

Safe Hose Management

Overview

To avoid incidents brewery employees should inspect hoses prior to use, use hoses appropriately, and neatly put away hoses after use. This Tool Box Talk applies to all flexible hoses used to transport beer or hazardous substances such as hot water, steam, CIP, chemicals, and gases.

Hose Setup and Safe Use

- Locate/store hoses away from high traffic areas.
- Inspect hoses before each use.
- Store hoses away from the top or bottom of stairs. Place hoses behind steps if possible.
- Draw attention to hoses on the ground, especially in high traffic areas, by marking with signs.
- Select the appropriate hose length for the job to avoid excess hose that could spill into pathways. Pick the minimum length needed to connect tanks.
- Do not leave hoses stacked on top of each other, or not coiled when not in use.
- Never exceed the rated working pressure of a hose.

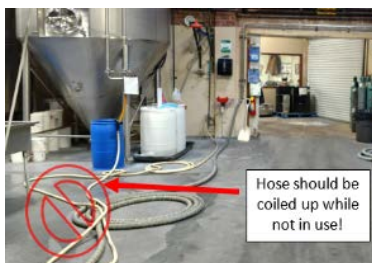
Transporting

- Use dollies, rollers, or carts when moving large hoses.
- Use proper ergonomic lifting methods when moving hoses. If hoses are heavier than 50 pounds, DO NOT lift alone. Avoid twisting your back & keep your back in a neutral position. Move elbows close to your sides when carrying.
- Never pull a hose by its coupling or drag hoses to avoid damage to hoses.
- When moving a hose, always lift the hose and coupling together.
- Never over-bend a hose to the point of kinking.
- Never kink a hose to stop the flow.

Storage

- Put hoses away as soon as you are finished with your task.
- Safely coil hoses in designated areas off of the floor (e.g., on a rack).

- Ensure hoses do not kink when coiling – this can damage the hose.
- Store hoses at a height accessible from ground level.
- Add hooks to tanks/poles to safely store hose while connected to pipes/tank hookups.
- Never run over a hose with equipment or vehicles, such as fork lifts.
- Store hoses out of direct sunlight and away from direct heat sources.



Hose Fittings

If hose fittings are improperly used, this can lead to potential exposures to hazardous substances such as caustic, hot water, or compressed air. Using the correct type and size of hose end fittings/connectors is crucial to ensure life of the hose and eliminate potential exposure to employees. Do not rely on light-duty hose clamps (e.g., worm gear clamps) which are not designed to operate at pressure when attaching hoses/tubing. Instead use heavy duty clamps and fittings (e.g., crimp fittings or ear clamps, etc.).

Hose Inspections

Prior to use, inspect hoses for any damage or signs of wear. If a hose is damaged, remove it from service immediately.

- Inspect hose cover for damage. Cuts or abrasions which expose the reinforcement are signs that the hose should be removed from service.



- Check exposed surfaces of couplings, flanges and nipples for cracks or excessive corrosion. Check for coupling slippage and ensure the hose clamps are tight and secure before each use.



- Check the flexibility; it should move freely. Hoses exposed to sunlight, extreme temperatures or chemicals can affect its resiliency and become stiff and hard. When flexed, a stiffened hose can crack, leading to failure.



- Color changes can indicate chemical or ozone attack, or aging. Hoses that have changed color should be pulled from service for a more thorough inspection.



- Blisters near the coupling is a sign that the hose may be over-pressurized. Blisters can also indicate a chemical incompatibility.



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<http://www.mbaa.com/brewresources/brewsafety>