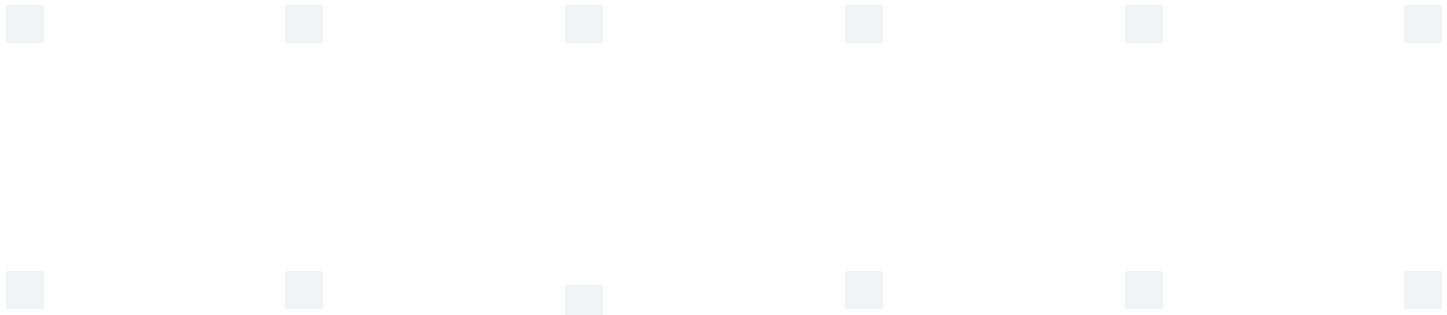


PALLMANN

Drum Chipper PHT



Drum Chipper PHT



Upgrading of your waste

Your wood assortments attain a considerable increase in value through conversion into high quality chips. Pallmann Drum Chippers type PHT produce high quality chips from long and short logs, slabs, edgings, thinnings, veneer waste or board trims. Pulp mills, paper mills, fiber- and particleboard plants use wood chips as an everincreasing degree. Chips are easy to transport and convey. They can be stored without difficulties and allow precise metering into refiners and flakers. Chips are also well suited as fuel for high intensity burning in modern heating plants.

A Pallmann Speciality

Chippers are special machines. For many decades Pallmann has manufactured size reduction machines for the woodworking industry. Steady development and intensive research, in close cooperation with our customers, brings technical progress and expansion to our machinery program. In addition to the standard chipper series Pallmann makes available special designs precisely attuned to all specific requirements, thus achieving optimum results. The most suitable

chipper size is selected in accordance with the maximum infeed size and the desired throughput capacity. The required chip length, which is in accordance with their end use, will also influence the performance rate. Feed roller speed, profile of the feed rollers, rotor knives are factory tuned to guaranty the desired product.

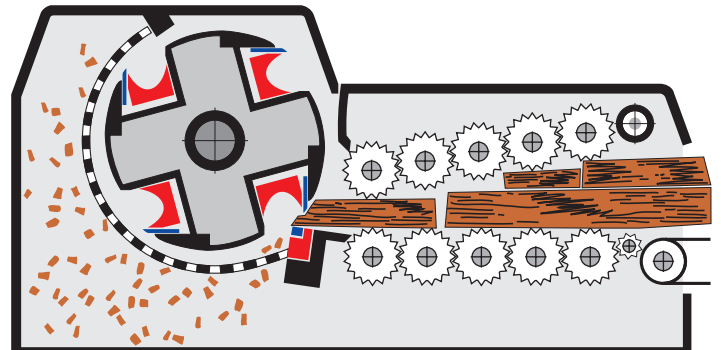
Reliable Feeding System

A belt or vibratory conveyor delivers the feed material to the chipper. As standard the belt is guided by large rollers and is supported in a heavy duty trough. A reinforced belt is employed when the feed material is dumped onto the conveyor by a side loader. Rubber buffers protect the belt against shock loads. A faster rotating cleaning roller, located between feeder belt and the adjoining lower feed roller, keeps short wood pieces from sticking and tearing at the feeder belt. If fines, sand etc. should be separated from the infeed material, a Pallmann vibratory feeder with built in screen section can be installed. Vibratory feeders convey any type of raw material. When installing a vibratory feeder the small cleaning roller is not needed. Pallmann recommends the installation of a metal detector to stop the infeed if metal is within the feed material, this will protect the chipper against damage. Short cut-offs are preferably conveyed to the feed rollers by a vibratory trough. A longitudinal orientation of short feed material is accomplished by the special profiled trough.

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Large Feed Rollers

To obtain a quality chip with a uniform length the infeed material has to be held firmly and advanced at a constant rate. This is accomplished at the Pallmann chipper by the heavy duty rollers with their coarse and sure gripping serration. Large feed roller diameters were selected purposely to assure certain and continuous feeding. The feed roller system is self cleaning due to the arrangement of the roller serrations. The upper rollers of the feeding system are located in pivoted roller carrier and adjust automatically to the infeed height. Flanged, robust geared motors drive the feed rollers. Shorter or longer chips can be obtained by changing drive ratios. Special feed rollers with replaceable segments or spikes are available for extremely abrasive feed materials. These wear parts can be exchanged without the need of feed roller removal.



Hydraulic Dampers

The upper feed rollers walk up onto the incoming feed stock and the pivoted roller carrier continuously adjusts to the layer thickness, thus assuring a perfect feed advance. Hydraulic shock absorbers supported by special hydro pressure vessels smoothen the movements of the heavy roller carrier. This proven damper system is also adjustable allowing regulation of the contact pressure of the upper feed rollers. Larger Pallmann chipper models are supplied with a remote controlled hydraulic lifting system for the upper roller arrangement. For larger chippers the hood can be opened hydraulically to have access for knife change.

Modern Rotor Design

The chipper rotor is of an extremely robust welded design. It is heat stress relieved and electrostatically balanced. Modern taper locks connect the heavy duty rotor shaft to rotor body and V-belt pulley. The chipper rotor is driven by a more than amply dimensioned V-belt drive. The momentum of the heavy rotor helps to equalize short shock loads. Knife pockets will be armour plated to reduce the extreme wear usually encountered when aggressive wood species, bamboo or similar



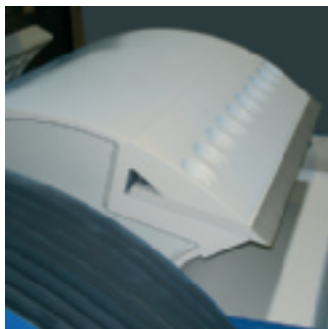
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materials are being processed. Exchangeable wear plates in special design built in into the rotor pockets allow an additional protection.

Especially Robust Bearings

Over dimensioned shafts and bearings at all Pallmann chippers assure quiet, vibration-free operation even during shock loads. The extremely heavy bearing housings, designed as flange bearings, are tightly bolted to the machine housing. Use of heavy duty, self aligning roller bearings results in long lifetimes even under continuous full load operating conditions.



Mechanical knife clamping



Knife fixing



Centrifugal wedge clamping (optional)



Knife change

Secure Knife Installation

Fly knives and knife cover plates are bolted to the rotor with single rows of special bolts. To change knives the rotor has to be exposed by opening the housing cover. This is done by hand at smaller chippers. At larger machines the cover is lifted by a push-button operated hydraulically. A fixing pin will hold the rotor in knife change position. Two turns will loosen the knife holding bolts. Spring pressure raises the knife cover plate for easy removal of the dull fly knife. The knife holding bolts are re-tightened after a preset and sharp knife has been fully inserted. A special geared torque wrench allows effortless and proper tightening of the knife holding bolts. For quick knife change Pallmann Drum Chippers can be supplied with a wedge clamping system. A hydraulic system, push button operated, releases the centrifugal wedge for knife change. A built in safety system prevents the knives from sliding out during operation. The knife setting is done in a jig outside of the machine for both fixing systems.

Simple Stator Knife

As anvil during chipping acts the stress relieved stator knife support, the cutting edge is given by the exchangeable stator knife, it is carried on a heavy slide.

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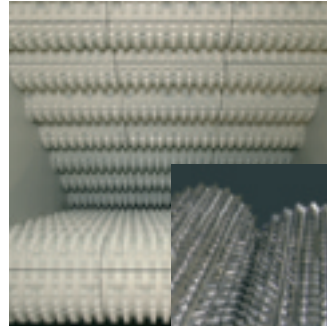
For stator knife change this slide can be pulled out sidewise after loosening the clamping wedges. Even under very heavy chipping conditions the stator knife will be hold tight in the correct position. Smaller chippers have flat-type and large chippers have square-type stator knives. On special request a hydraulic stator knife change can be supplied. The optimum location of fly knives and bed knives as well as best suitable cutting angle and wood infeed system provide a slanted cut and guarantee for the best chip quality and most economical chipping process.

Enlarged Screen

It is unavoidable that end pieces and cut-offs leave a small percentage of oversized splinters. Pallmann installs therefore a heavy breaker screen which effects a secondary size reduction. To obtain the largest possible screen area, the breaker screen has been extended from the chipper anvil and raised above the rotor to the machine hood. A breaker bar installed in the machine housing acts as a secondary stator knife and supports secondary reduction.

Safety In Every Detail

An automatic control system depending on the power pick-up of the main drive motor is controlling the infeed drive motors. Feeder belt and feed rollers will stop when motor overloads occur. Feed continuation is automatic after load drop off. Oversized feed stock larger than the maximum feed height will also stop the feed system. Ejection takes place through push-buttons



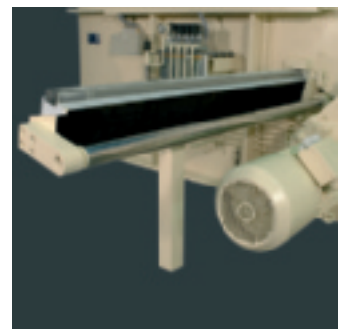
Infeed rollers with exchangeable segments or spikes



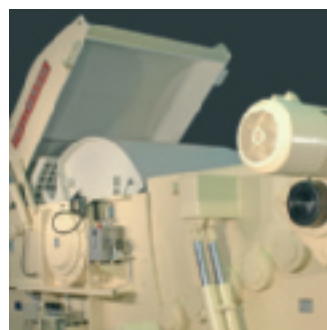
Screen



Main hydraulic unit



Stator knife



Rotor cover and rotor

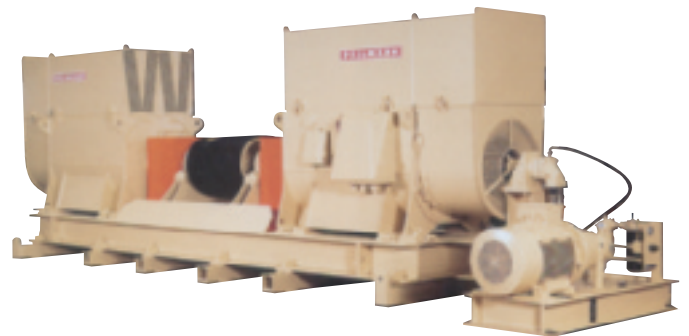


Knife setting device

controlled feeder reversal. The total chipper assembly can be stopped by activating an emergency switch.

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A limit switch makes it impossible to start the chipper while the machine hood is open. A safety bar in front of the infeed opening is in accordance with prescribed safety regulations. Thermistors protect the feed roller gear motors from overheating even during frequent automatic on-off operation. All Pallmann drum chippers are tested and approved by the "Berufsgenossenschaft Holz" a German selfcontrolling agency of the wood industry.



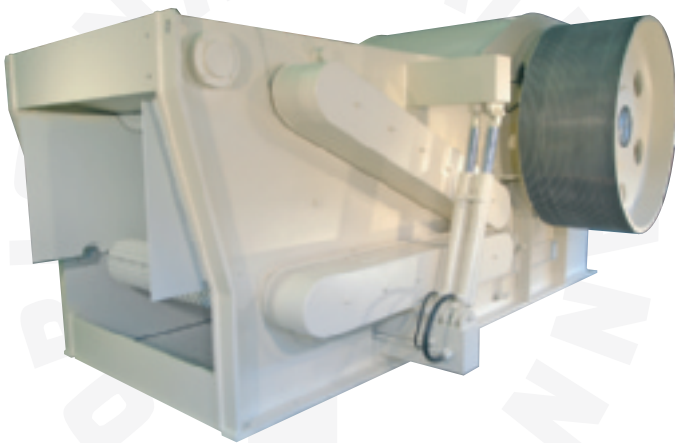
Special advantages of the well proven Pallmann drum chippers

High Quality Chips

Optimum chip quality is assured through the special feed system, the favourable chipper rotor configuration with its extra large chip pockets, the slanted cut and the enlarged screen area. Production of high quality chips for the particleboard industry as well as for the MDF industry. On request delivery of special machines designed for different chip lengths. Delivery of complete wood yards with feeding and complete discharge systems. Adapted to customised requirements. Knife clamping available via knife cover plate and bolts or centrifugal wedge. All Original Pallmann Drum Chippers are equipped with exchangeable wear plates in the chip pockets.

Many Applications

Chipping of round wood, slabs, core rolls, veneer waste, cut-offs, thinnings etc. of each wood species and moisture.



Drum Chipper PHT

Trouble Free Continuous Operation

Robust, simple design; machine building to the highest standards in modern manufacturing plants; use of high quality materials and their treatment with the most up to date techniques result in reliable productivity under severest operating conditions.

Low Operating Costs

Low maintenance feed system, long knife life, large regrindability of knives, quick knife and screen changes.

High Performance

Stated performance rates are liable and will be obtained with certainty.

Especially Robust Bearings

All chippers are equipped with over dimensioned shafts and bearings to assure smooth operation even during heavy shock loads.

Technical data

Type	Infeed opening [mm]	Main drive [kW]	Rotor Ø [mm]	Number of rotor knives	Feed rollers number Ø[mm]	Capacity [t/h]	Weight approx. [kg]
PHT	120 x 430	37 - 55	400	2/4	1+1 250	3 - 6	1200
PHT	180 x 720	75 - 100	600	2/4	1+1 396	8 - 14	4000
PHT	240 x 860	132 - 200	800	2/4	2+2 318	17 - 23	6000
PHT	330 x 860	160 - 315	1000	2/3	3+3 318	24 - 30	9000
PHT	440 x 860	250 - 400	1200	2/3	4+4 318	32 - 43	12000
PHT	440 x 1050	250 - 450	1200	2/3	4+4 318	40 - 46	14000
PHT	520 x 860	250 - 450	1400	2/3/4	5+5 318	30 - 44	16000
PHT	520 x 1050	315 - 400	1400	2/3/4	5+5 318	36 - 50	19000
PHT	520 x 1250	400 - 630	1400	2/3/4	5+5 318	43 - 59	22000
PHT	600 x 1050	400 - 630	1600	2/3/4	5+5 340	52 - 61	30000
PHT	600 x 1250	500 - 800	1600	2/3/4	5+5 340	62 - 73	34000
PHT	720 x 1250	560 - 900	1800	3/5	6+6 340	74 - 88	46000
PHT	720 x 1450	630 - 1000	1800	3/5	6+6 340	86 - 102	50000
PHT	850 x 1250	710 - 1120	2000	3/4/5	7+7 340	91 - 106	50000
PHT	850 x 1450	800 - 1250	2000	3/4/5	7+7 340	106 - 123	55000
PHT	1050 x 1450	900 - 1400	2400	3/4/5	7+7 396	99 - 117	70000
PHT	1050 x 1650	1000 - 1600	2400	3/4/5	7+7 396	112 - 132	77000

The capacity figures are based on 10% chipping square section use, chipping length 40 mm, wood density 450kg/m³ b.d.



The Pallmann Group of Companies

The Pallmann Group is the leading manufacturer for size reduction machinery in the wood products industry. The Pallmann Maschinenfabrik designs, manufactures and supplies tailor-made individual or complete solutions for the processing of raw material for MDF, OSB, particle board, waste wood and annual plants. At the headquarters in Zweibrücken, the Pallmann company runs the world's largest research and development plant as well as a training and service centre. More than 100 test machines are available for the preparation of various raw materials with subsequent laboratory analysis on industrial scale.

In addition to the manufacturing plants in Europe, North and South America, the Pallmann group has a world-wide sales and service network.



The Pallmann Program

Engineering and

Service:

Design and manufacturing
Research & development
Tests at industrial scale
Laboratory analysis
Worldwide service
Spare parts
Control systems
Process monitoring
Set-up & commissioning
Refurbishment

Components:

Debarkers
Universal flakers
Long log flakers
Disc chippers
Drum chippers
Knife ring flakers
Double stream mills
Hammer mills
Drum shredders
Bale breakers
Depithers
Refiners
Chip washing systems
Re-chippers
Pre-crushers
Impact hammer mills
Screen ring mills
Wing beater mills

System solutions for:

Flake production
Fibre production
Strand production
Recycling
Annual plants preparation

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