# AR 380

OPERATING WEIGHT 3,500 kg

ENGINE OUTPUT 37 kW (49,6 HP)

SHOVEL CAPACITY **0.5 - 0.8 m<sup>3</sup>** 

# PRELIMMINARY VERSION







Shovel capacity	0.5 m <sup>3</sup>
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

Differing data for use of pallet forks (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**	1,370 kg
Payload 60% uneven surface***	1,027 kg
Sound level	
Average sound power level L <sub>W</sub> A <sup>(1)</sup>	98.2 dB(A)
Guaranteed sound power level $L_WA^{(2)}$	99.0 dB(A)
Sound pressure level L <sub>p</sub> A <sup>(3)</sup>	82.0 dB(A)
Vibration values hand/arm/whole body vibration <sup>(4)</sup>	< 2.5/0.5 m/s <sup>2</sup>

<sup>\*</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 ISO 6396. (4) According to ISO 8041.

# 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.

3,500\* KG OPERATING WEIGHT

37 KW (49,6 HP) ENGINE OUTPUT

0.5 M<sup>3</sup> SHOVEL CAPACITY

#### 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 ( $t/m^3$ ) of the shovel contents, which you can take as approximations from the data sheet's TABLE OF SPECIFIC WEIGHTS IN  $t/m^3$ . 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.

<sup>\*</sup> 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.

### Easy maintenance

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

#### 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 ±12° 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.

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.

#### Powerful drive unit

Optional cabin version

adjustable.

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

> 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.

#### 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 03 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**

Kubota D1803 CR-T
water-cooled
37 kW (49.6 HP) at 2,700 rpm
150 Nm at 1,600 rpm
1,826 cm <sup>3</sup>
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.

#### Stooring

Fully hydraulic center pivot steering

Front and rear wheels follow the same track

Steering angle of  $40^{\circ}$  to each side,  $\pm 12^{\circ}$  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, particulary 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

**Tipping** 

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

#### **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 travelt

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

**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

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 largetinted screens

Anti-theft-device with code stick

Radio

Warning beacon

Front and rear working lights

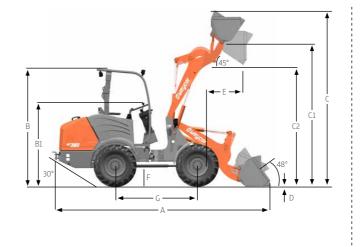
Additional counterweight

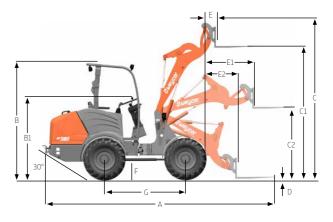
## **TECHNICAL DATA**

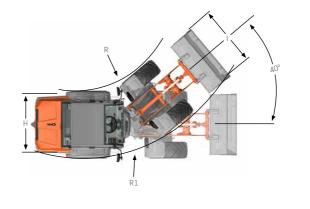
AR 380 with standard shovel	AR 380 with pallet forks
4,581 mm	5,073 mm
2,456 mm	2,447 mm
2,320 mm*	2,320 mm*
3,624 mm	3,323 mm
2,927 mm	2,716 mm
2,363 mm	1,170 mm
33 mm	118 mm
589 mm	279 mm
-	1,048 mm
-	681 mm
391 mm	391 mm
1,710 mm	1,710 mm
1,500 mm	1,500 mm
1,550 mm	1,030 mm
1,641 mm	1,641 mm
3,085 mm	3,085 mm

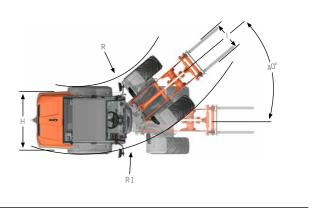
\* Cab Version

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









With standard shovel

With pallet forks









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.