

# LIQUIDATOR UMT-TD Series Thermodynamic Steam Trap

## Applications

- Unit Heaters
- Steam Tracing
- Drip Legs
- Tire Presses
- Laundry Equipment
- Plating Tanks
- Platen Presses
- Cooking Equipment

Pressures To 450 PSIG  
Temperatures to 650°F

### Easily Maintained

Four bolt cover permits easy in-line rebuilding for less than the cost of replacement.

### Optional Integral Strainer

Helps prevent dirt and scale build-up on valve seat.

### Excellent Energy Savings

Positive shutoff assures no loss of steam during normal operation.

### Fits all Universal Connectors

Liquidator body will replace any manufacturers' universal mount trap body.

### Easily Replaced

Two bolt design permits rapid removal without breaking pipe connections.

### Freeze Proof

Self draining when installed vertically.

### Durability and Long Service Life

Stainless steel body and cover with stainless steel Celtron® Cartridge for maximum corrosion, thermal and hydraulic shock resistance.

### Unaffected by Ambient Conditions

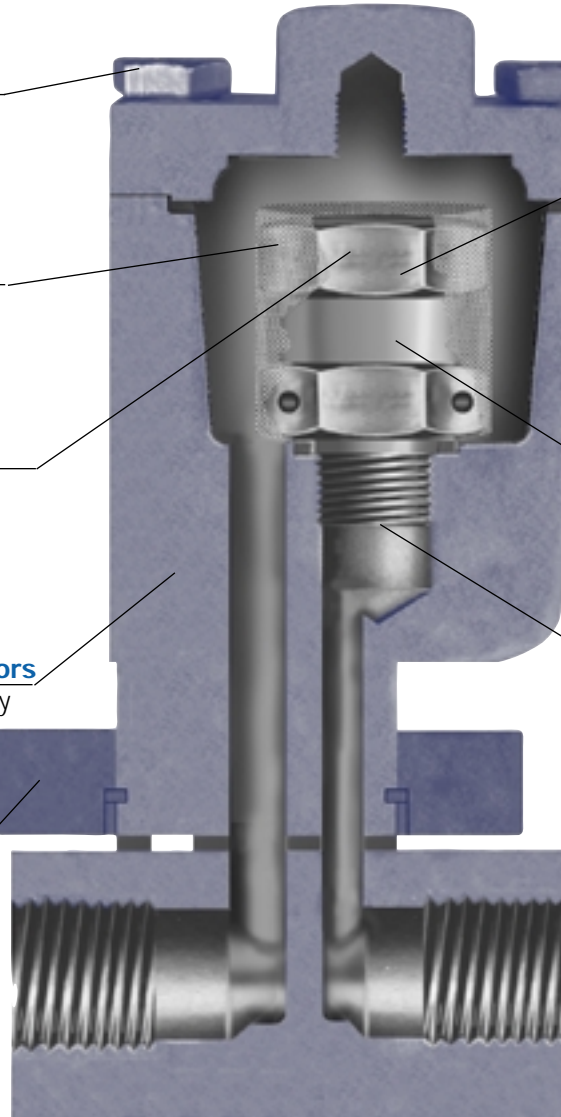
Steam jacketing minimizes steam loss.

### Blast Discharge

Clears away dirt and scale.

### 3 Year Guarantee

Guaranteed against defects in material and workmanship.



# THERMODYNAMIC STEAM TRAPS

**NICHOLSON** has a wide variety of Thermodynamic Steam Traps to accommodate applications through 600 psi. Most models utilize **NICHOLSON**'s exclusive Celtron® Cartridge. The Celtron® facilitates inline maintenance while simultaneously providing superior performance. The all-stainless NTD 600 is the value leader of the line, providing the performance **NICHOLSON** users have come to expect in a conventional, recognizable design.



## NTD600 SERIES THERMODYNAMIC STEAM TRAPS

Pressures To 600 PSIG (41.3 barg)  
Temperatures to 800°F (426°C)

**Compact Design** — Hardened stainless steel disc is the only moving part.

**Inexpensive** — Low initial cost is less expensive than repairable technologies.

**Simplifies Installation** — Works in any position.

**Rugged** — Handles water hammer and superheat.

**Reliable, Efficient Operation** — Blast discharge helps to eliminate dirt buildup and provides tight shutoff

**Freeze resistant** — Self draining design prevents freezing.

**All Stainless Steel Construction** — Resists both internal and external corrosion.

**Easy to Monitor** — Audible discharge cycle makes checking operation simple.

### MODELS

- **NTD600**—Thermodynamic Disc Trap
- **NTD600S**—NTD600 with integral strainer
- **NTD600B**—NTD600S with blowdown valve

### APPLICATIONS

- Steam Tracing
- Drips
- Heating

**NTD600 Model Only:**  
Canadian Registration # OE0591.9C

*Installation Tip:* Always install STV Test & Block Valve as part of trap station  
SEE PAGE 118

*Installation Tip:* Add Uniflex Pipe Coupling for ease of maintenance  
SEE PAGE 102

### OPERATION

Incoming air and condensate flow through the trap body and into the control chamber. Line pressure raises the disc off the seat allowing complete discharge. When flashing condensate enters the cartridge, flow velocity increases, creating low pressure underneath the disc. Flashing condensate at high velocity strikes the inside wall of the disc chamber and is deflected

to the top of the disc causing a pressure buildup. The disc is forced down onto the seat by this pressure imbalance. The trap remains closed as flashed vapor in the control chamber keeps the disc seated. Pressure inside the cap is not lowered until the trapped flash vapor condenses due to body radiation. Condensing steam lowers the pressure above the disc. Disc is then lifted and the cycle repeated.