



EXCELLENCE INDUSTRIES

CASE STUDY

CMCE LIGHTNING SUPPRESSION SYSTEM

CASE STUDY

Protecting Manufacturing Operations From Lightning Risk in Plant City, Florida

Excellence Industries – Plant City, Florida

[Excellence Industries](#), a **leading manufacturer of commercial refrigeration and foodservice display equipment**, operates a large manufacturing campus in **Plant City, Florida**—one of the most lightning-active regions in the United States. After experiencing multiple lightning strikes across the property, the company sought a proactive solution to protect its manufacturing operations, electrical infrastructure, and production continuity.

Encore Land and Sea installed **one CMCE-120 Lightning Suppression System**, providing approximately **500,000 square feet of lightning-free protection** over the facility. By preventing lightning strike formation rather than simply managing strikes after they occur, the system eliminates the risk of lightning-related downtime and helps keep manufacturing operations running.

The Challenge

Modern manufacturing facilities depend on continuous operation. Automated production equipment, electrical distribution systems, PLCs, and process controls must remain online to maintain production schedules and meet customer demand.

Located in central Florida, Excellence Industries faced an elevated lightning risk due to its expansive metal-roof manufacturing buildings and frequent severe thunderstorms. After multiple lightning strikes occurred across the property, the company recognized the need for a more comprehensive lightning protection strategy.

Lightning-related disruptions threatened to cause:

- Production downtime
- Damage to electrical equipment
- Process interruptions
- Unexpected maintenance costs
- Delayed customer deliveries
- Reduced operational efficiency

While conventional lightning rods safely conduct lightning after a strike forms, they do not prevent lightning from striking the facility in the first place.

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The Solution

To eliminate the risk of future lightning-related disruptions, Excellence Industries partnered with Encore Land and Sea to install one CMCE-120 Lightning Suppressor at its Plant City manufacturing campus.

Unlike traditional lightning protection systems, CMCE Lightning Suppression is designed to prevent lightning strike formation. Using patented deionization technology, the system neutralizes the electrical imbalance between storm clouds and the ground, preventing upward streamer formation—the condition necessary for lightning strikes.

The installation provides approximately:

- 1 CMCE-120 Lightning Suppressor
- 500,000 square feet of protection
- Continuous passive operation
- No moving parts
- Minimal maintenance requirements

The project was completed with minimal disruption to ongoing manufacturing operations.

Project Results

Today, Excellence Industries benefits from enhanced protection against one of Florida's most persistent natural threats.

By eliminating the conditions that allow lightning strikes to form over the facility, the CMCE system supports greater operational continuity and helps protect critical manufacturing assets from lightning-related interruptions.

Key Benefits:

- Reduced risk of lightning-related production downtime
- Protection for manufacturing equipment and electrical infrastructure
- Improved reliability of plant operations
- Reduced exposure to costly equipment damage
- Greater operational confidence during Florida's thunderstorm season
- Passive, maintenance-friendly protection

Rather than reacting to lightning after it occurs, Excellence Industries now relies on a proactive system designed to eliminate the likelihood of direct strikes occurring over its manufacturing campus.

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Why Manufacturers Are Turning to Lightning Suppression

Manufacturing facilities increasingly rely on automation, robotics, process controls, and sophisticated electrical systems that cannot afford unexpected interruptions.

Even a nearby lightning event can disrupt production, damage sensitive electronics, and create costly delays throughout the manufacturing process.

CMCE Lightning Suppression offers manufacturers a proactive alternative by preventing lightning strike formation before it can impact operations—supporting greater uptime, operational resilience, and business continuity.

Project Summary

Property: Excellence Industries

Industry: Commercial Refrigeration & Foodservice Equipment Manufacturing

Location: Plant City, Florida

Challenge: Lightning-related risk across facility

Solution: Installation of one CMCE-120 Lightning Suppressor

Coverage Area: Approximately 500,000 square feet

Result: Enhanced operational continuity and eliminated risk of lightning-related downtime, equipment damage, and production interruptions.

