



04/06/2007 - High Speed laminator for Firestone U.S.A.

Firestone Building Product, Carmel Indiana, USA, one of the leading manufacturer in the insulation boards and assembly materials for the construction industry, has chosen **OMS Group** as partner supplier for a new continuous production plant of flexible faced PIR rigid foam insulation panels.



The most modern continuous plant in the world has been delivered and installed by **OMS Group** in the brand new Firestone's factory building based in Deforest, Wisconsin.

Launched in July 2000, this plant can produce panels at a speed of 60 m/min (i.e. 72 m²/min, since the real panel width is 1.2m).

This technically advanced plant is composed of:

- Double belt conveyor, 30m total length, working at 60m/min (real production speed)
- Thickness of the panels produced: ranging from 10 to 220mm
- Possibility to produce tapered panels (max inclination 60 mm)
- Automatic adjustment of panels thickness; simultaneous adjustment thanks to the innovative constructive concept applied to the double belt conveyor.
- Heating system for the double belt conveyor at a temperature of +80 C in order to process PIR foams even though highly reactive
- Tunnel covering the entire length of the double belt conveyor made in self-supporting insulated panels able to contain eventual heat dispersion
- Metering and mixing unit for Polyol + Pentane, composed of three high pressure metering groups, each one equipped with "mass" type flow meters This unit is also able to work even with alternative blowing agents available on the market
- Closed-loop control system for all working parameters; metering pumps output; temperature; working pressure; production speed; etc,)
- Plant control is completely integrated into an Industrial PC (personal computer) to handle and control the whole production line
- Safety and ventilation/extraction system to monitor -through adequate sensors and relative suction groups) all the working areas for safe use of flammable blowing agents (Cyclo-pentane, Normal-pentane, Iso-pentane, etc).

Thanks to the fruitful co-operation and in-depth experience of Firestone's personnel in the running of continuous panels production lines, the start-up of this brand new plant was made in a record time: just one week from the assembly of the production line.