FLAIL MOWER USM SMT SMK









Flail mower USM 10 / 13 / 15 / 18 / 21 / 26

The USM flail mower works as a rear implement in a standardised three-point hydraulic system, laterally offset next to the tractor unit.

The working setting of the flail mower is smoothly variable so that it can be used on the most difficult slopes, embankments and plains.

It is a universal mower and mulcher for mowing:

- Verges
- Embankments
- Fallow land
- · Recreation grounds
- Field margins
- · Green manure crops
- · Green fallow (set-asides)
- · Cleaning of meadows
- · Decapitating of turnips etc.

The flail mower very cleanly mows all types of grass, from seaweed to reed up to sedges. Leisure facilities such as sports fields, camping sites, airfields, etc. can be perfectly maintained. Even thorny bushes, shrubs up to 4 cm in diameter and other uncontrolled growth are no obstacle for the flail mower.

The mowed material is heavily crushed and split so that it can rot and mulch very quickly. This eliminates the need to clear away the goods.

With the wide flails even dense crops can be chopped relatively short and evenly distributed. Lying grass can be brought up.



USM 18 mowing ditch slopes



USM 26 mulching corn stover







USM 18 with displacement



USM with conveyor belt for lateral depositing of the mowed material



USM 13 mowing ditch slopes



USM 13 in transport position

There is a good view of the working mowing gear. It is operated from the tractor's hydraulic control units. Both together guarantee safe handling.

The built-in hydraulic overload protection prevents damage to the machine in the event of unintentional moving at obstacles.

The roller mounted over the entire mowing width allows very good ground adjustment even on uneven surfaces.

The flail mower can be attached or dismantled in a few minutes.

Due to the compact build and the generous dimensions of the flail shaft and the flail, the flail mower is largely insensitive to foreign bodies such as stones, pieces of wood, iron parts and other rubbish.

The special type of suspension of the special spring steel flails results in a favourable and energy-saving speed, which also reduces wear to a minimum.

On request, the flail mower USM 15 - 26 can be equipped with a flail shaft with heavy, free floating flails (see page 5). This means that it can also be used for stronger growth with shrubs as well.

As another alternative, the USM 10 and 13 can be equipped as fine-cut flail mowers. The grass to be mulched is heavily crushed and rots faster.

The USM 10 and 13 flail mowers are equipped with a hydraulic lateral displacement of 0.50 m as standard. As an optional extra, the USM 15 to 26 can be specially equipped with a hydraulic lateral displacement of 0.60 m. Controlled from the tractor's hydraulics, the extension can be changed by 60 cm as required. Reflector post, trees and other obstacles can easily be avoided.

Technical data see page 5.



Flail mower USM 10 / 13 / 15 / 18 / 21 / 26



hydraulic swerving device



electronic operating hours counter



USM V-belt drive



hydraulic transport protection in working position



 $hydraulic\ transport\ protection\ in\ transport\ position$



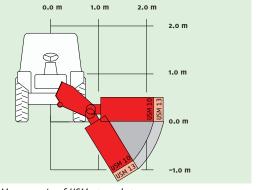
very stable lower catch hooks



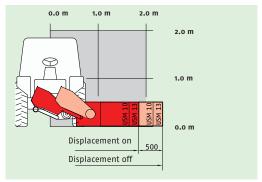
central hydraulic block with nitrogen buffer

Technical data USM 10 / 13 / 15 / 18 / 21 / 26

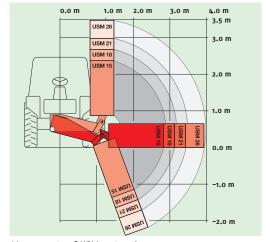
	USM 10	USM 13	USM 15	USM 18	USM 21	USM 26
Working width (m)	1,00	1,30	1,50	1,80	2,10	2,60
Total width (m)	2,10	2,40	3,45	3,85	4,15	4,65
Transport width (m)	1,15	1,15	2,25	2,25	2,25	2,25
Power requirement kW (HP)	20 (27)	25 (34)	30 (41)	50 (68)	60 (80)	65 (88)
Weight basic equipment (kg) may vary depending on additional equipment	420	450	900	950	1150	1250
PTO shaft speed (rpm)	540	540	540	540	1000	1000
Area output approx. (ha/h)	8	8	8	8	8	8
Inclination angle	70°	70°	70°	70°	70°	70°
Total swivel range	160°	160°	160°	160°	160°	160°
Working width starting from tractor centre (m)	2,10	2,40	2,95	3,25	3,55	4,05
Working width starting from tractor centre (m) with hydraulic lateral adjustment	1,60 - 2,10	1,90 - 2,40	2,65 - 3,25	2,95 - 3,55	3,25 - 3,85	3,75 - 4,35
E-point linkage category	I + II	I + II	II + III	II + III	II + III	II + III
Number of flails	22	28	12	15	18	24
Front attachment option	-	-	-	-	-	-
laterally displaceable by (m)	0,50	0,50	0,60	0,60	0,60	0,60
Basket	-	-	-	-	-	-
Ground adjustment:	Roller	Roller	Roller	Roller	Roller	Roller



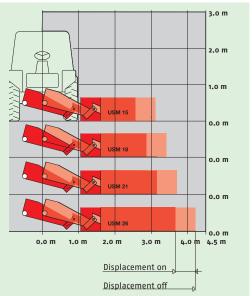
Movements of USM 10 and 13



Movements of USM 10 and 13



Movements of USM 15 to 26



Displacement of USM 15, 18, 21, 26

The choice of flail shaft on flail mowers of the USM series



The flails in the standard version weigh about 2 kg and are made of spring steel. They are loosely hooked in the holder of the flail shaft and each is secured by a screw. When mowing, they are held in position by centrifugal force and can avoid obstacles.



On request, the flail mowers of the USM series can be equipped with heavier, free-floating flails. These sit on stable flail blocks on a massive flail shaft. This means that it can also be used for stronger growth with shrubs as well.

Flail mower SMT 15

The SMT 15 flail mower is equipped with a lateral hydraulic displacement device of 0.65 m as standard. The extension can be changed as required by adjusting it accordingly.

The hydraulic lateral displacement offers the advantage that obstacles can be better avoided and the extension can be changed.

The low mowing head permits mowing under crash barriers.

The SMT 15 flail mower can also be used as a wild weed brush or as a pavement cleaning brush by changing the working equipment.

The device can be supplied for right-hand or left-hand work.



The SMK flail mower is designed for work as a front implement next to the carrier vehicle in the three-point hydraulic system cat. Il or in the vehicle plate size 3 or 5. The swivel range of the mowing head allows for work on embankments and slopes.

The SMK flail mower is designed for extensive use on harder bushes and vegetation and can also be equipped with the following special equipment:

- hydraulic lateral displacement by 0.60 for bypassing reflector posts, trees and other obstacles
- reinforced version with free-floating flails
- impact rail for strong decrease of grass and green waste
- · wear protection insert installed in mower hood
- operating hours counter



SMT 15 right-hand work on tractor



SMT 15 left-hand work on U20 Unimog



SMT 15 in transport position





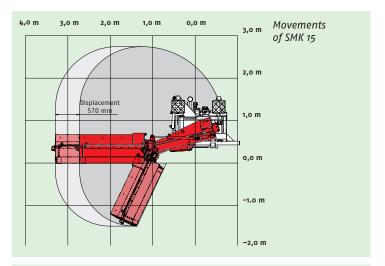
SMK 15 right-hand work on tractor

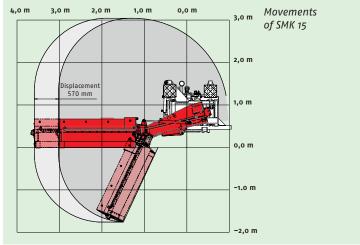


SMK 15 in transport position



SMT 15 with radial weed and pavement cleaning brush





Technical data	SMT 15	SMK 15	SMK 18
Working width:	1,50 m	1,50 m	1,80 m
Total width:	3,80 m	3,85 m	4,15 mm
Transport width (folded in):	2,00 m	2,20 m	2,20 m
Power input starting from:	30 kW (40 PS)	50 kW (68 PS)	60 kW (82 PS)
Weight basic device:	750 kg	950 kg	1.000 kg
PTO speed:	540 U/min.	1.000 U/min	1.000 U/min
Working speed:	up to 8 km/h	up to 8 km/h	up to 8 km/h
Inclination angle:	70°	65°	65°
Total swivel range:	250°	250°	250°
Displacement range:	0,65 m	0,57 m	0,57 m
Pavement cleaning brush working width:	0,90 m	-	-
Radial weed brush working width:	0,60 m	-	-

Technology for environmental landscape maintenance and agriculture



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