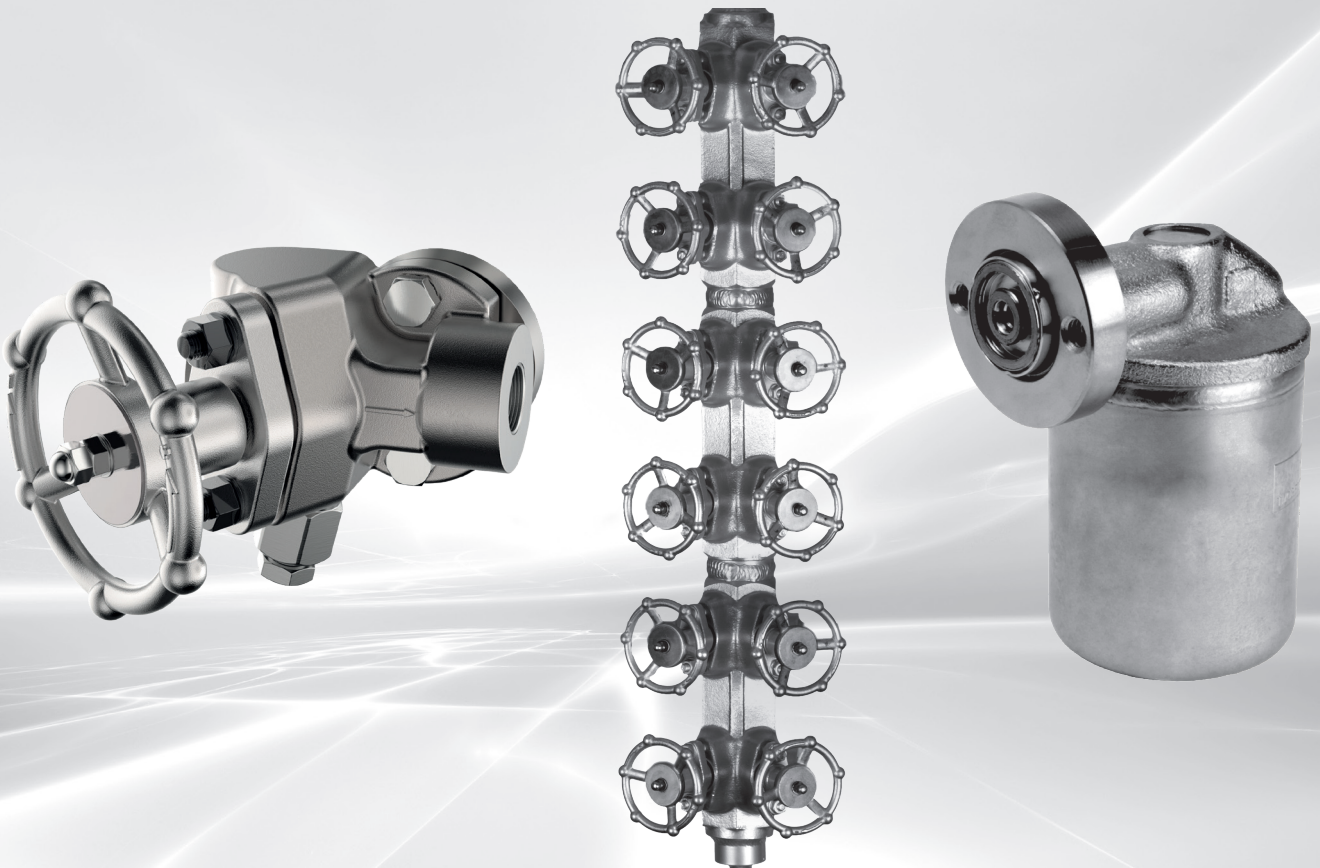




## The GESTRA GMF Series

Pipeline Connectors, Manifolds,  
Inverted Bucket Steam Traps

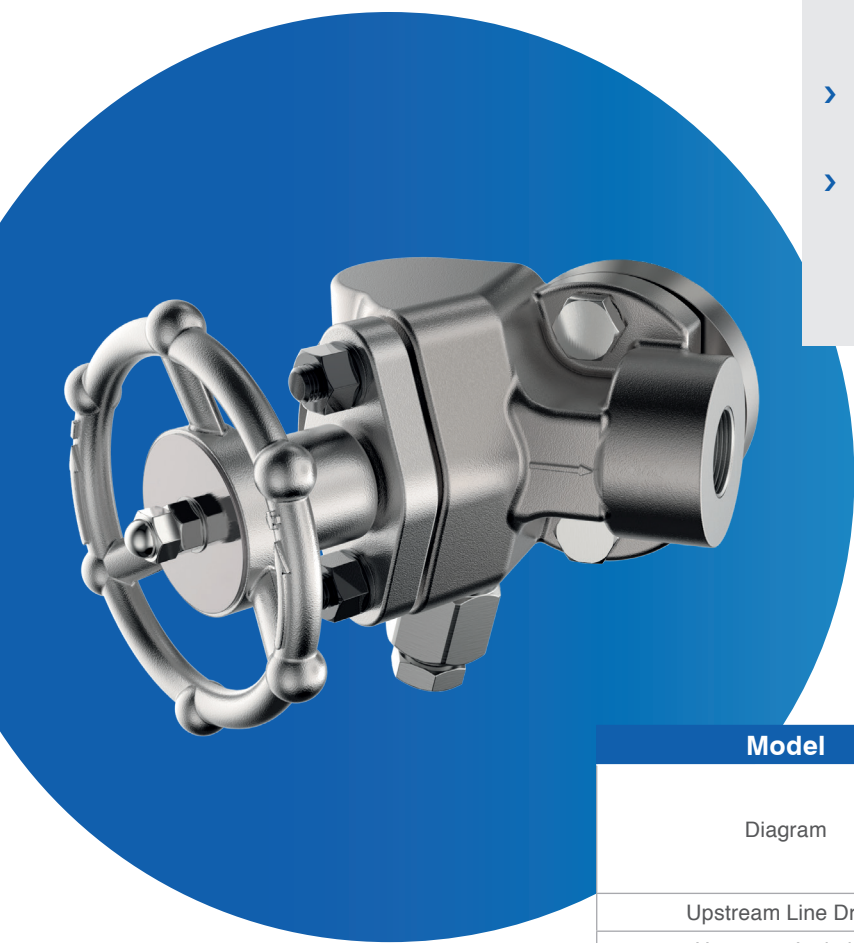


Engineering steam performance

# Pipeline Connectors


## The next generation in pipeline connection

The new GESTRA pipeline connector range has been developed to satisfy the needs of modern process industries, significantly simplifying installation and reducing maintenance time. Traditional steam trapping assemblies often require the plant to be shut down for new traps to be installed, taking significant time and reducing production output. The GESTRA pipeline connectors with single and double isolation, allow steam traps to be installed without need for process shutdown.



## Key features and benefits:

- ASME 600 rated forged body - Suitable for use on lines up to 425°C (800°F) at 56 bar g (812 psig).
- Strainer fitted as standard - Protects steam trap from debris entrained in the condensate.
- Fully shrouded piston valve stem - reducing potential of stem corrosion.
- Supplied with upstream trap vent and downstream trap test blowdown valves as standard – allowing steam trap to be vented or tested.
- Available complete with upstream line drain – allowing steam trap set to be safely bypassed.
- Universal Steam Trap Connection – allows you to safely fit a complete range of steam traps without interruption to your process.

Model	PC3000
Diagram	
Upstream Line Drain	
Upstream Isolation	•
Maintainable Strainer	•
Upstream Trap Vent	•
Universal Steam Trap Connection	•

# UIB

Our pipeline connectors can easily be used in conjunction with GESTRA's UIB30.

## Inverted Bucket Steam Trap

### UIB30/UIB30H

The UIB30 and UIB30H are maintenance free sealed inverted bucket steam traps. The UIB30H is designed for higher capacities.



Main features	Typical applications	Size	Maximum body rating	Maximum operating pressure
<ul style="list-style-type: none"> <li>• High capacity</li> <li>• Robust design</li> <li>• Near continuous discharge of condensate</li> <li>• Minimal back-up of condensate</li> </ul>	Temperature / pressure controlled applications with fluctuating loads	DN15 – DN50 (½" – 2")	ASME 900	110 bar g

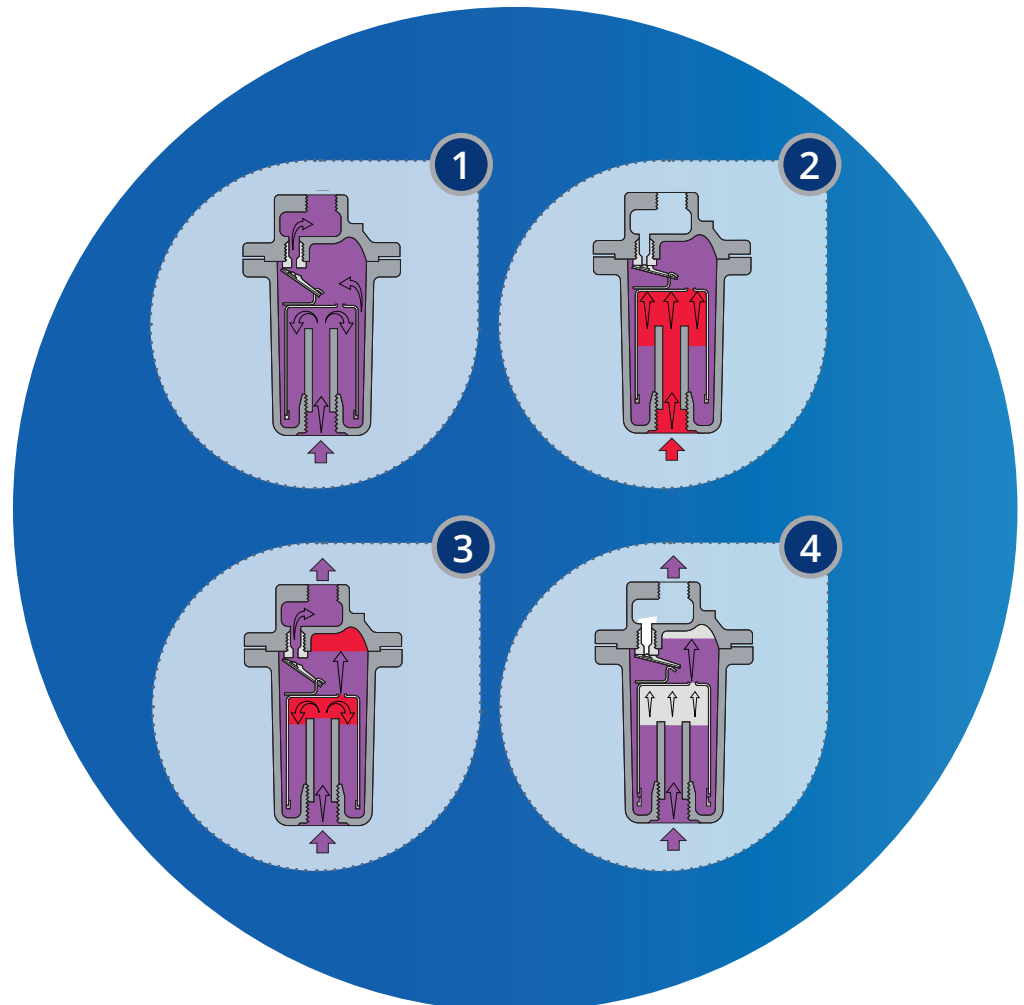
# Mechanical steam traps

## Inverted bucket mechanical steam traps

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

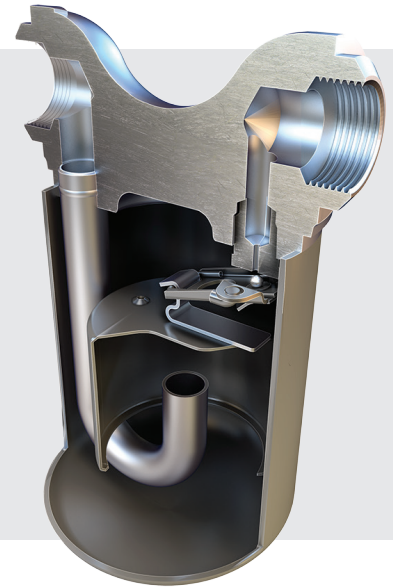
### How an inverted bucket steam trap works

1. As condensate reaches the trap it forms a waterseal 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. This positions the lever mechanism such that the main valve 'snaps' shut due to flow forces.
3. The bucket will lose its buoyancy as the enclosed steam condenses due to radiation losses and steam escapes through the vent hole. Once this happens the weight of the bucket will pull the valve off its seat and the cycle is then repeated.
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 lead 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. Where the venting of air may be a particular problem, this can be overcome simply by fitting an external air vent in parallel.



### Features and benefits:

- › Near continuous condensate discharge with tight shut-off. Minimal back-up of condensate ensures maximum plant efficiency.
- › Deep water-seal to protect against the possibility of steam loss.
- › Suitable for superheat conditions when fitted with internal inlet check valve.
- › 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 (SCA models only).



## Inverted bucket steam traps – product range

Material	Maximum operating pressure	Connection	Sizes						Installation
			DN15 1/2"	DN20 3/4"	DN25 1"	DN40 1 1/2"	DN50 2"	DN80 3"	
Cast iron	13 bar g	Screwed Flanged	S SF						Horizontal
			SCA						
Carbon steel	41 bar g	Screwed Socket weld Flanged						Horizontal	
	116 bar g	Screwed Socket weld Flanged	IBV Series C IBV Series C-LDF2						Vertical
Stainless steel	30 bar g	Screwed Socket weld Flanged	SIB30 SIB30H					Horizontal	
		Swivel	UIB30 UIB30H						Universal

# GESTRA Manifolds GMF

## Steam tracing using our compact dual duty manifold

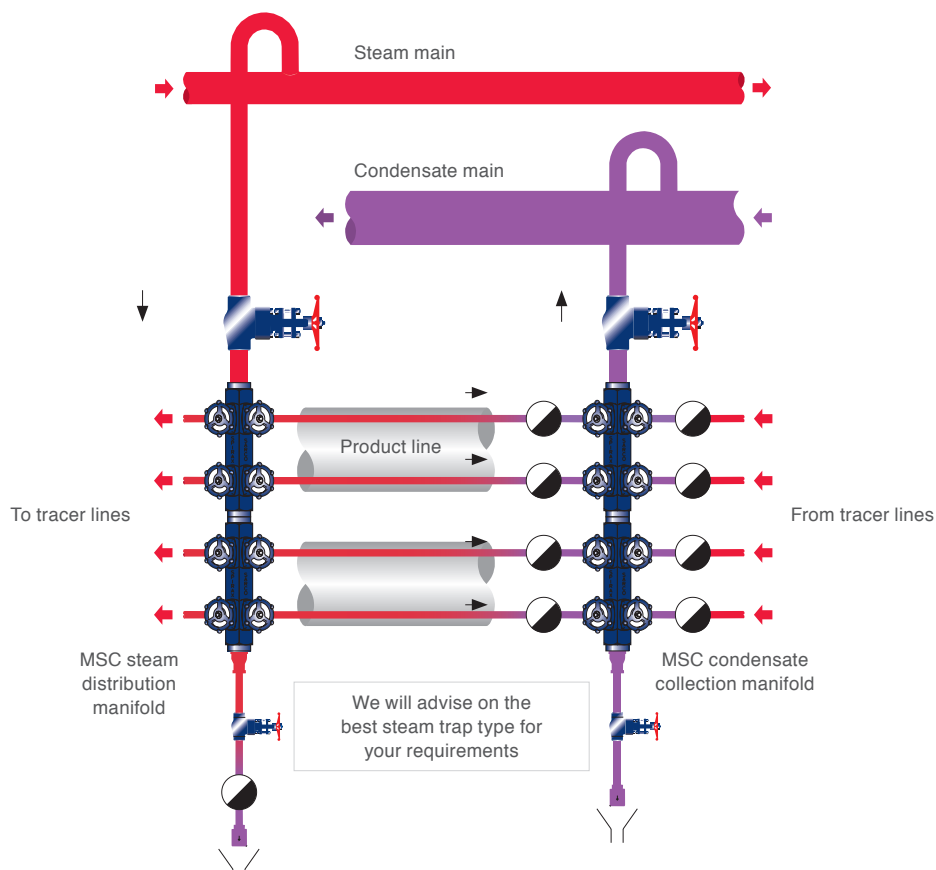
Steam tracing is used principally to maintain a reasonable product temperature and viscosity in order to simplify pumping, avoid freezing, solidification and stagnation. Although the rates of condensate are relatively small, trap populations will be large since all tracer lines should be individually trapped. For ease of design and layout, the condensate from the traps is collected in a manifold. The steam to the tracers can be distributed utilising a similar manifold arrangement.

Our forged MSC series manifold minimises on-site fabrication and testing.

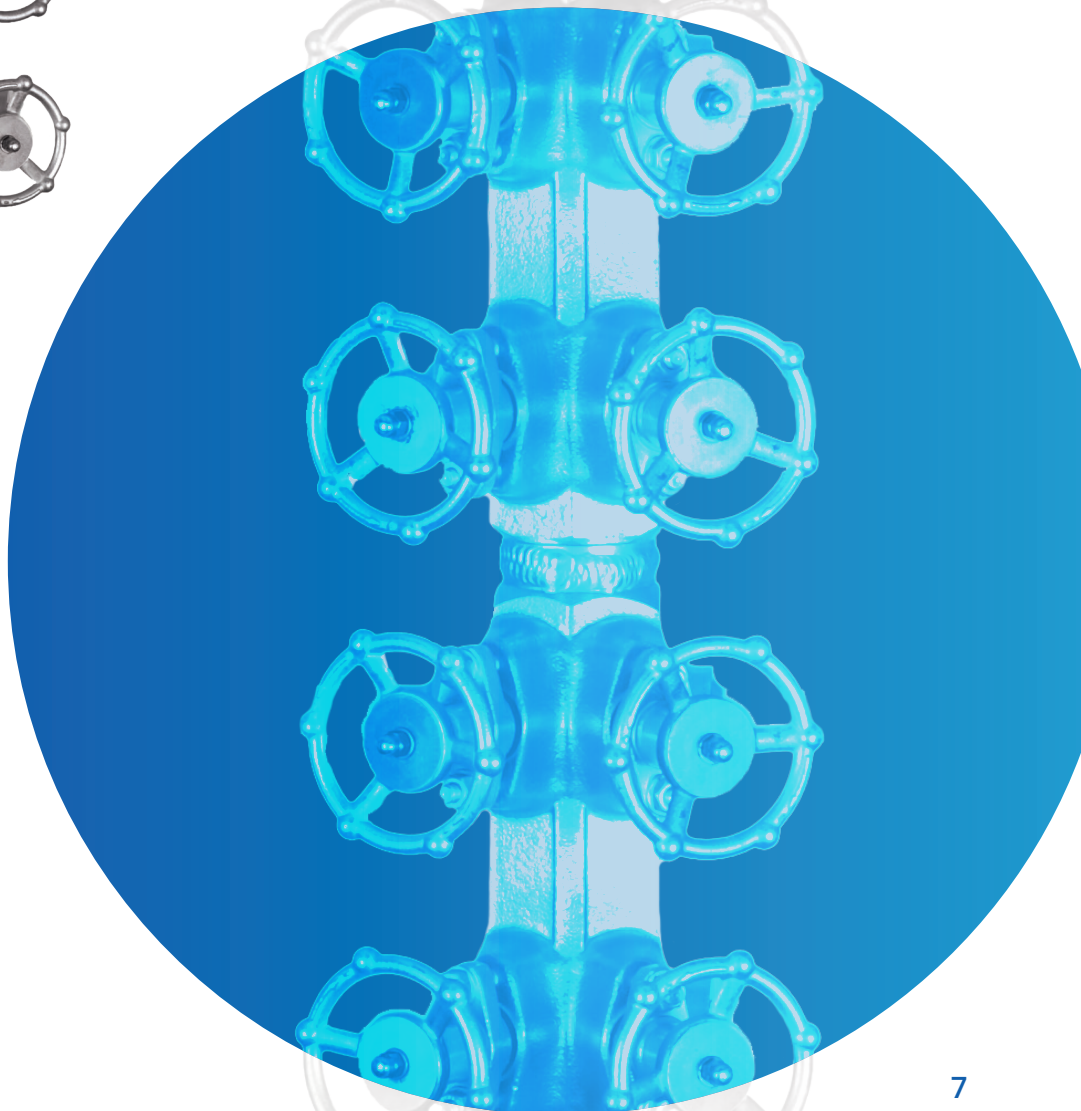
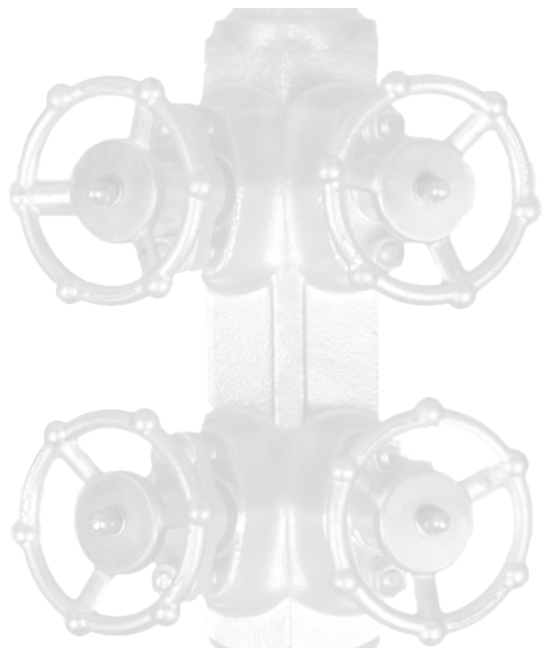
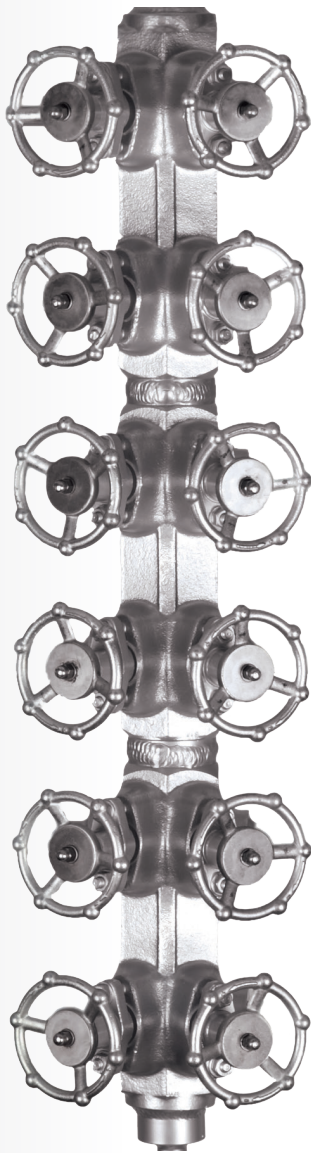
### Key features:

- Minimises on-site fabrication and testing.
- Lower cost than conventional welded design.
- Shortens project lead times.
- Space saving with standardised design.
- Lightweight to support and easy to install with optional mounting kit.
- Easy to maintain.
- Optional insulation jacket for energy conservation.

Manifold type	Number of tracer connections	DN		Tracer connections			EN 10204 3.1.B certification	Options	
		15	20	BSP	NPT	SW		Insulation jacket	Mounting kit
MSC04	4	•	•	•	•	•	Standard	•	•
MSC08	8	•	•	•	•	•	Standard	•	•
MSC12	12	•	•	•	•	•	Standard	•	•









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