



COMPRESSED AIR SYSTEM EVALUATIONS

What are compressed air systems evaluations?

Our Compressed Air System Evaluations are detailed reports created from data that is gathered for a prescribed period of time using metered data loggers. Normally this prescribed period is (7) days. However, there are many systems that operate the same each day, so a three (3)-day measurement time period is often adequate to determine how the system is operating. In addition to our monitoring equipment, we also utilize monitoring data that may be already available in your plant, such as flow and pressure charts, recorders, amp and/or KW meters, compressor controls and dryer control panels, along with pressure gauges.

CLS performs Compressed Air System Evaluations to determine areas of improvement and inefficiencies with your compressed air system. Such as:

- 1. Capturing Potential Energy Savings**
- 2. Ascertaining Operational, Maintenance and Performance Issues**
- 3. Assessment Tool for Updating and Purchasing New Equipment**
- 4. Capitalizing on Energy Reduction and Incentives from Energy Providers**

These evaluations have great value, because compressed air production is often one of the primary energy expenses in an industrial plant. The Department of Energy (DOE) estimates that the energy costs for the average compressed air system can be reduced by 20% to 35% percent. For many companies this can represent tens of thousands of dollars of potential savings annually. The main source of compressed air energy losses are:

- **Air Leaks**
- **Equipment Inefficiencies**
- **Production & Distribution Inefficiencies**
- **Excessive Pressure Drop**
- **Artificial Demand**
- **Maintenance & Performance Issues**

CLS can provide engineered answers and solutions identifying the areas of a compressed air system that require repairs or upgrades, which when corrected will improve system efficiency and achieve energy cost savings.

The equipment and labor to complete this type of evaluation is specific to your plant needs. Our estimate to provide the evaluation is based on how many items need analyzing, the type and number of compressors, type and number of dryers, receiver tanks, filters and drains and the reason for the evaluation.

The CLS Engineering Team is ready to provide you with the solutions to improve the quality of your compressed air system and at the same time reduce your cost of producing compressed air.

SCOPE OF THE EVALUATIONS

- **Compressors:** We evaluate the existing compressors as to how they are installed, condition, general performance, temperatures, pressures and their ability to unload and load.
- **Controls:** We discover the opportunities that exist for the energy conservation with the existing controls and evaluate if the compressors can be sequenced or networked to provide superior performance and efficiency.
- **Air Treatment:** Total evaluation of the compressed air treatment equipment such as air dryers, aftercoolers, separators, filters and drains. We find what dew point they are operating at and what dew point is actually required while always looking for water and contamination in the system.
- **Pressure & Flow:** We locate problem areas such as low pressure and/or flow restrictions that that cause excessive pressure drop in a system.
- **Piping & Receiver Tanks:** Complete evaluation of the general piping and storage system in your facility.
- **Ultrasonic Leak Detection:** We use advanced Ultrasonic equipment to detect leaks in your entire facility.
- **Appropriate Usage:** We look and classify the following usages such as; unregulated flows, open drains, timer drains, blow offs, misapplied pressures and consider appropriate electric driven devices rather than pneumatic.
- **Review Plant Maintenance:** We review the compressor and system maintenance program to determine how often maintenance is scheduled and performed and how well it is being done.
- **Address Specific Concerns by Plant Personnel:** Our reports include discussions with plant personnel to determine if there are any pressure problems downstream that negatively affect plant systems and processes. We also check for any contamination or water downstream that may adversely affect product or processes.

Please contact CLS to schedule your appointment today.

Because CLS is a full service compressor company we can provide all of the solutions to correct the problems/ issues found in the Report/Evaluation, to include new equipment, labor to repair or correct issues so that the systems is operating at its peak performance.