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Link Category Title

Oven/Oxidizer Heat Recovery

<http://www.airmanagement.com/oxidizer>

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Ovens/Oxidizer Waste Heat Recovery



Sustainable Energy Solutions “Green Technologies” has received much attention during the past few years and for a good reason as most of the scientific community believes that global warming is taking place and regardless of personal views, we would all agree that we have a responsibility to be good stewards with the resources entrusted to us for future generations. Simply put it’s the right thing to do but the next question that echoes in the minds of many is at what cost?

Solar and wind technologies have received much of the attention for good reason since they can be applied in almost any facility and environment with the basic requirement being to have “sun and wind”. For those that have explored this technology even with tax incentives and rebates the return on investment (ROI) is normally low (10-30 years) making it a hard sell in most industries, meanwhile Commercial Bakeries have the unique opportunity to implement oven and oxidizer waste heat recovery that provides a sustainable solution with typical returns ranging from immediate with new plants, to 4-8 years in retrofit situations. Oven & Oxidizer waste heat recovery design should consider two key components, which includes the amount of energy available “generation” as well as the amount of heat that can be used “distribution” with a balance to ensure an optimized cost to benefit ratio. In many cases boilers and auxiliary heating equipment can be eliminated from the facility providing capital cost avoidance therefore increasing the ROI.

Some typical points of use include proofers, tray washers, fermentation rooms, feedwater preheat (oven steam), water heating, makeup air preheating, absorption cooling, dehumidification, etc. System installation can even be paid for based on energy saved with no change in cash flow when “Performance Contracting” methods are used. Please contact us for additional information or to receive a proposal.

Environmental Impact



How much of an impact does waste heat recovery make? Commercial Bakeries producing 20,000 lbs. of product per hour with an oxidizer can avoid 700-1000 tons of greenhouse gases annually! This would be the equivalent of carbon sequestered from 85,291 seedlings over a 10-year period or 709 acres of pine forest. It is a big deal and for further information, please access the web link below.

<http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>