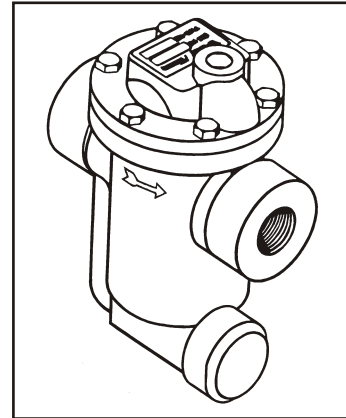


It is solely the responsibility of the system designer and the user to select products and materials suitable for their specific application requirements and to ensure proper installation, operation and maintenance of these products. Assistance shall be afforded with the selection of the materials based on the technical information supplied to Spence Engineering Company, Inc.; however, the system designer and user retain final responsibility. The designer should consider applicable Codes, material compatibility, product ratings and application details in the selection and application. Improper selection, application or use of the products described herein can cause personal injury or property damage. If the designer or user intends to use the product for an application or use other than originally specified, he must reconfirm that the selection is suitable for the new operating conditions.

NICHOLSON
STEAM TRAP
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INSTALLATION AND MAINTENANCE GUIDE



Dura-Flo
Inverted Bucket Steam Trap

NICHOLSON
STEAM TRAP
 A division of CIRCOR International, Inc.

SPENCE
 A division of CIRCOR International, Inc.

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 011449

INSTALLATION

Traps should be installed in an accessible position and location for easy servicing. The maximum differential pressure (P) stamped on product name plate must be greater than the maximum pressure differential across the trap. The trap must be installed with the body upright so that bucket is rising and falling vertically. The inlet and outlet connections should be in a horizontal plane for horizontal traps and a vertical plane with inlet on the bottom for vertical traps. The trap installed below the drain point, so that a water seal can be maintained around the open end of the bucket.

1. Install below and close to equipment being drained. Avoid long lengths of horizontal piping ahead of trap. Allow vertical clearance for maintenance.
2. Pitch all horizontal inlet lines towards the steam trap to help eliminate potential water hammer problems.
3. All models should have a strainer installed ahead of trap (Fig.1).
4. Union fittings (Uniflex) and shut off valves (STV) should be installed on both sides of trap for ease of servicing and trap testing (Fig.1).

TYPICAL INSTALLATION

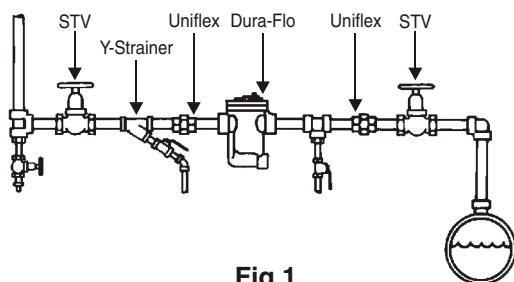


Fig.1

5. A test and pressure relief valve should be installed to assure relief of internal pressure prior to servicing and as a visual indication of trap operation (Fig.1).
6. A check valve should be installed on return piping if there will be a pressurized return line or the trap drains to an overhead return line (Fig.2).

INSTALLATION

Inverted bucket traps may need to be primed before being placed into service. Either of the following methods can be used.

1. Remove pipe plug from trap cover. Pour water into trap until full and replace pipe plug.
2. Keep return piping valve closed until trap fills with condensate, than slowly open valve.

MAINTENANCE

The trap mechanism should be inspected periodically and all dirt removed working parts. **Worn parts must be replaced.**

TYPICAL INSTALLATION (Pressurized Return Line)

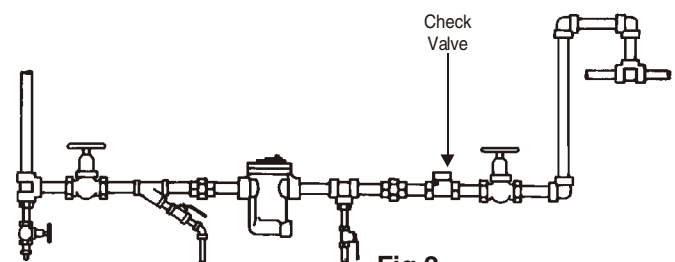


Fig.2