



Central States Hose, Inc.
the hose and fittings superstore



IMPORTANT SAFETY INFORMATION REGARDING STEAM HOSE

⚠️ WARNING: Exposure to steam is hazardous! If not properly controlled, steam can cause serious bodily injury or death and property damage. Steam hoses must be properly selected, coupled, tested, installed, used, and maintained. All hoses will eventually wear out. It is important to be mindful of and on the look-out for the hose that has deteriorated to the point where it can no longer provide safe service.

Proper steam hose selection includes:

- * selecting a hose identified as steam hose construction,
- * providing steam hose identification in the form of permanent branding on the hose's outer cover, not just the package,
- * identification of the type of service the steam hose is to accomplish,
- * Is the hose manually handled?
- * What is the anticipated frequency of use?
- * What is the actual pressure of the steam service?
- * Is the hose subject to pressure surges or peaks?
- * What is the temperature of the steam?
- * Is the steam saturated (wet) or super-heated (dry)?
- * What environmental factors may the hose cover be exposed to?
- * and recognizing potential spillage or accumulations of corrosive or petroleum-based products may have deteriorating effects on a hose cover.

Ensure that the hose is properly installed:

- * Use hose couplings designed for steam service. Steam hose couplings use a bolt-on outside clamp which can be re-tightened over the hose's service life.
- * Avoid extreme hose flexing near the coupling. Use elbows in the piping system to assure a straight line connection with the hose.
- * Installation of a shut-off valve between the steam source and hose will maximize hose service life and operator safety. Boston considers a shut-off valve mandatory!
- * Spring guards can relieve some of the acute flexing encountered in heavy manual handling applications.
- * Provide a suitable means of storing the hose when not in use. A permanent rack or tray will minimize damage to the hose while in storage. Do not hang the hose on a hook, nail, or other object which could cut or damage the hose.

Common Sense with Steam equals Safety:

- * Provide operators with adequate safety clothing including gloves, rubber boots, full-length protective clothing, and eye protection. This minimizes the effects of scalding burns received from splash-back of steam or hot water.
- * Ensure the working area is clear of clutter and tripping hazards.



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- * Check the tightness of coupling bolts prior to each use.
- * De-pressurize the hose after use. This provides safety and dramatically increases hose life.
- * The best prevention of accidents is an awareness and anticipation that they may occur.

Preventive, Periodic Maintenance Pays Off

All hoses will eventually wear out. It is important to be mindful of and on the look-out for the hose that has deteriorated to the point where it can no longer provide safe service.

What to look for in a hose near the end of its useful life:

- * cover blisters or lumps.
- * cuts or gouges in the hose cover that expose the reinforcement.
- * steam leaks at the coupling ends or anywhere along the length of the hose.
- * flattened or kinked areas which have damaged the hose.
- * a reduction in steam flow indicating that the tube is swelling.

When any of these conditions occur, it is good safety sense to immediately remove the hose from service. Once removed, the hose can be carefully inspected before further use.

Often times a steam hose failure will occur near the ends due to flexing and strain at the coupling. In such instances, the hose can be cut back and recoupled, providing additional service life. Hoses used in continuous high pressure/temperature service should be periodically inspected for signs of tube hardening. Generally speaking, it is necessary to remove the coupling for tube inspection.

The provisions of this section shall apply to ship repairing, shipbuilding, and shipbreaking.

Steam supply and hoses:

Prior to supplying a vessel with steam from a source outside the vessel, the employer shall ascertain from responsible vessel's representatives, having knowledge of the condition of the plant, the safe working pressure of the vessel's steam system. The employer shall install a pressure gauge and a relief valve of proper size and capacity at the point where the temporary steam hose joins the vessel's steam piping system or systems. The relief valve shall be set and capable of relieving at a pressure not exceeding the safe working pressure of the vessel's system in its present condition, and there shall be no means of isolating the relief valve from the system which it protects. The pressure gauge and relief valve shall be located so as to be visible and readily accessible.

Steam hose and fittings shall have a safety factor of not less than five (5).

When steam hose is hung in a bight or bights, the weight shall be relieved by appropriate lines. The hose shall be protected against chafing.

Steam hose shall be protected from damage and hose and temporary piping shall be so shielded where passing through normal work areas as to prevent accidental contact by employees.



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This information is from our manufacturer of steam hose and the OSHA web site: <http://www.osha.gov>
This is provided as an introduction to the safe use of steam hose, it may be subject to change without notice and may not include all current regulations. Central States Hose urges you to contact your safety manager, a safety consultant or OSHA field office to ensure that your operation meets all safety requirements.

⚠ Use of a damaged hose assembly can result in serious personal injury and property damage.