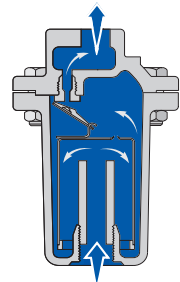


MECHANICAL STEAM TRAPS

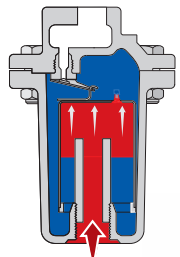
Inverted bucket steam traps

Spirax Sarco inverted bucket steam traps employ a simple and well-proven principle, which relies on the difference in density between steam (a vapor) and condensate (a liquid). They have a robust design and incorporate a simple density sensitive bucket and lever mechanism.

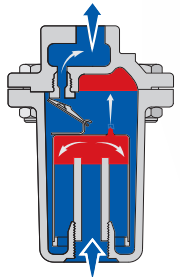
How an inverted bucket steam trap works



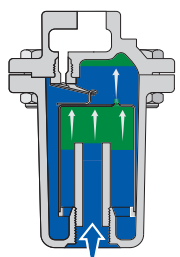
1. As condensate reaches the trap it forms a water seal inside the body. The weight of the bucket keeps the valve off its seat. Condensate can then flow around the bottom of the bucket and out of the trap.



2. When steam enters the underside of the bucket it gives it buoyancy and the bucket rises. The bucket which is connected to the lever arm closes the valve.



3. The bucket will lose its buoyancy as the cooler condensate enters the trap and steam in the bucket condenses. Once this happens the weight of the bucket will pull the valve off its seat and the cycle is then repeated. In operation a small amount of live steam is used through the vent hole.



4. Any air reaching the trap will also give the bucket buoyancy and close the valve preventing condensate flow. The small vent hole positioned at the top of the bucket will bleed air into the top of the trap. Because the vent hole at the top of the bucket is small in diameter it will vent air very slowly. Consequently a separate external air vent may therefore be required to ensure quick and effective start-up.



User Benefits:

- Near continuous condensate discharge with tight shut-off. Minimal back-up of condensate ensures maximum plant efficiency.
- Simple and robust construction to guarantee long life against waterhammer and vibration.
- Stainless steel internals are attached to the cover for ease of maintenance.
- Integral strainer (B-Series and HM34 models only).

Inverted Bucket Cast Iron Steam Traps

	Connections	Flow Pattern	Body Material	Pressure (PSIG)	Model and Pipe Size						Strainer Option Available	Integral Air Vent
					1/2"	3/4"	1"	1 1/4"	2"			
	NPT	Inline Horizontal	Cast Iron		B1H	B1H	B2	B3	B4	B5	Yes	B_2 Only
					B12H	B12H	B22	B32	B42	B52		
				15	•	•	•	•	•	•		
				30	•	•	•	•	•	•		
				75	•	•	•	•	•	•		
				125	•	•	•	•	•	•		
180	•	•	•	•	•	•						
250	•	•	•	•	•	•						
	NPT	Inline Vertical		Multiple operating pressure ranges up to 250 psig	211	212	213	215	216	No	No	

Note for strainer option add "S" after model. Example B1HS-125 or B32S-180

Inverted Bucket Carbon Steel Steam Traps HM Series

	Connections	Flow Pattern	Body Material	Pressure (PSIG)	Model and Pipe Size					Strainer Option Available
					1/2"	3/4"	1"	1 1/2"	2"	
	NPT, SW	Inline Horizontal	Cast Steel	Multiple operating pressure ranges up to 464 psig	HM34	HM34	HM34			Standard
	ANSI 600	Inline Vertical Up	Forged Steel	Multiple operating pressure ranges up to 600 psig	621	622	623	625	626	No
				Multiple operating pressure ranges up to 900 psig	921	922	923	925	926	

Inverted Bucket Stainless Steel Sealed Traps SIB30, SIB30H and SIB45

	Model	Connections	Flow Pattern	Material	Pressure (PSIG)	1/2"	3/4"
	SIB 30 and SIB30H	NPT, SW	Inline Horizontal	Stainless Steel	Multiple operating pressure ranges up to 435 psig	•	•
	SIB45				Multiple operating pressure ranges up to 652 psig	•	•