

# HA Series Water Chillers

## GENERAL INFORMATION

Hardface Alloys Chillers are designed for closed-loop thermal spraying and welding gun cooling applications. The chillers use a large capacity water storage tank to cool the process using an all copper heat exchanger for efficient heat transfer.

Non-corrosive, contaminate - free plumbing materials are used to guarantee minimal maintenance and long service life of internal components. They come standard with an all bronze or stainless steel pump and a large stainless steel reservoir with submerged copper coils to effectively perform the cooling function 24 hrs-a-day, 7 days-a-week.

Gun water temperature is maintained by a PLC controlled system. Desired *to-process* water temperature is selected via electronic remote control box with monitoring gauges indicating water pressure, *to-process* water temperature and *from-process* water temperature. In addition to safety indicators, the remote control box and main control panel feature the power on-off switches.

Our Chillers are ideal for all thermal spray and welding applications. The simple, durable, and easy to use design make them the most cost-effective solution for all your gun cooling needs on the market today.

1001AC



Electronic Remote Box



## FEATURES

- Large Stainless Steel Reservoir
- All Copper Heat Exchanger
- Over-Sized Condenser
- Electronic Remote Control with 25' cable
- Electronic Control Panel
- Automatic Water Level Control
- TwinPak-Power Cooling
- Bronze or Stainless Steel Coolant Pump

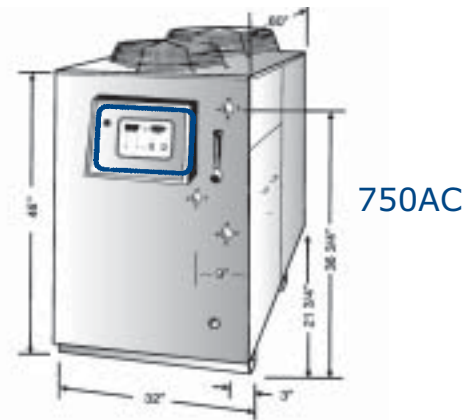
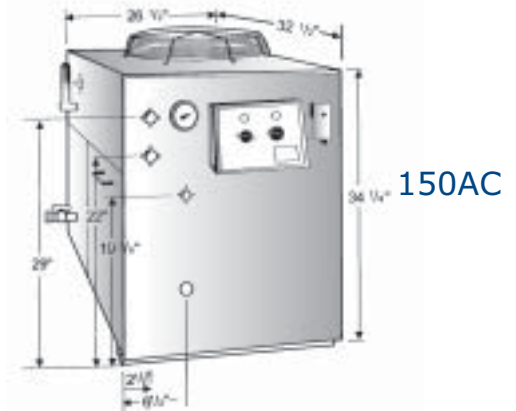
## BENEFITS

- Contaminant-Free System
- Cycle On and Off With Varied Load Demands. No Hot Gas Bypass
- Excellent Heat Transfer
- Meets National BTU Standards
- Easy To Use Controls
- Refrigeration Load is Split Between Two Independent Systems
- Corrosion Resistant Pump

# Your Single Source Solution For All Your Coating Needs

## SPECIFICATIONS

PROCESS	PTA	PLASMA	PLASMA	HVOF	HVOF
SYSTEM	<ul style="list-style-type: none"> <li>Linde</li> <li>Starweld</li> </ul>	<ul style="list-style-type: none"> <li>3M</li> </ul>	<ul style="list-style-type: none"> <li>ELECTROcote 5200</li> <li>7M &amp; 9M</li> <li>SG100</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Jet</li> <li>Jet-Kote</li> <li>Top Gun</li> </ul>	<ul style="list-style-type: none"> <li>SUPERCote HV<sup>3</sup></li> <li>JP5000</li> </ul>
CHILLER MODEL NUMBER	150AC	750AC	1001AC	2000AC	2500AC
CAPACITY	1.5 ton	7.5 ton	10 ton	20 ton	25 ton
BTU PER HOUR	18,000	90,000	120,000	240,000	300,000
FLUID RESERVOIR CAPACITY	20 gallons	60 gallons	100 gallons	145 gallons	145 gallons
WEIGHT	454 lbs	1100 lbs	1500 lbs	3000 lbs	3500 lbs
VOLTAGE	230/3 or 460/3	230/3 or 460/3	230/3 or 460/3	460/3	460/3
AMPERAGE	11.0 - 6.0	40.0 - 19.6	46.0 - 23.0	45	60
FLUID CIRCULATING PUMP	1/2 hp	1/2 hp	1/2 hp	1/2 hp	1/2 hp
FLUID PUMP/GPM	20@24.8 psi	12@250 psi	10@250 psi	15@100 psi	15@100 psi
CABINET SIZE	32.5" x 26.5" x 34.25"	60" x 32" x 46"	68" x 34" x 51"	92.25" x 38" x 75"	92.25" x 38" x 75"



**BTU= Constant (weight of water) x GPM x Temperature Differential**  
 Multiply the fluid flow (GPM) by 500. Multiply the result by the temperature differential or rise (return water temperature minus the input or supply water temperature). Divide the result by 12,000 and you now have your required rating.

**Example:** 500 Constant (weight of water)  
 x 10 GPM (gallons per minute)  
 5000  
 x 12 Temperature Differential (or rise)  
 60,000 Required BTU s per hour  
 12,000 Each 12,000 BTU s requires 1 Ton of Cooling  
 = 5 Ton (This equipment require a 5 ton capacity)

**IMPORTANT: NOT ALL CHILLERS ARE RATED THE SAME.**  
 When comparing load ratings in the chillers be sure to check if they are rated at the National ARI standard of 44° F chilled outletwater, 95° F ambient air temperature.  
 Custom Chillers Available for Specialty Applications.

