Conveyors – Safety – Fact Sheet



WHAT SHOULD I KNOW WHEN WORKING AT OR NEAR A CONVEYOR?

There are many hazards associated with working at or near a conveyor, including:

- Rotating parts or pinch points can drag in, crush or entangle
- Confinement or assembly areas (the area between a fixed object and a moving one) can shear or crush
- Parts that slide or reciprocate (press down) can crush or shear
- Items can break or be ejected (thrown from) the conveyor system
- Items can fall off the conveyor
- Electrical, fire or explosion hazards

When working near any conveyor:

Do

- Wear hard hat and safety shoes.
- Tie back (and tuck in) long hair.
- Know the location of the emergency “shut-off” devices and how to use them.
- Make sure all safeguards and guards including cages, barriers, guardrails, warning signals, and other safety devices that are required are in place and operational.
- Know how to work near machinery safely.

Do Not

- Do not wear loose clothing or jewellery.
- Do not climb, step, sit or ride on the conveyors.
- Do not alter or remove guards or safety devices.
- Do not try to remove stuck items or debris until the conveyor is locked out.
- Do not service the conveyor without following lock-out procedures.

What are some safety tips for working near a gravity conveyor?

Gravity conveyors include those that have rollers, wheels or chutes where objects move by gravity or momentum only.

Do

- Guard pinch points on rollers and wheels and between the conveyor and receiving table.
- Provide adequate guardrails along sides to prevent all objects from falling off.
- Provide retarders (friction areas) if heavy objects are conveyed.
- Ensure there are warning devices near the receiving areas if you cannot see the packages moving on the conveyor.
- Ensure draft checks (fire doors) are installed where conveyors pass through fire walls or floors.

What are some tips when working at a “powered” conveyor?

“Powered” or “power” conveyors include the use of belts, live rollers, slats, or buckets.

Do

- Position yourself so that you are not hit by objects moving down the conveyor.
- Ensure that you can see the conveyor system when you are at the operating controls.
- Ensure that guards are in place for all moving parts of the drive system and in all zones where hazards such as in-running nip, drawing-in, trapping and crushing, friction burns or abrasion are present (includes above, sides, and below the conveyor).
- Guard all pinch points between the conveyor system and fixed objects.
- Locate guardrails around low level conveyors and areas where conveyors pass through the floor/ceiling.
- Locate emergency stop cut-off switches near the operator and along the length of the conveyor at approximately 30 metres (100 feet) apart (or closer).
- Ground belts on belt conveyors to prevent static buildup.

What are additional tips when working with other types of conveyors?

When working with aerial conveyors:

- Make sure that guards and protection plates are in place to protect people working below from falling objects.

When working with bucket conveyors:

- Make sure that both vertical and horizontal bucket conveyors are totally enclosed.

When working with pneumatic conveyors:

- Familiarize yourself with control devices and release valves to cut off air flow in the event of blockage.
- Shield joints and access points to prevent material from being thrown in the event of gasket failure.
- Ensure that screening is in place at the suction end to prevent large objects from being sucked in.

When working with portable conveyors:

- Use only weatherproof electrical components.
- Make sure power cables are located where they will not be walked on or run over.
- Make sure that sideboards are high enough to prevent large items from falling and smaller items from being thrown by the wind.
- Chock the wheels on trucks and rail cars that are being loaded or emptied by portable conveyors.
- Do not exceed the rated load capacity of the conveyor.

When working with movable conveyors:

- Install barrier guards, guardrails and/or mark the ground to indicate operating area of the conveyor.

Are there issues, other than safety, I should know about?

Yes. If working at a conveyor or belt, repetitive motions, reaching, and lifting may lead to Work-Related Musculoskeletal Disorders (WMSD) especially when movements are done quickly and for a long period of time. The following case studies are available as examples and the information can be applied to a variety of situations:

- Conveyor – Ergonomics
- Bottle Recycling Department of a Brewery
- Fish Processing

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