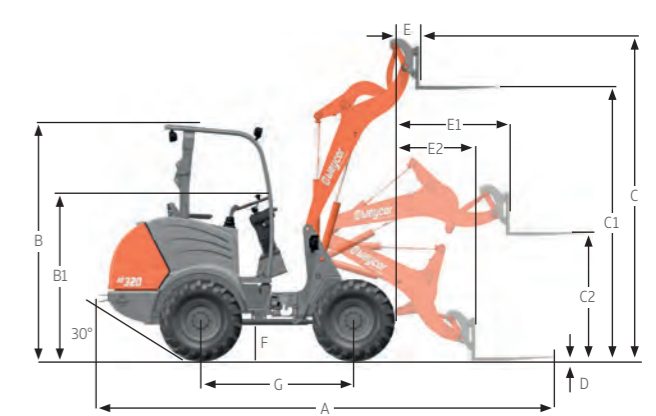
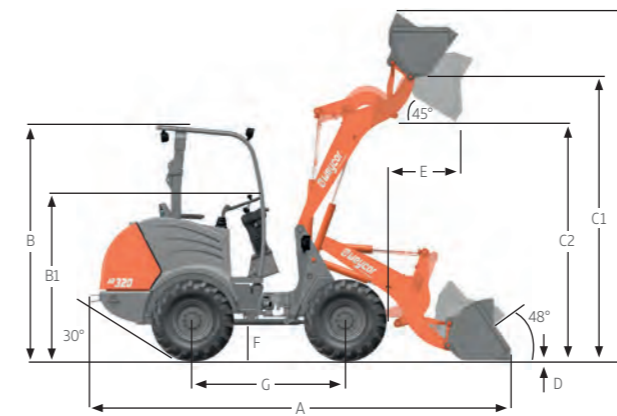
Equipment – Option	
4th section front or rear Main battery switch Special paintings and oils Cyclone dust separator Trailer coupling Left hinged adjustable window, right window to open can be fastened Hot water heating with heat exchange and 3-stage-fan Front windscreen ventilation, variable output Rear 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	

(1) Power output ISO 14396, exhaust aftertreatment according to EU 2016/1628.

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/m³)

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

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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AR 380

OPERATING WEIGHT
3,500 kg

ENGINE OUTPUT
37 kW (49,6 HP)

SHOVEL CAPACITY
0.5 - 0.8 m³



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3,500⁽¹⁾ KG OPERATING WEIGHT

37⁽²⁾ KW (49,6 HP) ENGINE OUTPUT

0.5 M³ SHOVEL CAPACITY

Operating data

Shovel capacity	0.5 m³
Track width	1,010 mm
Turning radius (outer shovel edge)	3,490 mm
Tear out force	3,850 daN
Torque	2,650 daN
Tipping load, straight	2,575 kg
Tipping load, articulated	2,252 kg
Lifting capacity at ground level	2,470 daN
Operating weight	3,500 kg

Specifications

Differing data for use of pallet forks⁽³⁾ (500 mm distance to center of gravity)

Static tipping load, straight and articulated	1,712 kg
Lifting capacity	1,369 daN
Payload 80% even surface ⁽⁴⁾	1,370 kg
Payload 60% uneven surface ⁽⁴⁾	1,027 kg

Sound level

Average sound power level LWA ⁽⁵⁾	98.2 dB(A)
Guaranteed sound power level LWA ⁽⁵⁾	99.0 dB(A)
Sound pressure level LPA ⁽⁶⁾	82.0 dB(A)
Vibration values hand/arm/whole body vibration ⁽⁷⁾	< 2.5/0.5 m/s²

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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° , 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 and wide-opening engine hood.

Optional cabin version

In addition to the excellent circumferential visibility in the wheel loader, its clearly arranged controls and its ergonomic design. In the agricultural cab, the steering column is adjustable.

Powerful drive unit

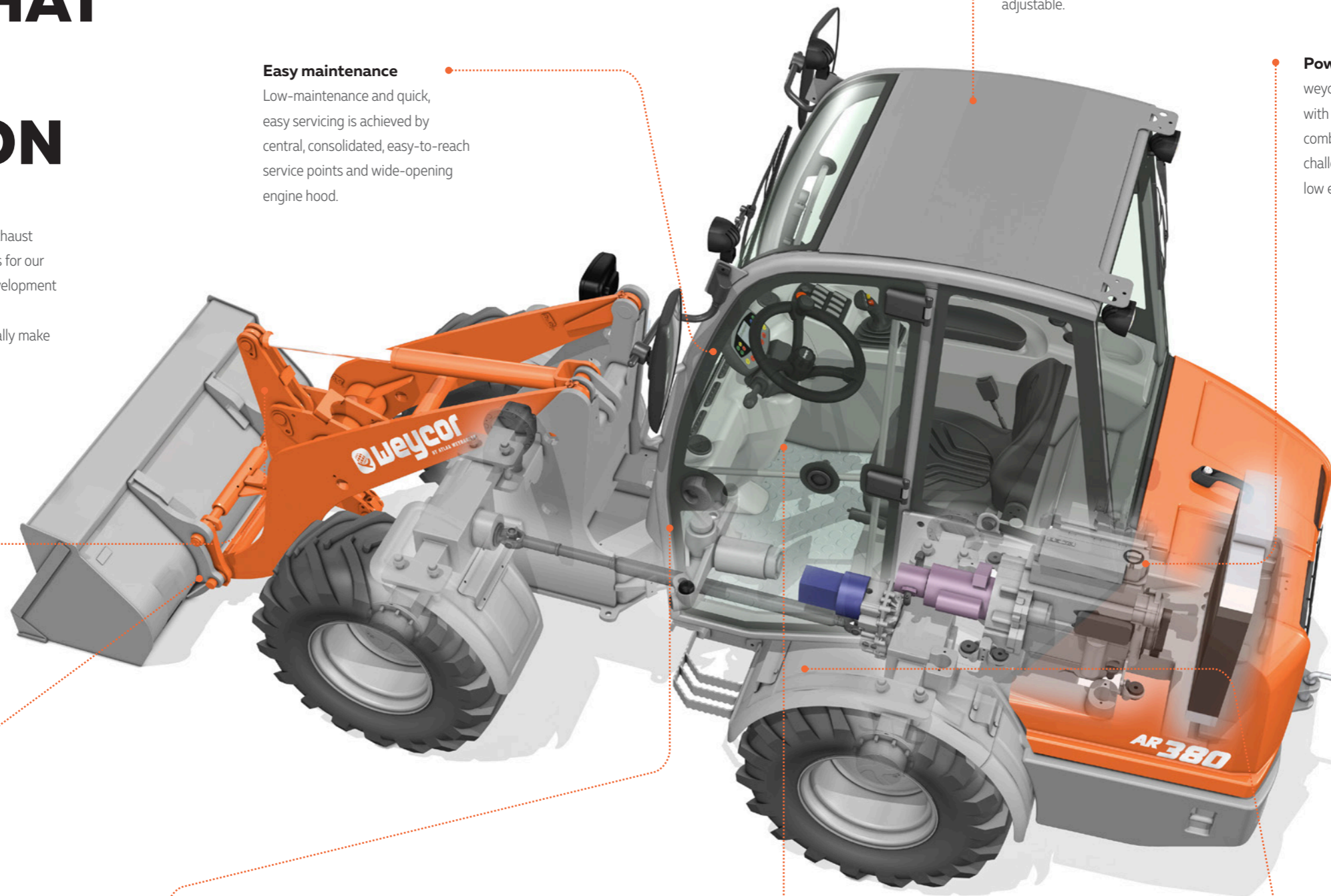
weycor wheel loaders are equipped with state-of-the-art engines which combine high power reserves for challenging operations with up-to-date low emission values.

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

Kubota D1803 CR-T – reliable and durable

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



Mighty performance

37 kW at a maximum of 2,700 rpm

Compliance with emission standards

EU Stage V, EPA Tier 4

Clean and quiet performance

The common rail system has optimised combustion and created a longer-lasting, quieter engine with greater fuel efficiency. Through careful selection and control of exhaust aftertreatment components, we are able to offer a clean and powerful engine. Kubota O3 Series engines have been developed step by step to meet the requirements of each EPA stage. This enables us to offer our customers worldwide engines that are certified for the relevant emission regulations.

The D1803-CR-T-E5 engines have been designed to meet the stringent regulations: EPA/CARB Tier4 + EU Stage V.



TECHNICAL DATA

Engine

Model	Kubota D1803 CR-T
Design	water-cooled
Output	37 kW ⁽¹⁾ (49.6 HP) at 2,700 rpm ⁻¹
Max. torque	150 Nm at 1,600 rpm ⁻¹
Cubic capacity	1,826 cm ³
Number of cylinders	3 in line

Electrical system

Operating voltage	12 V
Battery	12 V / 72 Ah
Generator	14 V / 70 A
Starter	12 V / 2,0 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

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: 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.

Parking brake: Drum brake via funicular link acting on all 4 wheels with engine switch off.

Axles

Rigid axles with planetary reduction gears in wheel hubs.
45%-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 230 bar

Emergency steering function

Tires (Special tires upon request)

Standard: 15.0/55-17 – Multi-purpose tires for earth moving machines, particularly surface friendly, gardening and landscaping

Special tires: 11.5/80-15.3 MPT –Multi-purpose tires for sand and gravel surface, woodland, roads and paths

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 280 bar, Delivery of pump 43.2 l/min

Fuel/oil capacities

Diesel	70 Liter
Hydraulic oil	43 Liter
Engine oil	7 Liter
Front axle	4 Liter
Rear axle	3.5 Liter
Gear oil	0.65 Liter
Cooling liquid	8 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

Lifting **4.0 s**

Lowering **3.0 s**

Tipping **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

Laterally tiltable soundproof ROPS cabin

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

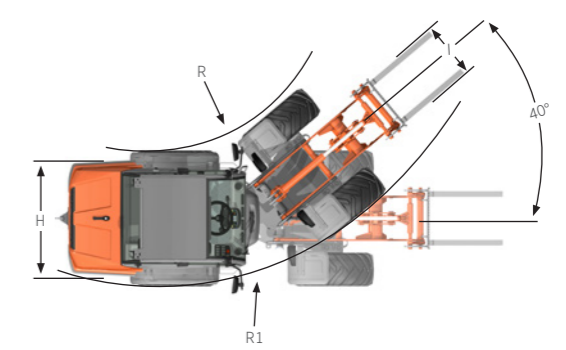
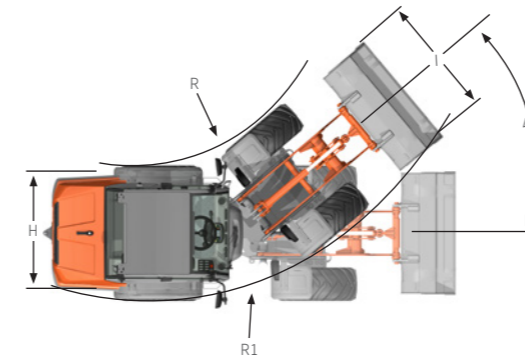
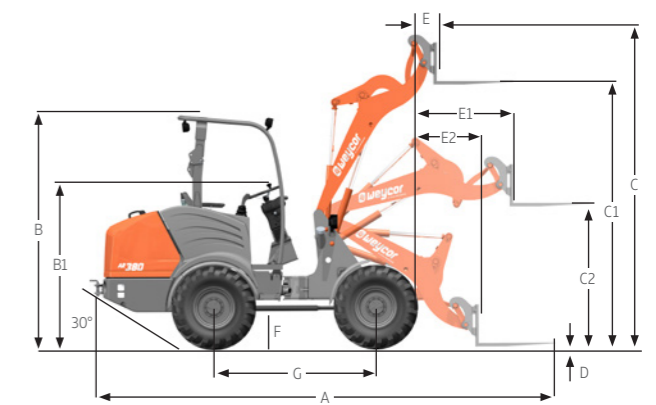
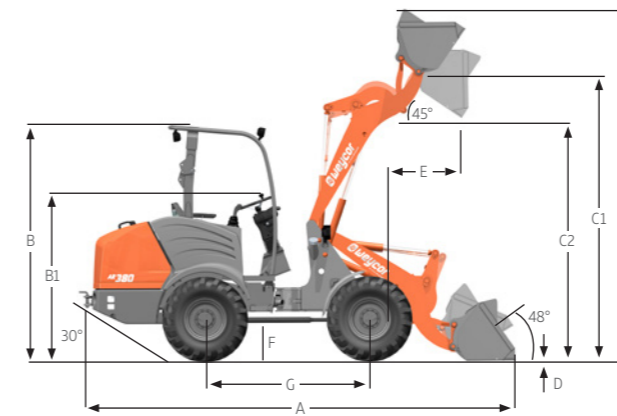
Additional counterweight

(1) Power output ISO 14396, exhaust aftertreatment according to EU 2016/1628.

TECHNICAL DATA

	AR 380 with standard shovel	AR 380 with pallet forks
A	4,581 mm	5,073 mm
B	2,456 mm	2,447 mm
B2	2,320 mm*	2,320 mm*
C	3,624 mm	3,323 mm
C1	2,927 mm	2,716 mm
C2	2,363 mm	1,170 mm
D	33 mm	118 mm
E	589 mm	279 mm
E1	-	1,048 mm
E2	-	681 mm
F	391 mm	391 mm
G	1,710 mm	1,710 mm
H	1,500 mm	1,500 mm
I	1,550 mm	1,030 mm
R	1,641 mm	1,641 mm
R1	3,085 mm	3,085 mm

* Cab Version



With standard shovel

With pallet forks

Specific gravity for material handling weight (t/m³)

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



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