NEWS LETTER- 26

Significance Of Pipe Size

Pipe / Trunnion size (DN/NB/OD mm)

This is required for proper selection of the support attachment like clamp with desired height (C dim as per PHSPL catalogue)

A very few Client's technical data may not have/miss these input data which puts the support vendor in a **FIX,** thus preventing them to move forward or to quote with assumptions.

Absence of these data many times may not be possible to assume & calls for clarification which takes time for getting reply from client.

In this process vendor may loose time & call for extension which may or may not be honoured by the client due to urgency. Thus the client loses quote from reputed vendor. Sometimes if the submission is thru portal, even clarification may not be feasible.

Under such circumstances, please imagine the situation of the reputed vendor who could not even participate with proper quote. As such, it can be imagined about the seriousness of the issue.

In case of pipe size, there are four cases to be explained.

1. If pipe is OD (outside diameter) based, then outside diameter or Nb/Nd (nominal bore/Diameter) of pipe is adequate for support selection. (Nb or Nd is mere no which has a specific relation to OD of pipe)

2. But if the pipe material is FRP, it is appropriate to indicate the exact OD of pipe since for a Given Nb of FRP pipe, OD differs than that of regular steel piping.

3. If the pipe is ID (internal diameter) controlled, in such case it is essential to provide the pipe & thickness with tolerances, so as to arrive at the max OD of pipe to finalise the correct ID of clamps.

4. If the support is provided on the trunnion welded to parent pipe, then it will be appropriate to mention the trunnion pipe size which is the actual support point.

Some interesting points to mention here about **ID controlled pipe** selection/usage Id controlled pipe is normally used in critical piping (main steam, Hot reheat, Hp by pass Piping) - In order to maintain the required velocity of the medium in turn limit the pressure drop between the inlet & outlet points. Further in these systems, normally pipe bends are used which will have 3D or 4D as bend radius instead of conventional elbows(1.5D or 1D as radius) for many technical reasons.

(Normally such bends will have straight portion like clamping, trailing lengths before and after bend radius). Such bends will have higher thickness than the normal straight pipe thickness to take care of bend thinning effect for the same ID of pipe. Hence bend pipe OD & straight pipe OD will be different. This in turn will have different OD of pipe clamp. Hence clamp ID (equals OD pipe arrived based on Id + 2x wall thick) of support located on straight portion of pipe bend & straight pipe will be different. This is to **be kept in mind** while providing the technical data by client. Else there will be mismatch at site, thus hampering the erection critically.

Trunnion Size-

In some of the supports, especially in vertical pipe supports client may use/weld suitable pipe on to the parent pipe.

In some exceptional case client may provide vertical trunnion pipe on top of horizontal pipe to clear any drain tapping at the bottom of support point.

This will be normally two sizes less than the parent pipe size. This pipe is normally termed as trunnion pipe.

In such case the clamp id will be as per OD of the trunnion pipe only & **NOT** the parent pipe.

Please see attachment on next page.

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 37 years we have supplied to major power plants, refineries, nuclear installations & process industries in India & several International projects.

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Ordering Information

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