

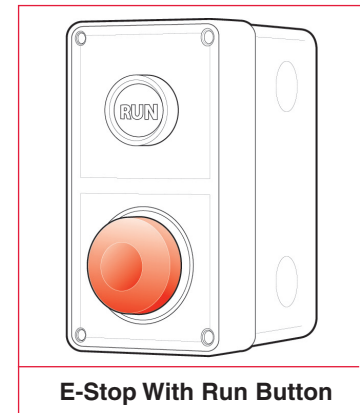
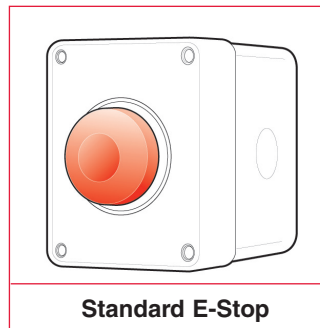
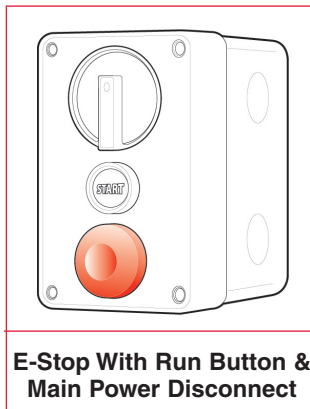
SAFEGUARDING IN MANUFACTURING

16. E-Stops

“E-stop” is the industry term for Emergency Stop. It is a red mushroom-shaped stop button that is manually depressed in the event of an emergency condition, upset condition, or accident. An emergency stop is not considered a primary safeguarding device.

Because it requires intentional activation, an emergency-stop device seldom prevents accidents; it is an after-the-fact device. It may, however, prevent an unsafe machine operation from continuing and, when activated, will stop a machine after an accident has occurred.

The various published safeguarding standards contain specific requirements for E-stops, including how many are required and where they should be located.



E-Stop Installation Requirements

- The following requirements apply to all E-stop installations:
- Mushroom-shaped and red in colour
- Located within immediate and unimpeded reach of the operator or other persons directly affected by the machine operation
- Designed to allow immediate activation with any part of the body (no ring guards or recessed position)
- Requires a manual push to activate and a manual pull to reset; remains in the depressed position when activated (not a “hold-to-run” type switch)
- A check for safe machine operation is required before an E-stop is reset
- Must be hard-wired into the control circuit to allow the magnetic coil to drop out (cannot be routed through a Programmable Logic Controller [PLC] except for monitoring purposes)
- The machine must not restart merely by pulling out and resetting the E-stop. A second, independent control must also be activated before the machine will restart.