

Operation, Installation and Maintenance Instructions For Metal Hose Assemblies and Expansion Joints

- 1. Assemblies (hereafter referring collectively to metal hose and expansion joints) should be separated during shipping so that they are not allowed to rub against or hit one another, or any other objects, during transit.
- 2. During shipment, handling, and installation, the braid, hose or bellows must not be dented, cut, scratched, punctured, permanently bent, or otherwise damaged in any way.
- During installation, the braid, hose or bellows should not come into contact with any weld spray or splatter, welding elements, heated elements, or open flames.
- 4. Assemblies should never be operated at any pressure or temperature that is higher than their design pressure and temperature, nor tested at any pressure that is higher than their approved test pressure.
- 5. Assemblies should only be used in systems for which they were specifically designed. Piping systems incorporating expansion joints must be properly guided and anchored in accordance with the Standards of the Expansion Joint Manufacturers Association (EJMA).
- 6. Compression or extension of metal hose is not permitted, nor is twisting (torsion) of a metal hose or bellows.
- 7. Care should be taken to avoid sharp bends when using metal hose. An elbow fitting should be used in most cases where metal hose is required to make a sharp 90 bend. Metal hose should never be used when it is bent in a radius that is less than the minimum centerline bend radii as listed in the Metal Hose Catalog.
- The movement of a metal hose or expansion joint cannot be restricted or obstructed in any way.
- 9. No maintenance is required. Inspection immediately after installation and during field leak-testing is recommended. Thereafter, periodic inspection for leaks, damage, excessive motion, distortion, etc. is at the discretion of the end-users.
- 10. Shipping bars are painted yellow and must be removed after installation, but before testing and system operation. They are not designed for pressure thrust loads developed during system testing or operation. If they are missing or damaged during transit, this could indicate damage to the assembly.
- 11. Shipping bars are not to be used as lifting devices. Chains or other lifting devices should not be employed directly on bellows or hose elements.
- 12. Tie rods, control rods, limit rods, jacking rods or any nuts and bolts attached to same should not be removed, adjusted, or added to any assembly without first consulting factory.
- 13. Flange bolting, bolt tightening torque recommendations, and gaskets, are the responsibilities of the end-user, unless provided by factory.
- 14. An assembly must not be forced to fit within piping system; any movements occurring during installation when added to those occurring during operation must not exceed the assembly movement capability.
- 15. Expansion joints with liners should be installed such that the free end of the liner is pointing in the direction of the flow. For those units that ship with a loose flow liner, often referred to as Vanstone liner, the free end is that end without a ring or flange.
- 16. If an assembly has lateral, axial, or angular movements applied during manufacture (presets), they should be verified by measurement prior to installation to ensure they have been maintained during transit.
- 17. Assemblies, or any component thereof, should never be modified in any fashion without consulting factory.

OI&M Rev.8.31.16

Southeastern Hose, Inc. 506 Sangamore Road Bremen, GA 30110