

## Long Log Strander PZU

Economical one-step production of highest quality strands

Infeed Material

Debarked Wood Logs

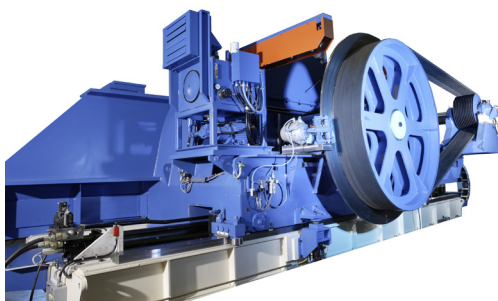
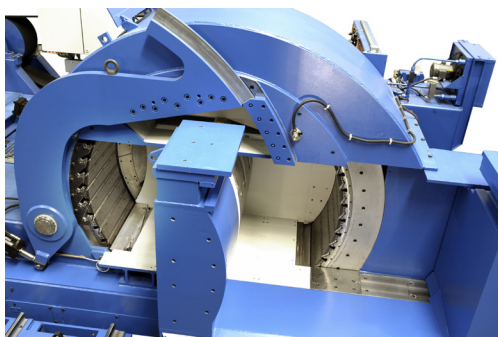


Final Product

Highest Quality OSB Strands



## Pioneer in knife ring stranding technology. The Ultimate Strander PZU.



### Area of Application

PALLMANN invented the knife ring **Long Log Strander PZU** for the production of quality strands with a low percentage of fines, for the production of OSB-boards.

### Design and Method of Operation

It consists of a loading station – **the batch feeder PZUB** – and the strander PZU. Logs, the preferred feeding material, are fed either via a crane from above directly to the loading station or from a storage deck from the side.

The batch feeder, is available for different log lengths. Aligning elements shake the log bundle parallel to the grain and allow high filling degree to achieve high capacity.

A special version of the batch feeder, the '**pocket loader**' moves into the trough of the batch feeder from the side and reduces the loading width of the trough. Thus, the logs align perfectly for fiber parallel stranding. During log feeding a gate closes the loading section and slides out of way after the batch is formed. The batch feeder is equipped with two pushers: 1) The batch loader (bottom pusher) at the loading area is controlled by operator and pushes the logs into the strander or take-over position. 2) The log feeder (top pusher) takes over for automatic mode with the strander and pushes the logs in cycles into the cutting chamber.

### Decisive Advantages

- Excellent ratio between loading and cutting times
- High strand quality with low content of fines.
- Even strand geometry and smooth strand surface
- Improved and simpler maintenance
- Constant cutting speed over the complete length of knives

The stranding process takes place in cycles on the inside of the knife ring. The combination of the high-performance hydraulic positioning unit and the intelligent PLC system provides a consistent traversing speed even at varying loads = uniform strand thickness. Scoring knives in the ring determine the strand length and adjustable breaker bars are installed for strand width control. The knife ring is made with high accuracy from high-strength, low-wear steels. Since all wear parts can be easily replaced, high service life of the knife ring is ensured.

PALLMANN unique feature, the centrifugal clamping of the knife packages allow release of up to six knife packages at a time for quick knife change and high uptime of the strander. Knife clamping in bolted design is optionally available.

As an option, the machine can be equipped with an automated knife change system. During this process, several knife packages are automatically released, ejected to the front and exchanged with new knife packages. Cleaning of the pocket is automatic.

### Pallmann Long Log Strander PZU

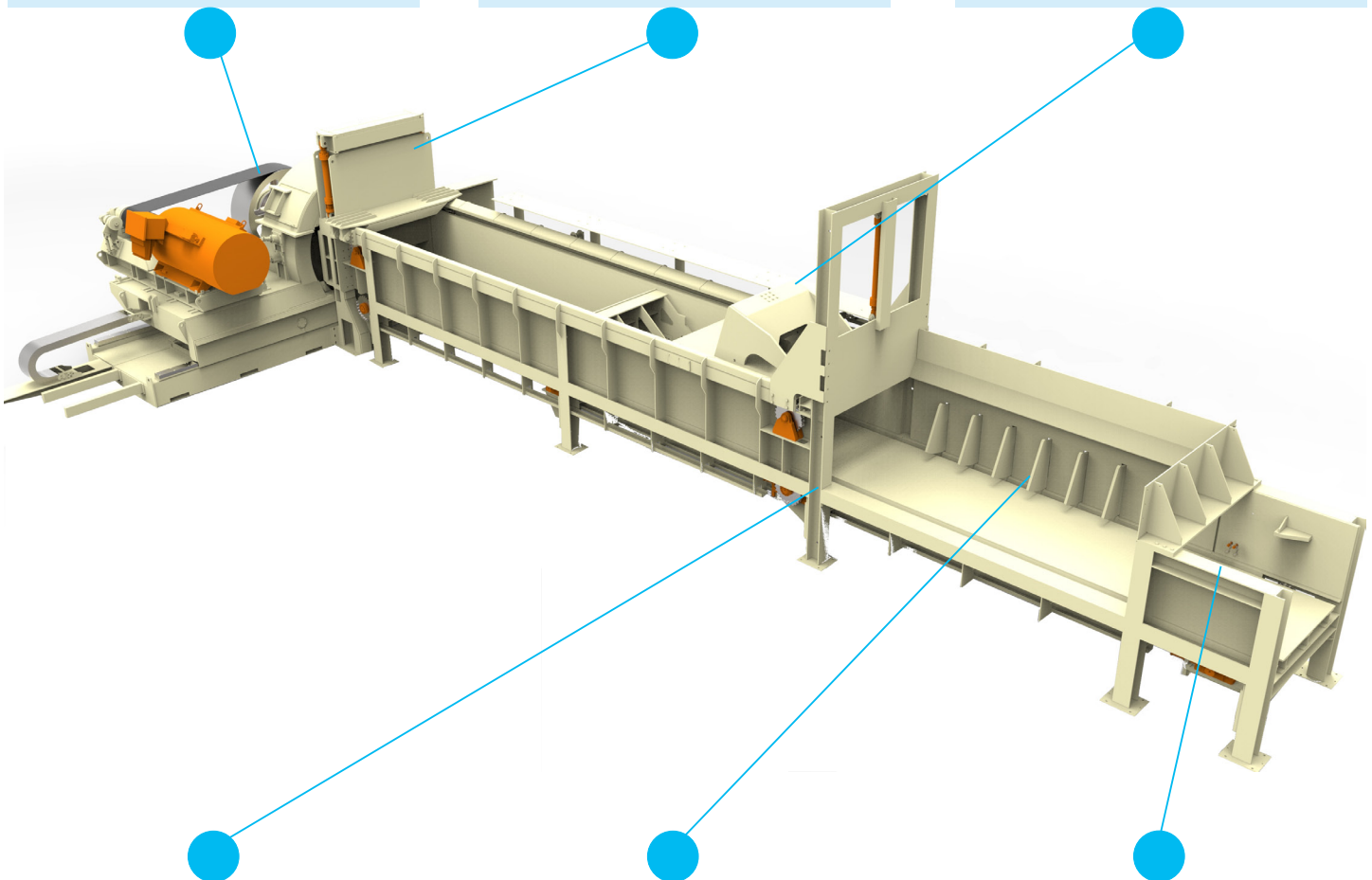
- Knife ring = constant cutting speed over full length of the knife
- High strand quality with low percentage of fines
- Fiber parallel stranding

### Weight tower

- Heavy weights in front of the strander hold the logs in place during the cutting cycle
- Reduction of fines
- Single hydraulic cylinder operation

### Batch feeder PZUB - log feeder

- Automatic batch loading into the strander
- Hydraulic swivel pusher allows wood-length optimized programming
- Knife length equalizing logic



### PZU - front gate

- Closed during loading process of logs into the batch feeder
- Limits the batch length in feeding direction during feeding process
- No logs can slide out to the front

### PZU - aligning elements

- Optimal alignment of the logs
- Shaking the log bundle during or after the feeding process
- Crane feeding or deck feeding

### PZUB - batch loader

- Limit the length of the batch during feeding process
- Adjustment of the batch in length
- Pushing the batch into the flaker until take-over of the log pusher

PZU		19-725	19-800	22-725	22-800	24-800
Knife ring diameter	mm	1.900	1.900	2.200	2.200	2.400
Number of knives	pieces	42	42	48	48	54
Knife length	mm	725	800	725	800	800



## 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



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# PALLMANN

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. More than 100 test 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.

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