

VOLVO MILLING MACHINE

MW500



INNOVATIVE MILLING TECHNOLOGY IN A COMPACT MACHINE

As a world leader in paving and compaction equipment, Volvo is proud to introduce the MW500 milling machine. The MW500 is a “utility-class” milling machine designed for maneuverability and versatility in applications such as patching, joints, trenching, and close cutting around street and roadway obstructions. Guided by input from customers like you, our global engineering resources have incorporated new technologies for this class of machine to allow you to complete your jobs more safely and efficiently than ever before.

Optimal traction control

The patented Volvo Line Manager System provides the operator with unprecedented straight-line steering capability and overall machine control. This innovative system, in conjunction with the standard all-wheel drive and anti-slip control, electronically compensates for machine drift caused by the forces of the cutting drum rotation. With more efficient control of the machine, the operator can get the job done quickly with fewer mistakes.

Advanced control and diagnostics

The innovative control system brings advanced technology to the compact milling-machine class. The control panel includes a brightly illuminated display and backlit membrane switches for low-light operations. With automatic depth control, the operator can enter the desired cutting depth and is assured precise milling control. Performance messages and diagnostic information are displayed in common language, rather than codes, to aid in troubleshooting.

Maneuverability = Productivity

With the tightest cutting radius in its class, 200 mm (7.87 in), the four-wheel MW500 doesn't sacrifice stability or maneuverability. The MW500 also offers class-leading working and travel speeds, to move quickly between and during jobs. For flush cutting on the right hand side, the right rear support leg and wheel can be swiveled inboard to get up close to obstacles.

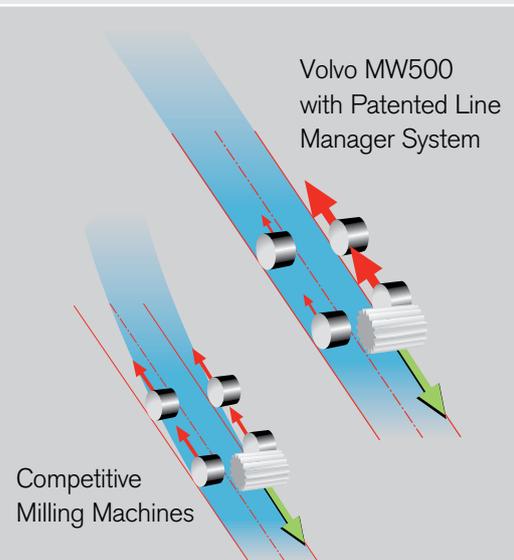
Ergonomic operator platform

The Volvo MW500 has a spacious operator's platform with an adjustable steering wheel column and control panel for optimal ergonomics. This platform provides the operator a 360-degree view of the working area and excellent visibility to the cutting area. The propel and conveyor joysticks are comfortable and conveniently located for ease of operation. The propel joystick incorporates additional functionality to easily control the raising and lowering of the rear legs to increase jobsite efficiency.

A machine designed with you in mind

In addition to putting all our global engineering resources into this milling machine, we sought out customer input to better understand the challenges you face on a daily basis. We know you're out there every day, and we know how productivity and reliability determine the success of your business.

This new milling machine allows us to serve you at all stages of the road-building process. The Volvo road machinery business has a proud, 175-year legacy that has produced many industry standards and remains the choice of professionals. Combined with our full line of road machinery products — including motor graders, pavers, and compactors — these machines will help you achieve maximum productivity in all phases of the road construction and rehabilitation process.





GROUNDBREAKING SOLUTIONS FOR YOUR MILLING PROJECTS

Safety

- Backup alarm, horn, and adjustable beacon on operator platform
- Three mirrors: two on front of machine, one on right hand railing
- Three emergency stop switches located on steering column and on both sides near legs
- Operator-presence floor switch and operator-presence seat switch
- Active indication of safety interlocks

Water system

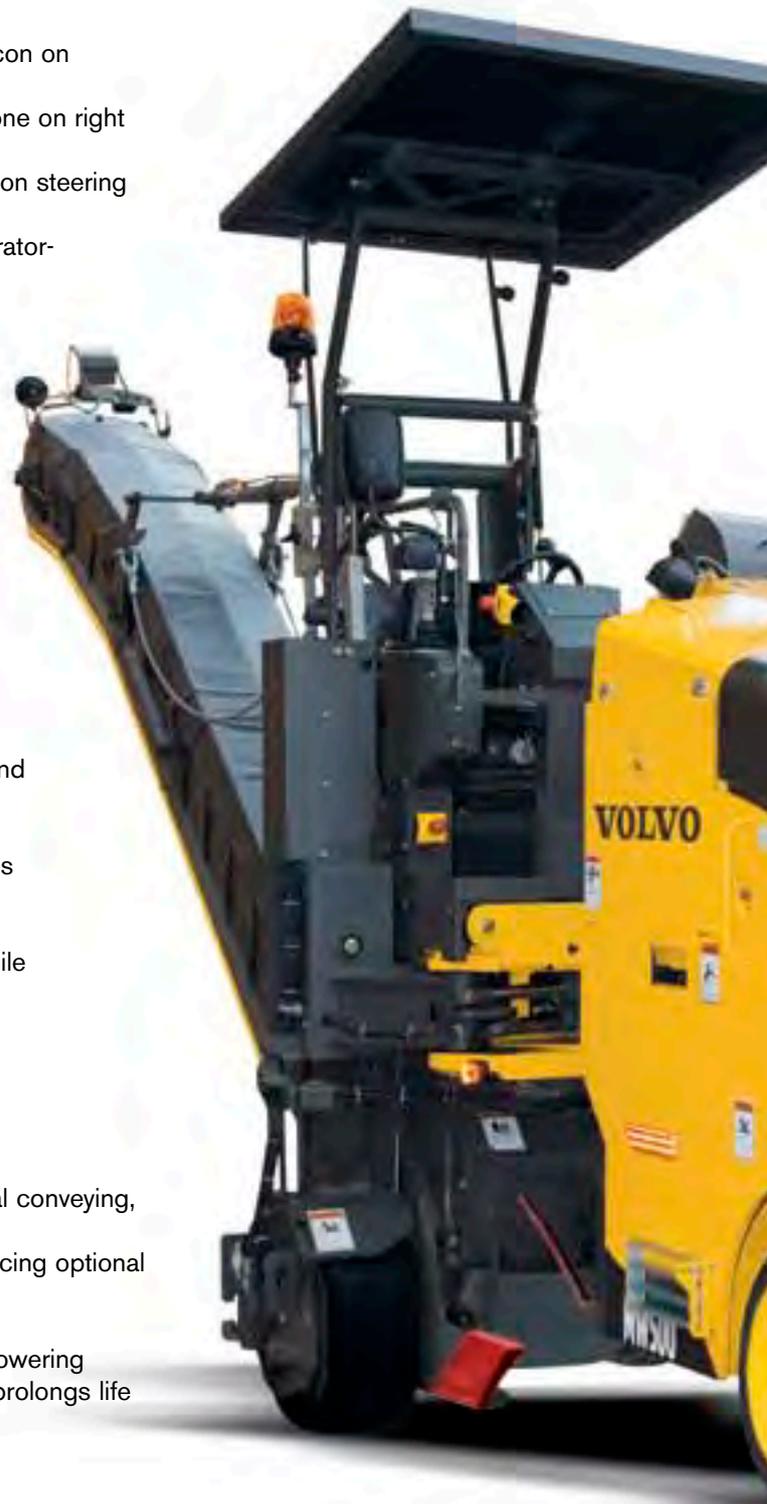
- 590,5 l (156 gal) plastic tank
- Spray bar in drum housing cools and cleans teeth, reduces dust emissions
- Dual water fill

Conveyor system

- Optional package includes quick disconnect conveyor and hydraulically raised rear mold board
- Adjustable four ways: up, down, and 25° to each side
- Right side conveyor swing is limited when right rear leg is swiveled inboard
- Box-type frame design with canvas covers
- Underside conveyor wheels prevent material sticking, while conveyor cleats help move material

Drum area

- Standard 500 mm (19.69 in) drum width for optimal conveying, narrower options available
- Standard 15 mm (.625 in) tooth spacing, "fine" spacing optional
- Standard weld-on tooth holders provide durability, quick-change tooth-holder system optional
- Hydraulically raised side skirts for easy raising and lowering
- Heavy side-skirt material content adds stability and prolongs life of drum housing





Operator area and controls

- Ergonomic operator station with adjustable control panel and steering wheel column
- Integrated lockable control panel cover
- Excellent visibility to drum cutting area
- Advanced control panel features illuminated display of gauges, milling depth, and safety messages
- Backlit membrane switches, preset milling depth and memory, profile programs
- Control panel uses same proven technology as Volvo Titan pavers
- Drive lever pivots up 30° for improved ergonomics in standing, sitting, or crouching positions, down 30° for vandalism protection
- Folding operator canopy is optional



Serviceability

- Easy access to all routine maintenance points
- Swing-out valve block
- Remote hydraulic drains

Powertrain

- Deutz TCD 2012 liquid-cooled diesel engine provides 95 kW (127 hp) @ 2 300 rpm
- Heavy-duty belt drive with automatic hydraulic belt tensioning and central shaft configuration for optimal belt tension

Drive system

- Standard all-wheel drive with anti-slip control
- Exclusive Line Manager System offers better straight-line steering and easier handling by adjusting power to wheel motors and compensating for offset rear drum spinning in opposite direction
- Travel speed (0 – 8 km/h [0 – 5 mph]) and working speed (35 m/min [0 – 115 fpm]) both best in class, improving productivity
- 210 mm (7.87 in) cutting radius similar to three-wheel competitive models but with the improved stability of a four-wheel machine
- Right rear leg swivels out for added stability and in for flush cutting along right hand side obstacles

VOLVO SAFETY COMMITMENT

Operator safety has always been a core value at Volvo, and the design of the MW500 is a perfect example. Whether it's tramming, working, or undergoing maintenance, the MW500 is packed with safety features — from stability technology to double-activation switches to vandalism prevention and more.

- Stability technology. When the rear right leg is swiveled inboard, the conveyor has limited swing to the right. This ensures that the center of gravity does not extend past the edge of the milling drum. When the leg is in its outboard position, the conveyor can swing freely in both directions.
- When the teeth are being replaced, the milling drum is automatically deactivated by a contact switch.
- To start the milling drum, the operator must press two buttons at the same time. This prevents accidental activation.
- During maintenance work under the milling machine, the support wheels are secured with pins to prevent unintentional lowering.
- The MW500 has an emergency stop on the operator platform and another on both the left and right sides that can be activated from the ground.
- To protect against vandalism, the joystick can simply be folded down and locked when not in use. The control panel is protected against damage by an integrated steel cover.

A machine designed with you in mind

The MW500 is designed with maneuverability and versatility in mind to complete the following applications:

- Patching
- Joints
- Trenching
- Trimming
- Close cutting around street and roadway obstructions





SUPPORT YOU CAN TRUST

When you buy a Volvo, you don't only get a construction machine of the highest quality. You also get access to all the products and all the competence that is required for your machine to give you maximum profit and growth.

We care about your ownership — today and tomorrow

When you invest in a Volvo construction machine, you get more than a construction machine of the very highest quality. But of course, even the best machine needs service and maintenance, especially considering the extreme stresses to which your machine is subjected. Your machine shouldn't only be productive today, it should also be productive tomorrow.

We care about your operation — anywhere at any time

When you invest in a construction machine, the knowledge of having good service and access to the right parts is just as important as the price — if not more important. After all, it is the total cost during the machine's life that counts. With all the products and resources we have at our disposal, we can offer you the very best support. Anywhere at any time.

We care about the operator — day after day

An aspect of major importance in Volvo machines is the operator's environment. If it isn't good, it doesn't matter how good the rest of the machine is.

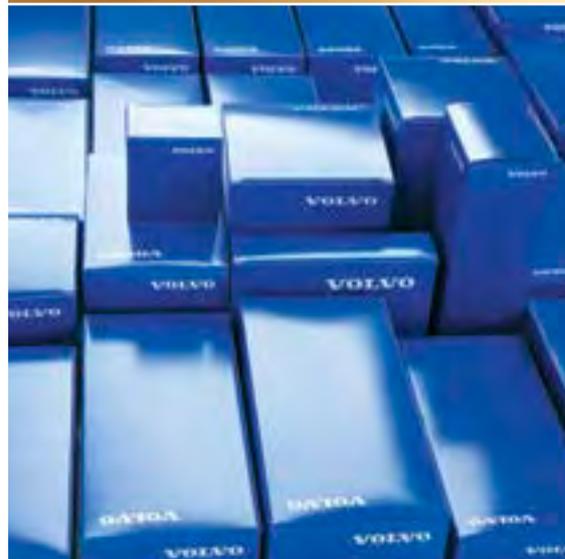
A machine operator has a job full of responsibility, and the productivity demands are high. Operators with a safe, comfortable, and ergonomic operator's station do a better job and get more out of their machine. Day after day.

Genuine Volvo Parts

Genuine Volvo Parts constitute a system where each individual part is designed for perfect function with the other parts. By always using Genuine Volvo Parts, your Volvo will retain the features it had when you bought it.

High competence and the right tools — profitable for you

We are specialists who know your machine, and all our service technicians have the competence and the commitment required to give you peace of mind and good economy in your operation. With the right competence we do the job faster, saving you valuable time. We also do the job in the right way and with the right tools.





SPECIFICATIONS

Model		MW500
Engine (Diesel)		
Model		Deutz TCD 2012 L04 2V
Output	kW (hp)	95 (127) @ 2 300 rpm
Coolant		Liquid
Exhaust Emission		COM III A / EPA Tier 3
Standard Drum		
Drum Width (max)	mm (in)	500 (19.7)
Milling Depth (max) ¹	mm (in)	210 (8.3)
Tool Spacing	mm (in)	15 (0.6)
Number of Teeth		62
Drum Diameter	mm (in)	750 (29.5)
Working Performance		
Working Speed	m/min (fpm)	35 (114.8)
Travel Speed	km/h (mph)	7,9 (4.9)
Theoretical Gradeability		60 % (operation) / 10 % (max. travel speed)
Ground Clearance	mm (in)	230 (9.0)
Undercarriage		
Number of Wheels		4 (solid rubber)
Front-Wheel Dimensions (AR x W)	mm (in)	560 x 180 (22 x 7.1)
Rear-Wheel Dimensions (AR x W)	mm (in)	560 x 270 (22 x 10.6)
Conveyor		
Belt Width	mm (in)	350 (13.8)
Theoretical Conveyor Capacity	m ³ /hr (yd ³ /hr)	80 (104.6)
Electrical System		
Electrical System		24 volt
Transport Dimensions (L x W x H)		
Standard Version Without Conveyor	mm (in)	3 925 x 1 790 x 2 540 (154.5 x 70.5 x 100)
Standard Version With Conveyor	mm (in)	9 400 x 1 790 x 2 540 (370.1 x 70.5 x 100)
Tank Capacities		
Water Tank	l (gal)	600 (158.5)
Fuel Tank	l (gal)	220 (58.1)
Hydraulic Tank	l (gal)	68 (18)
Weights		
Front Axle Load, Full Tank		
Standard Version Without Conveyor	kg (lb)	4 550 (10,031)
Standard Version With Conveyor	kg (lb)	3 600 (7,937)
Rear Axle Load, Full Tank		
Standard Version Without Conveyor	kg (lb)	4 050 (8,929)
Standard Version With Conveyor	kg (lb)	6 000 (13,228)
Operating Weight EN500 ²		
Standard Version Without Conveyor	kg (lb)	8 100 (17,857)
Standard Version With Conveyor	kg (lb)	9 100 (20,062)
Shipping Weight ³		
Standard Version Without Conveyor	kg (lb)	7 600 (16,755)
Standard Version With Conveyor	kg (lb)	8 600 (18,960)

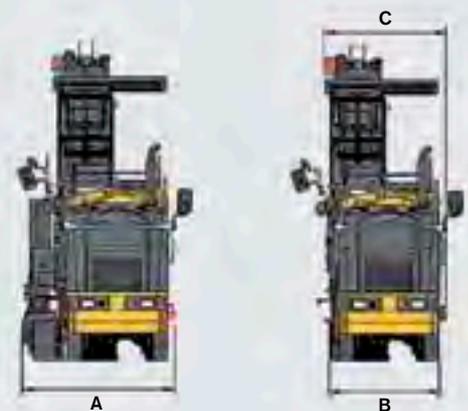
¹ Maximum milling depth may deviate from the value indicated, due to tolerances and wear

² Weight with 1/2 water, 1/2 fuel, and 80 kg (175 lb) operator ³ Dry weights of the basic machine without any additional equipment

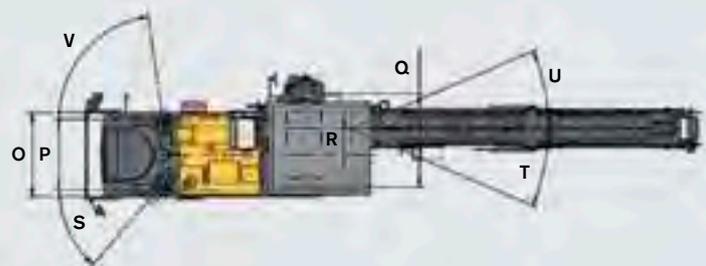
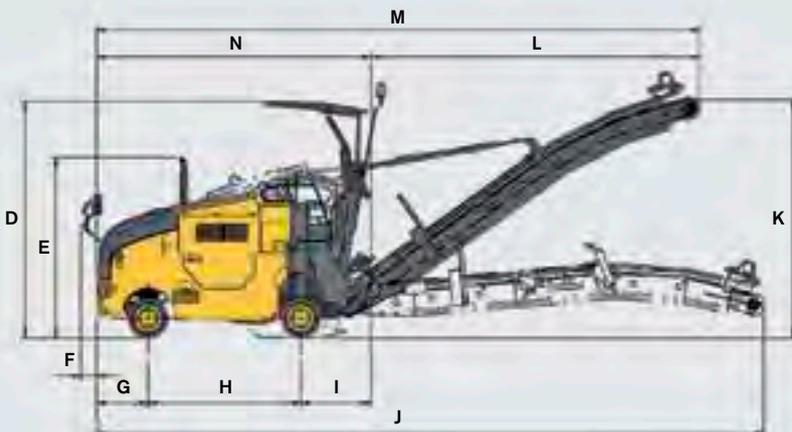
MACHINE DIMENSIONS

Dimension	mm (in)
A	1 790 (70.5)
B	1 300 (51.2)
C	1 440 (56.7)
D	3 326 (130.9)
E	2 536 (99.8)
F	228 (9.0)
G	720 (28.3)
H	2 150 (84.6)
I	992 (39.1)
J	9 392 (369.8)
K	3 348 (131.8)

Dimension	mm (in)
L	4 630 (182.3)
M	8 492 (334.3)
N	3 862 (152.0)
O	1 180 (46.5)
P	1 000 (39.4)
Q	1 310 (51.6)
R	370 (14.6)
Dimension	degrees
S	49°
T	23°
U	23°
V	82°



Features	Std	Opt
Deutz Diesel Engine, COM IIIA/EPA Tier 3	•	
4 Wheels, Front Wheel Steering	•	
Advanced Control and Diagnostic System	•	
Milling Drum 500 mm (19.7 in) - Standard Tool Holders (C 10 / 62 + RP18)		•
Milling Drum 500 mm (19.7 in) (750/500/15-1/54, With Sleeved Bit Holder System KPF201, Full Conveyor Functions)		•
Milling Drum 400 mm (15.7 in) (750/400/15-1/52, With Standard Bit Holder System C10, Conveying Process Hampered)		•
Milling Drum 300 mm (11.8 in) (750/300/15-1/45, With Standard Bit Holder System C10, Conveying Process Hampered)		•
Fine Milling Drum 500 mm (19.7 in) Milling Width (750/500/8-1/90, With Standard Bit Holder System C10, Conveying Process Hampered)		•
Cutting Ring (Milling Width 80 mm [3.1 in], Conveying Process Hampered)		•
Laterally Swiveling RH Wheel Support, Electric / Hydraulically Controlled	•	
Patented Line Manager (Traction Power Adjustment)	•	
Conveyor with Hydraulically Raised Rear Mold Board, Warning Strobe Light, Work Light and Horn		•
Vibration-isolated Operator Platform	•	
Folding Operator Canopy		•
Sprinkler System with Interval Switch (Water-Saving Feature)		•
Adaption for High Ambient Temperatures Up to 55° C (131° F)		•
Milling Box with Protective Cover	•	
Automatic Parking Brake	•	
Electronic Controlled All-wheel Drive with Anti-slip Control	•	
Electronic Output Regulator	•	
Safety Package Includes Warning Beacon, Rear-view Mirrors, Back-up Alarm, Operator Presence Cut-off Switch in Seat and Platform	•	
Special Assembly Device for Easy Drum Exchange		•
Tilting Adjustable Steering Column	•	
Adjustable Operator's Seat with Seat Switch	•	
Towing Device	•	
Hydraulic Side Skirts and Front Moldboard	•	
Emergency Stop Switch on Platform and on the Sides	•	
Biodegradable Oil		•



VOLVO CONSTRUCTION EQUIPMENT

Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 180 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo.

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

VOLVO

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