



Thanks to very aggressive drive rollers, feeding is always perfect with any kind of material. The machine's conveyors in the lower part of the rollers assure recovery of any escaped chips.

The feeding chute may be fitted with steel chains (optional).

All Energy chipper models may be set up with wheels for towing, own engine or placed on self-propelled vehicles. The drum cutting system with multi-blades assures production of high quality chips (calibration grate). The ejection of the chips with a multiblade fan makes it possible to obtain dust-free chips and loading even a 40' container, with minimum power absorption. The 360° rotating discharge pipe is adjustable in height and hydraulically tilting.

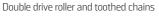
CHIPPERENERGY 23 | 30 | 40 Range of professional medium-sized chippers with drum cutting system. Designed to obtain highquality, consistent and well-calibrated chips, for use for energy purposes in boilers of any make and size, to produce pellets, or for industrial production of chipboard panels.

NEW LINE OF CHIPPERS FOR THE PRODUCTION OF HIGH QUALITY CHIPS, SUITABLE TO HANDLING LARGE QUANTITIES OF MATERIAL

The innovative technical solutions applied, allow the Energy range to be used in especially heavy-duty and continuous work that may range from forestry to chipping sawmill waste and maintenance of large parks. Any wood material may be ground, logs, branches, twigs, green prunings including resinous trees or palm residues, as well as particularly hard wood. Innovative system for extracting chips: the chips are instantly extracted by the chipping drum through a vacuum system that makes it possible to remove all intermediate parts such as worm screws etc. This results in a reduction of absorbed power, reduction in dust in the chips, longer service life of the blades, reduction in maintenance costs as well as elimination of all chipper clogging issues.

Clogging is eliminated: green and moist material may be chipped with optimal results with no clogging issues.























The wide loading hopper, complete with large sized drive rollers driven by gear motors and steel drive chains (optional) assure perfectly feeding the chipper with any type of material. The hopper may be folded for transport.

Version TPS-TTS professional chiipper, driven by the tractor's PTO at 1000/750 RPM. Carried on the three tractor points. With wheels and drawbar for towing (optional).

Version MTS-MTE forestry chipper, driven by independent engine with water cooled diesel engine option, or with electric motor. Motion transmission by V-belts. With road trailer approved for towing at 80 or 40 km/h (optional). Self-propelled crawler mounted outfitting (optional).

FEATURES

- · Double hydraulic drive rollers with very powerful gear motors.
- · Solenoid valve block.
- · All electronic controls.
- · Safety and control system with galvanised panic bar.
- · Drum with adjustable exposure blades.
- · High thickness steel chipping drum.





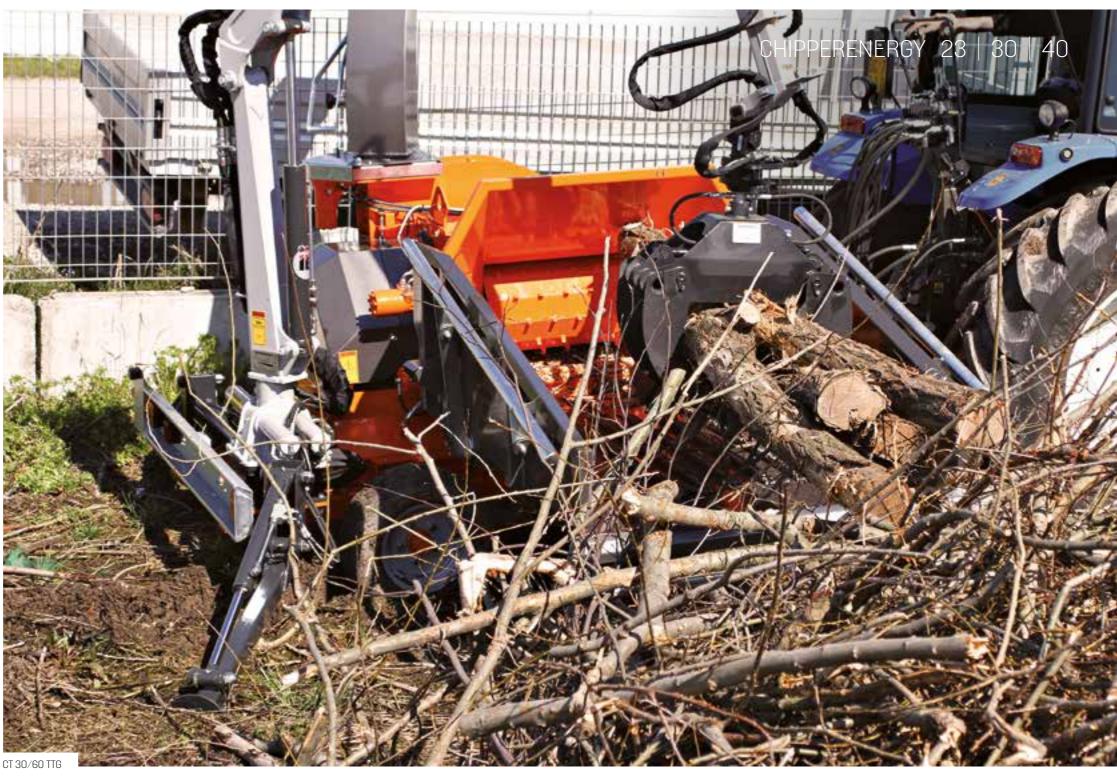
- · Quick blade attach-detach system.
- · Gauging grid.
- · Joystick to control input or ejection of the material.
- · Chip ejection cap with adjustable tilt.
- · Hydraulic pump mounted with flexible coupling system to increase service life.
- · Hydraulic pump with cast iron flanges to increase service durability over time.
- · Hydraulic system independent from the tractor.
- · Pressurised oil tank to assure perfect cleanliness of the oil hydraulic system.
- · Hydraulic oil filter on intake.
- · Oversized, maintenance–free chipping disc supports.
- · Bearing with double row of barrel rollers.
- · Shaft fitting in hardened 38NCD4.
- · Folding loading hopper to reduce overall dimensions during transport or storage.
- \cdot Easy access for maintenance.
- · Lifting hook.
- · Folding pipe with gas piston lowering system (optional).
- $\cdot \mbox{ Roller revolutions adjustment valve (optional)}.$
- · The chipper may be fitted with hydraulic log loading crane (optional).
- · Centralised greasing (optional).





















CHIPPERENERGY 23 30 40		23-42 TPS	23-42MTS	30-60 TPS	30-60 MTS	40-60 TPS	40-60 MTS
TRACTOR POWER	CV	40-80		70-120		90-160	
ENGINE POWER	cv (kW)		60 (44)		126 (93)		175 (128)
NUMBER OF CYLINDERS							
MAX WOOD DIAMETER	mm	230	230	300	300	300-400	300-400
NUMBER OF ROLLERS							
MAXIMUM PASS	mm	230x420	230x420	300x600	300x600	400x600	400x600
NUMBER OF BLADES				3-6	3-6	3-6	3-6
DRUM DIAMETER		360	360	450	450	620	620
DRUM WIDTH		420	420	600	600	600	600
CHIP LENGTH		6-20	6-20	6-30	6-30	6-30	6-30
CHANGEABLE GRID		standard	standard	standard	standard	standard	standard
SOUNDPR. ENGINE			optional		optional		optional
SELF-CLEANING FAN					optional		optional
BELT TRANSMISSION		/	standard	/	standard	/	standard
360° CHIPS PIPE		standard	standard	standard	standard	standard	standard
FOLDING PIPE		standard	standard	optional	optional	optional	optional
NOSTRESS DEVICE		standard	standard	standard	standard	standard	standard
NOBLOCK		standard	standard	standard	standard	standard	standard
HOUR COUNTER		standard	standard	standard	standard	standard	standard
RADIOCONTROL				optional	optional	optional	optional
LIGHTS SYSTEM		optional	optional	optional	optional	optional	optional
CARDAN JOINT SHAFT		standard		standard		standard	
PTO SHAFT		optional		optional		standard	
HOURLY PRODUCTION		8-12 cu.m/hr	9-14 cu.m/hr	18-25 cu.m/hr	25-30 cu.m/hr	30-50 cu.m/hr	40-60 cu.m/hr
SHIPPING DIMENSIONS		2200x1800x2300	3400x2000X2500	2600x2000x2600	4600x2200X2800	3200x2100x2600	5200x2300X2900
MACHINE WEIGHT		1400	2350	1600	3250	1900	3550



CHIPPERENERGY 40 | 50 | 80

NEW LINE OF CHIPPERS FOR THE PRODUCTION
OF HIGH QUALITY CHIPS, SUITABLE TO HANDLING
LARGE QUANTITIES OF MATERIAL

Intended for use in medium to large sized forest sites,
this chipper ensures high productivity.

Designed to be used in forestry, the ENERGY 40-5060 range has been developed to produce high quality
chips to be used in the energy sector.

ENERGY drum chippers have been designed around a drum blade cutting system, while all operations carried out by the machine to produce chips may be automatically controlled with an electronic system.

The machines are fitted with the most innovative NOSTRESS and NOBLOCK systems and, thanks to their technical structure, they may be driven by tractor or independent engine.

CHIPPERENERGY 27





To increase chip production and fully exploit the power output, these chippers are equipped with a series of high grip toothed rollers, which may be added by an industrial chain conveyor for conveying into the chipper even significant amounts of medium-large sized twigs. Furthermore, all models are fitted with an output calibration grid to produce various chip sizes. The main intended use for this range of chippers is the medium-large sized forestry site, although

they may also be applied in agriculture.

The chipping block is made with very thick steel plates that assure long durability even under heavy duty and continuous operating conditions.

The steel plates subject to greater wear, such as the fan case panel, the drum case panel, the chip ejection pipe outer sheet metal are in wear-proof HARDOX600 steel. The ejection fan consists of interchangeable screwed terminals.





The large-sized chipping drum processes to perfection even large-sized logs. It consists of two rows of five blades, easily replaceable for sharpening operations. The blade is fastened to the drum with steel screws. The screws are screwed into interchangeable threaded and cemented bushes placed on the support plate of the blades.

The blades and the counterblade are both adjustable and allow chip size to be changed with utter precision.

The calibration grid is interchangeable, disassembly is easy and quick.

Chip size adjustment is carried out by changing the exposure of the blades and replacing the calibration grid. By adjusting the distance between blade and counterblade, chips of the desired size may be obtained even before the chips come into contact with the grid. This markedly reduces dust and the "regurgitation" effect (chips that go back into the chute), thus assuring lower power absorption, lower blade wear, higher productivity and very high quality chips.

The bearings of the chipping drum are of the type with double row of barrel rollers and oversized, contained in steel supports CNC machined from billet with large support flange to ensure strong stability.









The chip ejection fan, with suction effect, is in direct contact with the chipping drum. This makes it possible for the chips to be immediately extracted after chipping, leading to a marked decrease in power consumption and dust. In fact the absence of middle components, such as worm screws, assures the chips maintain their speed. This makes it possible for the fan to turn at a lower speed, thus also reducing the wear of the sliding plates. The simplicity of the ejection system completely eliminates any clogging problem even when grinding green twigs or material with leaves.

fitted in the end part with a baffle to convey the chips with precision into containers of any height. Foldable into the shape limits for road transport. The feeding hopper is constructed with steel plate, reinforced on the perimeter and on the sides. It consists of a large sized tank with containing sides and toothed feeding rollers. The end part of the hopper folds hydraulically to reduce overall dimensions during transport.





The horizontal toothed drive rollers (three plus four additional ones as optional) are driven by oversized oil bath planetary gear motors. This assures great drive strength, that makes it possible to handle large amounts of material, large-diameter logs or with bifurcations, twigs and branches etc.

The supplementary drive rollers (four as optional), located in the feeding hopper, have the purpose of aiding in the introduction of especially bulky material. Furthermore, they help eliminating any foreign matter in the twigs and logs to be ground (e.g. soil, stones etc.).

Greasing of all points is centralised to reduce maintenance and make operations easier.

The hydraulic system actuates all the chipper's operations. The circuit consists of FOUR hydraulic cast iron pumps and FIVE blocks of solenoid valves that individually supply the three toothed traction rollers and other services such as pipe rotation for chips output, mobile roller motion etc.









CHIPPERENERGY **Powerful planetary gear motors** in oil bath assure rotation of the toothed rollers. The circuits 40 | 50 | 80 are at low pressure and filtered to assure proper operation with no circuit overheating. This leads to long durability of the system and consistent operation over time. All operating pressures are easily controlled on the control monitor on the machine. The electric system integrated with the machine's computer controls the whole machine in every work stage. Thanks to a touch-screen monitor the operator interface is simple and user-friendly, making it possible to perform any operation and monitoring status of the work stages. Any required maintenance or fault is also signalled. The NOSTRESS device, which controls the grinding stage, interrupts feeding the material when the engine's speed is excessively low and resumes automatically as soon as the engine's power picks up again.

The NOBLOCK device assures the material is fed smoothly by triggering in the event of accidental block of the feeding components (chain and roller).

The engine and transmission (MTS version) consist of a diesel engine with water cooling and oversized radiator. Thanks to pneumatic fan inversion the radiator may always be kept clean, thus increasing performance. The power transmission of the engine is by means of belts with hydraulic engage.

The user controls the engine with a digital panel.

Data transmission uses the Can–BUS system

Remote control (wireless in radio frequency, optional): it controls all the machine's operations.

Tested against impact and suitable for humid environments. Active and passive safety category 4 (UNI EN 954-1)

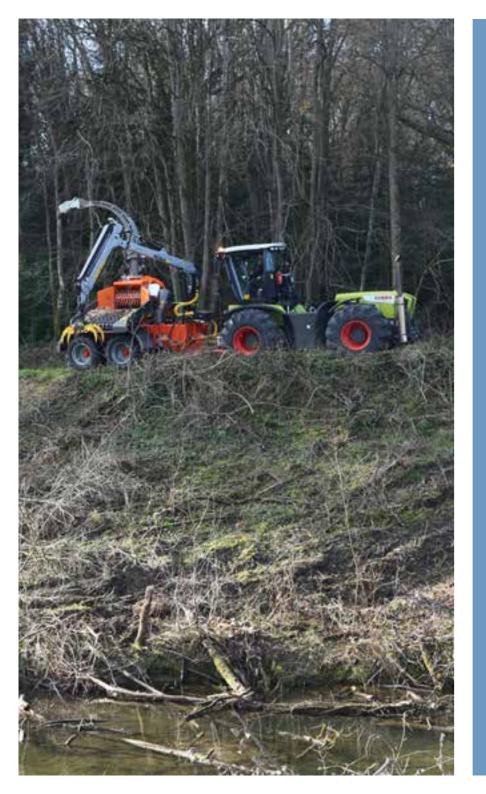
Hydraulic loading crane (optional): the chipper may be fitted with hydraulic log loading crane, set up as desired by the customer.

The ENERGY range may also be configured for applications on crawler or wheeled self-propelled vehicles, on demountable vehicles, towed and approved for road use, with chipper head placed on a rotating platform, complete with hydraulic log splitter to reduce the size of the outsize logs.









CHIPPERENERGY 40-50-80		40-75 TTS	40-75 TTS 40-75 MTS		40-100 MTS
TD AOTOD DOWED					
TRACTOR POWER	CV	120-200		150-200 	
ENGINE POWER	cv (kW)				175 (128) - 220 (161) - 315 (231)
NUMBER OF CYLINDERS			175 (128) - 220 (161) - 315 (231)		
MAX WOOD DIAMETER		400		400	400
NUMBER OF ROLLERS			400		
MAXIMUM PASS		400x750		400x1000	400x1000
NUMBER OF BLADES		3-6	400x750	4-8	4-8
DRUM DIAMETER	mm	620	3-6	620	620
DRUM WIDTH		750	620	1000	1000
CHIP LENGTH		6-30	750	6-30	6-30
CHANGEABLE GRID		standard	6-30	standard	
SOUNDPR. ENGINE			standard		optional
SELF-CLEANING FAN			optional		optional
BELT TRANSMISSION		/	optional	/	standard
360° CHIPS PIPE		standard	standard	standard	standard
FOLDING PIPE		standard	standard	standard	standard
NOSTRESS DEVICE		standard	standard	standard s	standard
NOBLOCK		standard	standard	tandard	
HOUR COUNTER		standard	standard	standard	standardv
RADIOCONTROL		optional	standard	optional	optional
LIGHTS SYSTEM		standard	optional	standard	standard
CARDAN JOINT SHAFT		standard	standard/	standard	
PTO SHAFT		standard		standard	
HOURLY PRODUCTION		40-70 cu.m/hr	60-120 cu.m/hr	50-70 cu.m/hr	70-130 cu.m/hr
SHIPPING DIMENSIONS		4200x2400x3000	5500x2400x3000	4500x2400x3000	6200x2400x3000
MACHINE WEIGHT		5500	8000	6800	9000

Page	CHIPPERENERGY 40 50 8	30	50-75 TTS	50-75 MTS	50-100 TTS	50-100 MTS	80-130 TTS	80-130 MTS
MUNICATION PART								
MANUSCIDENCIFIES	TRACTOR POWER	CV	150-300		200-320		250-450	
Minera Persistries min State S	ENGINE POWER	cv (kW)		315 (231) - 487 (358)		487 (358) - 530 (389)		530 (390) - 730 (536)
NON-READ PROLLERS FT	NUMBER OF CYLINDERS							
MANDRISH PASS	MAX WOOD DIAMETER		500	500	500	500	700-800	700-800
ModeRoff BLADES m' 3-8 3-5 4-8 4-8 4-8 5-10 5	NUMBER OF ROLLERS							5
PRINTENDIFF Fire	MAXIMUM PASS		500x750	500x750	500x1000	500x1000	800x1300	800x1300
PRIME	NUMBER OF BLADES	nº	3-6	3-6	4-8	4-8	5-10	5-10
Public	DRUM DIAMETER	mm	750	750	750	750	1100	1100
CHANGERAIL FORID Standard S	DRUM WIDTH		750	750	1000	1000	1300	1300
SOUNDIR ENGINE / optional / optional / optional SELF-CLEANING FAN / standard / standard / standard BEU TRANSMISSION / standard / standard / standard 380° CHIES PEPE standard <	CHIP LENGTH	mm	6-40	6-40	6-40	6-40	6-40	6-40
SEIF-CLEANING FAN / standard	CHANGEABLE GRID		standard	standard	standard	standard	standard	standard
SELTTRANSMISSION	SOUNDPR. ENGINE		/	optional	/	optional	/	optional
SBOT CHIPS PIPE Standard	SELF-CLEANING FAN		/	standard	/	standard	/	standard
FOLIDING PIPE Standard Incompression Standard Incompression	BELT TRANSMISSION			standard		standard		standard
NOSTRESS DEVICE Standard Inches Standard Inches Standard Inches Inches Standard Inches	360° CHIPS PIPE		standard	standard	standard	standard	standard	standard
NOBLOCK standard optional	FOLDING PIPE		standard	standard	standard	standard	standard	standard
HOUR COUNTER Standard Optional	NOSTRESS DEVICE		standard	standard	standard	standard	standard	standard
RADIOCONTROL Optional Standard Standard Standard Standard // Standard <th< td=""><td>NOBLOCK</td><td></td><td>standard</td><td>standard</td><td>standard</td><td>standard</td><td>standard</td><td>standard</td></th<>	NOBLOCK		standard	standard	standard	standard	standard	standard
LIGHTS SYSTEM standard standard standard standard standard standard / standard / CARDAN JOINT SHAFT standard / standard / standard / PTO SHAFT standard / standard / standard / HOURLY PRODUCTION 60-120 cu.m/hr 80-120 cu.m/hr 70-130 cu.m/hr 100-150 cu.m/hr 150-250 cu.m/hr 200-300 cu.m/hr SHIPPING DIMENSIONS mm 4500x2400x3500 6200x2450X3400 4600x2400x3500 6500x2450x3400 5600x2500x3500 6500x2450x3400	HOUR COUNTER		standard	standard	standard	standard	standard	standard
CARDAN JOINT SHAFT standard / standard / standard / PTO SHAFT standard / standard / standard / HOURLY PRODUCTION 60-120 cu.m/hr 80-120 cu.m/hr 70-130 cu.m/hr 100-150 cu.m/hr 150-250 cu.m/hr 200-300 cu.m/hr SHIPPING DIMENSIONS mm 4500x2400x3500 6200x2450X3400 4600x2400x3500 6500x2450x3400 5600x2500x3500 6500x2450x3400	RADIOCONTROL		optional	optional	optional	optional	optional	optional
PTO SHAFT standard / standard / standard / HOURLY PRODUCTION 60-120 cu.m/hr 80-120 cu.m/hr 70-130 cu.m/hr 100-150 cu.m/hr 150-250 cu.m/hr 200-300 cu.m/hr SHIPPING DIMENSIONS mm 4500x2400x3500 6200x2450X3400 4600x2400x3500 6500x2450x3400 5600x2500x3500 6500x2450x3400	LIGHTS SYSTEM		standard	standard	standard	standard	standard	standard
HOURLY PRODUCTION 60-120 cu.m/hr 80-120 cu.m/hr 70-130 cu.m/hr 100-150 cu.m/hr 150-250 cu.m/hr 200-300 cu.m/hr SHIPPING DIMENSIONS mm 4500x2400x3500 6200x2450X3400 4600x2400x3500 6500x2450x3400 5600x2500x3500 6500x2450x3400	CARDAN JOINT SHAFT		standard	/	standard	/	standard	/
SHIPPING DIMENSIONS mm 4500x2400x3500 6200x2450X3400 4600x2400x3500 6500x2450x3400 5600x2500x3500 6500x2450x3400	PTO SHAFT		standard	/	standard	/	standard	/
	HOURLY PRODUCTION		60-120 cu.m/hr	80-120 cu.m/hr	70-130 cu.m/hr	100-150 cu.m/hr	150-250 cu.m/hr	200-300 cu.m/hr
MACHINE WEIGHT kg 6500 12000 8000 14000 12000 21000	SHIPPING DIMENSIONS		4500x2400x3500	6200x2450X3400	4600x2400x3500	6500x2450x3400	5600x2500x3500	6500x2450x3400
	MACHINE WEIGHT		6500	12000	8000	14000	12000	21000