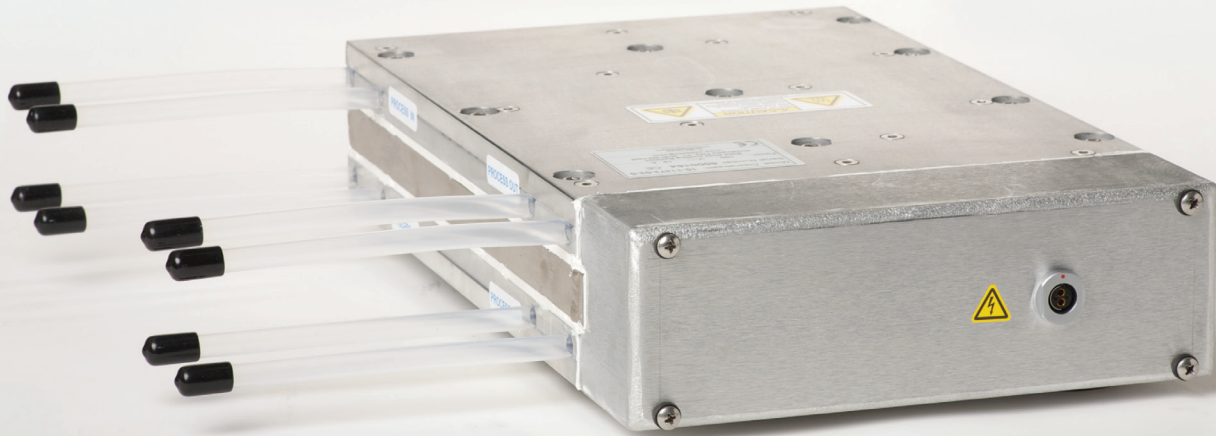


# CLEANSTREAM 550 - H1500

Wide Range Temperature Control for R+D Chemical Baths



## Cleanstream 550-H1500 Patented Liquid-to-Liquid Thermoelectric Heat Exchanger

Equivalent to 1250 Watt chiller or 1500 Watt heater for

- Low power direct heating and cooling for 2-40 liters semiconductor chemical baths

Designed to fit inside most wet bench designs, the Cleanstream 550-H1500 maintains temperature control at an ultra-precise  $\pm 0.05$  °C from 10-90 °C, and can do so at 10X the response time while consuming 80% less power than Freon-based chillers in near ambient applications.

Cleanstream offers a triple moisture seal for low temperature operation and PFA Teflon® surfaces on process side for ultra-high purity or corrosive fluids. And it uses ISO 14001 enabling thermoelectric technology, so no moving parts, no noise, no vibration, and no maintenance — with an MTBF greater than 80,000 hours. Two-year warranty standard.

A complete Cleanstream 550-H1500 package is available including:

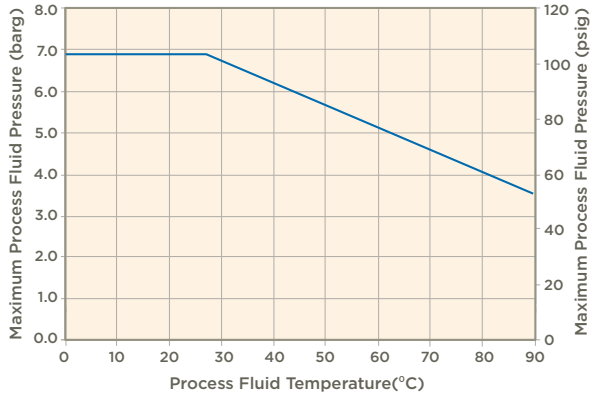
- Cleanstream 550-H1500
- Switchback 6600 CE bipolar power supply or power supply/ temperature control unit with Yokogawa UT 55A controller
- Two 4:1 PTFE fittings
- One power cable with over-temp interlock

For complete information: [sscooling.com/cleanstream1500](http://sscooling.com/cleanstream1500)

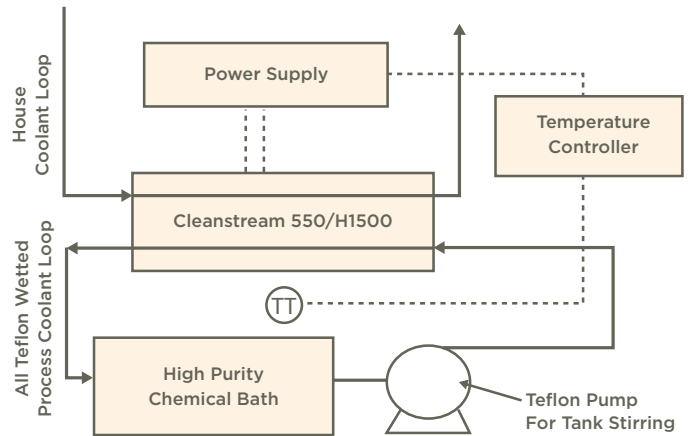
# The Right Temperature Without Fail

## Solid State Cooling Systems

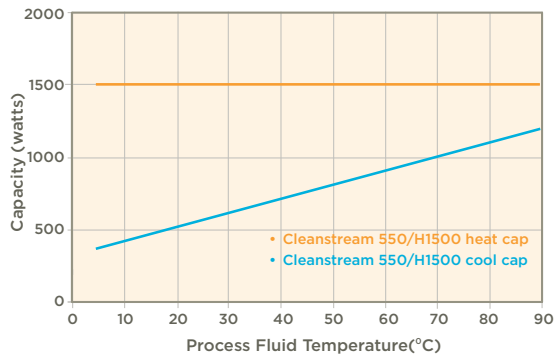
### CLEANSTREAM PROCESS FLUID PRESSURE RATING (ALL MODELS)



### CLEANSTREAM POSITIONING SCHEMATIC



### CLEANSTREAM 550/H1500 COOLING AND HEATING CAPACITY



## SPECIFICATIONS

<b>Operating Range</b>	10 to +90 °C
<b>Cooling Capacity</b>	550 watts at 25 °C
<b>Heating Capacity</b>	1500 watts
<b>House Fluid</b>	Filtered treated industrial water
<b>Process Fluid</b>	Up to 50% HF solution, SC1 and SC2 solution, organic solvents, other PFA Teflon-compatible fluids
<b>Flow Rate</b>	0.5-2 or 4-10 gpm (2-8 lpm or 15-38 lpm) in process plates, 4-8 gpm (15-30 lpm) in house plate
<b>Maximum Pressure</b>	100 psig on house. Process fluid pressure depends upon temperature (see graph)
<b>Teflon Fitting Choices</b>	3/4" or 1" Flaretek, or Teflon tube stub
<b>Size (L x W x H)</b>	16 x 9.75 x 3.1" (41 x 25 x 8 cm)
<b>Weight</b>	38 lbs. (17 kg)
<b>Power Requirements</b>	200-240 VAC, 3Ø, 6A to Switchback 6600 CE set at: 0-144 VDC, 0-12 Amps
<b>Material</b>	House cooling water flows through 6063 aluminum T6 hardened with Nickel-coated interior or optional Teflon-impregnated anodized aluminum; process fluid flows through HDPFA Teflon tubing only

### SOLID STATE COOLING SYSTEMS