



## FLAIL MOWERS

REAR, FRONT  
EXTENSION ARMS AND ATTACHMENTS





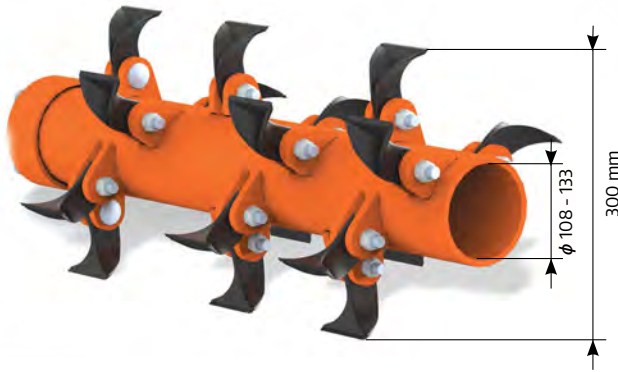
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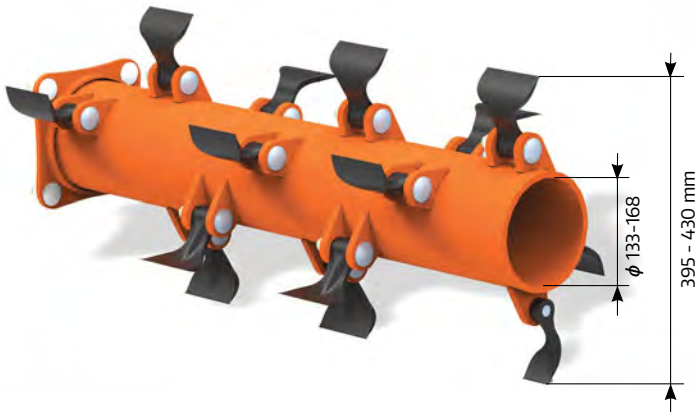
# GENERAL CHARACTERISTICS OF FLAIL SHAFTS



## LIGHT CLASS

(PIKO, KBR-L, LAMA)

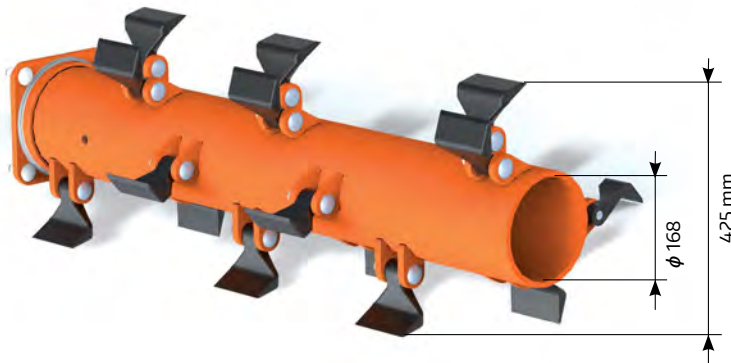
1. Flail shaft -  $\phi$  108 mm (4 1/4"), wall thickness 6,3 mm / 1/5"
2. Cutting shrubs (up to 3.5 cm - 1 2/5" thick depending on knife type).
3. Ground following bar -  $\phi$  108 mm or 133 mm (4 1/4" or 5 1/4").



## MIDDLE CLASS

(MIDO, GRINO, KANGU, KW, KBR)

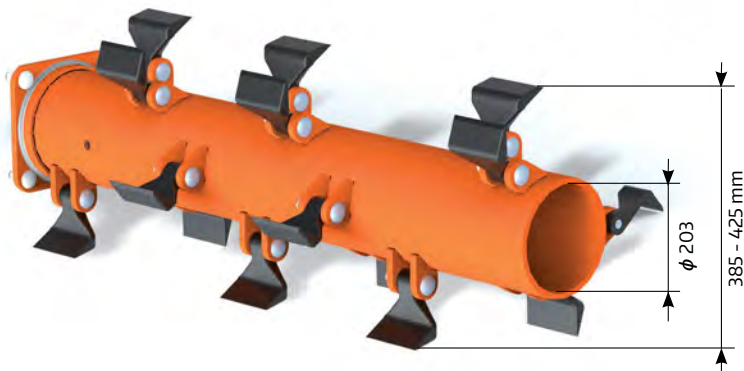
1. Flail shaft :
  - Grino -  $\phi$  168 mm (6,3/5"),
  - Mido, Kangu, KW, KBR -  $\phi$  133 mm (5 1/5"),
 wall thickness:
  - Grino, KW, KBR - 8,8 mm / 2/5"
  - Mido, Kangu - 10 mm / 2/5"
2. Cutting shrubs and bushes (up to  $\phi$  6 cm / 2 2/5" thick depending on knife type).
3. Ground following bar -  $\phi$  133 mm or 168 mm (5 1/4" or 6 3/5").



## HEAVY CLASS

(KBRP)

1. Flail shaft -  $\phi$  168 mm (6 3/5"), wall thickness 8,8 mm / 2/5"
2. Cutting shrubs and bushes (up to  $\phi$  7 cm - 3 1/5").
3. Ground following bar -  $\phi$  168 mm (6 3/5").



## SUPER HEAVY CLASS

(MAMUT)

1. Flail shaft -  $\phi$  203 mm (8"), wall thickness 10 mm / 2/5"
2. Cutting shrubs and bushes (up to  $\phi$  8 cm - 3 1/5").
3. Ground following bar -  $\phi$  203 mm (8")



# FLAIL KNIVES



~ 1,2 kg  
(2,65 lbs)

## KNIFE TYPE I

Max. diameter of branches to be cut:  
 $\phi$  80 mm (3 1/5"),  
Width: 140 mm, Length: 98 mm.



~ 0,6 kg  
(1,3 lbs)

## KNIFE TYPE II

Max. diameter of branches to be cut:  
 $\phi$  35 mm (1 2/5"),  
Width: 104 mm (2x 52 mm), Length: 120 mm.



~ 1,0 kg  
(2,2 lbs)

## KNIFE TYPE III

Max. diameter of branches to be cut:  
 $\phi$  35 mm (1 2/5"),  
Width: 104 mm, Length: 120 mm.



~ 1,0 kg  
(2,2 lbs)

## KNIFE TYPE IV

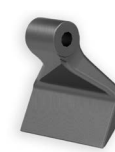
Max. diameter of branches to be cut:  
 $\phi$  35 mm (1 2/5"),  
Width: 102 mm, Length: 115 mm.



~ 0,6 kg  
(1,3 lbs)

## KNIFE TYPE V

Max. diameter of branches to be cut:  
 $\phi$  50 mm (2"),  
Width: 100 mm, Length: 105 mm.



~ 1,4 kg  
(3,1 lbs)

## KNIFE TYPE VI

Max. diameter of branches to be cut:  
 $\phi$  80 mm (3 1/5"),  
Width: 120 mm, Length: 110 mm.



~ 0,2 kg  
(0,45 lbs)

## KNIFE TYPE VII

Max. diameter of branches to be cut:  
 $\phi$  20 mm (4/5"),  
Width: 68 mm, Length: 73 mm.



~ 0,3 kg  
(0,65 lbs)

## KNIFE TYPE VIII

Max. diameter of branches to be cut:  
 $\phi$  20 mm (4/5"),  
Width: 84 mm (2x 42 mm), Length: 82 mm.



~ 0,3 kg  
(0,65 lbs)

## KNIFE TYPE IX

Max. diameter of branches to be cut:  
 $\phi$  35 mm (1 2/5"),  
Width: 70 mm, Length: 70 mm.



~ 0,3 kg  
(0,65 lbs)

## KNIFE TYPE X

Max. diameter of branches to be cut:  
 $\phi$  35 mm (1 2/5"),  
Width: 62 mm, Length: 62 mm.



~ 0,2 kg  
(0,45 lbs)

## KNIFE TYPE XI

Max. diameter of branches to be cut:  
 $\phi$  15 mm (0,6"),  
Width: 72 mm, Length: 88 mm.



~ 0,3 kg  
(0,65 lbs)

## KNIFE TYPE XII

Max. diameter of branches to be cut:  
 $\phi$  15 mm (0,6"),  
Width: 75 mm, Length: 122 mm.

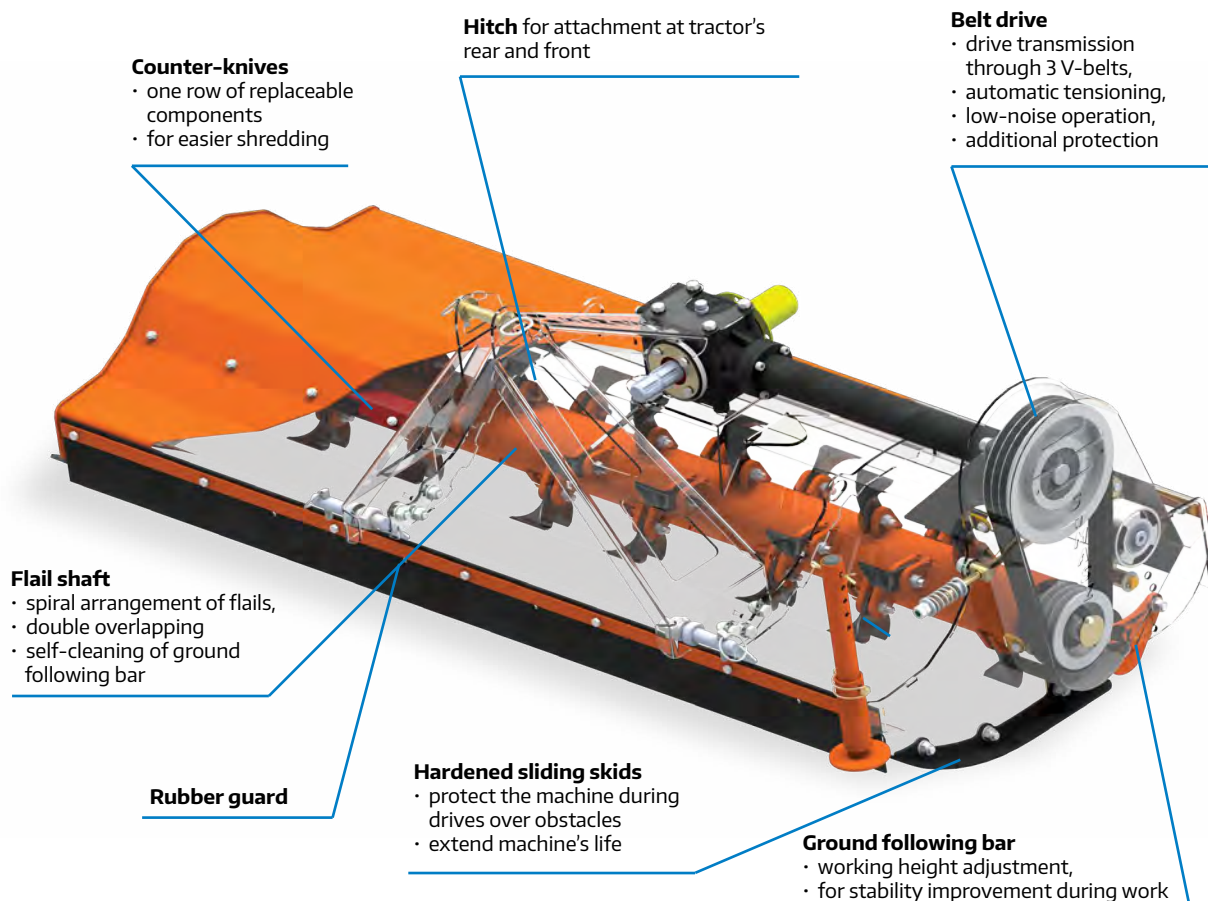
### FLAIL KNIFE TYPEES

Type	Standard	Option
PIKO	VII	VIII, X
MIDO	V	II, III, IV
GRINO	V	II, III, IV
MAMUT	VI	III, IV
KBR	I	II, III, IV
KBR L	VII	VIII, IX
KANGU	V	II, III, IV
KBRP	I	II, III, IV
LAMA	V*, VII	VIII, IX
KW	I	II, III, IV
EMU	I	-
IBIS	VII	IX, XI, XII

\* only in mowing head LAMA 121 HD

Type I, V, VI, VII, IX, X - sold as 1 pc.  
Type II, III, IV, VIII, XI, XII - sold as cpl. [2 pcs]

# ADVANTAGES OF PIKO FLAIL MOWERS



## OTHER ADVANTAGES OF PIKO FLAIL MOWERS

### Design

- double sided hitch can be installed easily for attachment either at tractor's front or rear
- low weight owing to use of high quality steel
- gearbox with integrated clutch

### Ground following bar

- **automatic cleaning with flails**
- no pressing of cut material

### Flail shaft

- equipped with double row barrel bearings
- arrangement of flails provides intensive shredding of material and faster drying and decomposition
- less drives - time savings
- lower load of machine and tractor

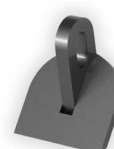
## OPTIONAL EQUIPMENT

Hydraulic side shift (version with H)  
Range up to 320 mm (13 in)

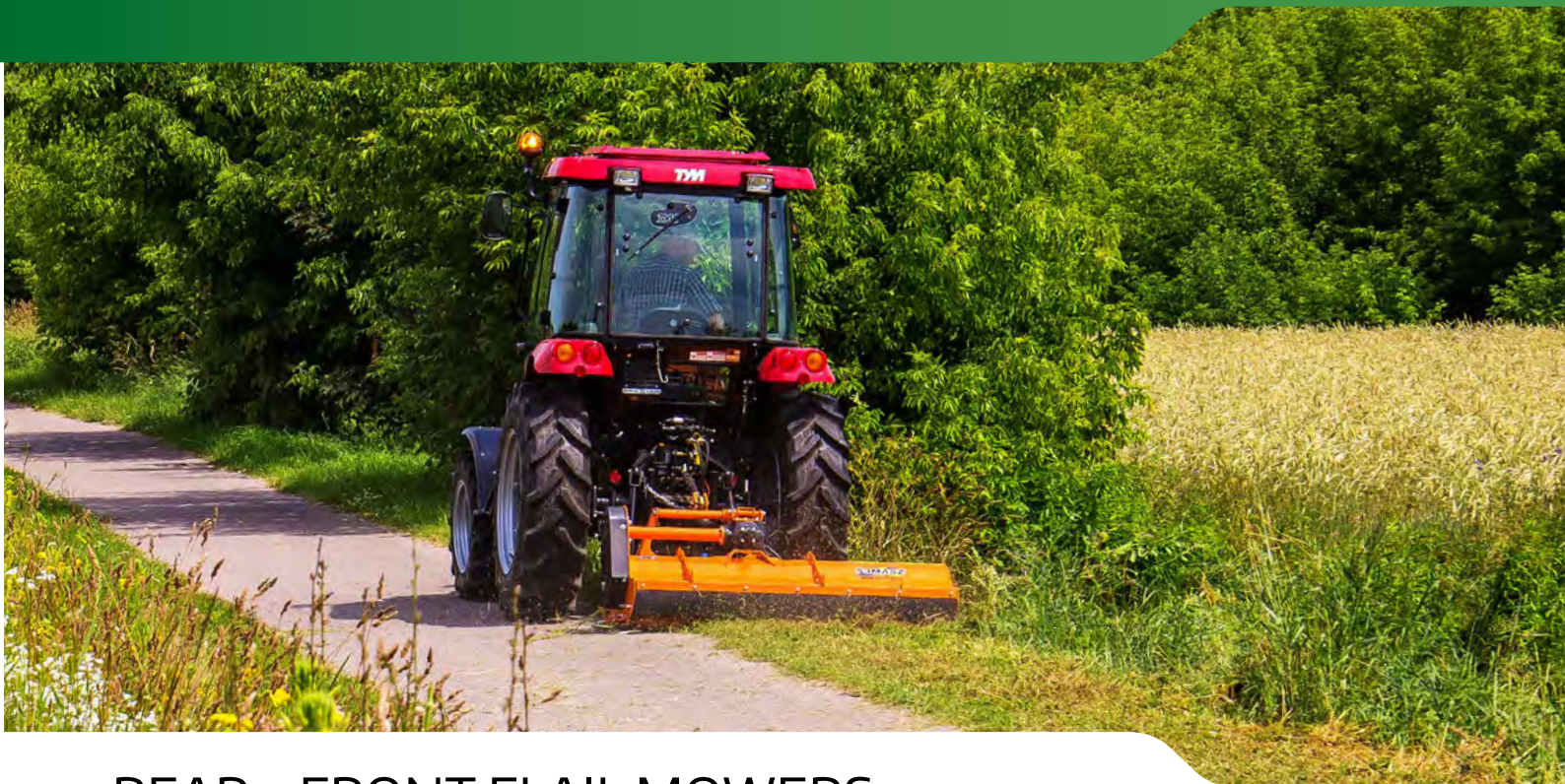
Flail knife:



TYPE VIII



TYPE X



## REAR – FRONT FLAIL MOWERS

**PIKO** - light class



~ 0,2 kg  
(0,45 lbs)

**KNIFE TYPE VII**  
Standard flail knife

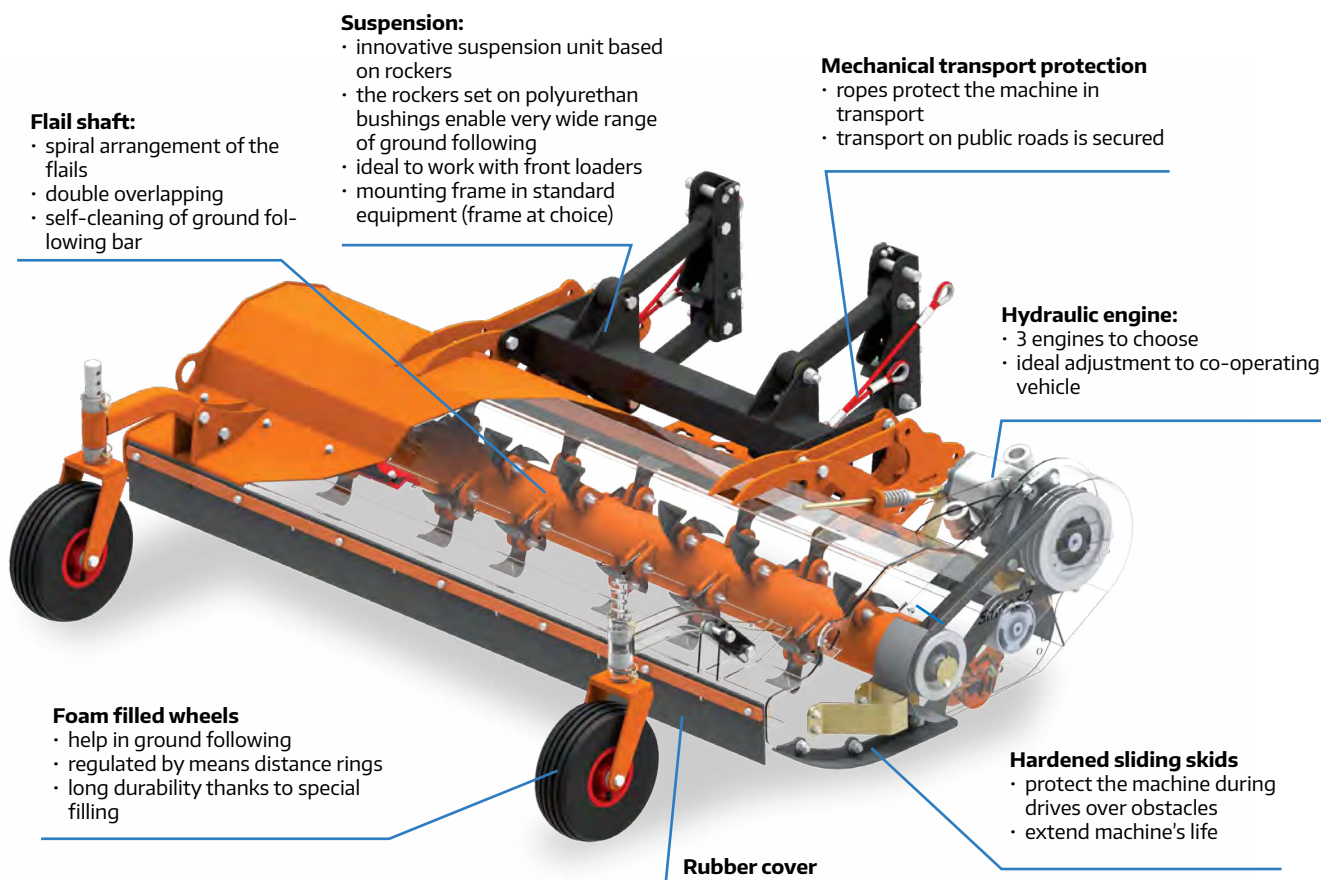
### Standard equipment:

Shaft with double flail spiral (double overlapping) • Overrunning clutch integrated in gearbox • Mowing height adjustment with ground following bar • Hardened sliding skids • Adjustable support leg • Replaceable counter-knives • PTO shaft • Automatic tensioning of V-belts

TECHNICAL DETAILS	PIKO 100		PIKO 100 H		PIKO 130		PIKO 130 H		PIKO 150		PIKO 150 H	
	Working width [m / ft]		1,00 / 3'4"		1,30 / 4'4"		1,50 / 4'11"					
	Necessary hydraulic couplers		-		1 x double acting		-		1 x double acting			
	Number of knives [pcs.]		26		34		40					
	Number of replaceable counter-knives		1 row / 2 pcs.				1 row / 3 pcs.					
	Number of V-belts				3							
	Flail shaft diameter [mm /in]				108 / 4 1/4"							
	RPM				540							
	Hydraulic side-shift length [mm /ft]		-		320 / 1'		-		320 / 1'			
	Power demand [HP]*		from 20		from 30		from 35					
	3-point hitch cat.				I							
	Weight [kg / lbs]		175 / 385		205 / 450		200 / 440		230 / 510		220 / 485	
	Max. diameter of branches to be cut [mm /in]				20 / 4/5"							
	PTO shaft				tractor - mower: no clutch (clutch built in gearbox)							



# ADVANTAGES OF **NANO 150 HYDRO** FLAIL MOWERS SERIES



## OTHER ADVANTAGES OF NANO FLAIL MOWERS

<b>Design</b>	<ul style="list-style-type: none"> <li>- swing hitch designed to operate with front loader enables wide range of ground following \ in 3 dimensions owing to poliurethan bushings</li> <li>- mower is attached to the vehicle by means of properly adjusted frame (standard)</li> <li>- low weight owing to use of high quality steel</li> </ul>
<b>Ground following bar</b>	<ul style="list-style-type: none"> <li>- <b>automatic cleaning with flails</b></li> <li>- no pressing of cut material</li> </ul>
<b>Flail shaft</b>	<ul style="list-style-type: none"> <li>- equipped with double row barrel bearings</li> <li>- arrangement of flails provides intensive shredding of material and faster drying and decomposition</li> <li>- less drives - time savings</li> <li>- lower load of machine and tractor</li> </ul>

## OPTIONAL EQUIPMENT

Flail knife



**TYPE VIII**



**TYPE X**





**SaMASZ**

## NANO 150 HYDRO FLAIL MOWERS SERIES



~ 0,2 kg  
(0,45 lbs)

**KNIFE TYPE VII**

In standard equipment

### Standard equipment:

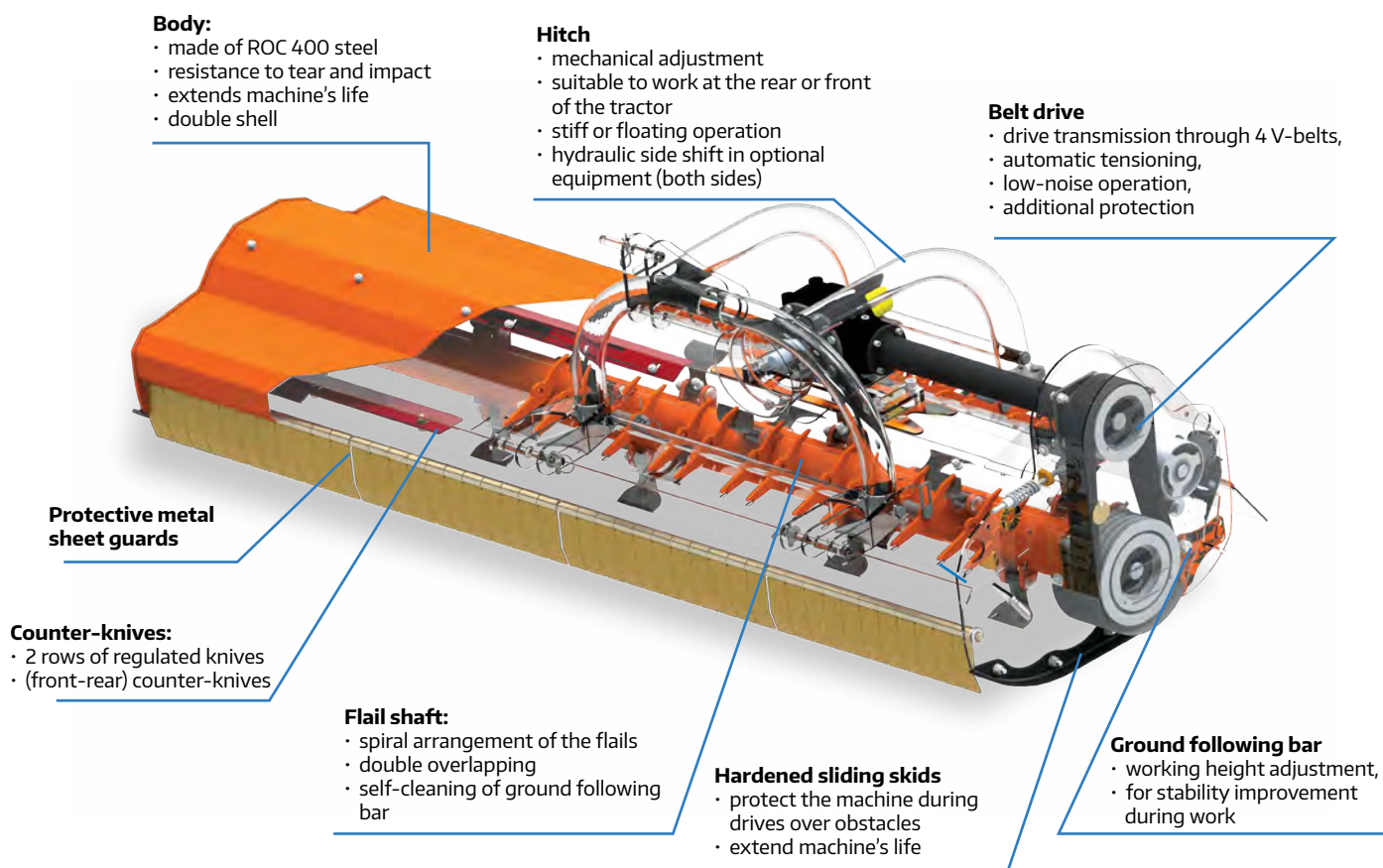
Flail shaft with spiral arrangement of flails (double overlapping) • Hydraulic engine • Swing hitch with the frame at choice • Regulated ground following wheels • Ground following shaft • Hardened sliding skids • Transport lock • Automatic tensioning of V-belts • Mowing height adjustment by means of ground following shaft • Adjustable support leg • Replaceable counter-knives • PTO shaft

**NEW!**

### NANO 150 HYDRO

TECHNICAL DETAILS	Working width [m / ft]	1,50 / 4'11"
	Necessary hydraulic couplers	-
	Number of knives [pcs.]	40
	Number of replaceable counter-knives	1 row / 2 pcs.
	Number of V-belts	3
	Flail shaft diameter [mm / in]	108 / 4.25
	Power demand [HP]*	from 35
	Oil pump efficiency [l/min]	50
	3-point hitch cat.	I
	Weight [kg / lbs]	205 / 452
	Max. diameter of branches to be cut [mm / in]	20

# ADVANTAGES OF MIDO FLAIL MOWERS



## OTHER ADVANTAGES OF MIDO

<b>Design</b>	<ul style="list-style-type: none"> <li>- double sided hitch for attachment at tractor's front or rear (option)</li> <li>- high durability owing to use of high grade steel</li> <li>- mechanical side shift</li> <li>- possible to change from 540 to 1000 rpm by switching V-belts</li> <li>- gearbox with integrated clutch</li> <li>- floating function</li> </ul>
<b>Ground following bar</b>	<ul style="list-style-type: none"> <li>- automatic cleaning with flails</li> <li>- no pressing of cut material</li> </ul>
<b>Flail shaft</b>	<ul style="list-style-type: none"> <li>- equipped with double row barrel bearings</li> <li>- arrangement of flails provides intensive shredding of material and faster drying and decomposition</li> <li>- less drives - time savings</li> <li>- lower load of machine and tractor</li> </ul>

## OPTIONAL EQUIPMENT

Hydraulic side shift  
range up to 320 mm



Flail knife:



TYPE II

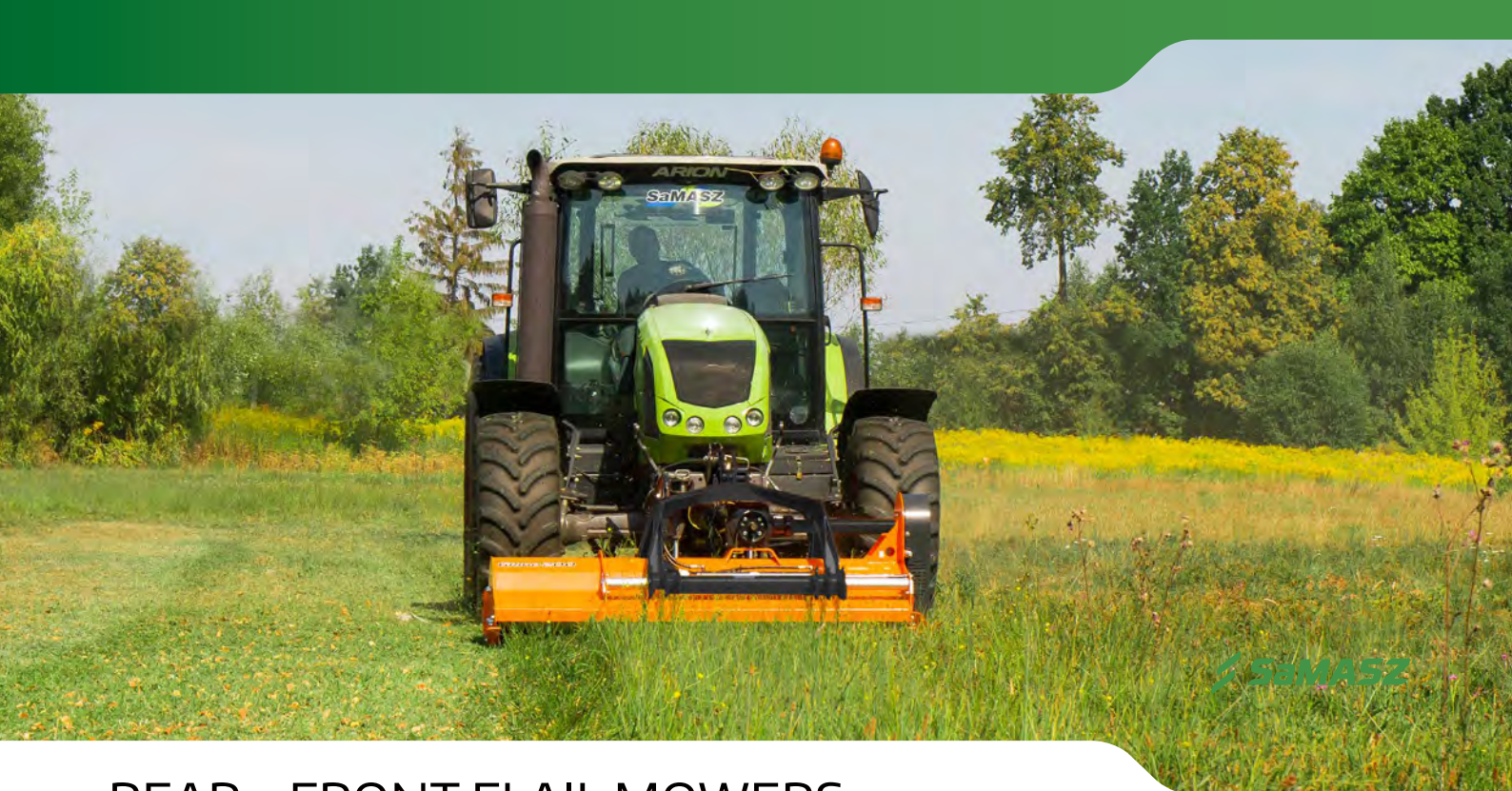


TYPE III



TYPE IV





**SaMASZ**

# REAR – FRONT FLAIL MOWERS

**MIDO** - middle class



~ 0,6 kg  
(1,3 lbs)

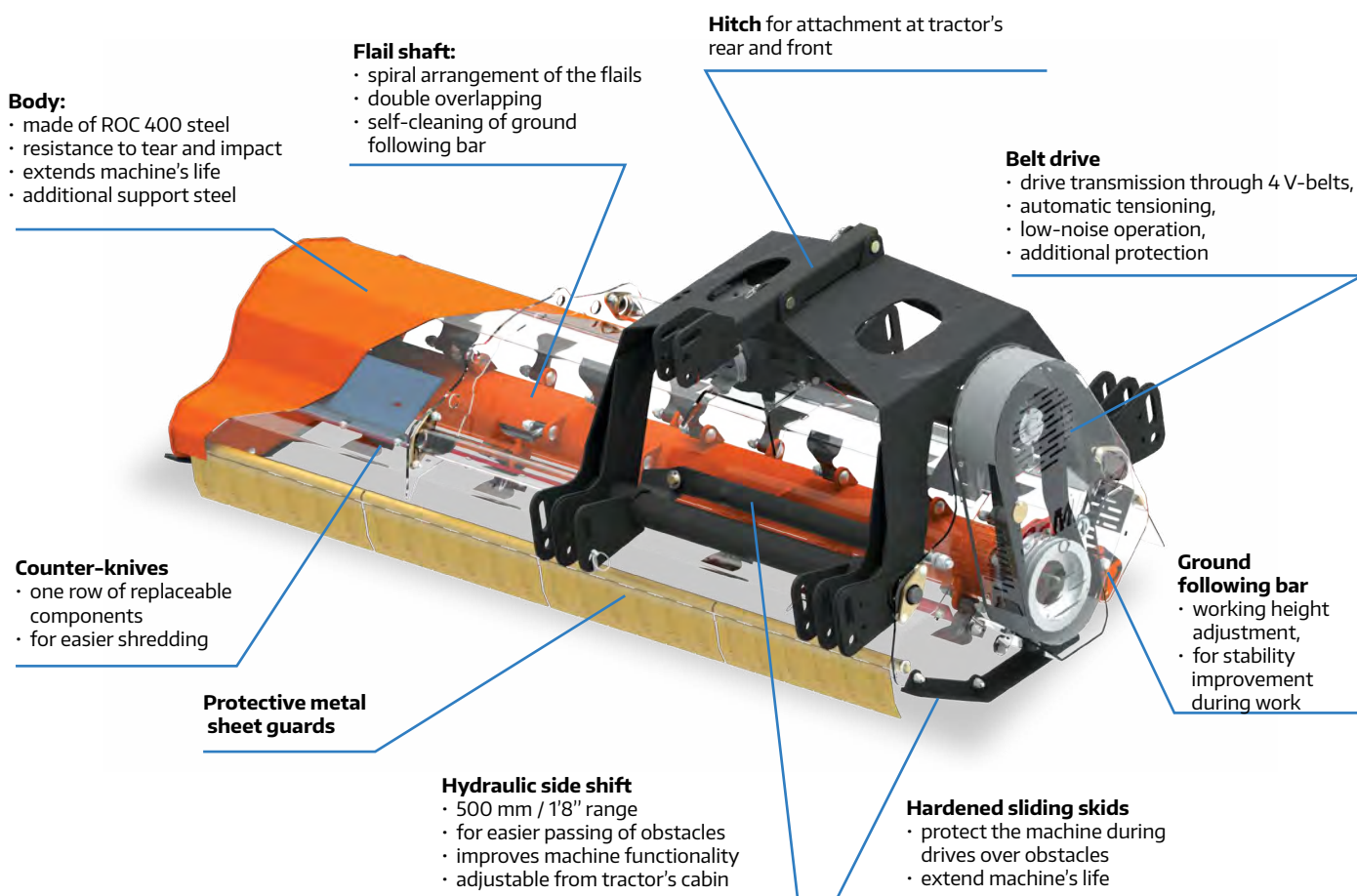
**KNIFE TYPE V**  
Standard flail knife

## Standard equipment:

Shaft with double flail spiral (double overlapping) • Overrunning clutch integrated in gearbox •  
 Mowing height adjustment with ground following bar • Hardened sliding skids • Adjustable support  
 leg • Replaceable, regulated (front-rear) counterknives • PTO shaft • Automatic tensioning of V-belts •  
 Protective metal sheet guards • Mechanical side shift

TECHNICAL DETAILS		NEW!	NEW!	NEW!	NEW!	NEW!
		MIDO 140	MIDO 160	MIDO 180	MIDO 200	MIDO 220
	Working width [m / ft]	1,40 / 4,6	1,60 / 5,24	1,80 / 5,90	2,00 / 6,56	2,20 / 7,21
	Number of knives [pcs.]	17	19	22	24	26
	Number of replaceable counter-knives	2 rows				
	Number of V-belts	3			4	
	Flail shaft diameter [mm / in]	108			133	
	RPM	540 / 1000				
	Hydraulic side-shift length [mm / ft] (option)	350 / 1,14		400 / 1,31		
	Power demand [HP]*	45	50	60	70	80
	3-point hitch cat.	I / II				
	Weight [kg / lbs]	370 / 815	915 / 415	435 / 960	450 / 992	480 / 1058
	Max. diameter of branches to be cut [mm / in]	35 / 1,37"				
	PTO shaft	tractor - mower: no clutch (clutch built in the gearbox)				

# ADVANTAGES OF GRINO FLAIL MOWERS



## OTHER ADVANTAGES OF GRINO FLAIL MOWERS

<b>Design</b>	<ul style="list-style-type: none"> <li>- double sided hitch for attachment at tractor's front or rear</li> <li>- high durability owing to use of high grade steel</li> <li>- metal sheet for housing reinforcement</li> <li>- cat. I/II hitch with floating function</li> <li>- gearbox with integrated clutch</li> </ul>
<b>Ground following bar</b>	<ul style="list-style-type: none"> <li>- automatic cleaning with flails</li> <li>- no pressing of cut material</li> </ul>
<b>Flail shaft</b>	<ul style="list-style-type: none"> <li>- equipped with double row barrel bearings</li> <li>- arrangement of flails provides intensive shredding of material and faster drying and decomposition</li> <li>- less drives - time savings</li> <li>- lower load of machine and tractor</li> </ul>

## OPTIONAL EQUIPMENT

Flail knife:



TYPE II



TYPE III



TYPE IV





## REAR - FRONT FLAIL MOWERS

### GRINO - middle class



~ 0,6 kg  
(1,3 lbs)

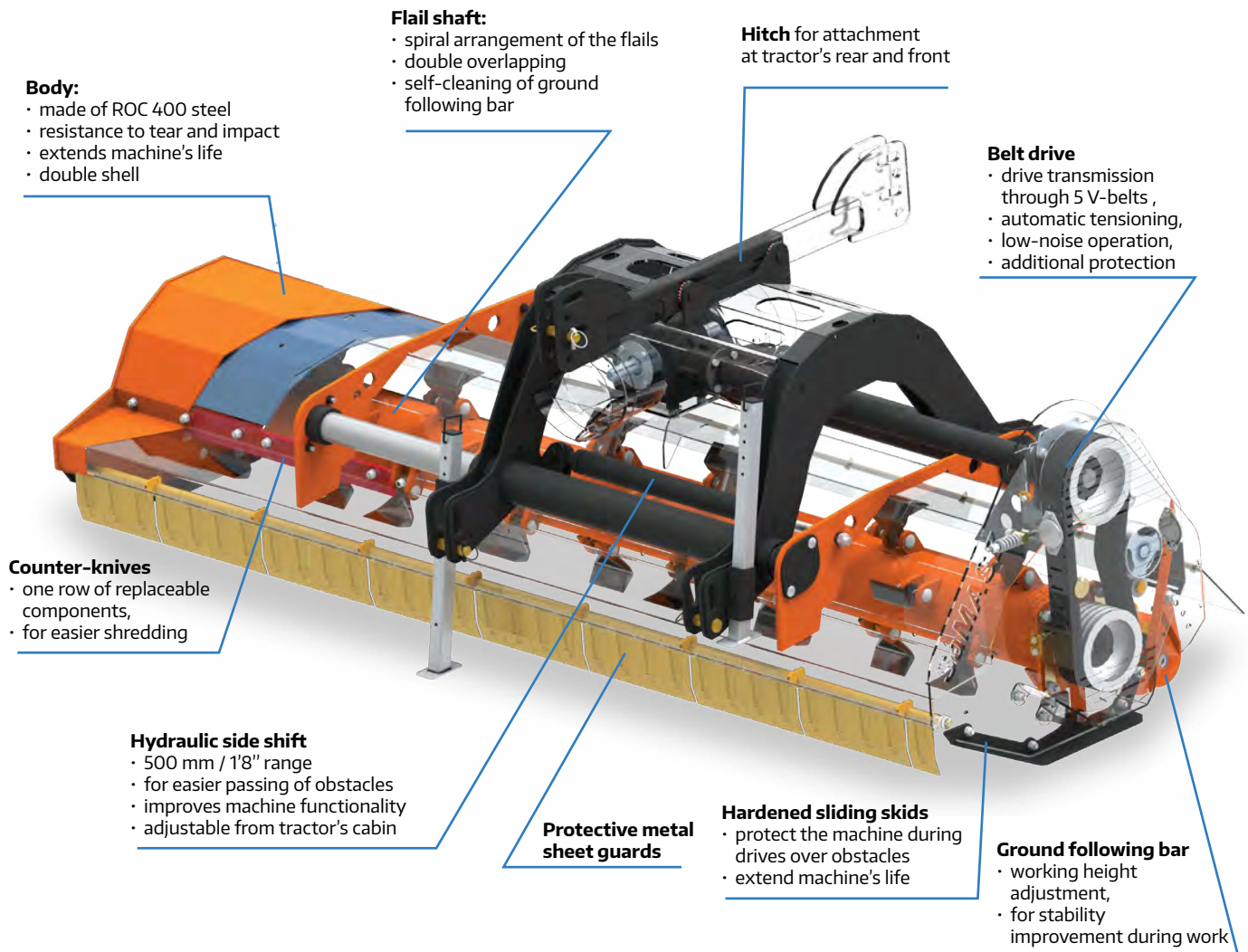
**KNIFE TYPE V**  
Standard flail knife

#### Standard equipment:

Shaft with double flail spiral (double overlapping) • Overrunning clutch integrated in gearbox • Mowing height adjustment with ground following bar • Hardened sliding skids • Adjustable support legs • Protective metal sheet guards • Replaceable counter-knives • PTO shaft • Automatic tensioning of V-belts

	GRINO 160	GRINO 180	GRINO 200	GRINO 220
Working width [m / ft]	1,60 / 5'3"	1,80 / 5'11"	2,00 / 6'7"	2,20 / 7'2"
Necessary hydraulic couplers	1x double acting			
Number of knives [pcs.]	20	24	30	36
Number of replaceable counter-knives [row]	1 row / 3 pcs.		1 row / 4 pcs.	
Number of V-belts	4			
Flail shaft diameter [mm/ in]	168 / 6 3/5"			
RPM*	540 / 1000			
Hydraulic side-shift length [mm / ft]	500 / 1'8"			
Power demand [HP]	from 50	from 60	from 70	from 80
3-point hitch cat.	I / II			
Weight [kg / lbs]	580 / 1280	610 / 1345	640 / 1410	665 / 1470
Max. diameter of branches to be cut [mm / in]	50 / 2"			
PTO shaft	tractor - mower: no clutch (clutch built in the gearbox)			

# ADVANTAGES OF MAMUT FLAIL MOWERS



## OTHER ADVANTAGES OF MAMUT FLAIL MOWERS

<b>Design</b>	<ul style="list-style-type: none"> <li>- double sided hitch for attachment at tractor's front or rear</li> <li>- high durability owing to use of high grade steel</li> <li>- double-layer high quality metal sheet body</li> <li>- cat. II hitch with floating function</li> <li>- gearbox with integrated clutch</li> </ul>
<b>Ground following bar</b>	<ul style="list-style-type: none"> <li>- automatic cleaning with flails</li> <li>- no pressing of cut material</li> </ul>
<b>Flail shaft</b>	<ul style="list-style-type: none"> <li>- equipped with double row barrel bearings</li> <li>- arrangement of flails provides intensive shredding of material and faster drying and decomposition</li> <li>- less drives - time savings</li> <li>- lower load of machine and tractor</li> </ul>

## OPTIONAL EQUIPMENT

Flail knife:



TYPE III



TYPE IV





## REAR FLAIL MOWERS

### MAMUT - super heavy class



~ 1,4 kg  
(3,1 lbs)

**KNIFE TYPE VI**  
Standard flail knife

#### Standard equipment:

Shaft with double flail spiral (double overlapping) • Overrunning clutch integrated in gearbox • Double-shell body • Mowing height adjustment with ground following bar • Hardened sliding skids • Adjustable support legs • Protective metal sheet guards • Replaceable counter-knives • PTO shaft • Automatic tensioning of V-belts

TECHNICAL DETAILS	MAMUT 250		MAMUT 280		MAMUT 300	
	Working width [m / ft]	2,50 / 6'6"		2,80 / 9'2"		3,00 / 9'8"
	Transport width [m / ft]	2,70 / 8'1"		3,00 / 9'8"		3,20 / 10'6"
	Necessary hydraulic couplers	1 x double acting				
	Number of knives [pcs.]	30		36		42
	Number of replaceable counter-knives	1 row / 6 pcs.		1 row / 6 pcs.		1 row / 7 pcs.
	Number of V-belts	5				
	Flail shaft diameter [mm / in]	□ 203 / 8"				
	RPM	1000				
	Power demand [HP]	from 100		from 120		
	3-point hitch cat.	II				
	Weight [kg / lbs]	960 / 2115		1050 / 2315		1090 / 2403
	Max. diameter of branches to be cut [mm / in]	80 / 3 1/5"				
	PTO shaft	tractor - mower: no clutch (clutch built in gearbox)				

# ADVANTAGES OF **KBR L** / **KBR** FLAIL MOWERS

## Counter-knives

- row of replaceable components
- for easier shredding

## Ground following bar

- working height adjustment,
- for stability improvement during work

## Belt drive

- drive transmission through 4 V-belts
- automatic tensioning,
- low-noise operation,
- additional protection

## Flail shaft:

- spiral arrangement of the flails
- double overlapping
- self-cleaning of ground following bar

## Hardened sliding skids

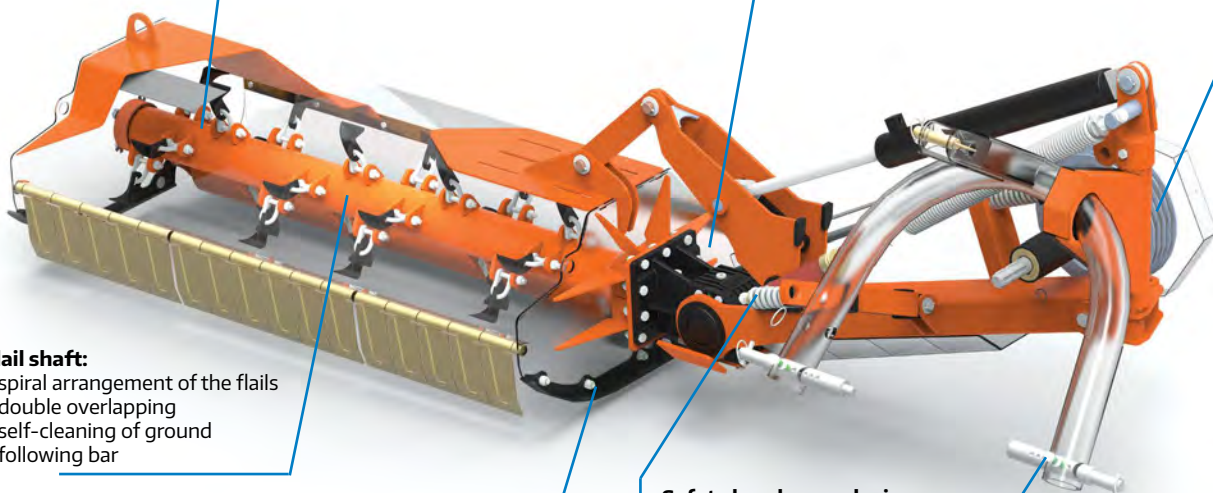
- protect the machine during drives over obstacles
- extend machine's life

## Safety breakaway device

- for mower protection against damages
- mechanical for KBR L,
- hydraulic for KBR

## Hitch pins

- adjustable,
- for easier attachment of various types of tractors



## OTHER ADVANTAGES OF **KBR L** / **KBR** FLAIL MOWERS

### Design **KBR L**

- enables work within  $-65^{\circ}$  and  $+90^{\circ}$
- metal sheet for housing reinforcement
- low weight owing to use of high-quality steel **OPTIMA**
- gearbox with integrated Rotex clutch
- front metal sheet guards

### Design **KBR**

- enables work within  $-65^{\circ}$  and  $+90^{\circ}$
- front protective chains
- gearbox with integrated clutch (SaMASZ design)
- unlike KBR L the KBR mower is designed for work under **more difficult** conditions

### Ground following bar

- automatic cleaning with flails
- no pressing of cut material

### Flail shaft

- equipped with double row barrel bearings
- arrangement of flails provides intensive shredding of material and faster drying and decomposition
- less drives - time savings
- lower load of machine and tractor

## OPTIONAL EQUIPMENT

Flail knife - **KBR L**:

Flail knife - **KBR**:



TYPE VIII



TYPE IX



TYPE II

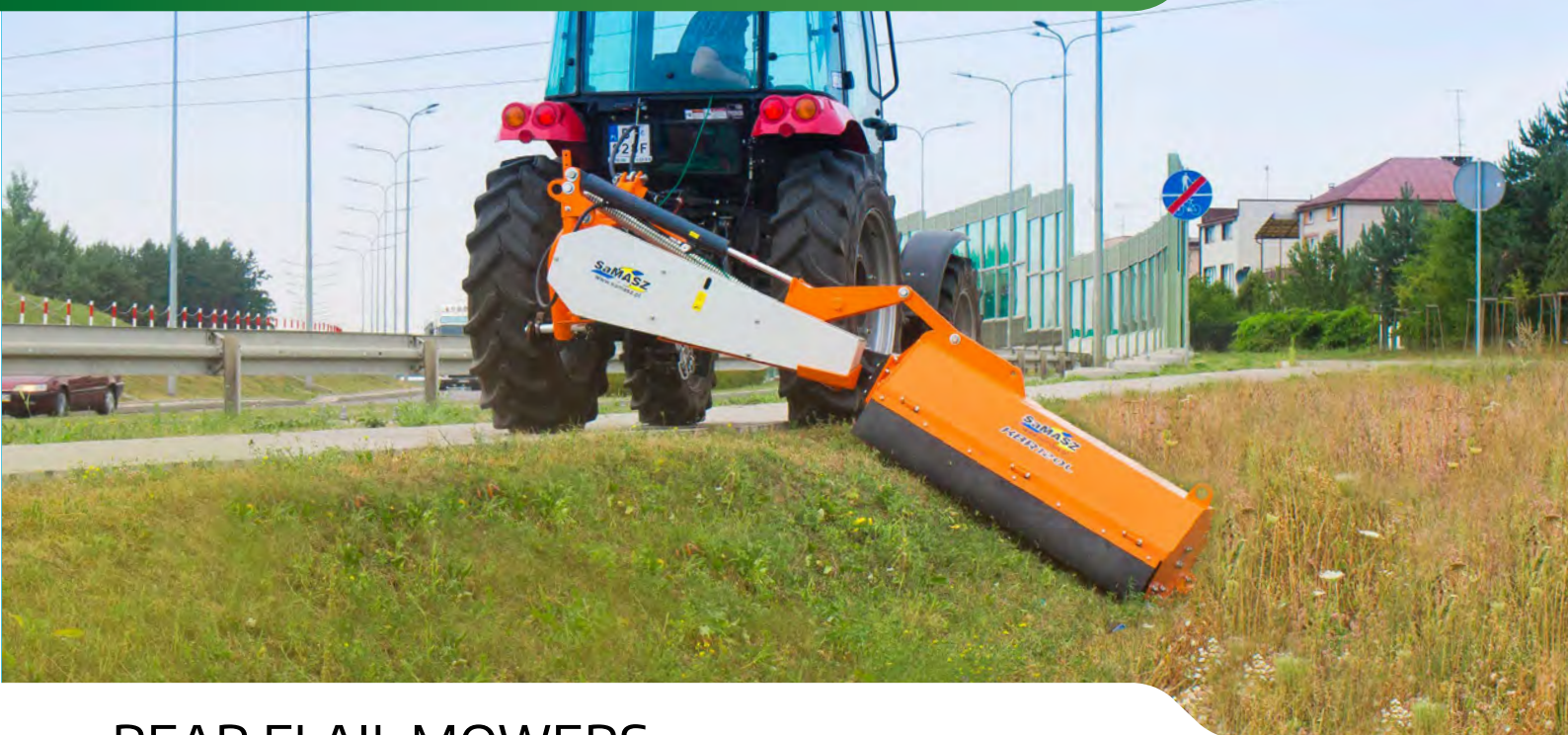


TYPE III



TYPE IV





## REAR FLAIL MOWERS

**KBR L** - light class

**KBR** - middle class



~ 1,2 kg  
(2,65 lbs)

**KNIFE TYPE I**  
Standard flail knife



~ 0,2 kg  
(0,45 lbs)

**KNIFE TYPE VII**  
Standard flail knife

### Standard equipment KBR L:

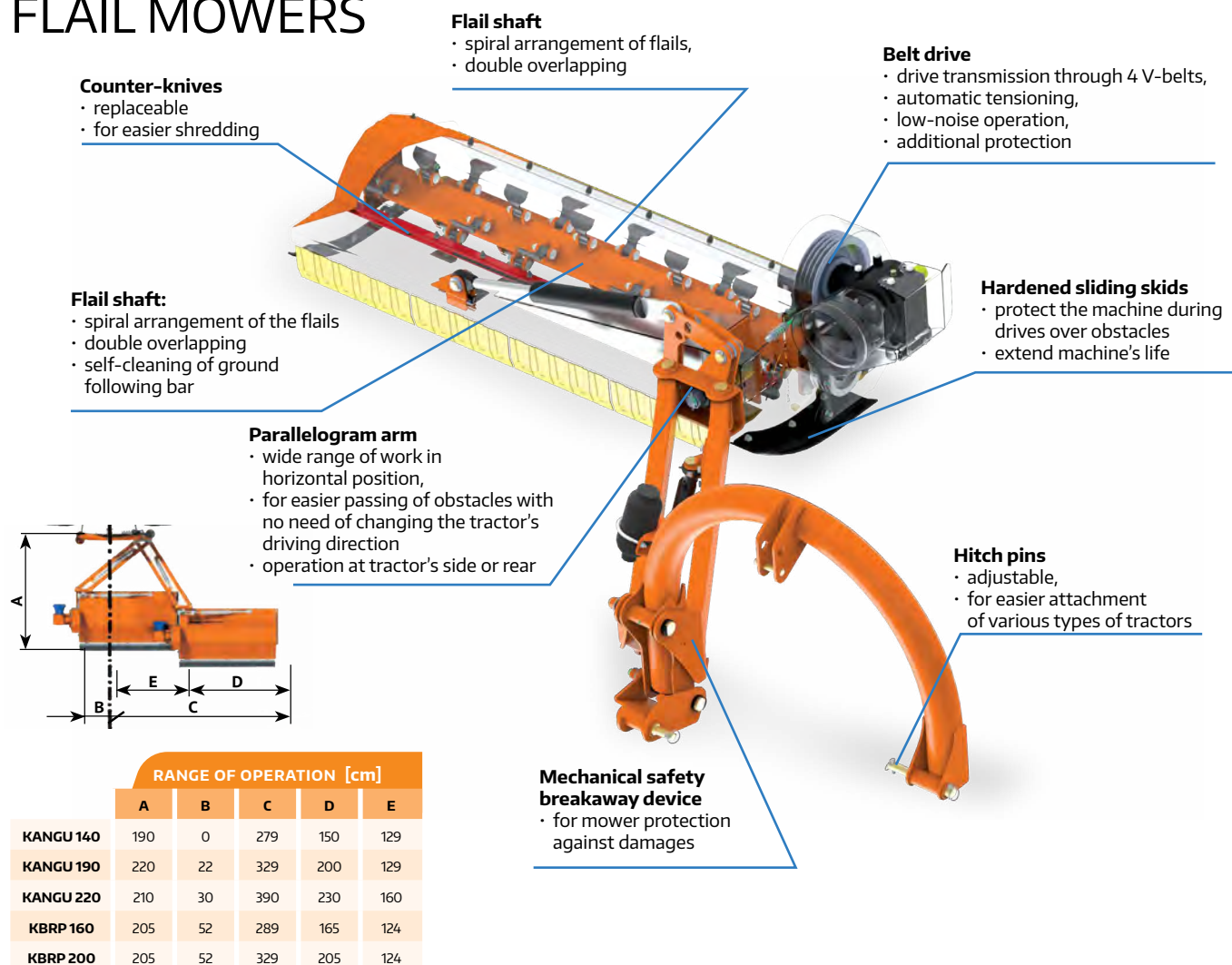
Shaft with double flail spiral (double overlapping) • Gearbox with integrated Rotex clutch • Hydraulic cylinder • Mechanical safety breakaway device • Mowing height adjustment with ground following bar • Rear rubber guard • Adjustable hitch pins • Front protective metal sheet guards • Adjustable support leg • PTO shaft • Automatic tensioning of V-belts

### Standard equipment KBR:

Hydraulic cylinder • Gearbox with integrated clutch (SaMASZ design) • Hydraulic safety breakaway device • Limiting chain • Mowing height adjustment with ground following bar • Rear rubber guard • Adjustable hitch pins • Front protective metal sheet guard • PTO shaft • Automatic tensioning of V-belts

		KBR 120 L	KBR 140 L	KBR 140	KBR 160
TECHNICAL DETAILS	Working width [m / ft]	1,20 / 3'11"	1,40 / 4'7"	1,40 / 4'7"	1,60 / 5'3"
	Necessary hydraulic couplers	1 x single acting		1 x single acting	
	Number of knives [pcs.]	20	24	12	14
	Number of counter knives	1 row / 1 pcs.		1 row / 1 pcs.	
	Flail shaft diameter [mm /in]	□108 / 4 1/4"		□133 / 5 1/4"	
	RPM	540		540	
	Power demand [HP]	from 30	from 35	from 50	from 70
	3-point hitch cat.	I / II		II	
	Weight [kg / lbs]	410 / 905	430 / 950	670 / 1480	705 / 1555
	Max. diameter of branches to be cut [mm /in]	20 / 4/5"		60 / 2 2/5"	
PTO shaft		tractor - mower: with overrunning clutch			

# ADVANTAGES OF KANGU / KBRP FLAIL MOWERS



## OTHER ADVANTAGES OF KANGU / KBRP FLAIL MOWERS

### Design KANGU

- enables work within  $-65^\circ$  and  $+90^\circ$
- high durability owing to use of high grade steel
- gearbox with integrated clutch
- front metal sheet guards

### Design KBRP

- enables work within  $-65^\circ$  and  $+90^\circ$
- high durability owing to use of high grade steel
- metal sheet for housing reinforcement
- front protective chains
- unlike KANGU the KBRP mower is designed for work under **more difficult** conditions

### Ground following bar

- automatic cleaning with flails
- no pressing of mowed material

### Flail shaft

- equipped with double row barrel bearings
- arrangement of flails provides intensive shredding of material and faster drying and decomposition
- less drives - time savings
- lower load of machine and tractor

## OPTIONAL EQUIPMENT

Flail knife - KANGU / KBRP:



TYPE II



TYPE III



TYPE IV





# ADVANTAGES OF IBIS / EMU FLAIL MOWERS

## Container's capacity

- 1,0 m<sup>3</sup> / 35 ft<sup>3</sup> - IBIS / IBIS UP - plastic,
- 1,2 m<sup>3</sup> / 42 ft<sup>3</sup> - EMU S - metal,
- 1,4 m<sup>3</sup> / 49 ft<sup>3</sup> - EMU UP - metal

## Rear road lights

## Ground following wheels

- improve work stability

## Flail shaft:

- spiral arrangement of the flails
- double overlapping
- self-cleaning of ground following bar

## Hardened sliding skids

- protect the machine when passing over obstacles
- extend machine's life

## Belt drive

- drive transmission through 3 V-belts,
- automatic tensioning,
- low-noise operation,
- additional protection

## Ground following bar

- working height adjustment,
- for stability improvement during work

## OTHER ADVANTAGES OF EMU / IBIS FLAIL MOWERS

### Design IBIS

- simultaneous cutting and grass pick-up
- hydraulic discharge
- low weight owing to use of high-quality steel
- front protective rubber guards
- **unlike EMU intended for areas of special care**
- designed for low power tractors
- container's discharge possible directly on the trailer (IBIS UP) - up to 2 m / 6'7"

### Design EMU

- simultaneous cutting and grass pick-up
- hydraulic discharge
- container's discharge possible directly on the trailer (EMU UP) - up to 2 m / 6'7"
- high strength owing to use of high grade steel
- gearbox with integrated clutch
- front metal sheet guards

### Ground following bar

- automatic cleaning with flails
- stepless working height adjustment (IBIS)

### Flail shaft

- equipped with double row barrel bearings
- arrangement of flails provides intensive shredding of material and faster drying and decomposition
- less drives - time savings
- lower load of machine and tractor

## OPTIONAL EQUIPMENT

Flail knife - IBIS:



TYPE IX



TYPE XI



TYPE XII





**EMU** - steel container



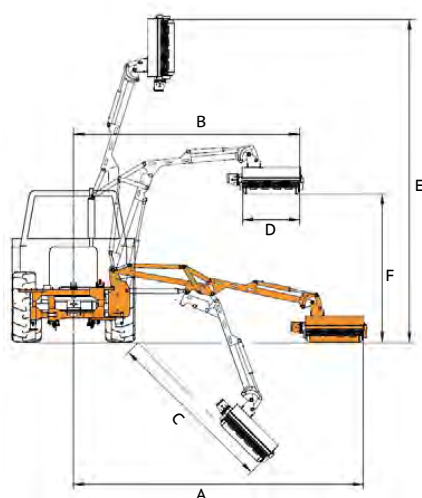
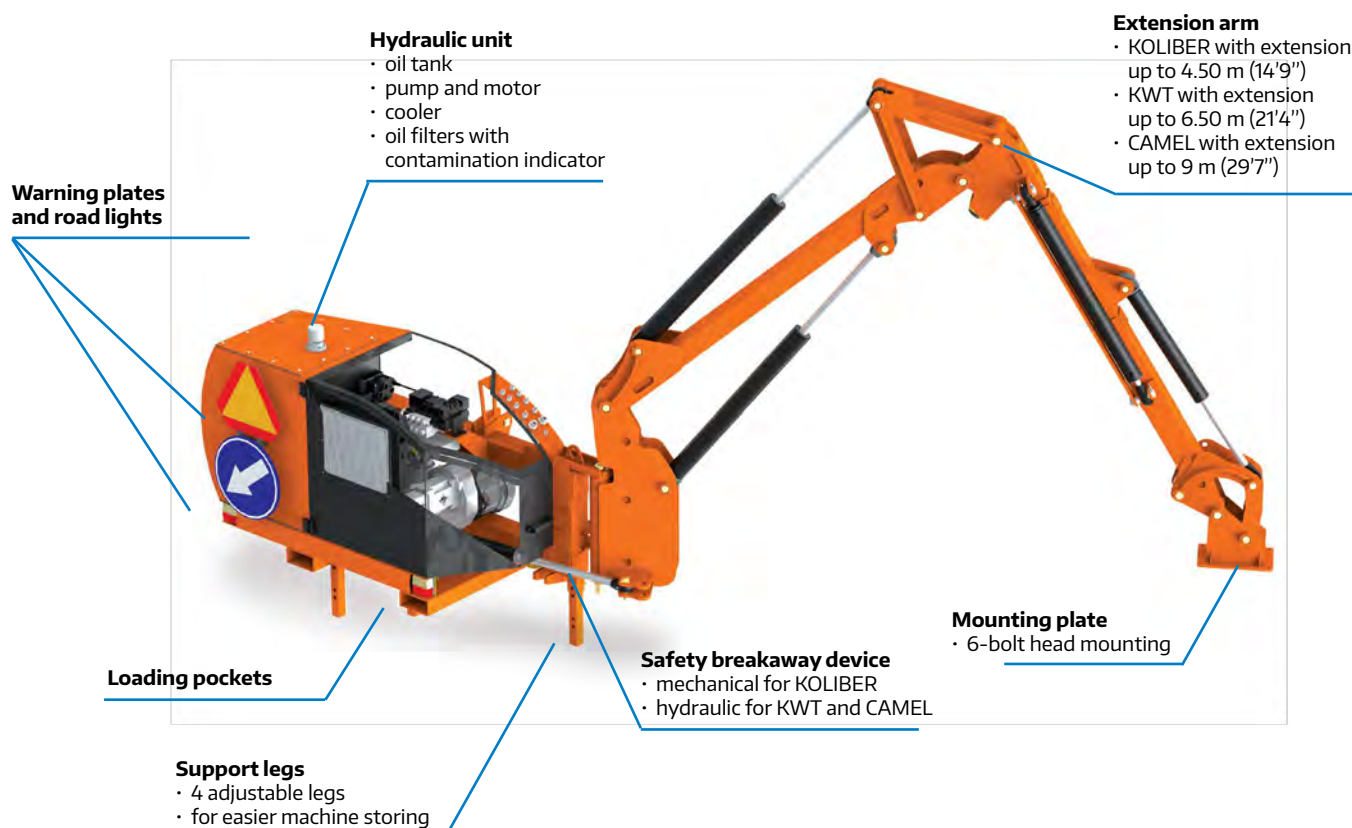
~ 1,2 kg  
(2,65 lbs)

**KNIFE TYPE I**  
Standard flail knife EMU

Shaft with double flail spiral (double overlapping) · Hydraulic discharge · Mowing height adjustment · Front protective metal sheet guards (EMU) · Road lights · PTO shaft · Front support wheels set (IBIS) · Automatic tensioning of V-belts

## TECHNICAL DETAILS

# ADVANTAGES OF KOLIBER / KWT / CAMEL EXTENSION ARMS



EXTENSION ARM REACH WITH MOWING HEAD [cm/in]

	A	B	C	D	E	F
KOLIBER 400	410 / 161	310 / 122	270 / 106	120 / 47	455 / 179	220 / 87
KOLIBER 450	460 / 181	350 / 138	320 / 126	120 / 47	505 / 199	250 / 98
KWT 550 / KW 110	570 / 224	440 / 173	340 / 134	110 / 43	640 / 252	290 / 114
KWT 550 / KW 125	570 / 224	450 / 177	340 / 134	130 / 51	640 / 252	290 / 114
KWT 550 / KW 140	580 / 228	450 / 177	350 / 138	150 / 59	650 / 256	290 / 114
KWT 550 / LAMA 120	580 / 228	450 / 177	350 / 138	120 / 47	650 / 256	290 / 114
KWT 550 / LAMA 140	600 / 236	470 / 185	370 / 146	140 / 55	670 / 246	290 / 114
KWT 650 / KW 110	660 / 260	530 / 209	430 / 169	110 / 43	720 / 283	300 / 118
KWT 650 / KW 125	660 / 260	530 / 209	430 / 169	130 / 51	720 / 283	300 / 118
KWT 650 / KW 140	675 / 266	540 / 213	440 / 173	150 / 59	730 / 287	300 / 118
KWT 650 / LAMA 120	670 / 264	540 / 213	440 / 173	150 / 59	730 / 287	300 / 118
KWT 650 / LAMA 140	690 / 272	560 / 220	460 / 181	140 / 55	750 / 295	300 / 118
CAMEL 900	900 / 354	690 / 272	660 / 260	120 / 47	960 / 378	520 / 205

## OTHER ADVANTAGES OF KOLIBER / KWT / CAMEL EXTENSION ARMS

### Design

- arm mounted to tractor's rear 3-point linkage
- additional stabilizing brackets (KWT, CAMEL)
- high suspended original arm enables safe drive over obstacles
- opened cover on hydraulic and electrical units

### Hydraulic unit

- independent, equipped with own cooler and pump
- oil tank with level indicator and temperature sensor
- arm equipped with hydraulic connectors
- hydraulic pump with capacity up to 100 l/min (26 GPM)
- available in option for 1000 rpm

### Steering

- cable-type as **standard**
  - valves controlled with Bowden cables
- electric (E) ON-OFF in **option**:
  - arm is moved at constant speed adjusted with choke valves
- proportional steering (EP) available in **option**:
  - arm motion speed dependent on joystick position
  - simultaneous three cylinder control possible





## REAR EXTENSION ARMS

**KOLIBER** - reach up to 4,5 m (14'9")

**KWT** - reach up to 6,5 m (21'4")

**CAMEL** - reach up to 9,0 m (29'7")

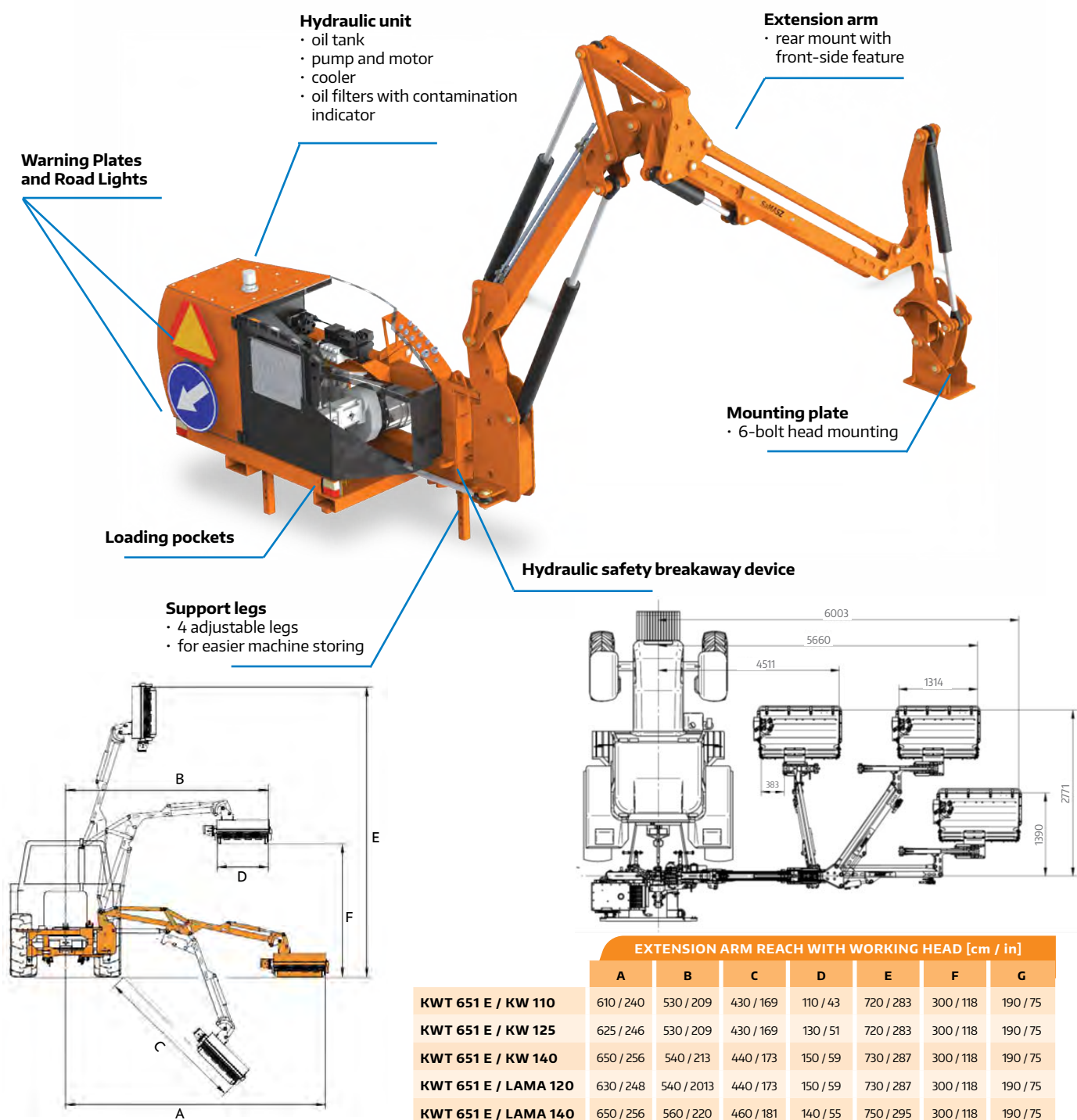


### Standard equipment:

Hydraulic safety breakaway device (KWT and CAMEL) • Mechanical safety breakaway device (KOLIBER)  
 • Cable-type control panel • Temperature and oil level indicators • Hydraulic lock • Cooler with oil filters  
 • Adjustable support legs • Warning plates • Rear road lights • PTO shaft • Stabilizing brackets (KWT, CAMEL)

		KOLIBER 400	KOLIBER 450	KWT 550	KWT 650	CAMEL 900	
TECHNICAL DETAILS	Arm reach [m / ft]*	4,00 / 13'1"	4,50 / 14'9"	5,50 / 18'	6,50 / 21'4"	9,00 / 29'7"	
	Necessary hydraulic couplers	-			1 x double acting		
	Recommended tractor's weight [kg / lbs]	2400 / 5290	2900 / 6395	3700 / 8160	4300 / 9480	7500 / 16535	
	Oil tank capacity [L / cu.ft.]	120 / 31 us gal			200 / 52 us gal		
	Pump power [kW]	33					
	Pump efficiency (l/min) / (GPM)	90 / 23					
	Transport width [cm / ft]	175 / 5'9"	185 / 6'1"	195 / 6'5"		190 / 6'3"	
	Transport height [cm / ft]	265 / 8'8"	290 / 9'6"	350 / 11'6"		400 / 13'1"	
	RPM	540					
	Power demand [HP]	from 55			from 80	from 90	from 100
	3-point hitch cat.	II				III	
	Weight [kg / lbs]	530 / 1170	580 / 1280	1055 / 2325	1140 / 2515	1370 / 3020	
PTO shaft	tractor - mower: no clutch						
3-point hitch support brackets	-			Turnbuckle			

# ADVANTAGES OF **KWT 651 E / EP** EXTENSION ARM



## OTHER ADVANTAGES OF KWT 651 EXTENSION ARM

### Design

- arm mounted to tractor's rear 3-point linkage
- additional stabilizing plates
- high suspension point enables safe and comfortable operation
- opened cover on hydraulic and electrical units
- enables moving an arm to the front, so that working head is in line with an operator - better visibility and comfortable work

### Hydraulic unit

- independent, equipped with own cooler and pump
- oil tank with level indicator and temperature sensor
- arm equipped with hydraulic connectors
- hydraulic pump with capacity up to 100 l/min (26 GPM)
- available in option for 1000 rpm

### Steering

- electric (E) as **standard**:
  - steering with one cylinder possible
- proportional steering (EP) available in **option**:
  - arm motion speed dependent on joystick position
  - simultaneous three cylinder control possible





## REAR EXTENSION ARMS

### KWT 651 E / EP

- reach up to 6,5 m (21'4")



#### Standard equipment:

Electric steering with joystick • Hydraulic safety device • Temperature and oil level indicator • Transport safety device with valve • Cooler with oil filters • Stabilizing brackets • 3-point linkage support brackets • PTO shaft • Regulated support legs • Warning plates with road lights

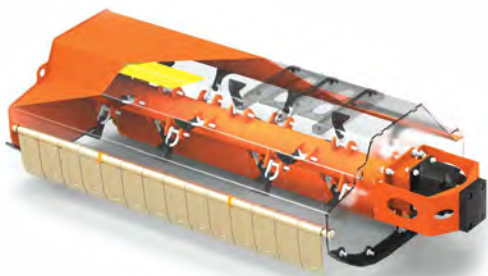
#### KWT 651

TECHNICAL DETAILS	Arm reach [m / ft]*	6,40 / 21'
	Recommended tractor's weight [kg / lbs]	4300 / 9480
	Oil tank capacity [L / cu.ft.]	200 / 52 us gal
	Pump power [kW]	33
	Pump efficiency (l/min) / (GPM)	90 / 23
	Transport width [cm / ft]	195 / 6'5"
	Transport height [cm / ft]	350 / 11'6"
	RPM	540
	Power demand [HP]	from 90
	3-point hitch cat.	II
	Weight [kg / lbs]	1230 / 2710
	PTO shaft	<b>tractor - mower:</b> no clutch
	3-point linkage support brackets	Turnbuckle

\* Arm reach with working head 1,2 m (3'11")

# EXTENSION ARM ATTACHMENTS

## LIGHT WEIGHT MOWING HEAD LAMA 120 / 140



TECHNICAL DETAILS	LAMA 120		LAMA 140	
	Working width [m / ft]	1,20 / 3'11"		1,40 / 4'7"
	Flail shaft diameter [mm/ in]	108 / 4 1/4"		
	Number of knives (type VII - in standard equipment)	20		24
	Oil pump efficiency (l/min) / (GPM)	90-100 / 23-26		
	Hydraulic pressure [bar / PSI]	210 / 3045		
	Weight [kg / lbs]	185 / 410		205 / 450
	Arm type	KOLIBER, KWT, CAMEL		KOLIBER, KWT, CAMEL

## LIGHT WEIGHT MOWING HEAD LAMA 121 / 141

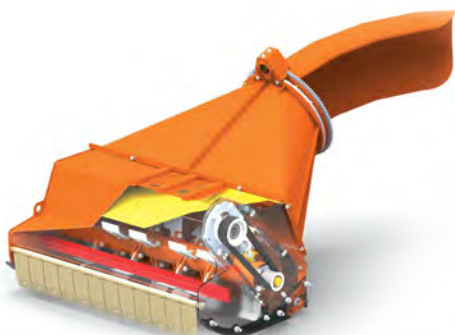
- hydraulic motor mounted on top of mowing head
- manual side-shift



TECHNICAL DETAILS	LAMA 121		LAMA 141	
	Working width [m / ft]	1,20 / 3'11"		1,40 / 4'7"
	Flail shaft diameter [mm/ in]	108 / 4 1/4"		
	Number of knives (type VII - in standard equipment)	20		24
	Oil pump efficiency (l/min) / (GPM)	90-100 / 23-26		
	Hydraulic pressure [bar / PSI]	210 / 3045		
	Weight [kg / lbs]	245 / 540		255 / 560
	Arm type	KWT, CAMEL		KWT

## LIGHT WEIGHT MOWING HEAD LAMA 101 P

- hydraulic motor mounted on top of mowing head
- hydraulic regulation of discharge



TECHNICAL DETAILS	LAMA 101 P	
	Working width [m / ft]	1,06 / 3' 4"
	Flail shaft diameter [mm/ in]	108 / 4 1/4"
	Necessary hydraulic couplers	1 x double acting
	Number of knives	30
	Oil pump efficiency (l/min) / (GPM)	90-100 / 23-26
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight [kg / lbs]	250 / 550
	Arm type	KOLIBER, KWT, CAMEL



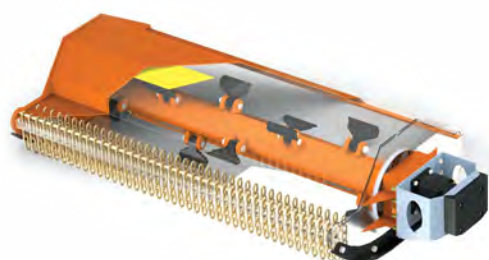
## LIGHT WEIGHT MOWING HEAD LAMA 121 HD

- hydraulic motor mounted on top of mowing head
- mechanical side shift



TECHNICAL DETAILS	LAMA 121 HD	
	Working width [m / ft]	1,20 / 3'11"
	Flail shaft diameter [mm/ in]	133 / 5 1/4"
	Number of knives (type V - in standard equipment)	20
	Oil pump efficiency (l/min) / (GPM)	90-100 / 23-26
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight [kg / lbs]	270 / 595
	Arm type	KWT

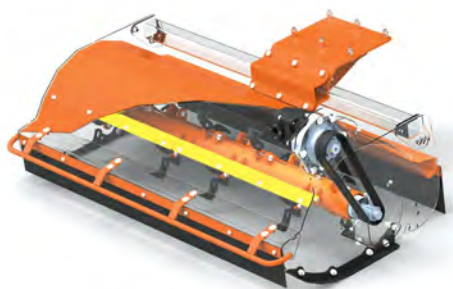
## MOWING HEAD KW 110 / 125 / 140 - HEAVY WEIGHT



TECHNICAL DETAILS		KW 110	KW 125	KW 140
	Working width [m / ft]	1,10 / 3'7"	1,25 / 4'1"	1,40 / 4'7"
	Flail shaft diameter [mm/ in]	133 / 5 1/4"		
	Number of knives (type I - in standard equipment)	10	10	12
	Oil pump efficiency (l/min) / (GPM)	90-100 / 23-26		
	Hydraulic pressure [bar / PSI]	210 / 3045		
	Weight [kg / lbs]	265 / 585	305 / 675	330 / 730
	Arm type	KWT		

## MOWING HEAD KW 111 / 126 / 141 - HEAVY WEIGHT

- hydraulic motor mounted on top of mowing head
- mechanical side shift

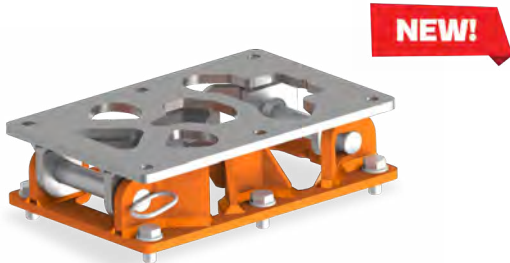


TECHNICAL DETAILS		KW 111	KW 126	KW 141
	Working width [m / ft]	1,10	1,25	1,40 / 4'7"
	Flail shaft diameter [mm/ in]	133	133	133 / 5 1/4"
	Number of knives (type V - in standard equipment)	12	14	16
	Oil pump efficiency (l/min) / (GPM)	90 - 100	90 - 100	90-100 / 23-26
	Hydraulic pressure [bar / PSI]	210	210	210 / 3045
	Weight [kg / lbs]	250	270	280 / 620
	Arm type	KWT	KWT	KWT

# EXTENSION ARM ATTACHMENTS

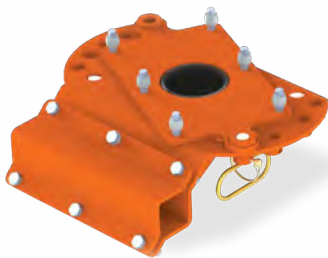
## ADDITIONAL ATTACHMENTS

### QUICK - COUPLING



### SWIVEL MOUNT - MECHANICAL

- rotation range up to 45°
- Lama 121, 141, 121 HD



### SWIVEL MOUNT - HYDRAULIC

- with all mowing heads,
- stepless rotation range up to 180°



### MOUNT EXTENSION

- attachment to LAMA 121 / 141 with additional bracket
- movement range up to 260 mm (~10 in)





## CIRCULAR SAW PT3-190 / PT3-190 F\* / PT4-250 / PT4-250 F\*



TECHNICAL DETAILS		PT 3-190	PT 3-190 F*	PT 4-250	PT 4-250 F*
	Working width [m / ft]	1,90 / 6'3"	1,90 / 6'3"	2,50 / 8'2"	2,50 / 8'2"
	Circular blade [pcs.]	3	3	4	4
	Oil pump efficiency (l/min) / (GPM)	85-100 / 22-26	55 - 70 / 14-18	85-100 / 22-26	55 - 70 / 14-18
	Hydraulic pressure [bar / PSI]	180 / 2610			
	Weight [kg / lbs]	195 / 430	195 / 430	250 / 550	250 / 550
	Arm type	KWT, CAMEL	FISHER	KWT	FISHER

\* Free flow required

## SCISSOR TRIMMER PG 150/ PG 150 F / PG 200 / PG 200 F



TECHNICAL DETAILS		PG 150	PG 150 F*	PG 200	PG 200 F*
	Working width [m / ft]	1,50 / 4' 11"	1,50 / 4' 11"	2,00 / 6' 7"	2,00 / 6' 7"
	Max diameter of cut branches [mm / ft]	100 / 4"			
	Oil pump efficiency (l/min) / (GPM)	45-60 / 11-18			
	Hydraulic pressure [bar / PSI]	160 / 2320			
	Weight [kg / lbs]	200 / 440	200 / 440	240 / 530	240 / 530
	Arm type	KWT, CAMEL	FISHER	KWT,	FISHER

\* for FISHER carrier

## HYDRAULIC FRONT-LOADER EXTENSION ARM FISHER (FOR PG AND PT)



TECHNICAL DETAILS		FISHER
	Side-shift [m/ft]	1,06 / 3'4"
	Head rotation	100°
	Necessary hydraulic couplers*	1 x double acting 1 x single acting
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight with mounting frame [kg/lbs]**	250 / 550
	Designation	PG F, PT F

\* operation with circular saw PT requires free flow - with medium pair of hydraulic couplers.

\*\* use of snow plow adapters possible

# EXTENSION ARM ATTACHMENTS

## STUMP GRINDER **FP 20**



TECHNICAL DETAILS	FP 20	
	Number of knives	16
	Oil pump efficiency (l/min) / (GPM)	70-100 / 18-26
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight [kg / lbs]	90 / 200
	Arm type	KWT, CAMEL

## ROAD SHOULDER GRINDER **RP 110**



TECHNICAL DETAILS	RP 110	
	Working width [m / ft]	1,10 / 3' 7"
	Flail shaft diameter [mm / ft]	168 / 6 3/5"
	Oil pump efficiency (l/min) / (GPM)	70-100 / 18-26
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight [kg / lbs]	255 / 560
	Arm type	KWT, CAMEL

## DITCH CLEANER **OR 080**



TECHNICAL DETAILS	OR 080	
	Working width [m / ft]	0,80 / 2' 7"
	Number of knives	8
	Oil pump efficiency (l/min) / (GPM)	80-100 / 21- 26
	Hydraulic pressure [bar / PSI]	210 / 3045
	Weight [kg / lbs]	225 / 495
	Arm type	KWT, CAMEL



## ROAD SIGN WASHER **ROLLER 1000**



ROLLER 1000	
TECHNICAL DETAILS	Working width [m / ft]
	1,00 / 3' 4"
	Oil pump efficiency [l/min] / (GPM)
	40 / 10
	Hydraulic pressure [bar / PSI]
	200 / 2900
	Weight [kg / lbs]
	140 / 310
	Arm type
	KWT, CAMEL

## TANK 1000



TANK 1000	
TECHNICAL DETAILS	Capacity [L/us gal]
	1000 / 264
	Weight (without liquid) [kg / lbs]
	170 / 375
	Power [V]
	12
	Hydraulic pressure [bar / PSI]
	2,5 / 36
	Oil pump efficiency [l/min] / (GPM)
	15 / 15 gpm

## MOP



	MOP 120	MOP 140	MOP 160	MOP 200
TECHNICAL DETAILS	Working width [cm/ft]	120 / 3' 11"	140 / 4' 7"	160 / 5' 3"
	Brush rpm	140 - 160		
	Brush diameter [cm/in]	60 / 24		
	Working speed [km/h / mph]	up to 10 / 7 mph		
	Container capacity [L / us gal]	70/18	90/23	130/34
	Dimensions [cm/ft]	140 / 140 / 114	160 / 140 / 114	180 / 140 / 114
	Length / width / height	4'7"/4'7"/3'9"	5'3"/4'7"/3'9"	5'11"/4'7"/3'9"
	Weight [kg / lbs]	260 / 570	275 / 605	310 / 685
				170/44
				200 / 140 / 114
				6'7"/4'7"/3'9"
				320 / 705



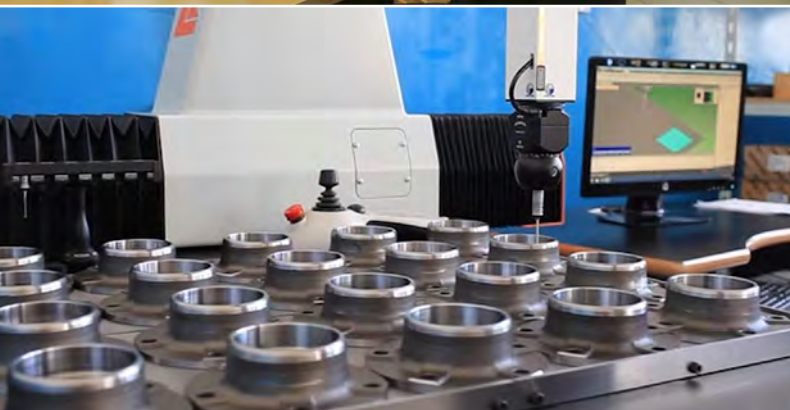
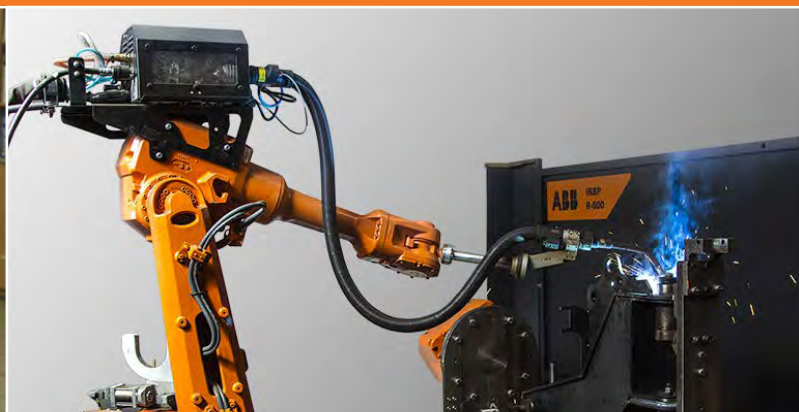
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True passion and constant seeking of the best solutions are amongst the ideas, which have been essential for the SaMASZ employees and have become the key to the company's success.

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 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. Since the beginning we managed to manufacture and sell more than 95,000 mowers and few thousands of other machines. 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.