

Aquatherm

RQT Advanced Series



High flow pumps for exceptional flow rates



Intuitive PLC for easy programming and diagnostic control



Built to last with the best possible components

MOLD TEMPERATURE CONTROL UNITS

$\frac{3}{4}$ to 10 hp (0.56 to 7.5 kW)

We engineer compact, high performance water temperature control units designed to maximize production efficiency. The Aquatherm RQT Series delivers precise control, exceptional reliability, and user-friendly operation. Built with high-quality components - including cast pump volutes, heater tubes, mixing assemblies, high-flow pumps with leak-resistant silicon carbide seals, and durable Incoloy-sheathed heaters - these units provide years of maintenance free operation.

The RQT Series is designed for advanced control and data management, with three different models available, including PLC options to meet your specific needs. The RQT Advanced model features an intuitive large LCD screen with adjustable parameters for precise temperature control.

High Flow Pumps	Designed to meet rapid cooling requirements, our energy-efficient pumps provide the best flow available in the industry. Sizes from ¾ to 10 hp (0.56 to 7.5 kW). Silicon carbide pump seals are standard.
Long Life Heaters	Incoloy sheathed heater elements offer superior performance, longevity, and corrosion resistance compared to copper or stainless steel options.
Leak Proof Pump/Heater Assembly	Heavy-duty cast-iron pumps, heater tubes, and mixing tubes with O-ring seals reduce threaded fittings that can cause internal pressure losses and are prone to leaks.
Long Life Pump Seals/Internal Flushing	High-temperature pump seals, with an integral flush system and turbulence ribs inside the seal chamber, extend seal life and are more energy efficient than external seal flush lines.
Modulating Cooling Valves	Fast-acting, high performance modulating valve responds quickly and precisely to any sudden changes in the process to ensure consistent mold temperatures all the time.
24 VDC Control Circuit Power	Dependable and safe control circuit power, isolates the control circuit from static interference for stable and precise operation.
Tilted Front Panel	Conveniently angled for optimal viewing, quick and easy monitoring and adjustment of the set point and other control functions.
Process Temperature Retransmit	0-10vDC Continuous remote monitoring of process temperature on any device.
Intelligent Air Purge	At start-up, the automatic air purge sequence deactivates when the mold circuit is above 120°F (49°C) to avoid cooling of the mold during temporary power interruptions.
Advanced PLC Controller	Easy to use LCD screen with adjustable parameters offer precise temperature control.
Seal Saver	An automatic sequence cools the unit down before stopping the pump to extend pump seal life by eliminating the potential of seal warping.
Pump Running Hours Display	A quick and easy way to check on the total machine run time to better plan for routine maintenance.
Adjustable Deviation Alarm Time Delays	A programmable alarm time delay eliminates nuisance alarms at start-up by allowing the unit to reach a stable temperature before activating the temperature alarms.
Supply and Return Temperature Display	Continuous display of the set point, supply and return temperatures, for complete monitoring of the process and unit operation.
Adaptive Maximum Setpoint	Automatically adjusts unit's maximum setpoint (up to 250°F [121°C] standard and 300°F [149°C] optional) for variable cooling water supply pressure installations.
Digital Process Pressure	Process and return system pressure.
Adaptive Pressure Relief	Limits pressure relief valve discharge by anticipating a pressure spike and opening the cooling valve to control system pressure.
Digital Flow Meter	Displays estimated fluid flow and monitors flow to the mold.
System Statistics	Real time information on digital IO states, alarm operations, low pressure events, cooling valve active times, pump run time, heater run time, control voltage and overall run time.
Trending Data	Live performance data tracks variables such as supply and return temperatures, process pressure, heating and cooling percentages, flow and temperature accuracy.
Communication	Modbus RTU.
Warranty	Three year parts and labor.

