

• **Temperature Control Units**

Water & Oil  
30° - 500°F

• **Portable Chillers**

Air & Water-Cooled  
20° - 70°F

• **Central Chillers**

Air & Water-Cooled  
Packages & Modules  
20° - 70°F

• **Pump Tank Stations**

Chilled or Tower Water  
200 - 3600 gallons

• **Cooling Tower Cells**

45 - 540 tons

• **Filters**

• **Heat Exchangers**

• **Negative Pressure Units**

**WARRANTY**

• **1 Year:**

Covering parts and labor

David W. Ennes

Blackhawk Machinery & Systems, Inc.

847-427-0414

ennes@chillerconnect.com

## TROOPER & VAC-U-TEMP SERIES

- Stop Mold Leaks
- Prevent Downtime



Trooper and Vac-U-Temp units are used by injection molders that need immediate solutions to critical manufacturing problems caused by leaking o-rings and/or cracked molds.

The **Trooper** works with your process circulating system, such as your temperature controllers or a central plant chiller, to convert positive pressure from these systems to negative pressure within the cooling channels of the mold. Negative pressure allows air to enter the cooling channel which prevents water or coolant

from leaking out. This air is then vented from the unit through the air separator. This technique is guaranteed to stop leaks.

The **Vac-U-Temp** line of negative pressure temperature control units stop leaks and are an excellent choice when higher temperatures are needed and a closed loop system is appropriate. The Vac-U-Temp design with vacuum venturi creates the best air separation in the industry and does not “foam up”. Our design does not rob pump pressure that can reduce the usable flow of the unit.

### APPLICATIONS

Vac-U-Temp & Trooper Series negative pressure units can be used on a variety of process applications that require consistent process water flow.



Molds & Dies



Nozzles, Barrels & Tools



Heat Exchangers



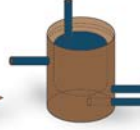
Troughs & Tanks



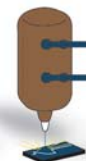
Rolls



Radiators & Air Coils



Jacketed Vessels & Mixers



Lasers

# TROOPER LEAK STOPPER

## Specifications

|                                  |        | TR-100 | TR-300 | TR-350 | TR-400 | TR-500 |
|----------------------------------|--------|--------|--------|--------|--------|--------|
| <b>Pump</b>                      | HP     | 3/4    | 3/4    | 1 1/2  | 1 1/2  | 2      |
| <b>Flow<sup>2</sup></b>          | GPM    | 7.2    | 14.6   | 14.8   | 24     | 52     |
| <b>Max Return Pressure</b>       | PSI    | 100    | 40     | 150    | 40     | 40     |
| <b>Unit Amperage<sup>3</sup></b> |        | 2.5    | 3.5    | 6.5    | 4.5    | 8.5    |
| <b>@ 3ø /60hz (Full Load)</b>    |        | 460    | 1.3    | 1.8    | 3.3    | 2.3    |
| <b>Connection Size (inches)</b>  | NPT    | 3/4    | 3/4    | 3/4    | 1 1/4  | 1 1/4  |
| <b>Unit Weight<sup>1</sup></b>   | Pounds | 120    | 120    | 210    | 220    | 250    |
| <b>Unit Dimensions</b>           | Height | 28     | 28     | 28     | 28     | 28     |
| (measured in inches)             | Width  | 24     | 24     | 36     | 24     | 36     |
|                                  | Depth  | 14     | 14     | 14     | 14     | 14     |

### Notes:

- Units are shipped from Oakville, CT.
- Flow at 0 psi return pressure.
- Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.



Model TR-400

# VAC-U-TEMP NEGATIVE PRESSURE TEMPERATURE CONTROL UNIT



Model VT-1800

Models VT-1800 and VT-2600 are closed circuit negative pressure temperature control units with heater, heat exchanger and stainless steel reservoir.

### Options

- 12 kW heater (in lieu of 6 kW)
- 5.6 sq. Ft. Heat exchanger in lieu of 3.6 sq. Ft. For greater cooling capacity.

## Specifications

|                                     |          | VT-1800 | VT-2600      |
|-------------------------------------|----------|---------|--------------|
| <b>Fluid</b>                        |          | Water   | Water/Glycol |
| <b>Heater</b>                       | kW       | 6       | 6            |
| <b>Heat Exchanger</b>               | Sq. Ft.  | 3.2     | 3.2          |
| <b>Cooling Capacity<sup>1</sup></b> | BTU / hr | 48,000  | 48,000       |
| <b>Reservoir</b>                    | Gallons  | 3.6     | 3.6          |
| <b>Pump</b>                         | HP       | 3/4     | 1 1/2        |
| <b>GPM</b>                          | Maximum  | 22 / 37 | 50           |
| <b>Temperature</b>                  | Maximum  | 180°F   | 260°F        |
| <b>Unit Dimensions</b>              | Height   | 28      | 28           |
| (measured in inches)                | Width    | 24      | 24           |
|                                     | Depth    | 14      | 14           |
| <b>Weight</b>                       | LBS      | 220     | 230          |

### Note:

- Rating conditions: 10 apm of cooling water supplied at 50°F cooler than setpoint.



## STANDARD FEATURES

### FRAME & CABINET CONSTRUCTION:

- Rugged pressed steel
- Powder coated finish
- Portable, on casters
- Easy access service panels
- Small footprint - compact

### COOLANT CIRCUIT:

- Bronze pressure reducing valve (TR Models)
- Water inlet strainer (TR Models)
- All copper and bronze piping
- Automatic air purge
- Standard NPT process fittings

### WARRANTY:

- 1 year

### SYSTEM SAFETY DEVICES:

- Low supply pressure shut off with indicator (TR Models)
- High return pressure shut off with indicator (TR Models)

### PRESSURE GAUGES:

- To mold pressure
- From mold pressure
- Supply pressure
- Return pressure

### ELECTRICAL:

- Phase monitor relay
- IEC motor starter
- Master on/off switch
- Fused control transformer
- Power entry terminal block
- Fused transformer
- Available :
  - 230/460/3/60
  - 110/220/1/60
- Motor overload protection
- 5 kA RMS SSCR

**David W. Ennes**

**Blackhawk Machinery & Systems, Inc.**

**847-427-0414**

**ennes@chillerconnect.com**

**Phone: 842-427-0414 Web: www.TempTekchillers.com**

TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.