

KNOWLEDGE

What is the purpose of power outage protection?

- Keeps the machine operating even when shop loses power
- Prevents the machine from automatically restarting when power is restored
- Assures that critical machinery remains operational at all times

On a bench-top grinder, the work/tool rest and the rotating abrasive wheel create a:

- Nip point
- Shearing point
- Transverse motion
- Reciprocating motion

Which of the following parts of a machine should be guarded? (check all that apply)

- The power transmission
- The point of operation
- The feed-line components
- The lead screw on a lathe
- The chip conveyor

Two-hand controls are an example of a:

- Guard
- Procedure
- Device
- LOTO

A pressure mat is not an acceptable way to guard a point of operation.

- True
- False

When multiple people are operating a press, which of the following statements must be True? (check all that apply)

- Each operator should have an individual set of controls
- One set of controls is adequate if work flow is coordinated
- An emergency stop should be readily accessible to each worker
- If present, foot controls should be guarded to prevent accidental activation



On every machine, moving parts located less than ____ feet above the floor must be guarded.

- 12
- 10
- 8
- 7

Which of the following are attributes of a proper machine guard? (check all that apply)

- Prevents hands from contacting moving parts
- Cannot be easily removed without tools
- Holds stock in place
- Creates no new hazards
- Is tamper-resistant

Which of the machines and equipment in a shop are required to comply with the OSHA Machine Guarding standard?

- Only those manufactured after 1970, the year OSHA was created
- Only those for which the original manufacturer provides guards
- Only those that have moving parts that can injure an employee
- Compliance with the OSHA standard depends on when and where the machine was produced

Does OSHA allow a shop owner to purchase or manufacture machine guards for a piece of equipment if guards were not provided by the original manufacturer?

- Yes
- No

A properly functioning E-stop will:

- Allow a machine to re-start automatically after a power failure
- Not allow a machine to re-start after a power failure
- Be adjustable to allow a machine to re-start when the power comes back on
- Automatically turn off the machine after a certain number of hours

Machine guards for mills and drills must prevent eye injuries and comply with the Z87 standard requirements.

- True
- False



Which of the following are characteristics of a shield? (check all that apply)

- Is a fixed part of the machine
- Can be repositioned
- Protects the machine operator from chips and coolant
- Fully encloses the machine point of operation

OSHA requires that the machines designed for fixed locations are anchored in place.

- True
- False

When using compressed air for cleaning machinery, OSHA requires that the air pressure must be reduced to:

- 20 psi
- 25 psi
- 30 psi
- 35 psi

Complete the following sentence to make it a True statement: An OSHA-compliant air-gun... (check all that apply)

- Operates only at pressures below 50 psi, regardless of the air-line pressure
- Has relief valves that reduce air pressure to under 30 psi when dead-ended
- Is manufactured and sold by OSHA
- Has a stamp reading "OSHA" on the handle
- Is made using special steel alloys



SKILLS

I am comfortable with my ability to demonstrate and explain how to identify the machine parts and movements that require guarding.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

I am comfortable with my ability to demonstrate and explain how to evaluate a machine using a safety checklist.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

I am comfortable with my ability to demonstrate and explain how to restart a machine after using the E-stop.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

I am comfortable with my ability to demonstrate and explain how to ensure that feedstock or work piece is properly secured so that it is not forcefully ejected from the point of operation.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

