TS INDUSTRIE®



TS INDUSTRIE



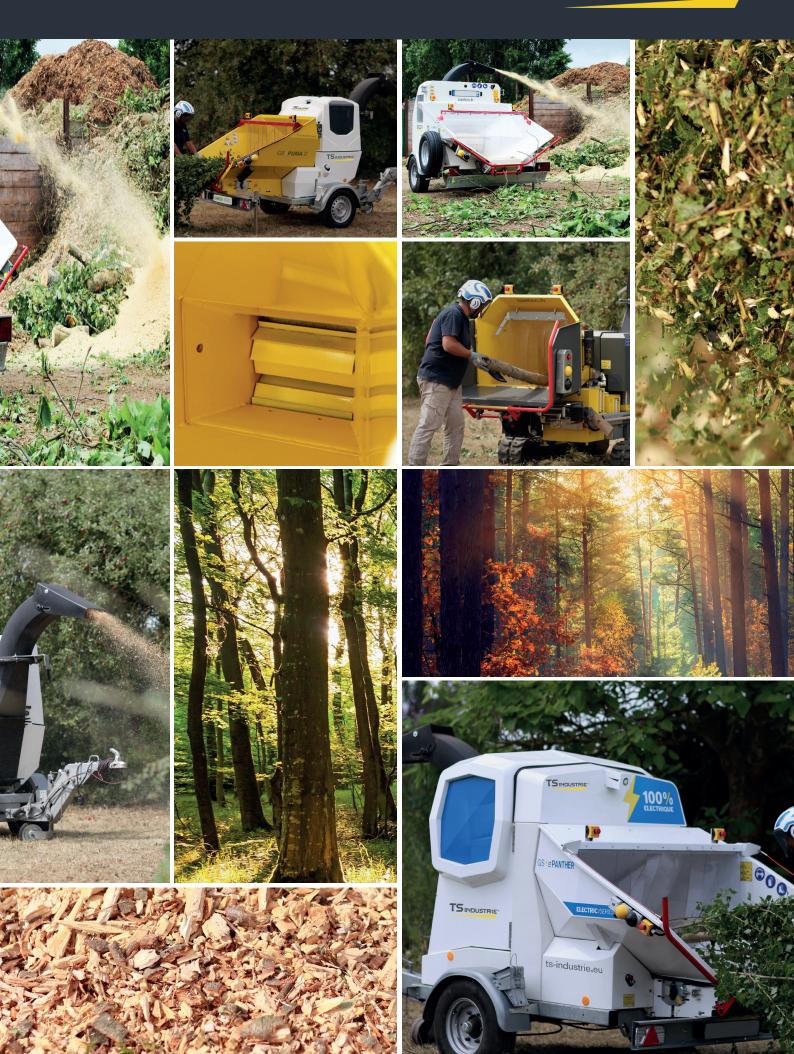
Since 1985, TS INDUSTRIE has specialised in the manufacture and distribution of branch and multi-plant shredders for landscaping professionals. With its 3 ranges of shredders, TS INDUSTRIE covers all needs.

GREEN/SERIES

WOOD/SERIES

ELECTRIC/SERIES

TS INDUSTRIE®



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ROTOR SHREDDERS

WS/PTO

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SCHUTZAUSRÜSTUNG

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A UNIQUE CONCEPT





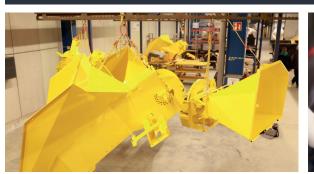






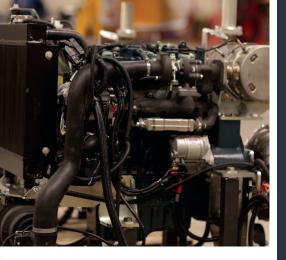


TS INDUSTRIE offers you large range of products for all your inquiries









We controle the entire production process, to provide premium product.













Driven by passion and commitment, our teams manufacture wood chippers and rotor shredders.

A TECHNICALLY SKILLED TEAM AT YOUR SIDE





TS INDUSTRIE is a team of experts and enthusiasts with a common goal: to offer our clients quality products and premium service.



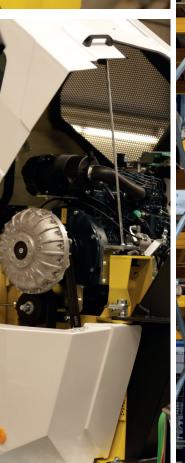
Our in-house technical team provides a support for all your technical inquiries.

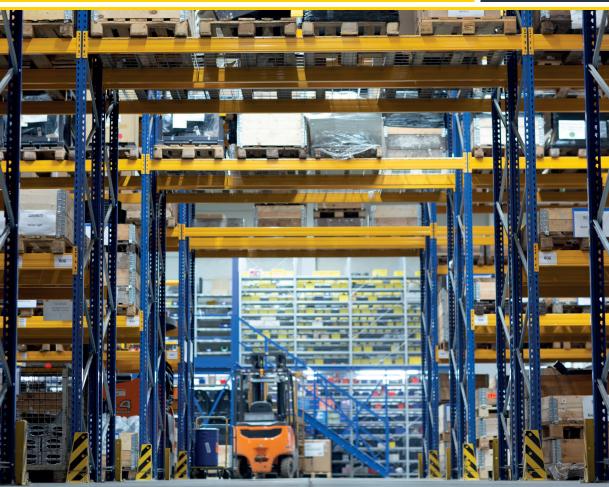




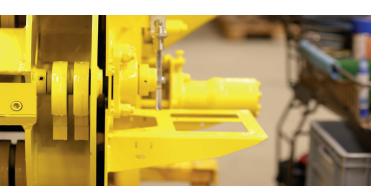


We are at your side to simplify your daily work, with the expiriencesd teams of customer support, after-sales service and spare parts.





Our logistic ensure fast delivery of products and spare parts to guarantee the best service possible.



SERVICE

OUR CHIPPING TECHNOLOGIES

Our chippers range includes 2 different product lines:

Green series is developped to shred the mixed greenery. The fibers of shredded material is softened which makes it excellent for composting and mulching. This method is especially efficient with the leafy branches.

The Wood series is perfectly suitable to produce uniform wood chips for the plant protection or to serve as combustion material. All models are perfectly suited for the clean chipping of any tree pruning and mixed greenery.

WOOD CHIPPING

CUTTING DISC

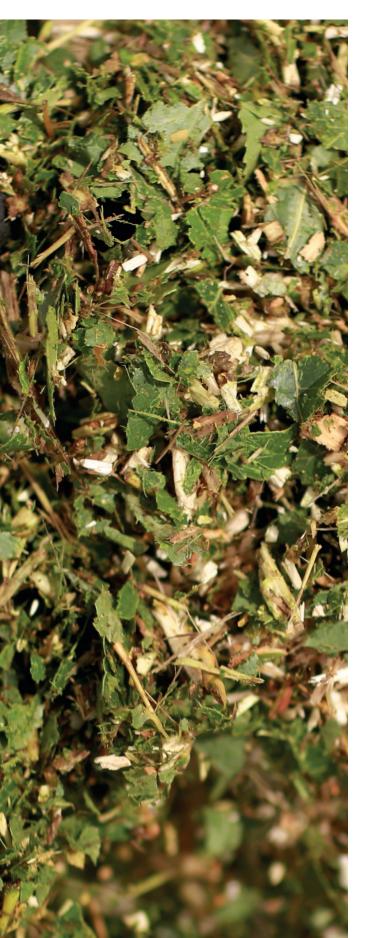


The **cutting disc**, installed on all wood chippers, works with two adjustable blades and counter blade to produce clean cuts and uniform chips.





MIXED GREENS SHREDDING



POWER MIXED ROTOR



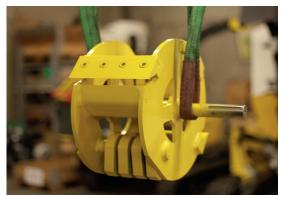
The new generation of POWER MIXED ROTOR is even more productive thanks to a bigger number of hammers and knives. The ventilation chambers help to provide an extra air flow for efficient material evacuation.



MIXED ROTOR



The **MIXED ROTOR** is a patented system that combines both hammers and knives for chipping all types of greens and branches simultaneously and efficiently.



HOW TO RECYCLE CHIPPED MATERIAL

Chipped material created by rotor schredder from different plants is rich in nutrients and decomposes quickly. Therefore, it is perfectly suited for composting and as an organic fertilizer for your plants.

Uniform wood chips are created by the cutting disc technology. They are used for both ornament and protection of your plant beds (i.e. storage of water in the soil, regulation of temperature, etc.) or may also serve as fuel.



MIXED GREENERY MATERIAL

Soil regeneration - Efficient nutrient supply - Water saving - Improved soil profile.



COMPOST

Improves the composition of the soil - Increases its water retention capacity - Stabilises the pH value - Reduces surface erosion - Promotes root formation



ENERGY

Important source of renewable primary energy - Fuels economy - Promotes local supply- Low economic and environmental impact of transport



MULCHING

Allows waste to be left on site -Aesthetics - Reduced irrigation - Nutrient supply - Temperature regulation - Reduced use of fertilisers

THE RIGHT CHOICE OF A CHIPPER

In order to get a machine that fits your chipping needs, you should keep in mind the following parameters: the quantity and the type of material that you usually chip, the diametre of branches, what is your typical working context: forests with difficult access or cities and green area maintenance...



You will find this symbol on each of our pages to indicate **productivity** or quantity of substance.

OUR TECHNICAL ADVANTAGES

TS.COCKPIT

TS.C+CKPIT

The last generation of our control unit for reliable operations and easy maintenance.



PILOT SYSTEM AND PILOT SYSTEM SWING

Control unit for reliable operation of chippers with three power levels.



NO STRESS

Regulating system for the speed of the feed rollers. Clogging or stalling of the motor is prevented.



VARIOSTRESS

Setting of NO STRESS according to the chipped material.



CO₂-REDUCTION

Automatic presence sensor that helps to reduce CO₂ emissions and to save energy.



ELECTRIC CONTROLS

Activation of the feeding rollers and convoyer forward and backward.



TURNABLE BLOW-OUT CHUTE

Adapting to all conditions of use.



FOLDABLE HOPPER

Essential and indispensable for transport.



PIVOTABLE TURRETTE

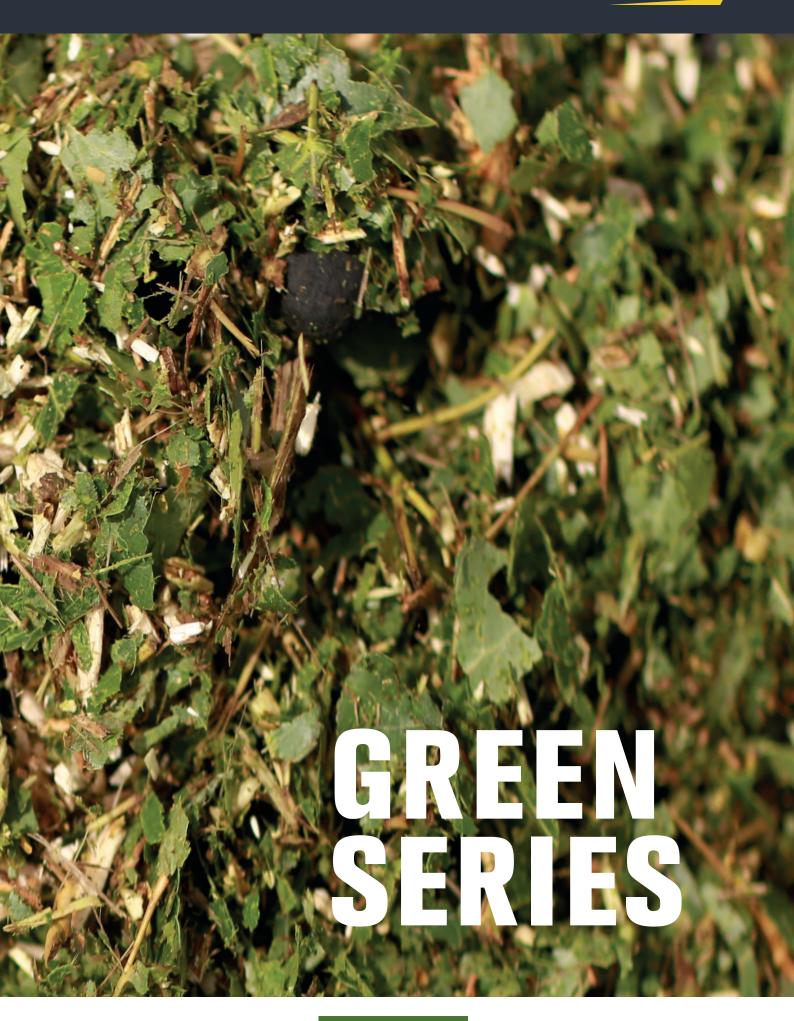
Guarantees ergonomic and safe working.



TRACK CRAWLERS

Permit the accesS to any type of complicated working site.









PREMIUM P



Our PREMIUM P is the user-friendly and real reference product from TS INDUSTRIE. Equipped with a reliable KOHLER 25HP engine and an efficient MIXED ROTOR with 10 hammers and 2 blades, it shreds your green waste up to 13 cm. Weighing less than 750 kg, this rotor shredder can be safely transported with a German 'Class B' driving licence. Landscaping professionals appreciate its wide hopper for convenient operations. The PILOT SYSTEM centralize the operation settings of the shredder and thus make this model easy to use.













< 750 kg

	PREMIUM P		
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	725 - 2 CYL.		
ENGINE POWER	25 HP		
BRANCH DIAMETER (cm)	13		
WEIGHT (kg)	745		
ROTOR	MIXED ROTOR 10 HAMMERS / 2 BLADES		
ROTOR WEIGHT (kg)	85		
L x W x H (mm)	3770 x 1600 x 2140		
WIDTH OF FEED ROLLER (mm)	250		
LOADING HEIGHT HOPPER (mm)	715		
REFERENCE	GSPREMIUMP		
MAINTENANCE KIT	KITPREMIUMP		

TECHNICAL DATA P. 34 - 35

GERMAN REQUIREMENTS FOR CHIPPERS



 ≤ 750 Kg

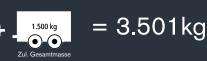


≤ 3.500Kg

Zul. Gesamtmasse

Anhänger leitchter als Zugfahrzeug









= 3.300kg

= 3.500 kg

In any case, please check the registration certificate of your vehicle for the permitted towing weight.

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TIGER D / TIGER P











The TIGER, available with **diesel** or **petrol engine**, is adaptable to all type of application. To transport this shredder weighing less than 750 kg only a German 'class B' driving licence is required.

The TIGER is equipped with a **feed convoyer** and a **wide hopper** for optimum working comfort. Its **MIXED ROTOR** with 8 hammers and 2 blades as well as a **TS.Cockpit** as standard features create the perfect urban machine configuration.





TIGER D





TIGER P





	TIGER D	TIGER P			
ENGINE CAPACITY (cm ³) - NUMBER of CYLINDERS	898 - 3 CYL.	725 - 2 CYL.			
ENGINE POWER	25 hp				
BRANCH DIAMETER (cm)	1	4			
WEIGHT (kg)	745 695				
ROTOR	POWER MIXED ROTOR 8 HAMMERS / 2 BLADES				
ROTOR WEIGHT (kg)	45				
L x W x H (mm)	3560 x 1515 x 2060				
WIDTH FEED ROLLER (mm)	250				
LOADING HEIGHT HOPPER (mm)	750				
REFERENCE	GSTIGERD GSTIGERP				
MAINTENANCE KIT	KITTIGERD KITTIGERP				

TECHNICAL DATA P. 34 - 35



Perfect balance between power and capacity.

Our rotor shredder, PYTHON P equipped with 25 HP KOHLER petrol engine to shred your green waste up to 15 cm in diameter. Its weight of 950 kilos and an adjustuble drawbar that equipped with brakes allows the shredder to be transported with a German 'Class B' driving licence as long as the total weight is less than 3,500 kg, see overview.

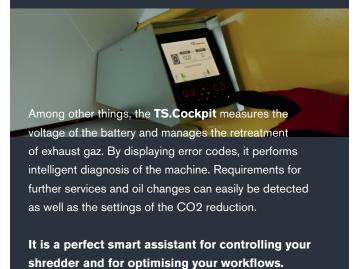
The PYTHON P has the patented **POWER MIXED ROTOR** with 8 hammers and 4 blades.

The **TS.Cockpit** controls the entire machine with **three different power setting levels**. Important maintenance functions can be checked up in one glance.

THE TS.COCKPIT

The **TS.Cockpit** is a control system which withstands outdoor operating conditions: bad weather, vibrations and other daily challenges.

The control of the machine and the selection of the three power levels are done throught an intuitive colour display. The three power levels are clearly identified for easy switching from one mode to another:









U U	H	MOTORIZATION KOHLER CH730 V 25 HP
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	PYTHON P
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	725 2-CYL.
ENGINE POWER	25 hp
BRANCH DIAMETER (cm)	15
WEIGHT (kg)	950
ROTOR	POWER MIXED ROTOR 8 HAMMERS / 4 BLADES
ROTOR WEIGHT (kg)	100
LXWXH(mm)	4000 x 1550 x 2115
FEED ROLLER WIDTH (mm)	250
LOADING HOPPER HEIGHT (mm)	700
REFERENCE	GSPYTHONP
MAINTENANCE KIT	KITPYTHONP

TECHNICAL DATA P. 34 - 35











PUMA D

The PUMA is our bestseller in all its diversity! **Diesel**, **petrol** and **100** % **electric** (pp. 38-39), it is robust and powerful and able to shred diverse greenery with a max. diameter of 16 cm.

The PUMA is equipped with a **POWER MIXED ROTOR** equipped with 12 hammers and 6 blades. The control of the machine is operated via **TS.Cockpit**. The machine is also equipped with an **adjustable drawbar** containing the **parking brake**.

It also includes a wide geared **feed convoyer** and an **infeed roller**.





	PUMA P	PUMA D		
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	999 2-CYL.	1498 2-CYL.		
ENGINE POWER	38 hp	25 hp		
BRANCH DIAMETER (cm)	16			
WEIGHT (kg)	1230 1330			
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES			
ROTOR WEIGHT (kg)	150			
L x W x H (mm)	4370 X 1690 X 2360			
WIDTH OF FEED ROLLER (mm)	400			
LOADING HOPPER HEIGHT (mm)	750			
REFERENCE	GSPUMAP GSPUMAD			
MAINTENANCE KIT	KITPUMAP	KITPUMAD		

TECHNICAL DATA P. 34 - 35



THE FUNCTIONS NO STRESS AND VARIOSTRESS

The two functions **No Stress** and **Variostress** automatically regulate the feeding speed depending on the thickness and type of material.

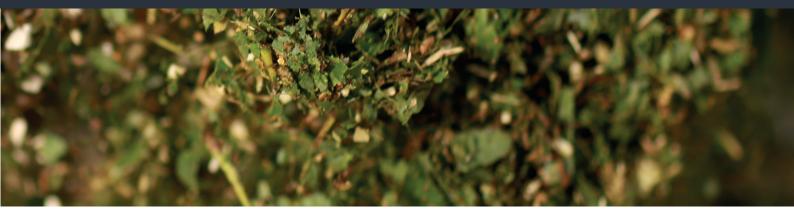
In use, No Stress is an autonomous system stopping both the feed roller and the feed convoyer when the amount of material is too extensive. While the rotor continues to schred the material. Once the rotor speed is back to normal the alimentatin starts all over again.

The No Stress settings are defined by the selected Variostress range, a total of three power levels ranging from the smallest/softest to the widest/thickest wood. Our shredders also contain a wheel which adjusts the speed of the feed convoyer and feed roller to regulate the speed of the material and thus the texture of the shredded material (slower for fine shredded material, faster for coarser shredded material).









JAGUAR D

JAGUAR PTO















	JAGUAR D	JAGUAR PTO	JAGUAR D SR-TK		
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	1498 4-CYL.	-	1903 4-CYL.		
ENGINE POWER	45 hp	-	45 hp		
PERMITTED DIAMETER (cm)	18				
WEIGHT (kg)	1365 900 2100				
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES				
ROTOR WEIGHT (kg)		150			
L x W x H (mm)	4430 X 1780 X 2380	3000 X 1500 X 2350	4430 X 1780 X 2350		
WIDTH FEED ROLLER (mm)		400			
LOADING HOPPER HEIGHT (mm)	760	800	830		
REFERENCE	GSJAGUARD	GSJAGUARPTO	GSJAGUARDSRTK		
MAINTENANCE KIT	KITJAGUARD	KITJAGUARPTO	KITJAGUARD		

TECHNICAL DATA P. 34 - 35





The versions of our JAGUAR offer a variety of configurations: 45HP diesel version on chassis, PTO drive, tracks drive or 100 % electric (pp. 40-41).

All models are suitable for perfect shredding of green waste up to 18 cm in branch diametre. They are equipped with a powerful 150 kg **POWER MIXED ROTOR**, with of 12 hammers and 6 blades which shred the material with ease and eject it efficiently. In addition to optimising fuel consumption and engine power, the JAGUAR is equipped with a **TS.Cockpit**. Its **parallelogram drawbar** is adjustable, and the **180° pivoting discharge chute** may be easily oriented. Thanks to the **crawlers with slope compensation** and the **standard remote control**, safe working and manoeuvring is possible at all times, even on difficult grounds.







The PANTHER D is a powerful addition to the product range of rotor shredders.

This machine is propelled with KOHLER 56HP diesel engine that drive a POWER MIXED ROTOR, equipped with 6 hammers and 12 blades to shred green waste up to 19 cm in diameter.

With a wide hopper and a 50 cm interlocked feed convoyer, work can be coordinated with several operators at the same time which means less time spent working on locations. The adjustable **parallelogram drawbar** facilitates transport with different towing vehicles. The **PILOT SYSTEM** offers a choice of three different power levels depending on the material shredded.



Being future-oriented we continuously develop innovative features and options for our machines. When the operator says that the shredder was working 8 hours, the mesurments are actually show that the effective shredding time of the machine is about three hours out of that time. Based on this observation, we designed the CO₂ reduction sensor. This detection system, placed above the hopper, reliably lowers the engine speed when the operator is no longer present behind the machine.

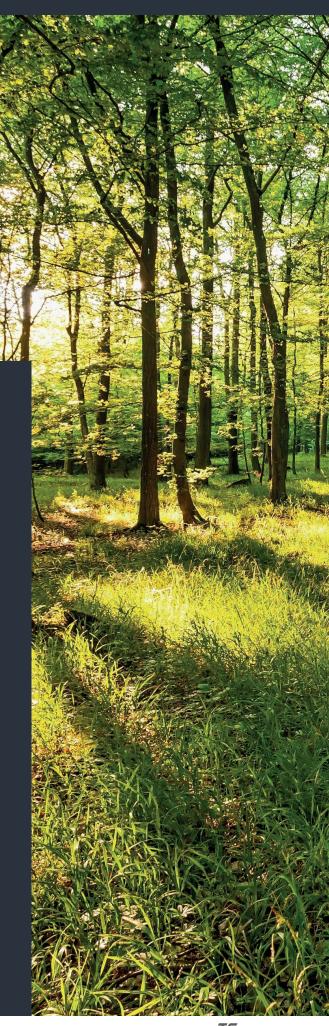
HOW DOES THE CO, SENSOR WORK?

Level 1: If there is no user behind the machine, the sensor detects it and automatically switches the motor to slow speed.

Level 2: The operator reappears behind the machine. The sensor registers his appearance and puts the motor up to the load speed programmed in advance. The feeding system starts. Within two seconds, the shredder is ready for use.

WHY INSTALL THE CO₂ SENSOR ON THE MACHINE?

The reduction system of CO₂ offers many advantages for you: noticeable reduction of CO₂ emissions and fuel consumption of the machine, lowering the noise level while working, improvement of operator comfort and an extension of the service life by reducing the need for maintenance. The CO₂ reduction system is available from GS/JAGUAR (18 cm) to GS/COBRA (21 cm) rotor shredders.











	PANTHER D
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	1903 3-CYL.
ENGINE POWER	56 hp
BRANCH DIAMETER (cm)	19
WEIGHT (kg)	2050
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES
ROTOR WEIGHT (kg)	150
L x W x H (mm)	4510 x 2020 x 2360
FEED ROLLER WIDHT (mm)	400
LOADING HOPPER HIGHT(mm)	760
REFERENCE	GSPANTHERD
MAINTENANCE KIT	KITPANTHERD
TECHNICAL DATA P. 34 - 35	



The benchmark among rotor shredders is our COBRA D. The power and reliability of its **two available engines** (KOHLER diesel 75 hp or KUBOTA petrol/gas in 88/94 hp) set the standard. Its **POWER MIXED ROTOR** with 16 hammers and 8 blades cuts branches up to 21 cm in diameter.

This model is equipped with an adjustable **parallelogram drawbar**. The **extra wide hopper** of over 1600 mm and the 50 cm wide **feed convoyer** allow multiple users to work simultaneously and without disturbance.









Both our wood chippers and rotor shredders offer a variety of options to choose.

- System of CO, reduction: lower emissions and fuel savings (see p.30)
- Discharge chute options: extended or foldable a suitable solution in any case
- Spare wheel: available for most of our wood chippers and rotor shredders; perfect for the working sites hard to acces to.
- Individual choice of colour: our indoor paint shop allows you to choose the colour that fits your brand image
- Maintenance kit/Replacements of knives: guaranteed availability of spare parts
- Led lights: to continue the work even in early mornings or late evenings
- Chassis options: depending on models

For more information on our options and shredders, please contact the sales team.







	COBRA D	COBRA PG			
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	2504 4-CYL.	3800 4-CYL.			
ENGINE POWER	75 hp 88 hp (PETROL) / 94 hp (C				
BRANCH DIAMETER (cm)	21				
WEIGHT (kg)	2105				
ROTOR	POWER MIXED ROTOR 16 HAMMERS / 8 BLADES				
ROTOR WEIGHT (kg)	270				
L x W x H (mm)	4710 X 1690 X 2500				
FEED ROLLER WIDTH (mm)	500				
LOADING HOPPER HEIGHT (mm)	700				
REFERENCE	GSCOBRAD	GSCOBRAPG			
MAINTENANCE KIT	KITCOBRAD KITCOBRAPG				

TECHNICAL DATA, pp. 32 - 33

TECHNICAL DATA

	RO'	ROTOR SHREDDERS WITH CHASSIS				
	GS/PREMIUM P	GS/PREMIUM P GS/TIGER P GS/TIGER D GS/PHYTO				
Referece	GSPREMIUMP	GSTIGERP	GSTIGERD	GSPYTHONP	GSPUMAP	
Branch Diameter (cm)	13	14	14	15	16	
Average input (m³/h)	13	17	17	22	27	
Engine	KOHLER CH730 V 25 hp / 18,5 kW	KOHLER CH730 V 25 hp / 18,5 kW	KUBOTA D902 V 25 hp /18,5 kW	KOHLER CH-730 V 25 hp / 18,5 kW	KOHLER ECH-980 EFI V 38 hp / 28 kW	
Engine Capacity cm ³ /Number of cylinders	725 2-Cyl.	725 2-Cyl.	898 3-Cyl.	725 2-Cyl.	999 2-Cyl.	
Fuel	petrol	petrol	diesel	petrol	petrol	
Clutch	hydraulic	centrifugal force	centrifugal force	centrifugal force	centrifugal force	
Covering	ABS-hoods	FRP-hoods	FRP-hoods	FRP-hoods	FRP-hoods	
liameter of the rotor (mm)	560	400	400	560	560	
eight of the rotor (kg)	85	45	45	100	150	
umber of hammers	10	8	8	8	12	
umber of blades	2	2	2	4	6	
lidth of the infeed roller (mm)	250	250	250	250	400	
eed convoyer	No	400	400	400	400	
ameter of the feed convoyer (mm)	340	340	340	340	340	
umber of axles	1	1	1	1	1	
mensions of tyres	155/70R13	155/70R13	155/70R13	165R13C	165R13C	
nel tank capacity (I)	30	17	17	32	32	
onsumption (I/h)	4	4	3	4	3.9	
scharge chute	270°	180°	180°	180°	180°	
eight discharge of chute (mm)	2060	1850	1850	2115	2300	
leight of machine (kg)	745	695	745	950	1230	
otal weight of road homologation (kg)	750	750	750	1000	1340	
mension of the hopper x W (mm)	1500 x 1390	1600 x 1350	1600 x 1350	1600 x 1350	1600 x 1350	
oading hopper height (mm)	715	750	750	700	750	
x W x H Dimension of working-transport nm)	3770 x 1600 x 2140	3560 x 1515 x 2060	3560 x 1515 x 2060	4000 x 1550 x 2115	4370 x 1690 x 2360	
Wheel Chock / upright unit	Standard / Standard	Standard / Standard	Standard / -	Standard / Standard	Standard / Standard	



ROTOR SHREDDERS WITH CHASSIS					ROTOR SHREDDERS PTO	ROTOR SHREDDERS WITH TRACKS
GS/PUMA D	GS/JAGUAR D	GS/PANTHER D	GS/COBRA D	GS/COBRA PG	GS/JAGUAR PTO	GS/JAGUAR D SR-TK
GSPUMAD	GSJAGUARD	GSPANTHERD	GSCOBRAD	GSCOBRAPG	GSJAGUARPTO	GS JAGUAR D SR-TK
16	18	19	21	21	18	18
27	32	38	45	45	32	32
KUBOTA V1505 V 25 hp /18,5 kW	KUBOTA V1505CRT V 45 hp / 33,57 kW	KOHLER KDI 1903TCR IN 56 hp / 42 kW	KOHLER KDI IN 75 hp / 55,4 kW 2504TCR	KUBOTA WG3800GL V 88 hp (petrol) 94 hp (gas)	PROPULSION min. 55 hp (From 80 hp, a reinforced gearbox is necessary)	KUBOTA V1505 CRT V 45 hp / 33,57 kW
1498 4-Cyl.	1498 4-Cyl.	1861 3-Cyl.	2482 4-Cyl.	3800 4-Cyl.	-	1498 4-Cyl.
diesel	diesel	diesel	diesel	petrol/gas	power take-off	diesel
hydraulic	hydraulic	hydraulic	hydraulic	hydraulic	-	hydraulic
FRP-hoods	FRP-hoods	FRP-hoods	FRP-hoods	FRP-hoods	-	FRP-hoods
560	560	560	560	560	560	560
150	150	150	270	270	150	150
12	12	12	16	16	12	12
6	6	6	8	8	6	6
400	400	400	500	500	400	400
400	400	500	500	500	400	400
340	340	340	395	395	340	340
1	1	1	1	1	-	-
165R13C	175R14C	215R14C	215R14C	215R14C	-	-
32	32	50	50	50 / 13 kg gas	-	32
3.9	4		5	-	-	4
180°	180°	180°	180°	180°	180°	180°
2300	2330	2330	2250	2250	2330	2330
1380	1450	2050	2105	2150	900	2100
1400	1500	2200	2200	2200	-	-
1600 x 1350	1600 x 1350	1600 x 1620	1600 x 1630	1600 x 1630	1600 x 1350	1600 x 1350
750	760	760	700	700	800	830
4370 x 1690 x 2360	4430 x 1780 x 2380	4510 x 2020 x 2360	4710 x 1960 x 2500	4710 x 1960 x 2500	3000 x 1500 x 2350	3000 x 1800 x 2400
Standard / Standard	Standard / Standard	Standard / Standard	Standard / Standard	Standard / Standard		-







ELECTRIC F SERIES

THE TS.COCKPIT AND THE MOBILITY PLATFORM

The standard **TS.Cockpit** enables users to control the machine on locations. You choose from three power levels and activate the activity sensor. Maintenance intervals and machine parameters are visible at all times. Possible error codes can easily be read out by operators.

These and other pieces of information can also be transferred to an IoT platform.

This enables you to call up the machine parameters of your shredder anytime and anywhere (subscription included for the first three years of use subject to warranty registration. Available as an option after three years).







PRESENCE SENSOR

All our electric shredders are equipped with a **Start & Stop button**, which you can complete with a presence **sensor**. This option optimises energy consumption and reduces noise disturbance about an average of 60 to 70 percent during operation.

The sensor is located above the hopper and points to the rear of the machine to detect the activity of operators. If nobody is detected behind the machine within ten, twenty or thirty seconds (programmable), the rotor stops and simultaneously recuperates energy. The feed convoyer and feed roller are also stopped. To restart the system, press the Start & Stop-button on the side.



PROVEN TS INDUSTRIE TECHNOLOGIES FOR ELECTRIC SHREDDERS

Electric shredders offer new ways of working while keeping the best practices of combustible:

Choice of the rotor speed/engine power:



Low rotor speed and engine power



Average rotor speed and engine power



High rotor speed and engine power

A fourth option is customisable.

- Start & Stop-button: Energy recovery, energy saving, battery regeneration (only below a charge of 97 %), noise reduction by stopping the rotor, additional energy saving in combination with the option of the presence sensor (p. 38).
- Charge of battery: 100 % engine power regardless of the battery's state of charge. The available mobility platform enables the safe planning in your daily schedules (see TS.Cockpit, p. 20 & p. 36).
- Hibernation mode: Activation of the hibernation button when not in use of more then 15 days. Self-maintenance
 of battery state of charge (SoC) of 70 %. It preserves the batteries' state of health (SoH) in a long-term
 according to warranty conditions.
- 1 charging cycle = 100 % charged: when talking about the charging cycle, it is a 100% charging, for example, a full cycle corresponds to a 60 % charge, then a 35 % charge and a final 5 % charge.















Our PUMA goes electric! Its lithium iron phosphate batteries drive a 19 kW motor (equivalent to 31 HP) that shreds your green waste up to a diameter of 16 cm. It is equipped with a POWER MIXED ROTOR consisting of 12 hammers and 6 blades, a system with a feed convoyer, a feed roller and an adjustable parallelogram drawbar.

The ePUMA is controlled by the TS.Cockpit, which provides all information about the shredder. With the option of the presence sensor, you can further optimise the energy savings achieved so far.

The perfect combination of TS INDUSTRIE'S know-how and electrics!

	ePUMA
MOTOR	LiPo 96V 180Ah ASYNCHRONOUS 19 kW (31 hp)
AUTONOMY	(up to) 1 WORKING DAY
BRANCH DIAMETER (cm)	16
WEIGHT (kg)	1470
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES
ROTOR WEIGHT (kg)	150
L x W x H (mm)	4430 x 1780 x 2380
FEED ROLLER WIDTH (mm)	400
LOADING HOPPER HEIGHT (mm)	760
REFERENCE	GSEPUMA
MAINTENANCE KIT	KITSEPUMA



The eJAGUAR makes the POWER MIXED ROTOR electric! With 12 hammers, 6 blades and an electric engine (equivalent to 46HP), it is equipped with a **lithium iron phosphate battery**. After a full charge of nine hours, you have enough energy for up to one working day.

The shredder is equipped with the proven **feed convoyer** and the innovative **TS.Cockpit**, which provides all information about the machine. This service is accessible on site and online.









TECHNOLOGY OF LITHIUM-IRONPHOSPHATE-BATTERIES

The batteries of our electric shredders employ the latest lithium iron phosphate technology. The safe concept ensures fire- and explosion-free use even in the event of damage of the cover protection.

During the period of ongoing inactivity the 'hibernation mode' should be activated to prolong the lifetime of the battery.

As for the recyclability and the life time of the battery, it is almost 100% recyclable after a life time of our shredder.









	eJAGUAR
MOTOR	LIP 96V 300Ah ASYNCHRONOUS 28,5 kW (46 hp)
AUTONOMY	(up to) 1 WORKING DAY
BRANCH DIAMETER (cm)	19
WEIGHT (kg)	1590
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES
ROTOR WEIGHT (kg)	150
L x W x H (mm)	4430 X 1780 X 2380
FEED ROLLER WIDHT (mm)	400
LOADING HOPPER HEIGHT (mm)	760
REFERENCE	GSEJAGUAR
MAINTENANCE KIT TECHNICAL DATA, p. 47	KITGSEJAGUAR













The ePANTHER is TS INDUSTRIE'S largest e-model.

It offers autonomy for up to two working days to shred your green waste up to 19 cm in diameter.

Thanks to its **lithium iron phosphate batteries**, its **35 kW asynchronous engine** (equivalent of 56 hp) and with a **feed convoyer** of **50 cm**, the ePANTHER is your ideal partner.

The adjustable parallelogram drawbar facilitates transport and the TS.Cockpit allows you to control work both on site and remotely.

	ePANTHER
MOTOR	LIP 96V 360Ah ASYNCHRONOUS 35 kW (56 hp)
AUTONOMY	(up to) 2 WORKING DAYS
BRANCH DIAMETER (cm)	19
WEIGHT (kg)	2150
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES
ROTOR WEIGHT (kg)	150
L x W x H (mm)	4510 x 2020 x 2380
FEED ROLLER WIDTH (mm)	400
LOADING HOPPER HEIGHT (mm)	760
REFERENCE	GSEPANTHER
MAINTENANCE KIT	KITGSEPANTHER

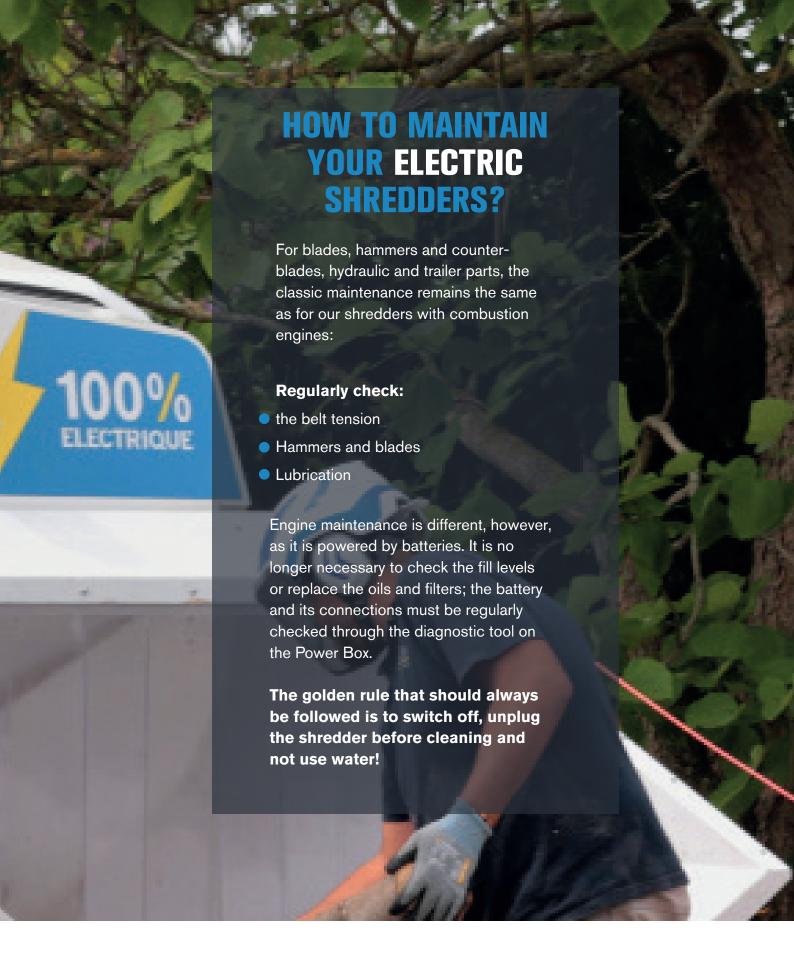








Section Sect					
Section Sect		e PUMA	e JAGUAR	e PANTHER	
	Permitted diameter (cm)	16	18	19	
### ### ### ### ### ### ### ### ### ##	Average input (m³/h)	27	32	38	
Part	Batteries				
Parameter of the rotor (mm) 19 28.5 3.5 3.5	Mono phase charger	included	included	included	
A	Engine	asynchronous	asynchronous	asynchronous	
Part	Engine power (kW)	19	28.5	35	
	Power compared to combustion engine (hp)	31	45	56	
Start & Stop yes, manually yes, manually yes, manually Marranty of battery 1,000 hours at 85% soh 3 years resp. 3 years resp. 3 years resp. 3 years resp. 1,000 hours at 85% soh 2,000 hours at 85% soh	Power saving mode	yes	yes	yes	
Warranty of battery 3 years resp. 1,000 hours at 85% soh Charging time (b) 6 9 12 Autonomy (up to) 1 working day (up to) 1 working day (up to) 2 working days Weight of the machine (kg) 1470 1590 2150 Contral lubrication system yes yes Drawbar Centrally height adjustable Centrally height adjustable Centrally height adjustable Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Wheel Chock / upright unit 500 560 560 Standard / Standard / Standard Standard / Standard	Clutch	no	no	no	
1,000 hours at 85% soh 1,000 hours at 85%	Start & Stop	yes, manually	yes, manually	yes, manually	
Autonomy (up to) 1 working day (up to) 1 working day (up to) 2 working days Average consumption (kW/h) 7 9 10 Weight of the machine (kg) 1470 1590 2150 Central lubrication system yes yes yes Drawbar Contrally height adjustable antital was adjusta	Warranty of battery				
Average consumption (kW/h) 7 9 10 Weight of the machine (kg) 1470 1590 2150 Central lubrication system yes yes yes Average Consumption (kW/h) yes yes yes Central lubrication system yes yes yes Average Consumption (kW/h) yes yes yes Average Consumption (kW/h) yes yes yes Average Consumption (kg) 1470 250 260	Charging time (h)	6	9	12	
Weight of the machine (kg) 1 470 1 590 2150 Central lubrication system yes yes yes Drawbar centrally height adjustable centrally height adjustable centrally height adjustable centrally height adjustable Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Ave x H (mm) 4430 x 1780 x 2380 4430 x 1780 x 2380 4510 x 2020 x 2380 Diameter of rhe rotor (mm) 560 560 560 Weight of rotor (kg) 150 150 150 Jumber of blades 6 6 6 Mumber of hammers 12 12 12 Weight of feed roller (mm) 400 400 400 Wheel thought of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 760 760 760 Diameter of feed roller (mm) 1600 x 1350 1600 x 1620	Autonomy	(up to) 1 working day	(up to) 1 working day	(up to) 2 working days	
Central lubrication system yes yes yes Drawbar centrally height adjustable centrally height adjustable centrally height adjustable Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard Ax W x H (mm) 4430 x 1780 x 2380 4430 x 1780 x 2380 4510 x 2020 x 2380 Diameter of rice rotor (mm) 560 560 560 Weight of rotor (kg) 150 150 150 Jumber of blades 6 6 6 dumber of hammers 12 12 12 deed bett (mm) 400 400 500 Width of feed roller (mm) 400 400 400 Vide of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 760 760 Diameter of feed roller (mm) 1600 x 1350 1600 x 1620 Diameter of feed roller (mm) 2330 2330 2330 Platform of mobility Included Included Included	Average consumption (kW/h)	7	9	10	
Drawbar centrally height adjustable centrally height adjustable centrally height adjustable centrally height adjustable Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard x W x H (mm) 4430 x 1780 x 2380 4430 x 1780 x 2380 4510 x 2020 x 2380 Diameter of rhe rotor (mm) 560 560 560 Weight of rotor (kg) 150 150 150 Number of blades 6 6 6 dumber of hammers 12 12 12 Seed belt (mm) 400 400 500 Width of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 360 360 360 Coading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1620 Platform of mobility Included Included Included	Weight of the machine (kg)	1470	1590	2150	
Wheel Chock / upright unit Standard / Standard Standard / Standard Standard / Standard x W x H (mm) 4430 x 1780 x 2380 4430 x 1780 x 2380 4510 x 2020 x 2380 Diameter of the rotor (mm) 560 560 560 Weight of rotor (kg) 150 150 150 Number of blades 6 6 6 Number of hammers 12 12 12 Feed belt (mm) 400 400 500 Width of feed roller (mm) 400 400 400 Diameter of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 760 760 760 Discharge chute 180° 180° 180° 180° Platform of mobility Included Included Included	Central lubrication system	yes	yes	yes	
x W x H (mm) 4430 x 1780 x 2380 4430 x 1780 x 2380 4510 x 2020 x 2380 Diameter of the rotor (mm) 560 560 560 Weight of rotor (kg) 150 150 150 Number of blades 6 6 6 Number of hammers 12 12 12 Eed belt (mm) 400 400 500 Width of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 360 360 360 Loading height hopper (mm) 760 760 760 Diseasons of hopper T x W (mm) 1600 x 1350 180° 180° Platform of mobility Included Included Included	Drawbar	centrally height adjustable	centrally height adjustable	centrally height adjustable	
	Wheel Chock / upright unit	Standard / Standard	Standard / Standard	Standard/ Standard	
Weight of rotor (kg) 150 150 Number of blades 6 6 6 Number of hammers 12 12 12 Seed belt (mm) 400 400 500 Width of feed roller (mm) 400 400 400 Diameter of feed roller (mm) 360 360 360 Diameter of feed roller (mm) 760 760 760 Diameter of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included	x W x H (mm)	4430 x 1780 x 2380	4430 x 1780 x 2380	4510 x 2020 x 2380	
Number of blades 6 6 Number of hammers 12 12 12 Feed belt (mm) 400 400 500 Width of feed roller (mm) 400 400 400 Diameter of feed roller (mm) 360 360 360 Coading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	Diameter of rhe rotor (mm)	560	560	560	
Number of hammers 12 12 12 Feed belt (mm) 400 400 500 Width of feed roller (mm) 400 400 400 Diameter of feed roller (mm) 360 360 360 Coading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Platform of mobility Included Included Included	Neight of rotor (kg)	150	150	150	
August A	Number of blades	6	6	6	
Width of feed roller (mm) 400 400 400 Diameter of feed roller (mm) 360 360 360 coading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included	Number of hammers	12	12	12	
Diameter of feed roller (mm) 360 360 360 Loading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	Feed belt (mm)	400	400	500	
Coading height hopper (mm) 760 760 760 Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	Nidth of feed roller (mm)	400	400	400	
Dimesions of hopper T x W (mm) 1600 x 1350 1600 x 1350 1600 x 1620 Discharge chute 180° 180° 180° deight dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	Diameter of feed roller (mm)	360	360	360	
Discharge chute 180° 180° 180° Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	.oading height hopper (mm)	760	760	760	
Height dicharge chute (mm) 2330 2330 2330 Platform of mobility Included Included Included	Dimesions of hopper T x W (mm)	1600 x 1350	1600 x 1350	1600 x 1620	
Platform of mobility Included Included Included	Discharge chute	180°	180°	180°	
	Height dicharge chute (mm)	2330	2330	2330	
Available option Presence sensor Presence sensor Presence sensor	Platform of mobility	Included	Included	Included	
	Available option	Presence sensor	Presence sensor	Presence sensor	





WARRANTY FOR THE ELECTRIC MACHINES

Like all our other shredders, the electric shredders are guaranteed for three years, with the third year under the condition of registration it on our website. We may also offer an option of warranty extension for extra an two years .



VISIT OUR NEW WEBSITE



ts-industrie.eu



- Distributor platform
- Direct spare part webshop
- New design
- New features









WS/16P

The wood chipper WS/16P is a real companion for all users with a driving licence equivalent of the German 'category B', as its weigh is less than 750 kilograms. Its **folding hopper** makes the machine compact for transportation.

The cutting disc with two blades, in combination with the counter blades, provides a **clean cut** and produces even wood chips.

The **discharge chute**, which can be pivoted by 270°, offers you the necessary flexibility in all your working sites.









	WS/16P
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	999 2-CYL.
ENGINE POWER	38 hp
BRANCH DIAMETER (cm)	16
WEIGHT (kg)	704
CUTTING SYSTEM	CUTTING DISC
CUTTING DISC DIAMETER (mm)	510
CUTTING DISC WEIGHT (kg)	50
LxWxH (mm)	3950 x 1400 x 2470
HOPPER DIMENSIONS T x W (mm)	1530 x 1075
LOADING HOPPER HEIGHT (mm)	700
REFERENCE	WS16P
MAINTENANCE KIT	KITWS16P

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WS/18 D R-TK

The WS/18 is a true all-rounder in term of configurations: in a fixed or turnable version or as a tracked chipper with remote control. Its **two feed rollers** catch the branches up to 18cm of diametre and carry them to the cutting disc. The **hopper** is **foldable** for easy transport. **Track mounted** and **radio-controlled**, the WS/18D R-TK provide access to any complicated working site.















WS/18D

WS/18DT









The turnable configuration can be rotated at 270° to allow safe and ergonomic working environnement away from traffic.

	WS/18D	WS/18DT	WS/18D R-TK		
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	1498 4-CYL.				
ENGINE POWER	25 hp				
BRANCH DIAMETER (mm)	18	18	18		
WEIGHT (kg)	1085	1330	1800		
CUTING SYSTEM		CUTTING DISC			
CUTTING DISC DIAMETER (mm)	670	740	670		
CUTTING DISC WEIGHT (kg)	92.5	142	92.5		
L x W x H (mm)	4000 x 1560 x 2530	4000 x 1630 x 2555	3100 x 1575 x 2500		
DIMENSIONS HOPPER T x W (mm)		1530 x 1080			
LOADING HOPPER HEIGHT (mm)	700	700	700		
REFERENCE	WS18D	WS18DT	WS18DRTK		
MAINTENANCE KIT	KITWS18D	KITWS18DT	KITWS18D		

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WS/20DT LINE



The WS/20DT is an updated version of the WS/20DT, equipped with TS.Cockpit and handy centralised lubrication system. Its high-torque diesel engine, supplies asufficient power for any working conditions. The TS.Cockpit controls work processes and the indicates all relevant information on an ergonomic screen with colourful display.

The rotating turret and the 270° swivelling discharge chute offer maximum working comfort, flexibility and safety. The large feed hopper facilitates the feeding of branches and pruning and can be folded to save space during transport. Maintenance of the machine is simplified by the well thought-out design. The wide service openings are designed to optimise accessibility for maintenance and service. The machine is available with an optional double axle and in its PTO version.

	WS/20DT LINE
ENGINE CAPACITY (cm³) / NUMBER OF CYLINDERS	1861 - 3 ZYL.
ENGINE POWER	42 kW / 56 PS
BRANCH DIAMETER (mm)	20
WEIGHT (kg)	1990
CUTTING SYSTEM	HACKSCHEIBE
CUTTING DISC DIAMETER (mm)	900
CUTTING DISC WEIGHT (kg)	218
L x W x H (mm)	4800 x 2000 x 2760
DIMENSION OF HOPPER T x W (mm)	1540 x 1330
LOADING HOPPER HEIGHT (mm)	870
REFERENCE	WS20DT
COMFORT-KIT	KITWS20DT

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PTO

TS INDUSTRIE offers a wide range of proven cutting disc chippers with PTO drive shaft.

These models offer the benefits of all the existing product in our cumbustion range.

The PTOT-versions of WS/20 and WS/23 are avalaible with 270° turnable turrets.



	10PTO	15PTO	18PTO	20PTO	20PTOT	23PTO	23PTOT	
POWER TAKE-OFF	PTO 540 R/min	PTO 540 R/min	PTO 540 R/min	PTO(T) 1	000 R/min	PTO 1000 R/min		
CUTTING DISC DIAMETER (mm)	450	560	670	(900		00	
CUTTING DISC WEIGHT (kg)	49	50	92.5	2	218		218	
FEED ROLLER WIDTH (mm)	200	160	215	310		310		
FEED ROLLER DIAMETER (mm)	140	140	140	240		240		
ROTATING DISCHARGE CHUTE (°)	270	270	270	270		270		
HOPPER DIMENSIONS T x W (mm)	1500 x 700	1500 x 965	1530 x 1080	1500 x 1290 1500 x		x 1290		
LOADING HOPPER HIGHT (mm)	630	630	700	870		8	70	
REFERENCE	WS10PTO	WS15PTO	WS18PTO	WS20PTO	WS20PTOT	WS23PTO	WS23PTOT	
MAINTENANCE KIT	KITWS10PTO	KITWS15PTO	KITWS18PTO	KITWS20PTO	KITWS20PTOT	KITWS23PTO	KITWS23PTOT	

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WS/23DT



The WS/23DT is the most powerful wood chipper of TS INDUSTRIE.

On a two-axle braked chassis with **adjustable drawbar** and **automatic hitch** as well as a **270° rotation discharge chute**, this model meets all requirements for all type of your working sites.

The chipper is equipped with an **extra-large ejection flap** and two sturdy **feed rollers**. The machine contains a **PILOT SYSTEM** which adapts the chipping power to the needs of the operator and the material. It results in operational and energy savings.



RECOMMENDED PROTECTION FOR THE USE OF A CHIPPER

The right personal equipment is essential for any job!



	WS/23DT
ENGINE CAPACITY (cm³) / NUMBER OF CYLINDERS	2405 4-CYL.
ENGINE POWER	75 hp
BRANCH DIAMETER (cm)	23
WEIGHT (kg)	2340
CUTTING SYSTEM	CUTTING DISC
CUTTING DISC DIAMETER (mm)	218
CUTTING DISC WEIGHT (kg)	900
L x W x H (mm)	4900 x 1960 x 2680
HOPPER DIMENSIONS T x W (mm)	1540 x 1290
REFERENCE	WS23DT
MAINTENNCE KIT	KITWS23DT

TECHNICAL DATA PP. 58 - 59

TECHNICAL DATA

WOOD CHIPPERS WITH CHASSIS						
	WS/16 P	WS/18 D	WS/18 DT	WS/20 DT LINE	WS/23 DT	
Reference	WS16P	WS18D	WS18DT	WS20DTLINE	WS23DT	
Branch Diameter (cm)	16	18	18	20	23	
Motor/Engine	KOHLER EFI 38 hp / 28,3 kW	KUBOTA V1505 25 hp / 18,5 kW	KUBOTA V1505 25 hp /18,5 kW	KOHLER V KDI 1903 56 hp / 42 kW	KOHLER KDI 2504TCR 75 hp / 55,4 kW	
ingine Capacity (cm³) - Number of cylinders	999 cm ³ / 2-Cyl.	1498 cm ³ / 4-Cyl.	1498 cm ³ / 4-Cyl.	1861 cm ³ / 3-Cyl.	2482 cm ³ / 4-Cyl.	
Fuel	petrol	diesel	diesel	diesel	diesel	
Clutch	motor base	freewheel	freewheel	freewheel	freewheel	
Covering	metal safety case	polyester resion safety case	polyester resion safety case	polyester resion safety case	polyester resion safety case	
Diameter of the cutting disc (mm)	510	670	740	900	900	
Veight of the cutting disc (kg)	50	92.5	142	218	218	
Blades	2	2	2	2	2	
eed roller	2	2	2	2	2	
Vidth of the feed roller (mm)	240	215	245	310	310	
Diameter of the feed roller (mm)	245	140	140	240	240	
lumber of axles	1	1	1	1 or 2 (optional)	2	
Dimensions of tyres	155/70 R13	165R13	225/55 R12C	205R14C / 185R14C	185 R14C	
Fuel tank capacity (I)	17	30	20	50 I	50	
Consumption	4,3 l/h	3,9 l/h	3,9 l/h	4,1 l/h	5 l/h	
Discharge chute	270°	270°	270°	270°	270°	
Height discharge chute (mm)	2440	2300	2500	2680	2680	
Furnable tower	-	-	270°	270°	270°	
Weight of the machine (kg)	704	1085	1330	1990	2340	
otal weight permitted on the chassis	75	110	1350	2000 oder 2200	2400	
Dimension of the hopper 'x W (mm)	1530 x 1075	1530 x 1080	1530 x 1080	1540 x 1290	1540 x 1290	
oading Height hopper (mm)	700	700	700	870	870	
x W x H Working position (mm)	3950 x 1400 x 2470	4000 x 1560 x 2530	4000 x 1630 x 2555	4800 x 2000 x 2760	4900 x 1960 x 2680	
. x W x H Dimension of working-trans- ort (mm)	3550 x 1400 x 2470	3485 x 1560 x 2530	3495 x 1630 x 2555	4295 x 2000 x 2760	4330 x 1960 x 2680	
Shim / upright unit	series / series	series / series	series / series	series / series	series / series	





	WOOL	CHIPPERS	- PTO		WOOD CHIPPER ON TRACKS CHASSIS
WS/10 PTO	WS/15 PTO	WS/18 PTO	WS/20 PTO WS/20 PTOT	WS/23 PTO WS/20 PTOT	WS/18 D R-TK
WS10PTO	WS15PTO	WS18PTO	WS20PTO WS20PTOT	WS23PTO WS23PTOT	WS18DR-TK
15	15	18	20	23	18
PTO power (max. permitted) 60 hp	PTO power (max. permitted) 60 hp	PTO power (max. permitted) 70 hp	PTO power (max. permitted) 80 hp	PTO power (max. permitted) 80 hp	KUBOTA V1505 25 hp / 18,6 kW
required speed 540 R/min	required speed 540 R/min	required speed 540 R/min	required speed 1000 R/min required speed 540 R/min	required speed 1000 R/min required speed 540 R/min	1498 cm ³ / 4-Cyl.
-	-	-			diesel
-	-	-	-	-	freewheel
metal safety case	metal safety case	metal safety case	metal safety case	metal safety case	polyester resion safety case
450	560	670	900	900	670
49	50	92.5	218	218	92.5
2	2	2	2	2	2
2	2	2	2	2	2
200	160	215	310	310	215
140	140	140	240	240	140
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	35
-	-	-	-	-	3,9 l/h
270°	270°	270°	270°	270°	270°
2000	2000	2000	2550	2550	2520
-	-	-	270° in model - 20PTOT	270° in model - 23PTOT	-
390	550	590	1100 - 20PTOT = 1300	1100 - 23PTOT = 1300	1800
-	-	-	-	-	-
1500 x 700	1500 x 965	1530 x 1080	1500 x 1290	1500 x 1290	1530 x 1080
700	630	700	870	870	700
1800 x 800 x 1930	1600 x 1200 x 2100	1700 x 1400 x 2500	3000 x 1560 x 2600	3000 x 1560 x 2600	3100 x 1575 x 2500
1800 x 800 x 1930	1600 x 1200 x 2100	1700 x 1400 x 2500	3000 x 1560 x 2600	3000 x 1560 x 2600	3100 x 1575 x 2500
-	-	-	-	-	-

SERVICE & WARRANTY

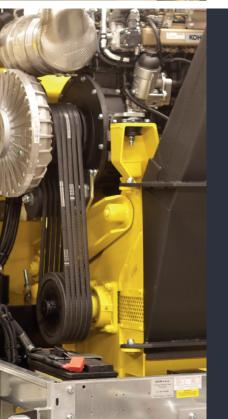




All our shredders come with a technical manual. Each manual gives you information on how to maintain your shredders.

Remember to have your shredders serviced by specialist companies and only use our spare parts.

Find all the information you need to maintain your shredder on our website.





Order your spare parts directly from our website.

KEY CONTACT

Valentina SANDULOVA

Export Sales Manager +49 1714033392 vsandulova@ts-industrie.eu

SALES ADMINISTRATION

Tanja WILKE

+49 32221096131

kontakt@ts-industrie.eu

SPARE PARTS

Ingo SCHUMACHER

+49 15231391355

ischumacher@ts-industrie.eu

AFTER SALES AND TECHNICAL SUPPORT

Sascha WIEDEMANN

+49 15231391355

swiedemann@ts-industrie.eu

Stefan KOSCHLIK

+49 32221096131

skoschlik@ts-industrie.eu





TS INDUSTRIE GmbH

Industriering Ost 42 47906 Kempen

Tel. +49 3222 1096 131 kontakt@ts-industrie.eu www.ts-industrie.eu

All technical data, dimensions and weights are non-binding. Some of the illustrations show additional equipment.