

VIRTUAL LUNCH January 17, 2024

Thanks for joining us a few minutes early.

We will start promptly at Noon!

HAZARD AWARENESS: STRUCK BY, CAUGHT IN OR BETWEEN TRAINING

... a conversation with Xavier Gonzales,

Construction Safety Expert with Pinnacol Assurance



Struck-by Injuries With Hand and Power Tools







Objectives

- Recognize common hazards and controls to prevent struck-by injuries.
- Understand employers' responsibility to protect employees.





Question

Who is responsible for the condition of tools provided to employees?

And....

Who is responsible for training employees on the safe use and handling of tools?



Questions

When employees provide their own tools, who is responsible for the condition of those tools?

And...

When employees provide their own tools, who is responsible for training employees on the safe use and handling of those tools?



Hand & Power tools

1926.300(a)

Condition of tools. All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.

1926.301(a)

Employers shall not issue or permit the use of unsafe hand tools.



Hand & Power tools

1926.21(b)(2)

The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.



Struck-by Injuries

Calendar Years 2022 and 2023

- Struck-by injuries from:
 - Falling objects
 - Powered tools moving parts
 - Tools

Losses: 19

Cost: \$243,356



When an employee furnishes the tools, he/she is responsible for their condition.

A. True

B. False



Any Concerns?





When an employee furnishes the tools, he/she is responsible for learning to use them.

A. True

B. False

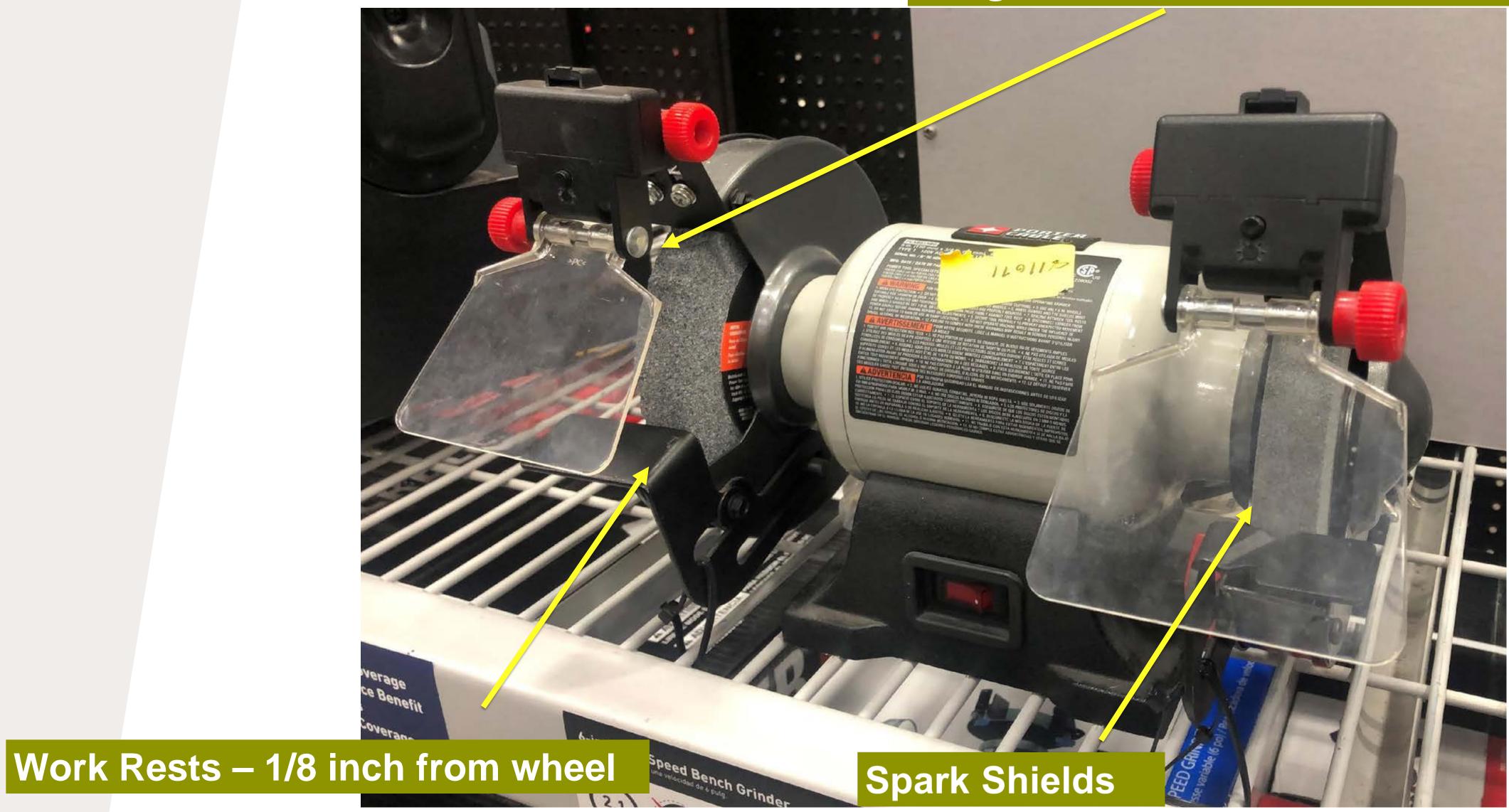


Any Concerns?





Tongue Guards – 1/4 inch from wheel





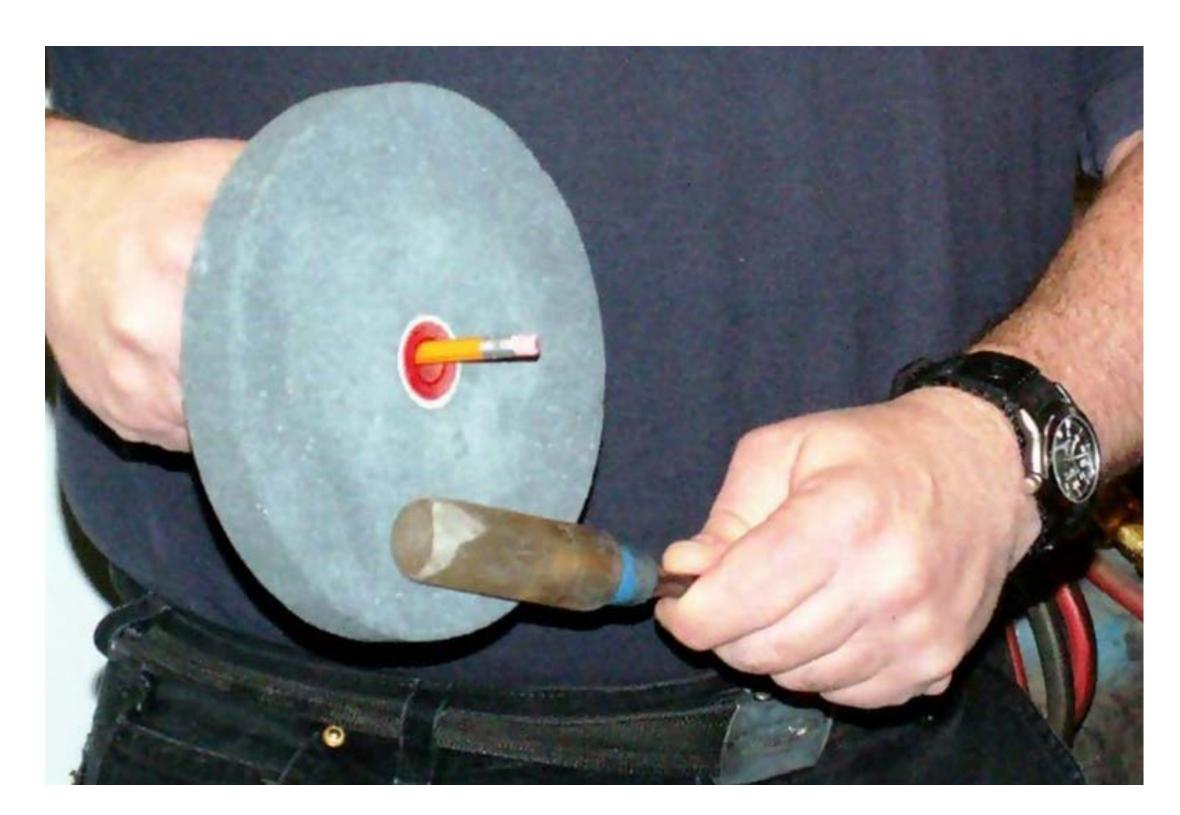
1926.303(c)

- Eye and face protection is NOT required when using abrasive wheels on a bench grinder if...
- The tool is equipped with permanently attached spark shields.
- The wheel is polishing and not emitting debris.



All abrasive wheels shall be closely inspected and ring-tested before mounting to ensure that they are free from cracks or defects.

1926.303(c)(7)





Any Concerns?







Impact tools, such as drift pins, wedges, and chisels, shall be kept free of mushroomed heads.

1926.301(c)



When is eye and face protection required when using a bench grinder?

- A. Always
- B. When using an abrasive wheel
- C. When the supervisor is watching
- D. When the grinder is not equipped with spark shield



Any Concerns?









The wooden handles of all tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

1926.301(d)





Any Concerns?

1926.302(b)(2) and (3)







When must abrasive wheels be inspected?

A. Before each use

B. Monthly

C. Every day

D. Periodically



Any Concerns?





And Now?





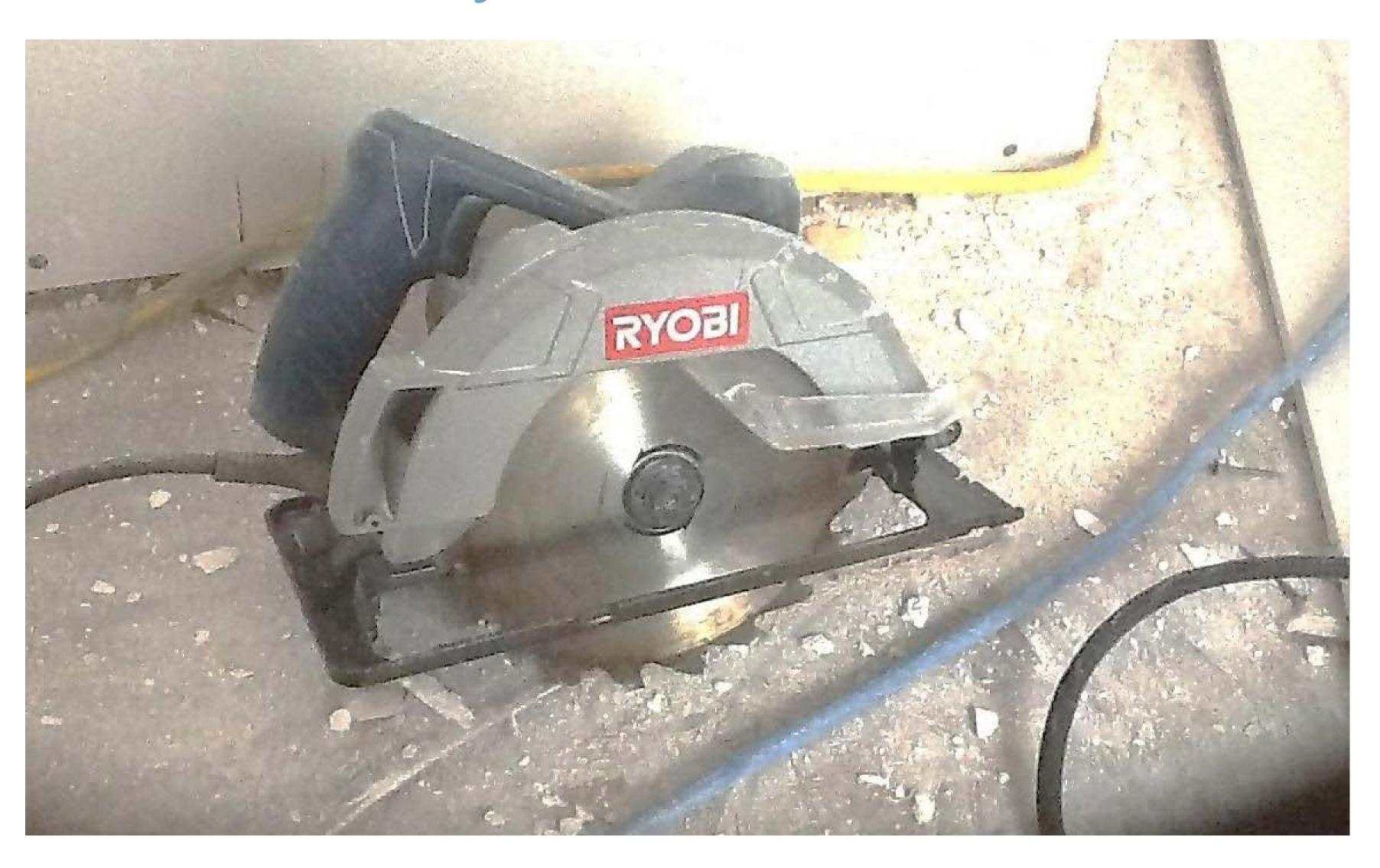
The maximum angular exposure of the grinding wheel periphery and sides shall not exceed 180 degrees.

1926.303(c)(5)





Any Concerns?





All portable, power-driven circular saws shall be equipped with guards.

The lower guard shall cover the saw to the depth of the teeth...When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to the covering position.

1926.304(d)





And Now?





Problem?









On a hand held grinder, the guard must cover at least

- A. 25° of the cutting or grinding wheel.
- B. 90° of the cutting or grinding wheel.
- C. No guard is required if grinder is being used with a cloth or sanding disc.
- D. 180° of the cutting or grinding wheel.





Table saw MUST be guarded by a hood which shall completely enclose the portion of the saw above the table.

1926.304(i)(1)



Would This Comply With The Standards?





Guarding







Guarding

...Guards shall be affixed to the machine...The guard shall be such that it does not create a hazard...

...machines whose operation exposes an employee to injury, shall be guarded.

...shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

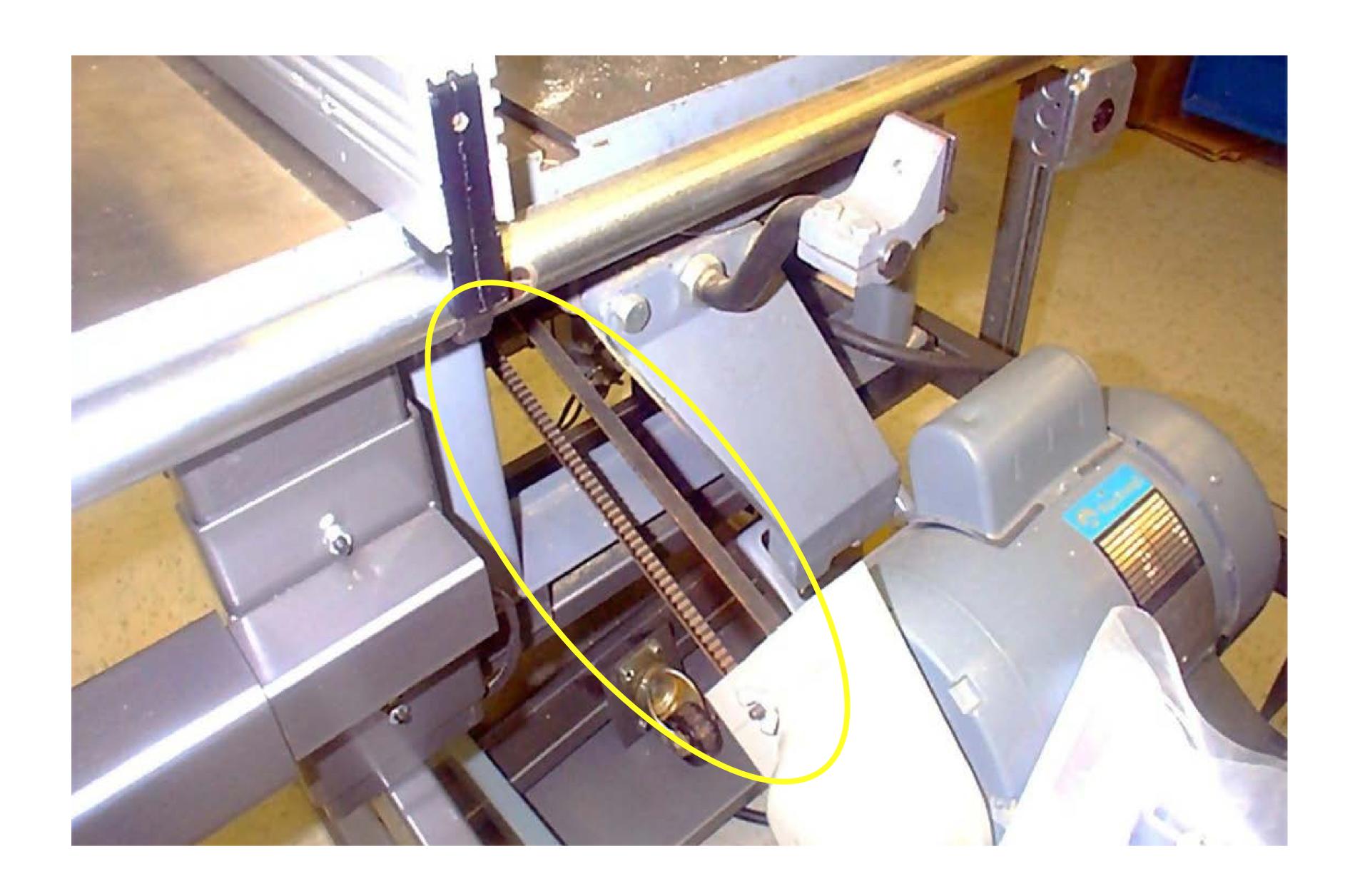
1910.212(a)(2) - (a)(3)(iii)



Question

Does OSHA allow an employer to design and create a guard for a tool that was not manufactured with a guard?







Chutes required when dropping material MORE than 20 feet.

1926.252(a)







If a power tool exposes an employee to moving parts but is not designed to accommodate a guard, the employer can...

- A. Allow employees to use the tool as is.
- B. Must find a way to guard against the hazard.
- C. Call OSHA and get a written permit to operate the tool without a guard.
- D. Hide the power tool when OSHA shows up.



Summary

- Recognizing common hazards with hand and power tools.
- Safe practices for using hand and power tools







Questions? Thank you for your attention and participation

Thank you to our Sponsors:

Industry Leader







































































Silver Sponsors

















