

### PTO K PRODUCT CATALOGUE

Reliable machines designed for demanding users

RELIABLE WOOD CHIPPING PERFECT RESULTS

### HIGH EFFICIENCY. DANISH QUALITY.

TP Wood Chippers are designed and manufactured in Denmark. All of our products are characterised by user-friendliness, strength and high efficiency. TP Wood Chippers are quite simply made to be used. In addition to the high quality, they are easy to operate and maintain. Our main task is to ensure that you get the work done and can quickly move on to the next job.



#### Woodchip as a source of revenue

In addition to being an environmentally-friendly solution, wood chipping also has a financial benefit. Woodchip is saleable if the quality is uniform and it meets the stated requirements in general. With TP Wood Chippers you have all of the prerequisites for meeting the requirements, e.g. for combined heat and power plants. In addition to delivering attractive, high-quality woodchip, the knives can also be adjusted for different sizes, depending on what the woodchip will be used for. TP Wood Chippers comply with the standards G30, G50 and G100 in the recognised Önorm M7133 standard. To guarantee this, it is a precondition that the wood chipper is fitted with a TP CHIP KIT, consisting of sliver breakers and a facing plate over the disc.

#### Wood chippers with warranty

Almost all of our TP Wood Chippers are covered by a three-year warranty, which covers all of the components, including engine, hydraulic components, gears, etc. The only thing that is not covered by the warranty is painting and standard wearing parts such as knives. The two biggest wood chippers in the range, TP 320 and TP 400, are used for professional, intensive and biomass production that requires a high level of maintenance, and are supplied with a one-year warranty.

#### Original wearing parts – for safety's sake

TP Wood Chippers are built to deal with tough circumstances and raw materials, but of course, wearing parts cannot last forever. We always recommend that you use original wearing parts and spare parts and that you replace wearing parts at the correct time. By doing so, you achieve better woodchip quality and better fuel consumption. At the same time, you will help to optimise reliability and extend the lifetime of the wood chipper. We even continue to supply parts for TP Wood Chippers that have been in operation for over 20 years!

### **TP FEATURES**



#### TP PILOT K – the rpm monitor that ensures problem-free operation

TP PILOT K is an efficient rpm monitor that among other things, prevents overloading of both the tractor and wood chipper. The rpm monitor ensures an efficient working process, where the tractor engine performs optimally. It provides the biggest possible capacity without you having to concentrate on the disc rpm. All you need to do is feed the machine! TP PILOT K also has many other useful functions, including display of the disc and roller rpm and time registration for easy calculation of jobs. TP PILOT K can also be connected to the crane joystick, so that forced opening of the rollers and reversing of the rollers can be executed using the crane operation joystick. This means the functionalities are operated from a single point, which helps to ensure good ergonomics. TP PILOT K is positioned in the tractor cab.



#### MOWI CRANE - efficient feeding by crane

TP crane models can be supplied with robust and reliable MOWI cranes, designed for efficient forestry work. The cranes are equipped with mechanical parallel operation making them the optimal solution for wood chippers. Parallel operation means the height does not need to be controlled when filling the wood chipper. This in turn means easier operation, fewer movements of the joystick and better ergonomics. The rotator and grab are included in our crane solutions.



#### CRANE FITTING - with flexibility and manoeuvrability

**INTEGRATED CRANE SUPPORT** a strong and compact solution for the large models, where the user is ensured of optimised weight distribution and manoeuvrability and good visibility. Integrated crane support is standard on TP 320 PTO K and TP 400 PTO K.

**TP CRANE SUPPORT** is a specially designed A-frame for cranes and wood chippers which can be directly assembled onto the tractor's 3-point suspension. This solution is both compact and flexible, since you can use the crane with or without a wood chipper, e.g. combined with a trailer. TP CRANE FRAME is used for TP 230 PTO K, TP 250 PTO K and TP 270 PTO K.



#### **JOYSTICK - simple operation**

You can choose between a 1-hand or 2-hand joystick for simple operation of TP Wood Chippers equipped with the TP PILOT K operating panel and MOWI crane. The solution is supplied as a plug & play set.

TP 1-HAND CONTROL and TP 2-HAND CONTROL includes a complete cable set, Danfoss PVG 32/5 electrical valve, TP RACK and armrest.



#### TP CHIP TRAILER – specially adapted for large scale woodchip production

You can purchase a professional and Danish made high-tip trailer, which helps to ensure easy woodchip production, transport and tipping, either onto the ground as a stack/stockpile or in a container.

The trailer is available in two variants: **TP CHIP TRAILER 19 HBT**, 19 m<sup>3</sup> and high-tip or **TP CHIP TRAILER 23 HST**, 23 m<sup>3</sup> and high-tip. Standard equipment on both variants includes hydraulic brake, bogie, 600/50-22.5" tyres with reinforced rims, closed cover and removable support leg and light fitting.

## PRODUCT GUIDE

#### **GENERAL FEATURES OF PTO K WOOD CHIPPERS**

- Specially developed for forestry use, where the raw material is whole trees. Operation by crane is the most efficient and safest way to use this size of machine, since all of the functions are operated from the tractor cab
- Solid and strong funnel, which narrows late built for feeding by crane
- Reliable machines designed and manufactured in Denmark
- Delivered with PTO shaft with free running
- Powerful in-feed rollers and integrated hydraulic system
- Produces woodchip suitable for burning in G30/G50/G100 quality
- Specially developed powder coating ensures effective protection against rust (corrosion class C4)
- Many options for adjusting the ejector spout, so that it matches the task
- Replaceable casing, which keeps maintenance costs to a minimum
- As an option, can be purchased with a MOWI crane, which is specially adapted for forestry work

#### **SPECIFICATIONS – PTO K WOOD CHIPPERS**

#### **KEY TO SYMBOLS**



	TP 230 PTO K	TP 250 PTO K	ТР 270 РТО К	TP 320 PTO K	ТР 400 РТО К
Max. wood diameter	230 mm	250 mm	270 mm	320 mm	400 mm
Roller opening	230 x 240 mm	250 x 350 mm	270 x 290 mm	320 x 340 mm	400 x 440
Power requirement HP	50-120 HP	60-140 HP	100-200 HP	130-250 HP	200-400 HP
Power requirement kW	37–90 kW	45–104 kW	75–150 kW	95–184 kW	147–294 kW
PTO rpm	1000 rpm	1000 rpm	1000 rpm	1000 rpm	1000 rpm
3-point suspension	Cat. 2	Cat. 2	Cat. 2	Cat. 3	Cat. 3
TP PILOT K – rpm monitor	Yes	Yes	Yes	Yes	Yes
Capacity/hour	54 m <sup>3</sup>	60 m <sup>3</sup>	76 m <sup>3</sup>	180 m <sup>3</sup>	400 m <sup>3</sup>
Woodchip size	12–18 mm	4–13 mm	11–21 mm	12–30 mm	15–40 mm
Adjustable woodchip size	Yes	Yes	Yes	Yes	Yes
Woodchip standard	G30/G50/G100*	G30/G50/G100**	G30/G50/G100*	G30/G50/G100**	G50/G100**
Feed rollers	2	2	2	2	2
Roller position	Vertical	Horizontal	Vertical	Vertical	Vertical
Chipper type	Disc chipper	Disc chipper	Disc chipper	Disc chipper	Disc chipper
Funnel angle	Perpendicular to direction of travel	Parallel to direction of travel	Diagonal rear facing	Parallel to direction of travel	Parallel to direction of travel
Chipping angle	45°	90°	45°	30°	30°
Number of knives	3	3	3	4	4
Number of counterknives	2	3	2	2	2
Disc diameter	760 mm	960 mm	960 mm	1050 mm	1225 mm
Disc weight	149 kg	272 kg	275 kg	434 kg	756 kg
Integrated hydraulic system	Yes	Yes	Yes	Yes	Yes
Hydraulic pump	Fixed gear pump	Fixed gear pump	Fixed gear pump	Variable piston pump	Variable high pressure piston pump
Standard ejector spout	Rotatable	Rotatable	Rotatable	Long, over length of tractor	Long, over length of tractor
Trailer hitch	Yes***	No	Yes***	No	No
Weight	990 kg	1030 kg	1385 kg	2500 kg	3000 kg
Weight with crane	1490 kg	1638 kg	1953 kg	3108 kg	3800 kg
Width	2030 mm	1611 mm	1980 mm	1781 mm	1810 mm
Height	2847 mm	3000 mm	3042 mm	3466 mm	3640 mm
Length	1532 mm	1807 mm	1972 mm	2191 mm	2604 mm

\* Sliver breaker set TP CHIP KIT is fitted as standard

\*\* Requires a fitted TP CHIP KIT (optional)

 $^{\star\star\star}$  Coupling point load max. 500 kg and total weight of trailer hitch max. 5000 kg



### TP 230 PTO K

#### PERFECT FOR WOOD CHIPPING ALONG ROADS

With its side-facing funnel, the TP 230 PTO K is an ideal choice when the material that is to be wood chipped is typically located along the side of roads and paths. TP 230 PTO K is a powerful wood chipper with hydraulic in-feed, which ensures large capacity and powerful in-feed, even with whole trees.

The machine is equipped with three knives and a sliver breaker set, which produces good woodchip that is ideal for burning, e.g. in wood furnaces.

Like the other wood chippers in the segment, TP 230 PTO K is very service-friendly. Both a replaceable casing in the disc housing and scrapers that ensure material does not accumulate, results in low-cost maintenance.

#### **PRODUCT INFORMATION**

- Includes an integrated trailer hitch, if trailer hitching is desired
- Supplied as standard with short, rotatable ejector spout, with several variant options, including long ejector spout along length of tractor
- Adjustable knives for variable woodchip size
- TP SERVICE BOX with critical wearing parts included
- The vertical toothed rollers ensure powerful and problem-free wood chipping



#### **CRANE OPTIONS**

Crane model	MOWI P20	MOWI P30
Crane operation	TP 1-HAND CONTROL C	or TP 2-HAND CONTROL
Reach with crane	4.7 m	5.7 m
Lifting capacity in outer position	450 kg	450 kg
Grab and rotator	Grab TG 16R and rotator 3t	Grab TG 16R and rotator 3t



## **TP 250 PTO K**

#### FOR LARGER AND MORE DEMANDING TASKS

The TP 250 PTO K is the solution when large capacity, flexibility and uniform woodchip quality is required. The disc wood chipper with hydraulic in-feed is an efficient machine for clearingup areas and wood chipping branches up to 250 mm in diameter. The large disc with three knives in combination with three counterknives, 90 degrees chipping angle and two horizontal in-feed rollers ensure very efficient wood chipping, from thin logs to whole trees.

Extremely service-friendly and with a divided disc housing, providing easy and fast access to the knives, etc.

TP 250 PTO K is the only crane model built with a TP TWIN DISC. In contrast to a traditional solid disc, TP TWIN DISC is made up of two discs, which are welded together around assembly plates. It ensures the necessary strength and rigidity – without the disc becoming so heavy that it affects efficiency. In addition to the high strength and ejection force, TP TWIN DISC produces less wear on the rear of the disc housing.

#### **CRANE OPTIONS**

Crane model	MOWI P20	MOWI P30
Crane operation	TP 1-HAND CONTROL of	or TP 2-HAND CONTROL
Reach with crane	4.7 m	5.7 m
Lifting capacity in outer position	450 kg	450 kg
Grab and rotator	Grab TG 16R and rotator 3t	Grab TG 16R and rotator 3t

#### **PRODUCT INFORMATION**

- Supplied as standard with short, rotatable ejector spout, with several variant options, including long ejector spout along length of tractor
- Hydraulic adjustment of the roller speed and therefore chip size
- Replaceable casing in the disc housing and scrapers that ensure material does not accumulate.
- TP SERVICE BOX with an extra set of critical wearing parts included





## **TP 270 PTO K**

#### **SUPERIOR CAPACITY WITH 45° FUNNEL**

TP 270 PTO K is a powerful wood chipper with hydraulic in-feed, which ensures large capacity and powerful in-feed, even with whole trees. The funnel is at an angle of 45° to the direction of travel, and provides optimal working conditions in practically any situation.

The machine is equipped with three knives and a sliver breaker set, which produces good woodchip that is ideal for burning, e.g. in wood furnaces. Adjustable knives for variable woodchip size.

Supplied as standard with short, rotatable ejector spout, with several variant options, including long ejector spout along length of tractor.

#### **PRODUCT INFORMATION**

- Includes an integrated trailer hitch, if trailer hitching is desired
- Divided disc housing, providing easy and fast access to the knives
- Replaceable casing in the disc housing and scrapers that ensure material does not accumulate, results in low-cost maintenance.
- TP SERVICE BOX with an extra set of critical wearing parts included
- Includes hydraulic rotatable ejector spout and electronically controlled spout



#### **CRANE OPTIONS**

Crane model	MOWI P30	MOWI 400
Crane operation	TP 1-HAND CONTROL C	or TP 2-HAND CONTROL
Reach with crane	5.7 m	6.2 m
Lifting capacity in outer position	450 kg	480 kg
Grab and rotator	Grab TG 16R and rotator 3t	Grab TG 22R and rotator 3t







### **TP 320 PTO K**

#### **POWERFUL WOOD CHIPPER FOR ROW FELLING**

TP 320 PTO K is a very powerful and compact wood chipper, which is ideal for row felling or clear felling. The integrated crane solution provides major advantages when working on wind belts or along roads. The wood chipper is fitted to the tractor's 3-point suspension and a high-tip trailer is fitted to the front end of the tractor. The long ejector spout moves the woodchip across the length of the tractor, directly into the high-tip trailer. A hydraulic rotatable ejector spout with an electronically controlled spout can be attached, so that the woodchip ejection can be adjusted quickly and easily.

Two vertical feed rollers with powerful teeth ensure superior intake power, while the knife system TP OPTICUT with four knives distributed in pairs on the disc, greatly reduces the vibrations from wood chipping.

The rpm monitor TP PILOT K, ensures that the tractor is not overloaded during operation, and has many other functions, including automatic adjustment of the roller and disc rpm.

#### **CRANE OPTIONS**

Crane model	MOWI P30	MOWI 400
Crane operation	TP 2-HAND CONTROL	TP 2-HAND CONTROL
Reach with crane	5.7 m	6.2 m
Lifting capacity in outer position	450 kg	480 kg
Grab and rotator	Grab TG 16R and rotator 3t	Grab TG 22R and rotator 3t

#### **PRODUCT INFORMATION**

- For the full utilisation and optimal visibility, it is necessary to use a tractor that is equipped with a rotatable cab seat
- Purchasing a TP CHIP TRAILER means you have the complete biomass production solution
- Adjustable knives for variable woodchip size. If smaller woodchip is required for use in a woodburning furnace, a TP CHIP KIT can be fitted, which contains sliver breakers and a screen in the ejector spout on the front of the disc.



#### **PRODUCT INFORMATION**

T 400

- For the full utilisation and optimal visibility, it is necessary to use a tractor that is equipped with a rotatable cab seat
- Includes a hydraulic rotatable ejector spout with an electronically controlled spout that can be attached, so that the woodchip ejection can be adjusted quickly and easily
- Adjustable knives for variable woodchip size. If smaller woodchip is required for use in a wood-burning furnace, a sliver breaker set, TP CHIP KIT can be fitted
- Extra boost option on roller compression (+50% compression)
- The integrated crane support and powerful crane flange ensures a compact and strong design with optimal weight distribution
- TP 400 COMPACT K is a variant, which is specially designed for secure fitting to tractors in the Fendt 900 series and Valtra S series. The special fitting requires technical training beforehand







# **TP 400 PTO K**

#### UNIQUE SHEER BRUTE STRENGTH AND EFFICIENCY IN A CLASS OF ITS OWN

TP 400 is the optimal machine for woodchip production in professional forestry. With capacity to produce up to 400 m<sup>3</sup> of woodchip an hour. Combined heat and power plants require this kind of woodchip.

A wide range of standard equipment includes a hydraulic belt drive coupling between the PTO and disc, automatic roller speed adjustment, integrated high-pressure hydraulics and divided disc housing with a hydraulic opening. The disc is equipped with the knife system TP OPTICUT, which has four knives distributed on the disc and reduces vibrations markedly and provides very even and stable wood chipping.

There is constant full control over the operation and functions via the rpm monitor TP PILOT K. This means the operator can monitor the rpm on the disc and the in-feed rollers, and the current temperature of the hydraulic oil from the tractor cab.

#### **CRANE OPTIONS**

Crane model	MOWI P30	MOWI 400 with vertical flange
Crane operation	TP 2-HAND CONTROL	TP 2-HAND CONTROL
Reach with crane	6.2 m	6.8 m
Lifting capacity in outer position	480 kg	480 kg
Grab and rotator	Grab TG 22R and rotator 3t	Specially adjusted grab TG 22R and rotator 3t







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Spare Parts Orders		
Monday - Thursday	07:30 - 15:00	
Friday	07:30 - 14:00	

#### WOOD CHIPPERS SINCE 1980

Linddana has designed, manufactured and marketed TP Wood Chippers since 1980. Today, Danish company Linddana is one of the world leaders in its field, supplying a strong selection of functional and reliable wood chippers for landscaping and biomass production.

#### **TECHNOLOGY AND PEOPLE**

Linddana's strong international position is founded on extensive technical expertise and a commitment to high quality, both in the selection of materials and in manufacturing processes. By combining skilled workmanship and using the latest manufacturing technology, we maintain the highest quality standards.



Dealer