



Quality is not an accident,
nor is it a coincidence

Side mulchers
Hydraulic mulching heads
Boom arms
Undergrowth mulcher





For more than 65 years humus has stood for innovative mulching technology in orchards and vineyards and municipal green area maintenance.



Plant 3
humus mulcher assembly

We have grown up with the development and production of mulchers.

Today, the machines offered under the brand name, humus are standard equipment in orchards and vineyards, municipal implementation and forestry applications.

Our history

Since 1954 when we developed the first mulcher for orchards, we have successfully pursued this theme. Today the humus product range includes more than 100 models. Now for more than 65 years the name, Maschinenfabrik Bermatingen, has been a guarantee of competence and innovation. Our expenditures for research and development are at a very high level. In all segments, we constantly strive to adapt our products to the requirements of our customers and thus to the requirements of the market.

In this process the considerations of our designers always go in two directions: On one hand the goal is to implement perfect technical solutions with the development of easy-to-operate machines and equipment, on the other hand the multifaceted requirements that enable environmentally responsible behaviour must be taken into account.

Modern manufacturing assures a high standard of quality

All the operations of the enterprise are centralised in at the company's headquarters facilities in Bermatingen on Lake Constance: Administration, development, parts manufacturing and final assembly work together transparently. The biggest milestone in the company's history was reached by the construction of the new company headquarters. This allowed the previous production area of 9,000 m² to be expanded to the current production area of over 15,600 m².

Know-how

With team spirit and commitment, qualified and motivated employees ensure the achievement of our ambitious corporate goals. We know: If you want to be a top player, you must be prepared to achieve something extraordinary. We act accordingly: Through ongoing investment we guarantee the high quality standard of our products. Systematic inspections and test accompany all phases, from the development to all stages of manufacturing to shipment to our customers throughout the world.

Precision work for satisfied customers

In our company it is not just all products that are in-house designs or that are developed by ourselves to series production readiness, we also produce all component parts ourself – to the extent possible and to the extent that appears profitable for us. Trained employees operate state-of-the-art manufacturing equipment. In addition to the laser centre (www.laserschneiden.tv) our CNC-controlled welding robots and trimming presses comprise another important prerequisite for smoothly and sustainably fulfilling our own quality requirements and the high quality expectations of our customers. In our own paint shops our product receive the protective paint finish.



*humus mowers of
fine-grained steel*

★ lighter ★ stronger
★ of more stable value!

Likewise, when installing standard parts we also impose high quality requirements and only use products that meet international standards.

Award winning

Recognised and award-winning accomplishment is an incentive for us to not let up in our efforts to always offer perfect solutions to our customers. Modern technology, optimal ease of operation and tested safety are implicit in our developments – this is confirmed by international test certificates.



...developed and
manufactured in Germany



In France we are represented by our subsidiary,
Humus S.A.

Side mulchers



SSP

optional  Safety Mulcher

6

Working width 1.25 – 1.55 m
up to 90 hp, for narrow-track tractors, municipal tractors
and small tractors, carrier vehicle min. 1,400 kg



SP

optional  Safety Mulcher

8

Working width 1.56 – 2.40 m
from 82 hp
Carrier vehicle min. 2,500 kg



SPS

Working width 1.55 – 2.00 m
up to 90 hp
Carrier vehicle min. 1,800 kg

10



SSG

optional  Safety Mulcher

12

for small tractors and
compact tractors
from 23 hp



GLS

optional  Safety Mulcher

14

for narrow-gauge tractors,
municipal tractors and small tractors
from 32 hp

Hydraulic mulching heads



WMH

optional  Safety Mulcher

16

Hydraulic mulching heads for compact tractors,
special tractors, wheel loaders, mini-excavators,
municipal vehicles and boom arms from 13 hp



SMH

optional  Safety Mulcher

18

Hydraulic mulching heads for compact tractors,
special tractors, wheel loaders, mini-excavators,
municipal vehicles and boom arms from 11 hp



KMA

optional  Safety Mulcher

20

Hydraulic mulching heads
for wheel loaders, large boom mowers
or excavators from 23 hp

Boom arms



BMS

Boom arms
from 25 hp

22

Undergrowth mulcher



PS

Undergrowth mulcher
with hydraulic or mechanical drive
from 34 hp

24



PH

Undergrowth mulcher
with hydraulic drive
from 54 hp

26

Top technology for outstanding results

The mode of operation of all humus flail mulchers: On the electronically-dynamically balanced rotor shaft with a generously configured spherical roller bearing the cutters are arranged so that they can oscillate freely and overlap. The cutters mulch the growth at the individually adjustable height and convey the mulched material through the tearing bars – here fine defibration and reduction occur. The mulched material is routed along the housing via the track roller and is uniformly distributed behind the flail mower.



The humus flail mulchers are either equipped with “Y“-type blades or with flails depending on the application:

“Y“-type blades



The blades that are suspended in pairs are free-moving, durable and require only minimal force. Moreover they ensure good distribution of the mulch mass. They can be used on both sides and are very popular because they generate minimal dust when they are working.

Recommended implementation areas

- Green area maintenance
- Branches to 5 cm Ø
- Shrubbery
- On rocky ground
- In row cultures
- Mulching in green manure

System flail



Due to its special shape and high net weight 2,7 kg, the system flail develops an advantageous suction effect and a particularly attractive cutting pattern. Either a fine-cutting blade or a claw blade is screwed into the deep bed of the cutter carrier. The blades can be cost-effectively replaced.

Recommended implementation areas

- ...for fine-cutting blades
- Pasture care
 - Shredding timber to approx. 10 cm Ø
 - Green area maintenance
 - Field work
 - Forestry applications
 - mulching of corn stover
- ...for claw blades
- Shredding timber to approx. 10 cm Ø

System flail for PM



Due to its special shape and high net weight 4,6 kg, the system flail develops an advantageous suction effect and a particularly attractive cutting pattern. Either a fine-cutting blade or a claw blade is screwed into the deep bed of the cutter carrier. The blades can be cost-effectively replaced.

Recommended implementation areas

- ...for fine-cutting blades
- Pasture care
 - Shredding timber to approx. 10 cm Ø
 - Green area maintenance
 - Field work
 - Forestry applications
 - mulching of corn stover
- ...for claw blades
- Shredding timber to approx. 10 cm Ø

Fine-cutting blade B60



Like its big brother, the system flail, due to its special shape and high deadweight, the fine-cutting blade B60 develops an advantageous suction effect and a particularly attractive cutting pattern. A fine-cutting blade is screwed into the deep bed of the cutter carrier. The blades can be cost-effectively replaced.

Recommended implementation areas

- Mulching of grass
- Parks and athletic facilities
- Roadsides and waysides
- Dams and dikes
- Municipal use
- Shredding timber to approx. 3 cm Ø

Small flails



This is an all-round flail. It is equally suited for mulching and for shredding wood to a thickness of approx. 5 cm.

Only suitable for the PH underbrush mulcher!

B70



The B70 cutter is the ideal partner for tasks with light ground contact! Thanks to its single-edged, sharp and hardened blade, you obtain the best fine-chopping results. The B70 cutter is suitable for all ground conditions, all types of vegetation and all types of undergrowth strata.

Recommended implementation areas

- Mulching of undergrowth and multi-year growth
- Embankment maintenance
- Line maintenance
- Biotope maintenance
- Renaturation
- Recultivation
- Maintenance of bushy areas
- Area management and landscape management

B80



Triple-edged carbide tool with offset cutting edges for wear-intensive and sandy applications. Minimal force requirement thanks to diagonally inserted carbide plates and an additional wear guard on the holder.



humus safety mulchers:
The revolutionary mulching technology
with convincing advantages...

...Safety

Thanks to the special design and arrangement of the cutters on the rotor, ejection of rocks and other foreign objects during the work and when lifting out the mulcher is virtually suppressed.

...Performance

Safety mulchers permit a higher cutting speed of the cutters; this has a positive effect on increased working speed and thus a greater area output is achieved.

...Quality

Due to the high number of cutting edges through use of the three cutter system, the safety mulchers ensures a clean grass cut and perfect reduction of the mulched material.

...Service

A worm shaft is at the centre of the Safety Mulcher technology, which is equipped with multi-toothed cutting blades made of highly wear-resistant special steel. The divided cutter segments can be quickly and easily replaced without special tools. In terms of service this saves time and money.



The patented Safety Mulcher
technology has received
multiple awards!



SSP

For narrow-track tractors,
municipal tractors and small tractors

optional *Safety Mulcher*



The SSP side mulchers offer double implementation possibilities: They can be used as rear mulchers directly behind the tractor. With the long parallelogram it is swung to the side next to the tractor to mulch on waysides and roadsides, and for mulching embankments and ditches. The variable inclination range of 90° upward and 60° downward, as well as the variably adjustable swing ranges enable the greatest possible area of implementation!





Infinitely variable inclination range of the mower head of 90° upward and 60° downward.



Integrated holder for convenient storage of the universal joint shaft.



The stable collision guard ensures the greatest possible protection against collisions with obstructions.



Cat. II for dismantling ensures greater free space of the universal joint shaft.

Well proven range of use

- mulching of grass and light wood
- ditches and embankments
- roadside plantings, edges of fields, roadsides
- area management and landscape management
- municipal implementation

Basic equipment

- Mounting: rear – use as a rear or side mulcher
- Inclination up 90° / down 60°
- Attention: Front attachment with a PTO speed of 540 rpm or hydraulic drive possible
- Cat. I and II mounting
- Cat. I mounting for dismantling in order to achieve a greater lateral displacement
- High-quality bevel gear: robust, flexible drive over enhanced V-belt on the rotor shaft
- Rear roller adjustment for good soil management and precise cutting height
- Mechanical collision safety
- Mounting height can be adjusted as per the type of tractor
- Spherical roller bearings in the rotor shaft
- Two anti-tipping legs
- Adjustable oil flow, in order to regulate restrictors to the pan and tilt cylinders in their movement speed

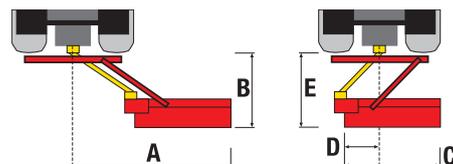
Accessories / special equipment

- PTO with overrunning clutch
- Set of wheels, wheel diameter 300 x 100 mm
- Set of foam-filled running wheels, wheel diameter 300 x 100 mm

Technical data

	SSP	125	145	155
Small flails/Fine-cutting blade	pcs.	24	28	30
	pcs.	18	21	24
Working width	m	1.25	1.45	1.55
Overall width	m	1.70	1.90	2.03
Housing height	m	0.33	0.33	0.33
Track of carrier vehicle	min. m	1.20	1.40	1.50
Power requirement*	from kW / hp	30 / 40	35 / 48	40 / 55
Rpm of PTO	rpm		540	
Weight**	approx. kg	515	535	555
Track of carrier vehicle	m	1.40	1.50	1.50
Carrier vehicle	mind. kg	1,400	1,500	1,700

* The power requirement also depends upon the grass density and grass height
 ** Weight may differ according to equipment



Dimensions	125	145	155
A = m	2.45	2.65	2.75
B = m	1.90	1.90	2.00
C = m	1.25	1.45	1.55
D = m	0.30	0.30	0.37
E = m	1.80	1.80	1.80

SSP cutter system, either...



Small flails



Fine-cutting blade B60



Safety cutters

Colour selection...



RAL 3000



RAL 2011

SP

For mulching of paths, field borders, roads and embankments, ditches and orchards

optional *Safety Mulcher*



The SP side mulchers offer double implementation possibilities: They can be used as rear mulchers directly behind the tractor. With the long parallelogram it is swung to the side next to the tractor to mulch on waysides and roadsides, and for mulching embankments and ditches. The variable inclination range of 90° upward and 60° downward, as well as the variably adjustable swing ranges enable the greatest possible area of implementation!





Infinitely variable inclination range of the mower head of 90° upward and 60° downward.



Attractive performance in large-area use: Combined with a front mulcher a total working width of up to 5.40 m is achieved.



Integrated holder for convenient storage of the universal joint shaft.



The stable collision guard ensures the greatest possible protection against collisions obstructions.



Removable guard pot for easy mounting of the universal joint shaft.



Cat. II for dismantling ensures greater free space of the universal joint shaft.



Skid right side to avoid that the machine presses into the ground!

Well proven range of use

- mulching of grass and light wood
- ditches and embankments
- roadside plantings, roadsides, edges of fields
- area management and landscape management
- municipal implementation
- green area maintenance for airports and in solar parks
- large area maintenance combination with front implement to 5.40 m working width
- mulching of corn stover

Basic equipment

- Mounting: rear – use as a rear or side mulcher
- Attention: Front attachment with a PTO speed of 540 rpm or hydraulic drive possible
- Inclination up 90° / down 60°
- Check valve to ensure safe positioning of the machine
- Cat. II and III mounting
- Cat. II mounting for dismantling in order to achieve a greater lateral displacement
- High quality angular gearbox with free wheel: robust, flexible drive over enhanced V-belt on the rotor shaft
- Rear roller adjustment for good soil management and precise cutting height
- Mechanical collision safety
- Spherical roller bearings in the rotor shaft
- Two anti-tipping legs
- Adjustable oil flow, in order to regulate restrictors to the pan and tilt cylinders in their movement speed
- Rotor tube diameter 140 mm (SP 240: 168 mm)
- Self-cleaning track roller with large spherical roller bearing, drive roll diameter 170 mm
- Housing height offset side 517 mm

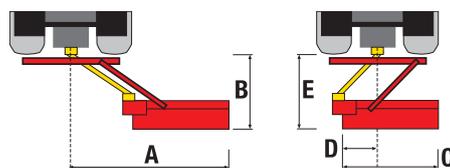
Accessories / special equipment

- Wide angle PTO with 2 wide angles. Precision pipe with square profile, 40 kg
- Right skid
- Wear plates

Technical data

	SP	155	180	200	220	240
„Y“-type blades	pcs.	48	54	60	66	78
System flails	pcs.	12	14	16	16	20
 Safety cutters	pcs.	18	21	24	26	–
Working width	m	1.56	1.80	2.00	2.20	2.40
Overall width***	m	2.28	2.52	2.72	2.92	3.12
Power requirement*	from kW / hp	60 / 82	59 / 81	66 / 90	66 / 90	66 / 90
Rpm of PTO	rpm	540				
Weight**	approx. kg	950	980	1,000	1,050	1,100
Track of carrier vehicle	m	1.80	1.80	2.00	2.20	2.30
Carrier vehicle	min. kg	2,500	3,000	3,400	3,400	3,400

* The power requirement also depends upon the grass density and grass height ** Weight depending on the equipment
*** Mulcher in horizontal position



Dimensions	155	180	200	220	240
A = m	2,73	2,97	3,17	3,35	3,55
B = m	1,87	1,87	1,87	1,87	1,87
C = m	1,56	1,80	2,00	2,20	2,40
D = m	0,25	0,25	0,25	0,20	0,20
E = m	2,01	2,01	2,01	2,01	2,01

SP cutter system, either...



„Y“-type blades



System flail... with fine-cut blade or claw blade



Universal flail



Safety cutters

Colour selection...



RAL 3000



RAL 2011



The SPS side mulcher is a light and attractively-priced side mulcher with pro qualities for all mulching tasks. The SPS is designed for power classes to 90 hp.



e.g.
additional
cutter systems
page 11



The stable collision guard ensures the greatest possible protection against collisions obstructions.



Removable guard pot for easy mounting of the universal joint shaft.



Integrated holder for convenient storage of the universal joint shaft.



Well proven range of use

- along roads and paths
- in sports facilities and parkways
- at airports
- on fallows
- in the pasture and land maintenance
- in the landscape maintenance
- in standard tree plantations
- care of field boundaries
- in solar parks

Basic equipment

- Mounting: rear – use as a rear or side mulcher
- Inclination up 90° / down 60°
- Cat. I and II mounting
- Cat. I mounting for dismantling in order to achieve a greater lateral displacement
- Gearbox with overrunning clutch
- High-quality bevel gear: robust, flexible drive over enhanced V-belt on the rotor shaft
- Rear roller adjustment for good soil management and precise cutting height
- Mechanical collision safety
- Mounting height can be adjusted as per the type of tractor
- Spherical roller bearings in the rotor shaft
- Two anti-tipping legs
- Large tray of mulched material behind the roller
- Adjustable oil flow, in order to regulate restrictors to the pan and tilt cylinders in their movement speed
- Housing height offset side 516 mm

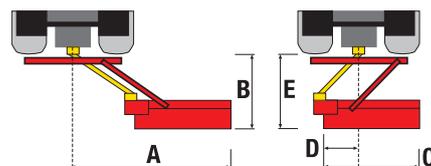
Accessories / special equipment

- PTO with star profile, without overrunning clutch
- Wide angle PTO with 2 wide angles. Precision pipe with square profile, 40 kg

Technical data

	SPS	155	180	200
„Y“-type blades	pcs.	48	54	60
System flails	pcs.	12	14	16
Working width	m	1.55	1.80	2.00
Overall width	m	2.08	2.33	2.53
Power requirement* from kW / hp		30 / 40	35 / 50	44 / 60
Rpm of PTO	rpm	540		
Weight**	approx. kg	710	750	780
Track of carrier vehicle	m	1.50	1.80	1.80
Carrier vehicle	min. kg	1,800	2,200	2,700

* The power requirement also depends upon the grass density and grass height
 ** Weight may differ according to equipment



Dimensions	155	180	200
A = m	2.52	2.77	2.97
B = m	2.00	2.00	2.00
C = m	1.55	1.80	2.00
D = m	0.69	0.69	0.69
E = m	1.85	1.83	1.83

SPS cutter systems, either...



„Y“-type blades



Fine-cut blade

SSG

Side mower for small tractors
and compact tractors

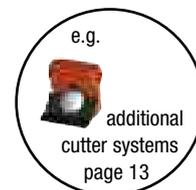
optional *Safety Mulcher*



The SSG serie can be attached on the rear on all small tractors/ compact tractors and they are available in left and right versions. This serie offer particularly versatile implementation.

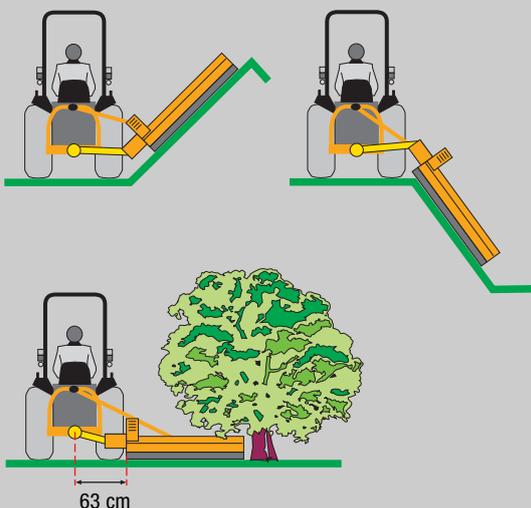
With this mulcher application areas can be worked that cannot be reached with a front mulcher. Thus ditches and embankments are conveniently mulched and mulching under bushes and hedges is a breeze.

On the tractor only a single-acting control device is required.





Front mounting only possible with hydraulic drive and 540 rpm.



Infinitely variable inclination range of the mower head of 90° upward and 60° downward.

Well proven range of use

- mulching of grass – in parks even under bushes and hedges
- ditches and embankments
- roadside plantings on bicycle paths
- along roads and paths and for maintenance of field edges
- forestry applications – for wayside care
- pasture management, area management and landscape management
- municipal implementation
- green area maintenance of fallow land
- athletic facilities and parks, football grounds
- standard tree orchards

Basic equipment

- Mounting: rear
- Attention: Front attachment with a PTO speed of 540 rpm or hydraulic drive possible
- Inclination up 90° / down 60°
- Cat. I or II attachment
- Skids, two anti-tipping legs
- Rear roller adjustment for good soil management and precise cutting height
- Right extension
- Mechanical obstacle safety
- The adjustable throttle valve for smooth lowering of mulching head
- Large tray of mulched material behind the roller
- Gearbox for mechanical drive
- Self-cleaning track rollers

Accessories / special equipment

- PTO with overrunning clutch
- Wheel with spindle

Technical data

	SSG	125	145
Small flails / Fine-cutting blade	pcs.	24	28
 Safety cutters	pcs.	18	21
Working width	m	1.25	1.45
Overall width	m	2.30	2.50
Housing height	m	0.33	0.33
Power requirement*	from kW / hp	17 / 23	19 / 26
Rpm of PTO	rpm	540	
Carrier vehicle minimum weight	kg	1,200	1,300
Weight**	approx. kg	270	300

* The power requirement also depends upon the grass density and grass height

** Weight may differ according to equipment

SSG cutter systems, either...



Small flails



Fine-cutting blade B60



Safety cutters

The humus flail mulcher SSG is equipped with small flails, fine-cutting blades or Safety cutters.

All cutting systems ensure a clean and good cut and prove themselves when shredding shrubbery. The Safety cutters prevent ejection of rocks and other foreign objects.

Colour selection...



RAL 3000



RAL 2011

GLS

With new side shift – for narrow-, compact-, small tractors and wheel loaders with hydraulic drive from 32 hp

optional *Safety Mulcher*



Front side mulcher with a new designed side adjustment – for narrow-gauge tractors, municipal tractors, small tractors and wheel loaders with a hydraulic performance from 32 hp.

Thanks to the hydraulic drive it runs very quietly because of missing gearbox noise. With its very compact mounting to the carrier vehicle, the GLS offers twice as many capabilities: as front mulcher directly in front of the carrier vehicle or as a side mulcher. With its large transverse displacement of 104 cm it is possible to shift it completely to the right – next to the tractor – to mulch alongside paths and roads, as well as slopes and ditches.





Stageless adjustable inclination range of the mulching head upwards 90° and downwards 60°



Via the new designed sideshift the side mulcher can be mounted direct to the front of the carrier vehicle. So, there is no obscuring visibility for the operator when driving.



3-point Cat. I + II



Mounting plate Hansa



Mounting plate Tremo



Mounting plate Avant



Mounting plate Wille 365



Mounting plate Multicar M26



Mounting plate Ladog



Euro mounting

Well proven range of use

- mulching of grass and light wood
- ditches and embankments
- hedge maintenance
- roadside greenery
- area management and landscape management
- municipal deployment
- green area maintenance of aerodromes, factory premises

Basic equipment

- Mounting: front
- Inclination range: upward 90° / downward 60°
- Fixture for attachment plate or 3-point linkage
- High-quality oil motor: Robust, elastic drive via reinforced V-belt on the rotor shaft
- Track roller for good ground tracking and precise cutting height guidance
- Mechanical collision guard
- Spherical roller bearing in the rotor shaft
- Two parking feet

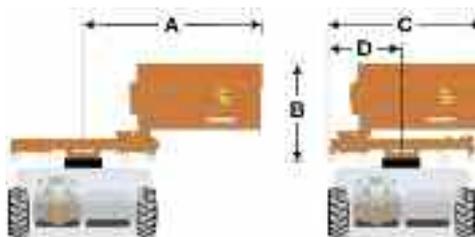
Accessories / special equipment

- Set of wheels, wheel diameter 300 x 100 mm
- Set of foam-filled wheels, wheel diameter 300 x 100 mm
- Rotor brake valve including feeder valve
- Feeder valve
- Rotor brake valve with pressure relief valve, speed limiter, including feeder valve
- Hydraulic hose kit for Holder C270 – C370
- Hydraulic hose kit for Kärcher MIC 50
- Hydraulic hose kit for Multicar / Tremo

Technical data

	GLS	105	125	145	155
Small flails / Fine-cutting blade	pcs.	14	24	28	30
 Safety cutters	pcs.	15	18	21	24
Working width	m	1.05	1.25	1.45	1.55
Total width	m	1.50	1.60	1.80	2.00
Housing height	m	0.33	0.33	0.33	0.33
Gesamtbreite Mulchkopf	m	1.15	1.35	1.55	1.68
Power requirement* from kW / hp		24 / 32	30 / 40	35 / 48	40 / 55
Weight***	approx. kg	345	365	385	405
Tractor track width	m	1.20	1.40	1.50	1.50
Tractor	at least kg	1,300	1,500	1,500	1,700
Slideway / linear	m	1.04	1.04	1.04	1.04

* The power requirement also depends on the grass density and grass height
 *** Weight can deviate depending on equipment



Dimensions	105	125	145	155
A = m	1.67	1.87	2.07	2.30
B = m	0.99	0.99	0.99	0.99
C = m	1.50	1.60	1.80	2.00
D = m	0.75	0.75	0.75	0.75

GLS cutter system, either...



Small flails



Fine-cutting blade B60



Safety cutters

Colour selection...



RAL 3000

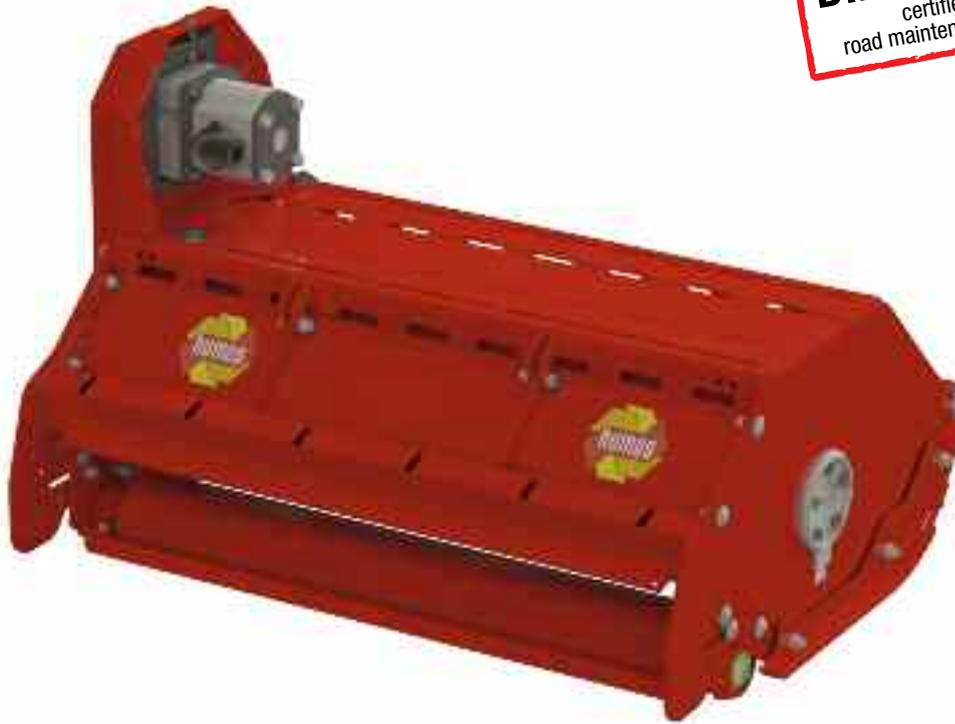


RAL 2011

WMH

Especially suitable for mounting on all compact tractors, special tractors, wheel loaders, mini excavators, municipal vehicles and extension mowers

With hydraulic drive



The WMH hydraulic mulching head is designed for universal use. It has a compact and low design and, with its hydraulic drive, is particularly well-suited for attachment on all special tractors, wheel loaders, mini-excavators, municipal vehicles and extension mowers.

In addition, a variable attachment system enables easy continued use of the mulcher if there is a vehicle change.

Serrated counter-cutters in the housing increase the degree of shredding of the mulch mass and thus achieve optimum working results.





Hydraulic side shift in connection with parallelogram shift* / adjustment way approx. 40 cm (possible from WMH 125)



Set of skids



3-point linkage



Universal mounting



Robocut mounting without swivel



Skid-Steer mounting



Energreen mounting



Euro mounting

Well proven range of use

- in orchards and vineyards
- in horticulture
- in berry plantations
- in nurseries
- in sports facilities and parkways
- fallows
- in landscape maintenance
- to shred prunings
- in municipal use

Basic equipment

- Mounting: front, rear and extension
- Housing with system angle for quick installation on the carrier vehicle
- Robust, flexible drive via enhanced V-belt on the rotor shaft, automatic V-belt tensioning
- Rear roller adjustment for good soil management and precise cutting height
- Self-cleaning roller with large storage and floor-friendly guide to the rounded ends and vertical adjustment the mulch machine – at WMH 135 and 145
- Drive roller diameter: 140 mm
- Rotor tube diameter: 102 mm
- Serrated counter-cutter in the housing to increase the degree of defibration and reduction of the mulch mass
- Housing height flat drive 602 mm, high drive 743 mm
- Housing height on the discharge side 487 mm
- Matching gear motor (oil motor) for the delivery rate (oil) of the carrier vehicle

Accessories / special equipment

- Height adjustment H 240 / 240 mm adjustment, 43 kg
- Height adjustment H 240 P / 240 mm adjustment with pendulum balance, 63 kg
- Rotor brake valve including feeder valve
- Feeder valve
- Rotor brake valve with pressure relief valve, speed limiter, including feeder valve
- Axial piston motor (only in connection with leak-oil line)
- Mounting for fork carriage without mounting hook
- Euro mounting

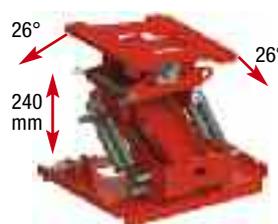
Technical data

	WMH	85	95	105	115	125	135	145
„Y“-type blades	pcs.	24	28	30	36	36	42	44
System flails	pcs.	8	8	8	8	10	10	12
Working width	m	0.85	0.95	1.05	1.15	1.25	1.35	1.45
Overall width	m	0.95	1.05	1.15	1.25	1.35	1.45	1.55
Power requirement								
	from kW / hp	13 / 18	13 / 18	13 / 18	16 / 22	18 / 25	18 / 25	22 / 30
Oil motors	l				25 – 130			
Weight***	approx. kg	235	255	275	295	315	335	355

* The power requirement also depends upon the grass density and grass height *** Weight depending on the equipment



Height compensation H 240



Height compensation H 240 P (with swing compensation)



Mounting for fork carriage / Euro mounting

WMH cutter systems, either...



„Y“-type blades



System flail... with fine-cut blade or claw blade



Universal flail

Colour



RAL 3000

SMH

Especially suitable for mounting on all compact tractors, special tractors, wheel loaders, mini excavators, municipal vehicles and extension mowers

With hydraulic drive

optional *Safety Mulcher*



The series SMH is designed for universal implementation. It has an extremely compact and low design and thus is particularly well-suited for attachment on special tractors, wheel loaders, mini-excavators, municipal vehicles and boom mowers.

Moreover, a variable attachment system enables easy continued use of this mulcher if there is a vehicle change.





Well proven range of use

- mulching of grass
- roadside plantings
- area management, landscape management, landscaping
- municipal implementation
- sports facilities and parks
- maintenance of meadow and pasture areas
- green area maintenance of fallow land
- large areas in combination with side mulchers
- hedge maintenance
- berry cultures
- tree nurseries

Basic equipment

- Mounting: front, rear and extension
- With hydraulic drive
- Housing with system brackets for quick installation on the carrier vehicle
- Skids
- Rear roller adjustment for good soil management and precise cutting height
- Overload protection by flexible V-belt drive
- Large tray of mulch behind the roller
- Adapted gear motor (motor oil) to flow rate (oil) from the carrier vehicle

Accessories / special equipment

- Hydraulic maintenance cover in front
- Height adjustment H 240 / 240 mm adjustment, 43 kg
- Height adjustment H 240 P / 240 mm adjustment with pendulum balance, 63 kg
- Set of wheels, wheel diameter 300 x 100 mm
- Set of foam-filled wheels, wheel diameter 300 x 100 mm
- Rotor brake valve including feeder valve
- Feeder valve
- Rotor brake valve with pressure relief valve, speed limiter, including feeder valve
- Mounting plate 540 x 240 mm
- Axial piston motor (only in connection with leak-oil line)
- Hydraulic side adjustment 28 cm adjustment – from SMH 105
- Mounting for fork carriage without mounting hook
- Euro mounting

Technical data

	SMH	085	105	125	145	155	175
Small flails/							
Fine-cutting blade	pcs.	14	18	24	28	30	
	pcs.	12	15	18	21	24	27
Working width	m	0.85	1.05	1.25	1.45	1.55	1.75
Overall width	m	0.95	1.15	1.35	1.55	1.65	1.85
Housing height	m	0.33	0.33	0.33	0.33	0.33	0.33
Power requirement*	from kW / hp	8/11	12/16	17/23	22/30	26/36	28/38
Oil motors	l				25 – 130		
Weight***	approx. kg	120	140	155	180	205	285

* The power requirement also depends upon the grass density and grass height
 *** Weight may differ according to equipment



Height compensation H 240



Height compensation H 240 P (with swing compensation)



Mounting for fork carriage / Euro mounting

SMH cutter systems, either...



Small flails



Fine-cutting blade B60



Safety cutters

The humus flail mulcher SMH is equipped with small flails, fine-cutting blades or Safety cutters.

All cutting systems ensure a clean and good cut and prove themselves when shredding shrubbery. The Safety cutters prevent ejection of rocks and other foreign objects.

Colour selection...



RAL 3000



RAL 2011



With track wheel set



With height compensation



With hydraulic lateral adjustment



With reach mower



System angle bracket for easy adaptation of receptacle brackets or adapter frames



humus SMH with mounted forked holder

KMA

Heavy mulcher with hydraulic drive, front-mounting on wheel loader, large extension mower or excavators

With hydraulic drive

optional *Safety Mulcher*



Heavy mulcher with hydraulic drive, for front attachment and attachment on large boom mowers, wheel loaders, excavators, etc. The mulching head is characterised by its extremely stable housing and strong bearings.





System angle bracket for easy adaptation of receptacle brackets or adapter frames

Well proven range of use

- mulching of grass
- ditches and embankments
- roadside plantings
- area management, landscape management, landscaping
- municipal implementation
- pasture area maintenance
- green area maintenance of fallow land
- large areas in combination with side mulchers
- hedge maintenance
- berry cultures

Basic equipment

- Mounting: front, rear or extension
- With hydraulic drive
- Housing with system angle for quick installation on the carrier vehicle
- Overload protection by flexible V-belt drive
- Large tray of mulch behind the roller
- Rear roller adjustment for good soil management and precise cutting height
- Drive roll diameter 170 mm
Rotor tube diameter 140 mm (KMA)
- Matching gear motor (oil motor) for the delivery rate (oil) of the carrier vehicle

Accessories / special equipment

- Mounting plate 340 x 460 mm
- Set of skids
- 3-point linkage Cat. II with hydraulic side adjustment
- Rotor brake valve including feeder valve
- Feeder valve
- Rotor brake valve with pressure relief valve, speed limiter, including feeder valve
- Water-proof drive box
- Axial piston motor (only in connection with leak-oil line)
- Wear plates
- Mounting for fork carriage without mounting hook
- Euro mounting

Technical data

	KMA	125	135	155	180	200	220
„Y“-type blades	pcs.	36	42	48	54	60	66
System flails	pcs	10	10	10	14	14	16
 Safety cutters	pcs.	14		18	21	24	26
Working width	m	1.25	1.36	1.56	1.80	2.00	2.20
Overall width	m	1.47	1.60	1.80	2.04	2.24	2.44
Power requirement*							
	from kW / hp	17 / 23	22 / 30	22 / 30	30 / 41	36 / 49	44 / 60
Oil motors	l			25 – 130			
Weight***	approx. kg	350	370	390	470	500	530

* The power requirement also depends upon the grass density and grass height

*** Weight depending on the equipment



Mounting for forkcarriage without mounting hook

KMA cutter systems, either...



„Y“-type blades



System flail... with fine-cut blade or claw blade



Universal flail



Safety cutters

Colour



RAL 3000



Hydraulic compact boom arm for small tractors and narrow gauge tractors or compact tractors.

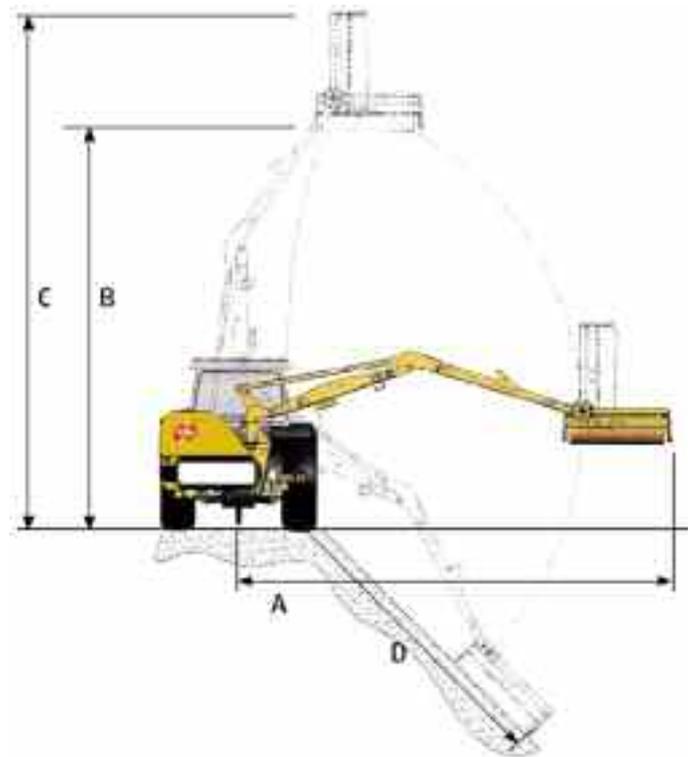
The BMS boom is factory equipped with a friction-reduced multi-lever Bowden cable control system.

Additional boom mowers on request!



Optional: Single-lever electro-proportional control – excellently suited for installation in the tractor cab.

The single-lever joystick control system gives the operator the possibility of controlling the height and the length of the boom arm with one lever. At least two cylinders can be activated simultaneously and variably. Thus precise and uniform control of the arm is provided.



Dimensions

All information is approximate

	BMS	3430	3530 Front	4330	4830
A = m	3.40	3.50	4.30	4.80	
B = m	3.00	2.85	4.10	4.60	
C = m	3.80	3.85	4.20	4.70	
D = m	2.00	2.00	2.55	3.00	





Optimal construction:
Through the arrangement for the BMS 3530 Front, the view is unobstructed during transport travel. Combined with the sliding mulching head, a reach of 3.50 m is achieved.



Good overview:
To enable a better view of the implement for the operator, the BMS 3430 and BMS 4330 (option) can be delivered mounted in front – three-point Cat. I / II. A high top link attachment point permits work close to the tractor and above obstacles.



Work facilitation:
A mechanical parallel guide of the boom arm offloads the operator: If there is a change in boom length the position of the implement remains unchanged.



Optional:
Lopper – equipped with guide fingers and serrated lower cutter for a clean cut. Particularly well-suited for trimming to Ø 30 mm.



Well proven range of use

- mulching of grass
- ditches and embankments
- roadside plantings
- wayside maintenance
- area management and landscape management
- municipal implementation
- hedge maintenance

Basic equipment

- Attachment: rear or front possible
- 3-point rear mounting cat. I or II
- Stabilization kit for 3-point
- Tractor independent hydraulic system
- Hydraulic collision protection
- Mechanical parallel guide
- Attachment for tool (e.g. pruning shears)
- Floating position extension
- Floating position mulching head
- Multiple lever bowden cable operation – length of cable: rear mounting 2 m, front mounting 3.20 m
- Drive shaft

Accessories / special equipment

- Delivery without hydraulic system
- Lighting system only for rear attachment on BMS 3430, 4330 and 4830
- Fast-changer – boom side
- Fast-changer – implement side (mulcher / tree topper)
- Set of hydraulic fast couplers, arm side or implement side
- Leak oil line on the boom, incl. fast coupler (required for hedge maintenance mower deck)
- Hydraulic fast coupler for leak oil line
- Attachment plate for Avant, Multicar, Boschung, Hansa, Ladog
- Counterweight for attachm. without hydr. system for BMS 3530 front
- Height-adjustable support feet for attachment via attachment plate
- Holder – attachment kit for stabilisation for BMS 3530 front

Technical data

	BMS	3430	3530 Front	4330	4830
Max. horizontal display	m	3.40	3.50	4.30	4.80
Pumping capacity	l / m	46	46	46	46
Working pressure	bar	210	210	210	210
Oil tank volume	l	66	66	66	90
Power requirement* min. kW / hp		18 / 25	18 / 25	33 / 45	33 / 45
Rpm of PTO	rpm		540 or 1,000		
Weight incl. oil**	approx. kg	330	350	430	410
Tractor weight	min. kg	1,200	1,750	1,900	2,300

* The power requirement also depends upon the grass density and grass height
** Weight depending on the equipment

Suitable mulching heads

Suitable mulching heads for the BMS boom arm are on page 18/19.



DIN EN 13524
certified for
road maintenance service



This product is made of Hardox® wear plate



The humus PS undergrowth mulcher impresses with its light weight and high performance in forestry and municipal applications (keeping roads clear, clearance, forest residues, etc.). The humus PS undergrowth mulcher is also perfectly suited for use in traditional agriculture (conversion of overhanging orchards or similar).

In recent years, the use of these devices has changed. They are often used as carrier vehicles (sometimes radio-controlled or even autonomous tracked vehicles) for instance on steep slopes, i.e. in places where a conventional towing vehicle, such as a tractor, can no longer be used because of its size and weight.

Thanks to the lower power of such a tracked vehicle compared to a conventional towing vehicle, the previously existing and often very massively built forestry and scrub mulchers can no longer be used since they are too heavy.

For this reason, our humus designers made every effort to meet these requirements and developed our humus PS, a very light yet powerful undergrowth mulcher.



Fig. with special equipment





Three-point receptacle Cat. II with hydraulic lateral adjustment and gearbox that is dependant on the direction of rotation. For front attachment or rear-push.



Hydraulic pressing device, 36 kg



Plug-in bolt for pressing device (prevents underbrush from slipping away)



Adjustable exchangeable skids standard equipment



Universal mounting



Robocut mounting without swivel



Skid-Steer mounting



Energreen mounting

Well proven range of use

- mulching of undergrowth and scrub
- ditches and embankments
- area management and landscape management
- municipal deployment
- maintenance of bushy areas
- recultivation
- infrastructure measures
- line maintenance
- biotope maintenance
- embankment maintenance
- renaturation

Basic equipment

- Attachment: Front, rear-push or boom
- Housing with system angle for quick and variable installation on the carrier vehicle
- Overload protection by flexible V-belt drive
- Large tray of mulch
- Rotor tube diameter 125 mm
- Effective diameter rotor 230 mm
- Axial piston motor
- Hydraulic maintenance cover in front
- Housing parts of Hardox® wear plate
- Interchangeable skids of Hardox® wear plate
- 2 interchangeable counter-cutters in the housing
- Cutting height adjustment up to 5 cm over skid

Accessories / special equipment

- Feeder valve 34 / 64 cm³
- 3-point linkage
- Hydraulic pressing device, 36 kg
- Pressing device, 32 kg
- Universal mounting, Robocut mounting without swivel, Skid-Steer mounting, Energreen mounting
- Plug-in bolt for pressing device (prevents under brush from slipping away)
- Adjustable exchangeable skids standard equipment

Technical data

	PS	85	105	125	145	155
Blade system B50	pcs.	12	15	18	21	23
Working width	m	0.85	1.05	1.25	1.45	1.59
Overall width	m	1.07	1.27	1.47	1.67	1.81
Power requirement*	from kW / hp	25 / 34	25 / 34	25 / 34	35 / 48	35 / 48
Axial piston motor	l	40 – 110 (drive left or right)				
Rpm of PTO	rpm	540 or 1,000 (drive right)				
Weight***	approx. kg	196	217	238	261	274

* The power requirement also depends upon the grass density and grass height *** Weight may differ according to equipment



Rotor shaft



Blade system B50



With its PH undergrowth mulcher humus brings to market a new powerhouse for green area maintenance and forestry work. The undergrowth mulcher with hydraulic drive has been especially developed for attachment on implement carriers with radio remote control. But it also suitable for other hydraulic carrier vehicles, e.g. for front attachment on wheel loaders, crawler track vehicles, large boom mowers or excavators.

The housing has a system angle bracket for fast and flexible attachment on a wide variety of carrier vehicles. Optionally the humus PH can be attached with a three-point linkage Cat. II on PTO shaft-driven carrier vehicles in front attachment and rear thrust, with 540 or 1,000 rpm.



This product is made of Hardox® wear plate





Three-point receptacle Cat. II with hydraulic lateral adjustment and gearbox that is dependant on the direction of rotation. For front attachment or rear-push.



Hydraulic pressing device, 36 kg



Plug-in bolt for pressing device (prevents underbrush from slipping away)



Universal mounting



Robocut mounting without swivel



Skid-Steer mounting



Energreen mounting

Flexible tool use (cutter systems) enables different applications and implementation conditions. The rotor's tool configuration can be easily swapped out and matched to the application.

The hydraulic front flap with counter-cutters is standard equipment. The counter-cutters in the machine ensure better reduction of the mulched material.

The housing of Hardox steel promises a long service life and is designed for professional use. An ingenious tool system guarantees an optimal cutting pattern: Ideally suited for green area care and forestry work, for rough terrain; it mulches undergrowth and branches without any problems.

Well proven range of use

- mulching of undergrowth and scrub
- ditches and embankments
- area management and landscape management
- municipal deployment
- maintenance of bushy areas
- recultivation
- infrastructure measures
- line maintenance
- biotope maintenance
- embankment maintenance
- renaturation

Basic equipment

- Attachment: Front, rear-push or boom
- Housing with system angle for quick and variable installation on the carrier vehicle
- Overload protection by flexible V-belt drive
- Large tray of mulch
- Rotor tube diameter 450 mm
- Axial piston motor
- Hydraulic maintenance cover in front
- Housing of Hardox® wear plate
- Interchangeable skids of Hardox® wear plate
- Rotor with cutting depth limitation
- 2 interchangeable counter-cutters in the housing
- Cutting height adjustment up to 5 cm over skid

Accessories / special equipment

- Three-point receptacle Cat. II with hydraulic lateral adjustment / mechanical lateral adjustment
- Delivery with gearbox drive (gearbox depends on the direction of rotation)
- Feeder valve 34 / 64 cm³
- Three-point receptacle Cat. II with hydraulic lateral adjustment and gearbox that is dependant on the direction of rotation. For front attachment or rear-push
- Hydraulic pressing device, 36 kg
- Pressing device, 32 kg
- Universal mounting, Robocut mounting without swivel, Skid-Steer mounting, Energreen mounting

Technical data

	PH	125	135	145	160
Blade systems B70 / B80 pcs.		26	28	30	32
Working width m		1.25	1.35	1.45	1.60
Overall width m		1.45	1.55	1.65	1.80
Power requirement* from kW / hp		40 / 54	50 / 68	55 / 75	63 / 85
Axial piston motor l			55 up to 110 l		
Rpm of PTO rpm			540 or 1,000		
Weight** approx. kg		460	510	540	610

* The power requirement also depends upon the grass density and grass height

** Weight may differ according to equipment

PH cutter system, either...



B70



B80

Flexible tool use for different applications and deployment conditions. The tool configuration of the rotor can be easily swapped out and matched to the application.

Initial rotor configuration at machine delivery is only possible with B70 cutter.

Colour



RAL 3000



The optimally balanced rotor with the B70 and B80 cutter systems ensures less wear on the bearings. The high rotor speed ensures high productivity and an optimal work result. The rotor has a cutting depth limitation that prevents excessive depth in the material to be mulched, thus excessive reduction of the rotor speed is prevented. This a particular advantage with low-power carrier vehicles, in maintaining the rotor speed.

B70: The B70 cutter is the ideal partner for tasks with light ground contact! Thanks to its single-edged, sharp and hardened blade, you obtain the best fine-chopping results. The B70 cutter is suitable for all ground conditions, all types of vegetation and all types of undergrowth strata.

B80: Triple-edged carbide tool with offset cutting edges for wear-intensive and sandy applications. Minimal force requirement thanks to diagonally inserted carbide plates and an additional wear guard on the holder.

Our product range



Mouse killer

A mobile implement for immediate use on meadows, gardens, orchards/vineyards and for landscaping.

More information at www.mäusevernichter.de



Flail mulchers

Growth is cleanly mulched in the set height. The mulched material is routed along the housing via the track roller and is uniformly distributed behind the implement.

Request the special brochure, **Flail Mulchers**.



Rotary mulchers

Rotary mulchers for orchards and vineyards, proven to be particularly effective due to their minimal height. Depending on the model, the implements are variable in the working width.

Please request the special brochure, **rotary mulchers**.



Cultivation

The humus-PLANET has been developed for mechanical weed control. Thorough and gentle: The weed is pulled out with the root and then chopped.

Please request the special brochure, **rotary mulchers**.



Attachment forklift and pallet lifter

All models are equipped with double-acting hydraulic cylinder for pressing and fast lowering, hydraulic top link, as well as flip-up and multiple adjustment load forks.

Implement technology and machines for soil cultivation

humus has a high level of commitment in the area of implement technology and offers an extensive product range for harvesting fruit, for cutting tasks and machines for soil cultivation.



Roller disc harrow



Cultivator



Subject to technical changes and colour deviations / version 03.2021

- Innovative technology
- Outstanding work results
- Easy operation
- Long-term reliability
- High quality
- Stable construction
- Service-friendly design



A full-coverage dealer and service network is the guarantor for proximity to customers and customer support, also extending for many years after the purchase.

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Your humus dealer



www.mulcher.tv