



Keys to Optimizing Your Chillers

SEASONAL MAINTENANCE SAVES MONEY AND ENERGY

HVAC

Facility professionals know the critical role of a chiller in your overall operation.

Maintenance to keep chillers running smoothly is critical to facilities that rely on environmental cooling demand for manufacturing processes or human comfort and care. What may not be as evident is the significant annual energy cost savings when chillers operate at peak performance. Chiller systems account for the vast majority of total energy use in many commercial and industrial buildings, and even a small improvement in efficiency can have a significant impact on your utility spend.

HOW CAN CHILLERS BE OPTIMIZED?

- Complete twice-yearly (winter and spring) chiller maintenance to prevent small problems from becoming bigger, expensive service and repair costs;
- Make sure your maintenance program is provided by an experienced, reliable and responsive company who not only has deep knowledge of chiller operation, but can be on-site immediately if needed, to provide both scheduled and emergency service.

HOW TO KNOW IF YOUR CHILLER IS OPTIMIZED

An on-site chiller analysis is a critical tool to evaluate your system's performance and calculate the yearly savings gained from service, and temperature setpoint adjustments. This analysis has the potential to identify thousands of dollars of yearly energy costs savings, based on the recommended adjustments.

GEM SERVICE CAN PROVIDE A CHILLER ANALYSIS

At your request, an experienced GEM Service chiller technician will thoroughly evaluate your chiller system's current performance and provide a potential energy savings estimate, based on recommended service and setting adjustments. You'll receive written recommendations for maximizing your system's efficiency based on completing service, cleaning, adjustment of chilled water temperatures, setpoints, and other system functions.

WHAT SHOULD CHILLER MAINTENANCE INCLUDE?

With regular winter and spring seasonal chiller system service, preventive maintenance keeps small problems from becoming major system repairs, while maximizing efficiency to save energy costs, and maintaining interior environment cooling demand.

The chiller service provided by GEM Service experts includes the following procedures critical to your equipment's long-term service life:

- Replace oil filter and purge dryer;
- Clean condenser tubes;
- Inspect/clean starter contacts;
- Perform meg/ohm test on motor;
- Perform startup and operational log to verify system operation and efficiency;
- Yearly oil sample analysis to check for excessive wear and potential failure in the impeller, bearings and other internal components.
- Refrigerant samples should be completed every 3-5 years. Measures water found in refrigerant in parts per million, total acidity in parts per million, and non-volatile residue oil percent.

Southeastern Container is an industry leader in the development and usage of post-consumer resin used to manufacture plastic beverage containers. Its Bowling Green, Ohio plant preforms and ships bottles to over 20 Coca Cola bottling operations in the U.S. and Canada.

“ Our production process operates 24/7 with injection and blow molding equipment. A well-maintained and reliable chiller operation is critical to the plant’s production process to supply the customers with a just-in-time requirement. We cannot afford to have unexpected breakdowns. ”

John Johnson
General Manager, Southeastern Container

HOW CHILLER EXPERTS HELP YOU

Dozens of local facility professionals rely on the chiller experts from GEM Service to not only service and maintain their systems, but also to provide recommendations for ongoing repairs and adjustments to maximize efficiency and energy cost savings.

- **Local, immediate response:** Unlike other companies, GEM Service teams are local to you. Our chiller experts can be on-site for both scheduled and emergency service—critical to keeping these essential systems up and running without costly delays;
- **Experienced service team:** Our team has the background and expertise to service, repair, and install all makes and sizes of chiller systems up to 1,500 tons;
- **Advanced chiller diagnostics:** Our team uses the latest advanced software to perform sensor diagnostics and service on all chiller system makes and models.

Regular chiller service keeps your system running reliably to eliminate lost production and productivity from unscheduled downtime, and keeps it operating at peak efficiency to eliminate wasted energy costs year after year.

CONTACT GEM SERVICE TO SCHEDULE A CHILLER ANALYSIS

Call 866.720.2700 or email hvac@gogemenergy.com to request your chiller analysis. An experienced chiller service technician will evaluate your system's current performance and provide an estimate on your energy savings, not only from service and cleaning, but from adjustment of chill water temperatures and set points to maximize your system's efficiency for the best possible savings.



REGULAR CHILLER SERVICE ENSURES PEAK PERFORMANCE WHILE SAVING ON ANNUAL ENERGY COSTS

- Many building owners don't realize the significant savings that can be gained by performing effective chiller system service that cuts energy costs by improving system efficiency.
- More than 120,000 chiller systems throughout the U.S. waste 30% more energy than needed due to inefficient operation, according to a U.S. Department of Energy survey.¹
- Lack of cooling tower maintenance can reduce chiller efficiency by up to 35%, and a dirty coil condenser in an air-cooled chiller by up to 15%.
- Basic service and cleaning of these key components improves efficiency and increases the life of your chiller system.

¹ <http://bit.ly/2PVkR67>