



Anderson Engineering™
of New Prague Inc.

Personal Injury Case Study

A healthy and very active, middle aged husband and father, was performing his job of installing a drain line, near ceiling height, inside a commercial warehouse. While in the process he came in contact with an ungrounded metallic shroud of an energized fluorescent light fixture. The worker, who was on scaffolding, received an electrical shock. The electrical shock was of such a magnitude that the worker's leg muscles contracted and he was propelled off the scaffolding to the concrete floor below.



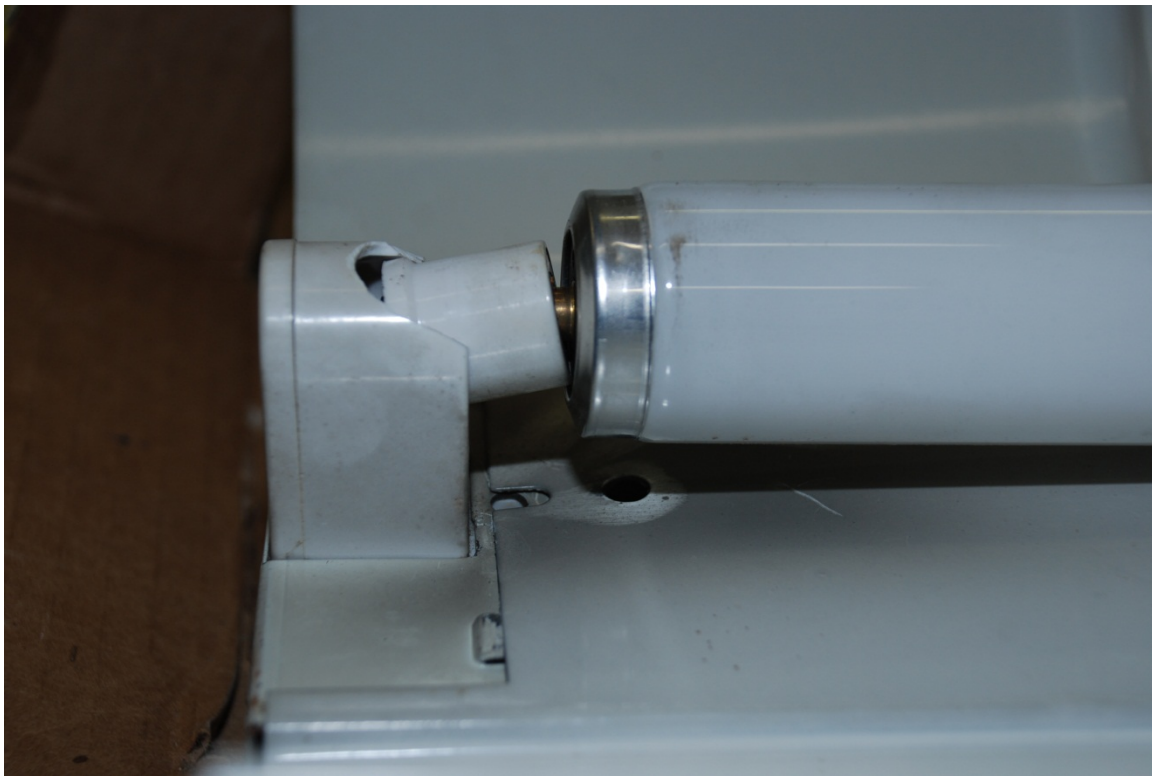
Hand/Finger marks where the worker came in contact with the light shroud.

The worker sustained severe head injuries as a result of his fall. The worker was in a coma after the accident fighting for his life as the doctors did whatever they could to save him. The worker survived the injuries and is now confined to a wheelchair. He has much difficulty communicating and he requires care 24 hours a day.

We at Anderson Engineering were able to show that the fluorescent light fixture had the capacity to deliver a very large voltage, approximately 300 Volts a.c., at 10 milli-Amperes a.c., at the shroud. The current, approximately 10 milli-Amperes a.c., is enough to cause an individual's muscles to contract. It is also known as the let go current, due to the fact that most individuals are unable to let go of whatever it is that is delivering the shock. In comparison, it only takes approximately 70 milli-Amperes to cause the heart to go into fibrillation. That can kill you.

Further examination of the light fixture showed that the lamp holder had sustained damage. A section of the plastic housing had broken free of the lamp holder. The damage to the lamp holder is indicative of how the fluorescent light fixture was maintained. The shroud for the light fixture was not inserted properly into the light fixture at the time of the accident. The combination of a broken lamp holder, and the improperly affixed shroud, were a direct cause of the electrical shock.

After a lengthy discovery phase of this matter, the attorney working for the crippled worker, was able to reach a settlement with the responsible parties. The settlement will help the family care for their injured father and husband. It will also assist in educating the young children of this devastated family.



Broken lamp holder and poor connection to light bulb.