

CALCULATING YOUR ENERGY EFFICIENCY

Electro Rent Testing Tips

The Challenge

Electrical energy is an essential but expensive resource that has often been viewed as inexhaustible. Efforts to create an infrastructure for generating electricity from renewable sources continues, but the vast majority of electricity generation still relies on a finite supply of raw materials that are becoming more expensive to find, mine, refine and consume. As a commodity that is subject to cost increases, energy consumers are encouraged to use electrical energy as efficiently as possible, whether in the home, office, a public facility or an industrial plant.

This is not as simple as it sounds, because there is more to saving energy than just using less of it. Of course, consuming less is important, but it is also important to understand when and how you use electrical energy. The power factor, load, and maximum demand within your facility are all significant aspects to consider when calculating the cost of your electricity.

Successful energy management starts with using the right test and metering equipment to identify consumption patterns. This can help determine the correct application of remedial action such as:

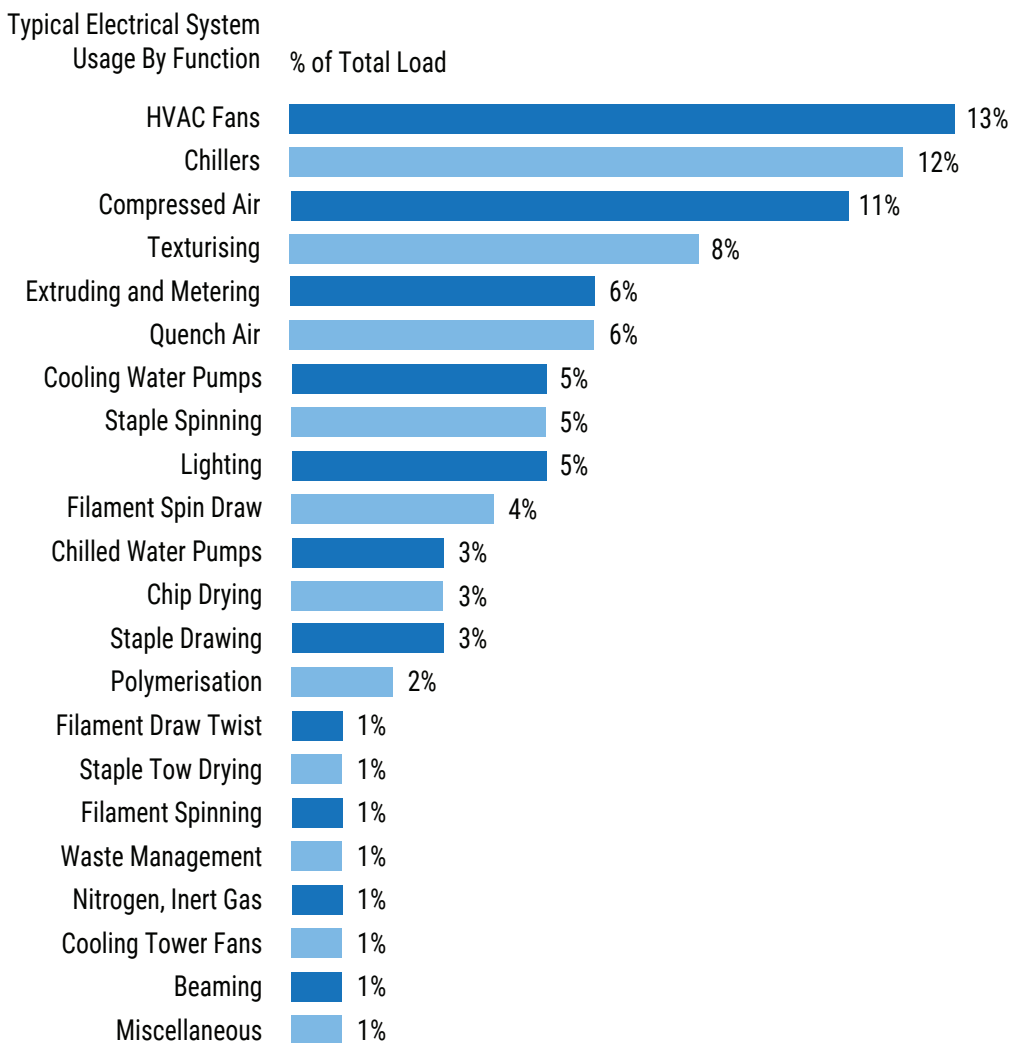
- Installing demand controllers
- Implementing better power factor correction equipment
- Switching to energy efficient motors

- Adopting energy efficient lighting
- Migrating to variable speed drives
- Improving HVAC (Heating, Ventilation and Air Conditioning) systems
- Upgrading your insulation

The Solution

An important initial step toward implementing a successful energy management process is to analyze the current profile of your electrical systems. Note that in this typical example, approximately 34% of the total load is associated with the production and distribution of chilled water for air conditioning, which wouldn't be unusual in many commercial or industrial premises.

Electrical System Use by Function for a Typical Industrial Plant



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CONSIDER USING

The Dranetz HDPQ Xplorer

Monitoring and analyzing the way power is used requires instruments capable of adapting to the application and providing the right level of insight. The Dranetz HDPQ Xplorer family was developed to meet that need.



Available with or without an integrated LCD display, the HDPQ Xplorer provides power quality, demand and energy monitoring, making it perfect for conducting power quality surveys, voltage and current transient studies, fault detection, motor tests and energy studies. It can also be used to measure inrush current, and capture harmonic and other forms of distortion with analysis. Its performance meets and exceeds industry standards, including: IEC 6100-47 IEC 6100-4-15, IEEE 519, IEEE 1453 and IEEE 1459.

The HDPQ Xplorer features three, fully integrated 'Answer Modules', algorithms for analyzing and identifying the source of power quality issues. These include: Sag/Dip Directivity; Capacitor Switching, and Motor Analysis. Built-in wired and wireless Ethernet connectivity make data access simple, convenient and safe. Simply set up the HDPQ Xplorer in a power distribution cabinet and access it remotely via a tablet or PC using one of several free applications available for all leading operating systems 30 Class A.

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About Electro Rent Services

Electro Rent helps companies acquire, optimize, and maximize use of the equipment they need, saving time and money at every stage. Our programs offer users the flexibility to access the right instruments at the right time—for as long as they need them and no more.

With these programs, cost of ownership stays under control and engineers always have access to the latest equipment, making technological obsolescence a thing of the past. Our services range from rent, lease, and buy, to used equipment, certified pre-owned, and a variety of flexible financing options.

Other services include calibration and repair, asset auditing and tracking, and asset management, which provides real-time feedback on your CapEx and OpEx investments. With more than 100,000 products, we have the right solution for you.

To learn more, contact us today at **1.800.553.2255** or email **sales@electrorent.com**. Our experts are available to assist with your product testing and financing needs.