Unlocking Environmental Health: Reduce Carbon Emissions with FS-Elliott's AirCompare℠

Are Carbon Emissions on Your Radar When Selecting a New Air Compressor?

Did you know, even modest reduction in carbon emissions can have substantial environmental benefits by reducing the impacts of industrial manufacturing? Saving energy goes beyond cost-cutting in factory operations; it encompasses safeguarding and enhancing the environment for present and future generations. Today, Environmental, Social, and Governance (ESG) initiatives hold greater significance in daily industrial production.

Despite strides in renewable energy, the United States still heavily relies on natural gas, nuclear, and coal for power generation, with associated carbon emissions. Enhancing machine efficiency can substantially reduce these emissions. For instance, even a modest 3% efficiency boost with our FS-Elliott P500 air compressor system (link to P500 Page) could slash carbon dioxide emissions by up to 69,080 kg.

Every contribution counts, no matter how seemingly small – even a few hundred horsepower can make a significant impact in our environment!

FS-Elliott's AirCompare Tool Can Help

FS-Elliott's AirCompare tool can help analyze your current compressed air system for you. This online tool will compare your current air compressor with an energy-efficient FS-Elliott solution and provide insight into energy cost savings and emissions reduction.

By committing to reducing emissions in our industrial processes, we improve both the health of our planet and our own well-being as inhabitants. Additionally, reducing carbon emissions addresses long-term environmental concerns such as pollution, climate change, and acid rain

Optimizing Investments: Analyzing Capital and Energy Costs with AirCompare

When evaluating a new air compressor solution, capital investment stands as just one among several expenses to consider. In the case of a standard positive displacement air compressor, capital investment typically accounts for less than 5% of the total lifecycle cost, with energy and maintenance costs taking precedence in operational expenses.

However, with an FS-Elliott P500 compressor system, a mere 3% enhancement in efficiency could translate to an 11kW decrease in power consumption. This improvement could yield nearly $12,000 in annual net profits. As energy prices rise, the importance of performance efficiency in managing operational costs becomes increasingly apparent.

Streamlining Operations: Assessing Maintenance and Service Time with AirCompare

Another consideration for positive displacement compressors is the number of moving parts that come into contact with static parts, which makes them prone to issues like pressure loss, leaks, or decreased efficiency.

Maintaining and servicing these compressors can be a bigger task than dealing with the overall expense of the consumables. Oil-injected compressors also tend to use more lubricant due to carryover during top-offs, and their oil removal systems have pressure loss equivalent to power consumption. Replacing worn-out components could result in substantial costs to prevent leaks or unexpected shutdowns. For instance, oil-free screw compressors require rotor replacement every 4-6 years due to Teflon coating wear. In the worst-case scenario, compressor shutdowns can result in extensive maintenance needs, leading to more downtime and reduced operation.

Explore the Benefits of FS-Elliott's AirCompare Tool

Our AirCompare program helps you analyze and compare the lifecycle cost to make the best decision for your purchase.

- Access built-in CAGI datasheets featuring oil-injected (flooded) screw compressor and oil-free (dry) screw compressor models.
- Benefit from FS-Elliott compressor performance based on aero selection performance curves.
- Consider maintenance costs and efficiency deterioration factors.

Discover the Impact: AirCompare Case Study

Explore a real-life example of how a manufacturer utilized AirCompare to optimize their facility and save money.

Ready to Enhance Your Plant Efficiency?

Contact an authorized FS-Elliott channel partner to run a more detailed and site specific AirCompare for your application and let us help improve your plant's efficiency!