**Question: I have e-stops on my machines, what are the safety requirements for them?**

**Answer:** OSHA details in 1910.144(a)(1)(iii) *Stop.*  Emergency stop bars on hazardous machines such as rubber mills, wire blocks, flat work ironers, etc., **shall be red**. Stop buttons or electrical switches which letters or other markings appear, used for emergency stopping of machinery shall be red.

However, OSHA requirements for E Stops are limited, but NFPA 79 Electrical Standard for Industrial Machinery has additional guidance. This is a consensus standard that can be enforced by OSHA.

Definition: E Stops come in many shapes and sizes. The most common is the red mushroom button with a yellow background. Other types of E Stops include pull-cord operated, push-bar, rod switches and foot operated switches with out mechanical guards.

Diagram

Description automatically generated with medium confidencePurpose: These devices are designed to be E Stops not E Shut offs. The difference is an E Stop is designed to *shut down* the equipment quickly in the event of an emergency. An emergency shut off is designed to *shut power off* to the machine.

Type: NFPA 79 has two categories for stopping requirements for E Stops. Category 0- Disconnection and Category 1- Controlled. Category 0 disconnects the actuators, equipment power, or motor in the event of an emergency. The Category 1 allows power to the machine actuators until a stop is achieved then power is removed.

Reset requirements: Once an E Stop has been activated it must be reset. Reset should be achieved by one of three ways: turning a key, pulling a button, or rotating a button.

Location: There is no specific location for E Stops but they should be readily accessible ( with in an arm’s length) for the operator where E stop is required.

Testing of E Stops is not spelled out in NFPA 79, but it does say that “ The functions of electrical equipment, particularly those related to safety and safeguarding, shall be tested and documented.” *If you have questions or concerns, please contact your BWC safety Consultant.*