

## Affinity® Thermal Control Products from Lydall

Lydall Affinity® thermal control solutions are designed and built to your manufacturing specifications, and are focused on reducing energy consumption. High-performance refrigerated and non-refrigerated chillers, and heating systems in compact, modular and user-friendly designs, deliver process temperature ranges of -80°C to +200°C.

Innovative, modular design.

Reliable performance.

Flexible applications.

# Etch

## Water-to-Water Heat Exchanger

*The International Sematech Manufacturing Initiative recently cited a **4x efficiency gain** for heat removal from process tools when using cooling water versus heat dissipation into the clean room environment.*

An alternative to POU chillers for FEOL thru BEOL tool sets; our water-to-water heat exchangers are energy and space efficient thus reducing CoO and accelerating operational profitability.

### System Features

- Electrical energy savings
- Significantly smaller footprint vs refrigerated POU chillers
- Process loop heater for process temperature requirements above ambient
- Modular design and construction
- Designed to support multiple etch process tool requirements
- Communications options include Device Net; LON Works, RS232/485
- Compatible with multiple process fluids including DI, synthetic and water/glycol

### Customer Benefits

- Precious clean room space requirements are significantly reduced
- Significant CoO savings via the reduction of system power requirements
- Extended temperature range reduces temperature ramp to set point time
- Improved system availability via reduced PM requirements and shorter maintenance cycles
- Communications options allow smooth replacement of OEM chillers
- Multiple process fluid capability supports all customer process requirements



Now you have a choice.

[www.lydallaffinity.com](http://www.lydallaffinity.com)

# Etch *Water-to-Water Heat Exchanger*

## System Performance Characteristics

Model Nomenclature	EWE-04AS-BE60CBD0
Part #	35799
MET Listed	Yes
CE Marked	Yes
Semi S2 Compliant	Yes
Cooling Capacity	5500 watts @ 20° C (facility water 6° colder)
Process Temperature Range	5° C to +90° C (41° F to 194° F)
Process Fluid – Standard	Galden
Process Fluid – Options	HFE, Fluorinert, Glycol, Water, De-ionized Water
Process Flow and Pressure	4 gpm @ 50 psi; 90 psi maximum (15.1 lpm @ 3.4 bar; 6.2 bar maximum)
Process Temperature Stability	+/- .5°
In-Line Process Heater	2000 watts (@ 230 volt in-put voltage)
Heat Dissipation	Facility Water
Facility Water Requirements	6° Colder than desired process temperature
Facility Water Connections	1/2" NPT
Ambient Temperature Range	5° – 40° C (45° to 104° F)
Dimensions	30 1/2 "L x 19"W x 28 1/2"H
Weight	400 lbs
Voltage	208 – 230 Volt, 3 Phase, 60 Hz 200 – 220 Volt, 3 Phase, 50 Hz
Total Amperage	7.4 amps
Maximum Fuse Disconnect	20 amps
Communications Standard	
Communication Options	Lam Research TCU Spec – 37 Pin/9 Pin Interface Analog, RS232/485, CHX, DeviceNet, LON Works
Pump/Reservoir	Magnetically Coupled Pump



Now you have a choice.

New Hampshire: 1-603-539-3600

Germany: 49-8709-926-10

Texas: 1-512-442-2832

Singapore: 65-6841-6283

California: 1-510-249-9100

Taiwan: 886-3-578-1585

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