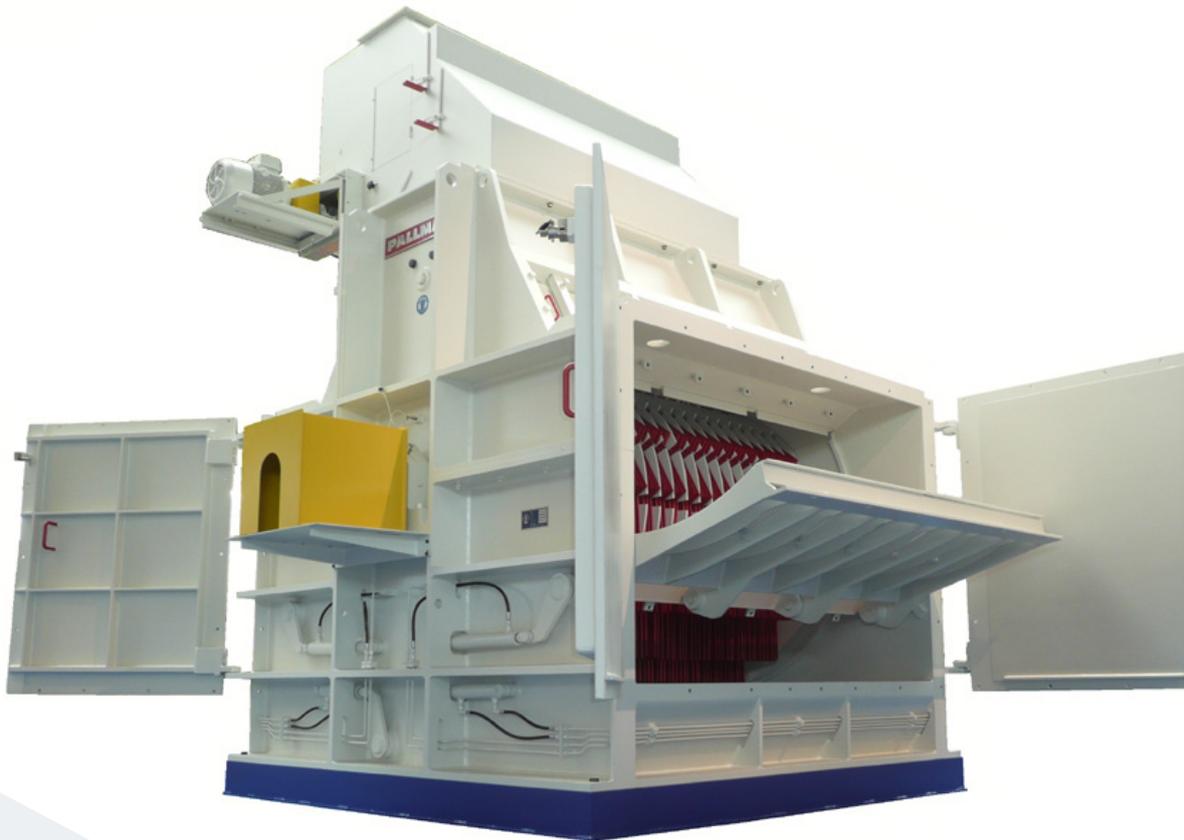


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# Production of wood flakes from dry, wet and highly wet wood chips



Hammer Mill PHM

**PALLMANN**

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# High quality flakes from waste- and fresh wood chips with the PHMS Hammer Mill.



## Area of Application

The Pallmann Hammer Mill, type PHMS is developed for the economical preparation of wood chips from waste- or scrap wood as well as from flakes and annual plants. The material produced is used for the production of core layer and surface layer material for board production and is suitable for the preparation of boiler fuel and particles for briquetting and pelleting.

## Design and Method of Operation

The material is spread over the full width by a vibratory feeder. The drum magnet separates ferrous impurities from the material stream. The gravity sifter „Cleanomat“ removes heavy particles based on specific material densities.

The size reduction process takes place between stationary grinding elements and rotating hammers. The perforation of the screen installed determines the final product size. The material is discharged straight down and can be transported pneumatically, or mechanically with an additional auxiliary aspiration system.

The symmetrically designed machine housing allows for operation of the mill in two working directions ensuring maximum utilization of the wear parts. The rotating flat steel hammers can swing back into the milling chamber in case of penetration of contaminants or coarse pieces. The screens are supported on a hydraulically operated frame for quick and easy exchange.



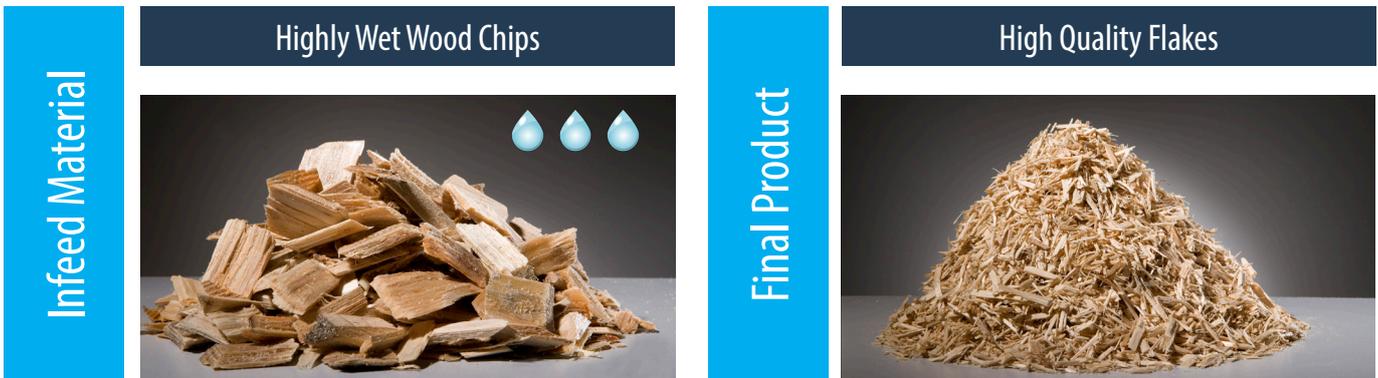
## Decisive Advantages

- › Uniform material preparation
- › High versatility and easy adaption to different infeed materials
- › Maximum utilization of all wear parts
- › Easy maintenance and high availability
- › Simple and safe operation



PHMS		8-6	12-12	12-18	16-20	18-20
Rotor diameter	mm	800	1.200	1.200	1.600	1.800
Rotor length	mm	600	1.200	1.800	2.000	2.000
Capacity *	t b. d. / h	1,5 - 2,0	3,0 - 5,0	7,2 - 9,5	10,5 - 14,0	13,0 - 17,0

# Waste wood chips with moisture $u > 100\%$ ? No problem for PHMC Hammer Mill.



## Area of Application

Surging demand by the pelletizing industry has caused a shortage of available sawdust and shavings. Numerous industries, like wood-based panelboard producers and power plants are forced to find alternative sources. Substitution of suitable replacements has become urgent to ensure a fiber supply and to prevent shortages. Wood chips are often the only available source.

## Design and Method of Operation

The feed material is introduced from above. Flat steel hammers rotating at high speed split the material mostly parallel to the grain. The screen opening mainly determines the width of the final product. The rotating flat steel hammers can swing back into the milling chamber in case of contaminants or coarse pieces. Multi-stationary grinding elements integrated into the mill assist in size reduction. Multi-screen zones allow the usage of variable screen openings in turning direction. The material discharge is straight down, product transport by means of mechanical conveyors, with additional auxiliary aspiration.

The symmetrically designed machine housing allows operation of the mill in two working directions ensuring maximum utilization of the wear parts. The screens are supported on a hydraulically operated frame for quick and easy exchange. Cleaning rollers are installed in the housing to keep the housing free of blockage and ensure secure operation especially when extremely wet chips are fed into the machine.



## Decisive Advantages

- › Processing of wet chips (moisture  $u > 100\%$ )
- › Improved and optimized grinding elements
- › Cleaning rollers -> blockage prevented even with highly wet material
- › Simple and safe operation
- › Maximum utilization and long lifetime of all wear parts
- › Easy maintenance and high availability

PHMC		16-14	16-20
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Rotor diameter	mm	1.600	1.600
Rotor length	mm	1.400	2.000
Capacity *	t b. d. / h	8,0 - 10,0	12,0 - 15,0

\* Depending on the wood species, conditions and machine settings



#### **System solutions for:**

- Flake production
- Fiber production
- Recycling of waste wood
- Annual plants preparation
- Thermal usage

#### **Engineering and Service:**

- Design and Manufacturing
- Research and development
- Control Systems
- Process monitoring
- Spare and wear parts for size reduction machines in PALLMANN quality
- Installation, commissioning, start - up
- Maintenance and repair service
- Operator training
- Technological training
- Retrofit and modernisation
- Warehouse stocking programs and logistic concepts



**Any questions?  
We've got answers**

Pallmann is the leading manufacturer of size reduction machinery for the wood products industry. Pallmann designs, manufactures and supplies tailor-made, individual or complete solutions for the processing of raw material for MDF, OSB and particleboard plants. At its headquarters in Zweibrücken, PALLMANN company operates the world's largest research and development center for size reduction technology as well as a training and service center. Numerous machines are available for the preparation of various raw materials including subsequent laboratory analysis on individual scale. Our global presence is ensured by our sales network for machinery as well as spare parts and after-sales service.

[www.pallmann.eu](http://www.pallmann.eu)



Pallmann Maschinenfabrik GmbH & Co. KG  
Wolfslochstraße 51  
66482 Zweibrücken | Germany  
+49 6332 - 802 0  
[wood@pallmann.eu](mailto:wood@pallmann.eu)

**Intelligent engineering  
for future generations.**