



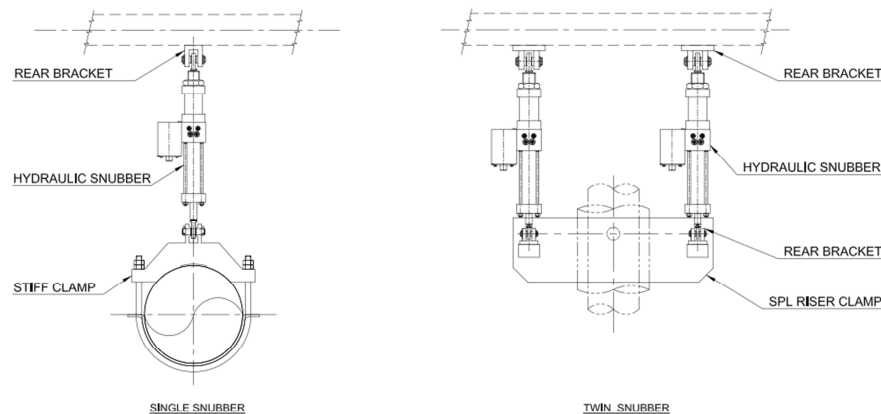
Pipe Hangers and Supports Pvt. Ltd

NEWSLETTER-15

(Snubber – Chapter – 5)

In continuation to the earlier Newsletter, let us discuss about the arrangements of snubbers.

Typical Arrangement of Snubber assembly with illustration



Depending on the space availability, supporting feasibility, there can be many types of arrangements possible.

1. At the pipe end, the snubber eye
 - (i) is normally connected by a stiff clamp through a pin. Or
 - (ii) It may also be connected on to trunnion welded on the parent pipe.
2. At the structure end, the snubber eye is connected normally through a rear bracket / weld on clevis through another pin & the rear bracket is welded to the structure(refer illustration given above).
3. It is recommended that both the **pin axes** (at the pipe end & at the structure end), should have the **same orientation**.
4. Normally it is preferred to have **both the pin axes perpendicular** to the maximum horizontal movement of pipe for better results.
5. **Precaution**

Contrary to the static loaded support, It should be noted that the clearance between the eye hole of the rod end of snubber & the pin will be very close to prevent slackness between the two, as load reversal exists due to dynamic loading condition. It is for this reason that the clevis with pin used along with static loading support should not be used / mixed with that used for snubber assy.

6. While selecting the Stiff clamp & rear bracket/ weld on bracket, care should be taken to match the hole of the snubber eyes, apart from selecting for the load bearing capacity, to avoid mismatches.
7. Snubber assembly can be further classified as single, double, special depending on the arrangements, similar to static hanger supports. Typical arrangements of Snubber assembly are illustrated above.

8. **Points to be noted during erection of Snubber assembly**

- (i) **It is very important that the assembly length as indicated in the approved dwg is to be maintained at site.**
- (ii) It should be noted that there is no cold locking facility provided in **standard** snubbers. As such while erection, when the snubber is lifted using any one of the eye, due to the inherent nature of snubber, it will expand or contract very slowly (movement cannot be observed as it moves/contracts like a snail) & the assy length will change/ be different than that indicated in the approved dwg.

PI NOTE THAT THE SNUBBER SHOULD NOT BE ERECTED WITH THIS DIFFERENT LENGTH, by manipulating the top structure to match the new assy length. This will change/reduce the travel length & hence may not accommodate the predicted thermal movement. **This is very serious & will destroy /permit malfunction of the snubber itself.**

Care should be taken to avoid this problem while erection.

- (iii) To avoid such an occurrence, some snubber suppliers provide locking arrangement in **cold position on special request. But after erection the lock Nut is to be released WITHOUT FAIL. ELSE IT WILL be very serious & will not** take care of **ANY thermal movement & the snubber will act as rigid support in thermal condition itself**. There is every chance to miss/ignore this point at site leading to damage to the snubber. To avoid such a situation & considering the cost, time duration for replacement in case of damage to the snubber, normally this facility is not recommended, unless insisted upon by the client. It is advisable to be safe & cautious than to invite problems with such additional facilities.

Till the next issue of our Newsletter, BYE!

About Pipe Hangers:

A Global Solution to Spring Hangers and Supports

We are the leading manufacturer of spring hangers, supports & accessories. Over the past 34 years we have supplied to major power plants, refineries, nuclear installations & process industries in India & several International projects.