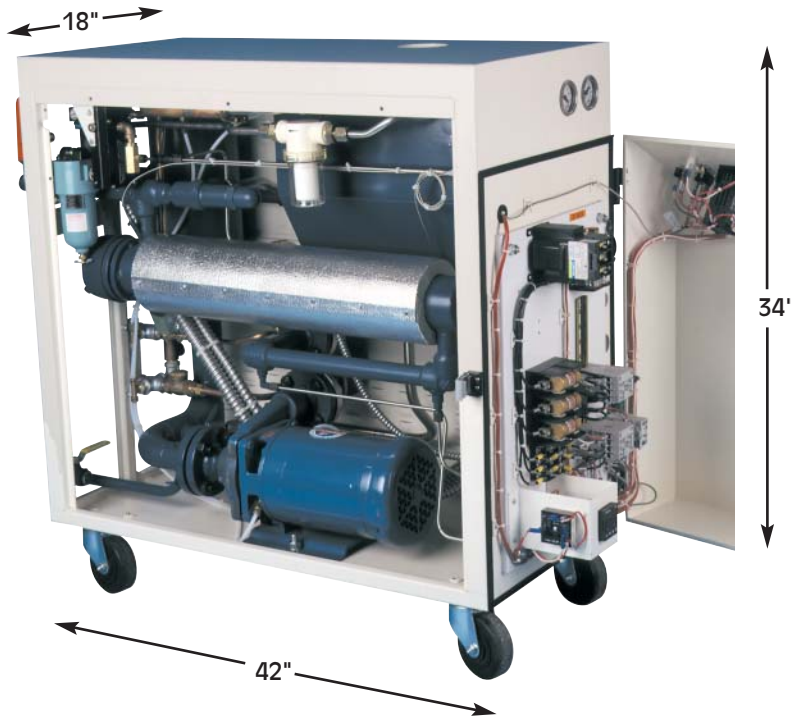


THERMAL VAC NEGATIVE PRESSURE HOT OIL & HOT WATER TEMPERATURE CONTROL SYSTEMS



- IMPROVED SAFETY
- Operates completely LEAK FREE
- EVACUATE your process fluid back into the Thermal VAC tank
- Pre-Heat Molds Safely & Cleanly
- Faster Mold Changes
- Vacuum fill from Oil Drum (no more hand pumping)
- All welded and flanged pipe construction
- Internal pressure relief/by-pass valve
- High level switch to prevent reservoir overflow

Thermal VAC Negative Pressure WATER Model	Heater kW	Water Pump GPM	Water Pump HP	Vacuum Pump SCFM @ 15"	F.L.A. (460)*	Optional Cooler Ft. sq. **	Dimensions WxLxH
1NPWT-620-460-DS	6	20	3	15	12.6	3.7	18"x32"x26"
1NPWT-920-460-DS	9	20	3	15	16.3	3.7	18"x32"x26"
1NPWT-1220-460-DS	12	20	3	15	20.1	3.7	18"x32"x26"
1NPWT-1820-460-DS	18	20	3	15	27.6	3.7	18"x32"x26"

* 230 Volt AMPs = 460 Volt Amps x 2

**3.7 ft. sq. provides 132,000 BTUH @ 200 deg. F.

Thermal VAC Negative Pressure HOT OIL Model	Heater kW	Oil Pump GPM*	Oil Pump HP	Vacuum Pump SCFM @ 15"	F.L.A. (460)**	Cooler Ft. sq. (optional)***	Dimensions WxLxH
1NPOT-920-VL-460-C	9	20	1-1/2	20	15	3.1	18"x42"x34"
1NPOT-1220-VL-460-C	12	20	1-1/2	20	19	3.1	18"x42"x34"
1NPOT-1820-VL-460-C	18	20	1-1/2	20	27	3.1	18"x42"x34"
1NPOT-2420-VL-460-C	24	20	1-1/2	20	34	3.1	18"x42"x34"

* 30 GPM available

**230 Volt AMPs = 460 Volt Amps x 2

***3.1 ft. sq. provides 48,000 BTUH @ 350 deg. F., 20 ft. sq. exchanger available (100,000 BTUH @ 350 deg. F.)

NEGATIVE PRESSURE HOT OIL & HOT WATER- TCU_s



Thermal VAC Negative Pressure Hot Oil and Hot Water Systems

Don't stop production just because the process has developed a leak. Budzar's Thermal VAC Negative Pressure Hot Oil and Hot Water Temperature Control Units allow you to continue running even with leaks. And when you don't have a leak take advantage of the improved safety and heat transfer characteristics of running your temperature control oil circuit under vacuum.

A successful negative pressure temperature control system is driven by three critical factors: vacuum pressure, vacuum air CFM and process fluid GPM. Thermal VAC's dual pump design, with a separate vacuum and process pump, delivers the **maximum** on all three of these critical factors.

- **Vacuum Pressure** - The deeper the vacuum pressure the more of the mold or process will be under vacuum. Thermal VAC units incorporate an on-board vacuum pump that can deliver up to 24" of mercury (near perfect vacuum).
- **Vacuum Air CFM** - The greater the CFM the bigger the leak that can be handled. Thermal VAC's on-board vacuum pump pulls enough CFM to handle as much as possible of the fluid (oil or water) flow rate through the mold or process.
- **Process Fluid GPM** - The greater the process fluid (oil or water) flow the more consistent the temperature control at the process. The Thermal VAC is a two pump system. The fluid pump delivers full rated flow to the mold or process even under full vacuum.

Of course all of this is of little use unless the unit also delivers accurate temperature control. The Thermal VAC provides ultra precise temperature control through a self tuning PID microprocessor that controls the low watt density electric heater and cooling exchanger control valve. The controller even has a 5 year warranty!



engineering
PRECISION

MAXIMUM SAFETY

- The Thermal VAC reduces the chance of your operators coming in accidental contact with hot oil or water.
- Should a leak develop the Thermal VAC will not spray out hot fluid, it will suck in air instead.

MAXIMUM VACUUM

- Thermal VAC's on board vacuum pump pulls up to a 24" of mercury vacuum. That is much more than single pump systems and means more of your process will be under vacuum.

MAXIMUM CFM

- Thermal VAC's vacuum pump is sized to pull 2 to 15 SCFM. That means the Thermal VAC can handle bigger leaks!

MAXIMUM GPM

- All other negative pressure systems force a trade-off between vacuum pressure and process fluid GPM.
- Thermal VAC's separate process pump delivers 20 GPM even under full vacuum and that means your process can continue to run at full capacity even with a leak!

NO SMOKE

- Most negative pressure oil units belch smoke from the vacuum pump discharge. The smoke fouls your plant and irritates operators.
- The Thermal VAC incorporates a proprietary condensing system that eliminates smoke discharge into the plant.

SIMPLE OPERATION AND MAINTENANCE

- Thermal VAC's controls are all automatic. You just turn the unit on and set the required process temperature and vacuum level.



process
TEMPERATURE
control