

MUS-MAX[®]

Demonstrates competence in chipper construction.

Many patented innovations!

WOOD TERMINATOR

Chippers program / 2019 edition



Chipper truck Mobile chipper



CRANE-LOADED, MOBILE WOOD CHIPPERS

The drum chippers process trunk wood, tree top parts, logging debris and shrubbery into quality wood chips.

Drive: Truck and diesel engines up to 775 HP

Prevent climate change

Promote wood chip heaters and heating plants!

Wood chips are climate-friendly, regional and cost-effective. Wood chips are particularly suitable as a biogenic energy source for buildings with high heat demand and enough storage space. The wood chips have low heating fluctuations and present an efficient wood fuel of the future.

Climate protection and forestry

The local woodlands sustainably promote climate protection. When wood chips are burned, only the amount of carbon dioxide that was absorbed from the atmosphere during the growth of the plant is released. Wood as a CO₂ neutral energy source is thus the alternative to fossil fuels closest to nature.

Wood chip heaters contribute to forest protection!

Proper forest management is an important measure against global warming. Extreme weather events such as hot and dry summers make it difficult for the forest to cope. This dryness promotes fungal infestation and results in devastating bark beetle damage. Diseased trees can only be burned in biomass heating plants after they have been immediately chipped into wood chips. The wood chip production of these damaged trees makes an irreplaceable contribution to forest protection. Even normal residual forest wood such as tree tops, shrubbery or residual trunk wood is particularly suitable for the production of wood chips. The potential of this forestry biomass is high.

Timber stock is constantly rising!

47% of Austria's territory is covered with woodlands. The annual wood growth alone amounts to more than 30.4 million solid cubic metres. The timber stock of Austria currently amounts to approx. 1.135 billion stock solid cubic metres (Vfm). The timber harvest (forest inventory) amounts to 25.9 million Vfm. The unused forest growth per year amounts to approx. 4.5 million Vfm. Therefore, more wood grows than is consumed, which means that much more wood can be converted into energy! As a renewable, regionally available and CO₂ neutral raw material, wood is very popular in times of climate change and constantly rising prices for fossil fuels. In this country, energy supply, especially in the heat sector with wood (wood chips), is increasing.



Quality chipped wood (wood chips)



Chipped wood: uniform standards

These wood chip standards can voluntarily serve as a basis for price negotiations and contracts. The ÖNORM EN ISO 17225 series of standards defines the quality-related fuel classes for biogenic fuels worldwide. For the energetic utilisation of wood chips for heating plants above 500 kW, a separate set of rules was published in Austria with the ÖNORM C4005. There are 4 commodity groups: C1 (trunk wood), C2 (solid trees), C3 (forest residues) and C4 (bark, stumps, roots).

Wood chips: ÖNORM EN ISO 17225

A distinction is made between fine, medium and coarse wood chips. The designations G30, G50 and G100 were replaced by ÖNORM EN ISO 17225 with the particle sizes P16, P31, P45 and P63. They state that the length of the main fraction is < 16 mm, < 31 mm, < 45 mm and < 63 mm, respectively. There are also quality classes A1, A2, B1 and B2. Fine wood chips are suitable for small wood chip heating systems (up to 100 kW). Industrial wood chips correspond to the medium size class P31/P45. P63 coarse wood chips are usually only used in large heating systems.

Delivery of wood chips

At the fuel market, the wood chips are delivered in loose cubic metres (lcm). As an alternative, the wood chips are traded in absolutely dry mass (atro ton). The energy content per lcm varies between 630 and 1120 kWh, depending on tree species and water content. The water content is an important quality feature because it is decisive for the calorific value and storage life of the fuel. Moisture meters for wood chips are available on the market (for further information, please contact the "Austrian Biomass Association").

25 years of chipper construction

How it all started ...

- 1994** Chipper No. 1 was a tractor-driven wood chipper model Wood-Terminator 7 (feed: W=76 cm, H=38 cm) with chassis. Customer: Kaufmann Karl (St. Peter a. O.). Chipper No. 2 was a WT 7 with a 200 HP diesel engine on a trailer, customer: Maindl (Liezien)
- 1996** The new WT 5 (W = 48 cm, H = 37 cm) and WT 6 (W = 62 cm, H = 38 cm) chipper series is developed. WT 7 (W = 76 cm, H = 38 cm)
- 1998** Start of the export of the WT 7 tractor-driven chippers to Switzerland and Holland. For the first time a WT 8 chipper with new Iveco diesel engine is delivered to Germany.
- 2000** The chippers are already being successfully produced in series. The customer Nassl from Germany receives the first tractor-driven chipper WT 8 Z (W=76 cm, H=40 cm) from the Lochner company.
- 2002** Chipper production is gaining momentum. The first WT 8 D truck chipper with conveyor belt discharge and side feeder went to the customer Hannes Schirrhofer/Stmk. Franz Huber in Lower Austria receives the first WT 8 Z tractor-driven chipper.
- 2004** The first WT 9 Z tractor-driven chipper (feed: W = 90 cm, H = 45 cm) went to the customer Mauerhofer/Stmk. We mounted the first WT 9 DS with concrete conveyor belt on a used Iveco truck. Furthermore, the customers Reinisch (WT 9 Z) and Wührer with the tractor-driven chipper WT 8 Z joined. The first MAN "Chipper Truck" WT 9 D (developed with the Lochner company) is delivered to the customer Nassl.
- 2005** The subsequently successful tractor chipper WT 10 Z (W = 98 cm, H = 75 cm) is tested with the customer Reinisch, improved, developed and ready for the market.
- 2006** The sale of the well-engineered WT 10 Z tractor-driven chipper started – the first customer was Svensson/Sweden. The first CAT C18 diesel engine (700 HP) was then installed on the WT 10 D chipper with 3 m long feeding belt and discharge conveyor belt (W = 0.8 m; L = 7 m). First customer of this model was: Estate management Flick from Rottenmann/Stmk. In this year Plant II was also built with a 1,500 m² large hall. The export countries Belgium, Lithuania and Latvia joined.
- 2007** The final assembly of chippers commenced successfully in Plant II. Export successes were achieved in Ireland, Portugal, Slovenia, Poland, Hungary and Croatia!
- 2008** The tractor-driven chipper WT 9 XL Z (feed: W = 82 cm, H = 70 cm) was developed. After that, the WT 8 XL Z chipper went into production. First customer: Vorobel Vilan/ Agropret company, Slovakia. These generations of chippers fit exactly for ranges up to 250 HP.
- 2010** The export countries Slovenia (Bijol company), Finland (Powerforest) and Estonia (Balmax company) joined. Larger quantities of the WT 9 XL Z went immediately to Latvia (sales partner: Powerforest company). The prototype wood chipper WT 7 L Z (feed: W = 54 cm, H = 50 cm) is newly developed and the first one is delivered to the Ventura company in Spain. Some WT 10 DLB chippers (750 HP) with discharge belt were also delivered to Sweden.
- 2011** In this year the small WT 7 L chipper (feed: W = 54 cm, H = 50 cm) are released onto the market.
- 2012** A MAN chipper truck with an installed WT 10 XL chipper with discharge belt (W = 98 cm; H = 75 cm) went to the Kapaurer company in South Tyrol. The Mayr company in Bavaria received the first MAN chipper truck WT 11 540 PS with blower and conveyor belt through the Lochner company (feed: W = 1.14 m, H = 0.75 m). The largest tractor-driven wood chipper in the world – the WT 12 Z – is designed and delivered to the customer Mandl/Liezien, Styria (feed: W = 1.35 m, H = 0.9 m).
- 2014** The wood chipper business is running continuously. The export quota is currently approx. 80 percent. The first order from Japan for a 400 HP Mercedes chipper truck with the WT 8 XL chipper has arrived. The first WT 10 XL DLK chipper, driven by a CAT C18 diesel engine with 775 HP, is delivered to the English railway.
- 2015** The first wood chipper trucks WT 10 XL were mounted on Volvo trucks with 540 and 650 HP and the drive power was taken over directly by a RBV gearbox.
- 2016** The first WT 12 Z chipper was delivered to mount a Fendt 1050 tractor (525 HP).
- 2017** The first Mercedes chipper truck WT 12 NMV (625 HP) was developed, produced and showcased at trade fairs.
- 2018** Approx. 20 chipper trucks from Volvo and Mercedes were delivered. A new chipper – WT 11 XL with hydraulic blower – is developed.
- 2019** The new chipper truck "Mus-Max Puma" is introduced. A WT 11 chipper is mounted on a Mercedes truck.

Dear readers,

Climate protection

Everyone is feeling the effects of climate change, but few are doing something about it! More and more storms with heavy rain, windstorms and hurricanes are to be reckoned with. Extremely hot summers lead to devastating bark beetle damage in spruce. Black pines suffer from fungal infestation and the future of ash trees is endangered by the ash shoot- and twig dieback. We have to intervene with our wood chippers and produce wood chips for all regional heating plants. By disposing of the damaged trees we contribute to the protection of the forest. When will the usage of fossil fuels finally come to an end?

25 Years Wood Terminator

We from the company Mus-Max focus on *renewable energy* with our Wood-Terminator wood chipper. With the new generation of chipper rotors and the speed-adjustable throw blower, clean, chunky, standard-compliant wood chips are produced. A new chipper model WT 11 XL is a large chipper of superlatives.

Mus-Max, successful company

With our wood chippers we belong to the market leaders in Europe. Due to the growing *export* the turnover of our company is constantly increasing. We are driven by the wishes of our customers and the technical implementation!

Now it is important to us how to produce the components and high-tech chippers as quickly as possible. In order to solve these problems, we rely on our employees, who are the most vital capital of our company.

State-of-the-art machine tools, highly trained specialist workers and a motivated team of engineers for work preparation are producing more and more machines. By pushing turnover we also need more and more employees. At the moment we have 110 employees.

It's nice to be successful, but since the delivery times of our chippers are getting longer and longer, we have to think about expansion for the future. I am proud of our *Mus-Max power team* and wish all our customers and business partners all the best for the future.

KommR. Erich Urch, Director



Always new demands

We have been manufacturing wood chippers for over 25 years now, and yet we are constantly learning new things. The market demands and those of the customers have repeatedly changed in the last years, and we also reacted naturally and adapted our machines to the market.

There were trends from tractor-driven chippers to chipper trucks; self-propelled vehicles were also discussed. Furthermore, the quality requirements for wood chips have changed constantly, and even now there are clear differences in what the respective market demands. We are constantly developing and looking for improvements to make the excellent and extremely stable machines even better, more flexible and easier to build.

Soon most of the machines will be networked, the controls will be delivered partly in touch technology, ergonomics and comfort will be significantly improved: everything to provide the chipper driver with a clear and healthy workplace. Our chipper trucks are already a big seller and the further development is running at full speed. In the next few years many more beautiful, powerful and newly

developed chipper trucks of all kinds will be released onto the market.

We are very proud of our partners (distributors) who do an excellent job and are fully support our product. Last year a new country – Belarus – joined us and we have gained a strong new partner.

Of course we supply our home market, but the export market is also constantly being expanded and newly developed. Also for years to come we will deliver our wood chippers to Europe, Africa, Japan – and wherever our machines are needed – and put them into operation.

The heart of the company are our reliable, loyal and inquisitive employees (the MUS-MAX power team): They proudly build our premium wood chippers WOOD-TERMINATOR in one of the most modern machineries.

Robert Urch, Director



PRODUCT INNOVATIONS

Wood-Terminator WT 9 XL and WT 10

1. Upper feed roller

- Largely dimensioned roller, internal hydraulic drive (planetary gear)
- Aggressive feed claws like a crocodile
- Exchangeable knives and serrations

2. Spiral screws

Extra strong, thick-walled, low-wear spiral screws with wood chip material feed to blower

3. Wear plates

Innovative wear plates in the blower and on the blade – made of special material (Hardox) – lasts twice as many hours as before

4. Larger ejection with perfect stream

80 cm – adjustable in radius, cleaning opening available, all wear plates exchangeable, headlights as standard. Blow up – possible

5. Chipper drum

- Low chipper drum speed
- Clean, square wood chips with few fine material
- Chipper knives or blades can be used. Advance: e.g. 28 - 32 mm.
- Clean, chunky wood chips (3 - 5 cm)

6. Control panel: CAN bus system

- Colour display
- Fast, electronic switching operations for Danfoss hydraulic feed system
- Feed rollers – switch-off and reversing control
- Pressure monitoring
- Operating hours counter up to 10 customers per day
- Feeding belt speed in % viewable on display
- Fine wood chips, coarse wood chips, hardwood/softwood mode can be manually adapted/switched
- Maintenance intervals easily visible
- Operating temperature display monitoring
- oil level monitoring
- **NEW!** Central lubrication: Lubricant level, fault diagnosis and much more.

7. Foot pedals

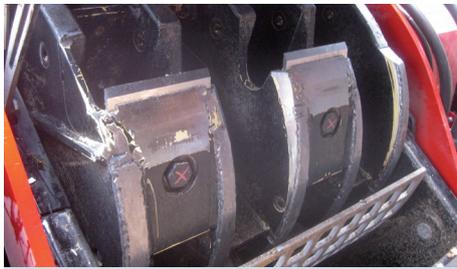
Any desired function of the chipper can be passed to the foot pedals, for example also the wood splitter's function.



Croc system: Exchangeable knives and serrations



Targeted throwing stream



Chipper rotor for chipper knives and blades



Control panel: Process box



Foot pedals for chippers/wood splitters etc.

MODEL SERIES

The model series in detail

Chipper truck:

WOOD TERMINATOR 7L NMV Page 5

Feed opening (WxH) max: 64 x 50 cm
Chipper capacity: up to 80 loose cubic metres/h

WOOD TERMINATOR 8XL NMV Page 7

Feed opening (WxH) max: 64 x 60 cm
Chipper capacity: up to 130 loose cubic metres/h

WOOD TERMINATOR 9XL NMV Page 9

Feed opening (WxH) max: 82 x 70 cm
Chipper capacity: up to 160 loose cubic metres/h

WOOD TERMINATOR 10XL NMV/RBV Page 11

Feed opening (WxH) max: 98 x 75 cm
Chipper capacity: up to 220 loose cubic metres/h

WOOD TERMINATOR 11 / 11XL NMV Page 13

Feed opening (WxH) max: 114 x 75 cm
Chipper capacity: up to 240 loose cubic metres/h

Feed opening (WxH) max: 135 x 80 cm
Chipper capacity: up to 280 loose cubic metres/h

WOOD TERMINATOR 12 NMV Page 15

Feed opening (WxH) max: 135 x 90cm
Chipper capacity: up to 320 loose cubic metres/h

Diesel Engine Chipper WT 9XL DLK Page 19

Feed opening (WxH) max: 82 x 70 cm
Chipper capacity: up to 160 loose cubic metres/h

Diesel Engine Chipper WT 10XL DLK Page 21

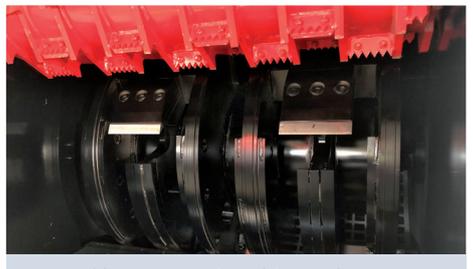
Feed opening (WxH) max: 98 x 75 cm
Chipper capacity: up to 240 loose cubic metres/h

Diesel Engine Chipper WT 11 DLK Page 23

Feed opening (WxH) max: 114 x 75 cm
Chipper capacity: up to 280 loose cubic metres/h

Diesel Engine Chipper WT 10XL DLB Page 25

Feed opening (WxH) max: 98 x 75 cm
Chipper capacity: up to 260 loose cubic metres/h

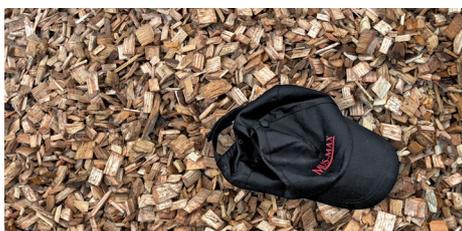


New generation chipper drum



Chipper knife setting gauge

Chipped wood (wood chips): uniform standards



P16 = G30 Fine wood chips



P31 / P45 = G50 Medium wood chips



P63 = G100 Coarse wood chips



Chipper truck WT 7L NMV

High-tech mobile chipper



**A small well-developed truck chipper.
Simply good chipper capacity, clean wood chip production,
economy and mobility.**

Chipper capacity: max. 80 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 64 x 50 cm
Tree diameter: max. 50 cm



Exact, clean wood chips

The chipper variably uses chipper knives or interchangeable blades. Interchangeable, laser-cut Hardox screen plates with square holes ensure high-quality wood chips P16S, whereby the chipping length can be set to 2, 3, 4 or 5 cm. Under the screen, 3 generously dimensioned screw conveyors ensure a continuous wood chip supply to the blower. The powerful blower output can be adjusted to the truck's strength by means of replaceable wear plates on the blades. In this feed size class (W = 64 cm; H = 50 cm) the mobile chipper WT 7L is far ahead of its time.

With its modern electronic and load-dependent control system, this machine has been designed to be powerful and have low drag resistance. A long service life is guaranteed. All wear plates in the blower and ejector are easily replaceable. The Wood-Terminator 7L is "the" superior chipper in its power class!

Arguments that convince:

- ✓ user-friendly
- ✓ Screen change – easy-peasy
- ✓ easy maintenance
- ✓ reliable
- ✓ sturdily built
- ✓ long service life
- ✓ perfect wood chips
- ✓ low diesel consumption



Technical data **WT 7L NMV**

Feed opening (WxH)	cm	64 x 50
Tree diameter max.	cm	50
Chipper capacity up to max.	lcm/h	80
Chipper knives or blades	pcs.	8
Rotor diameter	cm	73
Screen surface	m ²	0.95
Ejection height max.	m	4.65
Throwing distance max.	m	8
Machine dimensions (L/W/H)	m	7.5 / 2.5 / 3.9
Dead load with crane	t	20
Feeding chain with roller	m	1.2 or 2.2





Chipper truck WT 8XL NMV

The entry-level model for contract chipping



Equipped with high-tech electronics, the WT 8XL NMV once again confirms the lead of MUS-MAX technology for the Mercedes Benz 2042 truck.

Chipper capacity: max. 130 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 64 x 60 cm
Tree diameter: max. 60 cm



Hack-Truck WT 8XL NMV, the truck chipper for beginners

Low weight, high economic efficiency

The most modern CANBUS electronics as well as the load-dependent feeding belt control confirm the success of this development. At the touch of a button, you can immediately switch from coarse to fine wood chips. The CANBUS electronics also have the advantage that the circuit board is vibration-proof and requires little space in the control box. In addition, a very thin, weatherproof cable with steel wire braiding and a small, handy, ergonomic Process Box are used.



Arguments that convince:

- ✓ **Top feed**
A decisive advantage of this machine is the large rotor diameter and the large feed (W = 64 cm, H = 60 cm).
- ✓ **Top advance**
The longest chipper knife advance and the largest screen surface of this chipper series are convincing.
- ✓ **Top maintenance**
Since there are only eight chipper knives, they are quickly changed or ground. A generously dimensioned, thick-walled discharge screw conveyor and a blower equipped with easily replaceable wear plates confirm the easy maintenance of this unit.
- ✓ **Top-quality wood chips**
Highest wood chip quality, i.e.: clean square wood chips without fine dust particles – with low diesel consumption.
- ✓ **Top protection**
The patented foreign body securing of the chipper knives (against steel parts, stones ...) has proven itself and prevents larger damages to the chipper drum.

Technical data **WT 8XL NMV**

Feed opening (WxH)	cm	64 x 60
Tree diameter max.	cm	60
Chipper capacity up to max.	lcm/h	130
Chipper knives or blades	pcs.	8
Rotor diameter	cm	90
Screen surface	m ²	1.15
Ejection height max.	m	4.65
Throwing distance max.	m	10
Machine dimensions (L/W/H)	m	7.8 / 2.5 / 3.9
Dead load with crane	t	20
Feeding chain with roller	m	1.2 or 2.2
Mercedes	HP	up to 400
Volvo	HP	up to 400





Chipper truck WT 9XL NMV

Setting off into a new dimension of performance

The WT 9XL NMV impressively demonstrates its power wherever top performance is required. Ideal for trucks up to 460 HP.

Chipper capacity: max. 160 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 82 x 70 cm
Tree diameter: max. 70 cm



Even more economic efficiency!

For contractors who calculate

Thanks to a large-dimension rotor (Ø 900 mm) and the latest feed electronics, whole trees up to 700 mm Ø can for the first time be easily processed into quality wood chips using trucks with a power output of approx. 400 HP. The wood chips are thrown through the screen with only one rotor rotation. The WT 9XL NMV has the largest screen surface of all chippers in this feed width class. The result is clean, chunky wood chips with little fine material.



Arguments that convince:

- ✓ **Top chipper knife non-return system**
Prevents serious damages to the rotor.
- ✓ **Top-quality wood chips according to quality standard**
ÖNORM M7 133, ÖNORM C4005, EN/ TSS 14961 and ISO EN 172251 1-4
- ✓ **Top efficiency**
Low diesel consumption with 400 HP, high throughput, low maintenance costs.
- ✓ **Top feed**
Upper larger roller with tearing tools, lower roller of stable design; aggressive for shrubbery and logging debris.
- ✓ **Top chipper completely tight**
Machine does not lose any chipping material.
- ✓ **Top screw drive**
Hydraulic, oversized, maintenance-free.
- ✓ **Top "Multi-Tool" rotor**
10 staggered chipper knives or interchangeable blades, quickly exchangeable.
- ✓ **Top screen change**
Screen laser cut, easily exchangeable, in 5 min from P16S to P31S.

Technical data

WT 9XL NMV

Feed opening (WxH)	cm	82 x 70
Tree diameter max.	cm	70 / 55 *
Chipper capacity up to max.	lcm/h	160
Chipper knives or blades	pcs.	10
Rotor diameter	cm	90
Screen surface	m ²	1.40
Ejection height max.	m	4.8
Throwing distance max.	m	12
Machine dimensions (L/W/H)	m	8.1 / 2.5 / 4
Dead load with crane	t	23
Feeding chain with roller	m	2.7
Mercedes	HP	400 to 500
Volvo	HP	400 to 500

* softwood: 70cm, hardwood: 55cm





Chipper truck WT 10XL High-tech mobile chipper

A well-developed, reliable truck chipper

Simply good chipper capacity, clean wood chip production, economy and mobility.

For the chipper models WT 10XL NMV, WT 10XL RBV.

Chipper capacity: max. 220 lcm/h

Feed opening (W x H): 98 x 75 cm



The robust construction and simple operation convince

The feed has a more aggressive feed roller with exchangeable serrations. A load-dependent electronic system stops the feeding belt at lightning speed, retracts automatically and ensures trouble-free chipping operation. The feeding belt does not slow down, resulting in clean, chunky wood chips. The wide feed (1 m) is optimal for shrubs and has proven its worth in trunk wood. The high contact pressure of the upper feed roller ensures top quality of wood chips, even in the case of logging debris. Due to the fully automatic, safe operation of the chipper, the crane operator can fully concentrate on feeding the chipper, therefore a throughput capacity of up to 220 loose cubic metres/hour (lcm/h) can be achieved.



Arguments that convince:

- ✓ **Top feed**
2.7 m long feeding belt; reinforced design; long service life.
- ✓ **Top drive**
Feeding belt and lower roller driven by separate hydraulic motors; strong feed.
- ✓ **Top chipper drum**
The "Multi-Tool" rotor (Ø 940 mm) is an innovative design in which different chipper knives or knife blades can be changed variably depending on the material to be chopped; knife blades can be sharpened seven times.
- ✓ **Top crash protection**
When foreign bodies enter, the chipper knife destroys a replaceable metal body and ensures that no major damages occur to the chipper drum.
- ✓ **Top screen change**
The screen basket is divided and is quickly changeable by one person in a few minutes.
- ✓ **Top blower**
New throwing vanes with replaceable Hardox wear plates - higher blower throwing output.
- ✓ **Top ejection**
Accurate chipping wood stream and blowing up possible.

Technical data

WT 10XL

Feed opening (WxH)	cm	98 x 75
Tree diameter max.	cm	75 / 60 *
Chipper capacity up to max.	lcm/h	220
Chipper knives or blades	pcs.	10 / 12
Rotor diameter	cm	90
Screen surface	m ²	1.70
Ejection height max.	m	4.9 / 5.6
Throwing distance max.	m	12
Machine dimensions (L/W/H)	m	8.5 / 2.5 / 4
Dead load with crane	t	26
Feeding chain with roller	m	2.7
Mercedes	HP	510 / 550
Volvo	HP	550 / 750

* softwood: 75 cm, hardwood: 60 cm

NMV drive

Direct drive of truck with reversing gear

RBV drive

Special gearbox in the drive train instead of a cardan shaft



NEW



Chipper truck WT 11 / WT 11XL High-tech mobile chipper



A forward-looking concept

**Simply unbeatable in terms of chipping capacity,
wood chip quality, economy and mobility.**

For the chipper model WT 11 NMV / RBV and WT 11XL NMV / RBV.

Chipper capacity: WT 11 ► max. 240 lcm/h, WT 11XL ► max. 280 lcm/h



Chipper truck WT 11 / WT 11XL

Welcome to the professional of wood chip producers!

The aggressive feed and the fast reacting electronics enable trouble-free operation. Whole trees up to 75 cm in diameter are pulled in without the crane operator having to lift the feed roller. The CANBUS process control never slows down the feeding belt, so that the wood chips remain in the desired chipping length and clean, chunky, rather square chipped wood chips are produced. The large feed width (1.14 m) has great advantages especially for shrubs and treetop parts. The high hydraulic contact pressure of the massive upper feed roller produces beautiful, uniform wood chips even in the case of logging debris (P16S or P31S as well as P45S and P63 [ISO EN 17225 1-4]). The safe, fully automatic operation of the chipper allows the crane operator to concentrate fully on the loading work with the crane. This makes it possible to process up to 240 loose cubic metres of wood chips per hour without any problems.



Arguments that convince:

- ✓ **Top feed belt**
In contrast to the competitors, the feeding belt of this chipper is 2.7 m long thus, the 4 m logs remain on the belt during crane loading and do not fall to the ground.
- ✓ **Top drive**
This machine has maintenance-free hydraulic drive motors for the feed screw conveyors.
- ✓ **Top efficiency**
The easy pull of the chipper drum and the modern electronics of the feed control protect the tractor and ensure a previously unattained degree of efficiency.
- ✓ **Top protection**
The patented foreign body securing of the chipper knives (against steel parts, stones ...) has proven itself and prevents larger damages to the chipper drum.
- ✓ **Top screen change**
The screen basket is divided, has a low weight and is easily changeable by one person in a few minutes.
- ✓ **Top radio control**
The radio control for the ejection functions can be easily operated by the carrier itself and completely fill the trailer, thus reducing the chipper crane operator's workload.
- ✓ **Top throw blower**
Supplied as standard by WT 12. Better throwing performance, less fine material, wear and diesel consumption, more beautiful wood chips.

Technical data		WT 11	WT 11XL
Feed opening (WxH)	cm	98 x 75	135 x 80
Tree diameter max.	cm	75 / 60 **	80 / 70 *
Chipper capacity up to max.	lcm/h	240	280
Chipper knives or blades	pcs.	5 / 10 / 14	6 / 12 / 14
Rotor diameter	cm	90	100
Screen surface	m ²	1.95	2.05
Ejection height max.	m	4.8 / 5.6	4.8 / 5.6
Throwing distance max.	m	12	14
Machine dimensions (L/W/H)	m	8.6 / 2.5 / 4	9.2 / 2.6 / 4
Dead load with crane	t	27	30
Feeding chain with roller	m	2.7	3
Mercedes	HP	550 / 630	630
Volvo	HP	550 / 750	550 / 750
		** softwood: 75 cm, hardwood: 60 cm	* sw: 80 cm, hw.: 70 cm



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NEW



Chipper truck WT 12 NMV High-tech mobile chipper

A large chipper with special appeal and high performance

Simply unbeatable in terms of chipping capacity,
wood chip quality, economy and mobility.

Chipper capacity: max. 320 lcm/h

Feed opening (W x H): 135 x 90 cm

Tree diameter: max. 90 cm



"Better is the enemy of good"

Under this motto we have surpassed ourselves with the new Wood Terminator 12 NMV.



NEW

The new generation chipper rotor

With a dead weight of 3 t, it has a terminator-like impact force. This large flywheel mass is transferred directly to the powerful chipper knives and ensures an enormously high throughput of the wood chips. The WT 12 chipper has a screen surface of 2.2 m², thus the chips fall gently into the room of the discharge screw conveyor. The large screen surface also prevents the fine fraction of wood chips, as there is less shredding. The advance of the chipper knives can be adjusted mechanically (28 / 32 / 36 mm). The chipper knives are adjusted and tightened with a setting gauge very close to the counter knife.

The control panel is very ergonomically mounted at eye level

With trunk wood, the modern, load-dependent switch-off of the feed works wonders. There is no need to worry about the chipper, because it fully automatically processes the wood. The operator can therefore focus all his attention on the crane loading and ejector. All important functions of the control panel are permanently visible on the display. A change of the chipper electronics from softwood to hardwood or a change of the belt speed is possible in just a few seconds. With little time involved it can be switched from coarse to fine wood chips!



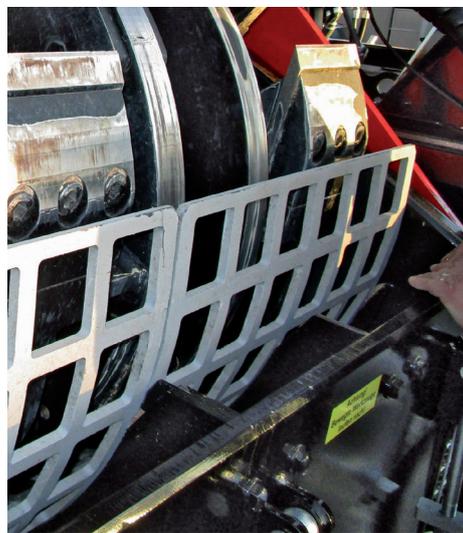
The power feed grips "like a crocodile" Exchangeable knife blades and serrations

With an aggressive, heavy, large feed roller and an enormous feed width, it is a great challenge for the crane operator to be able to load the machine. The proper fast wood crane with the appropriate crane tongs takes the large amount of residual wood supply to the WT 12 Z chipper. This chipper capacity amazes our customers!



MUS-MAX WT 12 NMV Revolutionary advancement: Load-sensing hydraulics as standard!

Modern hydraulic management requires an adjustable Danfoss axial piston pump in conjunction with several Danfoss PVG valves for the feed. Nothing is heated up with this load-sensing hydraulics, i.e. the oil flow is allocated power-oriented with a control line. With this valve technology, the feeding belt speed can also be electronically read in percent from the control panel. Furthermore, the feeding belt is driven by a powerful radial piston hydraulic motor without gearbox. This high-tech hydraulic system of the Wood Terminator 12 is otherwise only installed in excavators etc. Thus, the new WT 12 chipper has the strongest feed in this performance class.



Top screen change – split screens Fastest screen change, screen holder swivellable

The rotor cover is lifted hydraulically by electronic on-board hydraulics. The split screen can be exchanged in a few minutes. According to the standard, customer requirements regarding wood chip quality (from P16S to P31S, P45S, P63 and P100 [ISO EN 17225 1-4]) can easily be fulfilled.



Tree trunk diameter up to 90 cm



MUS-MAX Wood Terminator 12 NMV Mercedes chipper truck



Customers on the Karpfham fair in Germany

Mercedes-Benz truck/carrier vehicle

Vehicle data and dimensions

Truck model: Arocs 3263 LK 8x4
 Diesel engine: Mercedes 460 kW/625 HP
 Displacement 15.6 litres
 Drive: 8 x 4/4
 Gearbox: Automatic / torque converter
 Rear axle: steerable / relievable
 Wheelbase: 3.9 m
 Turning radius: 20 m
 Tires: first and last axis 385/65/R 22.5
 middle 2 axes 315/80/R 22.5

Vehicle dimensions

TRUCK: Length: 9235 mm
 Width: 2550 mm
 Height: 3990 mm
 Total weight: 32 t
 Tank capacity: 780 litres diesel
 Wood crane: Epsilon Palfinger Type Q 130/L 104
 Range: 10.4 m
 Lifting power: 1.3 t (extended)

Advantages

WT 12 NMV Chipper Truck Mercedes 625 HP

1. Mercedes-LKW NMV auxiliary drive 3000 N torque
2. New reversing gear, higher efficiency
3. Low diesel consumption (low engine speed)
4. Water cooler for truck engine enlarged, externally mounted
5. Temperature and level monitoring for diesel engine and chipper hydraulics
6. Air filter enlarged and easily accessible
7. Driver's cab: Panoramic view, Air-conditioned, Comfort seat, LED
8. Rear steerable axle, narrower curve radius
9. WT 12 – Feed: 90 cm high, 135 cm wide
10. Upper feed roller: Blades and teeth exchangeable
11. Screen holder swivellable – easier sieve change
12. Low rotor speed, beautiful, standard-compliant wood chips
13. New twin-screw discharge conveyor to throw blower
14. New hydraulic throw blower, gentle discharge, adjustable speed, clean wood chips
15. Combined chipper rotor for chipper knives or blades
16. E-Box: digital pressure display for operating functions



Technical data

WT 12

Feed opening (WxH)	cm	135 x 90
Tree diameter max.	cm	90 / 75 *
Chipper capacity up to max.	lcm/h	320
Chipper knives or blades	pcs.	6 / 12
Screen surface	m ²	2.20
Ejection height max.	m	4.5 - 5.3
Throwing distance hydraulic	m	18
Machine dimensions (L/W/H)	m	9.5 / 2.55 / 4
Dead load with crane	t	23
Feeding chain with roller	m	3.15
Mercedes	HP	550 / 630

* softwood: 90 cm, hardwood: 75 cm



Diesel Engine Chipper WT 9XL DLK



Your entry point to diesel engine chipper generation

The WT 9XL DLK impresses with many technical highlights
decisive for a Wood Terminator.

Chipper capacity: max. 160 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 82 x 70 cm
Tree diameter: max. 70 cm





Chipper on transfer truck with mounted Westtech wood splitter, can process round timber up to 1.2 m in diameter

Technical data	WT 9XL DLK	
Feed opening (WxH)	cm	82 x 70
Tree diameter max.	cm	70 / 55 *
Chipper capacity up to max.	lcm/h	160
Chipper knives or blades	pcs.	10
Screen surface	m ²	1.40
Ejection height max.	m	5.1
Throwing distance max.	m	12
Machine dimensions (L/W/H)	m	6.6 / 2.5 / 4
Dead load without crane	t	12
Dead load with crane	t	18
Feeding chain with roller	m	3
Engine	HP	405
Axes	pcs.	4
Drawbar design	drawbar, swivel drawbar, semi-trailer	
* softwood: 70 cm, hardwood: 55 cm		

The crane cab can be raised to provide a good overview for the operator. This cabin has a great advantage with high-piled wood. The WT 9XL chipper is swivelled out to the left or right via a slewing ring. This ensures an optimal wood supply to the chipper.



A CAT-C9.3-Acert diesel engine with 405 HP powers the chipper and the wooden crane. This compact design with a 3 m long feeding belt and a 1.5 m chute extension is ideal for long treetop parts, processor waste and splinter wood, etc.





Diesel Engine Chipper WT 10XL DLK

Maximum mobility and performance

The WT 10XL DLK impresses with many technical highlights decisive for a Wood Terminator.

Chipper capacity: max. 240 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 98 x 75 cm
Tree diameter: max. 75 cm



A comfortable, safe and ergonomic workplace

The WT 10XL DLK starts his work where others already give up. Whole trees up to 75 cm in diameter are easily pulled in and chipped without any problems. The machine can be quickly converted from P16S fine wood chips to P31S and P63 coarse wood chips for heating plants. Due to their enormous continuous performance, it is necessary to transport them away with containers or large trailers or chip them onto large material cones or in covered storage areas. With the fold-down wood splitter, trees with a diameter of 1 m can be easily split.

Splitter Westtech, splitting force: 27 t



Arguments that convince:

- ✓ **Top performance**
Up to 280 m³ wood chips P45S/h, large screen surface, highest throughput.
- ✓ **Top "Multi-Tool" rotor**
12 offset, robust knives – easy to drag, easy and quick to change (winter-proof). Also interchangeable blades, sharpenable up to seven times, can be used.
- ✓ **Top steels**
Shaft material from aircraft technology.
- ✓ **Top efficiency**
Unbeatable wood chip m³/hour chipping capacity for diesel consumption.
- ✓ **Top maintenance**
Central lubrication, few knife screws, wear parts quickly replaceable.
- ✓ **Top ejection**
Enlarged, telescopic 80 cm in length, extendable in radius, optimum tank filling.
- ✓ **Top hydraulic blower**
Infinitely variable speed, gentle discharge, clean wood chips.
- ✓ **Top chipper WT 10XL**
Longitudinal machine mounted on a truck with slewing ring and 3 m feeding belt, 600 HP Cat engine, Hydro-Drive all-wheel drive vehicle with rear steering axle.

Technical data

WT 10XL DLK

Feed opening (WxH)	cm	98 x 75
Tree diameter max.	cm	75 / 60 *
Chipper capacity up to max.	lcm/h	240
Chipper knives or blades	pcs.	5 / 10 / 12
Screen surface	m ²	1.70
Ejection height max.	m	6.3
Throwing distance max.	m	15
Machine dimensions (L/W/H)	m	6.6 / 2.5 / 4
Dead load without crane	t	13
Dead load with crane	t	16
Feeding chain with roller	m	2.7 / 3
Power requirement diesel engine	HP	400 - 600
Drawbar design		drawbar, swivel drawbar, semi-trailer

* softwood: 75 cm, hardwood: 60 cm

WT 10XL (longitudinal machine / 3 m feeding belt)

The chippers are usually supplied with a swivellable slewing ring (WT 10XL). The chipper can be swivelled out by 90° to the left and right and can therefore be used very flexibly. The 600 HP CAT diesel engine provides best throughput with low consumption.





Diesel Engine Chipper WT 11 DLK

A large chipper with power and capacity

The WT 11 DLK impresses with many technical highlights decisive for a Wood Terminator.

Chipper capacity: max. 280 lcm/h
(loose cubic metres/hour)

Feed opening (W x H): 114 x 75 cm
Tree diameter: max. 75 cm



Well-arranged work thanks to the crane driver's cab that can be lifted up

The WT 11 DLK chipper is a longitudinal chipper that is ideally suited for shredding whole logs and treetops. This large chipper with 750 HP has a high pulling power and therefore a very high chipping capacity. Due to their enormous continuous performance, it is necessary to transport them away with containers or large trailers or chip them onto large material cones or in covered storage areas. With the fold-down wood splitter, trees with a diameter of 1 m can be easily split.

Lasco: hydraulic cone splitter



Arguments that convince:

- ✓ **Top feed belt**
In contrast to the competitors, the feeding belt of this chipper is 2.7 m long thus, the 4m logs remain on the belt during crane loading and do not fall to the ground.
- ✓ **Top efficiency**
The easy pull of the chipper drum and the modern electronics of the feed control protect the tractor and ensure a previously unattained degree of efficiency.
- ✓ **Top protection**
The patented foreign body securing of the chipper knives (against steel parts, stones ...) has proven itself and prevents larger damages to the chipper drum.
- ✓ **Top screen change**
The screen basket is divided, has a low weight and is easily changeable by one person in a few minutes.
- ✓ **Top radio control**
The radio control for the ejection functions can be easily operated by the carrier itself and completely fill the trailer, thus reducing the chipper crane operator's workload.
- ✓ **Top hydraulic WT 12 blower**
Infinitely variable speed, gentle discharge, clean wood chips.
- ✓ **Top chipper WT 11**
Longitudinal machine truck-mounted with slewing ring and 3 m long feeding belt, 750 HP Cat engine, Hydro Drive all-wheel drive vehicle with rear steering axle.

Technical data

WT 11 DLK

Feed opening (WxH)	cm	114 x 75
Tree diameter max.	cm	75 / 60 *
Chipper capacity up to max.	lcm/h	280
Chipper knives or blades	pcs.	5 / 10 / 14
Screen surface	m ²	1.95
Ejection height max.	m	6.5
Throwing distance max.	m	18
Machine dimensions (L/W/H)	m	6.8 / 2.5 / 4
Dead load without crane	t	14
Dead load with crane	t	17
Feeding chain with roller	m	2.7 / 3
Power requirement diesel engine	HP	500 - 750
Drawbar design		drawbar, swivel drawbar, semi-trailer

* softwood: 75 cm, hardwood: 60 cm

WT 11 DLK Longitudinal machine / 3 m feeding belt

The chippers are usually supplied with a swivellable slewing ring (WT 11 DLK). The chipper can be swivelled out by 90° to the left and right and can therefore be used very flexibly. The 750 HP CAT-C18 diesel engine provides best throughput with low consumption.



Arguments that convince:

- ✓ Belt discharge with 1 m wide and 8 m long discharge belt
- ✓ Discharge belt with driver cleats (for coarse wood chips)
- ✓ Long service life, low wear and tear
- ✓ Fewer fine materials in the wood chips – no secondary shredding needed
- ✓ CAT-C18 diesel engine with increased cooling capacity
- ✓ Chipping capacity in continuous operation, up to 300 m³ wood chips per hour
- ✓ Fuel cooler electric
- ✓ Start cartridge: automatically generates ether during cold start
- ✓ Automatic fire extinguishing systems on request
- ✓ Extension plate for feeding belt, advantage for long timber loading
- ✓ Radio control: also all start-stop functions for the CAT diesel engine at the chipper console
- ✓ Flexible loading of wood trucks, wheel loaders etc. due to radio control.

Diesel Engine Chipper WT10XL DLB with belt discharge

The chipper who chips a little rougher

Ideally operatable with radio control.

Extra wide, extra long, extra strong – an ideal stationary unit for large heating plants. Low wear, high performance. The WT 10XL DLB (longitudinal machine / belt discharge) produces coarse wood chips (P31S, P63 and P100). Equipped with a conversion kit, even extreme fine wood chips (for pellet production) are possible. Loading can be carried out using a truck crane, excavator or wheeled excavator, among other things thanks to the radio control system. The chipper rotor can also be equipped with a larger blade advance.



Technical data

WT 10XL DLB

Feed opening (WxH)	cm	98 x 75
Tree diameter max.	cm	75 / 60 *
Chipper capacity up to max.	lcm/h	260
Chipper knives or blades	pcs.	5 / 10 / 12
Screen surface	m ²	1.70
Ejection height max.	m	6.3
Throwing distance max.	m	15
Machine dimensions (L/W/H)	m	6.6 / 2.5 / 4
Dead load without crane	t	13
Dead load with crane	t	16
Feeding chain with roller	m	3.6
Power requirement diesel engine	HP	up to 750
Chassis with 2 axles		445/H900

* softwood: 75 cm, hardwood: 60 cm

Special superstructures

Chipper variants at the request of the customer

Hackers with side loading and separately driven Cat diesel engine, mounted on a 3- or 4-axle truck, a semi-trailer or a 2-axle trailer, are becoming more and more popular!



Our wood chippers WT 9XL – WT 12 DS can be supplied with CAT diesel engines with special cooler and Clean-Fix spiral fan. For example, Mercedes, MAN, Scania, Renault or Volvo can be used as truck vehicles. The cab of the truck will be converted so that the chipper operator has a clear view of the chipping area. A new wood crane series from Epsilon – the Q series – has a reach of 10.40 m and provides even more

chipper capacity at the stand. It is also possible to use a wood crane with a raisable crane cabin. These diesel engine chippers are very manoeuvrable so you can quickly drive a few metres further at the chopping place, as no auxiliary drive has to be disengaged and engaged. With this chipper, you can quickly change the location of the chipper customer, as the truck runs 80 km/h.



Concentrated power – straight for the chipper drive



Chipper with mounted diesel engine (CAT or Mercedes), side or longitudinal feed: Chipper machines are mounted on hook lifts, crawlers, chassis or 4-axle trucks.

Top V-belt drive and flexible, operation with radio control possible.



WT 11 chipper with Lasco wood splitter, hydraulic cone splitter (see page 24)



HBC radio control with 2 joysticks, all control elements and belt attachment



WOOD TERMINATOR

Chipper trucks



WT 7L NMV

Feed opening (WxH) max. 64 x 50 cm
Chipper capacity: up to 80 lcm/h



WT 8XL Chipper Truck

Feed opening (WxH) max. 64 x 60 cm
Chipper capacity: up to 130 lcm/h



WT 9XL Chipper Truck

Feed opening (WxH) max. 82 x 70 cm
Chipper capacity: up to 160 lcm/h



WT 10XL Chipper Truck

Feed opening (WxH) max. 98 x 75 cm
Chipper capacity: up to 220 lcm/h



WT 11 Chipper Truck

Feed opening (WxH) max. 114 x 75 cm
Chipper capacity: up to 240 lcm/h



WT 12 NMV Chipper Truck

Feed opening (WxH) max. 135 x 90 cm
Chipper capacity: up to 320 lcm/h

Built-on chipper for trucks and trailers



WT 9XL DLK

Feed opening (WxH) max. 82 x 70 cm
Chipper capacity: up to 160 lcm/h



WT 10XL DLK

Feed opening (WxH) max. 98 x 75 cm
Chipper capacity: up to 240 lcm/h



WT 11 DLK

Feed opening (WxH) max. 114 x 75 cm
Chipper capacity: up to 280 lcm/h

Today **MUS-MAX** counts as one of Europe's leading manufacturers of innovative high-tech mobile chippers.

The company philosophy is characterised by the constant search for even better solutions.



The leadership team:

Erich Urch, KommR. with Helene Urch,
Robert Urch with Martina Urch-Rossi

Here are the most important criteria when buying a chipper

- Which wood chips (logs, shrubs) should be chipped?
- Which wood log diameter do I want to chop?
- What is the planned annual wood chip quantity (loose cubic metres)?
- Which chipper dimensions are necessary?
- Where should the chipper be used (in the forest, in the mountain forest, permanent location)?
- What off-road capability does the chipper need?
- Which wood chip customers do I have – according to quality: P16S/small heaters or P31S, P45S/P63 heaters?
- Are you driving on motorways or country roads?



All our devices and machines are constantly tested and further developed. We reserve the right to make technical changes and to change performance specifications.

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