

CASE STUDIES

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Cortec Coated Products – Antiquated Equipment Replacements

Cortec Coated Products is located in Eau Claire, WI, and develops and markets anti corrosion-coating options for a variety of paper-based materials. A company committed to customer service, Cortec[®] devises innovative paper coating solutions that satisfy each customer's product-specific needs. Cortec specializes in the manufacture of coated paper, board, and films for the printing and packaging industry.

Challenge

Since the popularization of the computer, digital operating systems have evolved and have gradually replaced analog systems. Because of the decline of analog operating systems, the pool of individuals able to operate and fix analog systems has shrunk and their services have become more expensive. As a result, analog operating systems have become more expensive to maintain than their digital counterparts.

In 2002, the management team of Cortec coated products began pushing to upgrade the operating system of it's off machine coater from analog to digital. The purpose of the off machine coater is to apply water base coatings to paper, poly films and other non-woven materials. The machine was initially intended to be used to coat anti-corrosion papers (one of Cortec's core products), and to do contract coating projects for outside customers but because of the antiquated nature of the machine and its operating system Cortec had not been able to contract out the machine at a competitive price. Plant Manager Mike Galatowitsch hoped that by upgrading the machine's operating systems, web inconsistencies would be minimized; material and repair costs lowered and machine contracting capabilities could be improved.

Strategy

In 2009, Mike presented the total quarterly repair costs to his operations manager; Cortec had been spending \$50,000 per quarter on repair costs for the off machine coater alone. The repair costs were so high that he was immediately given the authorization to start the process of upgrading the line.

Soon after, Cortec contacted a company that specialized in industrial system design. Once on site the company began the process of upgrading the antiquated analog drives that controlled the 13 motors on the off machine coater. Although the initial company that was contacted was knowledgeable about analog operating systems, according to Cortec their knowledge of digital operating systems was inadequate. Disappointed with the slow progress, Cortec contacted the drive manufacturer to inquire about developing a digital system for the drive system. They recommended the services of an independent engineer who was contracted to finish converting the machine coater operating systems from analog to digital.



Results

Because of the extensive nature of the project, sections of the coater were updated one at a time. As each drive was replaced, more system problems became apparent and were addressed accordingly. By 2011, virtually all of the drive systems for the off coat machine had been overhauled and converted to digital.

Since the completion of the project, Cortec has spent 40% less on annual materials costs and has eliminated tens of thousands of dollars of repair costs. Furthermore, Cortec has been able to produce its core products in a third of the time and is now able to contract out the off machine coater at an average price of \$1,000/hr. since upgrading the off machine coater operating systems, According to Mike, worker morale was greatly improved as a result of the heightened efficiency.

The total cost of upgrading the driver operating systems was approximately \$400,000. Mike believes that Cortec will be able to recoup the cost of the project in under a year.

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