

OPERATING WEIGHT **3,500 kg** 

ENGINE OUTPUT **37 kW (49,6 HP)**  SHOVEL CAPACITY **0.5 - 0.8 m<sup>3</sup>** 

A to





### **Operating data**

AR 380

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

#### Specifications

Differing data for use of pallet forks <sup>(3)</sup> (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 <sup>(4)</sup>	1,370 kg
Payload 60% uneven surface <sup>(4)</sup>	1,027 kg
Sound level	
Average sound power level LWA <sup>(5)</sup>	98.2 dB(A)
Guaranteed sound power level $LWA^{(5)}$	99.0 dB(A)
Sound pressure level LPA <sup>(6)</sup>	82.0 dB(A)
Vibration values hand/arm/whole body vibration <sup>(7)</sup>	< 2.5/0.5 m/s <sup>2</sup>

(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 ISO 6396. (7) 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<sup>(1)</sup> KG OPERATING WEIGHT

## (2) KW (49,6 HP) ENGINE OUTPUT



### 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/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.

(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.

#### Easy maintenance

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

#### 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 ±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.

#### 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.

#### **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.

### 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**

Engine	
Model	Kubota D1803 CR-T
Design	water-cooled
Output	37 kW <sup>(1)</sup> (49.6 HP) at 2,700 rpm <sup>-1</sup>
Max. torque	150 Nm at 1,600 rpm <sup>-1</sup>
Cubic capacity	1,826 cm <sup>3</sup>
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  $40^{\circ}$  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

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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	s by weycor joystick		
Parallel movement while	using pallet forks		
Automatic shovel return	to excavation position		
Automatic mid position of	of joystick		
Locking device acc. to Ge	erman 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 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 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 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	4,581 mm	5,073 mm
3	2,456 mm	2,447 mm
32	2,320 mm*	2,320 mm*
<u> </u>	3,624 mm	3,323 mm
[]	2,927 mm	2,716 mm
22	2,363 mm	1,170 mm
)	33 mm	118 mm
Ē	589 mm	279 mm
E1	-	1,048 mm
E2	-	681 mm
=	391 mm	391 mm
Ĵ	1,710 mm	1,710 mm
4	1,500 mm	1,500 mm
	1,550 mm	1,030 mm
२	1,641 mm	1,641 mm
R1	3,085 mm	3,085 mm
		* Cab Ver





With standard shovel

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 pallet forks



# You can find our current product range and more exciting details at: **www.weycor.de**

weycor is a brand of ATLAS WEYHAUSEN GMBH.

