

# Profitable Reduction in Volume of Waste Wood with primary Crusher "Dracula".

**Bulky waste wood assortments demand a primary crushing before transportation to the subsequent processing equipment.**

Reduction of transport costs resp. increase of throughput capacity of downstream size-reduction equipment thanks to optimized metering possibilities of the precrushed feed material is a must with regard to economical processing.

Legislation demands maximum recycling of waste wood, the combustion being considered as last option only. This waste resp. residual wood or urban wood is a mix of most different assortments such as e.g. packing material, pallets or other transport packagings. When modernizing old buildings a large amount of uncontaminated demolition lumber is generated, which, if properly prepared, may represent a valuable raw material for the particle board industry. The law enforcement of taking back of old wood furniture means a new challenge for the waste wood preparation plant managers and new problems which they do not know yet how to solve them.

Pallmann has developed new size-reduction equipment especially for these needs. The precrusher "Dracula" has a huge infeed chute which at the same time serves as a storage bin. Depending on the installation of the machine, the type of feed material and the conditions on site, the material can be fed into the storage bin by means of a front loader, a conveyor belt or another conveyor system.



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The teeth of a slow-speed rotor are tearing off parts of the large size material which then gets further crushed on the following auxiliary size-reduction bars.

The crushed material is discharged out of the machine laterally whereby a grate determines the final particle size. Special machine designs allow precrushing of whole particle board resp. MDF board piles. According to client's requirements the rotor can be driven either by an amply-dimensioned gear motor, elastic coupling and multiple chain or by a hydraulic motor.



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Picture 1: "Dracula" with lateral material discharge

Picture 2: Drive unit for "Dracula", amply-dimensioned with gear motor and multiple chain drive

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TOP PERFORMANCE IN SIZE REDUCTION

## Decisive advantages at first sight:

- Slow-speed rotor, extremely quiet operation
- Different crushing teeth patterns on the rotor adapted to material and requested degree of preparation
- Easy feeding thanks to generously sized storage bin
- Low dust generation thanks to slow-speed rotor
- Simple re-armouring of the crushing teeth
- Lateral material discharge, no expensive foundations are required
- Troublefree operation, no bridging of material thanks to special devices installed into the storage bin
- Sturdy rotor and drive make the machine resistant to foreign matter
- Throughput capacity increase for downstream size-reduction equipment thanks to reduced volume of feed material and consequently easier metering
- After precrushing, large ferritic contamination can be easily separated
- Special designs available for preparing piles of particle- resp. MDF board
- Mobile models available on request
- Final particle size of the pre-crushed material can be determined by different available machine configurations

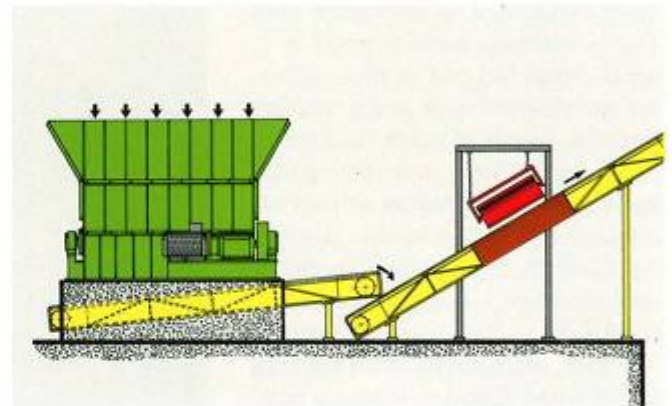
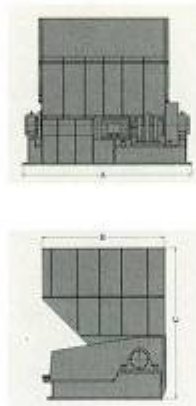


Picture 1: Feed chute of the "Dracula" filled with pallets



Picture 2: Lateral discharge of crushed material, therefore no expensive foundation required

Picture 3: Waste wood preparation for coarse size-reduction in the slow-speed precrusher "Dracula"; material evacuation via conveyor belts and separation of the already set free ferritic parts by means of a magnet



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| Machine Type    |     | PBEW 8-15 | PBEW 8-25 | PBEW 8-35 | PBEW 10-35 |
|-----------------|-----|-----------|-----------|-----------|------------|
| Infeed opening  | mm  | 2300×1500 | 2300×2500 | 2300×3500 | 3300×3500  |
| Rotor diameter  | mm  | 800       | 800       | 800       | 1000       |
| Rotor length    | mm  | 1500      | 2500      | 3500      | 3500       |
| Drive capacity  | kW  | 45-55     | 55-75     | 75-90     | 132-160    |
| Dimensions      | mm  |           |           |           |            |
| A               |     | 2470      | 3470      | 4470      | 4700       |
| B               |     | 2600      | 2600      | 2600      | 2900       |
| C               |     | 3100      | 3100      | 3100      | 3300       |
| Weight          | t   | 11        | 15        | 19        | 30         |
| Throughput rate | t/h | 6-10      | 10-15     | 14-20     | 20-30      |



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