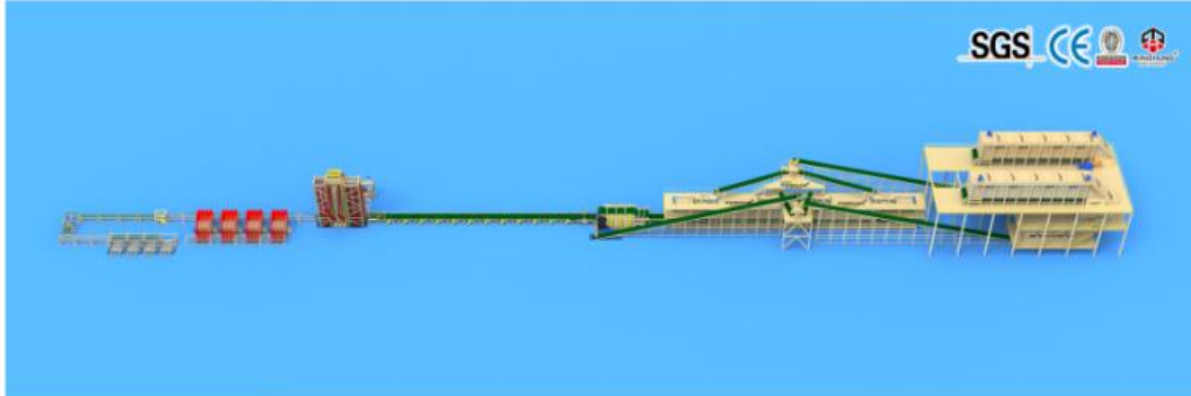


OSB Production Line



Oriented Strand Board, commonly known as OSB, is a type of engineered wood panel made by compressing and bonding strands of wood together with resin. These strands, typically obtained from fast-growing trees like aspen or poplar, are oriented in specific directions to enhance the board's strength and dimensional stability. Oriented Strand Board (OSB) has gained immense popularity in the construction industry due to its durability, cost-effectiveness, and eco-friendly nature. This engineered wood product is widely used in various applications, including flooring, roofing, and sheathing.

The Production Process of OSB:

1. Wood strands making section:

The first step in manufacturing OSB involves the stranding process. Logs are debarked and then cut into small strands using a large rotary drum or a disk chipper. The surface wood strands are produced by fast speed veneer peeling machine, which speed can be 200m/min, keep large capacity, and ensure wood strands evenly and balance, be helpful for surface smooth. These strands are typically 2 to 8 inches long and 0.02 to 0.06 inches thick. The strands are then sorted based on size and quality.

2. Screening section:

Flakes or strands must be graded into different fractions according to their size in order to form the layers of the panel. At the same time, standard and suitable wood strands, small sawdust, and oversize strands are sorted out. This is done by sieving in a drum screen.

Advantages of our Vibrating screen:

- > Strong screening ability, and good screening affect
- > With frame screen box, ensure more stronger and durable
- > Great elastic vibration support
- > Mature and perfect motion balance technology
- > Stable and reliable operation and long life span
- > With Self-cleaning system
- > Cover small space

3. Drying section:

After the stranding process, the wood strands undergo drying to reduce their moisture content. This is crucial to ensure the stability and quality of the final product. The strands are dried in large industrial dryers until they reach an optimal moisture level.

In general, drying is convection drying in a drum dryer: the particles slowly pass through an elongated, rotating drum that is inclined slightly downwards. Hot air flows through the drum in the opposite direction and absorbs the moisture. The energy required for drying is usually supplied by a hot gas generator.

Advantages of our Drying machine:

- <1> Drying efficiency is high, less heat consumption, and energy conservation
- <2> Wood strands' shape keep good during drying
- <3> More safety with Oxygen-free drying

4. Blending and Resination section:

Once dried, the wood strands are blended with resin, typically a melamine-urea-formaldehyde adhesive. The resin helps bind the strands together and provides additional strength and moisture resistance to the OSB. The blending process ensures an even distribution of resin throughout the wood strands.

Advantages of our Blue blending system:

- > Advanced production technique, make sure it works good
- > Mature machine feature, and new type misting nozzle, ensure uniform spreading glue

5. Mat Formating section:

The blended strands are spreaded uniformly onto a conveyor belt to form a mat. During this process, a specific orientation is achieved by aligning the strands in a cross-directional pattern. This cross-directional arrangement enhances the structural integrity of the OSB.

6. Continuous Pre-press section

The formed mat is relatively fluffy, and thickness is too thick, so it will be transferred to the Pre press machine before hot press machine.

Advantages:

- > Remove air trapped in the slab, this is also referred to as deaeration.
- > Make the slab has a certain density, improve its own support strength, to ensure that the slab does not break and damage during conveying, cutting, and loading.
- > Reduce slab thickness
- > Be helpful to improve hot press machine working speed

7. Hot Pressing section:

The mat is transferred to Multi-opening hydraulic hot press where heat and pressure are applied. The heat activates the resin, causing it to cure and bond the strands together. The pressure ensures a strong and uniform bond throughout the board. The pressing process typically takes a few minutes, depending on the desired thickness and density of the OSB.

8. Trimming and Finishing section:

After the pressing process, the OSB panels are trimmed to the desired dimensions using saws. The edges are smoothed, and the panels are inspected for any defects. Surface treatments, such as sanding or embossing, may be applied to improve the appearance and performance of the OSB.

9. Electronic control system:

We use good brand control parts like Siemens PLC control system, Schneider switch, and others, and it is Fully automatic control

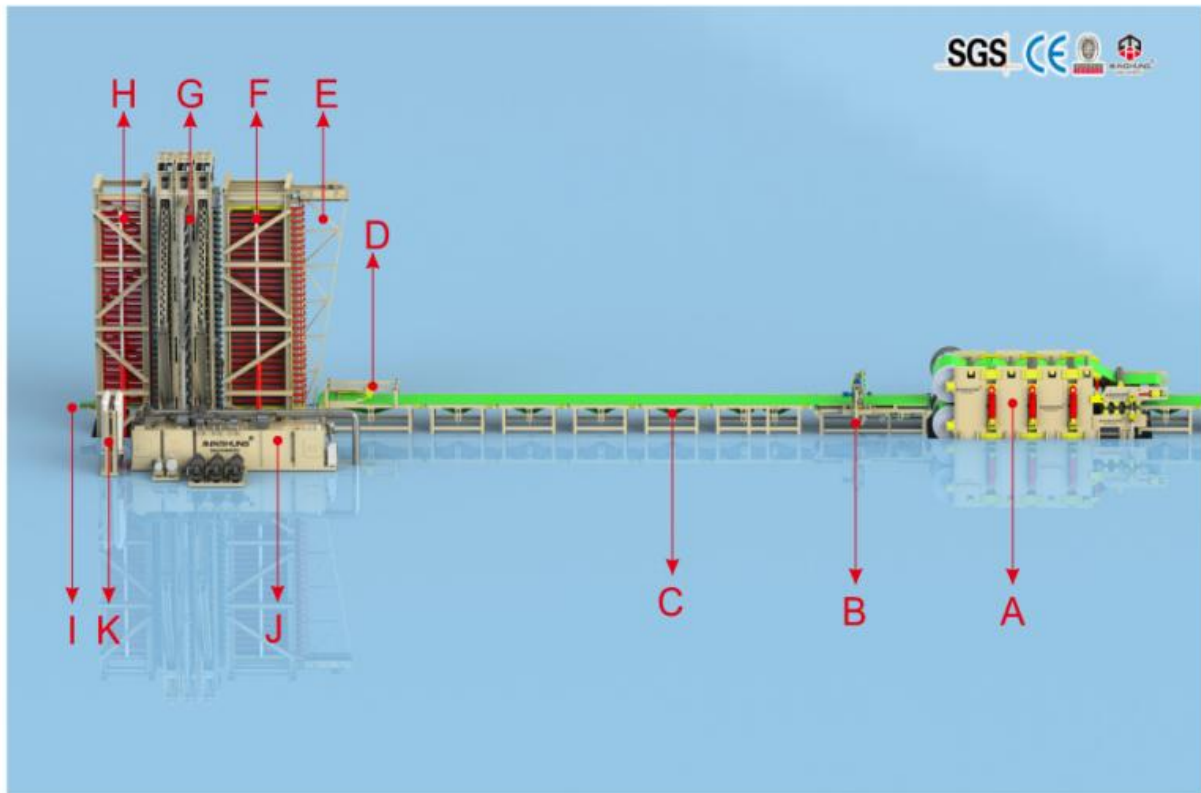
10. Energy center

Energy center is designed to offer heating energy for wood based panel industry, it uses the wood bark, panel waste, veneer waste, sawdust and others come out from Panel production as the fuel, producing multiple heat carrier as the conduction oil, steam, hot wind and so on. It realizes High efficiency, Energy conservation, Environmental protection.

The production process of OSB involves several intricate steps. Each step is carefully executed to ensure the production of high-quality OSB with excellent strength, durability, and dimensional stability.

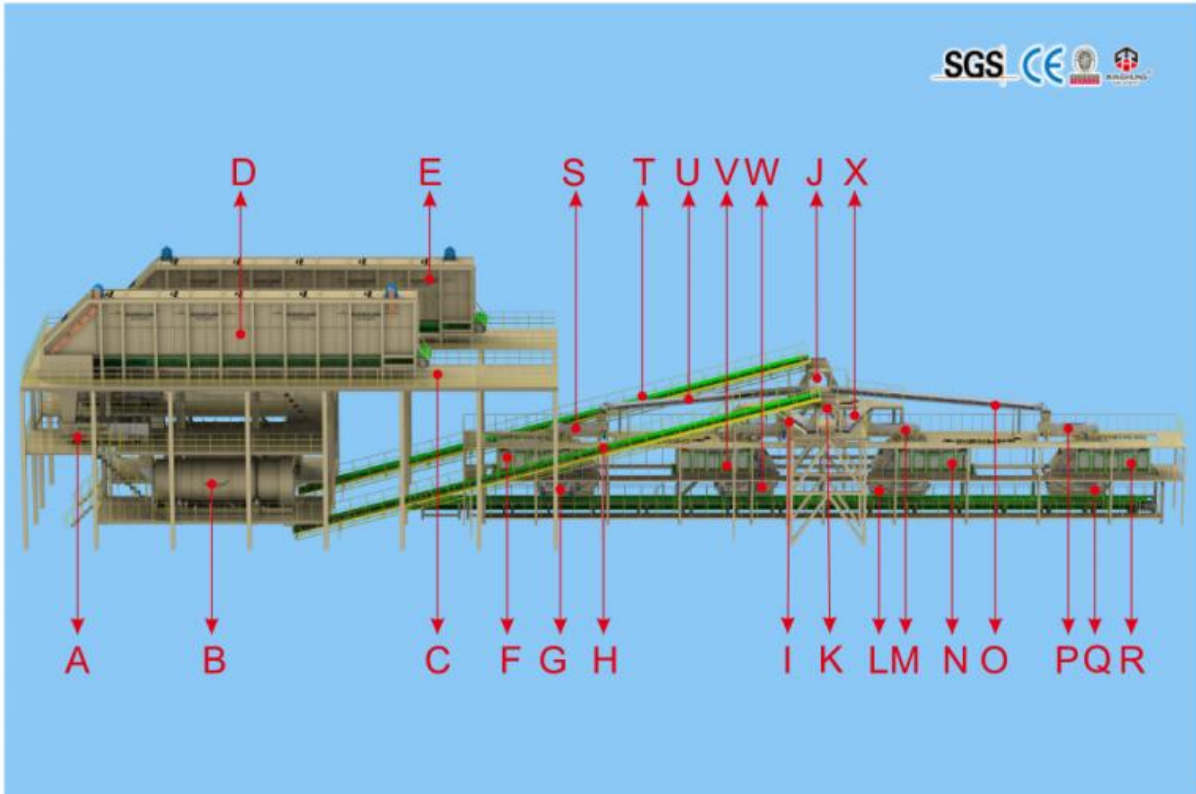


Multi-opening hot press and Continuous pre press Line



- A. Continuous pre press
- B. Synchronous crosswise cutting saw
- C. Plate blank conveyor
- D. Infeeding plate blank conveyor
- E. Push plate device
- F. Auto loader
- G. Hot press machine
- H. Auto unloader
- I. Unloading belt conveyor
- J. Oil tank (Hydraulic station)
- K. Energy accumulator

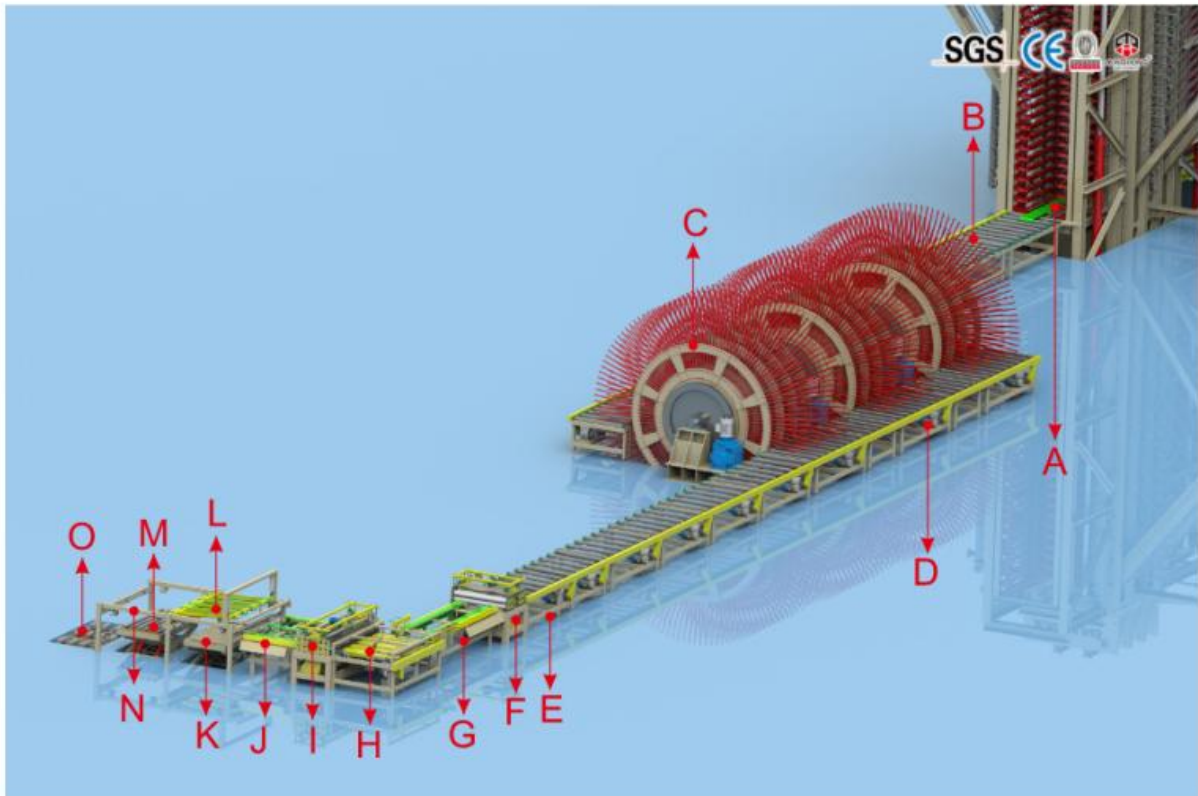
Glue blender and mat forming machine



- | | |
|---------------------------------|------------------------------------|
| A. Core measuring bin | M. Core swing measuring belt |
| B. Core glue blender | N. Surface measuring box |
| C. Platform | O. Surface separator belt conveyor |
| D. Core Quantitative bin | P. Surface swing measuring belt |
| E. Surface Quantitative bin | Q. Surface forming box |
| F. Surface measuring box | R. Surface measuring box |
| G. Surface forming box | S. Surface swing measuring belt |
| H. Core belt conveyor | T. Surface belt conveyor |
| I. Core separator belt conveyor | U. Surface separator belt conveyor |
| J. Surface separator | V. Core measuring box |
| K. Core separator | W. Core forming box |
| L. Core forming box | X. Core separator belt conveyor |



Edge cutting machine and board cooling frame



- A. Unloading belt conveyor
- B. Feed roll conveyor
- C. Panel turnover machine
- D. Unloading roll conveyor
- E. Feed roller conveyor for Longitudinal edge saw
- F. Longitudinal edge saw
- G. Unloading roll conveyor for Longitudinal edge saw
- H. Feed roll conveyor for Lateral edge saw
- I. Lateral edge saw
- J. Unloading-board roller conveyor for Lateral edge saw
- K. Unloading lift table
- L. Transition belt conveyor
- M. Unloading lift table
- N. Automatic stacker
- O. Unloading-board ground roll