# **CLEANSTREAM H3000**

Liquid-to-Liquid In-Line Heater for High Temperature Baths



## Cleanstream H3000 All-PFA Teflon Wetted In-Line Unit

Well suited for electroplating baths operating above 40 °C

Designed to fit inside most wet bench designs, the Cleanstream H3000 replaces an in-line heater or chiller/heater. It maintains temperature control at an ultra-precise  $\pm 0.05$  °C from 40-90 °C, and can do so at 10X the response time of Freon-based chiller/heaters.

Cleanstream provides PFA Teflon® surfaces on process side for ultra-high purity or corrosive fluids. And it uses thermoelectric technology, so no moving parts, no noise, no vibration, and no maintenance.

A complete Cleanstream H3000 package is available including:

- Cleanstream H3000
- Switchback 6600 CE bipolar power supply or power supply/ temperature control unit with Yokagawa UT 55A controller
- Two 4:1 PTFE fittings
- One power cable with over-temp interlock

For complete information: sscooling.com/cleanstreamH3000

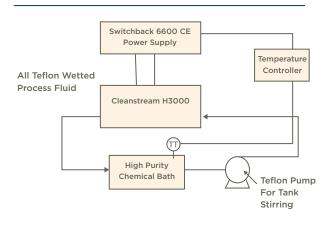


### The Right Temperature Without Fail

### Solid State Cooling Systems

The Cleanstream H3000 heater is an all PFA Teflon wetted "in-line" unit, which replaces an in-line heater or chiller/heater. It directly heats, and when used with the Switchback 6600 CE power supply and a temperature controller, controls the temperature of the process fluid in wet bench applications.

#### **CLEANSTREAM POSITIONING SCHEMATIC**



SPECIFICATIONS	
Operating Range	+40 to +90 °C with ± 0.2 °C control
Heating Capacity	3000 watts
Process Fluid	Ideal for H <sub>2</sub> SO <sub>4</sub> /H <sub>2</sub> O <sub>2</sub> , SC1, SC2, electroplating baths or other fluids compatible with PFA Teflon
Process Fluid	0.5-2 or 4-10 gpm
Maximum Pressure	100 psig on house. Process fluid pressure depends upon temperature (see graph)
Teflon Fitting Choices	3/4" or 1" Flaretek, or Teflon tube stub
Size (L x W x H)	16 x 9.75 x 3.1" (41 x 25 x 8 cm)
Weight	40 lbs (18 kg)
Power Requirements	208 VAC, 3Ø, 12A, or Switchback 6600 CE power supply set at 144 VDC, 24 A output
Material	Process fluid flows through HDPFA Teflon tubing only

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

