Hamilton Sundstrand
A United Technologies Company

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Company Background

Hamilton Sundstrand (HS) is a *United Technologies Company* (UTC) that has over 50 facilities worldwide. It specializes in the manufacturing of aerospace and industrial tools and pumps for the defense and energy industries. Corporately, HS industrial products service hydrocarbon, chemical and food processing, and construction and mining. Hamilton Sundstrand aerospace manufacturing in York, NE produces equipment for commercial, regional, corporate, and military purposes, and for international space programs. The facility currently operates on eight hour shifts, three shifts per day for a 24-hour operation.

Project Description

In the summer of 2010 the Hamilton Sundstrand heat treatment center wanted to quantify and reduce energy and material usage. Quantification helped lead to the creation of the *Energy and Materials Map*. Analysis of this map revealed the easiest methods for reducing use of energy and materials. These reduction ideas were turned into P2 opportunities, and the benefits were calculated.

Pollution Prevention Benefits and Results

The reduction of waste in both energy and materials will lead to large quantity reductions that will directly result in a large decrease in energy and materials expenses. The energy reductions, namely electricity, will also lead to a reduction of greenhouse gases produced. Implementing the recommendations resulting from this project (highlights are summarized in Table 1 below) could result in the potential reduction of greenhouse gas emissions by over 400 metric tons of carbon dioxide equivalents per year.

Table 1: Potential Pollution Prevention Benefits and Results

Project	Investment	Annual Savings	Electricity Reduced Annually	Nitrogen Reduced Annually
Energy & Materials Audit Tool	$0	$0	0 kWh	0 CFT
Energy & Materials Map	$5,300	$2,250	18,300 kWh	197,000 CFT
Heat Treatment Scheduling	$0	$8,100	226,800 kWh	0 CFT
Nitrogen Usage	$0	$30,200	0 kWh	8.180,000 CFT
Total	**$5,300**	**$40,550**	**245,100 kWh**	**8,377,000 CFT**