The Armstrong stainless steel traps—Series 1000, Series U-1000, Series 1800 and Series 2000—have high resistance to damage from freeze-ups. They also offer high resistance to wear and corrosion for longer service reliability, and they provide continuous air venting.

Armstrong stainless steel traps provide maximum ease and economy of installation, inspection or replacement. What’s more, an Armstrong stainless steel trap is the ideal solution for trapping applications such as tracer lines, steam mains and heating and processing applications.

Wear and corrosion resistance
Free-floating guided lever valve mechanism is “frictionless,” and all wear points are heavily reinforced. All working parts are stainless steel. Valve and seat are stainless steel, individually ground and lapped together in matched sets.

Virtually no steam loss
Steam does not reach the water-sealed discharge valve.

Purging action
Snap opening of the valve creates a momentary pressure drop and turbulence in the unit drained. This breaks up films of condensate and air and speeds their flow to the trap.

Sealed, tamperproof 304-L stainless steel package
Able to withstand freeze-ups without damage.

Excellent operation against back pressure
Since trap operation is governed by the difference in density of steam and water, back pressure in the return line has no effect on the ability of the trap to open for condensate and close against steam.

Resistance to damage from water hammer
Open bucket or float will not collapse as a result of water hammer.

360° universal 304 stainless steel connector
Provides quick, easy in-line renewability along with all the proven advantages of an inverted bucket operation. Also available with optional IS-2 integral strainer connector with 20 x 20 mesh stainless steel strainer.

Continuous air and CO2 venting
Vent in top of bucket provides continuous automatic air and CO2 venting with no cooling lag or threat of air binding. Steam passing through vent is less than that required to compensate for radiation losses from the trap, so it’s not wasted.

Dependable operation
Simple, direct operation with nothing to stick, bind or clog. Only two moving parts—the valve lever and the bucket.

Freedom from dirt problems
Condensate flow under the bottom edge of the bucket keeps sediment and sludge in suspension until it is discharged with the condensate. Valve orifice opens wide and closes tightly. No buildup of dirt or close clearances to be affected by scale.
2000 Series Stainless Steel Steam Traps

For Pressures to 45 bar...Capacities to 590 kg/h

With the Series 2000 360° universal connector, you can install inverted bucket efficiency and long service life in any piping configuration with little or no repiping. You get the reliability of the inverted bucket operating principle, plus all the benefits of all-stainless steel construction:

- A sealed, tamperproof package
- A compact, lightweight trap
- The ability to withstand freeze-ups without damage
- Exceptional corrosion resistance
- A three-year guarantee against defective materials or workmanship

Series 2000 steam traps combine savings in three important areas: energy, installation and replacement. The 360° universal connector provides quick, easy in-line renewability along with all the proven advantages of an inverted bucket operation. Choice of NPT or BSPT screwed connections, or socketweld connections.

Also available with optional IS-2 integral strainer connector.
2000 Series Inverted Bucket Steam Traps

All Stainless Steel with 360° Connector
For Pressures to 45 bar...Capacities to 590 kg/h

Description
With the 2000 Series’ 360° universal connector, you can install inverted bucket
efficiency and long service life in any piping configuration with little or no
repiping. You get the reliability of the inverted bucket operating principle, plus all
the benefits of all-stainless steel construction:

- A sealed, tamperproof package
- A compact, lightweight trap
- The ability to withstand freeze-ups without damage
- Exceptional corrosion resistance
- A three-year guarantee against defective materials, defective
workmanship.

2000 Series steam traps combine savings in three important areas: energy,
installation and replacement. The 360° universal connector provides quick, easy
in-line replacement along with all the proven advantages of inverted bucket
operation. Also available with optional IS-2 integral strainer connector.

Maximum Operating Conditions
Maximum allowable pressure (vessel design)†:
Model 2010, 2011: 28 bar @ 427°C
Model 2022: 45 bar @ 315°C

Maximum operating pressure:
Model 2010: 14 bar
Model 2011: 28 bar
Model 2022: 45 bar @ 316°C

Maximum back pressure: 99% of inlet pressure

Connections
Screwed BSPT and NPT
Socketweld
Flanged DIN or ANSI (welded)

Materials
Body: ASTM-A 240 Grade 304L
Loose Flange: Zinc Plated Steel
Internals: All stainless steel – 304
Valve and seat: Stainless Steel 17-4PH (<35 bar)
Titanium (>35 bar)
Standard connector: Stainless steel – 304
IS-2 connector with integral strainer: ASTM A351 Gr.CF8
20 x 20 mesh 304 SS Screen

Specification
Inverted bucket steam trap, type ... in all stainless steel, freeze resistant, with
360° universal connector, having continuous air venting at steam temperature,
free-floating stainless steel mechanism, and orifice at the top of the trap.
Maximum allowable back pressure 99% of inlet pressure.

How to Order
Specify:
- Model number
- Size and type of pipe connection
- Type of 360° connector (with or without strainer)
- Maximum working pressure that will be encountered or orifice size
- Any options required

Options
- Insu-Pak™ insulation for Models 2010/2011
- Stainless steel pop drain for Models 2011/2022
- Stainless steel loose flange
- Probe connection for Models 2011/2022
- Standard connector
- IS-2 connector with integral strainer
- With the 2000N Series 360° universal connector, copper oxide plugging
problems can be eliminated.

All models comply with the Article 4.3 of the PED (2014/68/UE).
† May be derated depending on flange rating and type.
2000 Series Inverted Bucket Steam Traps
All Stainless Steel with 360° Connector
For Pressures to 45 bar... Capacities to 590 kg/h

Connectors
Besides the inverted bucket traps, the standard connector, IS-2 connector with integral strainer and TVS-4000 can also be used on thermostatic, thermostatic wafer and disc traps.

Options
Pop Drain for Freeze Protection
In general, a properly selected and installed Armstrong trap will not freeze as long as steam is coming to the trap. If the steam supply is shut off, a pop drain should be used to automatically drain the trap. Stainless steel pop drain available for Models 2011 and 2022.

Maximum Operating Conditions
Pressure: 41 bar
Temperature: 177°C

Insu-Pak™
Now you can insulate the in-line traps in your plant without complicating regular trap maintenance. Insu-Pak, a simple reusable insulation package, cuts the time and cost of in-field installation because it goes on in a snap. And it comes off just as easily. The Insu-Pak can prevent trap freeze-up when used with a properly designed condensate manifold. Designed for use with Model 2010 and Model 2011 traps.

Probe connections are available for trap monitoring for Models 2011 and 2022.

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.