

# Go Green!



**Air Industries** is committed to providing the most energy efficient industrial air system by constant training by our manufacturers, working with our power partners and the US department of Energy programs. Air Industries Energy Audits use the best practices recognized in industry today.

Taking an aggressive approach to reducing the power consumption of industrial systems requires putting a strategy in place that extends equipment performance, reduces heat and minimizes friction, and cuts power cost. Studies reveal that energy reduction can be achieved by incorporating efficiency technologies and practices such as proper air system design, usage and maintenance that decreases the cost of system ownership.

Specifically, the use of proper system control enhances system investment and ensures critical applications run at peak performance.

**DEFINING ENERGY EFFICIENCY** -  $E$  (energy) =  $W$  (work) +  $Q$  (heat)

Achieving energy efficiency occurs when machinery output is maximized. Effective operation of pumps, compressors, fans, blowers or other industrial equipment and components is reached when the maximum amount of work is achieved vs. the total energy put into the system (i.e., minimize losses due to heat and friction). Common energy inefficiencies in air systems are improperly sized fans, ductwork restrictions, poor controls, and other misapplications. While identifying these challenges is simple, without the right mindset by management in place, industrial plants will continue to face production hindrances and take longer to realize investment payback.

**MAXIMIZING PERFORMANCE** - Fully understanding a plant's operation and using the right tactics lets manufacturers stay ahead of the power efficiency curve for a variety of applications (i.e., pumping, mining, power generation, etc.) that require gas and electricity power. A first step in reducing the total cost of equipment ownership is met by employing the right equipment for the job and realizing one size does not necessarily fit all.

The Federal Government and State Public Utilities Commissions through aggressive rebate programs are encouraging industry to become more efficient to become more competitive in a global marketplace, Air Industries can work with you to make this happen.