MOPAC Insulation Energy Appraisal

Evaluating your facility’s energy efficiency saves you a lot of unnecessary costs.

Many manufacturing facilities overlook energy saving opportunities in their distribution systems. In a given day, a typical plant manager will focus on process improvement issues, ways to increase throughput and reduce cost, employee safety, new product development, facility maintenance, equipment failures and more. Yet a company’s costs are significantly influenced by the amount of energy and the efficiency of the energy delivery system used in its processes. Assessing the true dollar and performance value of insulated process systems is an essential element of a plant’s energy conservation plan. An additional element is evaluation of those thermal surfaces which currently are not protected, and also represent a source of energy loss.

MOPAC Energy/Insulation appraisers use sophisticated software to evaluate the thermal performance of your current insulation systems on piping and equipment. Our team will document your Btu losses, translate those losses into dollars, and calculate the level of your greenhouse emissions. We will project your potential cost/energy savings and emission reductions with an upgrade to your insulation system.

You receive a customized report containing an analysis of all the data gathered during the appraisal process. The report is designed to help you make informed decisions regarding thermal protection that can have significant payback for the life of your facility. Inspecting your insulation systems can provide an excellent return on investment and quick payback through cost savings.

Call today and see how a MOPAC Insulation Energy Appraisal can show you where potential energy savings exist for an excellent return on investment.

Atlanta Corporate Center
800-933-0434 or mopac@mopac.biz
COST SAVINGS WITH ENERGY CONSERVATION  
Awareness, Assessment, and Action

ESCALATION OF ENERGY COSTS

<table>
<thead>
<tr>
<th>ENERGY SOURCE</th>
<th>UNIT</th>
<th>2000</th>
<th>2010</th>
<th>% +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>MCF</td>
<td>$3.69</td>
<td>$4.23</td>
<td>15.57%+</td>
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<tr>
<td>Gasoline</td>
<td>GAL</td>
<td>$1.50</td>
<td>$3.00</td>
<td>100%</td>
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<tr>
<td>Bulk Oil</td>
<td>Barrel</td>
<td>$16.00</td>
<td>$91.75</td>
<td>473% +</td>
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ENERGY MANAGEMENT

In response to the rising cost of energy, corporations are implementing corporate energy management programs. An effective method of reducing energy costs has been the assessment of insulation for those processes subject to heat loss. MOPAC assists each Customer in assessing conditions, providing specifications and quantifying the economic return on-investment.

EXAMPLE OF COST-SAVINGS

An Energy Audit was used to determine the insulation thickness required to insulate the 1500 feet of saturated steam lines with temperatures operating at 437°F. Computer projections estimated that insulation would significantly reduce the heat (Btu) loss along the steam lines leading to the dryers. The reduction in heat loss alone would increase the operating temperature by 15° and maintain the process temperature along the length of the lines. The combination of a higher temperature in the dryer lines and a more consistent process line temperature would result in a faster and more efficient veneer plywood process. The plant installed 2” thick fiber glass pipe insulation — the thickness determined by the audit that was needed to reduce heat loss, maintain process temperature and bring the outside surface temperatures of the pipes down for personnel protection.

Installing the insulation allowed the plant to cut steam usage by approximately 6,000 lbs./hour (which is equivalent to saving about 18 tons of fuel per day); eliminate the purchase of outside fuel; reduce the amount of ash being generated and landfilled; and reduce the surface temperature of the pipes to a much safer level for personnel protection (approximately 85°F). By insulating the steam lines and installing new straps they were able to save 7,212,000 Btu per hour, an approximate savings of $1,100.00/day or $401,500.00 annually.

*Case Study from North American Insulation Manufacturers Association (NAIMA)*

Certified Energy Appraisers

Member of

**NIA**
National Insulation Association

Generating Value Through the Protection of Assets and Energy