PROBLEM:
A leading manufacturer of candy mints was using employees equipped with handheld spray bottles to apply release agent to a 36” (0.9 meter) cooling wheel. When too little release agent was applied, the candy stuck to the wheel and had to be scrapped. Over-application of the release agent was costly and messy. Workers were unable to apply the proper volume of release agent consistently.

SOLUTION:
An automated spray system, consisting of an AutoJet 1550+ spray controller and four PulsarJet® electrically-actuated spray nozzles, now coats the cooling wheel with the proper volume of release agent. Precision Spray Control (PSC) is used to cycle the nozzles on and off very quickly to control the flow rate and ensure proper volume of release agent is applied even when the speed of the cooling wheel or other operating conditions change.
RESULTS:

The candy manufacturer has experienced many benefits since the installation of the AutoJet Spray System. Manual spraying has been eliminated and workers have been deployed to other tasks. The proper volume of release agent is now consistently applied on the cooling wheel resulting in an improvement in mint quality and a reduction in scrap. Other benefits include a 10% decrease in release agent use and a 10% increase in production. The manufacturer reports the system cost was offset in just five months and reduced operating costs by US$25,000 annually.

A CLOSER LOOK AT THE SYSTEM

**Four PulsJet® spray nozzles** provide uniform coverage across the width of the cooling wheel.

**AutoJet spray controllers** provide precise control of flow rate and spray timing, eliminating overspray and wasted release agent.

**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 changing 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](http://spray.com/psc)