

## **Article Two**

### **Maximizing Uptime: Electrical Preventive Maintenance for Industrial Facilities**

For industrial plants and manufacturing operations, unplanned downtime can be extremely costly. It leads to lost production, wasted materials, and missed delivery deadlines. One of the most effective ways for electrical contractors to reduce these disruptive outages is by implementing a comprehensive electrical preventive maintenance (EPM) program.

An effective EPM program goes well beyond simple equipment inspections. It involves systematic testing, analyzing data, and addressing potential issues before they develop into serious failures. Here are some key components:

#### **Infrared Thermography Scanning**

Excessive heat is often one of the first signs of an upcoming electrical problem. Regular infrared scanning of components like bus connections, circuit breakers, transformers, and motors can help identify hot spots that need further investigation.

#### **Insulation Resistance Testing**

Over time, insulation can degrade due to factors like heat, moisture, and electrical stress, increasing the risk of shorts and grounds. Testing insulation resistance provides valuable insights into the remaining lifespan of the insulation.