

Automated Spray Lubrication System Saves Foam Parts Producer More Than US\$30,000 Annually

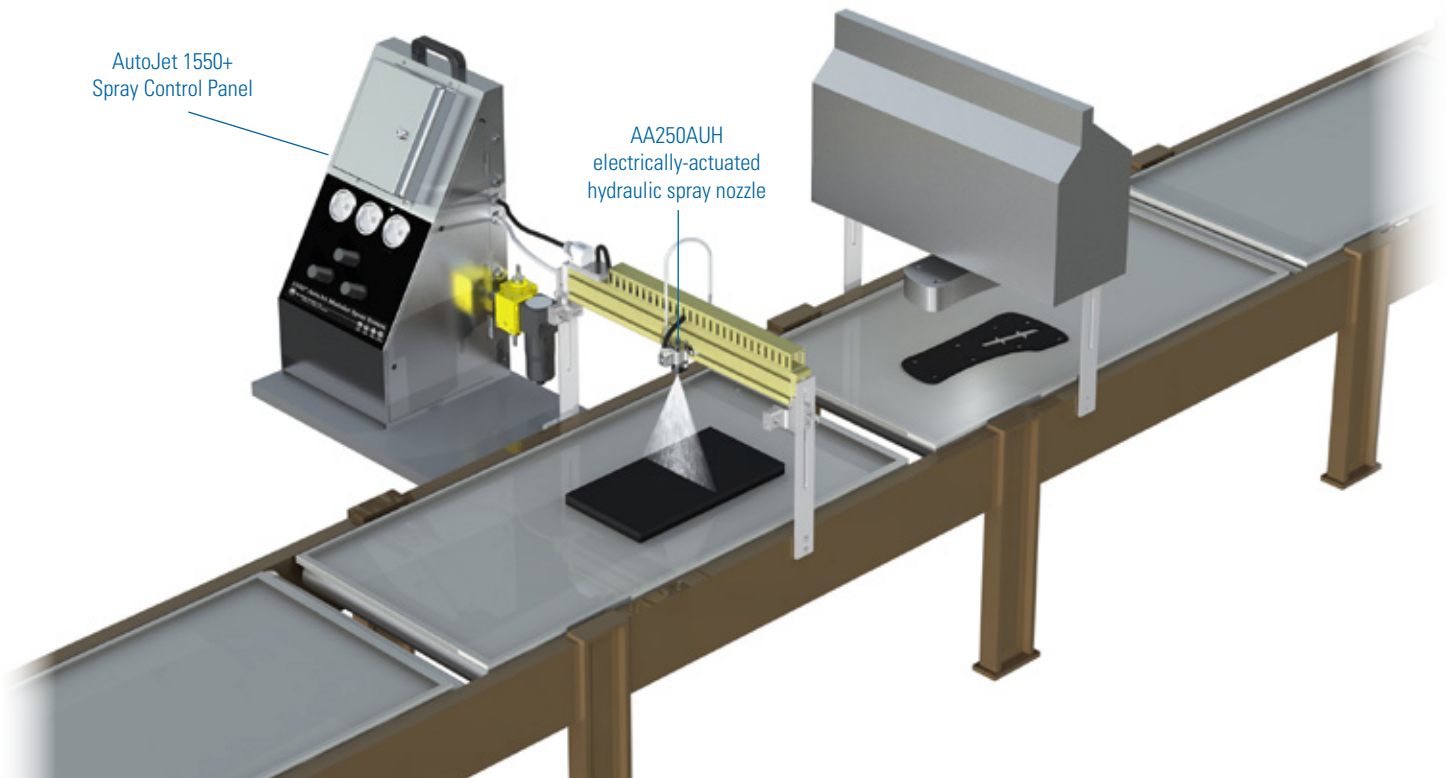


Problem:

A parts supplier to the automotive industry was spraying a soap-based lubricant on foam prior to being die-cut to prevent blades from getting stuck. A solenoid valve provided on/off control of the nozzle. Some very thick foam products also received a manual application of the lubricant in addition to the spray coating. The lubricant was being applied inconsistently; sticking problems were common, foam waste was high and production time suffered.

Solution:

Five AutoJet® automated systems now apply the lubricant to the foam pieces. Each system is equipped with an AA250AUH electrically-actuated hydraulic spray nozzle controlled by an AutoJet 1550+ Spray Control Panel. Using Precision Spray Control (PSC), the proper volume of lubricant is applied to the foam even when operating conditions, such as line speed, change. The AutoJet 1550+ Spray Control Panel provides on/off control of the nozzle and enables easy adjustment of flow rate to accommodate different foam shapes and thickness.





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Results:

The AutoJet® automated spray system has made dramatic improvements in the lubrication process. The lubricant is now applied consistently and uniformly directly on the foam. Manual application of lubricant has been eliminated and lubricant use has decreased by 50%. In addition, foam scrap rate has decreased by 70% and the maintenance time required to clean up excess lubricant has been eliminated, reducing labor costs and enabling an increase in weekly production. The automated spray lubrication system cost was recouped in less than six months and a savings of US\$30,000 annually has been achieved.

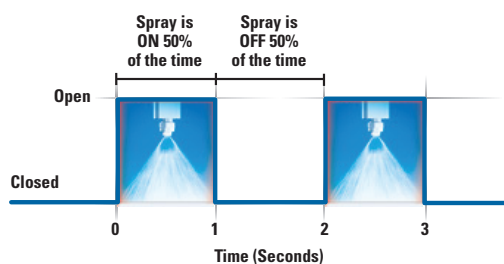
A CLOSER LOOK AT THE SYSTEM



AA250AUH electrically-actuated hydraulic spray nozzles provide consistent lubricant application on the foam prior to die-cutting.



AutoJet Model 1550+ Spray Control Panel provides complete automated spray control of nozzles to ensure precise and accurate placement of lubricant with minimal waste. The system ensures proper flow and eliminates uneven lubricant application.



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 nozzle's 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



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