

LIGHTNING PROTECTION

FOR COOLING TOWERS

One structure commonly found at most plants is the cooling tower. Although a fairly simple structure, it presents challenges in designing, installing and maintaining an effective and durable lightning protection system.



This is problematic, as lightning strikes often damage drive motors, shafts and bearings, and can interfere with control systems. Repair, or more likely replacement, can easily cost a substantial amount of money and entail extended down time for the associated production process.

Unfortunately, these structures are possessed with various design, material and operating quirks. They are usually constructed of wood, fiberglass and composites to resist the highly corrosive nature of the cooling fluids. Constant vibration and shaking from out of balance blades and other components produce fatigue. Materials chosen for the lightning protection system components must be up to the task. Lightning protection systems installed using ordinary, industry standard techniques and commercial quality materials often do not hold up over time and require frequent and perhaps extensive repair and maintenance.

Lightning Master is a UL Listed Manufacturer of Lightning Protection Components. Building upon our extensive experience protecting these structures, Lightning Master® has worked with operators and manufacturers to develop materials, parts, and installation techniques to significantly extend the life and reliability of the lightning protection system. Additionally, we offer the option of using ultra-sharp point air terminals designed to reduce the formation of static charge on, and delay the formation of lightning-completing streamers from, the structure.

Lightning Master is a UL Certified Installer of Lightning Protection Systems. We can provide a UL Master Label, Letter of Findings or Engineering Inspection Report, as appropriate, on completed installations. We install using Lightning Master employees or can provide installation supervision and guidance either onsite or virtually, particularly outside the United States.

Lightning Master[®]... We wrote the book on lightning protection for industrial facilities.

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