FLEXICRAFT METAL EXPANSION JOINTS INSTALLATION INSTRUCTIONS

The selection of the correct style expansion joint for particular service conditions is only a portion of the application. The following precautions must be observed to assure best results from the installation:

- 1. Ensure that all pipelines containing expansion joints are properly anchored. This includes being designed for the thrust loads that will be experienced during operating and test pressures. This load is equal to the pressure times the effective area of the joint.
- 2. Ensure that all pipelines containing expansion joints are properly guided. Guides are required within four pipe diameters of the joint, and then again after fourteen pipe diameters, if applicable. The pipelines must be aligned at the time of joint installation.
- 3. Handle the joints carefully. The bellows element must be protected from damage. Dents, scores, arc strikes weld spatter, and other damage can cause the joint to fail. Damaged joints should not be used.
- 4. Internally pressurized joints with liners are to be installed in the proper orientation with respect to the direction of flow.
- 5. Unit lengths must not be altered during installation except for the application of cold pull.
- 6. If joints have weld ends, cover the bellows element with a chloride free fire retardant cloth prior to welding. If joints have flanged ends, do not force the expansion joint to match the bolt holes of the mating flange.
- 7. Remove shipping bar restraints after installation, but before hydrotesting.
- 8. Test pressure should not exceed 1 _ times design pressure.
- 9. Water free of halogens should be used for hydrotesting.
- 10. If the testing medium is significantly heavier than the product to be carried in the system, care must be taken to support the additional weight.
- 11. Paints containing low melting point metals or their compounds, particularly aluminum, lead or zinc, must not be allowed to come into contact with the bellows convolutions.
- 12. All installation procedures should conform to E.J.M.A. Safety Recommendation in Section B.



"Flexible Piping Solutions"