



## **ROTARY TEDDERS**

**4 - rotor, 6 - rotor,  
8 - rotor, 10 - rotor**

## **ROTARY RAKES**

**1 - rotor, 2 - rotor, in-line rakes**

## **BASKET RAKES**

**5-bars**





## ...Clean, thoroughly aerated swath

Farm's capability of producing high quality forage is one of the crucial factors to distinct modern milk and meat production technology.

Access to top quality technical equipment, conforming to high requirements is considered to be a challenge at the designing stage.

To meet these needs, we offer top quality technological solutions, based on 30-year experience in designing agricultural equipment. We will help to achieve your success!

Many have already trusted us. We are passionate about designing machines to meet any farmer's needs!



**35 years  
of experience...**

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# Rotary tedders

P4-471, P4-531, P6-651, P6-771, P4-471 C, P4-531 C, P6-771 C

### Double acting hydraulic cylinder

- synchronous unfolding of the machine even on steep slopes,
- innovative design in P6-651 and P6-771

### Warning plates with road lights

### Gearbox

- Oil operating gearbox
- low noise operation
- maintenance-free use

### Mechanical transport lock

### Hitch

- swinging for better ground following
- turning for easier manoeuvring

### Damping braces

- stabilize the machine during operation

### Adjustable driving chassis

- high range spreading angle
- stability on wet fields

### Gearbox cover

- prevents grass winding



# General characteristics

## Tine arm

- round profile extends tine's life
- ideal ground following ensures uniform material spread

## Tines

- made of High Dynamic spring wire
- 4 coils for better flexibility
- special tine-mount for greater stability
- 2 approach angles



## Tine loss protection

- prevents unexpected loss of tines

## Oil-operating gearbox

- Cardan joints, with easy access grease points, ensure constant power transfer between the rotors
- low-noise operation
- as part of main frame - decreased total weight of the machine





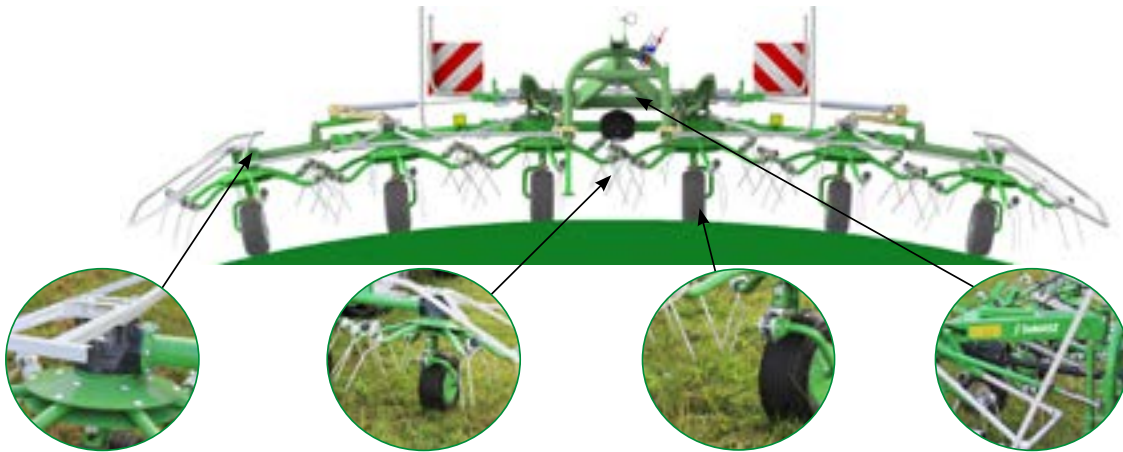


# Rotary tedders

P4-471, P4-531, P6-651, P6-771, P4-471 C, P4-531 C, P6-771 C

The range of hay tedders includes eight machine models. Four rotor models are available: P4-471, P4-531, P4-471 C, P4-531 C (C-drawn version) and six-rotor models P6-651, P6-771 and P6-771 C. Thanks to their high performance, quality and solid construction, the hay tedders have an established position on the Polish market and are winning foreign mar-

kets with great success. The front support wheel is available as an accessory for even better turf protection. This solution is especially recommended for work on uneven, hilly terrain. A number of solutions that enable to harvest clean forage have been used in SaMASZ hay tedders.



### Intersecting gearbox

Solid and hermetic design of all intersecting gearboxes make rotors absolutely maintenance-free. Work in oil-bath with permanent lubrication increases its longevity.

### Rotors

Even layout of spread material thanks to perfect tine arms overlapping.

### Wheels

Protective guard against winding the crop on the wheels and inner tubes ensure smooth and trouble-free operation.

### Suspension

Suspension mechanism enables setting the machine in central position during lifting. Tension of damping braces is an additional support.

### Transport

Tedder arms are lifted to transport position by means of hydraulic cylinders.

Once lifted to transport position, the machine is stabilized automatically behind the tractor.



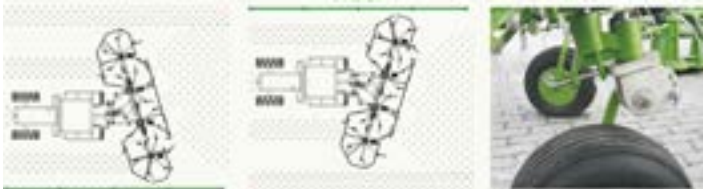




# Perfect drying

## Manufacturer's advice

Close distance between wheels and tines ensures clean swath regardless of the ground unevenness. Thus enables perfect ground following, owing to which the fodder is not soiled. There is a possibility to set the wheel angle, change of which, helps when taking turns on uneven fields. Setting the angle from steep to shallow is easy to carry out, on the brackets that hold the wheel arms (pin and hole system). Better work results when working along boundaries can be achieved by turning the wheels left or right respectively.

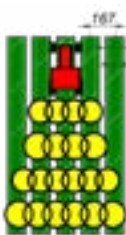


## High-range spreading angle

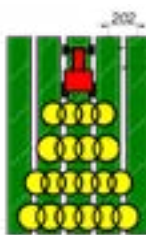
Possibility of tedding the swaths with different thicknesses owing to regulated angle of spread.



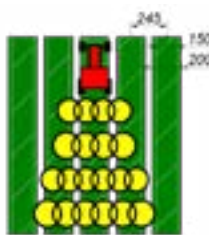
Mower 1,80 m / 5,90 ft



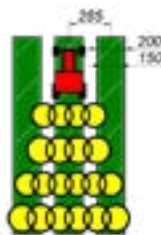
Mower 2,20 m / 7,20 ft



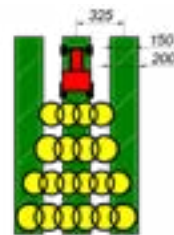
Mower 2,60 m / 8,55 ft



Mower 3,00 m / 9,85 ft



Mower 3,40 m / 11,15 ft



- P4 - 470
- P4 - 530
- P6 - 650
- P6 - 770

TECHNICAL DETAILS		P4 - 471	P4 - 531	P6 - 651	P6 - 771	P4 - 471 C	P4 - 531 C	P6 - 771 C	
	Working width [m / ft]	4,70 / 15'5"	5,30 / 17'5"	6,50 / 21'4"	7,70 / 25'3"	4,70 / 15'5"	5,30 / 17'5"	7,70 / 25'3"	
	Transport width / height [m / ft]	3,00 / 2,50 9'8" / 8'2"	3,00 / 2,70 9'8" / 8'1"	3,00 / 3,60 9'8" / 11'8"	2,95 / 4,00 9'7" / 13'2"	3,00 / 2,50 9'8" / 8'2"	3,00 / 2,70 9'8" / 8'1"	2,95 / 4,00 9'7" / 13'2"	
	Number of tine arms per rotor	4			6		4		6
	Necessary hydraulic couplers	1 x single acting			1 x double acting		1 x double acting		
	Working capacity [ha/h / ac/h]	~ 5,60 / 13,85	~ 6,30 / 15,55	~ 7,80 / 19,30	~ 9,20 / 23	~ 5,60 / 13,85	~ 6,30 / 15,55	~ 9,20 / 23	
	Number of arms [pcs.]	6							
	Rotor diameter [cm / ft]	162 / 5'4"	172 / 5'8"	160 / 5'3"	172 / 5'8"	160 / 5'3"	172 / 5'8"	172 / 5'8"	
	RPM	540							
	Hitch	II				drawbar			
Power demand [HP]	from 30	from 40	from 50	from 60	from 30	from 40	from 60		
Tires (with inner tubes)	16 x 6,5-8					16 x 6,5-8 / 18 x 8,5 - 8			
Weight [kg / lbs]	665 / 1470	680 / 1500	915 / 2020	945 / 2080	680 / 1500	695 / 1530	1730 / 3800		



# Rotary tedders

## P8 - 890

The P8 series hay tedders are perfect for medium to large farms and agricultural services companies. The machines guarantee the highest quality of work and excellent performance. The hay tedders ensure an even spread of green matter, which means that the cuttings dry evenly. They perfectly target the ground and effectively pick up the forage between the rotors. They are also suitable for wetlands. Pro-

perly designed tines eliminate the risk of sticking into the ground during operation, which ensures that the forage is not dirty and maintains high-quality. The P8 series hay tedders are easy to operate, thanks to bolt couplings that allow the machine to be folded down without having to switch off the PTO shaft.

### Standard equipment P8-890:

- Solid grease gearbox
- Tine loss protection
- Hydraulic folding
- Adjustable angle of spread
- Lifting curtain
- Adjustable wheel position allows to work on field boundary
- Warning plates
- Road lights
- PTO shaft
- KENNFIX hydraulic connector

### Additional equipment:

- Ground following wheel
- Safety cover







# High-quality of tedding

## Advantages:

- greater rotor tilt shortens the trajectory and increases the angle of spread so that the forage is turned on the other side to dry
- adjustable traction drive ensures machine stability and a wide range of forage spreads
- sliding and torsional hook, supported by stabilizing shock absorbers, increases the ground targeting range and facilitates manoeuvring
- quiet operation, hermetically sealed lubricating grease gearboxes are maintenance-free and provide excellent protection against grass winding
- the unique design of the protective railings forming the truss provides resistance to impact and contact with obstacles
- hydraulically foldable tarpaulin prevents the forage from being thrown away when working at the edge of the field
- the rotor lift lock at the headlands makes it easier to manoeuvre the machine and ensures that the swath is passed through without destroying its structure

		P8 - 890
TECHNICAL DETAILS	Working width [m / ft]	8,90 / 29'2"
	Transport width / height [m / ft]	3,00 / 9'10" 3,80 / 12'5"
	Number of tine arms per rotor	8
	Necessary hydraulic couplers	1 x single acting
	Working capacity [ha/h / ac/h]	~ 5,60 / 13,85
	Number of arms [pcs.]	6
	Rotor diameter [cm / ft]	160 / 5'2"
	RPM	540
	Hitch	II
	Power demand [HP]	from 60
	Tires (with inner tubes)	18x8,5-8 (central wheels) / 16x6,5-8 (side wheels)
	Weight [kg / lbs]	1320 / 2910





# Rotary tedders

## P10-1200

New model of SaMASZ rotary tedder, alike the other, makes it possible to achieve high fodder purity. With its 12-metre working width the machine is able to ensure even tedding of green forage at nearly 14 ha within an

hour. Wheels are mounted close to tedder tines which enables a perfect adaptation to the ground configuration, thus protecting the swath against soiling.

### Safety guards

- unique design in truss pattern
- exceptional resistance to impact and contact with obstacles

### Warning plates with road lights

### Turning cylinder of the wheels:

- change of drive direction (work/transport)
- no need to additionally manouvre the tractor

### Gearbox with solid grease

- hermetically closed
- maintenance-free use
- low-noise operation

### Adjustable driving chassis

- high range spreading angle
- stability on wet fields

### Curtain (standard)

- prevents throwing of grass during work at the end of the field
- hydraulic folding

### KENNFIX hydraulic connector

### Trailed hitch

- easy and quick mounting (bar)

### Patented folding mechanism

- folding and unfolding by mens of central hydraulic cylinder
- integrated with turnable cylinders, so that there is no need to additionally manouvre the tractor-tedder set

### Integrated mechanical brakes of the wheels

- stabilize wheels during work and transport
- prevent uncontrolled wheel turning

### Gearbox cover

- prevents grass winding





# High efficiency

### Tine arm

- round profile extends tine's life
- ideal ground following ensures uniform material spread

### Tines

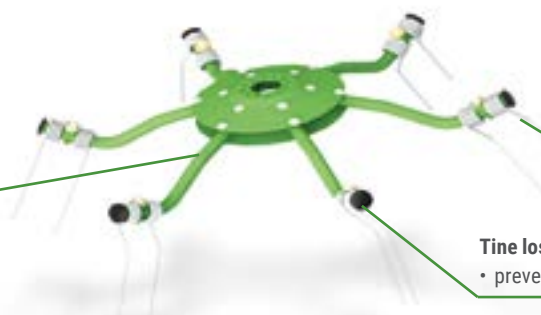
- made of High Dynamic spring wire
- 4 coils for better flexibility
- special tine-mount for greater stability
- 2 approach angles

### Tine loss protection

- prevents unexpected loss of tines

### Patented mechanism of angle adjustment:

- automatic setting of the machine to chosen angle of work
- 3 different angles: 14, 17 or 20°
- increases comfort of operation
- easy and quick maintenance



TECHNICAL DETAILS

### P10 - 1200

Working width [m / ft]	12,00 / 40'
Transport width / height [m / ft]	2,80/1,40 / 9'2"/4'7"
Number of tine arms per rotor	6
Necessary hydraulic couplers	2 x double acting
Working capacity [ha/h / ac/h]	~ 14,4 / ~36
Number of arms [pcs.]	6
Rotor diameter [cm / ft]	160 / 5'3"
RPM	540
Hitch	drawbar
Power demand [HP]	from 80
Tires (with inner tubes)	18 x 8,5 - 8 (road wheels)
Weight [kg / lbs]	2120 / 4674
PTO shaft	tractor: tedder: with friction clutch, built-in: with overrunning clutch





# 1 – rotor rake

Z-300, Z-301, Z-350, Z-351, Z-410, Z-440, Z-470

Rotary rakes Z - series are made for middle and small farms, with working widths from 3,00 m up to 4,70 m (9'10" up to 15'5").

### Shock absorbtion

Damping braces, on both sides, as standard equipment in Z - 410, Z - 440 and Z - 470. During lifting and transport, dampers ensure position and stability of the unit.



Z - 350



Z - 410



### Oil operating gearbox

- quick connecting rod replacement, allows for easy exchange of faulty part without taking the whole gearbox and machine apart
- low-noise operation
- constant lubrication

### Transport

1-rotor rake is easy to transport and when stored occupies small area owing to the removable rake's arms.







# Light-weight and simple in maintenance

## Advantages of Z - 410, Z - 440, Z - 470 rakes

SaMASZ rotary rakes are characterized by unique design solutions:

- 1 Gearbox is permanently lubricated, works in oil-bath – high durability.
- 2 Tine arms secured in working arms with two linchpins - picture 1 and 2.
- 3 Height adjustment of working unit regulated in two different ways:
  - with winding handle
  - by changing the wheel axle mounting
 As standard the chassis height is set for–16 cm (6 1/3"). When work is to be done on soft peat fields, the chassis height needs to be increased. Wheel axle must be turned around 180°, this will give additional 5 cm (2") of height from the ground. Wheel axle regulation is important, because it increases durability of gearbox' lower socket.



## Chassis

Not every field is even and smooth, in order to get regular and clean windrow, a perfect ground following system is indispensable. Z-410, Z-440 and Z-470 rakes are equipped with tandem chassis as standard. Z-300, Z-301 and Z-350, Z-351 can have it on customers request.



## Tine arms

Tine arms are easy to dismount and place in its transport pockets. Rised swath curtains reduce transport and storage width.



## Headstock

Swinging hitch eases operation on uneven fields and during turns. Front support wheel improves ground following and is available as an optional equipment. (Z - 470 as standard).

	Z - 300	Z - 301*	Z - 350	Z - 351*	Z - 410	Z - 440	Z - 470
<b>Working width [m / ft]</b>	3,00 / 9'10"	3,00 / 9'10"	3,50 / 11'6"	3,50 / 11'6"	4,10 / 13'5"	4,40 / 14'5"	4,70 / 15'5"
<b>Windrow width [m / ft]</b>	0,80 - 1,50 / 2'7" - 4'11"						
<b>Transport width [m]</b>	2,60 / 8'7"	2,60 / 8'7"	2,80 / 9'2"	2,80 / 9'2"	3,30 / 10'10"	3,60 / 11'8"	3,80 / 12'8"
<b>Transport width without arms [m]</b>	1,80 / 5'11"				1,90 / 6'3"	2,10 / 6'11"	2,30 / 7'7"
<b>Working capacity [ha/h / ac/h]</b>	~ 3,00 / 7,40	~ 3,00 / 7,40	~ 3,50 / 8,70	~ 3,50 / 8,70	~ 4,50 / 11,00	~ 5,00 / 12,35	~ 5,60 / 14,00
<b>Number of arms [pcs.]</b>	8	8	9	9	11		13
<b>Rotor diameter with arms [m]</b>	2,60 / 8'7"	2,65 / 8'8"	2,80 / 9'2"	2,80 / 9'2"	3,30 / 10'10"	3,60 / 11'8"	3,80 / 12'8"
<b>Number of tines [pcs./arm]</b>	3			4			
<b>RPM**</b>	540						
<b>Hitch</b>	II						
<b>Power demand [HP]</b>	from 20	from 20	from 25	from 25	from 40	from 45	from 50
<b>Tires (with inner tubes)</b>	15 x 6,0 - 6					16 x 6,5 - 8	
<b>Weight [kg / lbs]</b>	310 / 685	390 / 860	340 / 750	420 / 925	590 / 1300	750 / 1655	820 / 1810
<b>PTO shaft</b>	tractor - rake: with overload clutch						

\* Z - 301, Z - 351 - rakes with turning hitch.

\*\* Recommended drive speed during operation 300 - 350 rpm





**NEW!**

# 1 – rotor rake

Z - 300 SLIM, Z - 350 SLIM

The 1-rotor Z-300 Slim and Z-350 Slim rakes were designed for owners of small farms of up to 50 ha. The rake is an economical version of the popular Z-300 and Z-350 models equipped with a 9-arm

rotary gearbox for accurate raking. Machine provides a regular windrow, without grass twists, allowing for easy harvesting, e.g. with a baler.

### Design

- light and simple
- ideal to small tractors
- low power demand

### Height regulation handle

- stepless working height adjustment

### Oil operating gearbox

- quiet operation
- maintenance-free use



### Drive unit (option)

- turnable
- better tractor following
- protection of the turf against damage during turning with the lowered machine

### Windrow curtain

- foldable
- windrow width adjustment





# Functional and economical

## Advantages:

**Slim type of rake is an economical version of the popular Z series with a 9-arm rotary gearbox for accurate raking and high-quality forage.**

- 1 360° caster wheels, adjustable rake height and swath width for precise raking and clean forage
- 2 PTO shaft with overload clutch protects driving components against damage
- 3 the standard 2-wheel trolley, which can optionally be replaced by a tandem traction drive, it ensures perfect ground tracking and improves raking accuracy
- 4 front support wheel allows better ground following and protects the machine on uneven fields
- 5 removable rake arms, foldable safety barriers and small width for easy transport on public roads
- 6 protection against tine loss
- 7 reflective warning plates together with LED road lighting ensure safety on public roads.

## Standard equipment:

- Oil operating gearbox
- Turned drive unit
- Windrow width regulation
- Raking height adjustment
- Tine loss protection
- PTO shaft

## Additional equipment:

- Tandem chassis
- Front support wheel
- Warning plates with LED lights



Ground following wheel



Warning plates with LED lights

		Z - 300 Slim	Z - 350 Slim
TECHNICAL DETAILS	Working width [m / ft]	3,0 / 9'10"	3,5 / 11'6"
	Transport width [m]	2,96 / 9'8"	2,3 / 7'6" (with dismantled arms)
	Number of tine arms per rotor	4	8
	Necessary hydraulic couplers	1 x single acting	1 x double acting
	Working capacity [ha/h / ac/h]	~ 5,60 / 14	~ 7,80 / 19
	Number of arms [pcs.]		6
	Rotor diameter [cm / ft]	2,6 / 8'6"	2,8 / 9'2"
	RPM		540
	Hitch		II
	Power demand [HP]	from 30	from 50
	Tires (with inner tubes)		16 x 6,5-8
	Weight [kg / lbs]	286 / 630	270 / 595





# Trailed 1-rotor rake

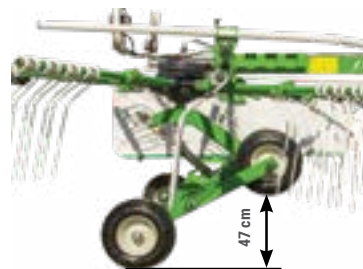
UNO 410, UNO 440, UNO 470

Trailed 1-rotor rakes UNO 410 and UNO 470 are very efficient, especially designed for raking grass, hay or straw. Owing to low power consumption are very economical and also resistant to difficult working conditions. Rake forms a regular, continuous windrow, without grass twists, which allows fast drying

and easy pick up with the use of a baler or self-collecting trailer. UNO rakes feature innovative height adjustment mechanism, which also lifts the machine to transport position and allows for ideal working height tune-up.

### Advantages:

- tandem steering system
- new tine shape
- height adjustment
- facilitated drive over the swath
- aggregating with smaller tractors is possible



Thanks to running gear lifting, rotor is risen well above the ground (47 cm / 18 1/2"), and leaves the swath intact. Rake can be driven safely on uneven grounds, without the risk of any damage exposure.



### Transport

Innovative steering system, based on solutions from DUO rake, facilitates the transport of the machine and provides comfortable transition from working to transport position.

TECHNICAL DETAILS

	UNO 410	UNO 440	UNO 470
Working width [m / ft]	4,10 / 13'5"	4,40 / 14'5"	4,70 / 15'5"
Windrow width [m / ft]	0,80 - 1,50 / 2'7" - 4'11"		
Transport width [m]	3,30 / 10'10"	3,60 / 11'8"	3,80 / 12'8"
Transport width without arms [m]	1,80 / 5'11"	2,35 / 7'8"	2,35 / 7'8"
Necessary hydraulic couplers	1 x single acting		
Working capacity [ha/h / ac/h]	~ 4,50 / 11,00	~ 5,00 / 13,00	~ 5,60 / 13,85
Number of arms [pcs.]	11		13
Rotor diameter with arms [m]	3,30 / 10'10"	3,60 / 11'8"	3,80 / 12'8"
Number of tines [pcs./arm]	4		
RPM*	540		
Hitch	bar		
Power demand [HP]	from 35	from 40	from 45
Tires (with inner tubes)	16 x 6,5 - 8		18 x 8,5 - 8
Weight [kg / lbs]	740 / 1630	870 / 1920	890 / 1960





## 2-rotor rake

### TANGO 730 - one or two swath rows

Combines functionality of Z2-780 and DUO 680, making 1 or 2 swath rows. Setting carousels near the central drawbar results in single row delivery, extending them outside makes two rows. New generation, 11-arm gearbox with strengthened,

connecting-rods has been applied. Additionally, the rake has a patented „gearbox angle changing mechanism”, which provides protection to drive shafts when lifting the machine to transport position.



#### Transport

TANGO 730 is hydraulically folded-up for the transport, it facilitates driving on public roads. Transport width doesn't exceed 3,00 m / 9'10".





# 1 or 2 windrows

### Winding handle

Used for adjustment of working height.

### Gearbox position modification system

The patent pending system eliminates excessive shaft deflection and considerably increases wide-angle joints life.

### Headstock

The machine features forced steering for superior tracking around bends. The system consists of a tie rod, which is attached to the two-point headstock.

### PTO shaft as standard

### Front swath curtain

Useful when making two rows – hydraulically folded away when operating on headland.

### Hydraulic

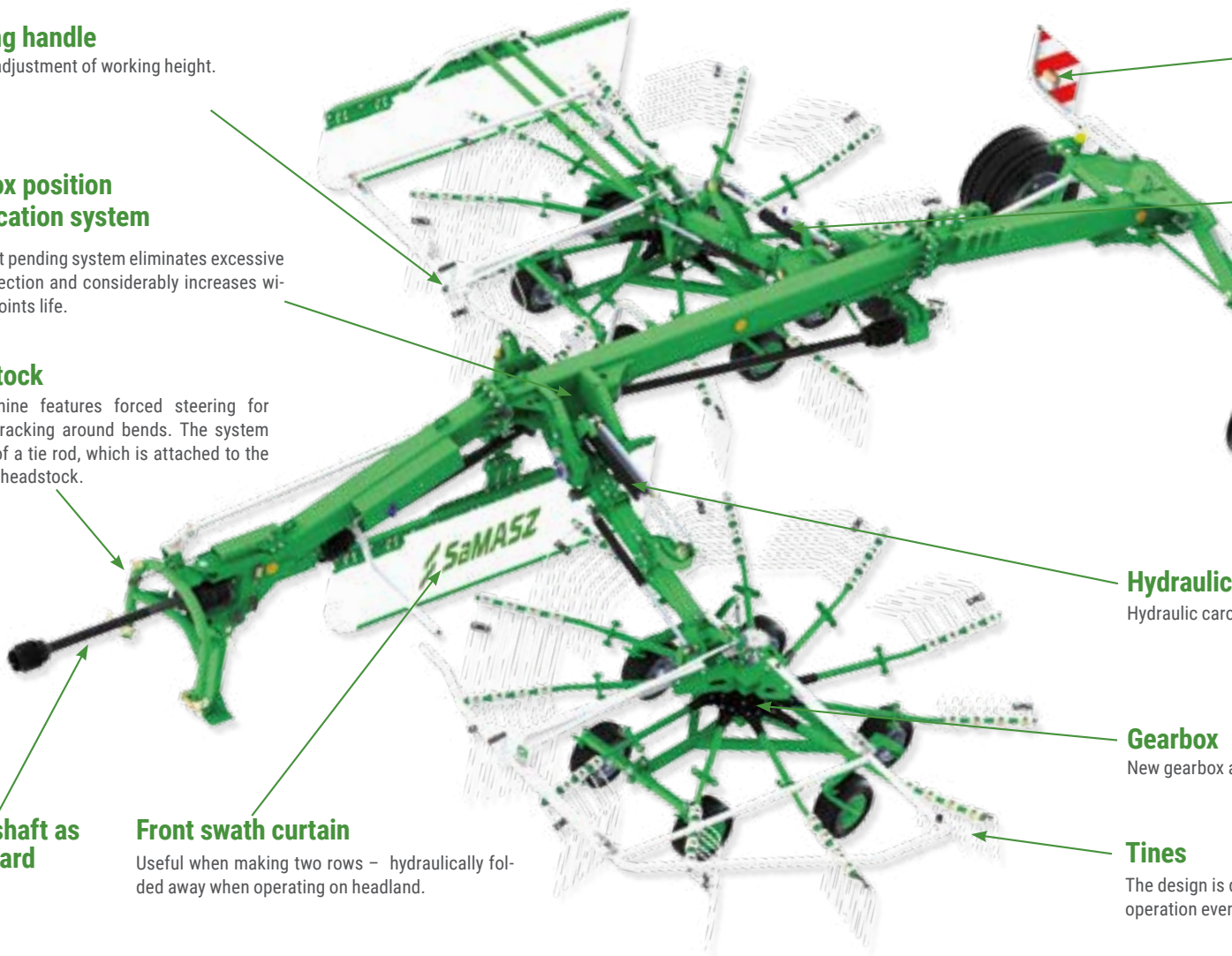
Hydraulic car

### Gearbox

New gearbox a

### Tines

The design is o  
operation ever







# Rotary rakes 2-rotor

## TANGO 730 - one or two swath rows

### Road lights

Provide safe transport on public roads.

### Stopper

Stopper limits the carousel lifting height is particularly useful when turning on headland.

### Wide wheels

For maximum stability and protection of the ground against excess pressure. Ensure maintaining constant distance between tines and the ground. Allow for performing works efficiently under any ground and weather conditions.

### fold-up mechanism

allows for quick and simple connecting-rod replacement.

developed for even more uniform tedding. Provide efficient and smooth when works are performed on a row formed of heavier plants.

Type	TANGO 730
Working width [m / ft]	6,70 - 7,30 / 22' - 24'
Transport width / height [m / ft]	3,00 / 3,90 9'8" / 12'1"
Windrow width [m / ft]	0,80 - 1,50 / 2'7" - 4'11"
Number of tine arms per rotor	11
Number of tine arms [pcs.]	4
Working capacity [ha/h / ac/h]	~ 5,60 - 7,50 / ~ 13,85 - 18,50
RPM*	540
Power demand [HP]	from 60
Rotor tires / Drive tires	16 x 6,5-8 / 340/55-16
Windrow presentation	on the right
Weight [kg / lbs]	2450 / 5400

\* Recommended drive speed during operation 300 - 350 rpm



**Gearbox used in TANGO 730 rake**

### Standard equipment:

- Hydraulic fold-up
- Tine loss protection
- Hydraulic swath width adjustment
- 1 or 2 windrow presentation
- Swinging hitch
- Lifting height stopper
- Working height adjustment
- Hydraulic swath curtain lifting system - on headlands
- Swath curtains
- Road lights
- Tandem chassis





## 2 - rotor center delivery rakes Z2-780, Z2-840 - one central swath

Two-rotor rakes features high quality of harvest. Two dimensional ground following mechanism provides cleaner raking. Z 2 - 780 model is able

to rake up green fodder from 7.2 up to 7.6 m (23'7"-25') Z 2 -840 from 7,6 up to 8,4 m (25' - 27'7").

### Wheels

For maximum stability and protection of the ground against excess pressure. Ensure maintaining constant distance between tines and the ground. Allow for performing works efficiently under any ground and weather conditions.



### Gearbox

The gear with extended connecting rods to provide longer fault-free operation period. Z2-840 has the gear with bolted connecting rod bodies.



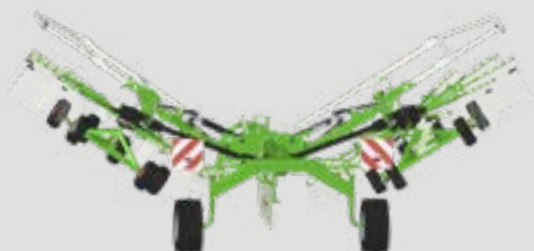
### Hydraulic fold-up mechanism

Hydraulic carousel fold-up. Support springs assistance with reduced ground pressure.



### Turning on headland

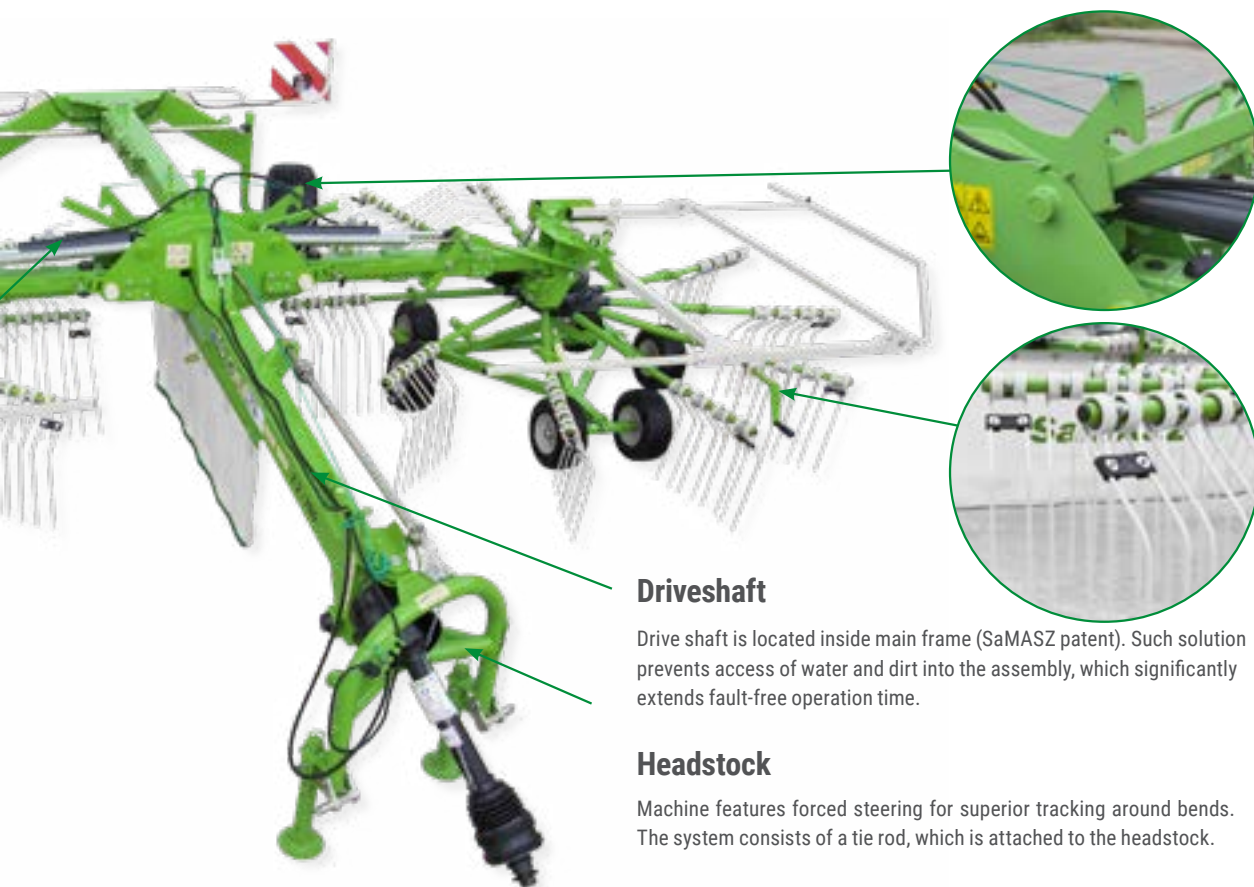
Thanks to hydraulic rotor lifting mechanism and rotor height stopper, turning on headland leaves the swath intact.







## The highest quality forage



### Stopper

Stopper limits the carousel lifting height, is particularly useful when turning on headlands.

### Tines

Developed design for even more uniform tedding. Efficient and smooth operation even when working on heavier windrow.

### Driveshaft

Drive shaft is located inside main frame (SaMASZ patent). Such solution prevents access of water and dirt into the assembly, which significantly extends fault-free operation time.

### Headstock

Machine features forced steering for superior tracking around bends. The system consists of a tie rod, which is attached to the headstock.

### Transport

Rake carousels are hydraulically lifted to transport position, main frame is strong and durable. It enables to drive on public roads. Working width does not exceed 2,9 m / 9'6".







# Lightweight and easy to use

## Working width adjustment

Manual working width adjustment mechanism. (standard in Z2-780).



Hydraulic working width adjustment mechanism. (standard in Z2-840).



## Working height adjustment

Manual working height adjustment - using a winding handle.



## Z 2-840 main differences when compared to Z2-780

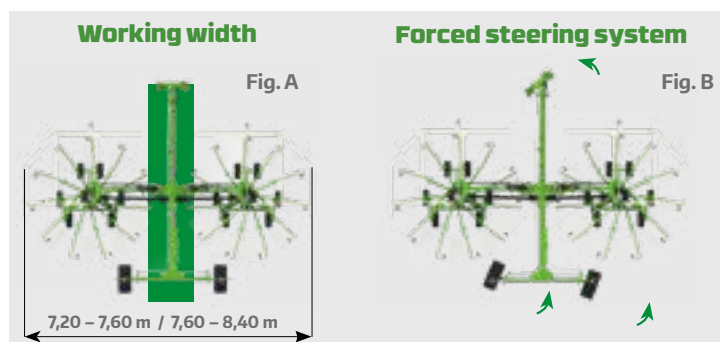
- size increase
- no manual raking width adjustment, the adjustment is done only by means of hydraulic cylinders
- castor wheel chassis
- improved transverse ground following (+/- 8°)
- gearboxes with quick rod replacement feature
- modernized swath curtain fold-up system
- additional width indicator
- modified working guide assemblies





**Fig. A.** Variable working width within 7.20 and 7.60 m (23'7"-25'), Z2-840 (7,60 - 8,40 / 25' - 27'7") range. Adjustment is possible only in transport position by inserting a pin.

**Fig. B.** Facilitated maneuvering owing to forced steering system. A simple mechanism transmits hitch torsion onto rear wheels' tie rod.



## Two dimensional ground following

Each rotor uses three tandem chassis. Longitudinal and transverse ground following mechanism ensures perfect ground following and results in very clean fodder or hay harvest. Other advantages of Z2-780 rakes are the same as for Z 410 rakes - see page 7.

Z2-780 rakes is a bright exception in the class of rakes with widths up to 7.6 m (25') as compared with other manufacturers. Main features are not only transverse and longitudinal ground following, but also a triple tandem running gear per single rotor.



Z2-780: a-5°, b-5°, c-15°, d-5°

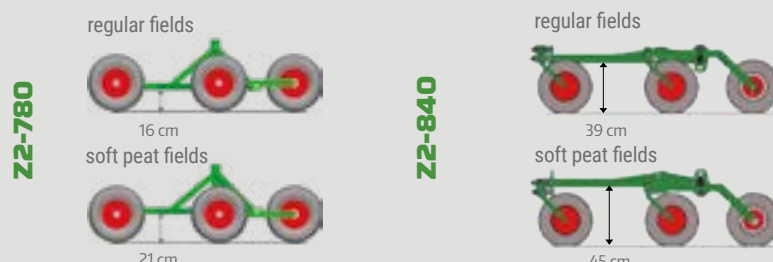
Z2-840: a-8°, b-6°, c-25°, d-8°

Type	Z2 - 780	Z2 - 840
Working width [m / ft]	7,20 - 7,60 / 23'7" - 24'11"	7,60 - 8,40 / 24'11"-27'7"
Windrow width [m / ft]	1,50 - 2,00 / 4'11" - 6'7"	1,20 - 2,00 / 3'11"-6'7"
Transport width / height [m / ft]	2,90 / 3,00 9'6" / 9'10"	3,00 / 3,75 9'8" / 12'3"
Number of arms per rotor [pcs.]	11	11
Number of dismountable arms per rotor for transport [pcs.]	4	4
Working capacity [ha/h / ac/h]	~ 8,00 / 20,00	~ 9,00 / 22,00
RPM*	540	540
Power demand [HP]	from 60	from 80
Tires	16 x 6,5-8 / 340/55-16	
Weight [kg / lbs]	2040 / 4500	2330 / 5130

\* Recommended drive speed during operation 300 - 350 rpm

## Running gear height regulation

Additional height increase can be done by turning wheel axle around (180°). It enables comfortable work on soft peat fields.







## 2-rotor in-line rakes

DUO 680, DUO 740 - one or two swath rows

2-rotor rotary rakes DUO 680 and DUO 740 are particularly recommended for those who seek very efficient solutions. Machine is able to lay either one or two swath rows, also allowing hydraulic adjustment of working width and therefore, windrow width by

main frame tilting. Recommended for middle-sized and large farms. Maximum width of raked swath is approx. 12 m / 39'4" (single large row after 2 runs).

### Hydraulic latch

Provides traction and stability of rear working unit.

### Road lights

Provide safety on public roads.

### Wheels

Wide tires 18 x 8,5-8 with possibility of twin wheel attachment.

### Support wheel

Provides following of any ground unevenness.



### Lifting mechanism

Thanks to the lifting mechanism, unit is raised well above the ground (47 cm / 18 1/2" clearance), and leaves the swath intact. Rake can be driven safely on uneven grounds, without the risk of any damage exposure.





# Innovative design

## Strong main frame drawbar

Square-profiled main frame drawbar is able to bear large loads.

## Front swath curtain

Useful when making two swath rows – hydraulically folded away when operating on headland.

## Crank handle

Used for adjusting front drawbar height - as needed.



## Gearbox

Solid, enclosed design. Oil-bath operation. Constant lubrication ensures their long, faultless work time.

## Standard-delivered PTO shaft



## Transport

Quick drive from field to field is not a problem. To support it warning plates and position lights have been applied. As rotor's diameter is 3 m / 9'10" (DUO 680), dismounting rotor arms is not always necessary. For longer drives on roads with bigger traffic it is more comfortable to have these dismounted.



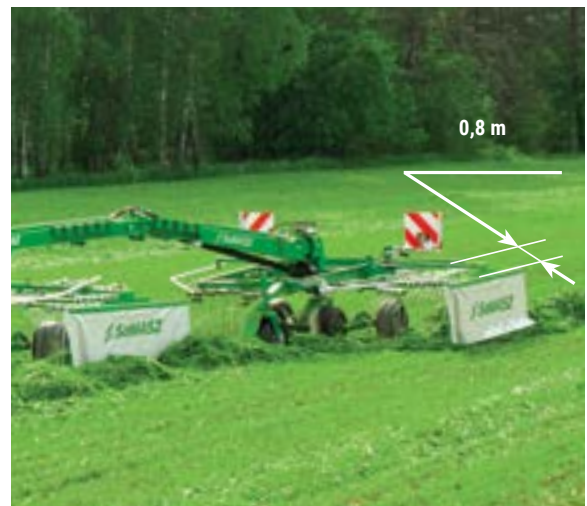


# 2-rotor in-line rakes

DUO 680, DUO 740 - one or two swath rows

### Advantages:

1. When transported rear unit is behind the front one (in-line rake)
2. 2 transport widths possible:
  - with tine arms - 3 m / 9'10"
  - w/o tine arms - 2,4 m, / 7'11" (w/o warning plates -1,8 m / 5'11")
3. Lower weight and compact size as compared to other 2-rotor center delivery rakes
4. Innovative height adjustment mechanism, which also lifts the machine to transport position and allows for ideal working height tune-up - 47 cm / 18 1/2" ground clearance
5. 2 double action hydraulic couplers to control rear working unit + 1 single action coupler for transport rise
6. Double tandem running gear, baloon-type wheels (18 x 8,5-8) as well as their close position to tine arms provide perfect ground following and very clean raking



Raking up to already deposited crop



### Variable raking width

(see drawing) with sparse material - multiple of a single windrow - 6.8 m (22'4").



### Easy manouvering:

Large turn angle and clearance allows for problem-free drive over lying material.





# Innovative design



**B** Transverse A) and Longitudinal B) ground following mechanism allows for independent rotor adjustment. Two support wheels and two independent rotors, provide perfect ground following and very precise raking, even with high working speed.



## Innovative chassis design

Patent pending height adjustment mechanism, which also lifts the machine to transport position and allows for ideal working height tune-up.

## Tandem suspension

Tandem axle, 4 wheels and wide tires, allowed for ground pressure reduction, which is important on soft grounds such as peat fields. Minor ground obstacles (e.g. stones) are leveled by movable trolley wheels.

	DUO 680	DUO 740
<b>Working width [m / ft]</b>	3,40 - 6,80 / 11'2" - 22'4"	3,70 - 7,40 / 12'1"-24'3"
<b>Windrow width [m / ft]</b>	0,80 - 1,50 / 2'7" - 4'11"	
<b>Diameter of rotor with arms [m / ft]</b>	3,00 / 9'10"	3,30 / 10'10"
<b>Transport width / height [m / ft]</b>	3,00 / 2,00 9'8" / 6'7"	3,30 / 2,00 9'8" / 6'7"
<b>Necessary hydraulic couplers</b>	1 x single acting, 1 x double acting	
<b>Working capacity [ha/h / ac/h]</b>	~ 5,00 - 6,50 / ~ 12,50 - 16,00	~ 8,00 / 20,00
<b>Number of arms per rotor [pcs.]</b>	11	
<b>RPM</b>	540	
<b>Hitch</b>	II	
<b>Power demand [HP]</b>	from 60	
<b>Tires (with inner tubes)</b>	18 x 8,5 - 8	
<b>Weight [kg / lbs]</b>	1720 / 3790	2050 / 4520





# Basket rake

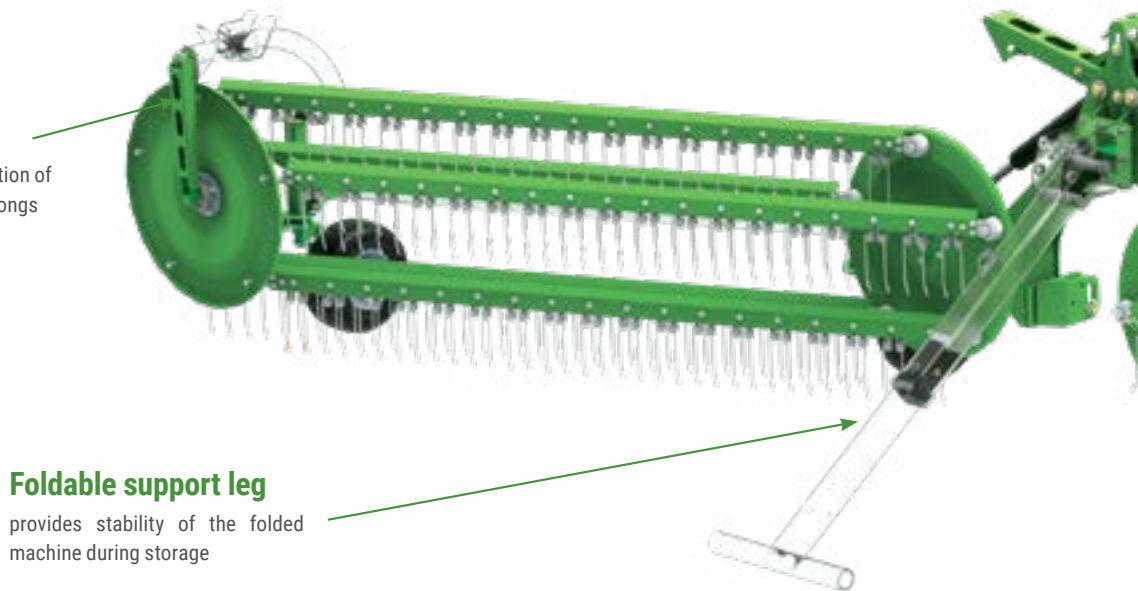
## TWIST 600

**TWIST 600 is a center delivery rake designed for a fast, efficient and clean raking of forage. It can be mounted to the front or rear of the tractor. With front mounting, you can simultaneously rake and work, e.g. with a baler. The rake consists of two**

**working systems driven by tractor's hydraulics using hydraulic motors. The machine does not need the tractor's PTO shaft for operation. The rake has low weight in comparison to its extensive working width.**

### Swing arm

Ensures smooth operation of the system, which prolongs bearing life.



### Foldable support leg

provides stability of the folded machine during storage

### Transport

The rake is folded and unfolded to/from the transport position using hydraulic cylinders.







The rake has low weight in comparison to its extensive working width.

### Safety mechanism

machine protection during transport

### Hydraulic cylinders

The rake arms are folded in and out to/from the transport position using hydraulic cylinders.

### Rake tines

Flexible rake tines ensure long and trouble-free operation and the highest forage purity.

### Ground following wheels

- turf protection,
- accurate ground following,
- stepless adjustment

Type	TWIST 600
Working width [m / ft]	6,00 / 19'9"
Windrow width [m / ft]	1,30 / 4'4"
Transport width / height [m / ft]	2,35 / 3,50 - 7'7" / 11'5"
Working drums [pcs.]	2
Raking bar [pcs.]	10
Tines [pcs.]	18
Working capacity [ha/h / ac/h]	~ 6,00 / 15,00
Drive type	hydraulic
Pump capacity [GPM]	7
Nominal pressure [bar / MPa]	160 / 16
Hitch	II
Power demand [HP]	from 80
Wheels	15 x 6,5
Weight [kg / lbs]	770

\* Recommended drive speed during operation 300 - 350 rpm

### Standard equipment:

Hydraulic drive with rotation speed regulation • Regulation of working height • Foldable support leg • Mechanical transport lock • Regulated ground following wheels • KENNFIX hydraulic connector

### Additional equipment:

- warning plate and road lights bracket with drawbar
- support wheel for rear hitch
- anti-winding cover



## Selected SaMASZ machines

extension arms



drum mowers



disc mowers



rotary rakes and tedders





## Electrophoretic cathode metal coating (KTL) - the way for a long surface life

Cataphoretic painting is used to coat elements that require coatings with significant corrosion resistance. Painting workpieces of SaMASZ machines is carried out on a fully automated line with a total length of 900 m. Each stage of the process is constantly monitored and recorded, which ensures the repeatability of the process as well as the highest quality of the coatings obtained.

The technology is always individually tailored to the characteristics of the workpiece and meets restrictive standards. Zinc phosphate surface preparation and KTL painting allow even the most complicated shapes with hard to reach workpiece slots to be covered. Such a coating guarantees the highest anti-corrosion resistance, which is more than 3 times higher than in the case of the standard iron phosphating.

This is extremely important, as it allows for a perfect surface finish. A well-equipped laboratory helps to monitor process parameters and coating quality, which translates into high resistance to weather conditions, corrosion, chemical and mechanical protection and aesthetic appearance.



### Advantages:

- high quality of the coating,
- covering complex shapes,
- precise control of the coating thickness,
- corrosion protection,
- chemical protection,
- mechanical protection.

## flail mowers



## snow plows



## tractor gritters and sweepers







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**True passion and constant seeking of the best solutions are amongst the ideas, which have been essential for the SaMASZ employees and have become the key to the company's success.**

What contributes the most to constant and dynamic development of the company are close contact with our customers and staying open to their needs. Thanks to dialogue with our present and future clients and trying to meet their expectations we create and strengthen up the basis of our dynamic success. We are creating the brand, which is already well recognized not only in the whole Europe, but also in the world.

Considering constant development as our top priority, we invest in product research. Our employees are the most talented Technical University graduates, who are not only experts in their own fields, but also bring in a great dose of

Your dealer:

professionalism and passion to their duties. You can always count on their competence and reliability.

Today, SaMASZ is the top Polish and one of the major European manufacturers of forage machinery. Our offer includes more than 300 types of different machines: drum mowers, disc mowers, tedders, rakes, flail mowers, extension arms or snow plows. We export to more than 50 countries around the world. Our sales network includes approx. 60 companies in Poland and approx. 70 abroad.

Our main goal, which is constant development and implementation to our production cutting edge technology in order to keep the world's top quality. We are fully aware, that in this ever changing reality, customers tend to seek trading partners who are trustworthy, and therefore we have an ambition of being considered as a reliable and professional manufacturer.

