### High performance

**Only the best available solution on the market is good enough to serve our customers**

For more than a century, Pallmann has been developing and building machines for the size reduction industry. Pallmann’s market leading position is a result of our philosophy to provide our customers efficient and at the same time precise, robust and long lasting machines and complete systems.

### Application

The innovative Pallmann Rotor Debarker PRD is designed for proper debarking of logs 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 raw material. The Pallmann Debarker is the latest development in debarking technology. It reflects the optimum combination of experience gathered in practical operation and highly developed engineering skills. Each component of the system is designed for utmost reliability and economy in the woodyard process. Constant improvements made with and for our customers have also resulted in a maintenance-friendly system with maximum availability.

### System Description

The Pallmann Rotor Debarker type PRD 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 conditions. High throughput capacity 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 3 rotors in parallel arrangement: The main rotor in the bottom of the debarker and the central and upper rotors in the side walls of the trough. Main and secondary rotors are driven together. Each module is equipped with a separate drive. Thanks to the compact design, the space and foundation requirement of the debarker are minimal. The single components are supplied prefabricated and are assembled on site thus reducing labor costs to a minimum. Round wood is usually fed laterally into the debarker. The logs are grasped by the debarking tools (cams) mounted on the main rotor and set into rotation as a whole bundle of logs as well as spinning on their own axis. The narrow design of the trough transports the logs parallel through the debarker thus avoiding tumbling and dropping of the logs as in a debarking drum. The parallel material flow allows smooth and simultaneous debarking of small and large diameter logs without breakage of thin logs and prevents damaging of the log ends. The bark is discharged between the intermeshing tools of the main and the central rotor. The bark is sheared in a scissors

### Technical Data

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of modules</th>
<th>Capacity o. d. t/h average log diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80 mm</td>
<td>100 mm</td>
</tr>
<tr>
<td>PRD 02/35</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>PRD 03/55</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>PRD 04/75</td>
<td>4</td>
<td>26</td>
</tr>
</tbody>
</table>
like action by the tools when passing through the slot and thus pre-cut. Depending on further utilization of the bark, the installation of a bark shredder is not required in many cases. The Pallmann Rotor Debarker allows flexible control of the process. Filling level, retention time and throughput capacity are adjustable. The modular design ensures that the system can be sized to fit the specific requirements of any operation. As an option, detachable cams are available. Modifications of the cam design are possible to offer greater flexibility when dealing with changing raw material and ambient conditions.

Customer benefits

- Compact design resulting in small space requirements.
- High throughput capacities, even for small log diameters.
- High degree of prefabrication thus fast and easy to install, reducing set-up time and labor costs.
- Low sound emission in comparison to a drum debarker - resulting in lower requirements on building design or no building at all.
- No tumbling and dropping of the logs in the trough but parallel debarking action thus simultaneous debarking of small and large diameter logs that avoids unnecessary wood loss.
- Many adjustments possible to adapt the equipment to different wood species, ambient conditions and throughput.
- Bark is discharged by intermeshing tools of main and central rotor allowing the pre-shredding of the bark.
- Easy re-starting after shut downs even when filled.
- Economical operation, low energy consumption.
- Efficient debarking even of crooked wood and difficult shapes.

<table>
<thead>
<tr>
<th>Lenght</th>
<th>Height</th>
<th>Width</th>
<th>Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>kW</td>
</tr>
<tr>
<td>12,510</td>
<td>3,915</td>
<td>2,450</td>
<td>2 x 55</td>
</tr>
<tr>
<td>19,200</td>
<td>3,915</td>
<td>2,450</td>
<td>2 x 55 + 37</td>
</tr>
<tr>
<td>25,900</td>
<td>3,915</td>
<td>2,450</td>
<td>2 x 55 + 2 x 37</td>
</tr>
</tbody>
</table>
The Pallmann Group

The Pallmann Group is the leading manufacturer of size reduction machinery for the wood products industry. Pallmann Maschinenfabrik 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. More than 130 test machines are available for the preparation of various raw materials including subsequent laboratory analysis on individual scale. In addition to the manufacturing plants in Europe, North- and South America, the Pallmann group has a worldwide sales and service network.

The Pallmann Program

Engineering and Service:  
Design and Manufacturing  
Research and development  
Tests at industrial scale  
Laboratory analysis  
Worldwide service  
Spare parts  
Control systems  
Process monitoring  
Installation and start-up  
Maintenance and repair  
Project Management

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

System solutions for:  
Flake production  
Fiber production  
OSB-production  
Recycling  
Annual plants preparation  
Thermal usage

PALLMANN Maschinenfabrik GmbH & Co.KG  
Wolfslochstraße 51  
66482 Zweibrücken  
Germany  
Phone: +49 6332 802 0  
Fax: +49 6332 802 511  
E-mail: wood@pallmann.eu  
http://www.pallmann.eu

PALLMANN America Inc.  
6420-A1, Rea Rd. Suite 335 Charlotte  
NC 28277  
USA  
Phone: +1 704 543 4400  
Fax: +1 704 543 5580  
E-mail: sales@pallmannamerica.com  
http://www.pallmannamerica.com

PALLMANN do Brasil Ind. e Com. Ltda.  
Av. Presidente Juscelino, 11 56  
09950-370 Diadema S.P.  
Brasil  
Phone: +55 11 4075 3044  
Fax: +55 11 4075 4968  
E-mail: pallmann@pallmann.com.br  
http://www.pallmann.com.br

PALLMANN Moskau Office  
Leninskiy prospekt dom 158  
Office Nr. 206  
119571 Moskau  
Russland  
Phone: +7 495 232 15 21  
Fax: +7 495 232 15 22  
E-mail: info@pallmann.ru

PALLMANN Beijing Representative Office  
Room 907, 9th Floor, Tower B  
West Wing of COFCO Plaza  
No.8, Jianguomennei Dajie, Dongcheng District  
100 005 Beijing, China  
Phone: +86 10 8511 8668 26  
Fax: +86 10 8511 8668 25  
E-mail: info@pallmann.com.cn