PENFLEX

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Hose Assembly Field Inspection Checklist

As metal hose is used to transfer media that is corrosive or hazardous— and often both—hose failure can present significant health risks to those working in and around the piping system and to the surrounding environment. Depending on the application, hose failure can also damage equipment in which the hose is used, resulting in thousands, even millions, of dollars lost.

As a safety precaution and to protect a company's machinery, Penflex recommends regular inspection of hose assemblies. Beyond a more formal inspection, all those working anywhere around hose assemblies should be educated to look for the most common indicators of hose failure.

If any of the following indicators are observed, replacement hoses should be considered before failure occurs.

1. Loose, broken, bulged, frayed or worn braid.
2. Deformation of the hose, which may include twisting, kinking, denting or flat spots.
3. Slipped, cracked or dented couplings. If couplings show excessive corrosion, this is also a red flag.
4. Traces of the media that's inside the hose coming out or being on or around the assembly. This is an obvious indication of a leak.
5. Loose or damaged hose guards or covers.
6. Indications of hose or braid corrosion.
7. Loose fitting attachments.
8. Hose assemblies that are rubbing against one another or making contact with adjacent machinery or piping.
9. Unreadable or missing identification or tag if this information is required.

Some of these indicators can be fixed before replacement hoses are needed. In the case of loose or damaged hose guards or covers, look to replace the guards or covers first. However, a careful inspection of the hose and braid beneath the damaged protective layer should be carried out before replacements are installed.

Loose fitting attachments may be tightened, and new tags may be created if information can be procured from the manufacturer. If hoses are rubbing up against one another, we recommend the use of hose buns to create space between hoses or between hoses and the ground or nearby machinery.

To download a copy of the field inspection checklist, visit the Engineering Bulletin library or click here.

If you have any questions about hose assembly inspection procedures, please contact us.