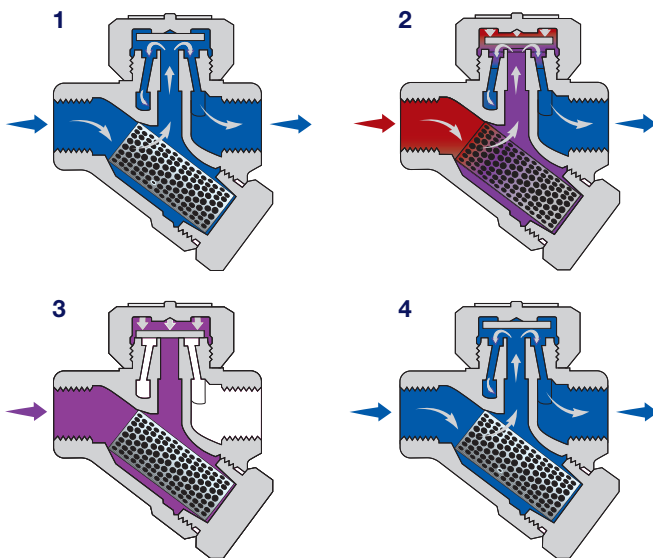


Thermodynamic steam traps

The Spirax Sarco TD was first launched in 1950 and has become the most advanced thermodynamic steam trap available. Constant design improvements have made today's TD an extremely robust steam trap, ideally suited to the rigorous demands of any steam system.

How a thermodynamic steam trap works



On start-up, incoming pressure raises the disc and cooled condensate, plus air, is immediately discharged (1).

Hot condensate flowing through the trap releases flash steam. High velocity creates a low pressure area under the disc and draws it towards the seat (2).

At the same time there is a pressure build-up of flash steam in the chamber above the disc which forces it down against the pressure of the incoming condensate until it seats on the inner ring and closes the inlet. The disc also seats on the outer ring and traps pressure in the chamber (3).

Pressure in the chamber is decreased by condensation of the flash steam and the disc is raised. The cycle is then repeated (4).



Key features:

- Positive condensate discharge with clean tight shut-off. Discharge condensate at very close to steam temperature that ensures maximum plant efficiency.
- Just one moving part, a disc, ensures reliable operation and minimal maintenance.
- Compact and light weight, reducing installation costs.
- Hardened disc and seat for long life.
- One trap covers a wide range of operating pressures making selection and replacement simple.
- Optional insulating cover for low ambient temperature or wet environments.
- Optional blowdown valve for some models.

Thermodynamic steam traps - Product range

Material	Maximum operating pressure	Connection	Sizes					Recommended installation
			DN8 ¼"	DN10 ⅜"	DN15 ½"	DN20 ¾"	DN25 1"	
Low temperature steel	42 bar g	Socket weld			TD42S3 TD42S3LC			Horizontal
Carbon steel	42 bar g	Socket weld			TD42S2 TD42S2LC			Horizontal
Stainless steel	10 bar g	Screwed	TD10					Horizontal
	30 bar g	Swivel			UTD30L UTD30H			Universal
	32 bar g	Flanged			TD32F TD32FLC			Horizontal
	42 bar g	Butt weld		TD3-3	TD3-3 TD3-3LC	TD3-3		Horizontal
		Screwed	TD259 TD52M	TD42LC TD42L TD52M	TD42 TD42LC TD42H TD42L TD52M TD52MLC	TD42 TD42H TD42L TD52M	TD42H TD42L TD52M	Horizontal
		Swivel			UTDM42L			Universal
	45 bar g	Screwed Socket weld Butt weld		TD1464				Horizontal
		Flanged		TD1464 TD45				Horizontal
	Alloy steel	62 bar g	Screwed Socket weld Flanged			TD62M TD62LM		
250 bar g		Socket weld Butt weld Flanged			TD120M			Horizontal
Stainless steel (Clean steam)	10 bar g	Screwed	BTD52L					Horizontal
		Clamp Tube end			BTD52L			Horizontal