

An Innovative Technology Company
Providing Energy and Emission Reduction Solutions



GEM[®] Condensate Return System

Product Catalog





The energy efficient GEM® Traps have no moving parts and are backed by a 10 year performance guarantee. The GEM® Condensate Return System is the permanent solution to steam trap failure.



RUBY STEAM TRAPS (Integral filter option for low duty applications)
Suitable for flanged applications

Operating Parameters:

PMA & PMO: 1450 psi (100 bar)
TMA & TMO: 935°F (500°C)

Flange rating:

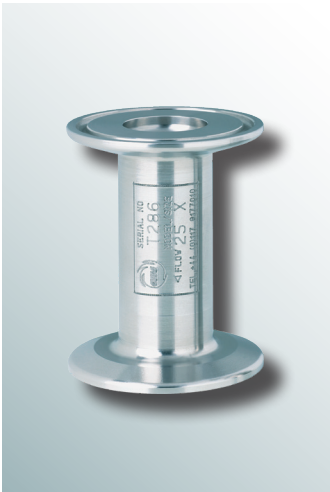
Suitable for all standard flanges

Pipe Connections:

1/2" - 4" (15 mm - 100 mm)
With optional filter: 1/2" - 1" (15 mm - 25 mm)

Material:

303 Stainless Steel



TOPAZ STEAM TRAPS

For clean steam applications

- Crevice free
- Hygienic

- Smooth internal surfaces to 32 µin (0.8 µm)*
- Easy to clean and sterilize

Operating Parameters:

PMA & PMO: 145 psi (10 bar)
TMA & TMO: 392°F (200°C)

Pipe Connections:

1/2" - 1" (15 mm - 25 mm)

Material:

316 Stainless Steel

*Please request details



QUARTZ STEAM TRAPS

For low load drip leg and trace heating lines

Operating Parameters:

PMA & PMO: 720 psi (50 bar)
when gasket fitted to torque of 37 lb.ft (50 N.m)
TMA & TMO: 935°F (500°C)

Pipe Connections:

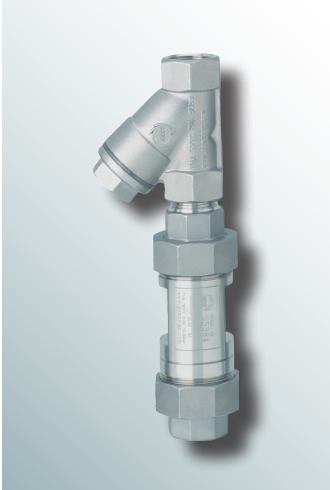
BSP/NPT
1/2" - 3/4" (15 mm - 20 mm)

Material:

303 Stainless Steel

Benefits of GEM® Traps

- ▶ Reduced maintenance
- ▶ No requirement for stocking spares
- ▶ Permanent energy savings (11 - 30%)
- ▶ Short payback (typically 12 - 18 months)
- ▶ Full sizing and commissioning support
- ▶ Complete turn-key solution available



SAPPHIRE STEAM TRAPS

Suitable for threaded connections (insulation bags available)

Operating Parameters:

PMA & PMO: 250 psi (17 bar)
TMA & TMO: 750°F (400°C)

Pipe Connections:

BSP/NPT thread
1/2" - 2" (15 mm - 50 mm)

Material:

Trap body 303 Stainless Steel
Union & Strainer 316 Stainless Steel

Strainers not supplied for sizes larger than 1"
(25 mm)



EMERALD STEAM TRAPS

For use with any universal 2-bolt quick-fit connectors* (insulation bags available)

Operating Parameters:

PMA & PMO: 1450 psi (100 bar)
TMA & TMO: 935°F (500°C)

*Supplied with flanges upon request

Pipe Connections:

BSP/NPT/SW
1/2" - 3/4" (15 mm - 20 mm)

Material:

316L Stainless Steel



OPAL STEAM TRAPS

For low load line drainage and trace heating lines (insulation bags available)

Operating Parameters:

PMA & PMO: 730 psi (50 bar)
TMA & TMO: 750°F (400°C)

Material:

316L Stainless Steel

Pipe Connections:

BSP/NPT/SW
1/2" - 3/4" (15 mm - 20 mm)
Flanged connections available

Thousands of GEM Traps have been installed worldwide, permanently cutting costs for blue chip international companies.

- ▶ Aesica
- ▶ Allergan
- ▶ BASF
- ▶ Bayer
- ▶ Boots
- ▶ Cadbury
- ▶ Carlsberg
- ▶ Chivas Brothers
- ▶ Coca-Cola
- ▶ Corus
- ▶ Diageo
- ▶ Dow Corning
- ▶ Dupont
- ▶ EON
- ▶ Exxon
- ▶ Ferrero
- ▶ Fruit of the Loom
- ▶ GlaxoSmithKline
- ▶ Glenmorangie
- ▶ Heinz
- ▶ Huntsman
- ▶ Interbrew
- ▶ International Paper
- ▶ Kerry Foods
- ▶ KNPC
- ▶ Kraft
- ▶ Loders Croklaan
- ▶ McCain Foods
- ▶ Merck
- ▶ Michelin
- ▶ Nestle
- ▶ NHS
- ▶ Novartis
- ▶ Pfizer
- ▶ Pirelli
- ▶ Premier Foods
- ▶ Rolls Royce
- ▶ Sappi
- ▶ Shell
- ▶ Tate & Lyle
- ▶ Unilever Unigema
- ▶ Whyte & McKay
- ▶ Weetabix
- ▶ Wrigley

Thermal Energy: Supplying Innovative Award-Winning Energy Recovery, Conservation, Bioenergy and Emission Reduction Solutions

TEI is a full service, design-build firm with engineering accreditation, established in 1986. We have designed and built many energy and emission reduction solutions for our customers.

Our team of professionals is highly experienced in plant and process energy efficiency evaluations and innovative solution development. We conceptualize, design, manufacture and deliver custom solutions which reduce your energy costs, improve energy efficiency and reduce the environmental impact of your facility.

We pride ourselves on working with customers to gain an in-depth understanding of their business, corporate, social and fiscal challenges. With this sound footing, our team of professionals provides complete solutions from initial design concept to installation, to financing and servicing of varied technology solutions.

Typical applications include:

- ▶ Waste energy recovery (FLU-ACE® and other);
- ▶ Biomass and waste steam drying solutions (DRY-REX® and other);
- ▶ Steam and condensate system solutions (GEM® and other); and
- ▶ Burner/Boiler system improvements.

Contact Thermal Energy today to discover how GEM steam traps can revolutionize your company's production efforts!



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