

## Case Study Summary

### Mechanical service company: Packaged air system



Air Systems, Inc. (ASI) is a leading mechanical service company in the San Francisco Bay Area. They provide

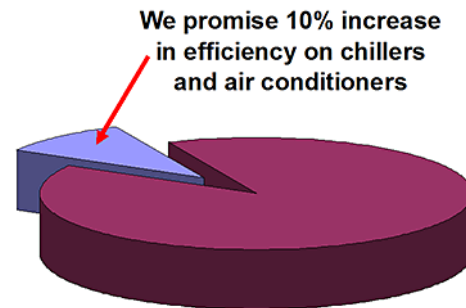
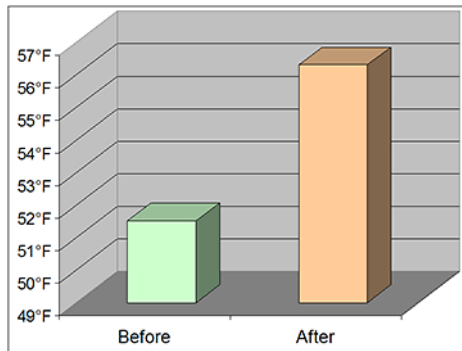
installation, maintenance, and service of HVAC equipment. <http://www.airsystemsinc.com/>

ASI is part of Emcor Group, Inc., a global leader in mechanical and electrical construction, energy infrastructure, and facilities services. Emcor is a Fortune 500 company: <http://www.emcorgroup.com/>

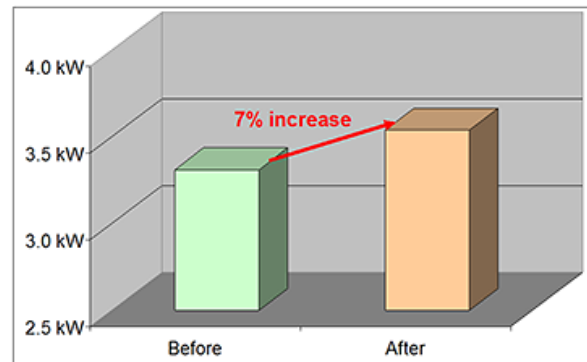
With a view to offering the Synthetic Refrigerant Catalyst from Power Knot to its customers, ASI jointly conducted a proof of performance on an air conditioning unit at their headquarters in San Jose. We measured an increase in efficiency (and corresponding reduction in energy usage) of over 12%.



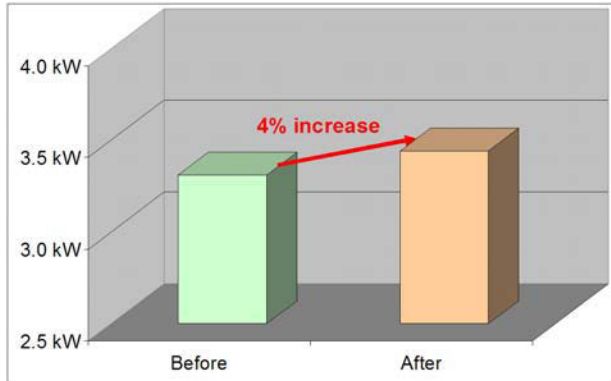
During our evaluation, we experienced warmer weather after treatment than before treatment:



This warmer weather resulted in greater power being used:



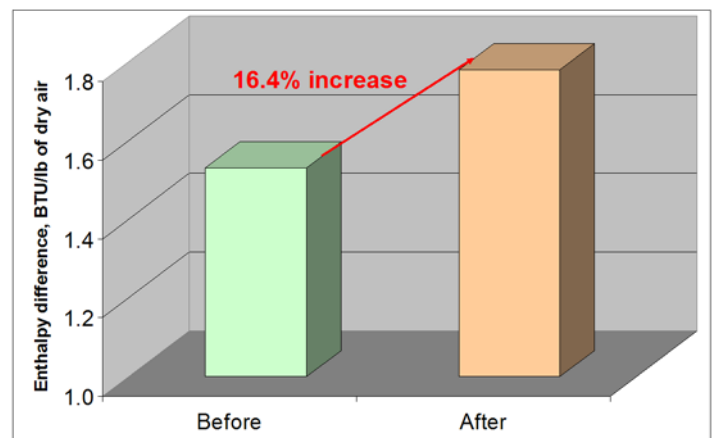
Our analysis showed that the warmer weather accounted for 2.8% of the increase in power, so the net increase in power was 4%:



This a/c system was made by Trane:



The warmer weather increased the load in the room being cooled, so the a/c system had to do more work. After treatment, the a/c system performed better by 16.7% based on calculating the enthalpy:



**The net effect is an improvement in efficiency of over 12%.**

Request a copy of the full report today from [sales@powerknot.com](mailto:sales@powerknot.com).

This is an example of the benefits of the Synthetic Refrigerant Catalyst supplied and supported by Power Knot. For more information on the Synthetic Refrigerant Catalyst, please contact your local sales representative or send an e-mail to Power Knot at [powerknot@powerknot.com](mailto:powerknot@powerknot.com).

Power Knot provides safe and economically sound solutions for businesses seeking to reduce energy costs and their carbon footprint through maximizing the efficiency of their cooling systems. Power Knot works with commercial, industrial, and military customers globally to reduce cooling system energy usage, improve energy efficiency, provide colder air, reduce maintenance expenses, and increase the lifetime of the systems. Their technologies are proven and available today, have been in reliable use for many years, and offer a payback period typically of less than two years. For more information, access [www.powerknot.com](http://www.powerknot.com).

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