

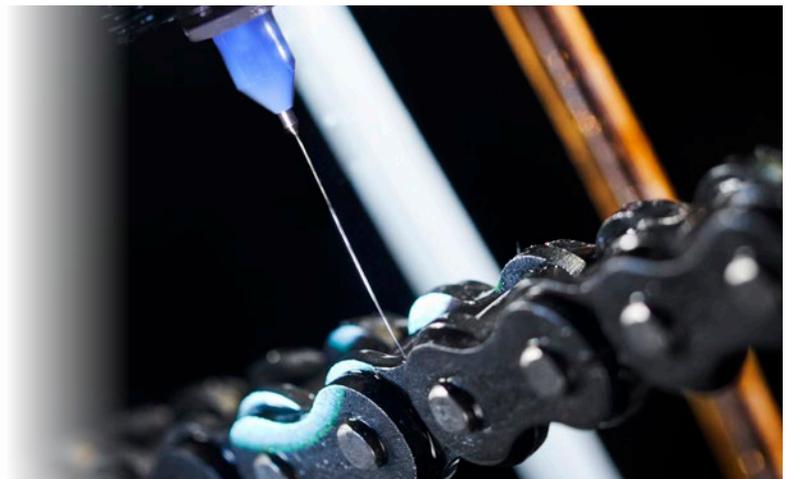
ELECTROSTATIC CHAIN OILER SYSTEM ELIMINATES CONTAMINATION CONCERNS ON CAN LINES

PROBLEM:

A can manufacturer needed a better way to lubricate conveyor line chains. Eight conveyor chains required lubrication in two locations. The air atomizing nozzles being used to apply the lubricant were creating several problems. The nozzles were over-applying the oil, which was wasteful and messy. The nozzles, which utilized compressed air for atomization, were misting. The mist was drifting onto the cans. Once contaminated, the cans had to undergo costly rework.

SOLUTION:

Four AutoJet® Electrostatic Chain Oiler Systems now lubricate the manufacturer's conveyor chains. Electrostatic spray technology relies on the attraction of the negatively charged oil and the grounded chains to achieve high transfer efficiency – over 90%. AutoJet electrostatic control panels provide precise control of the system's low-flow injector pumps. Each pump delivers oil to four electrostatic nozzles. The pumps can be individually adjusted to deliver the precise volume of oil required to each of the 16 lubrication points.



ELECTROSTATIC CHAIN OILER SYSTEM ELIMINATES CONTAMINATION CONCERNS ON CAN LINES – Continued

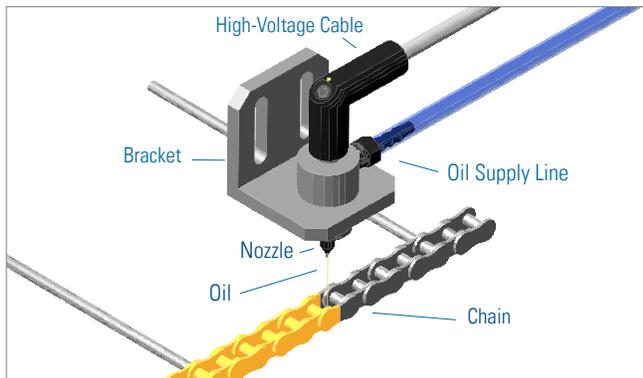
RESULTS:

The AutoJet® Electrostatic Chain Oiler Systems have eliminated the waste, misting and rework problems. The oil is now applied to each lubrication point and nowhere else, without misting. Oil consumption has been reduced by 10% and the manufacturer has saved more than US\$100,000 annually by eliminating rework

of contaminated cans. In addition, maintenance time has been reduced since excess oil no longer needs to be removed from surrounding equipment. The cost of the new systems was offset after just six months of operation.

A CLOSER LOOK AT THE SYSTEM

AutoJet Electrostatic Chain Oiler System ensures precise chain lubrication using less oil than other systems. The system consists of an AutoJet Spray Controller, electrostatic single-point spray nozzles and a 16-liter (4.2-gallon) oil reservoir.



AutoJet Single-Point Nozzle



Electrostatic spray technology is based on the scientific principle that "opposites attract." In electrostatic spraying, a negatively charged liquid coating is attracted to a neutral, grounded target. The physical attraction of the liquid to the target pulls the coating to the chain surface, providing typical transfer efficiencies of greater than 90%. Overspray is eliminated, reducing clean-up and improving the work environment.



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



Case Study No. 263A ©Spraying Systems Co. 2020