

Tissue Manufacturer Saves US\$40,000 and Improves Sustainability

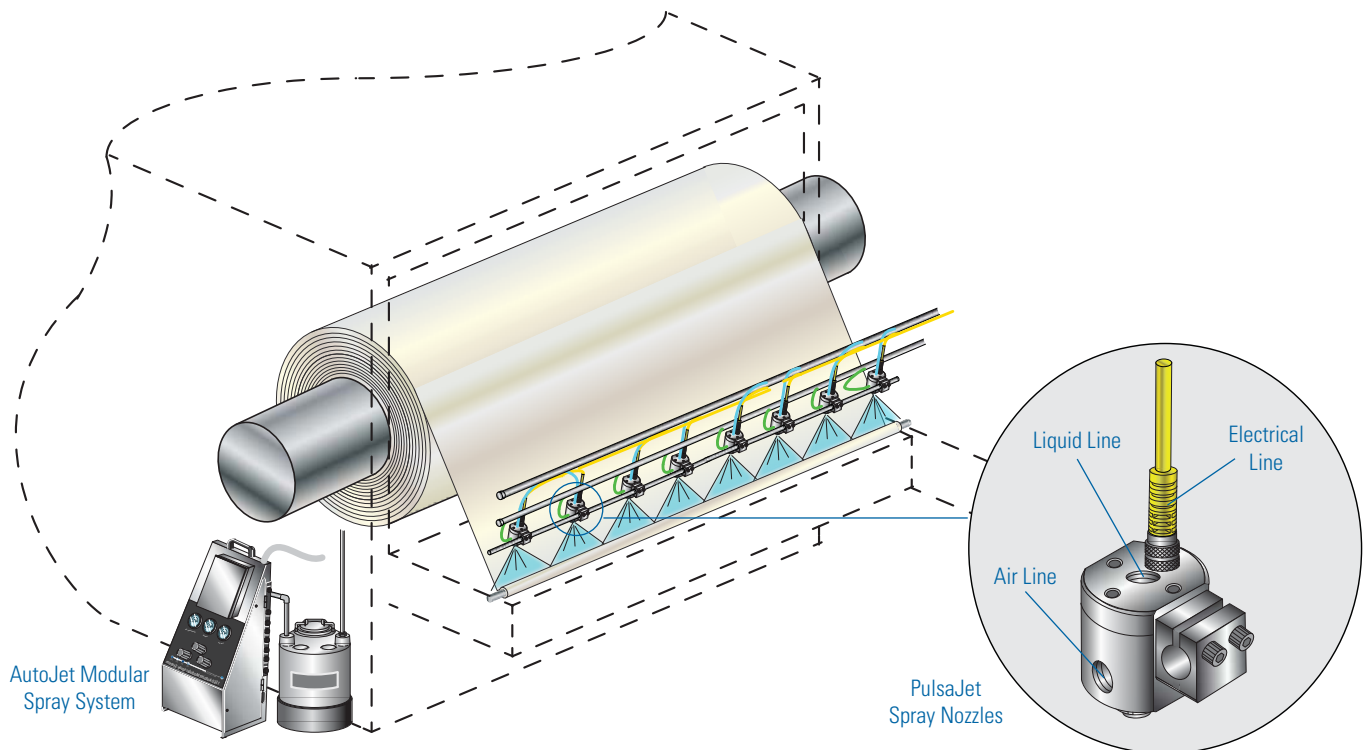


Problem:

A leading tissue manufacturer was winding rolls of commercial toilet tissue around cardboard core tubes. Plastic end caps were inserted into individual rolls after they were cut from long tissue logs into individual rolls. The core tubes and caps were costly and were ultimately discarded after the tissue roll was used, creating unnecessary waste. The manufacturer wanted to increase the number of sheets on the roll while reducing operating expenses and improving the sustainability of the product.

Solution:

An AutoJet® Model 1550+ Modular Spray System applies a light mist on the tissue as it is wound directly on a thin metal rod. Eight PulsaJet® nozzles with low flow air atomizing set-ups are triggered by the winding machine and spray just long enough to ensure the tissue adheres to the metal rod. The electrically-actuated PulsaJet nozzles are cycled quickly to maintain a very low application rate and avoid over-wetting. After the tissue roll is fully formed, the metal rod is pushed out of the roll, leaving only tissue product. Cardboard core tubes and plastic end caps are no longer needed.





Tissue Manufacturer Saves US\$40,000 and Improves Sustainability – Continued

Results:

The new AutoJet® spray system has helped the manufacturer achieve all of its goals for the coreless tissue line. The elimination of the cardboard core tubes allows more sheets of tissue to be wound on each roll. Annual savings gained by eliminating the cardboard tubes and plastic end caps are over US\$40,000. The payback period for the new spray equipment was about seven months. In addition, the manufacturer has improved sustainability by eliminating components that were previously discarded.

A CLOSER LOOK AT THE SYSTEM



Eight Pulsajet® Automatic Spray Nozzles apply a light mist of water on the tissue to ensure it adheres to the metal rod.



The AutoJet Model 1550+ Modular Spray System triggers the nozzles to spray when a sensor is received from the winding machine.



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