BASCO®
TYPE T and TC MOISTURE SEPARATORS and TRAP

API Heat Transfer
...world leaders in heat transfer technology
The Basic Operation of Type T and TC Separators

Basco Type T and TC Separators are designed to remove entrained moisture and solids from compressed air or gas streams. When properly installed and drained, we guarantee the removal of 99% of moisture and particles over 10 microns.

The design of the Basco Moisture Separators utilize the principal of centrifugal force to separate entrained moisture and drain it to the bottom reservoir. The removal is accomplished by causing the stream to enter a controlled centrifugal flow forcing entrained liquid and solids to the outer wall.

The Basco trap assembly, whether integral to the separator or purchased as a separate item, includes a corrosion-free, non-magnetic float mechanism. Loss of air is prevented by a positive O-ring seal. All traps are equipped with a deep well to allow for an immersion heater to prevent freeze damage to the trap.

Common Features and Differences

- The Type T Separator is designed without an internal trap. A remote trap assembly may be installed downstream. This is useful where space restrictions force the use of a shorter separator.
- The Type TC Separator has an internal corrosion-free trap assembly.
- Both Type T and Type TC separators and trap can be supported by its piping.
- Type T and TC separators can be furnished with ASME Code (UM) as an option. All models conform to ASTM A 278 Class 35 cast iron specifications.
- Compact design of trap assembly permits convenient removal of the housing for inspection or maintenance.
- Type TC Separators and traps can be furnished with an optional heating element to prevent freezing.
- All separator and trap models are stocked and ready to ship.

We Understand Heat Transfer

API Heat Transfer manufactures the most extensive selection of heat exchangers in the industry including shell and tube, plate, and brazed aluminum designs. Extensive applications know-how and a wide variety of industrial products allows API Heat Transfer to select the right heat exchanger for your application, and provide innovative alternative designs for your consideration.

Product diversity. Applications know-how. Manufacturing expertise. Renowned customer service. These ingredients set us apart and assure our customers of ultimate value.
Type T and TC Separator Dimensions

Type T Moisture Separator

Pressure 1.5” to 3” Models .160 psi
Pressure 4” Models ..........150 psi
Temperature ............450°F

Type TC Moisture Separator

ASME Code .... 160 psig @ 450°F
Non-Code ...... 160 psig @ 300°F
Non-Code ...... 250 psig @ 250°F
Flanged Models . 160 psig @ 300°F
## Type T and TC Separator Specifications

### Discharge Capacity for TC Trap Assembly

<table>
<thead>
<tr>
<th>TC Trap Inlet</th>
<th>Orifice Diameter</th>
<th>Differential Pressure (psi) / Discharge Capacity (Lbs. per Hour @ 70°F)</th>
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<td>3/4&quot;</td>
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Provisions for immersion heater at bottom of trap. Accomodates 5/8" x 2" heater element at 50 watts / 120 VAC. 12" leads S/S NPT, NEMA 1 Box

### Type T and TC Moisture Separator Dimensions

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<tr>
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<th>G</th>
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* Add 14.7 to psig
Manufacturing Expertise

Rugged Construction and Corrosion-Resistant Trap Assembly

Basco Moisture Separators and Traps include the following features:

- Large Corrosion-Free Float Ball
- Corrosion-Free Mechanism
- Non-Magnetic Valve and Seat
- Heavy Cast Iron Construction
- Accessible for Cleaning
- Ports and Plugs Provided
- Accomodates Immersion Heater
- 250 psi Design Pressure
- Includes Blowdown Plug

Common Mounting for Type T Moisture Separators and Traps

Traps for Type T Models are mounted remotely from the separator. Here the trap is installed directly below the separator and to drain. Traps for Type TC Models are integral to the separator.

If clearances are restricted yet a vertical drain is desired, the trap may be mounted adjacent to the separator with a vent or support line installed back to the separator.

The trap assembly can be installed to drain air receiver tanks. This installation is required where floor clearances are minimal. Shown with a vent line back to the receiver tank.
Other Products Available from API Heat Transfer

**OptiDesign®**
Straight-tube, removable bundle exchangers made from standard components. Floating tube sheet for seal leak detection and easy maintenance. Diameters from 3” (7.62 cm) to 42” (106.68 cm). ASME, API, TEMA, ABS and other codes available.

**Type 500 Shell and Tube Heat Exchangers**
General purpose exchangers designed to cool oil, compressed air and other industrial fluids. A variety of constructions, port configurations and materials are available. ASME and TEMA-C available. Diameters from 3” (7.62 cm) to 12” (30.48 cm).

**TEMA Shell and Tube**
A wide variety of TEMA types are available using pre-engineered or custom designs in various sizes and materials. Shell diameters from 6” (15.24 cm) to 60” (152.4 cm), ASME, TEMA, API, ABS, TUV, PED and other code constructions available.

**Brazed Plate Heat Exchangers**
Off-the-shelf, standard units reflect the latest in plate heat exchanger technology for maximum performance and low cost. Ideal for OEM or aftermarket applications. Many models stocked and ready to ship. Models for process or refrigeration applications.

**Extended Surface “ES” Exchangers**
Unique, patented plate-fin design for centrifugal or axial compressor intercooler and aftercooler applications and minimal pressure loss. Design eliminates separators. ASME code design is standard. Diameters from 20” (50.8 cm) to 120” (304.8 cm).

**Air-Cooled Heat Exchangers**
High efficiency, brazed aluminum coolers for cooling a wide variety of liquids and gases with ambient air. Lightweight, yet rugged. Capable of cooling multiple fluids in single unit. Models can be supplied with cooling fan and a variety of drives.

**Gasketed Plate Heat Exchangers**
The Schmidt line of gasketed plate & frame heat exchangers provide excellent heat transfer in a compact space. Plates are pressed from stainless steel, titanium and other alloys. Gaskets of nitrile, EPDM, Viton®, compressed fiber and Teflon® are used. Capacities range from 0.5 to 10,000 GPM.

**Pipeline Aftercoolers**
Straight tube, counterflow aftercoolers designed to yeild cool, dry compressed air. Available with or without accompanying moisture separators and constructed to a wide variety of design codes. Diameters from 6” (15.24 cm) to 42” (106.68 cm).