

Soil Management with Sustainable Effects.

Mulching conforms to ISO 14000 and is therefore classed as an ecologically valuable operating principle. Reintroducing the shredded biomass into the natural cycle leads to improved soil structure and protects the ground from dehydration, erosion and mud accumulation.

Mulching provides sustained support for soil micro-organisms, activates the soil's self-healing powers and maintains soil humus levels over long periods. The micro bacterial decomposition of the mulch gradually releases plant nutrients into the soil so that mineral-based fertilization can be reduced. Even chemically-based weed control is often not necessary as the mulch layer suppresses their growth long-term. Compared with more conventional processing methods, such as on-site biomass incineration, transporting or even slash-and-burn policies, the areal vegetation treatment using the AHWI mulch technology has clear ecological advantages.



Ecologically Worthwhile is also Ecologically Meaningful.

Using the AHWI mulchers to work the land in forests, agriculture or infrastructure areas saves not just time, personnel and operational hours, but you also profit from many additional advantages: when recultivating plantations, for example, you do not have to spend time and effort clearing up branch material or plant crown. Grinding out tree stumps leaves the ground navigable, and the mulch layer provides valuable and sustained plant nutrition, facilitates maintenance, and suppresses weed growth.

The use of environmentally friendly technology pays off in other aspects too: because mulching carries ISO conformity, your corporate image increases along with its market acceptance. This can be particularly beneficial when bidding for contracts, which then gives you that all-important competitive advantage.

The Key Application Areas for AHWI Mulchers.

Plantation Management

Recultivation of forests, Christmas-tree and palm oil plantations, tree replanting, fire hazard abatement, fire-break creation, thick undergrowth removal, shredding of crop residues.

Forest and Line Maintenance

Removal of logging debris, forestry lane formation, cuttings removal, maintaining the areas surrounding overhead power and transmission line pylons, applications in pipeline construction

Infrastructure Projects

Construction site evacuation, clearance and recultivation, seismological applications, forestry lane clearance, on-the-spot root stock shredding

Gardening and Landscaping

Landscape conservation, stump grinding, composting, tree nurseries

Agriculture and Fruit Growing

Scrubland and secondary vegetation conversion into useable agricultural areas.

Minimally invasive method: By using the AHWI mulchers, the intervention with nature is kept specifically to those regions that need to be processed. The soil is optimally prepared while the surrounding areas are conserved.

Technology

Cylindrical rotor concept with fixed and individually exchangeable carbide tipped tools

Double sided rotor drive using high-performance drive belts

Patented drive-shaft with synchronization control (W-Kinematik)

The particularly ruggedly constructed machine casing is extensively protected from abrasion by easily exchangeable wear sheets

Standardized 3-point peripheral attachment

Follow-up flap with screwed counter blade segments

Your Advantage

- Fixed carbide tipped tools deliver high impact at reduced cost
- Rapid tool exchange thanks to easy-to-use bolt connections
- Choice of tools to suit the application
- Individually exchangeable tools
- Optimally shaped rotor ensures efficient shredding with low running costs

- Almost maintenance-free drive concept
- Optimum power transmission with zero power loss
- Reduced wear
- Relieves the motor

- Ensures optimum drive shaft operation without any torsional vibration
- Optimized drive shaft operation guarantees maximum mulch output at full engine speed
- The durability of the drive shaft is significantly increased

- Long operational life guaranteed
- Reduced wear
- Reduced downtime and almost maintenance-free operation

- Available for all carrier vehicles equipped with a 3-point attachment
- Rapid attachment

- Performs additional mulch shredding to help deliver a perfect result

Model	Performance Class in HP	Working Width in mm	Weight in kg	No. of carbide tipped tools	HDT-Concept Push Bar	Fluid Turbo Clutch	Z-Kinematik	W-Kinematik	Swivel-Mounted Counter Blades
M450	80 to 140	1,800	1,350	42			X		
M500	100 to 180	1,800	1,750	42			X	X	
	100 to 180	2,000	1,900	48			X	X	
FM600Profi	100 to 180	2,300	2,000	54			X	X	
		2,300	3,030	54			X	X	
UZM580	180 to 300	2,300	3,500	54	X			X	
M700	240 to 550	2,300	4,620	56	X	X		X	X
FM500H	70 to 180	1,100	1,200	30					

Dealer

AHWI Pinoth



The Trailblazer for Environmentally-Friendly Surface Processing.

The AHWI Mulchers

Economically Advantageous: with AHWI Mulchers.

AHWI mulchers are all-purpose, economically efficient, professional units that maintain the ecological balance when clearing up large areas of vegetation. Irrespective whether upright deadwood or flattened logging debris needs to be cleared, forestry lanes or firebreaks need to be created, or Christmas-tree or palm oil plantations need recultivating, just one driver is required to manage all these tasks in a safe and thorough manner. The advantages for you are: that with the AHWI mulchers you will get far more area coverage with greatly reduced overhead in terms of manpower, time and machinery compared with more conventional methods.

Environmentally Friendly: the Rotation Principle.

The AHWI mulchers do not differentiate between upright ligneous material, fallen branches, shrubland, or mixed areas of secondary vegetation. When pushed, the assimilated ligneous material is drawn into the horizontally positioned rotor and coarsely cut. Rootstock is milled to ground level, and all the resulting biomass is distributed over the land surface.

When subsequently pulled, this biomass material is picked up by the rotor once again and reduced even further in size by special counter blades. The fineness of the resulting cuttings can be easily regulated with the follow-up flap. At the same time, the ground surface is broken up by the carbide-tipped tools affixed to the rotor, thereby enabling the reclaimed material to be mixed in with the topsoil. In this manner, the biomass is restored to the natural cycle, and what's left in the machine's path is an optimally prepared and perfectly cleared area. These are perfect conditions for new plantings or, as in the case with lines, for effective vegetation control.

Mulching on any Scale.

AHWI mulchers come in a variety of performance classes, working widths and configurations. They are available as auxiliary equipment that is attached to tractors; in particular, the AHWI crawler tractor or they can be adapted for attachment to hydraulic excavators. Their rugged design combined with patented technologies and easy-to-service wear parts ensure an above average service life, reduced downtimes and almost maintenance-free operation. We would be only too pleased to advise you on which AHWI mulcher is best suited to your application and carrier vehicle requirements.

Light and Manoeuvrable: the M450

With a working width of 1,800 mm and weighing in at just 1,350 kg, this is the lightest of the AHWI mulchers. It is suited for use with carrier vehicles with a performance class between 80 HP and 140 HP, but it is constructed for longevity. Power is delivered to one side of the rotor, with its 42 exchangeable carbide tipped tools, by high-performance drive belts and comes with synchronous control for optimum power transmission without torsional vibration.



Intermediate: M500

The M500 model range is prepared for carrier vehicles with performance classes between 100 HP and 180 HP. Three working widths are available: 1,800 mm, 2,000 mm or 2,300 mm and have rotors equipped with 42, 48 or 54 carbide tipped tools respectively. This makes it easier for you to find the most suitable configuration for both application and carrier vehicle. This is the universal unit for versatile deployment.



For Heavy-Duty Applications: the FM600Profi

The FM600 model range is prepared for carrier vehicles with performance classes upwards of 140 HP. Two working widths are available: 2,000 mm or 2,300 mm and have rotors equipped with 48 or 54 carbide tipped tools respectively. This is the unit for more demanding applications.



Climbing the Ranks: the UZM580

With a working width of 2,300 mm and weighing in at 3,500 kg, the UZM580 is a piece of equipment which tackles particularly demanding tasks. Attached to carrier vehicles with performance classes between 180 HP and 300 HP, this unit is able to achieve high acreage outputs, even when dealing with massive tasks. A specially developed rotor concept combined with carbide-tipped tool technology makes the deployment of the AHWI mulcher even more commercially efficient.



The Grand Master: the M700

With its 56 exchangeable carbide-tipped rotor tools and a working width of 2,300 mm, this is the mightiest of the AHWI mulchers – designed for carrier vehicles with performance classes between 240 HP and 550 HP. An optionally available fluid turbo clutch prevents motor stalling, which, apart from preserving the carrier vehicle's motor and its transmission elements, ensures the unit can operate continuously within its optimum speed range.



Accurate: the FM500H

The hydraulically operated FM500H is designed to be attached to excavators. Because it can be positioned with pinpoint accuracy, this mulcher is particularly suitable for those areas which are inaccessible to the more usual carrier vehicles, or are made difficult to access because of crash barriers, traffic signs or roadside reflector posts. An optionally available swivel adapter increases its flexibility.