Improper use of Portable Band Saw Leads to Finger Laceration

An electrician was installing 1” electric metallic tube (EMT) conduit in the ceiling of an office space. The installation occurred above the drop-down ceiling. The employee estimated that they needed approximately ten feet of conduit to connect two pieces together. Upon installing the conduit, the employee realized that the conduit was too long and needed to be cut down in size. The employee used a portable, cordless band saw (pictured right) to cut the still attached piece of conduit up in the ceiling. When attempting to perform the cut, the employee used one hand to hold the tool, and the other hand to support the piece of conduit. When the employee pulled the power trigger to begin the cut, the blade slipped towards the employee’s hand. The saw blade cut through the employee’s cut resistant glove and cut their left index finger.

The incident was quickly reported to a supervisor and an incident report was submitted through EHS’s Injury and Illness Reporting System within an hour of the incident occurring. This prompted a quick investigation into the incident to help determine causes and corrective actions.

To prevent similar incidents in the future, employees should always:

- Follow all manufacturer guidelines and instructions for safe use of power tools. In this instance, the operator’s manual for this band saw states the following:

  ![Danger sign](image1)

  Following this guideline would have kept the employee’s finger out of harm’s way and kept the tool from slipping out of place. If a tool has two handholds, then two hands shall be used when operating the tool.

- Eliminate at-risk behaviors and shortcuts to save time. This incident could have been avoided if the conduit was detached from the ceiling and cut at ground level using a pipe stand or vice.

- Perform a Hazard Assessment prior to starting work tasks. Identify all potential hazards associated with the work area before beginning work. The employee stated that the conduit was in a difficult position for
them to access in the ceiling (tucked about a foot behind the drop-down ceiling tile, seen in picture on first page). This put the employee in an awkward position while handling the power tool. This does not only present a hazard for the power tool usage, but can also present a fall hazard from reaching on a step ladder as well as an ergonomic hazard for awkward body positioning. A possible control for this hazard is using a second employee to assist with the difficult handling tasks.

- PPE is the last line of defense. The employee was wearing cut resistant gloves which helped minimize the injury. As part of your Hazard Assessment, develop meaningful controls to eliminate or reduce the potential impact of hazards.