Process Tunnel®

FOAMBOARDER

a major breakthrough in foam core panel technology

The Process Tunnel® is a new generation Foamboarder® production line for the manufacturer of urethane, isocyanurate, phenolic and reinforced foam core panels. The conventional double-belt pressure section of the panel line has been replaced by a Process Tunnel® to permit spectacular improvement in performance.

The Process Tunnel® combines rapid heat transfer and accurately ground die plates to continuously constrain and shape the panels at a rate and quality much higher than possible with the double belt methods. Panel surfaces are free of belt marks and have been produced to an accuracy of ±.010 of an inch in extensive testing with urethane, isocyanurate and phenolic foams. Higher operating temperature and superior heat transfer efficiency are ideal for cyanurates and allow shorter process lines and with much higher line speeds for all foams. Energy requirements are reduced. Greater line speeds are now achievable, limited only by chemical formulations and lay down techniques. Chemical lay down can be immediately adjacent to the pressure zone to allow for the use of accelerated formulations. Startup and thickness changeover is rapid and simple. Controls are combined in a console. Threading of paper, plastic and foil skins is simplified requiring a minimum of manual operation.

Faster
Smother panel surface
Better thickness accuracy
 Quieter
Safer
Higher thermal efficiency
Accurate temperature
Easier maintenance
Thin panel capability
Prompt delivery

Process Tunnel® Foamboarder® in high speed continuous production of 1.5” x 48” phenolic foam core with paper skins. Panels are automatically side trimmed and cut to length. In foreground are urethane panels showing both side trimmed and folded edges options.
The upper and lower die plates are in modular sections, each equipped with independently controlled temperature and pressure for maximum process flexibility. Die plates are power operated and locked for panel thickness setting operation. Another advantage is the increase in safety achieved by eliminating moving conveyor parts from the processing area.

The Process Tunnel® is designed for rapid continuous production of roof and wall insulating panels with paper, plastic, foil or light metal skins and with cores of urethane, isocyanurate, phenolic and reinforced foams. Nominal panel width is 48" with edges folded or trimmed. Panel thickness is .1" to 3.5" with excellent uniformity. Line speed 0-200 feet per minute. A choice of high or low-pressure wet ends can be combined with zigzag, ribbon, spray or curtain lay down.

The Process Tunnel® is offered as a complete system from skin let off station to panel cutoff. Lines can be set up and operated in our plant to produce a full range of product before shipment.

The Process Tunnel® is also offered as a separate item to replace double belt conveyors in existing panel production lines.

The Kornylak Corporation is prepared to discuss your roofing panel, sheathing board, and insulated wall board needs.

Arrangements can be made to witness operation, to produce samples or to test new formulations.

Panels are smooth and accurate. Urethanes, cyanurates and phenolics have been run very successfully.