

Recycler WR 2500

Technical specification



Technical specification

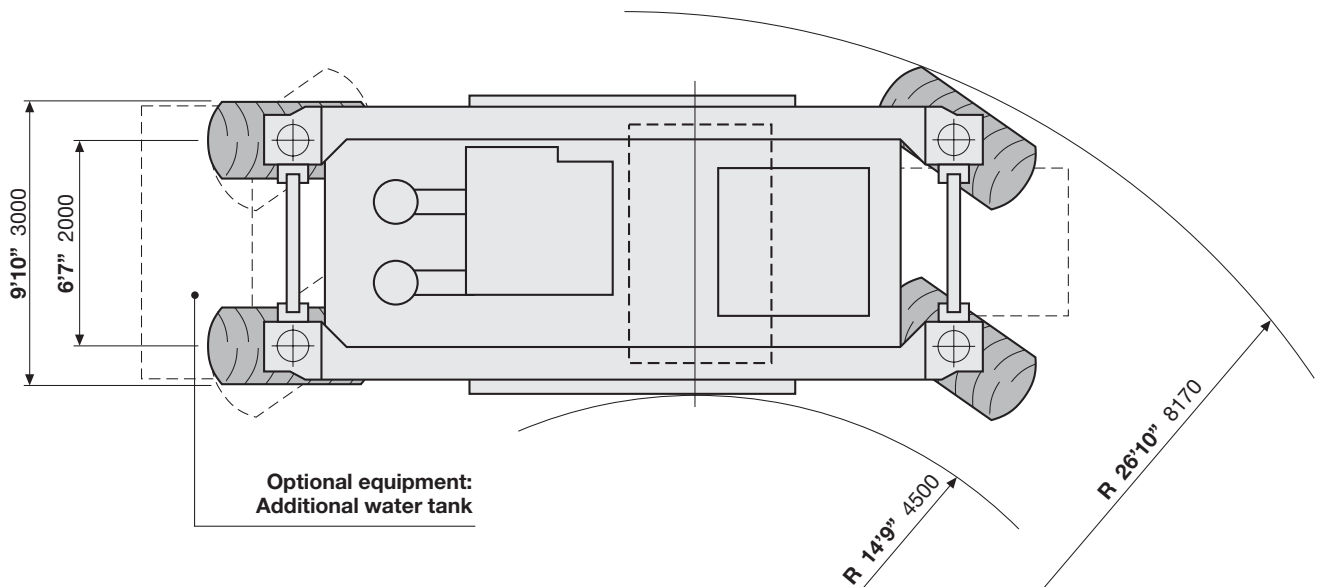
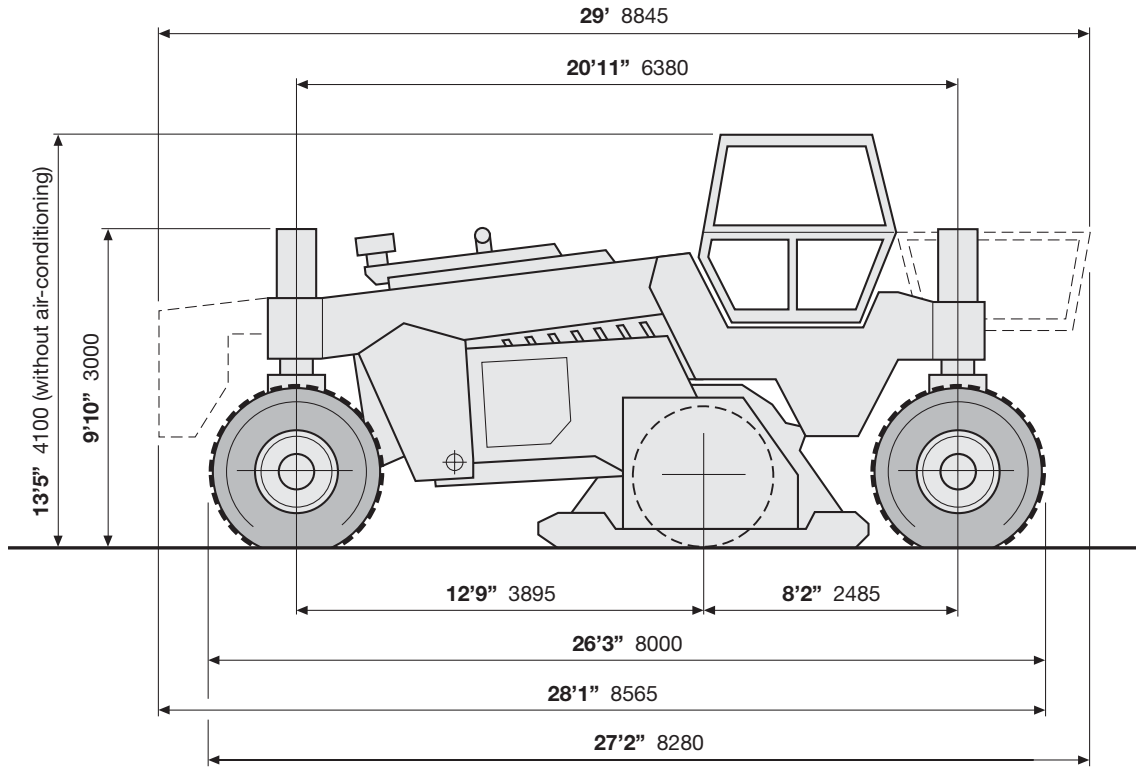
| | Recycler WR 2500 | Recycler WR 2500 Milling width 3000 mm |
|-----------------------------------|---|---|
| Milling width max. | 8' 2,438 mm | 10' 3,048 mm |
| Milling depth *1 | 0 – 20" 0 – 500 mm | 0 – 20" 0 – 500 mm |
| Milling drum | | |
| Spacing | 1 1/4" 30 mm | 1 1/2" 37 mm |
| Number of tools | 248 | 248 |
| Drum diameter with tools | 58" 1,480 mm | 58" 1,480 mm |
| Drum diameter without tools | 34" 860 mm | 34" 860 mm |
| Drum inclination max. | 8° | 8° |
| Engine | | |
| Manufacturer | Mercedes-Benz | Mercedes-Benz |
| Type | OM 444 LA | OM 444 LA |
| Cooling | Water | Water |
| No. of cylinders | 12 | 12 |
| Output | 455 kW/610 HP/619 PS | 455 kW/610 HP/619 PS |
| Engine speed | 2,100 min ⁻¹ | 2,100 min ⁻¹ |
| Displacement | 1,338 in ³ 21,930 cm ³ | 1,338 in ³ 21,930 cm ³ |
| Fuel consumption: 1/1 load | 29 gal/h 110 l/h | 29 gal/h 110 l/h |
| Fuel consumption: 2/3 load | 21 gal/h 80 l/h | 21 gal/h 80 l/h |
| Speed / Gradeability | | |
| 1 st speed of advance | 0 – 49 ft/min 0 – 15 m/min | 0 – 49 ft/min 0 – 15 m/min |
| 2 nd speed of advance | 0 – 131 ft/min 0 – 40 m/min | 0 – 131 ft/min 0 – 40 m/min |
| 3 rd speed of advance | 0 – 262 ft/min 0 – 80 m/min | 0 – 262 ft/min 0 – 80 m/min |
| 4 th speed of advance | 0 – 656 ft/min 0 – 200 m/min | 0 – 656 ft/min 0 – 200 m/min |
| Theor. gradeability, max. | 57 % | 57 % |
| Ground clearance | 15" 370 mm | 15" 370 mm |
| Weights / Loads *2 | | |
| Front axle load, full tanks | 38,140 lbs 17,300 daN (kg) | 39,904 lbs 18,100 daN (kg) |
| Rear axle load, full tanks | 34,613 lbs 15,700 daN (kg) | 35,715 lbs 16,200 daN (kg) |
| Shipping weight | 67,241 lbs 30,500 daN (kg) | 70,107 lbs 31,800 daN (kg) |
| Operating weight, CE *3 | 69,887 lbs 31,700 daN (kg) | 72,753 lbs 33,000 daN (kg) |
| Operating weight max. | 72,753 lbs 33,000 daN (kg) | 75,619 lbs 34,300 daN (kg) |
| Tyres | | |
| Type of tyres | Diagonal | Diagonal |
| Tyre size, front | 28 L 26 | 28 L 26 |
| Tyre size, rear | 28 L 26 | 28 L 26 |
| Tank capacities | | |
| Fuel tank | 422 gal 1,600 l | 422 gal 1,600 l |
| Hydraulic fluid tank | 71 gal 270 l | 71 gal 270 l |
| Water tank | 145 gal 550 l | 145 gal 550 l |
| Electrical system | 24 V | 24 V |
| Shipping dimensions | | |
| Dimensions of machine (L x W x H) | 27'3" x 10'6" x 10'6" 8,300 x 3,200 x 3,200 mm | 27'3" x 12'6" x 10'6" 8,300 x 3,800 x 3,200 mm |

*1 = The maximum milling depth may deviate from the value indicated, due to tolerances and wear.

*2 = All weights refer to basic machine without any additional equipment.

*3 = Weight of machine with half-full water tank, half-full fuel tank, driver (75 kg) and tools.

Dimensions in American standard and mm



Machine width for optional equipment "Milling width 10' (3,000 mm)": 12'4" (3,750 mm)

Technical description

Basic design

Recycler and stabilizer with mechanically driven milling drum and two working directions.

Chassis

Rigid welded structure with mounts for the individual units and attachments, as well as an integrated water tank. All components are readily accessible for maintenance and servicing.

Wheels

The wheels of the recycler WR 2500 are suspended from the chassis by means of round columns, the height of which can be adjusted hydraulically to set the machine to its working and transport positions.

Steering

The WR 2500 is equipped with a fingerlight hydraulic four-wheel steering system which can be adapted to the momentary working direction.

Traction drive

Each wheel is driven by a separate hydraulic motor and each hydraulic motor is supplied with oil via a separate variable-displacement hydraulic pump. The four travelling speeds can be infinitely adjusted from zero to maximum working speed in milling and travelling gear. Uniform traction is ensured by a permanent differential lock. The feed rate is set on the control console.

Power control

The machine is equipped with an automatic power control which adjusts the feed rate as a function of the diesel engine load. The power control can be deactivated so that the feed rate can also be set by hand.

Brakes

Braking is achieved by drag from the hydrostatic transmission. A manual multiple disk parking brake is additionally installed on each wheel.

Milling drum

The milling drum operates in up- or down-milling direction, depending on the direction of travel. Quick-change

tool holders are welded onto the body of the drum as a standard feature to hold the round-shank cutters. Special edge segments ensure a clean milled edge. The hydraulically adjusted scraper blade ensures a good mixed result. The momentary angular position of the crusher bar and scraper blade is indicated by mechanical scales within view of the operator.

Tool changes

The scraper blade can be swung aside hydraulically to provide access to the milling drum for tool changes. The use of quick-change tool holders reduces the repair work to a minimum.

Milling drum drive

The milling drum is driven mechanically. The drive power is transmitted from the diesel engine via a shifting clutch and power belts to the manual gearbox. The power transmission belts are automatically retensioned via a hydraulic cylinder. The speed of the milling drum can be set in four stages for optimum results.

Milling depth control

The milling depth can be infinitely varied via the four lifting columns or by swivelling the complete working station.

Soundproofing

Soundproofing is a standard feature and reduces the noise to a tolerable level for both the operating personnel and the environment.

Operator's console

The operator's console is located in the middle part of the machine. In addition to the steering wheel, the height and angle of which can be adjusted, it includes an ergonomically positioned seat for the operator which, together with the low height and orderly arrangement, makes this machine simple to operate. The modern controls and operating elements are located within easy reach and in the operator's field of vision. The operator's console can also be

hydraulically displaced to the right or left for a better overview. It can also be rotated through 180° to ensure optimum adjustment to the momentary direction of work.

Instrumentation

A multi purpose display shows operating hours, oil pressure, motor temperature, charging air temperature, operating voltage, hydraulic fluid temperature, gearbox temperature (milling drum), engine speed, diesel tank filling level and charge control. Furthermore contamination level indicator for filters.

CGC (Cockpit Graphic Centre)

During cold recycling works all data input for initial settings and control of the addition of stabilizing or binding agents is done via the display of the CGC. The job's data can be viewed there or can be printed via the optional printer.

Hydraulic system

Separate hydraulic systems for traction drive, control functions and cooling system. The hydraulic pumps are driven by the diesel engine via a PTO gear.

Electrical system

24 V system with three-phase alternator and two 12 V batteries, starter, socket outlet and alarm, as well as the complete working lights.

Filling equipment

Water and diesel are filled via generously dimensioned filler ports.

Safety during transport

Robust retaining lugs with which to secure the machine on a low-bed trailer or when loaded by crane.

○ Standard ● Optional

| Equipment | Recycler WR 2500 |
|--|-----------------------|
| Frame / operator's platform | |
| Variable operator's console | ○ |
| Cab – heating with filter | ○ in EU countries |
| Cab – with air-conditioning | ● all other countries |
| Special painting | ● |
| Machine control / level control | |
| Slope control | ● |
| Height control with 2 ultrasonic sensors on each side | ● |
| Electronic grade and slope control on both sides | ● |
| CGC (Cockpit Graphic Centre) | ● |
| Printer for job data | ● |
| Milling drum | |
| Quick-change tool holder system | ○ |
| Quick change tool holder system with shaft diameter 7/8" (22 mm) | ● |
| Equipment for milling width 10' (3,000 mm) (only available ex factory) | ● |
| Crusher bar | ● |
| Pneumatic tool ejector | ● |
| Cold recycling unit | |
| Metering unit for emulsion or water | ● |
| Duplex metering unit for emulsion and water | ● |
| Metering unit for foamed bitumen | ● |
| Duplex metering unit for foamed bitumen and water | ● |
| Metering unit for additive for the foamed bitumen | ● |
| Special metering unit for water 475.5 gal/min (1,800 l/min) | ● |
| Miscellaneous | |
| Soundproofing | ○ |
| Working lights | ○ |
| Warning lights | ○ |
| Reversing horn | ○ |
| Loading and lashing lugs | ○ |
| Comprehensive tool kit | ○ |
| 4-wheel steering | ○ |
| Air compressor | ○ |
| Engine power control | ○ |
| Comprehensive safety package with Emergency-OFF switches | ○ |
| Safety certificate by the employer's liability insurance association | ○ |
| CE-mark | ○ |
| Air prefilter | ● |
| High-pressure water wash down | ● |
| Water tank 422 gal (1,600 l) | ● |



WIRTGEN AMERICA

Wirtgen America Inc.
6030 Dana Way
Nashville, TN 37013, USA

Phone: (615) 501 - 0600
Fax: (615) 501 - 0691
Internet: www.wirtgenamerica.com