Effective log debarking for the MDF-/HDF and OSB industries

Debarker PD

PALLMANN
Effective debarking of short and long for MDF and OSB. Drum debarker type PDD.

Area of Application

The Pallmann drum debarker is used for logs of any length and diameter at high throughput capacities.

Design and Method of Operation

According to local conditions, the infeed can be either gravity fed through a chute or horizontally in conveying direction from the rear. The steel-drum is equipped with entrainers and bark removal slots. The retention time of the wood in the drum determines the degree of debarking and can be regulated by the exit gate opening. Optionally, the drum can be delivered without the bark removal slots. Bark must be separated after the debarking drum.

The robust modular construction is designed in one piece (smaller diameter; short drum length) or half shells that are then completed onsite. The drives are comes pre-assembled on frames.

The Pallmann drum debarker comes in two different basic drive design:

- power transmission with chain around the drum body
- cardan shaft driving the truck tires
- drives: electric motor + gearbox

Decisive Advantages

- Modular design concept
- Delivery in half shells possible to save freight charges
- Reliable and sturdy drive concept
- Easy and safe bark discharge by bark slots in the drum
- Prefabrication reduces erection time - low labor and time requirement; fast and easy to install
- Easily adjustable to different wood species, conditions and throughput by frequency controlled motors and moveable discharge gate
- Easy startup after shutdowns or cases of power failure - no removing of the logs to restart

<table>
<thead>
<tr>
<th>PDD</th>
<th>3-18</th>
<th>4-21</th>
<th>5-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum diameter</td>
<td>mm</td>
<td>3.000</td>
<td>4.000</td>
</tr>
<tr>
<td>Drum length</td>
<td>mm</td>
<td>18.000</td>
<td>21.000</td>
</tr>
<tr>
<td>Capacity *</td>
<td>t b. d. / h</td>
<td>20.0 - 40.0</td>
<td>50.0 - 70.0</td>
</tr>
</tbody>
</table>

* Depending on the wood species, conditions and machine settings
Decisive Advantages

- Modular design
- Each rotor is driven by its own hydraulic drive -> rotation direction and rotating speed can be separately controlled for each rotor
- Low energy demand
- 2 or 3 main rotors with exchangeable debarking tools
- Easy changing of the tools
- Different types of debarking tools available
- Hydraulically controlled outlet gate
- Debarking degree influenced by rotor revolution speed, numbers and type of tools and adjustment of the end gate

Area of Application

Pallmann debarkers allow for proper log debarking for the MDF-/HDF- and OSB industries as well as for all other high demanding applications and processes that require properly debarked round wood as a raw material.

Design and Method of Operation

Pallmann combines rotary action and friction by log-to-log contact for efficient bark removal. The results are properly debarked logs even from difficult and widely varying wood species in any operating condition. High throughput rate is guaranteed even for small diameter logs. The Pallmann Rotor Debarker is designed as a modular system to be adapted to the requirements of the customer. It consists of a stationary trough shaped housing and 2 or 3 rotors in parallel arrangement. Each rotor group is equipped with a separate drive.

Because of the compact design, space and foundation requirements of the debarker are minimal. The single assembled components are delivered to the site thus reducing installation costs to a minimum. Round wood can be fed either parallel to the rotors, laterally or in conveying direction from the rear.

The logs are grasped by the debarking tools (cams) mounted on the rotors and set into rotation as a whole bundle of logs whereby the individual logs are spinning on their own axis. This concept allows smooth, simultaneous debarking of small and large diameter logs with little wood breakage or loss. Adjustment of debarking degree by frequency controller and position of the discharge gate. The bark is discharged between the intermeshing tools of the rotor. It is pressed through the slots due to the rotor rotation with the debarking elements and is size reduced when passing through the slots.

* Depending on the wood species, conditions and machine settings
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

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 Maschinenfabrik GmbH & Co. KG
Wolfshochstraße 51
66482 Zweibrücken | Germany
+49 6332 - 802 0
wood@pallmann.eu

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