Kistler-Morse®

Multiple Products

case history

Market: Lumber and Wood Products

CUSTOMER

J.M. Huber's oriented strand board plant in Easton, ME.

PROBLEM

Oriented strand board is a plywood substitute used for roofing, sheathing, floors and walls. The product is made by blending together wood strips, resin and wax, then drying and pressing the mixture. In 1988, the facility wanted tighter production controls -- particularly on the amounts of resin and wax used in making boards.

APPLICATION

The production process begins when a waferizer cuts wood into 2 X 3-inch strips, then the strips are dried and sent to dry storage bins. From there, the wood strips travel along two conveyor belts and into either a 12 X 22-ft surface drum or a 10 X 16-ft core drum. Inside these blending drums, both resin and wax are added to the wood strips. J.M. Huber installed two Kistler-Morse Load Disc transducers beneath each of the conveyor belts -- each holding approximately 100 to 125 lbs of wood strips at a given time. A Kistler-Morse 1020 weight indicator sends a 4-20 mA signal to a third-party batch controller, which regulates the amount of resin and wax fed into the drums. The resin is emptied from an 1,800-lb. hopper by a screw; the wax is pumped from a tank measuring 39.5 X 45 inches.

BENEFIT

According to Carol Bell, Quality Control Supervisor at the strand board plant, the facility has improved its regulation of resin and wax usage. "Combined with the controller, it helps control the amount of resin and wax used," Bell says, "We're not using excess wax and resin, and we're also making sure that we're using enough when we make the board. It's helping us to provide a better quality product."

CONCLUSION

Kistler-Morse recommends that customers use three of the company's Load Discs for weigh-belt applications. J.M. Huber's application has only two Load Discs per weigh belt and is still achieving satisfactory results. Even though the Load Discs drift off zero, they are easily adjusted back to set point, according to Bell. The Kistler-Morse system was installed in 1988 at the J.M. Huber facility and is still doing the job.

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