



Serrrot



**Soil Range &
Biomass Range**

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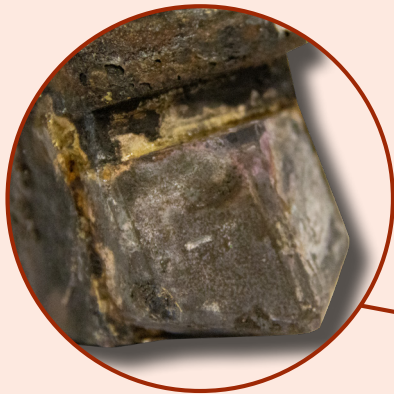


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Soil mulchers with fixed tooth

Fixe Top System: a system of cutting with teeth in tungsten, it's characterized by clamp screw not supporting the tooth; they fix it only so that it does not go out laterally. The effort due to the work neutralizes itself inside crenellations between the tooth and the support.



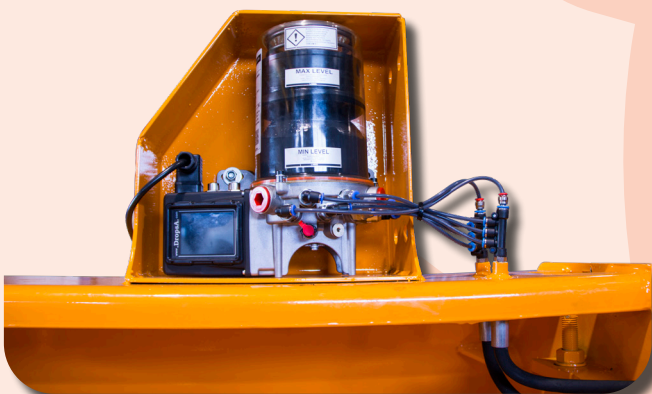
FIXE TOP

Greasing System

Automatic lubrication system replaces traditional lubrication system, obtaining optimum lubrication, and can be programmable in quantity and lubrication interval.

This consists of a grease tank, driven by a high pressure pump, driven by a 12 V electric motor and controlled by a programmer for interval time.

The pipes are integrated into the chassis inside the fairings.



FARMLAND-3



FIXE TOP

- ▶ Rotor FIXE TOP of Ø 470 mm of diameter.
- ▶ Steel-plate chassis, thickness 8 mm.
- ▶ For tractors between 100 - 150 HP.
- ▶ Soil preparation machine up to a depth of Ø 300 mm.
- ▶ Double ploughshare for opening the land.
- ▶ Greasing system.



Soil

MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-1600	1600	75 - 100 112 - 150	32	1665	2 Synchronous	1615	64"	1500	59"	1430	56"	1000
T-1800	1800	88 - 120 112 - 150	38	1780	2 Synchronous	1815	70"	1500	59"	1430	56"	1000
T-2000	2000	97 - 130 112 - 150	44	1900	2 Synchronous	2015	79"	1500	59"	1430	56"	1000
T-2300	2300	104 - 140 112 - 150	52	2200	2 Synchronous	2315	91"	1500	59"	1430	56"	1000



FARMLAND-4

- ▶ Rotor FIXE TOP of Ø 550 mm of diameter.
- ▶ Steel-plate chassis, thickness 10 mm.
- ▶ For tractors between 150 - 250 HP.
- ▶ Soil preparation machine up to a depth of Ø 400 mm.
- ▶ Double ploughshare for opening the land.
- ▶ Greasing system.

MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	112 - 150 149 - 200	36	2880	2 Synchronous	2080	81"	1500	60"	1670	66"	1000
T-2300	2300	127 - 170 186 - 250	48	3220	2 Synchronous	2380	94"	1500	60"	1670	66"	1000
T-2700	2700	149 - 200 186 - 250	60	3580	2 Synchronous	2780	109"	1500	60"	1670	66"	1000

FARMLAND-5



FIXE TOP

- ▶ Rotor FIXE TOP of 625 mm of diameter.
- ▶ Steel-plate chassis, thickness 12 mm.
- ▶ For tractors between 250 - 500 HP.
- ▶ Soil preparation machine up to a depth of Ø 500 mm.
- ▶ Double ploughshare for opening the land.
- ▶ Greasing system.



Soil

MODEL

MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-2500	2500	186 - 250 224 - 500	55	4100	2 Synchronous	2500	98"	1740	69"	1870	74"	1000
T-3000	3000	186 - 250 298 - 500	62	4700	2 Synchronous	3000	118"	1740	69"	1870	74"	1000



HARDLAND



- ▶ Solid rotor Harland Ø 625 mm.
- ▶ Steel-plate chassis, thickness 20 mm.
- ▶ For tractors between 300-600 HP.
- ▶ Soil preparation machine up to a depth of Ø 500 mm.
- ▶ Double ploughshare for opening the land.
- ▶ Greasing system.
- ▶ Gearbox Synkrodos.

MODEL

MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-2600	2600	224 - 300 447 - 600	10	6250	2 Synchronous	2600	102"	1740	69"	1870	74"	1000
T-3000	3000	224 - 300 447 - 600	12	7150	2 Synchronous	3000	118"	1740	69"	1870	74"	1000

TILLER-3

- ▶ Rotor FIXE TOP of Ø 470 mm.
- ▶ Steel-plate chassis, thickness 8 mm.
- ▶ For tractors between 80-120 HP.
- ▶ Soil preparation machine up to a depth of 120-150 mm.
- ▶ Raer roller into the hood.
- ▶ Greasing system (Option).



FIXE TOP

MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-1200	1200	59 - 80 75 - 100	30	935	4 XPC	1420	56"	1415	60"	950	66"	540
T-1400	1400	59 - 80 75 - 100	36	1070	4 XPC	1620	64"	1415	60"	950	66"	540
T-1600	1600	59 - 80 75 - 100	42	1160	4 XPC	1820	72"	1415	60"	950	66"	540
T-1800	1800	59 - 80 88 - 120	48	1230	4 XPC	2020	80"	1415	60"	950	66"	540
T-2000	2000	59 - 80 88 - 120	50	1316	4 XPC	2220	87"	1415	60"	950	66"	540

Soil



FIXE TOP

TILLER

- ▶ Rotor FIXE TOP of Ø 550 mm.
- ▶ Steel-plate chassis, thickness 10 mm.
- ▶ For tractors between 100-150 HP.
- ▶ Soil preparation machine up to a depth of 180 mm.
- ▶ Raer roller into the hood.
- ▶ Greasing system (Option).

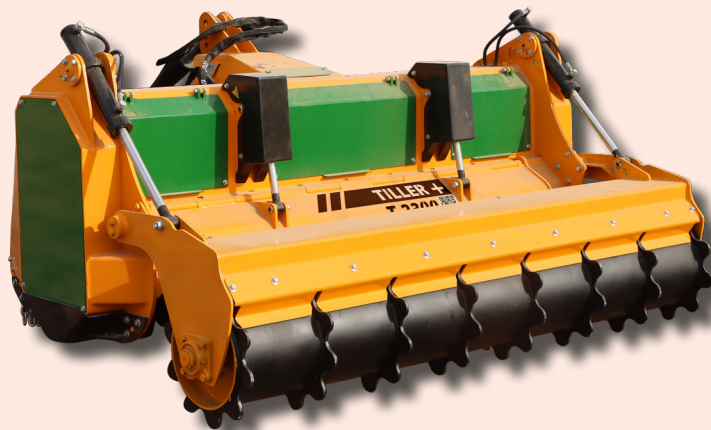
MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-1600	1600	74 - 100 97 - 130	40	1500	5 XPC	1880	74"	1340	53"	1010	40"	540
T-1800	1800	74 - 100 97 - 130	45	1580	5 XPC	2080	82"	1340	53"	1010	40"	540
T-2000	2000	74 - 100 112 - 150	50	1710	5 XPC	2280	90"	1340	53"	1010	40"	540

TILLER +





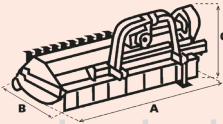



FIXE TOP

- ▶ Rotor FIXE TOP of Ø 550 mm.
- ▶ Steel-plate chassis, thickness 10 mm.
- ▶ For tractors between 150-220 HP.
- ▶ Soil preparation machine up to a depth of 200 mm.
- ▶ Hydraulic levelling roller.
- ▶ Greasing system.



Soil

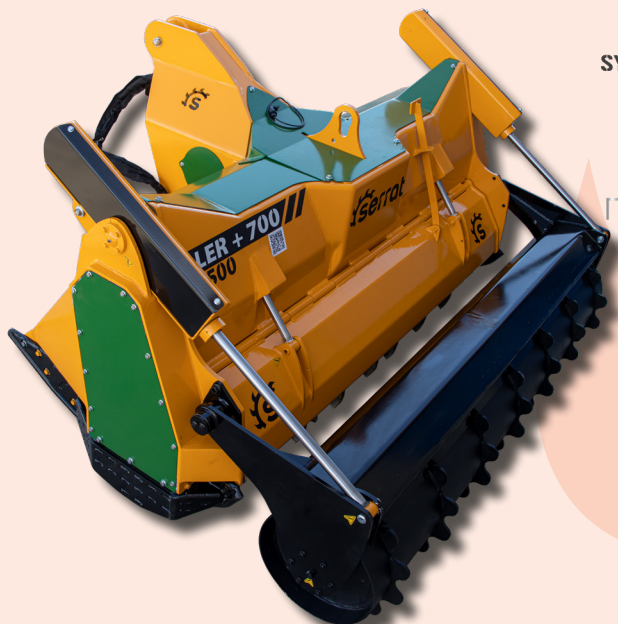
MODEL	 mm	 KW-HP			N° BELTS TYPE							
						A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	104 - 150 164 - 220	50	1990	2x4 XPC	2345	92"	1840	72"	1380	54"	1000
T-2300	2300	104 - 150 164 - 220	58	2200	2x4 XPC	2645	104"	1840	72"	1380	54"	1000
T-2500	2500	104 - 150 164 - 220	62	2290	2x4 XPC	2845	112"	1840	72"	1380	54"	1000





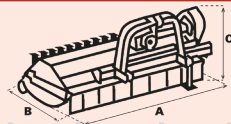



FIXE TOP

TILLER + 700

- ▶ Rotor FIXE TOP of Ø 700 mm.
- ▶ Steel-plate chassis, thickness 12 mm.
- ▶ For tractors between 300-600 HP.
- ▶ Soil preparation machine up to a depth of 500 mm.
- ▶ Hydraulic levelling roller.
- ▶ Greasing system.
- ▶ Double synchronous belt transmission.



MODEL	 mm	 KW-HP			N° BELTS TYPE							
						A mm	A in	B mm	B in	C mm	C in	
T-2500	2500	223 - 300 447 - 600	58	5000	2 Synchronous	2890	114"	2400	94"	1610	63"	1000

TOTEM-4





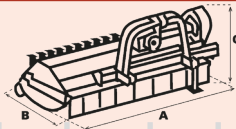

[-FIXE TOP-]

- ▶ Solid steel rotor with teeth fitted inside the rotor.
- ▶ Steel-plate chassis, thickness 12 mm.
- ▶ For tractors between 200 - 350 HP.
- ▶ Soil preparation machine up to a depth of 400-500 mm.
- ▶ Double ploughshare for opening the land.
- ▶ Double synchronous belt transmission.



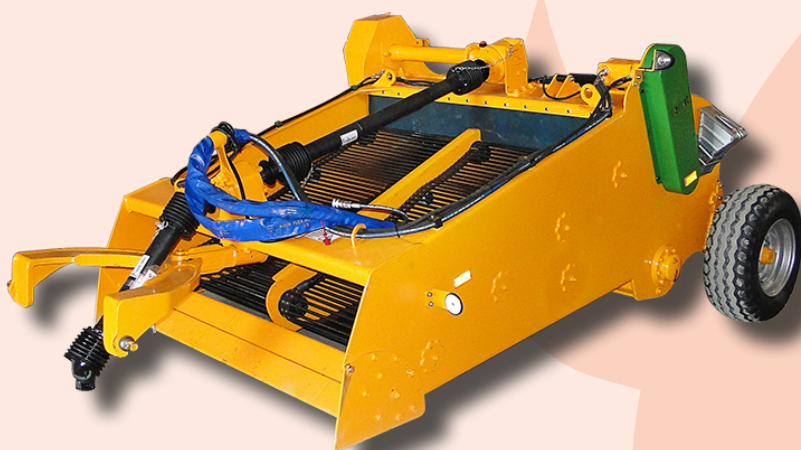
Soil

MODEL





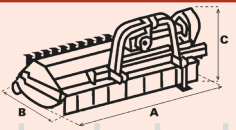

MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-1100	1100	149 - 200 257 - 350	48	3600	2 Synchronous	1100	43"	1954	77"	1500	59"	1000

PICAPIEDRAS

- ▶ Stone crusher.
- ▶ Loading by hydraulic feed belt.
- ▶ Chamber of grinding lined in sheet URSSA 500.
- ▶ For tractors between 80 - 120 HP.
- ▶ Working speed between 1-3 km/ hora.



MODEL

MODEL					N° BELTS TYPE							
	mm	KW-HP		KG		A mm	A in	B mm	B in	C mm	C in	
T-1800	1800	59 - 80 88 - 120	16	2876	4 XPC	2404	95"	3827	151"	1589	63"	1000

This Biomass wood chipper is able to mulch and recover the material. It is specially designed for the size of crushed in arboriculture, forestry and olive pruning remains, etc. It is fully compatible to hitch a trailer behind the tractor to store all the woodchips.

That wood chipper incorporates a double reversible and hydraulically controlled feeder (BRALAKC system), the rotor has the RHENDUEL system and a turbine which is responsible for carrying the mulched material to the trailer through a flexible tube or a discharge chute. The size of the material is ideal for using it as fuel in biomass, biogas or composting boilers.

This is since a few years already in SERRAT Mulchers we have a special concern. Resolve cost-effective, practical and viable collection from biomass of residues of size and branches as wood. By creating this chipper we have as objective to be the first stage of transformation of organic matter. This allows giving birth to a cycle of upgrading a raw material which is considered to date as waste. This renewable energy can help us to reduce our dependence on fossil fuels and contribute to the protection of the environment. In addition, the concept of this chipper has been studied to use of the standard tools (tractor, trailer, storage). The opportunity given to the customer is to utilize its own energy saving money and protecting the environment. The secret of this process is to do it in just one passage without refining any more the material.

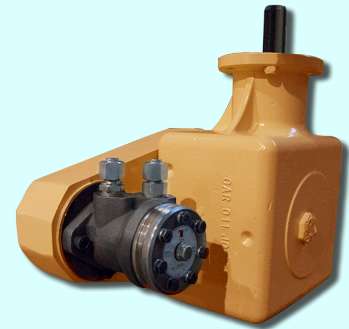
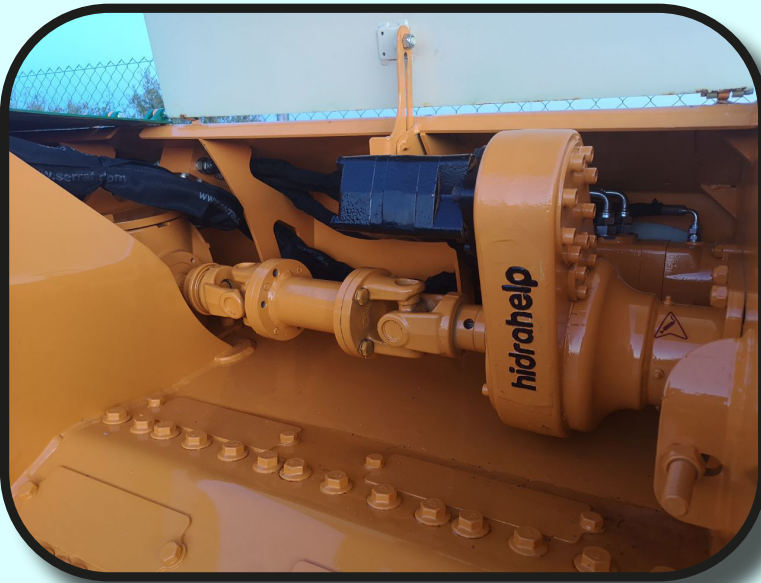


This innovative type of mulching allows us to obtain a perfect and uniform material. Once the BRALAKC system introduces the wood to the crushing chamber, we can forget about incorporating remains of earth or stones into our biomass in the finished product. The cost of that process is very cheap and ecological as well because we don't need any more industrial processes to refining the final product. The enhancement of the material that we can call "energy from field" is a project that SERRAT Trituradoras has developed in recent years. With this new generation of chippers we have obtained the expected results and we believe that this type of chippers could have a future in the development and use of alternative energies. The proof of its success is that we have already reached new customers and markets.



HIDRAHELP

HIDRAHELP is a hydraulic starter system for machines with heavy rotors, PTO without modulation in the ignition and in the front PTO.



BRALAKC

The BRALAKC feeder knives system is an exclusive design of SERRAT TRITURADORAS.

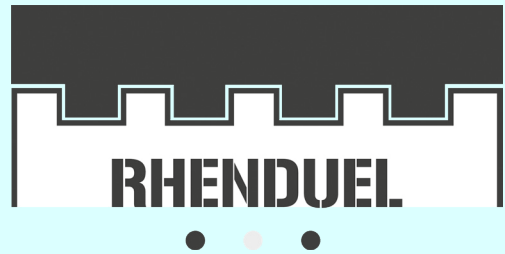
These exclusive feeder knives are the result of years of experience that SERRAT has developed in self-feeder mulchers.

Thanks to this innovative system we can obtain two essential factors collecting the pruning remains from the ground.

- ▶ Firstable, an absolute efficiency on the collection of the material thanks to the helical mounting system.
- ▶ On the other hand, thanks to its curved design, we can obtain a continuous feeding and without any obstruction, a fundamental factor in these type of machines when working in pruning cordons of high dimensions and volume.



RHENDUEL



The RHENDUEL system is an ingenious perfect cutting system for self-feeder mulchers. Its main advantage is that with this system we can obtain a very fine chipwoods like sawdust thanks to its special blades. In addition, the power required by the tractor, to mulch with this system of blades, it can decrease up to 40 %, a very important factor to be taken into account to save fuel and save money.

Thanks to the fineness and the homogeneity of the chipwoods, it was possible to obtain that in machines with pneumatic charge like BIOMASS it were possible the transport through flexible and to load the material into biomass trailers.

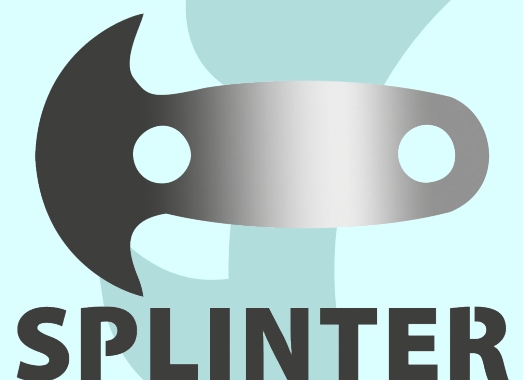
It must be remembered that the fineness of the material, facilitates a multitude of activities in the field, for example:

- 1.- The incorporation of the woodchips into the ground is much faster with this system and in a short period of time the material will disappear from the ground.
- 2.- In nuts cultivation, where normally the harvest is mechanic, is fundamental to use these machines, because otherwise, we could have some problems during the harvest with big piece of wood causing large losses for the farmers.



SPLINTER





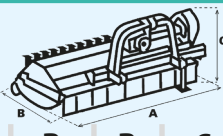

ROTOR WITH SPLINTER BLADES: Its main characteristic is that this rotor with blades is made up of two spirals in which the effort is distributed throughout the entire rotor, giving it a very high rigidity. In addition, these blades are reversible, having two cutting edges. useful cut. It is a rotor intended for wood shredding works of pruning remains and clearing.



BIOMASS 100

- ▶ Rotor with system RHENDUEL of \varnothing 350 mm.
- ▶ Steel-plate chassis, thickness 8 mm.
- ▶ Double hydraulic feeder, system BRALAKC.
- ▶ For tractors between 80 - 120 HP.
- ▶ For grass and branches up to \varnothing 60 mm.
- ▶ Start system HIDRAHELP.
- ▶ 6 meters of tube.
- ▶ Rear roller \varnothing 180 mm.





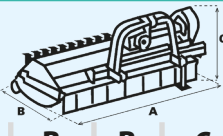



MODEL	 mm	 KW-HP			N° BELTS TYPE							
						A mm	A in	B mm	B in	C mm	C in	
T-1500	1500	59 - 80 88 - 120	4 x 7	1358	3 + 4 XPC/XPB	1860	63"	1255	49"	1180	46"	1000
T-1700	1700	59 - 80 88 - 120	4 x 8	1459	3 + 4 XPC/XPB	2060	81"	1255	49"	1180	46"	1000
T-2000	2000	61 - 80 88 - 120	4 x 10	1616	3 + 4 XPC/XPB	2360	93"	1255	49"	1180	46"	1000



BIOMASS 150

- ▶ Rotor with system RHENDUEL of \varnothing 450 mm.
- ▶ Steel-plate chassis, thickness 10 mm.
- ▶ Double hydraulic feeder, system BRALAKC.
- ▶ For tractors between 150 - 180 HP.
- ▶ For grass and branches up to \varnothing 100 mm.
- ▶ Start system HIDRAHELP.
- ▶ 6 meters of tube.
- ▶ Rear roller \varnothing 210 mm.





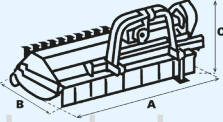

MODEL	 mm	 KW-HP			N° BELTS TYPE							
						A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	112 - 150 134 - 180	4 x 10	2135	4 + 4 XPC/XPB	2480	98"	1345	53"	1390	55"	1000

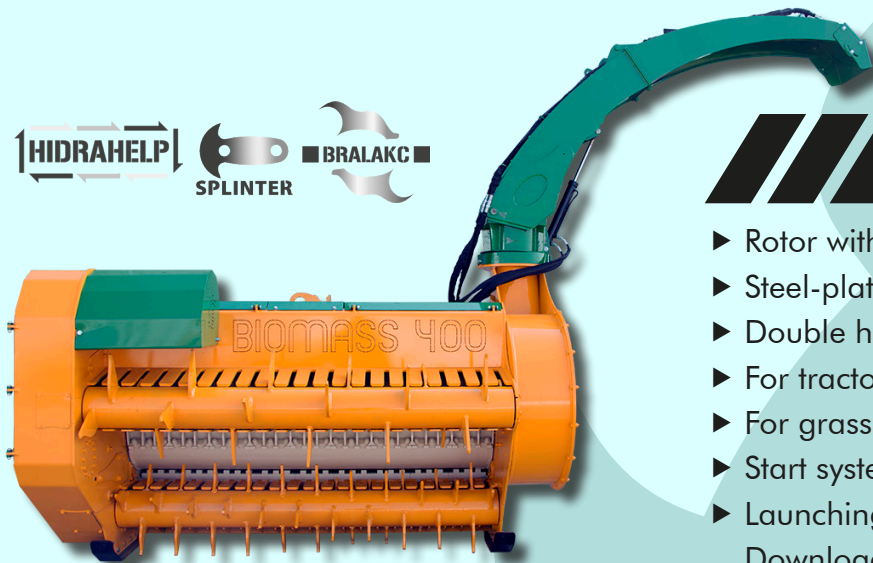
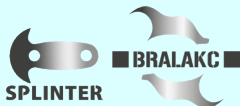
BIOMASS 200



- ▶ Rotor with system RHENDUEL of Ø 550 mm.
- ▶ Steel-plate chassis, thickness 10 mm.
- ▶ Double hydraulic feeder, system BRALAKC.
- ▶ For tractors between 150 - 250 HP.
- ▶ For grass and branches up to Ø 120 mm.
- ▶ Start system HIDRAHELP.
- ▶ 6 meters of tube.
- ▶ Rear roller Ø 270 mm.





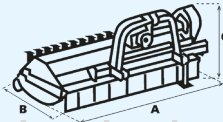



MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	112 - 150 186 - 250	6 x 10	2498	4 + 3 XPC	2490	98"	1435	56"	1420	56"	1000
T-2300	2300	112 - 150 186 - 250	6 x 11	2736	4 + 3 XPC	2790	110"	1435	56"	1420	56"	1000



BIOMASS 400

- ▶ Rotor with system SPLINTER of Ø 625 mm.
- ▶ Steel-plate chassis, thickness 12 mm.
- ▶ Double hydraulic feeder, system BRALAKC.
- ▶ For tractors between 300 - 500 HP.
- ▶ For grass and branches up to Ø 250 mm.
- ▶ Start system HIDRAHELP.
- ▶ Launching nozzle with hydraulic orientation. Download a 4 m.

MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-2250	2250	220 - 300 368 - 500	9 x 4	5795	Synchronous	3130	123"	2160	85"	2545	100"	1000

Techno - Economic data

The calorific value of wood compared to diesel fuel at a ratio of 2.5 to 1 which means that 2.5 kg equals a calorific value of 1 kg of dry wood of diesel fuel. Consequently if a house in the rural sector consumes between 1000 and 1500 l of diesel fuel per year with a cost between 800 and 1200 € with wood it would be necessary:

- ▶ 2 hectares of fruit trees
- ▶ 4 hectares vine
- ▶ 1.5 hectare olive
- ▶ 2 hectares citrus
- ▶ 3 hectares almond



This process is complete by a stage in two phases of drying of the product:

1st phase, from 8 to 10 days of drying in the field.

2nd phase, process of natural drying of matter crushed in a storage area isolated from the moisture.

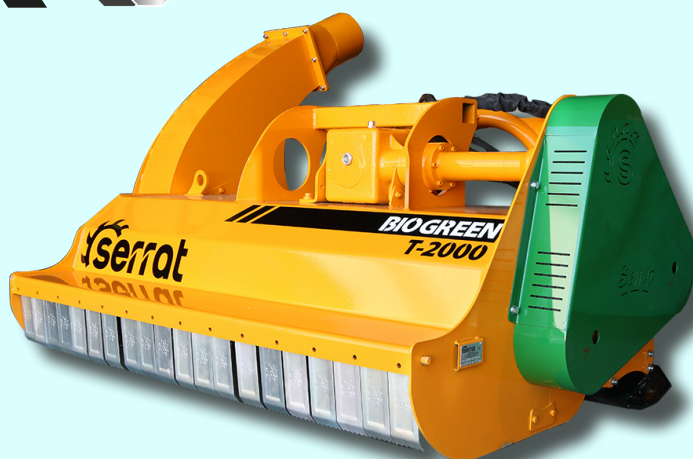
This quantity of residues of size it can cover the costs of energy consumption in heating and hot water for a family home. There are on the market of boilers of biomass with a high performance through automated systems to maintain a comfort of use equivalent to a conventional boiler. It is a practice very developed in developed countries, aware of the problem of the environment and the lack of energy. This is the need for a product like the 200 BIOMASS to enhance a cost-effective and viable way residues of sizes into pieces of wood very purposes (wafer) was born. This material can be directly used in boilers designed at the base to burn the wafer or a similar product.

This innovation of SERRAT Mulchers has been obtained through research and development work done by our Office and the collaboration of our clients, that day to day described us their necessities on the field tests, in various sectors and various types of wood.





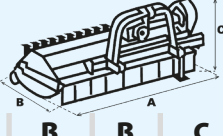

BIOGREEN



- ▶ Rotor POLSER of Ø 600 mm.
- ▶ Steel-plate chassis, thickness 8 mm.
- ▶ Forged hammers SERRAT special "grass".
- ▶ For tractors between 120 - 180 HP.
- ▶ GIROSTOP System.
- ▶ Steel worm screw Ø 300 mm.



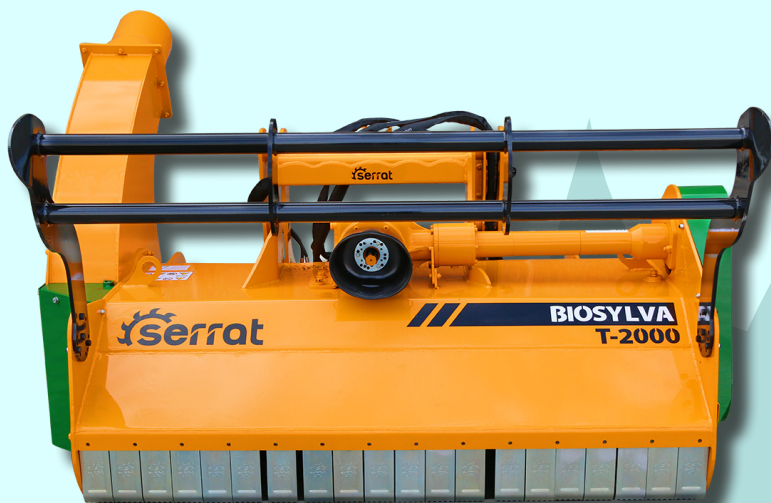
Biomass





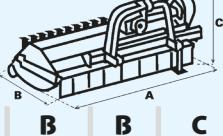

MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	88 - 120 134 - 180	16	1505	5 XPC	2460	97"	1150	45"	950	37"	1000
T-2300	2300	88 - 120 134 - 180	20	1700	5 XPC	2760	109"	1150	45"	950	37"	1000



BIOSYLVA

- ▶ Rotor POLSER+ of Ø 600 mm.
- ▶ Steel-plate chassis, thickness 12 mm.
- ▶ Forged hammers SERRAT special "grass".
- ▶ For grass and branches up to Ø 100 mm.
- ▶ For tractors between 180 - 220 HP.
- ▶ Steel worm screw Ø 300 mm.





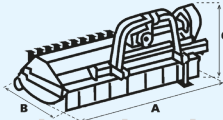



MODEL					N° BELTS TYPE							
	mm	KW-HP				A mm	A in	B mm	B in	C mm	C in	
T-2000	2000	134 - 180 164 - 220	32	2050	5 XPC	2460	97"	1150	45"	950	37"	1000
T-2300	2300	134 - 180 164 - 220	40	2300	5 XPC	2760	109"	1150	45"	950	37"	1000

TRIGON PACK

- ▶ Tubular rotor of Ø 400 mm.
- ▶ Steel-plate chassis, thickness 6 mm.
- ▶ Forged agricultural hammers SERRAT.
- ▶ For tractors between 40 - 80 HP.
- ▶ For grass and branches up to Ø 40 mm.
- ▶ Hopper of unloading 0,79 m³ to 1,14 m³.





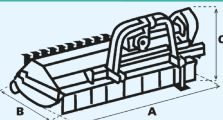



MODEL	 mm	 KW-HP		CAPACITY HOPPER	 KG	N° BELTS TYPE							
							A mm	A in	B mm	B in	C mm	C in	
T-1400	1400	29 - 40 59 - 80	12	0,79 m ³	620	3 XPC	1650	65"	1650	65"	1180	46"	540
T-1600	1600	37 - 50 59 - 80	12	0,91 m ³	665	3 XPC	1850	73"	1650	65"	1180	46"	540
T-1800	1800	44 - 60 59 - 80	16	1,00 m ³	720	3 XPC	2050	81"	1650	65"	1180	46"	540
T-2000	2000	48 - 65 59 - 80	16	1,14 m ³	770	3 XPC	2250	89"	1650	65"	1180	46"	540



PRO PACK

- ▶ Rotor POLSER of Ø 550 mm.
- ▶ Steel-plate chassis, thickness 8 mm.
- ▶ Forged agricultural hammers SERRAT.
- ▶ For tractors between 85 - 130 HP.
- ▶ For grass and branches up to Ø 80 mm.
- ▶ Hopper of unloading 2,3 m³ to 2,5 m³.

MODEL	 mm	 KW-HP		CAPACITY HOPPER	 KG	N° BELTS TYPE							
							A mm	A in	B mm	B in	C mm	C in	
T-1800	1800	63 - 85 96 - 130	16	2,3 m ³	1170	3 XPC	2060	81"	2179	86"	1558	61"	540
T-2000	2000	63 - 85 96 - 130	16	2,5 m ³	1255	3 XPC	2260	89"	2179	86"	1558	61"	540

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Notes



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