

# STEAM TRAP MODULES

## DESCRIPTION:

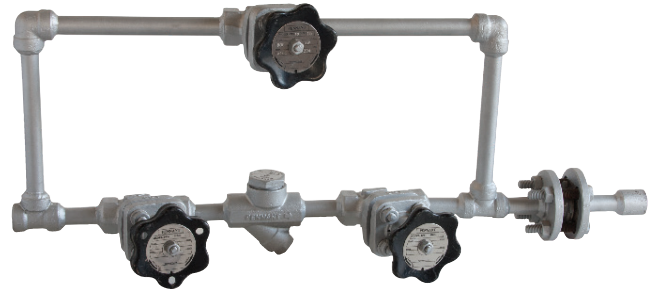
One of the typical problems faced by steam trap users is in installing the steam trap along with all its accessories in a steam pipeline or steam consuming equipment. This could involve the following:

- Ordering a standard steam trap
- Ordering all accessories required for such an installation like isolation valves, pipes, flanges etc.
- Making an isometric drawing of the installation
- Submitting the same to the local boiler authority for approval
- Arranging an approved welder to get the full installation welded at site
- Hydro testing the full installation at site
- Getting the installation inspected and cleared by the local boiler authority

All these not only cost money but also consume time and man hours in follow-up. It is not possible to order the material at site and commission the installation within a day.

This has now been made possible by PENNANT STEAM TRAP MODULES. These one piece modules which comes factory welded, inspected, tested and approved by IBR authorities, so that the end user does not have to follow the rigorous procedures mentioned above to get a trap installation up and running. All the customers has to do is to hook up the flanged module to the pipeline or equipment and run the system, saving time, money and most of all the headaches of approvals and clearances.

The PENNANT TRAP MODULE basically is a complete system which includes isolation valves, bypass valves, and trapping devices, interconnected with pipes, flanges, reducers, elbows, etc. In response to specific requests, strainers, sight check, check valve etc. could be added duly fitted into the system.



## STANDARD FEATURES:

- Inlet and Outlet isolation valves are provided to facilitate removal of the steam trap and its accessories for maintenance.
- A suitable sized bypass valve ensures continuous supply of steam (manual control) to process when the trap is under maintenance.
- A check valve at the outlet ensures that the downstream pressure does not reach the trap in case it exceeds set limits.

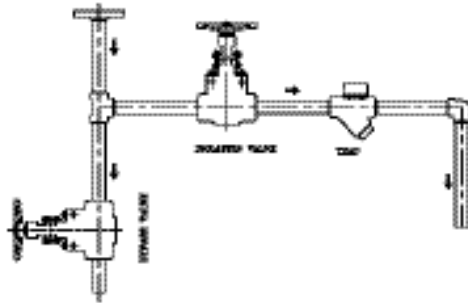
## ADD ON FEATURES:

- A sight check at the outlet of the trap facilitates its inline checking.

Standard trap modules can be supplied with various combinations, suitable for both open loop system and closed loop system.

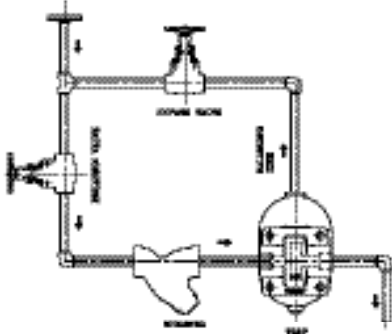
Combinations, suitable for both open loop system and closed loop system

FIG. 1 TRAP MODULE IN OPEN LOOP



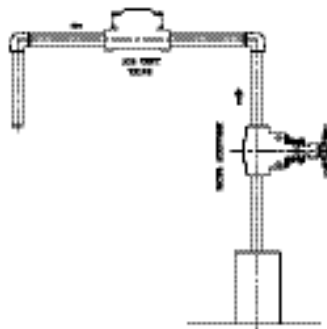
**Fig.1** shows a simple arrangement of trap module in open loop. This consists of the end flange, isolation valve, a trap and the by-pass valve

FIG. 2 LIQUID DRAIN TRAP MODULE WITH BALANCING LINE



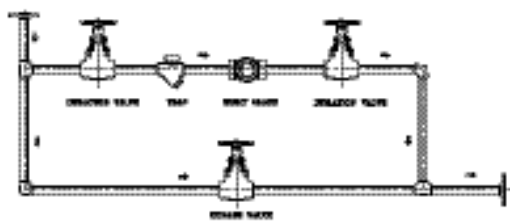
**Fig.2** shows a simple arrangement of trap module closed loop for air service. This consists of the end flange, isolation valve, y-strainer, a trap, balancing line and the by-pass valve

FIG. 3 THERMOSTATIC AIR VENT WITH AIR COLLECTION BOTTLE AT THE INLET



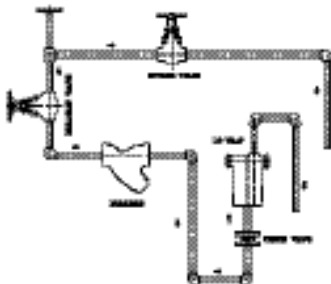
**Fig.3** shows a simple arrangement of thermostatic air vent with collection bottle at the inlet

FIG. 4 TRAP MODULE IN CLOSED LOOP



**Fig.4** shows a simple arrangement of trap module in closed loop. This consists of the end flange, isolation valve at both upstream & downstream of the trap, a trap sight-glass and the by-pass valve

FIG. 5 INVERTED BUCKET TRAP MODULE IN OPEN LOOP



**Fig.5** shows a simple arrangement of an inverted bucket trap module in open loop. This consists of end flange, isolation valve, strainer, check valve, trap and the by-pass valve

## HOW TO ORDER:

- Different typical options under plant conditions are shown above in five figures. Depending on the plant requirement, additional requirements like sight glass/strainer/check valve etc. should be properly specified on both upstream & downstream of trap.
- You should also specify:
  1. Overall Pressure Rating
  2. Operating Temperature
  3. Overall Space for Module
  4. Condensate Flow
  5. Flow Direction

Local regulations may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interest of development and improvement of the product, we reserve the right to change the specifications without prior notice.