Paperbacked Gypsum Board Production Line

Paperbacked gypsum board is a light construction material, which is mainly made of gypsum powder and liner paper. Mixed with small amount of starch, white latex, agglomerant, vesicant and water. It has many advantages such as light, fireproof, shockproof, heat preservation and so on. In addition, it can be cut, drilled, dig in the process of construction at will with convenience and good decorative effect. Furthermore, it can also enlarge the useful area of building.

In construction, paperbacked plasterboard and light steel-keel are used as non-main wall, which applied widely to all kinds of industrial and civil architecture.

The Paperbacked Gypsum Board Production Line is a special equipments & devices used for producing a kind of new type construction material, papered gypsum board. The production line is made of sections: Raw Material System, Forming System, Transportation System, Heating and Drying System, Cut-to-Length System, Taping and Packing System.

**Main Configuration**


Capacity, M²/Y: 2 Million, 4 Million, 8 Million, 10 Million, 12 Million, 15 Million
Forming device
The forming device is to make the slurry between the up and bottom paper to form the board.
Rubber belt conveyor and drying room

The rubber belt conveyor makes the first setting part while the drying room makes the final setting part of the board. Here showing are the heat preservation doors with the heat preservation materials.

Blank roller conveyor and printer

The printer is on the blank roller conveyor. The blank roller conveyor is to convey the board fast to the transferring part.

Transferring conveyor

This device is used to transfer the board from the blank roller conveyor to the drying part.
**Distributor**

This device is used to distribute the board into several layers into the drying room.

**Air blower**

The blower here is to blow the hot air into the drying room to dry the board.

**Electrical cabinet**

The cabinets here are automatic control system for the whole gypsum board production line. The PLC system here is Siemens brand.
Machine parts:

Protective paper loader
Adopt new style compressor to draw out the head of machine paper board without special requirement, Good level up and less inferior product.

Flatten board section
Raw material is transported and lifted to feeding hopper, after measurement it comes to vertical mixer. Face and back paperboard are lifted to each shelf. They are tensioned with special tensioned with special tension unit. Mixed material from vertical mixer falls down to back paperboard, then formed into shape and covered with face paperboard, after last flattening the semi-finished plasterboard is completed.

Conveying and Concreting
Semi-finished plasterboard from formation section is automatically edge trimmed into continuous plasterboard, conveyed to concreting station and automatically cut.

Transferring section
Concreted plasterboard automatically transferred and cut in middle, saving raw material. It can save 8 centimetre materiod every two pieces, so it is productive.

Drying room
Plasterboard Transferred automatically into drying room which has shelves 5-storey or 6-storey, 8-storey, 10-storey, 12-storey, with 50m, 60m, 70m, 90m, and 120meters length range.

Finishing section
Automatically cut into dimensions avoiding defect product occurrence, it promotes working efficiency.

Gypsum Plaster Board Production Line
- Paper covered plasterboard forming line.
- Standard Line with annual outputs (Million m²): 3, 4, 6, 8, 10, 15, 20, 30.
- Tailor Design
- Main equipment: batch mixing, board forming, set conveyor, knife, drier and packaging.
- PLC control and automatic continuously board forming.

Main technical data of major machinery:

<table>
<thead>
<tr>
<th>Annual Output</th>
<th>3,000,000 m²</th>
<th>6,000,000 m²</th>
<th>8,000,000 m²</th>
<th>10,000,000 m²</th>
<th>15,000,000 m²</th>
<th>20,000,000 m²</th>
<th>30,000,000 m²</th>
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<tbody>
<tr>
<td>Setter</td>
<td>Vmax=14.2 m/min</td>
<td>Vmax=15 m/min</td>
<td>Vmax=20 m/min</td>
<td>Vmax=26 m/min</td>
<td>Vmax=32 m/min</td>
<td>Vmax=43 m/min</td>
<td>Vmax=62 m/min</td>
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<td>Dryer</td>
<td>Vmax=1.17 m/min</td>
<td>Vmax=1.2 m/min</td>
<td>Vmax=1.25 m/min</td>
<td>Vmax=1.5 m/min</td>
<td>Vmax=2.1 m/min</td>
<td>Vmax=2.1 m/min</td>
<td>Vmax=2.36 m/min</td>
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<tr>
<td>Total Power</td>
<td>360.9 kW</td>
<td>394.37 kW</td>
<td>430.44 kW</td>
<td>460 kW</td>
<td>550 kW</td>
<td>550 kW</td>
<td>800 kW</td>
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