

Inspecting High-Mast Lighting Poles

UTILIVATIONS, LLC, a Columbus company, has commercialized its MastCheck™ technology to inspect high-mast lighting poles to ensure their safety and help to extend their life. Along with the MastCheck inspection, UTILIVATIONS also inventories and maps each individual lighting structure and performs specific preventive maintenance activities to extend the life of the poles and reduce maintenance costs.

Ohio Department of Transportation (ODOT) has an installed base of over 5000 poles with about 1000 in Central Ohio. Nationwide, there exists a growing population of about 50,000 poles. These poles range from 100-150 feet tall, include multiple 400W-lamps (or luminaires), and have been shown by the FHWA to significantly reduce accidents at major highway intersections. These same efficient fixtures are used to light ship yards, rail yards, prisons, sporting arenas, parking lots, water treatment facilities, and a host of other areas. Some of these steel poles are reaching the end of their life and pose a significant safety problem to the public when they collapse across lanes of traffic.

According to Peter Rogers, UTILIVATIONS' Director of Business Development, "MastCheck helps to predict and ward off these potentially catastrophic failures." Using an internal pulley system, high-mast pole lamps are serviced by lowering the lighting ring to the ground. To inspect these structures, the operator hangs three MastCheck battery-operated, wireless digital cameras on this ring. These cameras take digital images of the entire pole structure during the upward motion of the ring and send them to a ground-based computer. The stored results are sent to UTILIVATIONS to review and produce a detailed inspection report. Rogers states that "the report follows FHWA guidelines and includes the status of nine CoRe elements, indicating a pass, fail, or caution condition for each." A "caution" condition creates a "watch" to track the progress of specific corrosion or cracks during the next inspection. A "failed" inspection of any one of the critical elements creates the need for further detailed inspection of a particular point or some remedial maintenance to resolve an issue.

Midwest Electric and UTILIVATIONS are jointly addressing this market in Ohio.

[« Return to Main Page](#)

[« Return to Main Page](#)

[Working Hard to Work Safe](#)

[ME Corporate Values](#)

[Inspecting High-Mast Lighting Poles](#)

[Evolution of AFCIs and the NEC](#)

[ME Honors Veterans](#)

[ME Ranks 192](#)

[NEMA Publishes White Paper on Arc-Flash Analysis](#)