



SYO Steam Trap Advantages

Maintenance Aspects

- No Failure
 - No operating parts, No break, wear and failure
- Easy Repair and Maintenance
- No Erosion
 - wear resistance
 - heat treatment for corrosion resistance
- Semipermanent to use

Energy & Cost Savings

- Permanent Energy Savings
 - 10 to 30% steam savings through SYO traps
- Short Payback Period
 - short-term investment returns from one to two years
- Reduced boiler fuel costs

Installation Advantages

- Compact Size
- Stainless Steel
- Various fitting types

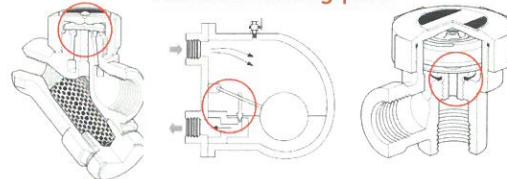


SYO Service

- 5-year performance guarantee
- Correct sizing is assured
- Each SYO Trap is purpose built
- Full records and traceability
- Each trap is fully commissioned
- Commissioning is included in the price of the trap

Problems with Mechanical Traps

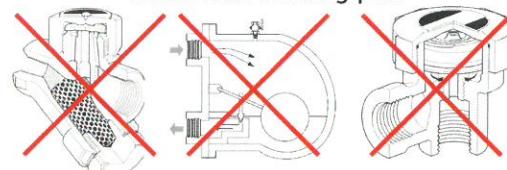
There is moving part



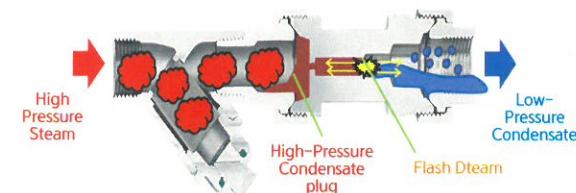
- 10% average annual failure rate
 - Higher on superheated and high pressure system
- Unpredictable life cycle
 - Failures undetected without constant surveys
- Thousands of traps and difficult access
 - Constant maintenance required
- Low priority
 - And therefore often ignored until the process is affected

Functional Characteristics of SYO

There is no moving part



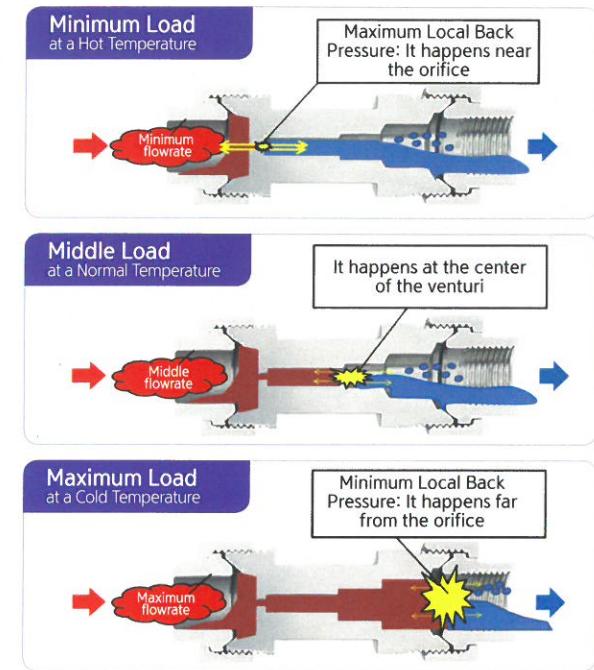
Working Principle of SYO



- Maintain **high pressure** at the front of orifice and **low pressure** at the back (lowest differential pressure 0.5)
- **Hot condensate water** moves from the **high pressure** zone at the front to the venturi throat at the **low pressure** side through the orifice
- **Hot condensate** momentarily vaporizes as the throat has a larger space and is under the **low pressure** → **Flash Steam**

Variable load of SYO Steam Trap

- Operation under various loads
 - Effectively responding the temperature changes in the four seasons
- Venturi Structure
 - Preventing flash steam from expanded and releasing condensate to throat
- Formation of Local Back Pressure
 - Flash steam loss protection, condensate plug maintenance and condensate flow control



Test Codes of SYO Steam Trap

- Wear Resistance
- Corrosion Resistance
- Impact Strength
- Hardness
- Steam Loss Rate

ASTM G99
KS D 1652 & KS D 0223
KS B 0810
KS B 0805
S B ISO 7841

► We provide the test results when order our products.