



2016C SERIES

Oil Temperature Control Unit



Technical Specifications

The 2016C Series Oil Temperature Control Unit provides accurate, automatic and dependable control in temperature ranges from 100°F to 400°F (38°C - 204°C) with heat transfer fluid. The 2016C Series Oil Temperature Control Unit offers full size performance in a compact, space saving cabinet, ideal for tight spaces and out-of-the-way installations. The 2016C Series Oil Temperature Control Unit is designed for Extruders, Blow-Molders, and Injection Molders working with engineered materials.

Features

Standard Features

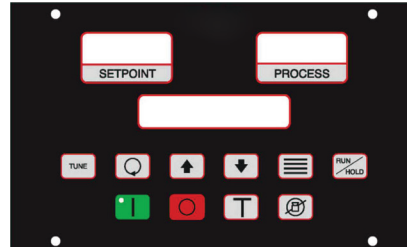
- Temperature range from 100°F - 400°F (38°C to 204°C)
- 460V/3ph/60Hz design with 6kW heater
- 1.5 sq. ft. heat exchanger
- Positive displacement pump with mechanical seal and totally enclosed fan cooled pump motors
- Pressure switch for low pressure pump shutdown
- Automatic vent sequence
- M2B+ microprocessor controller includes diagnostics features with indicator and warning lights
- Low tank level sensor
- Pump reverse
- Audible/visual alarm
- Compact cabinet with removable panels for easy maintenance access
- Independent safety thermostat
- Pressure-actuated bypass valve
- Pump motor over-current protection
- NEMA-12 style electrical enclosure
- Heating and cooling
- To-Process pressure gauge
- UL listed sub-panel

Optional Features

- Manual bypass
- Y-strainer
- Available voltages:
575/3/60, 208/3/60, 230/3/60, 380/3/50, 415/3/50
- Remote control enclosure with 20ft. cable
- Graphic display and functional indicating lights (3216 optional)
- Hour meter
- High temperature hoses

M2B+ Controller

- PID control for both heating and cooling
- Built-in Ramp/Soak feature
- Setpoint, To Process, From Process and DT displays
- Autovent sequence (adjustable from 1 to 10 minutes)
- °F to °C programmable
- 2 line by 20 character LCD to display status information and alarms



Specifications

Model	Pump hp (kW)	Flow gpm (lpm)	Pressure PSIG (bar)	FLA	Height in. (cm)	Width, in. (cm)	Depth in. (cm)	Shipping Wt. lbs. (kg)
2016C	0.75 (0.56)	6 (23)	50 (3.4)	9.0 / 460v	28 (71)	13 (33)	31 (79)	265 (120)

Because of high temperatures, flash steam may accrue in heat exchangers. Some applications may require the use of a condensate tank.



Side Stream Filtration

For Oil Temperature Control Units

INCREASE EFFICIENCY

This side-stream filter could increase the heat transfer efficiency by as much as 20 percent by reducing the amount of insolubles such as sludge and coke circulated through your process. This reduction of efficiency causes the system to take longer to heat up and cool down increasing your energy costs.

REDUCE MAINTENANCE COSTS

The same insoluble contaminants that cause a decrease in efficiency can also result in wear on rotating components and plug up spring loaded relief valves. The wear on the rotating components can also lead to costly material repairs, machine downtime and labor costs. The plugging of the relief valve can result in a safety hazard due to the valve not opening properly and being able to keep a constant flow of fluid circulating through the heater(s).



Features

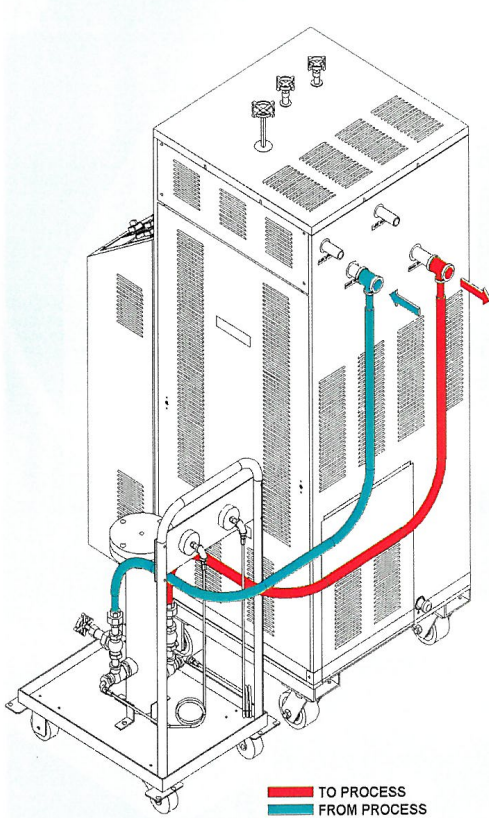
Standard Features

- 550°F maximum operating temperature
- 3 gpm maximum side-stream filtration
- Differential pressure gauge
- Isolation valves for filter change
- Includes 50 micron filter (25 & 100 micron filters available)
- Cart mounted on casters for mobility
- Cart size: 22" deep x 16" wide x 38" tall

Fluid Degradation

Heat transfer fluid in the presence of oxygen and heat degrades forming contaminants such as coke and sludge. These contaminants can cause the following problems in temperature control systems.

- Wear of rotating components such as pump impellers, gears and shafts, mechanical seals and valve stems
- Reduce capacity of heaters and heat exchangers by adhering to these surfaces
- Increased viscosity due to increased solids
- Increased energy consumption due to longer heat up or cool down time



Side Stream
Filtration System

Portable Design

Spare Filters Available in cases of 30

- 25 Micron
- 50 Micron
- 100 Micron

TECH TIP: Heat Transfer Fluid Analysis

Your fluid should be analyzed at least every 2,000 hours of operation as part of a regular maintenance program. If you are operating at elevated temperatures (above 400°F) this analysis should be performed quarterly to determine the condition of the fluid.

Analysis Should Include:

- Specific gravity
- Total acid number (TAN)
- Viscosity
- Insolubles
- Flash point of the fluid

Once the analysis is done, a comparison can be made to the original specifications from the manufacturer.