

Bulletin PP-901

DAMAGE ASSESSMENT

Damage may occur during construction handling and installation. Significant damage may impair the future performance of the pipeline. Damaged pipe or fittings should be inspected and evaluated to determine if the damage impairs serviceability. The following guidelines may be used to assess damage significance.

For DriscoPlex® pressure piping systems, damage or butt fusion misalignment in excess of 10% of the minimum wall thickness required for pipeline operating pressure may be significant. If the pipeline is to operate at the maximum permissible pressure for the material and DR, the damage allowance is 10% of the pipe minimum wall thickness. On the other hand, if the pipe is to operate at lower pressure damage depth may be greater.

The shape of the damage should also be considered. For small damage areas where the depth is not excessive, sharp notches and cuts should be dressed smooth so the notch is blunted. Blunt scrapes or gouges should not require attention. Minor surface abrasion from sliding on the ground or insertion into a casing should not be of concern.

- Pipe or fittings that have sustained service impairing damage should not be installed. Post-installation damage may require that the damaged pipe or fitting be removed and replaced.
- **Scrapes or gouges cannot be repaired by filling-in with extrusion or hot air welding. The damaged section should be removed and replaced.**
- Improperly made fusion joints cannot be repaired. Improper or misaligned butt fusions must be cut out and re-done from the beginning. Poorly joined socket or electrofusion fittings must be removed and replaced. Poorly joined saddle fittings must be removed by cutting out the main pipe section, or, if the main is undamaged, made unusable by cutting the branch outlet or chimney off the saddle fitting, and installing a new saddle fitting on a new section of main. Socket fusion fittings cannot be reused.
- Broken or damaged fittings cannot be repaired. They must be removed and replaced.
- **Kinked pipe must not be installed and cannot be repaired. Kinked pipe must be removed and replaced.**
- Pipe damaged during an emergency squeeze-off cannot be repaired. Squeeze-off damaged pipe must be removed and replaced.