

### **Perform a wiring and grounding survey**

Survey and test your facility's wiring and grounding system to make sure they are adequate for your specific equipment and operation. Shielding, as well as improper and loose connections, can affect the integrity of the internal electrical distribution system. Problems in the distribution system must be corrected before addressing those in the quality of the alternating current (AC) voltage.

### **Monitoring for power quality**

Voltage fluctuations may sometimes affect sensitive equipment. AC voltage problems may include under-voltage and over-voltage conditions, as well as voltage sags and transient disturbances, such as spikes, impulses, flickers, static discharges, radio frequency interference (RFI), electro-magnetic interference (EMI) or electrical noises. Sometimes monitoring can help eliminate power as a source of the problem. If it is power-related, monitoring will help to identify the problem so the correct resolution can be found.

### **Harmonics monitoring and analysis**

Harmonics can sometimes become an issue with the increased use of electronic and other non-linear loads. Harmonics is a problem because they can cause overload in circuits and power system components such as breakers and transformers. Harmonics can also cause system compatibility problems.

### **Energy and power factor monitoring**

In addition to power quality, we have the capability of measuring for energy, volt-amps, power factor, kilowatt and kilowatt hours. This information is useful in determining load information for energy conservation, load management or capacity purposes. Overloaded electrical systems can also contribute to power quality problems.