

# **DEHNservices**

Effective lightning and surge protection systems (LPS) require specialized engineering. DEHN offers complete engineering solutions for your project to comply to the latest standards. Our solutions are under supervision of a Lightning Protection Institute (LPI) certified Master Installer Designer (MID).

# Lightning Risk Assessment (IEC 62305-2 / NFPA 780 Annex L)



With a lightning risk assessment according to IEC 62305-2 or NFPA 780 Annex L, the lightning risk your project is exposed to can accurately be determined. A report will detail the process followed, with optimized recommendations of protection measure as an outcome.

# Lightning Protection System Design (IEC 62305 / NFPA 780 / IEEE 998)



A Detailed Lightning Protection Design is done according to IEC 62305 or NFPA 780 with risk analysis outcomes and extensive project information. An accurate bill of materials is calculated and a full set of drawing documents created with precise system configurations per project.

#### **Advanced Lightning Studies**



Using complex modeling and software to simulate lightning injection current distribution in structures and grounding systems to evaluate safety and equipment risks. Surge protection coordination studies to ensure compliance with IEC 62305-4 and equipment protection levels.

# Safety Grounding System Design (IEEE Std. 80 / IEC 60479-1)



Grounding systems with electrical earth fault clearance requirements need a Safety Grounding Grid Design to manage the step and touch voltage danger to humans. With soil and electrical data, a safe earthing system is simulated and designed according to IEEE Std. 80 or IEC 60479-1.

# **Grounding System Audits**



Compliance to NEC Article 250 requirements with verification of grounding system design parameters, including resistance fall of potential measurements, continuity measurements for bonding connections and step- and touch potential evaluations.

# **Lightning and Surge Protection Audits**



Testing and inspection of external lightning protection systems to comply with the relevant standard with a report of the findings and recommendations to repair or improve the system for compliance.

Surge protection audit to evaluate the correct application of surge protective measures at the correct locations in the electrical / control system and the surge protection device ratings to ensure adequate protection.

# Education – CEUs/PDHs for Professional Development



Expert-led educational presentations provide opportunities to earn continuing education units (CEUs) and professional development hours (PDHs). The focus is on the protection of people, property, and power through comprehensive instruction in lightning and surge protection, risk assessment, and grounding systems. Educational offerings support ongoing professional development and compliance with current industry standards.