

PANELSPRAY® MS SYSTEM INCREASES FIBERGLASS PRODUCTION, SAVES MANUFACTURER OVER US\$140,000 ANNUALLY



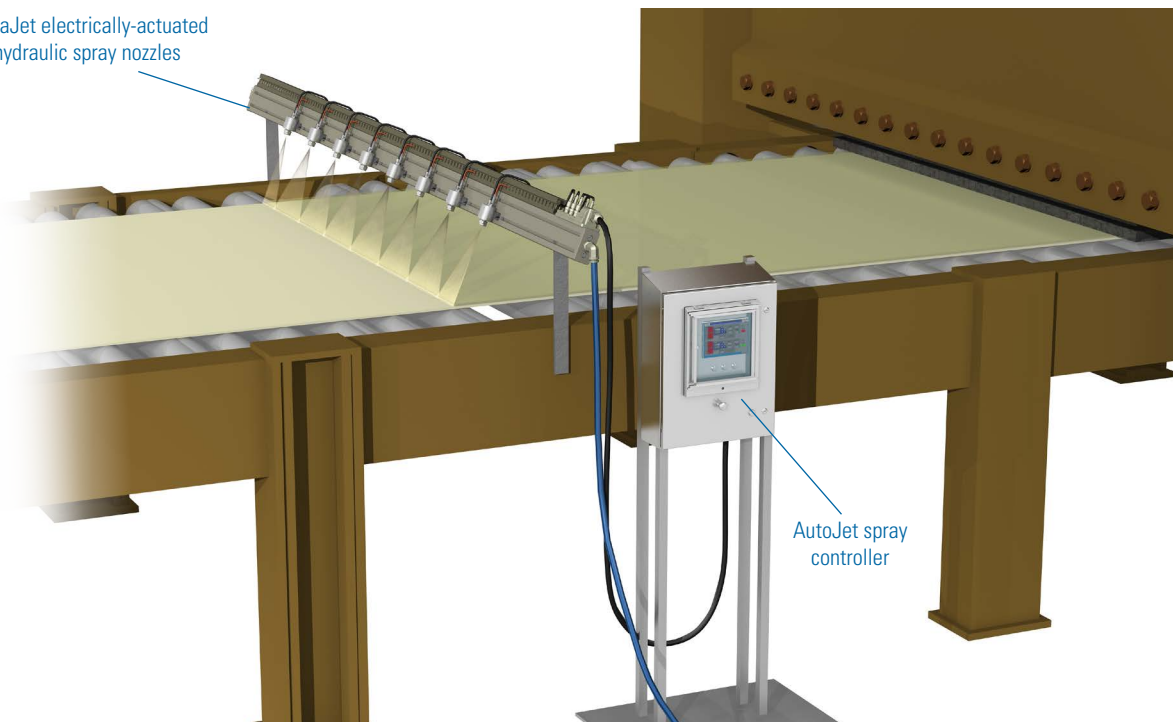
PROBLEM:

A manufacturer needed to improve the spray application of binder fluid on fiberglass prior to it entering a curing oven. The air atomizing nozzles in use didn't apply the fluid uniformly and frequently applied more than was necessary. Line speed was inconsistent and often required reactionary manual flow rate adjustments, which were imprecise. Not surprisingly, the manufacturer was faced with costly quality problems. In addition, the air atomizing nozzles produced mist that required extra maintenance downtime for equipment cleanup. The high energy costs associated with compressed air was also a concern to the manufacturer.

SOLUTION:

A PanelSpray MS System now applies the binder fluid on the fiberglass. Key components of the system include an AutoJet® spray controller and eight PulsaJet® electrically-actuated hydraulic spray nozzles. The nozzles are spaced evenly above the conveyor and provide precise, uniform application of the fluid across the entire width of the fiberglass. Using Precision Spray Control (PSC), the system makes automatic adjustments to flow rate when line speed changes to ensure the proper volume of fluid is applied at all times.

PulsaJet electrically-actuated hydraulic spray nozzles



AutoJet spray controller



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RESULTS:

The use of the PanelSpray MS System has helped the manufacturer resolve its quality problems. In addition, consistent application of the binder on the fiberglass has resulted in significant savings. Decreased binder fluid use saves the manufacturer US\$10,000 annually. Labor costs for monitoring the process

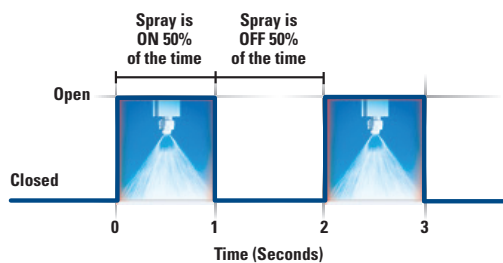
and maintenance have been reduced by US\$118,000 annually. The elimination of compressed air saves US\$15,000 annually. The total impact on operating costs, not including the value of the reduction in scrap, is more than US\$140,000. The system paid for itself in just three months.

A CLOSER LOOK AT THE SYSTEM



Eight Pulsajet® electrically-actuated spray nozzles cover the width of the conveyor.

PanelSpray MS System uses an AutoJet® Model 2250+ spray controller to automatically adjust the amount of binder fluid applied to the fiberglass based on line speed.



Precision Spray Control (PSC) involves turning nozzles on and off very quickly to control flow rate. This cycling is so fast that the flow often appears to be constant. With traditional nozzles, flow rate adjustments require a change in liquid pressure, which also changes the nozzles' spray angle, coverage and drop size. With PSC, pressure remains constant enabling flow rate changes without changes in spray performance. PSC requires the use of electrically-actuated spray nozzles and an AutoJet spray controller.

For more information about Precision Spray Control, visit spray.com/psc



Spraying Systems Co.®
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