

Welcome

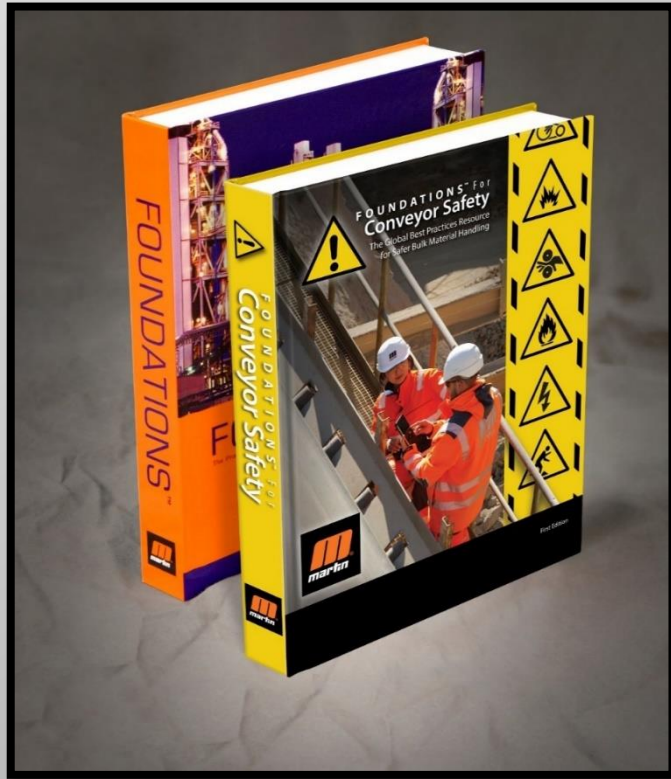
Belt Conveyor Safety webinar will begin soon



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Questions can be asked using the Q/A icon.

BELT CONVEYOR SAFETY

Are You Doing Enough To Reduce Injury From Belt Conveyors?



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FOUNDATIONS™



- Live, Instructor led classes
- Online classes
- Site assessments

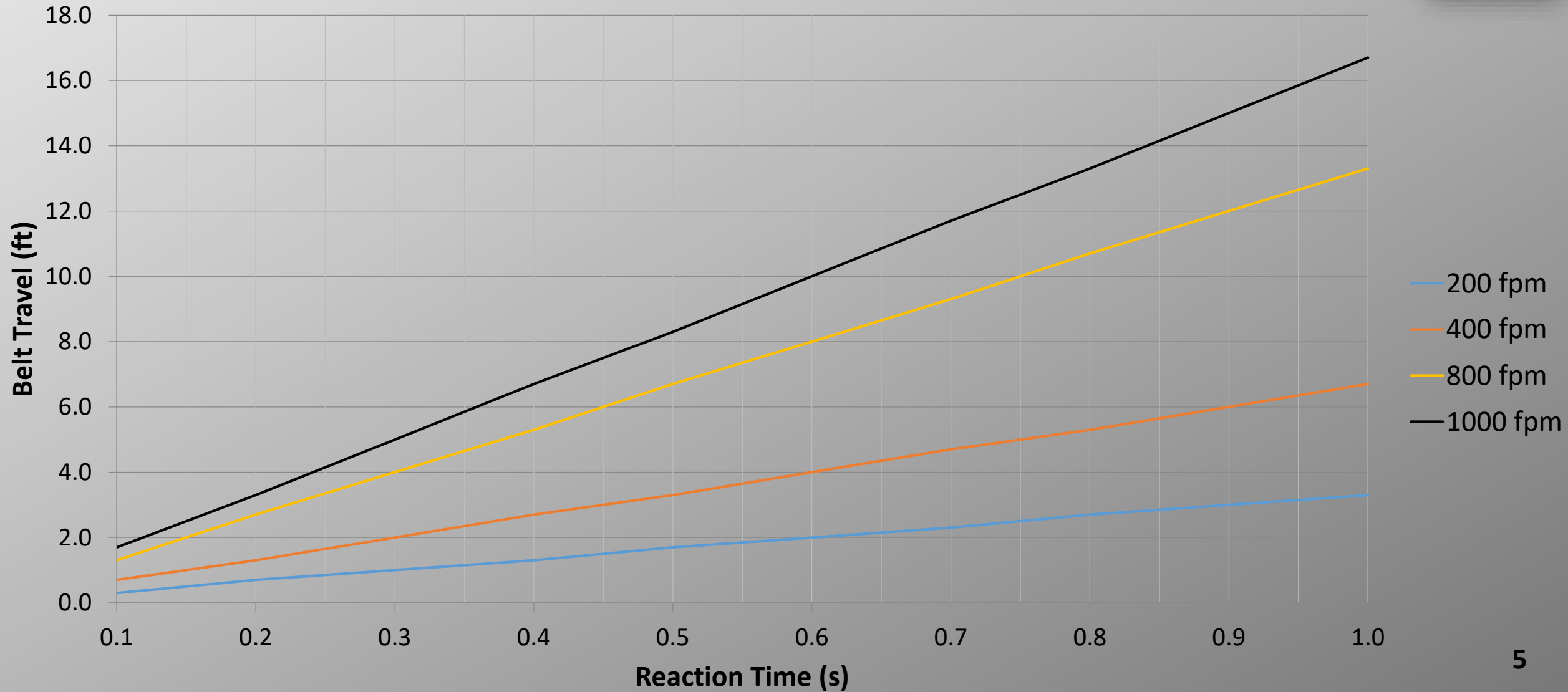


Webinar Objectives

1. Typical Tactics.
2. Improved Tactics
3. Most Effective Tactic



Belt Speed and Reaction Time



Typical Tactics



1. PPE and Attire
2. Policies, Procedures, Protocol
3. Training
4. Safety Equipment
5. The most effective way to keep workers safe

1. Proper PPE and Attire



- Hard hat
- Safety shoes
- Safety glasses
- Hearing protection
- Respirator
- Gloves
- Fall protection
- No baggy clothing;
No hooded sweatshirts
- Jewelry: left at home
or in the locker
- Hair: cut or confined

Shortcomings:

1. Ineffective
2. Open to workers not using

2. Policies, Procedures, Protocol

Lock Out - Be sure all energy is eliminated

Tag Out- Be sure all workers have tagged the equipment

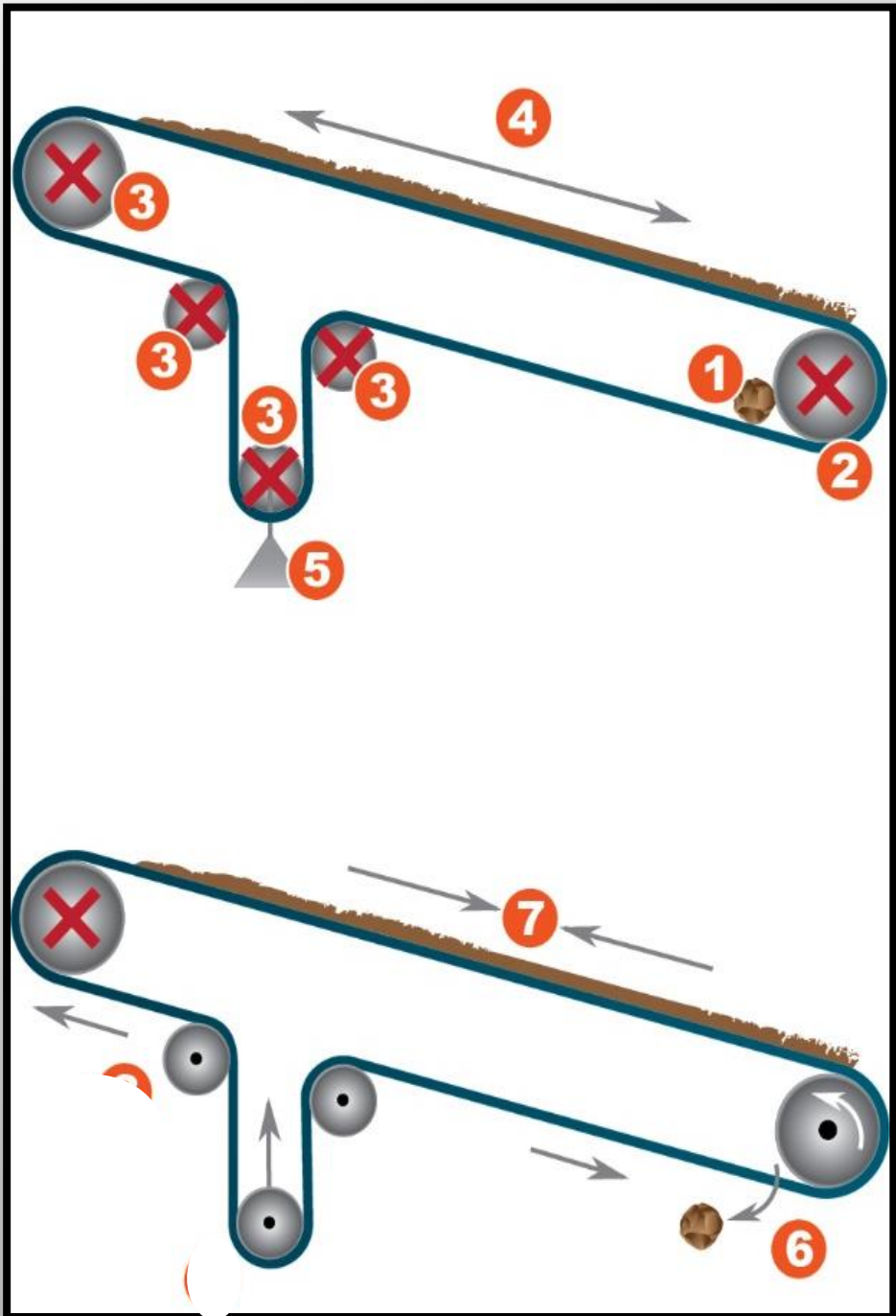
Test Out- Verify

Block Out- Eliminate stored energy from tension

Shortcomings:

1. Can be open to interpretation
2. Not enforced
3. Not inclusive of all hazards

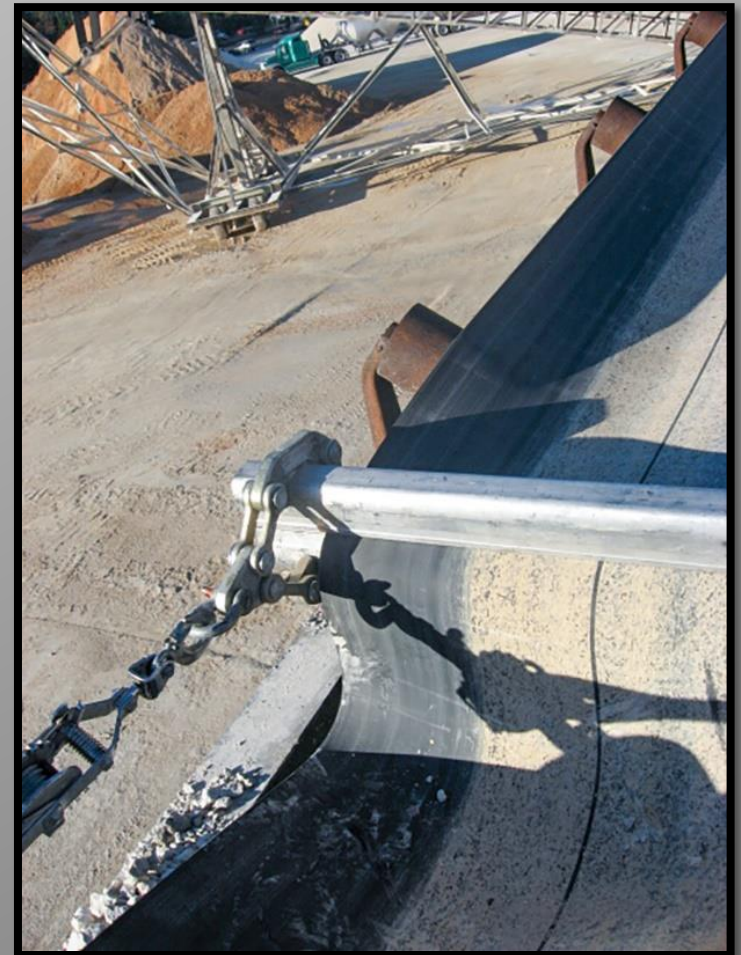




1. Rock trapped in tail pulley
2. Tail pulley stops rotating
3. Motor stalls or trips out and all pulleys stop rotating
4. Belt stretches on top side because drive is at the head
5. Take-up is lifted to remove jammed rock
6. Rock is removed and tail pulley is free to rotate
7. Stretch on top side contracts unexpectedly rotating the tail pulley counter clockwise

More on Block Out

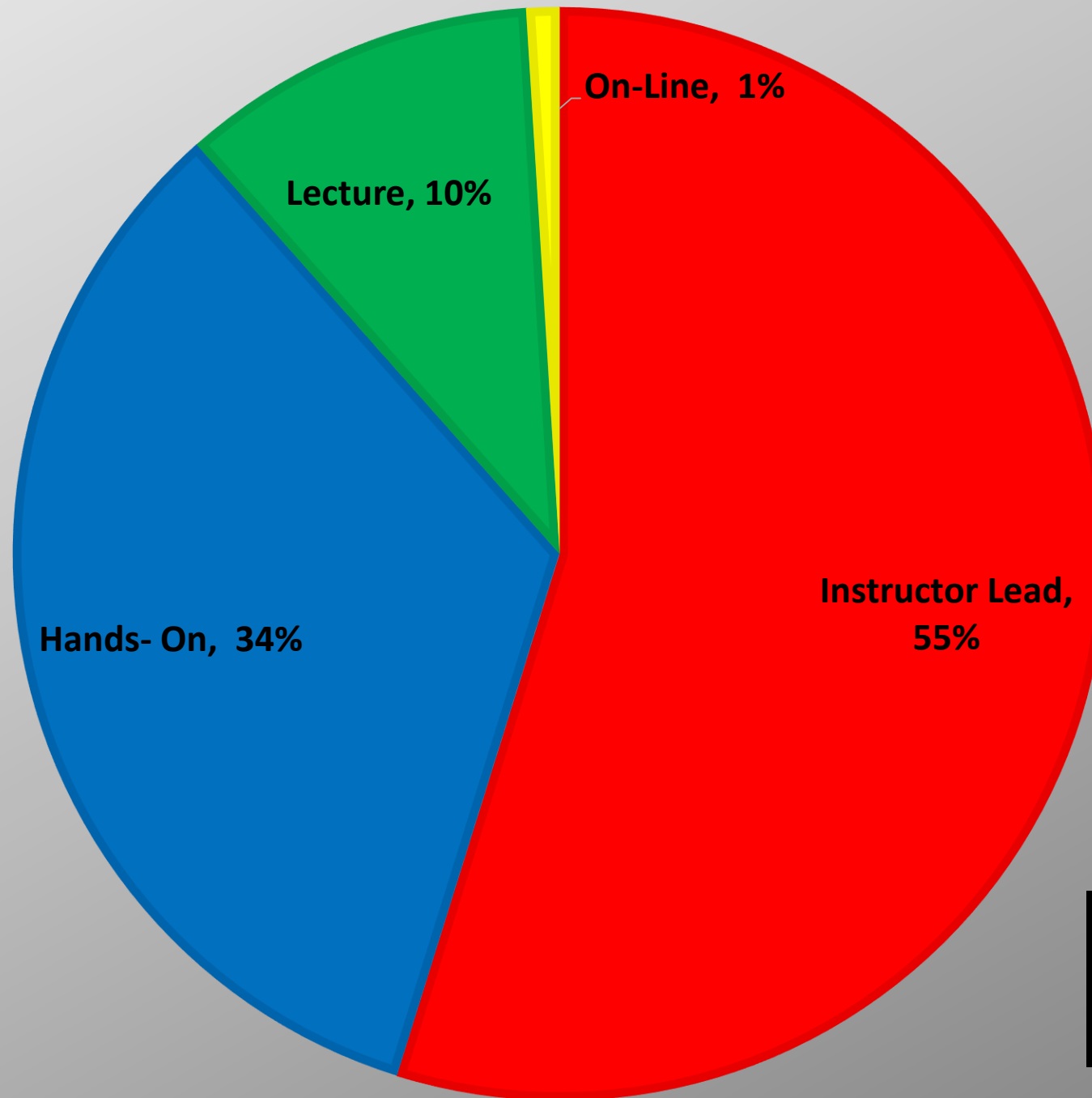
- Energy and power are not the same
- Block out eliminates stored energy from the stretch of the belt
- Physically restrain belt
- Clamps on the belt secured to structure
- Release tension when work is complete



3. Training



- 15% will likely trust new concepts.... *if they're even paying attention*
- 50% will likely trust if data and is provided... *if they're even paying attention*
- 35% will likely resist... *if they're even paying attention*



Preferred Training



Adult learning

- Enjoy-** Voluntary
Use training that creates a desire to attend
- Engage-** Unseat previous ways
Let learner provide input
- Educate-** Deliver your message
- Effective-** Inspire and motivate change in behavior

Shortcomings:

1. Doesn't always change behavior



4. Safety Equipment



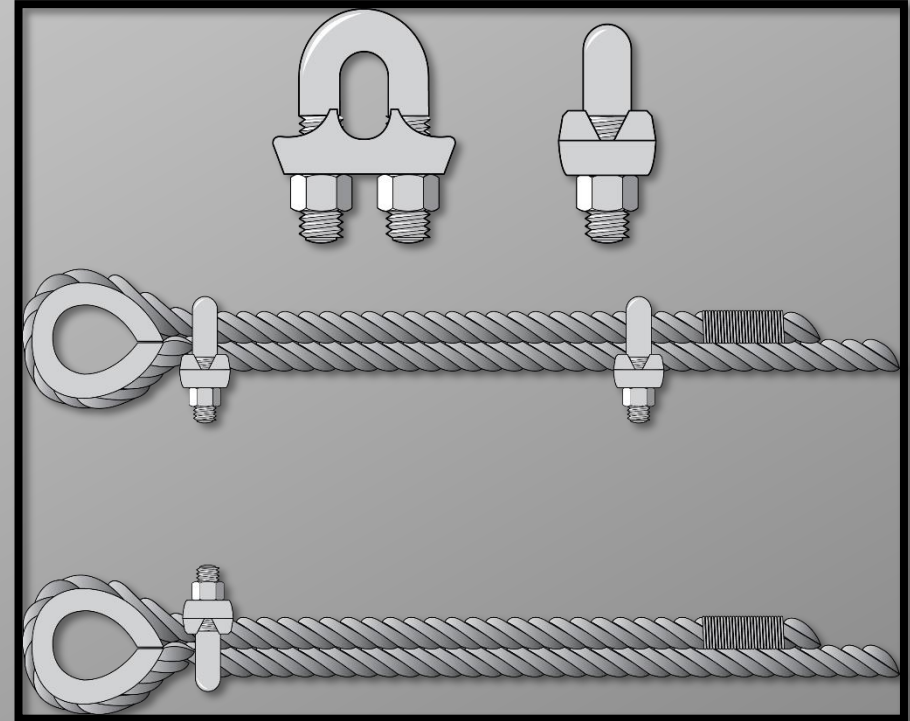
Emergency Stop Switches

- Test for slack in cable
- Measure and record runout
- Inspect cables and clamps
- Inspection length and location

Slack in cable and runout



Inspect cables and clamps

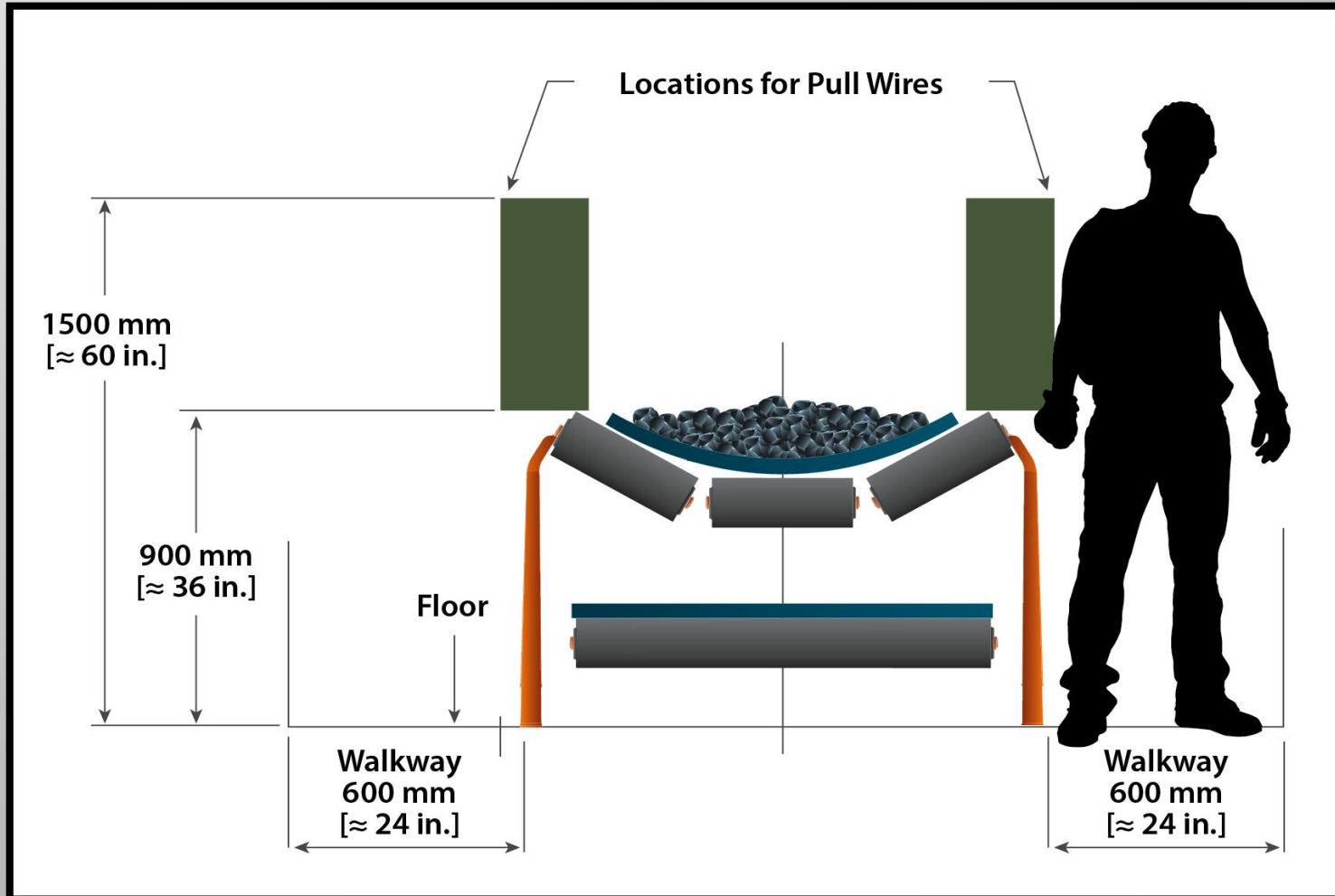




Incorrect Installation of
clamps

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Inspect length and location



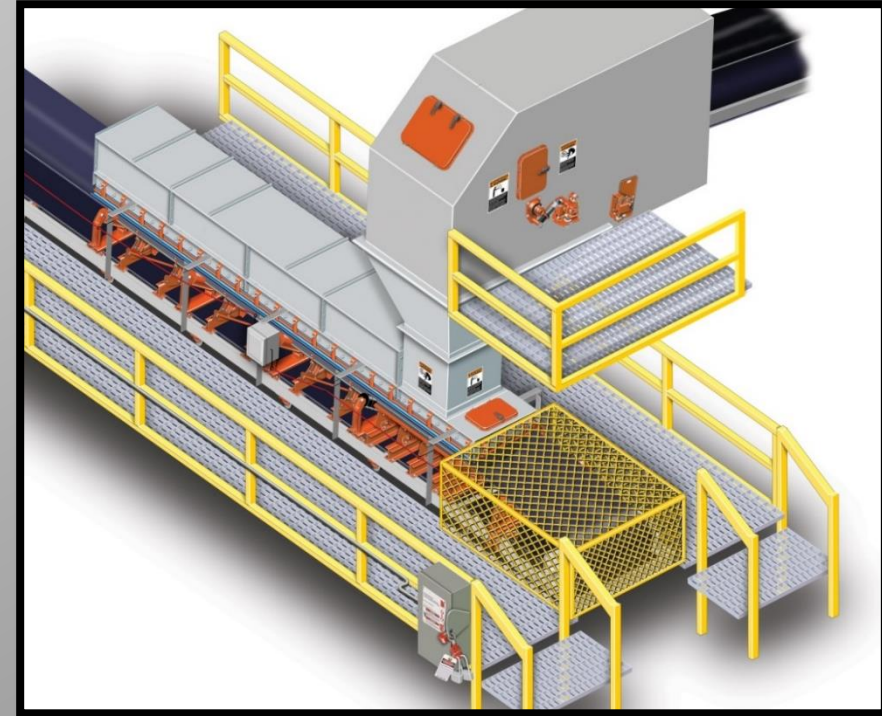
Elevation: 36" - 60"
Length: 164'
Length / Supports: 19.5'



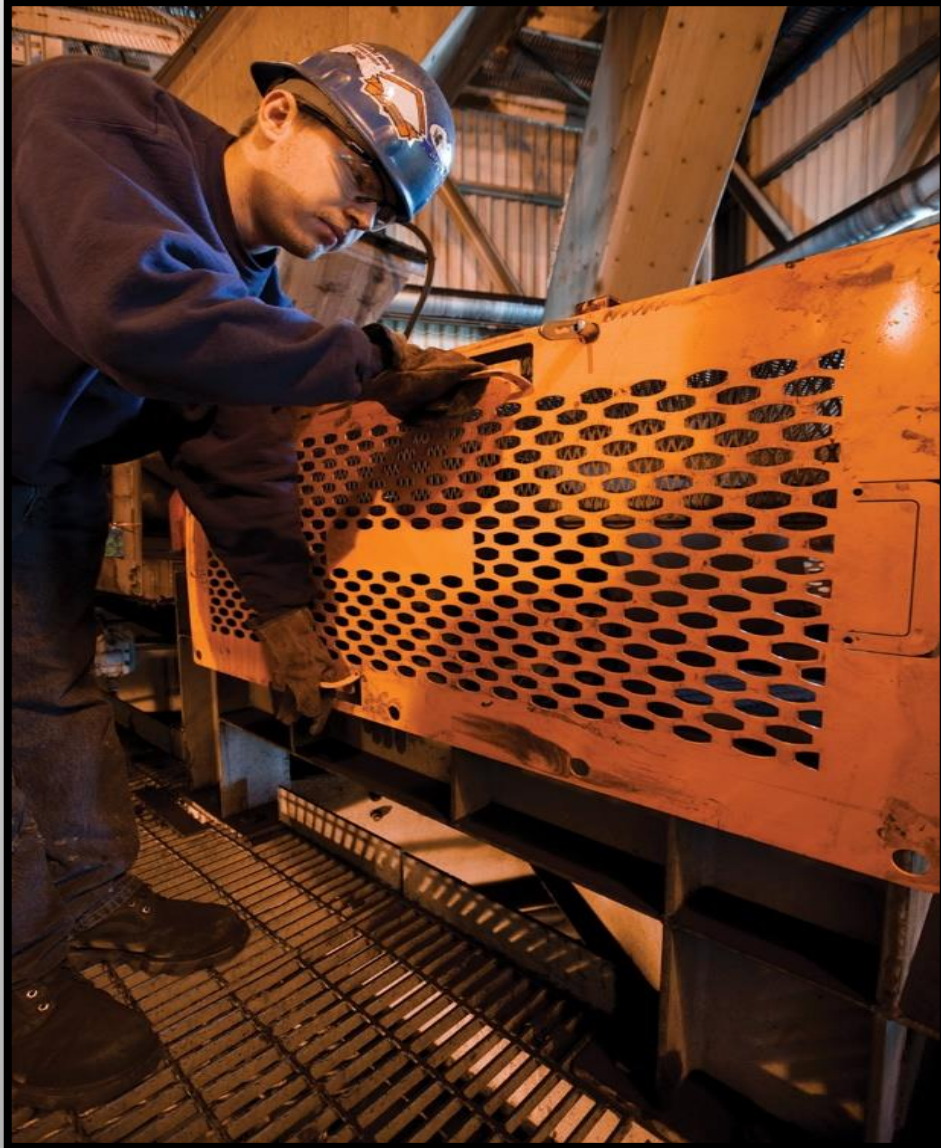
4. Safety Equipment

Guards

- Cannot be a hazard itself
- A.U.T.O.
- Proper distance from hazard
- Require a tool to remove
- Stand out in color
- Return roll guarding



Guard cannot be a hazard itself



- Not exceed 50lbs.
- No Sharp Edges
- Hinges do not create a pinch point

Should not reach (A.U.T.O.) the guard



Around
Under
Through
Over



Proper distance from the hazard



Require a tool to remove



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Stand out in color



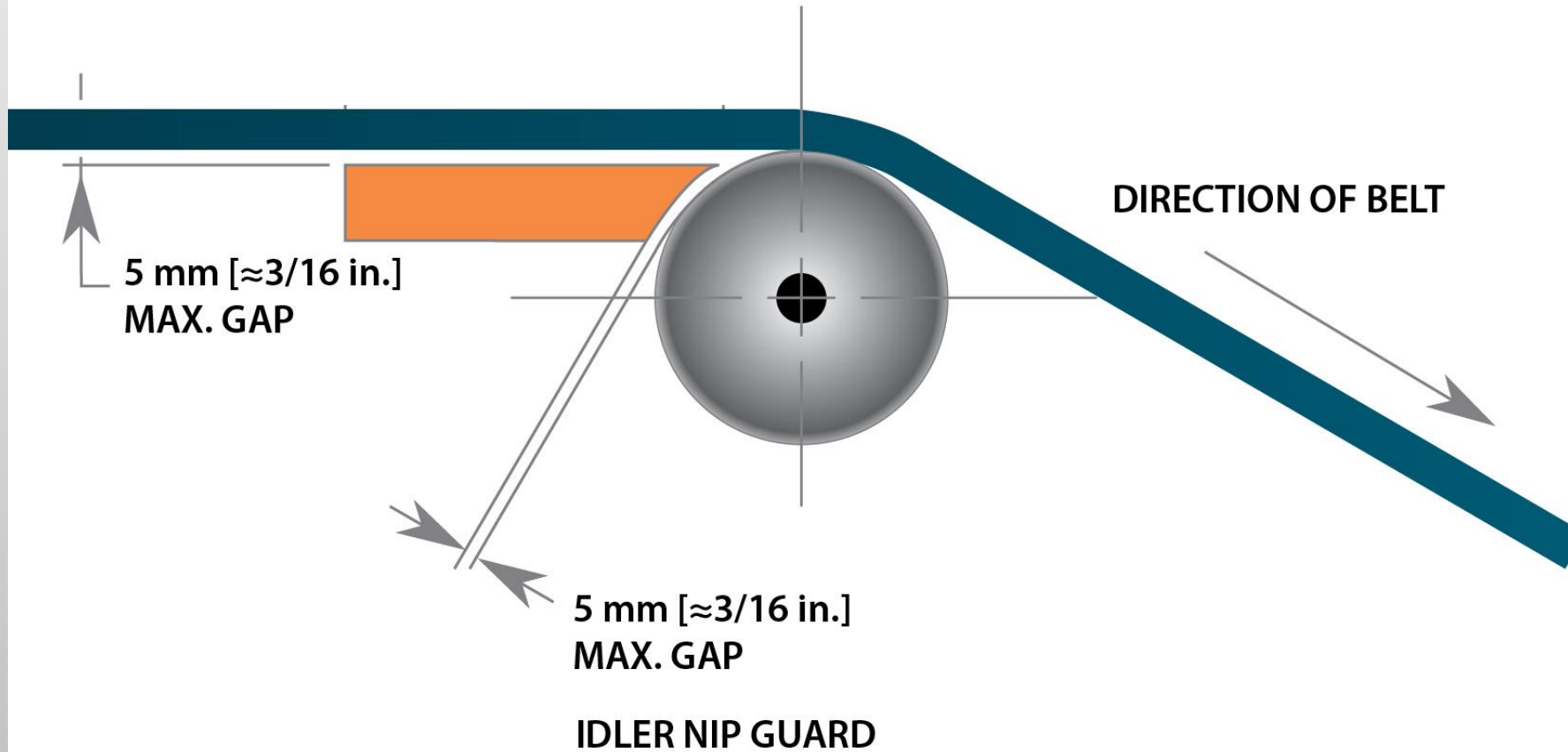
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Return roll guards



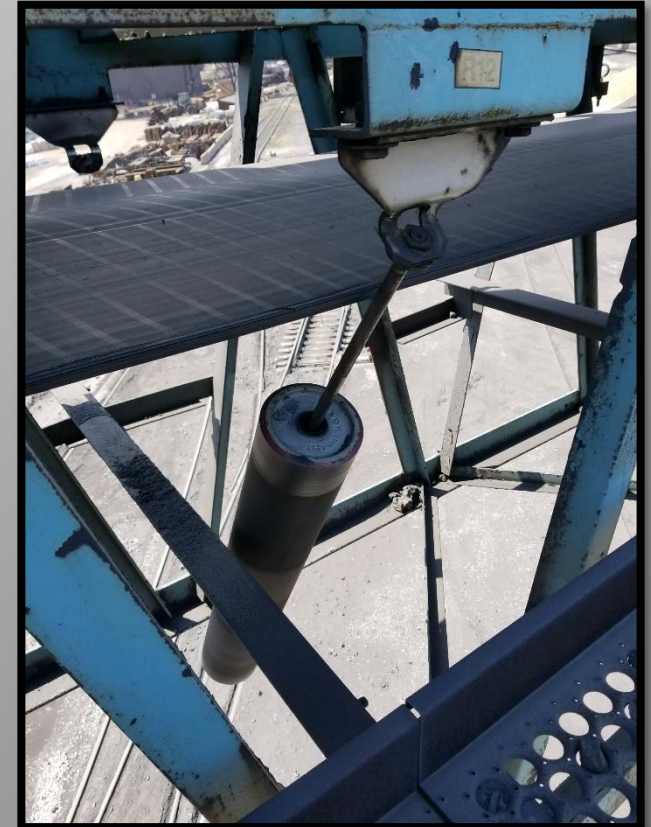
Installed at every return roll that is less than 7' in elevation.

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Plastic nip guards:
acceptable, not
ideal

Catch baskets installed over walkway or roadway



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- ~~5. The most effective way to keep workers safe~~

5. Eliminate the Hazard

Eliminate The Hazard

A 29-year old miner with 1 year of experience was fatally injured while cleaning a snub pulley. The victim was working from an aerial lift located under the belt conveyor when he became entangled in the conveyor pulley



Eliminate The Hazard

A 39 year-old mill operator with 1 year and 14 weeks of experience was killed at a surface gold operation. The victim was sweeping in a crusher building when he fell through an opening approximately 60 feet to the floor below.





Reduce Carryback to Reduce Risk



Culprits:

1. Not enough or improper belt cleaning
2. Poor belt surface or splice
3. Improper maintenance

Reduce Dust to Reduce Risk



Culprits:

1. Over relying on Skirting
2. Improper Belt support
3. Not manipulating air speeds

Reduce Spillage to Reduce Risk



Culprits:

1. Belt sag
2. Wearliner maintenance
3. Sealing at trough

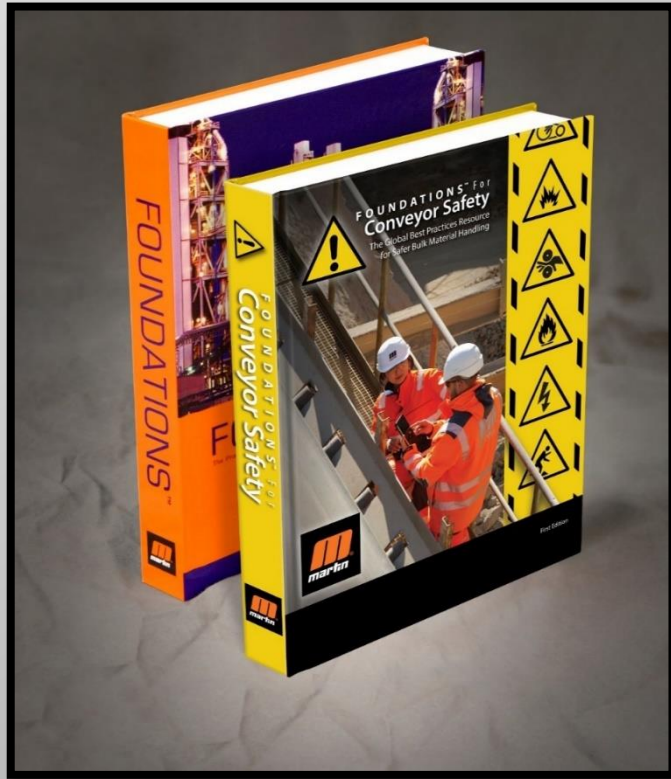
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