

Newsletter-35

Newsletter for Site Engineers- II

Pipe Hangers and Supports has always provided assistance at site to customers, for the nearly four decades that it has been in existence. However, in the past few years we have brought in added focus to this aspect, based on the requirements we have been receiving from our customers. We now have a dedicated set up for offering site services which consists of people who are very experienced in the manufacture of our product and its operation.

Our service at site for new projects normally involves inspecting the hangers to see whether they have been erected properly and whether the hangers have been “floated” after hydrotest of the piping system. In case any correction is to be carried out, we offer advice regarding the same and also guide the customer to carry it out. In the case of running projects, we inspect the hangers to check whether they are functioning properly and whether any replacement is required.

Based on our experience we thought it fit to record our observations and recommendations, which we feel will be useful for engineers at site.

Dos and Don'ts (continued)

13. Once the combinuts used for locking the spring hangers in the cold position are unlocked and the hangers are floated, ensure that the spring is in the cold position. If the springs are in the fully compressed or fully released condition, then it means that the load distribution among the hangers in the piping system is not proper. The spring hanger is either taking much more than the load that it is supposed to take it is taking much lesser load.
14. Avoid painting over the name plates of the spring hangers since they contain important information which would be required throughout the life cycle of the spring hanger.
15. Avoid using the spring hanger as an enclosure for keeping times like gloves, tools etc. during erection. In many instances these are not removed when the plant is brought into operation.
16. Please ensure that the mirror finished stainless steel plate, which is part of the slider arrangement, is available and is welded to the top plate. Also avoid painting over the mirror finished face of the stainless steel plate.
17. Ensure that all the packing material is removed from the spring hangers and supports.

18. While erecting spring supports, ensure that the load nut below the load pad is erected such that the adjustment of 25 mm is available to start with.
19. While erecting hanging type springs and rigid hangers, ensure that it is vertical in cold condition, unless a cold offset is specified in the hanger drawing.
20. While erecting hanging type springs, ensure that a gap of 75 mm is available between the two tie rods within the turnbuckle, to start with.
21. Ensure that the thread of the tie rod is fully engaged with the threaded portion of components such as eyenut, turnbuckle and clevis.
22. In arrangements involving twin hanger arrangement with spreader beam, ensure that the spreader beam is horizontal and is not inclined.
23. Ensure that the pipe clamp is assembled properly including the split pins on the load pin.

Procedure for removal for replacement of a hanger installed in the piping system

- (a) Removal for replacement of a hanger should be carried out only during shutdown when the piping system is in the cold condition.
- (b) For Variable hanger
 - (i) Before removing a hanger, the piping system is to be supported at that point by means of a temporary support such as a chain pulley block or a hydraulic jack.
 - (ii) Lock the pressure plate by closing in both the top and bottom locknuts on both sides of the vertical column – *Critical process*
 - (iii) Rotate the turnbuckle in the anticlockwise direction
 - (iv) Remove the linkage to the bottom attachment connected to the piping system such as clamp or lug
 - (v) Now the hanger is free to be removed from the top attachment such as inverted beam welding attachment or lug.

- (c) For Constant load hanger
- (i) Before removing a hanger, the piping system is to be supported at that point by means of a temporary support such as a chain pulley block or a hydraulic jack.
 - (ii) Lock the pressure plate by closing in both the forward and rear locknuts on both sides of the spring can – *Critical process*
 - (iii) Rotate the turnbuckle in the anticlockwise direction
 - (iv) Remove the linkage to the bottom attachment connected to the piping system such as clamp or lug
 - (v) Now the hanger is free to be removed from the top attachment such as inverted beam welding attachment or lug.

For past newsletters please look up our website www.pipehangers.in

About Pipe Hangers:

A Global Solution to Spring Hangers and Supports

We are the leading manufacturer of spring hangers, supports & accessories. Over the past 39 years we have supplied to major power plants, refineries, nuclear installations & process industries in India & several International projects.

Pipe Hangers & Supports Private Limited

Information Req'd by Pipe Support Manufacturer



- 1) Hot Load (Operating Load) in Kgs : _____
- 2) Thermal Movement / Travel (Direction + or -) in mm : UP (+) mm
- 3) Type of Hanger Variable / Constant /Rigid : VariableEffort Support
- 4) For Constant Add Over Travel : Yes No
- 5) For Variable Springs Max Allowable % Load Variation : %
- 6) Horizontal / Lateral Movement (If any) : 'X' Dir mm / 'Z' Dir mm
- 7) Hydro Load (If any) : Kgs
- 8) Model & Type of Support : _____
- 9) Assembly Length (From BOS/TOS to Pipe CL) : mm
- 10) Operating Temperature : Deg C
- 11) Pipe Insulation Thk : mm
- 12) Pipe Material : _____
- 13) Require Pipe Shoe for Foot Mounted Support : Yes No
- 14) For Foot Mounted Support Match Height : Yes No
- 15) Attachments like Lugs, Cleats Welded to Pipe in Scope : Yes No
- 16) Operating Load includes Wt of Accessories like
Clamp, Tie Rods, Cleats, Lugs etc. : Yes No
- 17) Preferred Surface Protection / Painting : _____
- 18) For 'G' Type /Double / Trapeze type Hanger the
Load Given above is for 1 assembly consisting of
2 Hangers / Individual Hanger : Yes No
- 19) Hot load or Cold load Setting

