New York State
Environmental Investment Program (EIP)
Capital Project Summary

Metaullics Systems, A Division of Pryotek, Inc.

Project Background

The Company, a Carbon and Graphite Manufacturer, was operated as a Division of Carborundum Company until February 1993 when it was sold to private owners and became Metaullics Systems Co, LP. It continued to operate as such until February 2005 when it was sold to Pyrotek, Inc. The Sanborn facility manufactures carbon and graphite rods and tubes, Bonded Particle Filters, and Metaullics Advanced Ceramics parts. The plant serves the non-ferrous metals and specialty graphite markets around the world. One product line is Carbon Raschig Rings.

Project Description

This project consisted of the purchase of a saw which is used to cut material to finished length in the Carbon Raschig Ring Product Line. Carbon Raschig Rings are used as "tower packing" in the oil refinery industry. This product line reached an all-time record high in sales for the 2007 Fiscal Year. Through two-thirds of the 2008 Fiscal Year sales already had exceeded the total sales of 2007. At the time Metaullics was not able to meet this demand, resulting in an estimated loss of sales of $45,000 for the 2008 Fiscal Year.

The saw in operation at the time was 39+ years old and did not operate efficiently. It had controls that were obsolete and required an investment of approximately $11,000 in parts and labor to update to modern controls. Due to the poor controls many adjustments were required at start up in order for the saw to produce final parts that meet the required tolerances.

The hydraulic system of the saw was in poor condition and created hydraulic oil leaks, which required clean ups. Quantities of oil absorbent materials were used and disposed of per current regulations on a regular basis. Due to the overall poor condition of the saw it required many hours of maintenance repair.

The majority of scrap was generated due to an obsolete "hold down" mechanism that resulted in a remnant scrap of approximately 7.0% of each tube of feeder material or an average of 8" per tube. A new saw was proposed to eliminate all of these costs and to significantly reduce the scrap.

Project Results

The new saw surpassed the expected results to reduce scrap. It was estimated that the new saw would reduce the scrap from 8" per tube by 5" per tube to a 3" remnant (a 62.5% reduction); however the new saw reduced this remnant scrap from 8" to an average of 2.55" (a 68.1% reduction). Based on an average length of 115 inches/tube the new saw successfully reduced the scrap rate from 7% to 2.2%.

The original Target was based on sales projections forecasted in March of 2008. Due to the US recession and then the global downturn in the economy, the project was delayed in starting and Metaullics fell far short of the projected sales goals in 2009 and 2010. If sales had met the projected levels for Carbon Raschig Rings the scrap reduction would have exceeded the target. The actual results from May of 2009 through April 2010 reduced scrap and associated solid waste disposal a total of 10,385 lbs and saved the company $103,403/year. This is a result of eliminating the controls update and scrap associated with the saw start up, required maintenance, hydraulic clean-ups and remnant scrap.

Pyrotek, Inc. continues to make Carbon Raschig Rings at its Metaullics facility in Sanborn, New York, more efficient and cost effective so it can offer more competitive pricing.

Contractor:	Niagara County IDA	**NYS EIP Investment:**	$45,000
County:	Niagara	**Contractor Match:**	$123,479
ESD Region:	Western Region	**Total:**	$168,479
ESD Contact:	518/292-5340	**Completion Date:**	November, 2010