

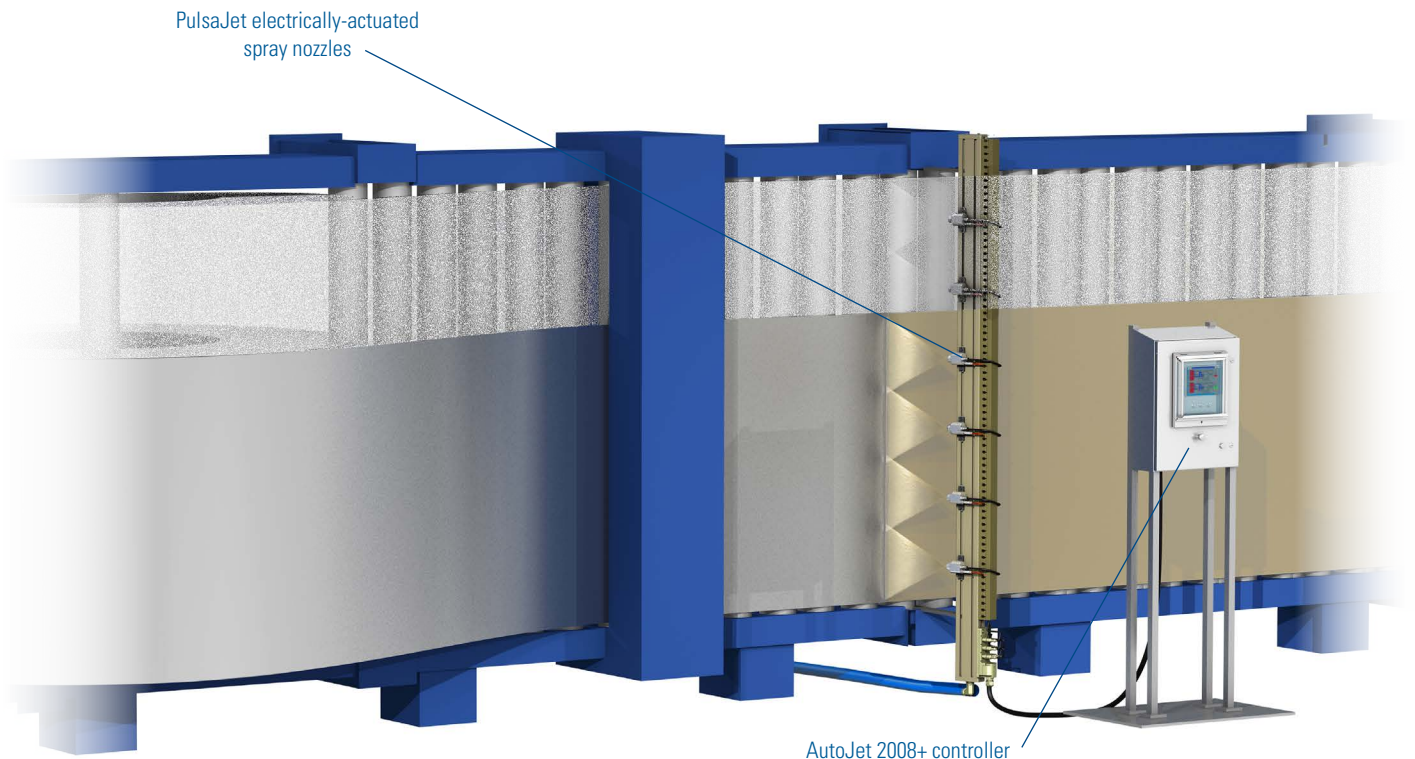
# AUTOJET® SPRAY SYSTEM SAVES STEEL PRODUCER MORE THAN US\$200,000 ANNUALLY

## PROBLEM:

A steel mill was applying corrosion inhibitor to strip prior to forming. Workers sprayed the solvent-based fluid with handheld paint guns. Strip width and line speed varied. The workers were unable to consistently apply the proper volume of the corrosion inhibitor. Under-application caused quality problems and over-application was wasteful, messy and compromised worker safety.

## SOLUTION:

An AutoJet spray system has solved the problem. The system uses Precision Spray Control (PSC), achieved with an AutoJet spray controller and PulsaJet® electrically-actuated spray nozzles, to ensure consistent application of the corrosion inhibitor. PSC controls flow rate by cycling nozzles on and off quickly. Flow rate is adjusted automatically when operating conditions, such as line speed, change. The system also includes a zone control feature, so operators can turn individual PulsaJet nozzles on and off based on strip width and eliminate messy overspray.



# AUTOJET® SPRAY SYSTEM SAVES STEEL PRODUCER MORE THAN US\$200,000 ANNUALLY – *Continued*

## RESULTS:

The AutoJet spray system has solved the corrosion-inhibitor application problems previously experienced by the steel producer. Now, the strip is consistently coated prior to forming, eliminating costly quality problems. Corrosion inhibitor use has decreased by 20% now that over-application has been eliminated. The workers, who were applying the fluid using spray

guns, have been deployed to other tasks. The AutoJet spray system has also enabled the producer to operate at faster line speeds. The production increase and reductions in labor and corrosion inhibitor use are valued at US\$200,000 annually by the steel mill. The payback for the AutoJet spray system was less than three months.

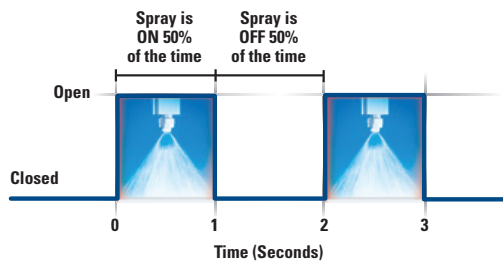
## A CLOSER LOOK AT THE SYSTEM



**PulsaJet® electrically-actuated spray nozzles**, mounted on a spray header, provide uniform application of the corrosion inhibitor across the width of the strip. Individual nozzles can be turned on or off manually using the AutoJet zone control panel.



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



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



**Spraying Systems Co.®**

Experts in Spray Technology

North Avenue and Schmale Road, P.O. Box 7900, Wheaton, IL 60187-7901 USA

Tel: 1.800.95.SPRAY

Intl. Tel: 1.630.665.5000

Fax: 1.888.95.SPRAY

Intl. Fax: 1.630.260.0842

[www.spray.com](http://www.spray.com)



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