Two Orifice Float Trap

Start-up Condensate Evacuation Made Easy
Two Orifice Float Trap (Patented)

Common Issues Faced in a Process Plant
- Productivity loss due to high batch time
- Reduced uptime of process equipment due to water hammering
- Steam loss due to frequent opening of trap bypass valve
- Varying start up, peak and running condensate loads
- Selection of incorrect type and size of steam trap

Problems Faced During Maintenance of Process Traps
- Incorrect / improper installation of process trap and other steam accessories, leading to malfunctioning of the steam trap
- Downtime of equipment due to hassles in online and inline maintenance
- Unavailability of critical spares
- No plan in place to replace process traps that have gone beyond service life

Varying Condensate Load Pattern
Ideal Solution - Two Orifice Float Trap

Float traps are the best choice for condensate evacuation in all process applications.

The Forbes Marshall Two Orifice Float Trap (Patented) is designed to handle high discharge capacity at start up and peak condensate loads. Its unique two orifice design ensures adequate and efficient condensate discharge during continuous operations. It offers high turndown for varying loads.
Two Orifice Float Trap Variants

**Two Orifice Float Trap (TOFT)**

**Compact Module - Two Orifice Float Trap (CMTOFT)**

Principle of Operation

When condensate enters the trap body, the float lifts up and opens the first orifice allowing condensate to discharge.

During start up and peak load conditions, additional lift of the float causes the second orifice to open, thereby enabling the TOFT / CMTOFT to handle both start up and running conditions effectively.

Features

- Two orifices operated by single float and lever mechanism
- Inbuilt strainer for better performance
- Piston valves* ensure zero inline loss and no loss from gland
- Inbuilt non-return valve* ensures no reverse flow
- Robust and compact construction
- Ease of Installation

Benefits

- Improved batch times and productivity at start-up and varying load
- Reliable performance guarantees improved uptime
- Steam saving of 3 - 4 % by ensuring no bypass opening at start-up
- Effective condensate removal enables maintaining gradients and product quality
- Ease of online and inline maintenance

*Available with CMTOFT model only
Customers Speak

The Forbes Marshall Two Orifice Float Trap has enabled us to achieve a faster start-up and reduce the ramp up time in our dome presses. We have now decided to standardise these traps for all types of presses.

The Two Orifice Float Traps installed on our jet dyeing machine for the last two years are functioning satisfactorily. The traps have helped us to overcome the problem of uneven heating cycle in the machine.

India’s eminent tyre manufacturer

Leading textile dyeing mill

The specific steam consumption of our crushed bran oil has decreased to 310 kg of steam/ kg (310 lb of steam/lb) of product with the smooth functioning of the Two Orifice Float Trap and other steam system components from Forbes Marshall in our 500 TPD (1mn lb/day) solvent extraction plant. We appreciate the after sales support from the Forbes Marshall team for maintaining the steam system.

Global manufacturer and exporter of edible oil

Leading manufacturer of edible oil

The efficient functioning of Two Orifice Float Traps has aided us to recover 95% of the condensate at 95 °C (203 °F) feed water temperature.

Global snack food company

Leading manufacturer of plywood

Forbes Marshall has audited and delivered a complete solution to our plywood unit, which eliminates bypass opening and water logging during start-up.

We have installed a Compact Two Orifice Float trap on the chambers, presses and dryers, which has helped reduce the steam load by 1.5 TPH (3300 lb/h).

We have depots across India for direct and rapid supply of Forbes Marshall products and genuine spares to minimise time from order to installation.