

Case 120. 59-year-old master electrician at a foundry was killed when he contacted 480-volt, 70-amp electrical system during troubleshooting a 10-ton bridge crane.

A 59-year-old male master electrician at a foundry was killed when he contacted 480-volt, 70-amp electrical system during troubleshooting a 10-ton bridge crane. The decedent was working on an elevated work platform aisle way that was approximately 36 inches wide. About 2/3 of the way across the platform on the south side was a fuse panel for the electromagnetic pendant that was used to load materials and products into the skip hoist leading to the cupola. About 36 inches from the fuse panel was a 480-volt DC transformer for the crane. Both the fuse panel and transformer covers had been removed. The decedent had previously replaced a 70-amp breaker in the fuse panel. The breaker he had installed melted and employees in the work area noticed sparking/flames at the control panel. The decedent again replaced this 70-amp breaker and the crane operated without incident. It was unknown why the decedent again accessed the aisle way; he may have wanted to replace panel and transformer covers or perhaps to check the electrical panels that he had previously worked on. The decedent did not de-energize nor lockout the fuse panel or transformer when he returned to the walkway. His coworkers, upon finding him near live power, de-energized and locked out the electrical system. Conditions at the scene indicated that the decedent had not replaced the covers and that he simultaneously contacted both panels and completed the circuit. The panel and transformer covers were found lying near the decedent on the aisle way. 911 was called and he was declared dead at the scene.

MIOSHA General Industry Safety and Health Division issued the following Serious citation:

- ELECTRICAL SAFETY-RELATED WORK PRACTICES, PART 40, RULE 4003(2).
De-energize live parts to which an employee may be exposed before the employee works on or near them, unless it can be demonstrated that de-energizing the parts introduces additional or increased hazards or is infeasible due to equipment design or operational limitations.

Lockout not performed on the 10-ton bridge crane.