

Eaton Corporation

CASE
SUMMARY

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EATON CORPORATION

Belmond, Iowa
Wright County

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Systems Engineering
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The Company

Eaton Corporation is a diversified industrial manufacturer with 2004 sales of \$9.8 billion. Eaton is a global leader in electrical systems and components for power quality, distribution and control; fluid power systems and services for industrial, mobile and aircraft equipment; intelligent truck drive train systems for safety and fuel economy; and automotive engine air management systems, power train solutions and specialty controls for performance, fuel economy and safety. The Belmond Facility produces engine valves and is an ISO 14000 registered facility.

Project Background

Eaton Corporation has a pollution prevention policy statement and a recycling program for scrap metal generated in processing. The main objective of this project is to improve first pass yield so that the second roll operation will not generate excessive scrap. In addition, grinding swarf disposal was evaluated. The swarf generated at this facility, an average of 1,100 tons a year, is disposed in the landfill.

Incentives to Change

Eaton desires to minimize waste by improving first pass yield through the thread roll operation. The project investigated the effects of forge and straightening quality on the finish machining lines on two high volume engine valves. Presently, there is excessive waste in the system due to scrap material generation and the associated overproduction waste.

Results

A recommendation was made to increase the in-process tolerance for the two families of parts by 25 percent, which would improve the first pass yield. This increase in tolerances will improve productivity and will save labor as well as energy costs required to roll the parts.





Project Summary Table

Project Description	Environmental Impact	Economic Cost Savings	Status
Grinding Swarf	1100 tons	Not Available	Recommended