WIRTGEN GROUP

Wirtgen

Technical specification

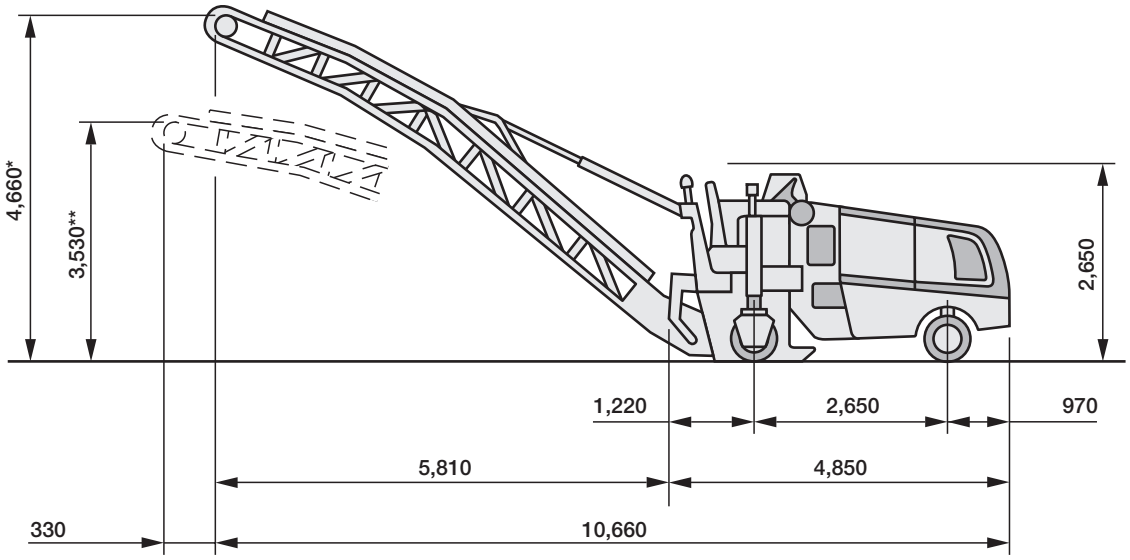
Cold milling machine W 60

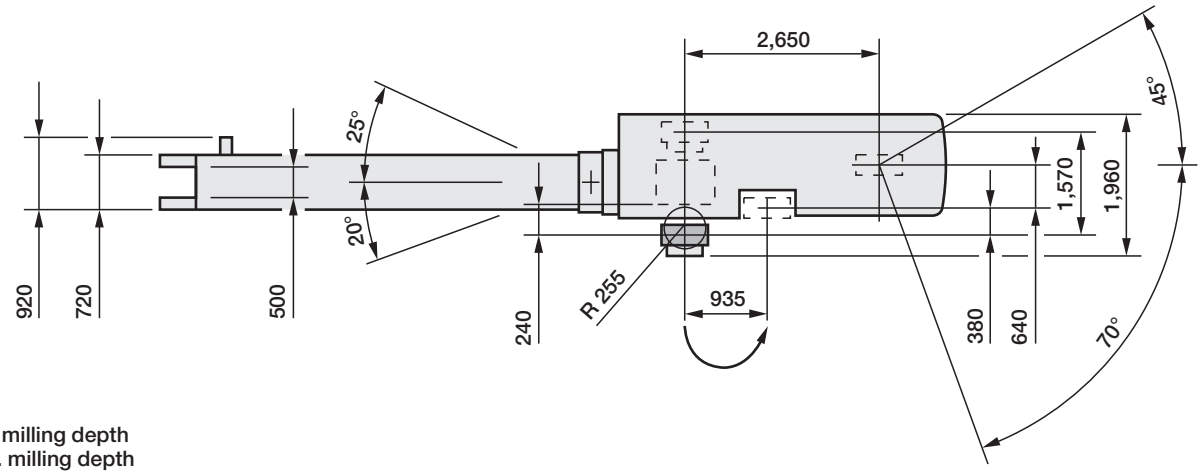
Technical specification

	Cold milling machine W 60	
Milling width max.	600 mm	
Milling depth*1	0–300 mm	
Milling drum		
Tool spacing	15 mm	
Number of tools	75	
Drum diameter with tools	930 mm	
Engine		
Manufacturer	Deutz	
Type	TCD 2012 L06 2V	
Cooling	Water	
Number of cylinders	6	
Output	155 kW/208 HP/211 PS	
Engine speed	2,300 min^{-1}	
Displacement	6,057 cm^3	
Fuel consumption, full load	42 l/h	
Fuel consumption, $^2/_3$ load	28 l/h	
Speeds/Gradeability		
1st milling gear	0–10 m/min	
2nd milling gear	0–20 m/min	
3rd milling gear	0–30 m/min	
Travel gear	0–6 km/h	
Theoretical gradeability, milling gear/travel gear	75%/10%	
Transversal inclination, max.	10°	
Ground clearance	325 mm	
Weights*2	**3 wheels**	**4 wheels**
Front axle load, full tanks	5,600 daN (kg)	5,750 daN (kg)
Rear axle load, full tanks	8,400 daN (kg)	8,500 daN (kg)
Own weight	12,500 daN (kg)	12,750 daN (kg)
Operating weight, CE*3	13,250 daN (kg)	13,500 daN (kg)
Operating weight, full tanks	14,000 daN (kg)	14,250 daN (kg)
Tyres		
Type of tyres	Solid rubber	Solid rubber
Tyre size, front (diameter x width)	620 x 305 mm	620 x 230 mm
Tyre size, rear (diameter x width)	620 x 255 mm	620 x 255 mm
Tank capacities		
Fuel tank	450 l	
Hydraulic fluid tank	80 l	
Water tank	900 l	
Electrical system	24 V	
Conveyor system		
Belt width	500 mm	
Theoretical conveyor capacity	115 m^3/h	
Shipping dimensions		
Dimensions of machine (L x W x H)	4,556 x 1,960 x 2,550 mm	
Dimensions of machine (support wheel folded in) (L x W x H)	4,556 x 1,600 x 2,550 mm	
Dimensions of conveyor (L x W x H)	8,050 x 1,000 x 1,000 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 mm

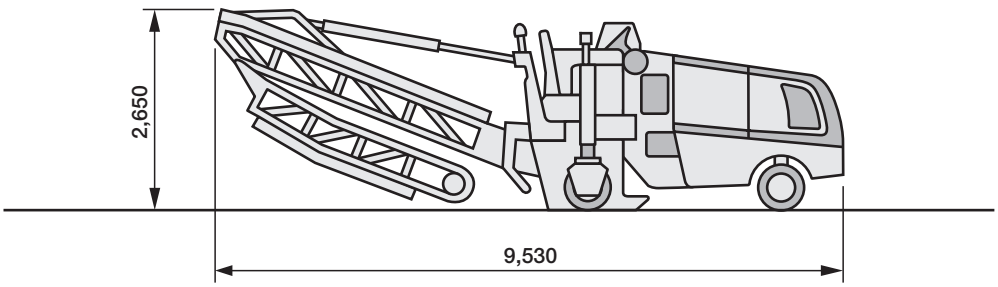




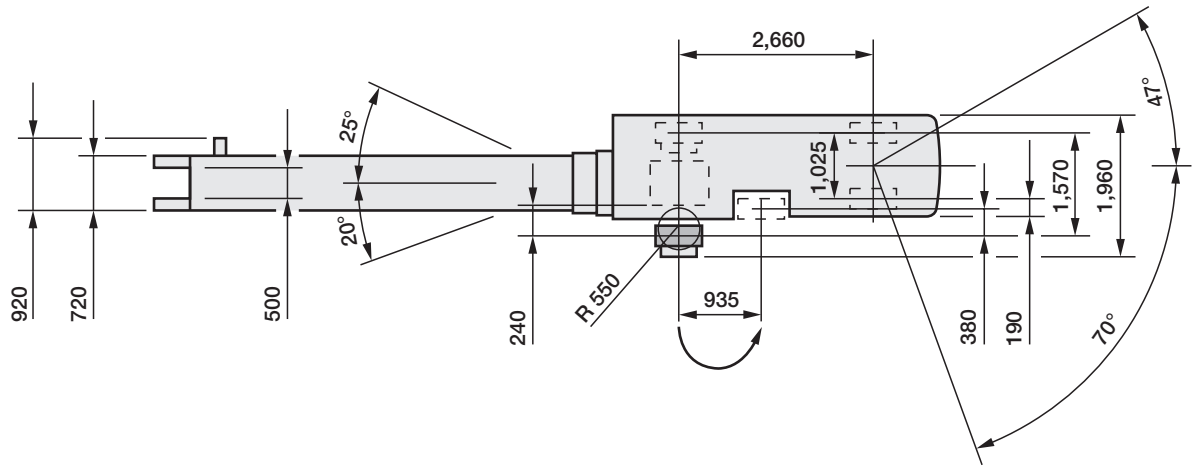
* = at min. milling depth
** = at max. milling depth

Special equipment: Folding conveyor

Dimensions in mm



Special equipment: 4-wheeled model
Dimensions in mm



Basic design
The W 60 is a road milling machine with mechanically driven milling drum and conveyor system.
The machine is equipped with permanent all-wheel drive as a standard feature.

Chassis
Robust welded construction with mounts for the individual function modules.
The tank for diesel fuel is integrated into the chassis.
The individual components are optimally arranged to ensure easy access for maintenance and service purposes.

Operator's platform
The operator's platform is located at the rear of the machine. The comfortable sitting position combined with ergonomically arranged operating elements allows the driver to operate the machine without fatiguing and ensures a clear overview of the machine. The driver's seat can be moved backwards and forwards, and also sideways beyond the right-hand edge of the machine.
The steering wheel can also be adjusted to ensure an ideal working position for all operators.
The most important controls are located in the right armrest.
Locking covers on the operating elements protect the machine against vandalism.

Power unit
The cold milling machine is driven by a modern 6-cylinder turbo diesel engine with electronic controller.
The diesel engine is elastically mounted to reduce noise levels and vibrations. All maintenance work can be carried out from one machine side.
All maintenance work can be carried out from one machine side. The engine complies with the stringent requirements of the exhaust emission standards stipulated by the US Environmental Protection Agency (EPA, Tier III) and the EU (Stage III).

Soundproofing
Noise levels are reduced by the standard soundproofing which also protects both the operating personnel and the environment against any nuisance due to noise.

Milling drum drive
The milling drum is driven mechanically by the diesel engine via a mechanical clutch, angular transmission and power belts acting on the drum gearbox.
The power belts ensure optimum transmission of the power, damp any impacts and protect the other units against overloading.
Constant tension of the power belts is automatically maintained by a hydraulic cylinder.

Milling drum
The milling drum is located between the rear wheels and operates in up-milling direction. Toolholders accommodating the point-attack cutting tools are welded onto the drum body. An optimum arrangement of the cutting tools ensures the smooth operation of the machine.
As an option, the milling drum can be equipped with the patented and established quick-change toolholder system HT11. With this system, the bottom parts of the toolholders are welded onto the drum body and the upper parts secured to the bottom parts by retaining bolts to allow quick replacement, thus minimizing any downtimes.
As an option, the W 60 can also be equipped for use with the FCS (Flexible Cutter System). This system allows milling drums to be rapidly changed from a milling width of 60 cm to 50 cm or 40 cm, with full milling depth and loading of the reclaimed asphalt material.

Cutting tool replacement
The scraper blade opens hydraulically and the side plates can be locked in the upper position to permit easy access to the milling drum for the replacement of cutting tools.
The power belts are slackened automatically to facilitate the replacement of cutting tools, as the drum can then be turned easily. Storage compartments near the ladder provide sufficient space for cutting tool containers.

Running gear
The machine is steered via the front wheel or optionally via the full-floating front axle. The rear wheels are suspended individually and designed as supporting wheels.
The rear right wheel can be manually (or hydraulically: optional) swivelled in front of the milling drum to improve the side clearance, for instance when working along kerbstones.

Travel drive
The cold milling machine W 60 has three (optionally four) separately driven wheels. The travel drive motors are fed by a common hydraulic variable displacement pump.
The travel speed can be infinitely varied from zero to maximum speed in all three milling gears and in travel gear.
A hydraulic flow divider acts as differential lock ensuring uniform traction.

Steering
The machine has a finger-light hydraulic steering system. Extremely tight locking angles allow exceedingly small turning clearance circles.

Brake system
Braking is achieved by drag from the hydrostatic travel drive. The road milling machine is additionally equipped with an automatic spring-loaded braking system in the travel drive gearboxes of both rear wheels.

Loading the milled material
Clean loading of the milled material is ensured by means of a scraper blade. Carbide segments on the edges of the scraper blade ensure a long service life.
The scraper blade can be locked at the required height if material is to be milled right down to the gravel course.
In addition, it can also be adjusted so that the milled trench can be refilled or part of the reclaimed material loaded on trucks. The loading conveyor receives the milled material from the milling drum and delivers it to the waiting truck via a wide conveyor system. By means of a special coupling device, the conveyor can be mounted and dismounted quickly. The loading conveyor can be adjusted in height and slewed to both sides. The material is transported reliably and safely by the V-ribbed belt.
The conveyor belt is covered to prevent the formation of dust clouds. The belt speed can be infinitely adjusted.

Milling depth adjustment and automatic levelling system
The milling depth is set via the hydraulic height adjustment of the rear drive units. The drive units can be conveniently adjusted independently of one another from the driver's seat, where the set values can be monitored on separate height indicators. This feature permits the simple and accurate production of wedged cuts.
As an option, the machine can be equipped with the integrated Wirtgen automatic levelling system LEVEL PRO which uses sensors to scan a reference plane. The height adjustment is then effected automatically.

Hydraulic system
The hydraulic systems for travel drive, loading conveyor and setting functions are mutually independent.

The hydraulic pumps are driven by the diesel engine via a power take-off, thus permitting a highly compact design. All the oil in the system is purified by a suction-type return filter. The system is cooled by an integrated hydraulic oil cooler.

Electrical system
24 V electrical system with starter, 3-phase alternator and two 12 V batteries.

Water spray system
The formation of dust clouds during the milling operation is largely prevented by an electrically operated water spray system which also cools the cutting tools, thus considerably extending their service life. The spray nozzles are easily removed for cleaning.

Filling
Water is filled via a C-pipe connection or a large filling port. Diesel fuel is filled via a large filling port.

Safety features
The cold milling machine can be securely lashed onto a low-bed trailer or loaded by crane (cross-beam) with the aid of the lashing lugs permanently attached to the machine. The machine features the GS mark (Geprüfte Sicherheit = Tested Safety) of the Employers' Liability Insurance Association and the CE mark.

Equipment	Cold milling machine W 60
Transport	
Loading and lashing lugs	○
Towing device	○
Road traffic licence	●
1 exterior rear view mirror, right, 2 exterior rear view mirrors, left	○
Machine control and levelling system	
Automatic levelling system LEVEL PRO left and right	●
Automatic levelling system LEVEL PRO with slope control sensor	●
Drive unit/Wheels	
All-wheel drive and switchable differential lock	○
4-wheel design with front axle	●
Hydraulically swivelling support wheel	●
Frame/Operator's platform	
Canopy, raised/lowered hydraulically	●
Special painting	●
Milling drum assembly	
Hydraulically lifting side plates	●
Hydraulically lifting drum plate, front	●
Additional lock-valve for scraper blade	○
FCS (Flexible Cutter System)	●
Milling units 500 mm / 400 mm milling width for FCS	●
Quick-change toolholder system HT11	●
Mounting device for exchange of milling drums	●
Drum carriage for exchange of milling drums	●
Loading the milled material	
Loading conveyor with quick-release coupling	○
Adjustable conveyor belt speed	○
Folding conveyor	●
Miscellaneous	
Illumination of the control panel	●
Comprehensive tool kit	○
Working lights	○
Warning beacon	○
Safety certificate by the Employer's Liability Insurance Association	○
Comprehensive safety package with emergency stop button	○
Reversing horn	○
Soundproofing	○
Operation of the cold milling machine with organic hydraulic fluid	●

○ Standard ● Option

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