TS INDUSTRIE®










CATALOG

TS INDUSTRIE IN A NUTSHELL

50 YEARS OF HISTORY

Founded in Germany in 1985, the long-established company Tünnissen has grown around its **renowned industrial expertise** in the design of professional **wood chippers**.

The brand quickly gained recognition among local authorities and landscaping companies thanks to its **robust, powerful machines,** designed to meet the demanding standards of **German quality.**

GROUPE SEE

In 2010, **Tünnissen became TS Industrie** after being acquired by the Groupe SEE. A major European player in the manufacture of machinery for landscaping professionals.

This strategic integration marked a real turning point: **modernisation of industrial tools, increased investment** in research and development, structuring of a solid European distribution network and technological expertise of the GROUPE SEE.

WHY CHOOSE TS INDUSTRIE

Today, TS Industrie combines **German engineering standards** with the power of a structured European group. Each is designed with **premium machine components** and assembled according to rigorous quality processes to meet the **intensive demands of professional use**.

Choosing TS Industrie means choosing a **solid, innovative and sustainable** brand with a complete range of **wood chippers, green waste shredders** and electric shredders.

GREEN/SERIES ELECTRIC/SERIES WOOD/SERIES

TS INDUSTRIE®





















SUMMARY

ROTOR SHREDDERS

GREEN/SERIES

GS/PREMIUM P ____ 14 - 15
GS/TIGER ____ 16 - 17
GS/PYTHON P ____ 18 - 19
GS/PUMA ____ 20 - 21
GS/JAGUAR ____ 22 - 23
GS/PANTHER D ____ 24 - 25
GS/COBRA D ____ 26 - 27
TECHNICAL DATA ____ 28 - 29

ELECTRIC ROTOR SHREDDERS

ELECTRIC/SERIES

GS/ePUMA ____ 32 - 33
GS/eJAGUAR ____ 34 - 35
GS/ePANTHER ____ 36 - 37
TECHNICAL DATA ____ 38

WOOD CHIPPERS

WOOD/SERIES

WS/160 ____ 40 - 41
WS/18 ____ 42 - 43
WS/20 ____ 44
WS/23 ____ 45
WS/PTO ____ 46 - 47
TECHNICAL DATA ____ 48 - 49

SOME TIPS FOR EFFECTIVE OPERATIONS

Our wood chipping and shredding technologies.....p.10
Green waste recycling.....p.12
Driving license requirements for towing a chipper.....p.14
The advantages of a multigreenery shredder?.....p.21
Why choose a crawler machine?.....p.23
Lithium iron phosphate batteries.....p.34

ADVANTAGES

1. ULTIMATE VERSATILITY – THE RIGHT MACHINE FOR ALL YOUR CHIPPING NEEDS

From hard branches to hedge trimmings, each model is designed to efficiently handle diverse green waste, providing the perfect solution for landscapers, arborists, and green professionals. Our range features models with various chassis configurations, from compact, towable frames for easy transport to heavy-duty tracked chassis for tackling difficult terrain. Additionally, you can choose between diesel, petrol, or electric versions.

2. HIGH EFFICIENCY – ENGINEERED FOR TOP PRODUCTIVITY

Each TS Industrie machine is designed by our in-house engineering team to deliver maximum productivity. Optimized cutting systems and robust designs ensure smooth, high-output performance, keeping operations efficient and minimizing downtime.

3. ECO-FRIENDLY PERFORMANCE – LOW EMISSIONS

Our developments, such as CO_2 sensor, optimized engine management, electric-powered machines, and the use of bio-lubricants, show the commitment of our teams to eco-friendly operations that align with green industry standards for a sustainable future.

4. RELIABLE SUPPORT NETWORK – EXTENSIVE PARTNERS & SERVICE TEAM

TS Industrie supports its clients through a robust network of knowledgeable partners and a dedicated support team, ensuring local expertise and prompt service when it's needed.

5. RELIABILITY YOU CAN COUNT ON – EUROPEAN QUALITY

Designed and produced in Europe, TS Industrie machines respect high safety standards while delivering reliable performance under heavy workloads and challenging conditions.

6. DRIVEN BY INNOVATION – CONTINUOUS IMPROVEMENT

TS Industrie is dedicated to innovation, consistently enhancing our products with advanced technologies and sustainable solutions that set the standard for high-performance machinery.



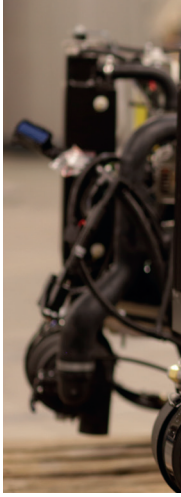

TS INDUSTRIE
GS ePANTHER
ELECTRIC/SERIES
TS INDUSTRIE
ts-industrie.eu



CHIPPING

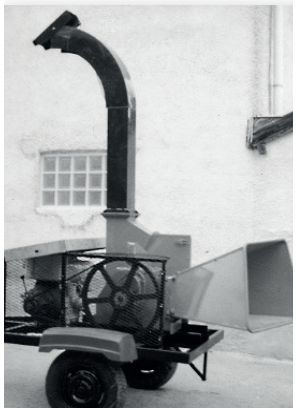
with TS INDUSTRIE

A UNIQUE CONCEPT





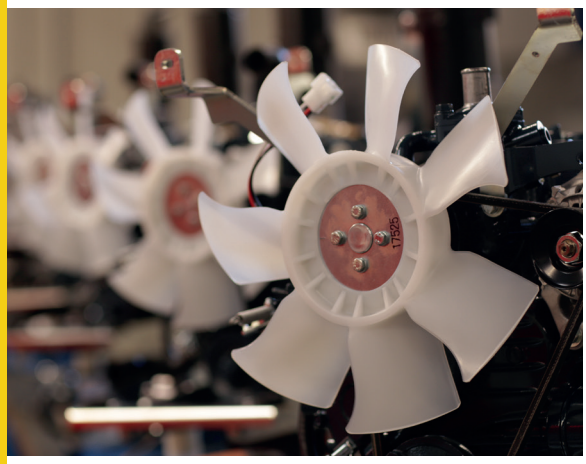
Our R&D team develop high-performant technologies to create a machine that meets your needs.





To offer users a premium product, we control the entire production chain. Our German and French teams work hand in hand to manufacture our machines, which are developed in Europe.





The company has been designing machines in Europe for 140 years.



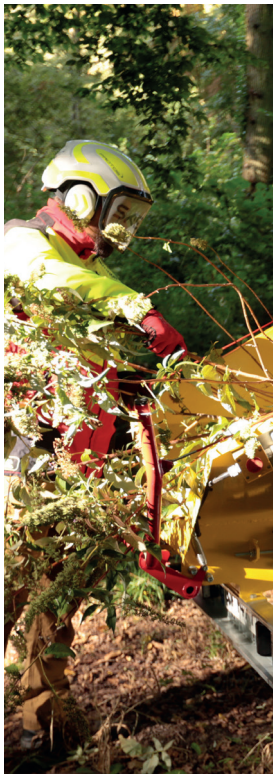


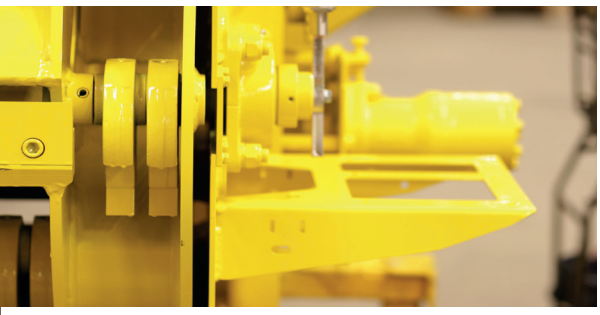


Our after sales service and spare sparts teams are by your side to help you in your daily needs. TS Industrie is n experts' team with a common objective : to provide high quality service and expertise.





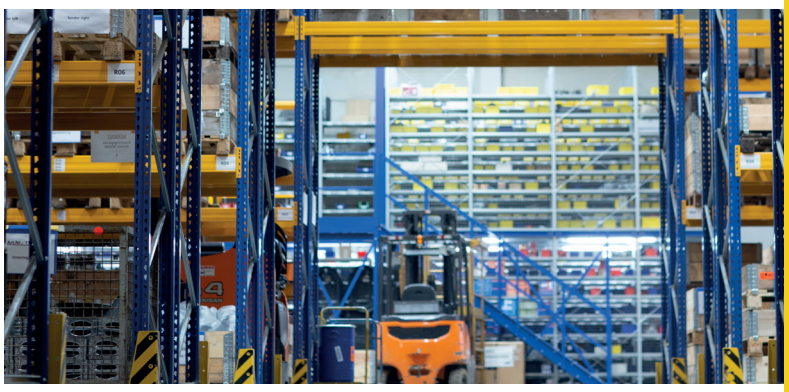




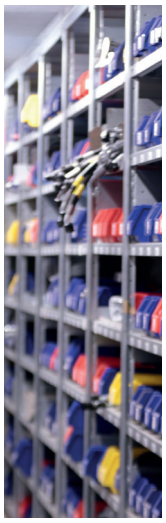
A sales team that supports you in the field.



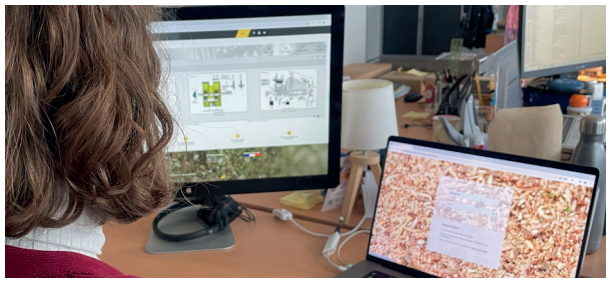
Our logistics platform ensures quick delivery of machines and parts to maintain continuous activity.







One website is developed to make your day-to-day operations easier.









EXCELLENT SERVICE

OUR CHIPPING TECHNOLOGIES



THE ADVANTAGES OF A GREEN WASTE SHREDDER

- Defibrates both light and dense material
- Airflow control for powerful material ejection
- Particularly suitable for leafy branches, hedge trimmings, cedars or palms

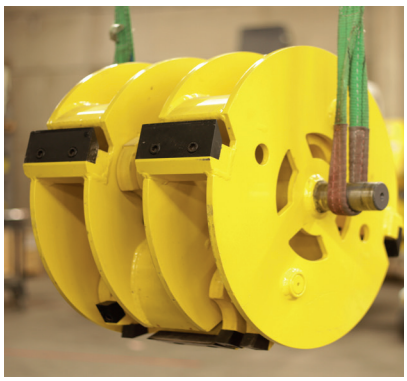


THE ADVANTAGES OF A WOOD CHIPPER:

- Clean cut wood
- Aesthetic chips
- Suitable for pruning and forestry work

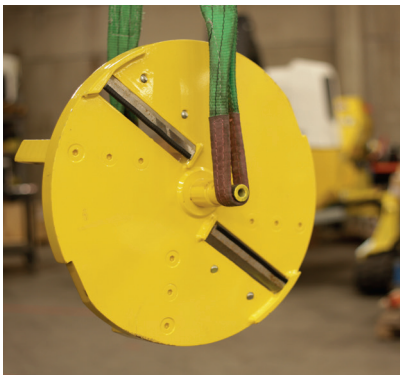
POWER MIXED ROTOR

The new generation of **POWER MIXED ROTOR** delivers higher productivity than ever, thanks to its multiple of hammers and knives. The ventilation chambers help to provide an extra air flow for efficient material evacuation. It's the better technology to reduce green waste.



CUTTING DISC

The **CUTTING DISC**, installed on all wood chippers, features with two adjustable blades and counter blades to produce clean cuts and uniform chips. The disc's thickness, combined with integrated ventilation fans, generates high inertia for enhanced productivity and efficient chip evacuation.



OUR TECHNICAL FEATURES

We continuously enhance our machines by developing and integrating innovative technologies that simplify operations, reduce costs, and promote eco-friendly practices.

TS.COCKPIT
Last generation of our control unit for reliable operations and easy maintenance.

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.

CO^2-REDUCTION
Automatic presence sensor that helps to reduce CO2 emissions and to save fuel.

CONTROLS UNITS
Activation of the feeding rollers and convoyer forward and backward.

TURNABLE BLOW-OUT CHUTE


Adapting to all conditions of use.

FOLDABLE HOPPER
Essential for transport.

PIVOTABLE TURRETTE


Guarantees ergonomic and safe operations.

TRACK CRAWLERS
Help to access to any type of working site.

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 for boilers.



MIXED GREENERY WASTE

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



MULCHING

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



ENERGY

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

HOW TO SELECT THE RIGHT MODEL?

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...

$$\frac{\text{INPUT CAPACITY (m}^3\text{/h)}}{\text{REDUCTION FACTOR OF 7}} = \text{OUTPUT VOLUME (m}^3\text{/h)}$$

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

TS INDUSTRIE



GREEN SERIES

GREEN/SERIES

GS/PREMIUM
ROTOR SHREDDER



PREMIUM P

MIXED ROTOR

BRANCH DIAMETER 13 CM

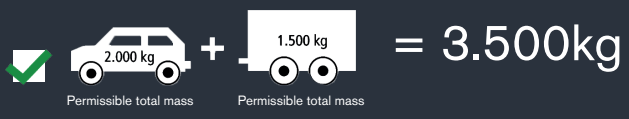
AVERAGE INPUT 13M³/H

< 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

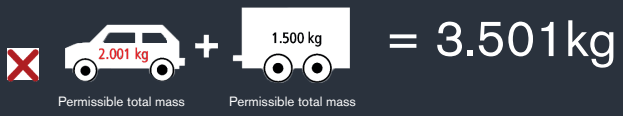
TECHNICAL DATA P. 28 - 29
ROAD HOMOLOGATION : 750KG

EUROPEAN ROAD HOMOLOGATION





≤ 750Kg
Permissible total mass





≤ 3.500Kg
Permissible total mass
Trailer leitchter as towing vehicle



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

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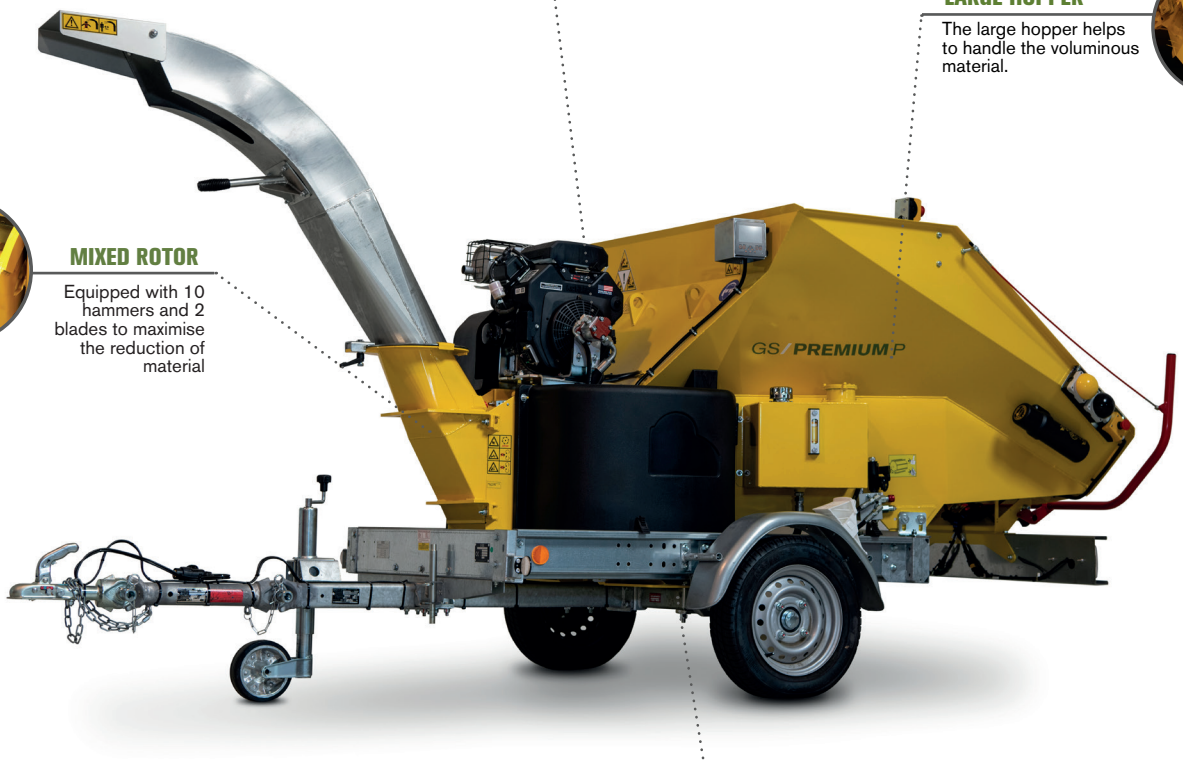
KOHLER ENGINE
18,5 KW / 25 HP

LARGE HOPPER
The large hopper helps to handle the voluminous material.





MIXED ROTOR
Equipped with 10 hammers and 2 blades to maximise the reduction of material



< 750 kg
Can be transported safely with a simple driving licence



MOTORIZATION
KOHLER CH730 V 25 HP

Our PREMIUM P is the user-friendly and relible shredder. Equipped with a 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 EU simple driving licence. Landscapers appreciate its wide hopper for convenient operations. The TS.Cockpit centralize the operation settings of the shredder and make this model easy to use.

GS/TIGER
ROTOR SHREDDER



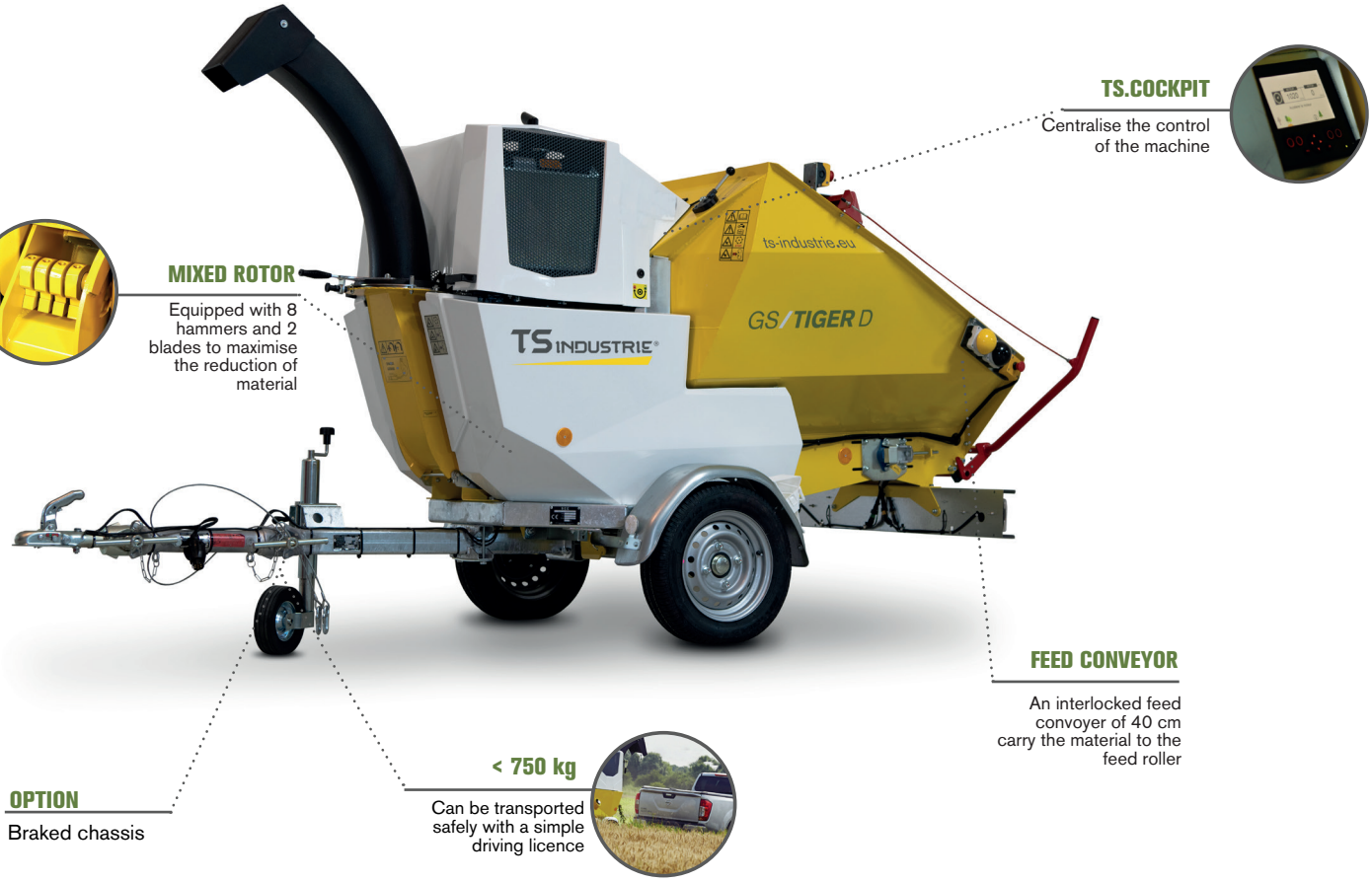
TIGER D / TIGER P

MIXED ROTOR

BRANCH DIAMETER 14 CM

AVERAGE INPUT 17M³/H

MOTORIZATION KUBOTA D902 V 25 HP



TS.COCKPIT
Centralise the control of the machine

MIXED ROTOR
Equipped with 8 hammers and 2 blades to maximise the reduction of material

FEED CONVEYOR
An interlocked feed convoyer of 40 cm carry the material to the feed roller

OPTION
Braked chassis

< 750 kg
Can be transported safely with a simple driving licence

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 EU simple driving licence is required.
The TIGER is equipped with a feed conveyor 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. Optionnaly, the machine can be feature a braked chassis with either a fixed or high-adjustable drawbar.



TIGER D



MOTORIZATION
KUBOTA D902 V 25 HP

TIGER P



MOTORIZATION
KOHLER CH730 V 25 HP

	TIGER D	TIGER P
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	898 - 3 CYL.	725 - 2 CYL.
ENGINE POWER	25 hp	
BRANCH DIAMETER (cm)	14	
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. 28 - 29
ROAD HOMOLOGATION : 750KG



NO STRESS

The No Stress function automatically adjusts the speed settings of feeding, depending on the thickness and type of material, to prevent the machine from clogging with overload at the material. The system relaunches automatically once the rotor has finished getting back to its average rotation speed. There are 3 shredding ranges, from the smallest/tightest to the widest/thickest wood. All our shredders are equipped with an adjustment knob controlling the speed of the conveyor and in feed roller, to reduce or increase the speed af the feeding and thus the size of chips of the shredded material.

GS/PYTHON P
ROTOR SHREDDER

The **PYTHON P** : the 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. With the weight of 950kg, the shredders' adjustable, braked drawbar allows transport under a standard EU.
B driving license, provided the combined weight with the towing vehicle remains below 3500kg.

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** depending on the green waste introduced. Important maintenance functions can be checked up in one glance on the TS.Cockpit.



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.



The **TS.Cockpit** measures the voltage of the battery and manages the retreatment of exhaust gaz. By displaying error codes, it performs intelligent diagnosis of the machine. Requirements for further services and oil changes can easily be detected as well as the settings of the CO2 reduction.

It is a perfect smart assistant for controlling your shredder and for optimising your workflows.

POWER MIXED ROTOR

BRANCH DIAMETER 15 CM

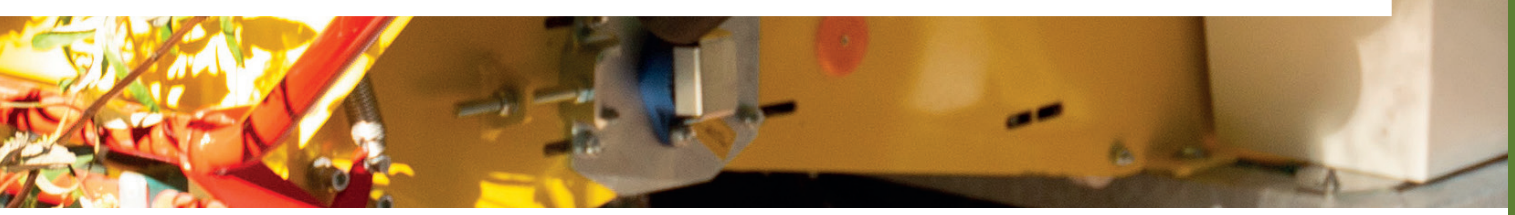
AVERAGE INPUT 22M³/H



MOTORIZATION KOHLER CH730 V 25 HP

	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
L X W X H (mm)	4000 x 1550 x 2115
FEED ROLLER WIDTH (mm)	250
LOADING HOPPER HEIGHT (mm)	700
REFERENCE	GSPYTHONP
MAINTENANCE KIT	KITPYTHONP

TECHNICAL DATA P. 28 - 29
ROAD HOMOLOGATION : 1000KG



GS/PUMA
ROTOR SHREDDER



PUMA P

POWER MIXED ROTOR

BRANCH DIAMETER 16 cm

AVERAGE INPUT 27m³/h

MOTORIZATION KOHLER ECH980 EFI V 38 HP



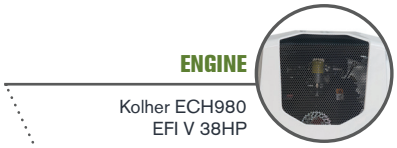
POWER MIXED ROTOR

12 hammers und 6 blades guarantee an optimal shredding



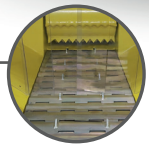
TS.COCKPIT

Centralises the control and operation of the machine



ENGINE

Kolher ECH980 EFI V 38HP



FEED CONVEYOR

40 cm wide reliable carries the material over the entire width to the infeed roller

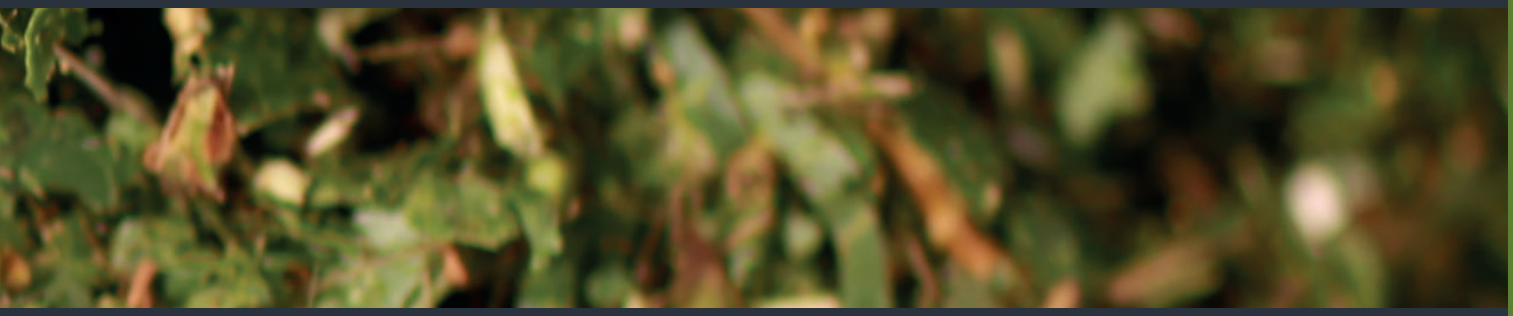


MAX. DIAMETER

Up to 16 cm

	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. 28 - 29
ROAD HOMOLOGATION : 1300KG



GS/PUMA

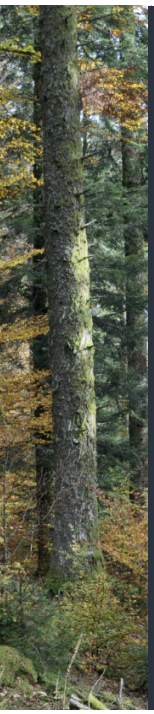
The PUMA is our bestseller in all its diversity! Diesel, petrol and 100 % electric, it is robust, powerful and able to shred diverse greenery with a maximum diameter of 16 cm.

The PUMA is equipped with a **POWER MIXED ROTOR** featuring 12 hammers and 6 blades. The control of the machine is operated via **the TS.cockpit.**

The machine is also equipped with an adjustable drawbar and an integrated brakes chassis.
It also includes a wide inseed feed conveyor and an infeed roller.



MOTORIZATION
KUBOTA 1505 V 25 HP



THE ADVANTAGES OF THE SHREDDER?

VERSATILITY: It can process a wide variety of green waste, such as branches, leaves, hedge trimmings, palm leaves, and conifers like thuja.

ERGONOMICS: The large hoppers of rotor shredders, combined with inseed conveyor facilitate machine loading.

TIME SAVINGS: There is no need to sort green waste before chipping, as both branches and leaves pass easily through a green series shredders.

FINE MULCH AND COMPOST PRODUCTION: Chipped waste is finer and decomposes quickly, making it an excellent soil amendment material.

VOLUME REDUCTION: Green waste is porcessed more efficiently by the shredder with its large hopper than by a wood chipper.

GS/JAGUAR
ROTOR SHREDDER



JAGUAR D SR-TK

POWER MIXED ROTOR

BRANCH DIAMETER 18 CM

AVERAGE INPUT 32M³/H

TS.COCKPIT
Centralises the control and operation of the machine

POWER MIXED ROTOR
12 hammers and 6 blades total weight of 150 kg offer a clean and powerful cut



FEED CONVEYOR
An interlocked feed conveyor of 40 cm reliably carry the material over the entire width to the infeed roller

REMOTE CONTROL
The remote control allows a safe transportation to any working site thanks to the tracks with tilt correction

ENGINE
Kubota 1505
CRT V 45 HP

MOTORIZATION
KUBOTA 1505 CRT V 45 hp

The versions of our JAGUAR offer a variety of configurations: 45hp diesel version on chassis, PTO drive, tracks or electric. All models are suitable for perfect shredding of green waste up to 18 cm of 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 optimizing fuel consumption and engine power, the JAGUAR is equipped with a **TS.COCKPIT** Its adjustable parallelogram drawbar and 270° pivoting discharge chute allow for easy orientation. Thanks to the crawlers with slope compensation and the remote control as a standard feature, safe operation and maneuvering are ensured at all times, even on challenging working sites.



JAGUAR D

POWER MIXED ROTOR

BRANCH DIAMETER UP TO 18 CM

AVERAGE INPUT 32 M³/H



MOTORIZATION KUBOTA 1505 CRT V 45 HP

JAGUAR PTO



MOTORIZATION POWER TAKE-OFF (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)	1450	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. 28 - 29
ROAD HOMOLOGATION : 1500KG

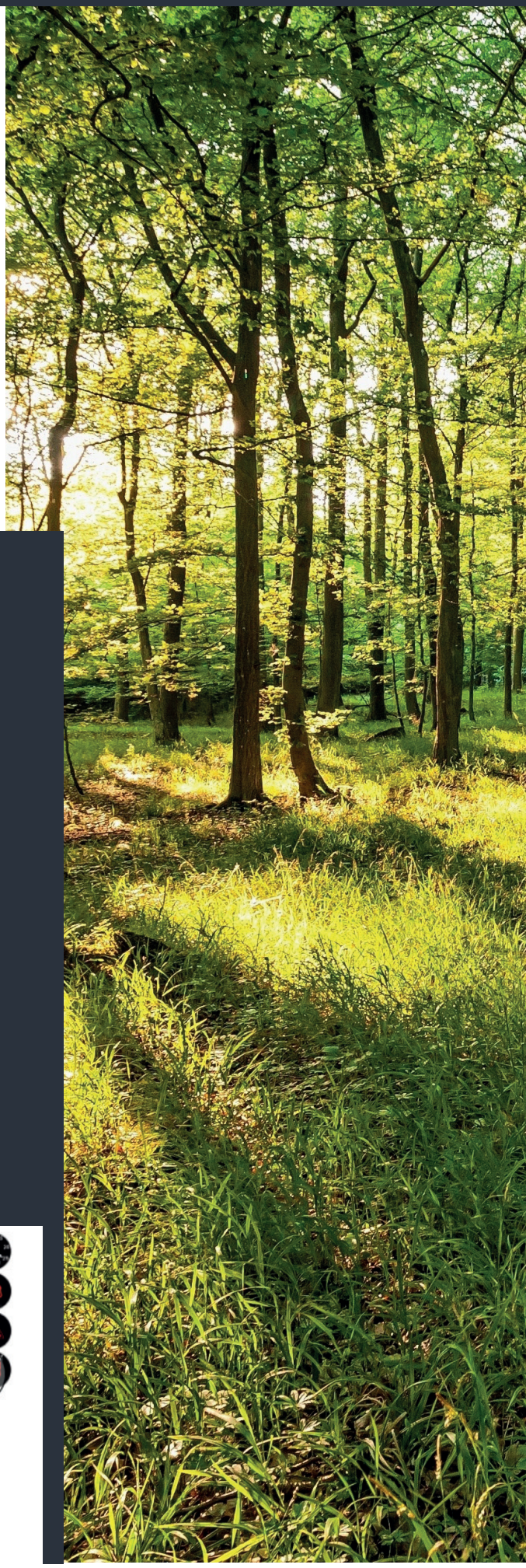
WHY CHOOSE A TRACKS MACHINE?

TS Industrie tracks machines, designed for branches with a diameter of up to 18 cm, as seen with the Jaguar or the WS/18. The remote control allows operators of tracks machines to be positioned safely on work sites, whether in the forest, on slopes, or on uneven terrain. Our optional working LED lights enhance the all-terrain capabilities, making these machines capable of operating in any circumstances!

GS/PANTHER D
ROTOR SHREDDER

The PANTHER D is a powerful machine in the product range of rotor shredders.
This machine is propelled by KOHLER 56HP diesel engine that drives a **POWER MIXED ROTOR**, equipped with 6 blades and 12 hammers to shred green waste up to 19 cm in diameter.

With a wide hopper and a 50 cm interlocked feed conveyor, work can be coordinated with several operators at the same time allowing you to finish the job faster. The adjustable parallelogram drawbar facilitates transport with different towing vehicles. The **TS COCKPIT** offers a choice of three different no stress levels depending on the infeed material.



THE CO_2 REDUCTION

Being future-oriented, we continuously develop innovative features and options for our machines. Did you know that generaly for 8 hours working day the effective shredding time is rowghly 3 hours ? To preserve the environment we designed the CO_2 reduction sensor. This detection system, placed above the hopper, lowers the engine speed when the operator is no longer present behind the machine.

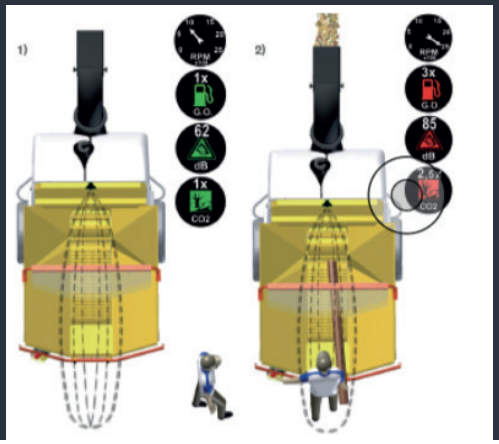
HOW DOES THE CO_2 SENSOR WORK ?

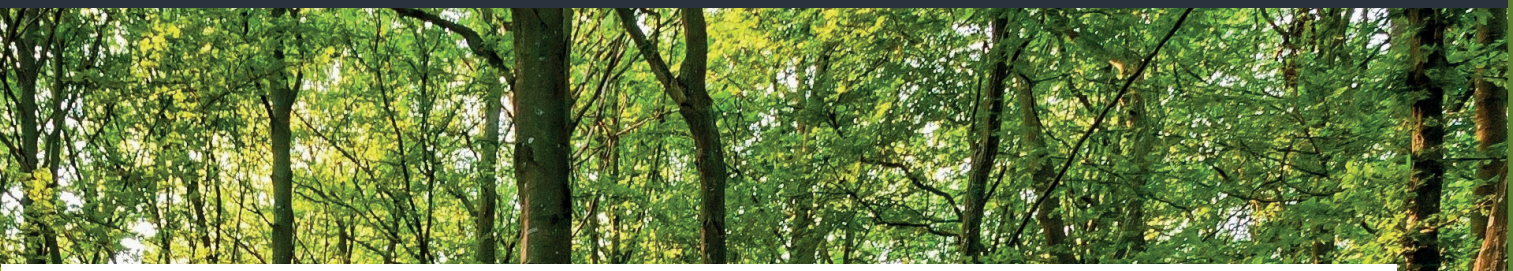
Level 1: If there is no user behind the machine, the sensor detects it and automatically switches the motor to slow speed.

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

WHY INSTALL THE CO_2 SENSOR ON THE MACHINE ?

The reduction system of CO_2 offers lots of advantages : noticeable reduction of CO_2 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 CO_2 reduction system is available from GS/JAGUAR (18 cm) to GS/COBRA (21 cm) rotor shredders.





MOTORIZATION
KOHLER KDI V 56 HP

OPTION OF CO^2 REDUCTION

FEED CONVEYOR
An interlocked feed conveyor of 50 cm reliably transfers the material over the entire width to the feed roller

POWER MIXED ROTOR
With 12 hammers and 6 blades, the rotor shreds material reliably



GROUPED LUBRIFICATION
For easy maintenance

POWER MIXED ROTOR

BRANCH DIAMETER
19 cm

AVERAGE INPUT
38m³/h

	PANTHER D
ENGINE CAPACITY (cm^3) - 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. 28 - 29
ROAD HOMOLOGATION : 2200KG

GS/COBRA
ROTOR SHREDDERS

The COBRA D is the proven standard among rotor shredders worldwide. The power and reliability of its engines KOHLER diesel 75 hp ensure exceptional performance. Its **POWER MIXED ROTOR**, featuring 16 hammers and 8 blades, efficiently cuts branches up to 21 cm in diameter.

This model comes with an adjustable parallelogram drawbar. The extra-wide hopper, over 1600 mm in width, and the 50 cm wide feed conveyor allow multiple users to work simultaneously without interruption.

The TS.COCKPIT centralises the control and the operation of the machine.

POWER MIXED ROTOR

AVERAGE INPUT
45m³/h

BRANCH DIAMETER
21 cm



AVAILABLE OPTIONS FOR YOUR CHIPPERS

Both our wood chippers and rotor shredders offer a variety of options :

- CO_2 reduction: lower emissions and fuel savings
- Discharge chute options: extended or foldable - a suitable solution for complexe working sites
- Spare wheel: available for the majority of our wood chippers and rotor shredders; perfect for the working sites hard to access to
- Individual choice of color: our indoor paint shop allows you to choose the color that fits your brand image
- Maintenance kit : guaranteed availability of original spare parts
- LED lights: to work even in early mornings or late evenings
- Chassis options: depending on models

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



POWER MIXED ROTOR

The largest of our rotors, equipped with 16 hammers and 8 blades



TS.COCKPIT

Centralises the control and operation of the machine



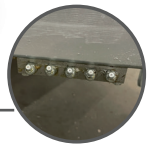
LARGE FEED CONVEYOR

The widest hopper combined with a wide feed conveyor of 50 cm and feed roller



MOTORIZATION
KOHLER KDI 2504TCR V 75 HP

GROUPED LUBRIFICATION



	COBRA D
ENGINE CAPACITY (cm³) - NUMBER of CYLINDERS	2504 4-CYL.
ENGINE POWER	75HP
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
MAINTENANCE KIT	KITCOBRAD

TECHNICAL DATA, p. 28 - 29
ROAD HOMOLOGATION : 2200KG

TECHNICAL DATA

ROTOR SHREDDERS WITH CHASSIS

	GS/PREMIUM P	GS/TIGER		GS/PHYTON P	GS/PUMA P
					
Referece	GSPREMIUMP	GSTIGERP	GSTIGERD	GSPYTHONP	GSPUMAP
Branch Diameter (cm)	13	14		15	16
Average input (m³/h)	13	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 cm³/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
Covering	ABS-hoods	FRP-hoods		FRP-hoods	FRP-hoods
Diameter of the rotor (mm)	560	400		560	560
Weight of the rotor (kg)	85	45		100	150
Number of hammers	10	8		8	12
Number of blades	2	2		4	6
Width of the infeed roller (mm)	250	250		250	400
Feed convoyer	No	400		400	400
Diameter of the feed convoyer (mm)	340	340		340	340
Number of axles	1	1		1	1
Dimensions of tyres	155/70R13	155/70R13		165R13C	165R13C
Fuel tank capacity (l)	30	17		32	32
Consumption (l/h)	4	4	3	4	3.9
Discharge chute	270°	180°		180°	180°
Height discharge of chute (mm)	2060	1850		2115	2300
Weight of machine (kg)	745	695	745	950	1230
Total weight of road homologation (kg)	750	750		1000	1340
Dimension of the hopper T x W (mm)	1500 x 1390	1600 x 1350		1600 x 1350	1600 x 1350
Loading hopper height (mm)	715	750		700	750
L x W x H Dimension of working-transport (mm)	3770 x 1600 x 2140	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/JAGUAR PTO	GS/JAGUAR D SR-TK
					
GSPUMAD	GSJAGUARD	GSPANTHERD	GSCOBRAD	GSJAGUARPTO	GS JAGUAR D SR-TK
16	18	19	21	18	18
27	32	38	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	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.	-	1498 4-Cyl.
diesel	diesel	diesel	diesel	power take-off	diesel
hydraulic	hydraulic	hydraulic	hydraulic	-	hydraulic
FRP-hoods	FRP-hoods	FRP-hoods	FRP-hoods	-	FRP-hoods
560	560	560	560	560	560
150	150	150	270	150	150
12	12	12	16	12	12
6	6	6	8	6	6
400	400	400	500	400	400
400	400	500	500	400	400
340	340	340	395	340	340
1	1	1	1	-	-
165R13C	175R14C	215R14C	215R14C	-	-
32	32	50	50	-	32
3.9	4		5	-	4
180°	180°	180°	180°	180°	180°
2300	2330	2330	2250	2330	2330
1380	1450	2050	2105	900	2100
1400	1500	2200	2200	-	-
1600 x 1350	1600 x 1350	1600 x 1620	1600 x 1630	1600 x 1350	1600 x 1350
750	760	760	700	800	830
4370 x 1690 x 2360	4430 x 1780 x 2380	4510 x 2020 x 2360	4710 x 1960 x 2500	3000 x 1500 x 2350	3000 x 1800 x 2400
Standard / Standard	Standard / Standard	Standard / Standard	Standard / Standard	-	-



PROVEN TS INDUSTRIE TECHNOLOGIES POWERED BY ELECTRIC

Our battery operated machines offer new way of working while keeping the best practices of combustible:

BETTER WORK COMFORT
The rotor's energy regeneration helps reduce noise impact on-site.

NO FUEL NEEDED
No more refill before the job. At the end of the day, simply plug in the chipper.

LOWER NOISE LEVEL
Less impact on the environment.

OPTIMIZED COST OVER TIME
Cheaper to operate than a combustible engine machine.

REDUCED MAINTENANCE
Less maintenance compared to a chipper with a combiustible engine.

NO POLLUTANT GAS EMISSIONS
An energy-efficient chipper that allows you to complete all your urban projects.

CHOICE OF ROTOR POWER/MOTOR SPEED COUPLING

Low rotor speed and engine power
Long battery life, low noise level, battery longevity.

Medium rotor speed and engine power
Best balance between battery life and machine performance.

High rotor speed and engine power
Maximum machine power for the most efficient processing of heavy material.

FIND OUT MORE ABOUT OUR ELECTRIC SHREDDERS ON OUR WEBSITE



ELECTRIC SERIES

ELECTRIC/SERIES

GS/ePUMA
ELECTRIC ROTOR SHREDDERS

Our PUMA goes electric! Its **lithium iron phosphate** batteries supply a 19 kW motor (equivalent to 31 HP) that shreds your green waste up to 16cm of diameter. It is equipped with a **POWER MIXED ROTOR** consisting of 12 hammers and 6 blades, a **feed conveyor**, a in 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 optimise further the energy savings. The perfect combination of TS Industrie's know-how and electric technologies!



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.

- **The shredding settings,**
- **Remote control of the machine,**
- **Settings and errors code for easy maintenance,**
- **Access to web plateforme to control and schedule your operations,**
- **Information and maintenance alerts for long life of the machine.**

These and other pieces of information can also be transferred to an IoT platform.
This enables you to monitor the machine parameters of your shredder anytime and anywhere (subscription included for the first three years of use subject towarranty registration. Available as an option after three years).



ACTIVITY SENSOR

Option to promote battery regeneration and energy saving

LITHIUM-IRON-PHOSPHATE BATTERIE

96 volt batteries for a19 kW asynchronous motor







START & STOP-BUTTON

For an easy starting and stopping of the system

TS.COCKPIT

Centralisation of the control of the machine and transfer information to the mobility platform



POWER MIXED ROTOR

BRANCH DIAMETER UP TO 16 CM

AVERAGE INPUT 27 M³/H

MOTORIZATION ELECTRIC 19 KW/31 HP

	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	KITGSEPUMA

TECHNICAL DATA, p. 38
ROAD HOMOLOGATION : 1300KG

GS/eJAGUAR
ELECTRIC ROTOR SHREDDER

The eJAGUAR makes the **POWER MIXED ROTOR** electric! With 12 hammers, 6 blades and an electric motor (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 conveyor** and the innovative **TS.Cockpit**, which provides all information about the machine. This service is accessible on site and online.

MOTORIZATION ELECTRIC
28,5 kW/ 46 hp

BRANCH DIAMETER
Up to 18 cm

POWER MIXED ROTOR

AVERAGE INPUT
32 m3/h



TECHNOLOGY
OF LITHIUM-IRON-PHOSPHATE-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 extend the lifetime of the battery.

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



ACTIVITY SENSOR

Option to promote battery regeneration and energy saving

LITHIUM-IRON-PHOSPHATE BATTERIE

96 volt batteries for a 28.5 kW asynchronous motor





START & STOP-BUTTON

For an easy starting and stopping of the system



TS.COCKPIT

Centralisation of the control of the machine and transfer information to the mobility platform



	eJAGUAR
MOTOR	LIP 96V 304Ah 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	KITGSEJAGUAR

TECHNICAL DATA, p. 38
ROAD HOMOLOGATION : 1500KG

GS/ePANTHER
ELECTRIC ROTOR SHREDDER

The ePANTHER is TS INDUSTRIE's largest e-model.
It offers a huge 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 **35kW asynchronous motor** (equivalent of 56 hp) and with a **feed conveyor** 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.

POWER
MIXED ROTOR

BRANCH DIAMETER
Up to 19 cm

AVERAGE INPUT
38 m³/h

MOTORIZATION
ELECTRIC 35 kW/ 56 hp

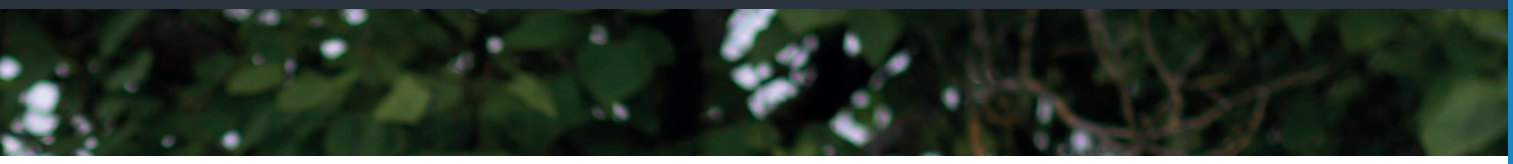


ACTIVITY SENSOR

All our electric shredders are free from CO2 emissions and are fitted with a Start & Stop button. You can also a instal activity sensor. This option optimises the use of your batteries and limits the noise impact of your worksites (by 60 to 70% on average). Located above the hopper, it faces the rear of the machine to detect the presence of operators. If no one is spotted for 10, 20 or 30 seconds (programmable), the rotor stops and regenerates the battery at the same time. The conveyor and feed roller are also stopped. Then simply press the Start & Stop button to restart a shredder it in a few seconds.









ACTIVITY SENSOR

Option to promote battery regeneration and energy saving

LITHIUM-IRON-PHOSPHATE BATTERIE

96 volt batteries for a 35KW asynchronous motor







START & STOP-BUTTON

For an easy starting and stopping of the system

TS.COCKPIT

Centralisation of the control of the machine and transfer information to the mobility platform



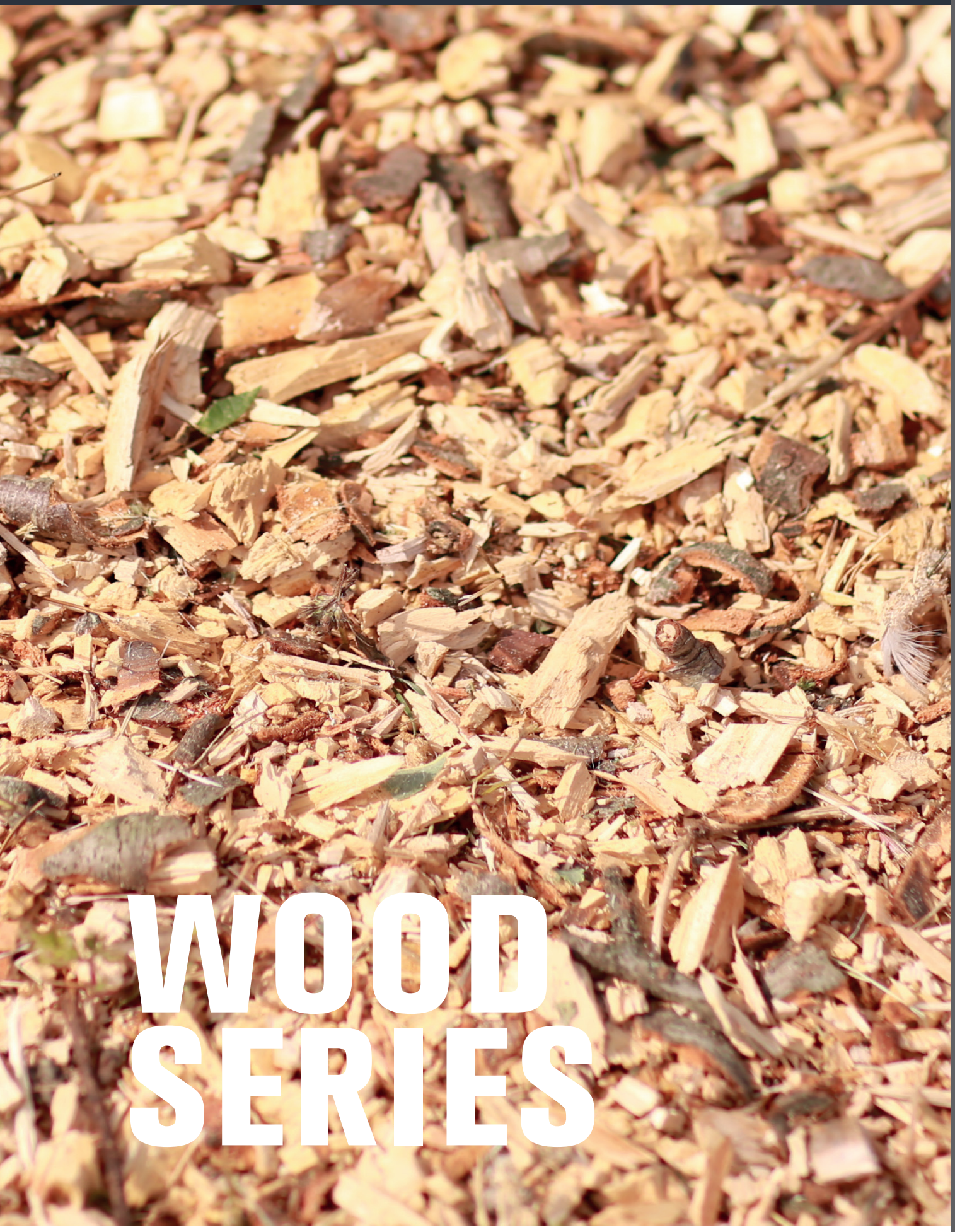
	ePANTHER
MOTOR	LIP 96V 360Ah ASYNCHRONOUS 35 kW (56 hp)
AUTONOMY	(up to) 2 WORKING DAYS
BRANCH DIAMETER (cm)	19
WEIGHT (kg)	2150
ROTOR	POWER MIXED ROTOR 12 HAMMERS / 6 BLADES
ROTOR WEIGHT (kg)	150
L x W x H (mm)	4510 x 2020 x 2380
FEED ROLLER WIDTH (mm)	400
LOADING HOPPER HEIGHT (mm)	760
REFERENCE	GSEPANTHER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

TECHNICAL DATA, p. 38
ROAD HOMOLOGATION : 2200KG



TECHNICAL DATA

	e PUMA	e JAGUAR	e PANTHER
			
Permitted diameter (cm)	16	18	19
Average input (m³ /h)	27	32	38
Batteries	lithium iron phosphate 96 voltage - 180 ah	lithium iron phosphate 96 voltage - 304 ah	lithium iron phosphate 96 voltage - 360 ah
Mono phase charger	included	included	included
Engine	asynchronous	asynchronous	asynchronous
Engine power (kW)	19	28.5	35
Power compared to combustion engine (hp)	31	45	56
Power saving mode	yes	yes	yes
Clutch	no	no	no
Start & Stop	yes, manually	yes, manually	yes, manually
Warranty of battery	3 years resp. 1.000 hours at 85% soh	3 years resp. 1.000 hours at 85% soh	3 years resp. 1.000 hours at 85% soh
Charging time (h)	6	9	12
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	centrally height adjustable	centrally height adjustable	centrally height adjustable
Wheel Chock / upright unit	Standard / Standard	Standard / Standard	Standard/ Standard
L 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
Number of hammers	12	12	12
Feed conveyor (mm)	400	400	500
Width of feed roller (mm)	400	400	400
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
Available option	Activity sensor	Activity sensor	Activity sensor



WOOD SERIES

WS/160P
WOOD CHIPPER

NEW

Discover the WS/160P: flagship wood chipper from TS INDUSTRIE —compact, robust, efficient, a reliable ally for arborists and landscapers who need a wood chipper under 750 kg.

With its lightweight design and braked chassis, it can be towed with a standard EU driving B license. Its foldable hopper ensures extreme compactness during transport and storage. Equipped with the **Cutting Disc** system, it delivers a clean cut and aesthetic wood chips, optimally ejected through its metal chute. It also features grouped lubrication to simplify maintenance. It can handle any diameter up to 16 cm, thanks to its Kohler EFI 38 HP petrol engine.

MOTORIZATION
KOHLER ECH 380
EFI PETROL V 38 HP

WEIGHT
< 750 KG

CUTTING
DISC

BRANCH DIAMETER
up to 16 cm



THE BENEFITS OF WOOD CHIPPERS

Do you chip more branches than green waste? Are you looking for high productivity? Do you want to equip yourself with a machine that combines numerous technical innovations?

Our WS/160P is made for you.
Its 80 kg Cutting Disc flywheel is features with two adjustable knives that pass in front of a counter-knives, ensuring a clean cut and aesthetic wood chips.

The TS.Cockpit, electrical controls, adjustable chute, and foldable hopper make of the WS/160P your best assistant for daily your tree care and landscaping projects.

Experience the comfort of using the WS/160P:

A CHIPPER DESIGNED FOR USER COMFORT



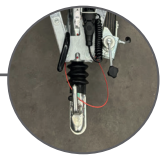


TS.COCKPIT

Centralisation of the, control of the machine

2 POSITIONS

of the campling







CENTRALISED LUBRICATION

Facilitates maintenance

SPIRAL CABLE

Anti-tearing





INSEED ROLLER

Wich easily grips wooden branches

PETROL ENGINE

Kohler 38HP for branches up to 16cm



	WS/160P
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)	80
L x W x H (mm)	3950 x 1400 x 2470
HOPPER DIMENSIONS T x W (mm)	1530 x 1075
LOADING HOPPER HEIGHT (mm)	700
REFERENCE	WS160P
MAINTENANCE KIT	KITWS16P

TECHNICAL DATA P. 48 - 49
ROAD HOMOLOGATION : 750KG

WS/18
WOOD CHIPPER



WS/18 D R-TK

CUTTING
DISC

BRANCH
DIAMETER
UP TO 18 CM

MOTORIZATION
KUBOTA V1505-E4B 25HP



BLOW-OUT
Rotating at 270°

FEED ROLLER
transfers the material to the cutting disc





FOLDABLE HOPPER
For easy and safe transport





TRACKS VERSION
Safe transportation as well as safe chipping on any ground

The WS/18 D R-TK is a reliable 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 **controlled remotely**, the WS/18D R-TK provide access to any complicated working site.



WS/18D



MOTORIZATION
KUBOTA V1505-E4B 25HP

The classic version of the WS/18D reduces branches up to 18cm in diameter. This is a chipper with the best value for money.

WS/18DT



MOTORIZATION
KUBOTA 1505V 25 HP

The turnable configuration can be rotated at 270° to allow safe and ergonomic working environnement away from traffic. The heavy cutting disc of 142 kg ensures high productivity.

	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

TECHNICAL DATA P. 48 - 49

ROAD HOMOLOGATION : 1100KG
ROAD HOMOLOGATION : 1350KG

WS/20DT
WOOD CHIPPER



WS/20DT

CUTTING
DISC

BRANCH
DIAMETER
UP TO 20 CM

MOTORIZATION
KOHLER KDI
1903 V 56 HP



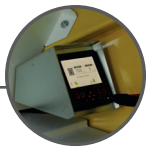
OPTION DOUBLE ESSIEU

Unfailing stability during operation and transport



TS.COCKPIT

Centralisation of the control of the machine



FOLDABLE HOPPER

For easy and safe transport



TURNABLE TOWER

The 270° turnable tower enables safe and ergonomic work



The WS/20DT is equipped with **TS.Cockpit** and grouped librification greasing system. Its high-torque diesel engine, supplies, a sufficient power for any working conditions. The TS.Cockpit controls work processes and indicates all relevant information on an ergonomic screen with colourful display.

The **rotating turret** and the 270° swivelling blow-out 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 twin axle (WS20DTA) and in its PTO version.

	WS/20DT
ENGINE CAPACITY (cm³) / NUMBER OF CYLINDERS	1861 - 3 ZYL.
ENGINE POWER	42 kW / 56 PS
BRANCH DIAMETER (mm)	20
WEIGHT (kg)	1990
CUTTING SYSTEM	CUTTING DISC
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

TECHNICAL DATA P. 48 -49
ROAD HOMOLOGATION : 2000KG
ROAD HOMOLOGATION : 2200KG



WS/23DT

CUTTING
DISC

BRANCH DIAMETER
UP TO 23 CM

MOTORIZATION
KOHLER KDI V
2504TCR 75 HP



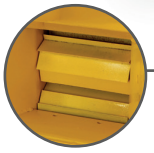
TWIN AXLE CHASSIS

Uncompromising stability during operation and transport



TURNABLE TOWER

The 270° turnable tower enables safe and ergonomic work



FEED ROLLER

Powerful hydraulic feeding



FOLDABLE HOPPER

For easy and safe transport

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 operates with a **TS.cockpit** which adapts the chipping power to the needs of the operator and the material. It results in operational and energy savings.

	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 P. 48 - 49
ROAD HOMOLOGATION : 2400KG

PTO

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

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

CUTTING DISC

BRANCH DIAMETER 23 CM

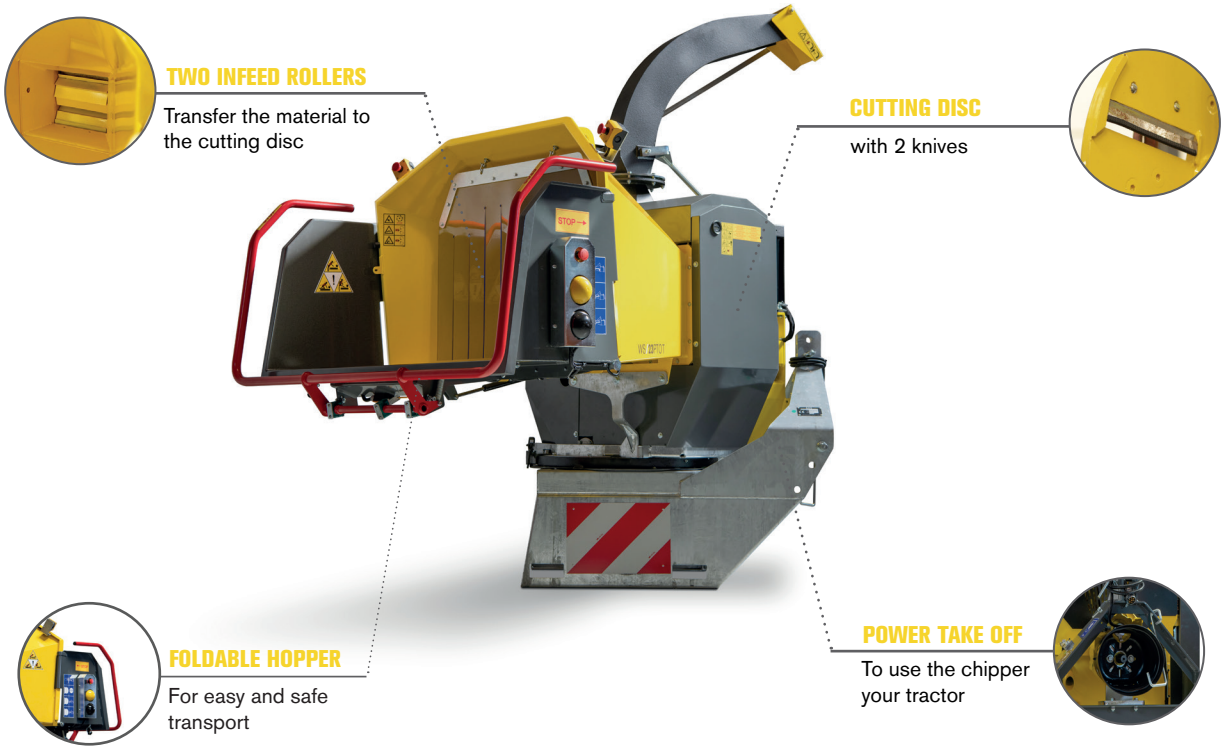


SET UP YOUR PTO MACHINE

The question of PTO power arises long before you buy your machine, and remains essential throughout its life for efficient operations use of your machine. There are a few important points to keep in mind before and during use:

- The difference between engine power and PTO output power.
- Always check the PTO setting when using the machine for the first time, even if it is set at the factory.
- Make sure that PTO shafts are compatible with the machine.
- If necessary, perform the check ups regulary during coupling and uncoupling.

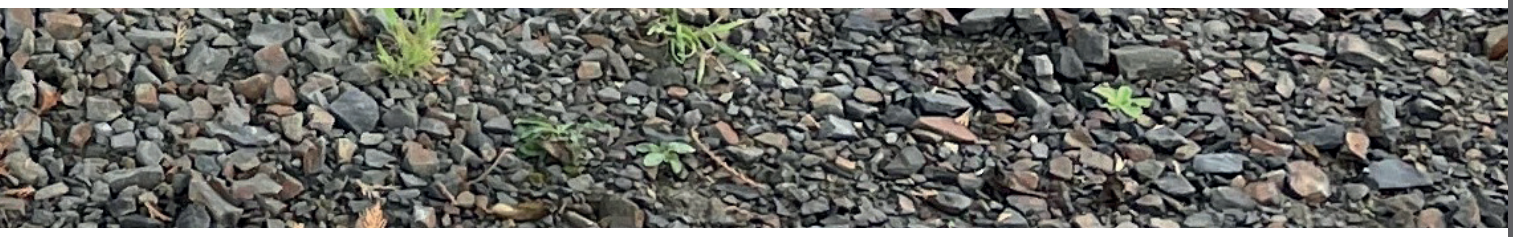




MOTORIZATION
PTO

	10PTO	15PTO	18PTO	20PTO	20PTOT	23PTO	23PTOT
POWER TAKE-OFF	PTO 540 R/min	PTO 540 R/min	PTO 540 R/min	PTO(T) 1000 R/min		PTO 1000 R/min	
CUTTING DISC DIAMETER (mm)	450	560	670	900		900	
CUTTING DISC WEIGHT (kg)	49	50	92.5	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 1290	
LOADING HOPPER HIGHT (mm)	630	630	700	870		870	
REFERENCE	WS10PTO	WS15PTO	WS18PTO	WS20PTO	WS20PTOT	WS23PTO	WS23PTOT
MAINTENANCE KIT	KITWS10PTO	KITWS15PTO	KITWS18PTO	KITWS20PTO	KITWS20PTOT	KITWS23PTO	KITWS23PTOT

TECHNICAL DATA P. 48 - 49



TECHNICAL DATA

WOOD CHIPPERS WITH CHASSIS

	WS/160P	WS/18		WS/20DT	WS/23 DT
					
Reference	WS160P	WS18D	WS18DT	WS20DT	WS23DT
Branch Diameter (cm)	16	18		20	23
Motor/Engine	KOHLER EFI 38 hp / 28,3 kW	KUBOTA V1505 25 hp / 18,5 kW		KOHLER V KDI 1903 56 hp / 42 kW	KOHLER KDI 2504TCR 75 hp / 55,4 kW
Engine Capacity (cm³) - Number of Cylinders	999 cm^3 / 2-Cyl.	1498 cm^3 / 4-Cyl.		1861 cm^3 / 3-Cyl.	2482 cm^3 / 4-Cyl.
Fuel	petrol	diesel		diesel	diesel
Clutch	motor base	freewheel		freewheel	freewheel
Covering	metal 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
Weight of the cutting disc (kg)	80	92.5	142	218	218
Blades	2	2		2	2
Feed roller	2	2		2	2
Width of the feed roller (mm)	240	215	245	310	310
Diameter of the feed roller (mm)	245	140		240	240
Number of axles	1	1		1 or 2 (optional)	2
Dimensions of tyres	155/70 R13	165R13	225/55 R12C	205R14C / 185R14C	185 R14C
Fuel tank capacity (l)	17 l	30 l	20 l	50 l	50 l
Consumption	4,3 l/h	3,9 l/h		4,1 l/h	5 l/h
Discharge chute	270°	270°		270°	270°
Height discharge chute (mm)	2440	2300	2500	2680	2680
Turnable tower	-	-	270°	270°	270°
Weight of the machine (kg)	704	1085	1330	1990	2340
Total weight permitted on the chassis (kg)	75	110	1350	2000 or 2200	2400
Dimension of the hopper T x W (mm)	1530 x 1075	1530 x 1080		1540 x 1290	1540 x 1290
Loading Height hopper (mm)	700	700		870	870
L 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
L x W x H Dimension of working-transport (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

WOOD 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
	10	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 l
	-	-	-	-	-	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
	-	-	-	-	-	-



ts-industrie.eu







WOOD/SERIES

GREEN/SERIES

ELECTRIC/SERIES

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All technical data, dimensions and weights are subject to change.
Some of the illustrations show additional equipment.