MANUFACTURER ACHIEVES SIGNIFICANT WORKER SAFETY IMPROVEMENTS WITH AUTOMATED SPRAY SYSTEM

PROBLEM:
A manufacturer of cemetery products needed a better way to apply a parting agent on bronze plaques to ensure clean release after the casting process. Operators were manually spraying the plaques on a conveyor. The handheld spray guns required constant attention because of clogging issues and frequent refilling. The manufacturer was concerned about operator safety due to prolonged exposure to the hazardous parting agent. The manufacturer turned to Spraying Systems Co. for a solution.

SOLUTION:
An AutoJet® 1550+ Precision Spray System now applies the parting agent to the plaques quickly and efficiently without operator intervention. Three PulsaJet® electrically-actuated spray nozzles are mounted above the conveyor. Using Precision Spray Control (PSC), the top of each plaque is uniformly coated with the proper volume of the parting agent. The system controller ensures the application rate is adjusted when operating conditions such as line speed changes. The controller also triggers the nozzles to spray only when the plaques are properly positioned in the spray station.
RESULTS:

The AutoJet® 1550+ Precision Spray System has dramatically improved worker safety by minimizing contact with the parting agent. Workers have been reassigned to other tasks, saving the manufacturer approximately US$90,000 on labor annually.

In addition, the precision application has resulted in a 25% reduction in parting agent use, providing both environmental and economic benefits. The system cost was recouped by the manufacturer in less than five months.

A CLOSER LOOK AT THE SYSTEM

**AutoJet 1550+ Precision Spray System** provides complete automated spray control of nozzles to ensure precise and accurate placement of parting agent with minimal waste.

**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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**Spraying Systems Co.**
Experts in Spray Technology

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