

Save Finite Resources and Cash through Energy Savings

Check any news source today, and you will read stories about escalating oil prices, the unrest in the Middle East, and the lingering concerns about global warming.

Energy is again a central issue as well it should be.

We as a nation consume over 33 quadrillion Btu's annually, which equates to over 20 million barrels of oil per day. That is 25% of the world's energy. We have known resources in America totaling 2% of the world's needs. The price of a barrel of oil has again exceeded \$100, and we are importing approximately 60% of our consumption, which means about 5 million of these barrels are coming from OPEC.

So what do we do? Burn alternate fuels? Convert to solar, geothermal and/or nuclear?

Well, certainly these alternatives can and should fit into an all encompassing energy policy, but to think they are the solution now or in the immediate future is wishful thinking. We are a carbon-based society and will be for many years to come. Natural gas, oil and coal are here for the foreseeable future, so it's time to get serious about saving energy (the fifth fuel). Through conservative use of finite resources, we can lessen our reliance on foreign imports, reduce operating costs and the adverse impact oxidized fuels have on our environment.

We have approximately 400,000 commercial/industrial boilers in this country and 60% are more than 20 years old. It is estimated the average efficiency is 75% because of outdated burners and controls, and/or the boilers are grossly oversized for the load and waste energy due to extreme burner/boiler cycling. Keep in mind, the fuel cost for many industrial process boiler applications today exceeds \$1 million per year.

Old and oversized boilers need to be evaluated by a professional engineer who understands a boiler's thermodynamics and can make an assessment based on sound engineering principles, system knowledge and application. The recommendation may mean replacing the boiler, or it may mean retrofitting equipment to the existing boiler to achieve an acceptable boiler efficiency rating at or near 85%.

In the final analysis, we as a nation are wasting a minimum of 10% of the energy we burn. That is equivalent to approximately 400 million barrels of oil per year, and boilers make up a large percentage of this loss.

When figuring the ever escalating cost of fuel, our dependence on foreign oil, and the negative impact boiler stack emissions have on our environment, isn't it time we get serious about the fifth fuel? Let's improve boiler efficiency and return cash to the bottom line.



Increase boiler efficiency by upgrading burner/controls or replace the inefficient boiler; reducing fuel consumption and related cost.

For more information on appropriate upgrades for your existing boiler system, go to cleaverbrooks.com/BOOST