OST SERVICES PROJECT REPORT #224

FRICTION ANCHOR ASSEMBLY PROJECT

FRICTION ANCHOR ASSEMBLY PROJECT

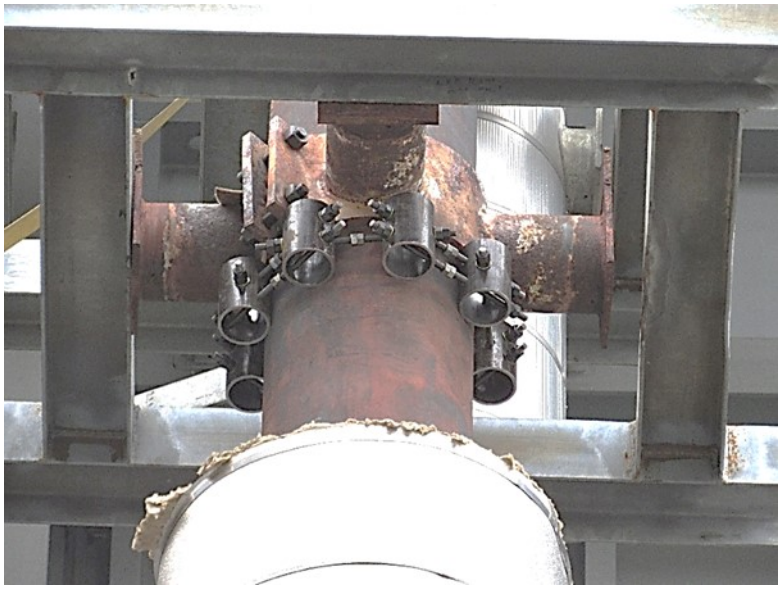


PHOTO OF FRICTION ANCHOR ASSEMBLY IN USE

In addition to the performance of regular walkdown activities directed at pipe supports, restraints and snubbers, OST Services has performed a number of unique and major projects over the years. The following represents a brief description of a notable undertaking.

PROJECT DETAILS

A new anti-slip assembly has been developed by OST Services. The assembly can be adjusted to accommodate a wide range of pipe diameters, by simply removing redundant pieces of the assembly. The assembly provides a means to keep items in place that can tend to loosen and slip down vertical sections of piping. Typical uses involve securing guides and restraints in place without welding to piping. This is particularly useful for piping produced in accordance with ASTM/ ASME A335 Grade P91, or similar material encountered throughout various industries. Other uses involve the support of insulation on vertical risers to remove sections below for nondestructive testing activities, pipe rework, valve replacements, etc.

The design has also been customized to accommodate the differential expansion properties of the pipe. The design ensures that the normal force exerted on the pipe are kept to a minimum, while still developing the friction force required for the supporting effort. Consideration has also been given to keeping the stresses in the clamp at a level low enough to prevent long term creep and relaxation, which would decrease the supporting capacity of the clamp.

OST SERVICES

A division of Lisega Inc.
55 Chapman Street
Providence, RI 02905

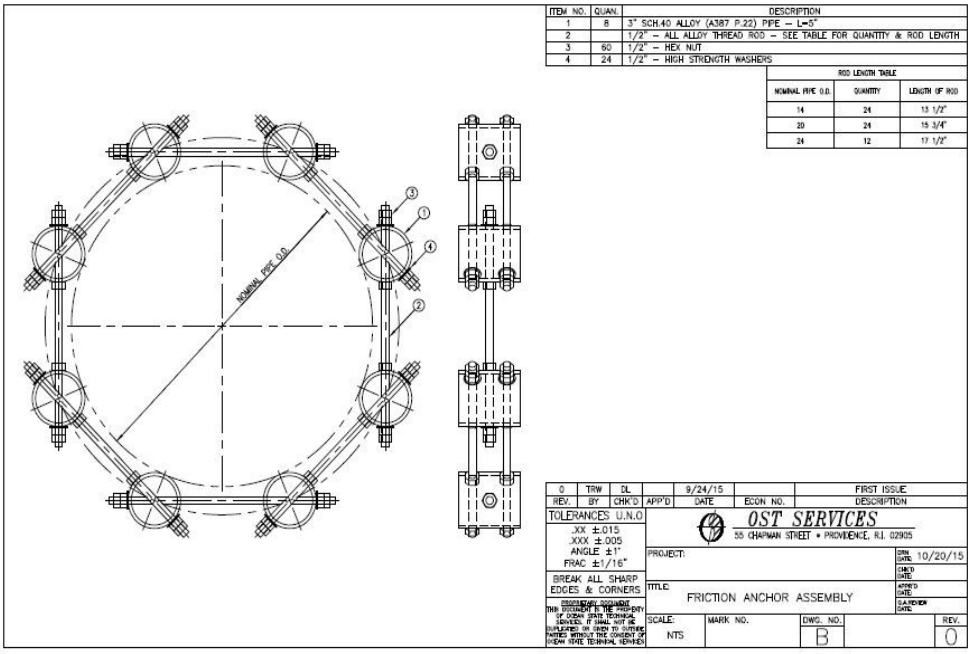
Tel: 401-467-8661
Fax: 401-467-8662

OST SERVICES

We're on the Web!
www.ostservices.com

Piping & Pipe Support Services

Design
Inspections
Testing
Repair
Adjustment
Installation
Analysis



DETAIL OF FRICTION ANCHOR ASSEMBLY

GENERAL DISCUSSION

The care, maintenance and ultimately, the reliable performance of a high energy piping system are dependent upon a number of categories. Factors such as the performance of pipe supports are crucial to accommodating dead weight loadings and allowing unobstructed thermal expansion of the systems. The restraint control devices, or snubbers, are intended to telescope freely and absorb only the dynamic loadings that may tend to develop within a system.

Periodic inspection of these devices provides crucial information on this area as well as identifying instances where abnormal operating occurrences may have developed along with unpredicted stresses. Also, important to the process is the periodic application of various non-destructive testing techniques at selected locations along the piping systems. The areas can be prioritized based upon industry experiences, site specific issues, along with objective engineering evaluations.