



LASER SERIES



Whether providing cooling for a laser welding, cutting, or marking machine, temperature control is important. You need a reliable, trustworthy machine to keep operations running and your equipment cool. We understand how important steady operations are, so we at Chase Cooling Systems have released an entire series of fluid chillers specially designed for the laser industry. We've taken what matters most and prioritized those elements into each unit in this series. UL-recognized electrical components complete every unit. With three separate configurations, there's sure to be one that matches your needs.

FEATURES & BENEFITS

- Dual cooling circuits in a single chiller simplifies installation
- Suitable for both CO₂ Lasers and Fiber Lasers
- Non-ferrous circuit resists corrosion
- Electronic Hot Gas Bypass Valve for tight temperature control
- Ability to use DI water for cooling of laser optics
- Compatible with glycol to obtain freeze protection in outdoor installations
- Standard design includes contacts for remote alarm and for remote on/off
- RS-485 communication capability for building management connectivity
- Optional wheel kit provides portability

COMMON USES

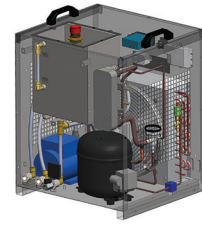
- Laser Cutting Machines
- Laser Welders
- Laser Marking



LASER SERIES

CHILLERS FOR LASER SOURCE

Suitable for use with both fiber and CO₂ laser sources. Our chillers have VFD pumps that can deliver constant outlet pressure. The non-ferrous water circuit provides corrosion resistance for the ultimate component protection. All units come standard with an electronic hot gas bypass valve, which provides tight temperature control of $\pm 0.2^{\circ}\text{F}$. An electric water heater is also included.



Unit for optics cooling

CHILLERS FOR LASER SOURCE ¹						
MODEL (460/3/60)		QBE006-R LSR	QBE009-R LSR	QBE012-R LSR	QBE014-R LSR	QBE025-R LSR
Cooling Capacity	[tons]	2.1	2.6	3.4	4.9	7.2
Flow	[gal/min]	5.6	6.8	9.1	13.1	19.2
Pressure	[psig]	46	46	46	50	50
Dimensions, W x D x H	[inch]	40 X 39 X 49				
Installation		Indoor or Outdoor (Minimum Ambient: Standard 50°F, Optional 14°F)				

¹ Performance based on Water Inlet 79°F, Water Outlet 70°F, Ambient 90°F

CHILLERS FOR OPTICS

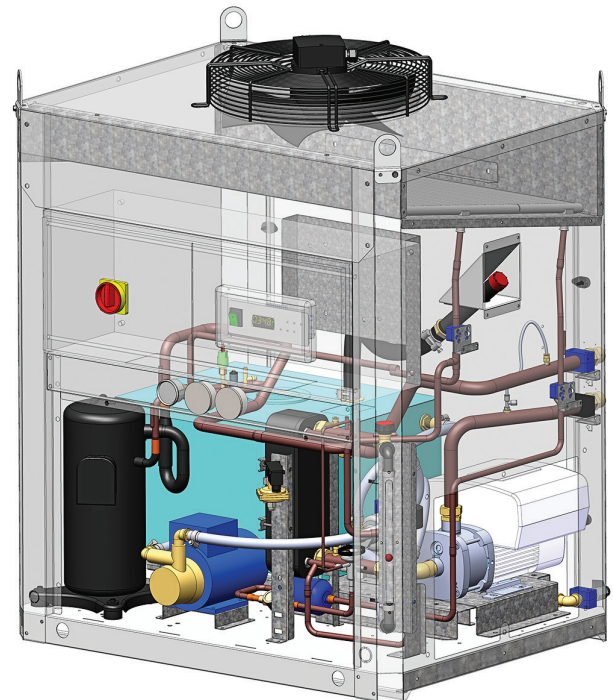
Great for sensitive applications relying on deionized (DI) water. Our units are designed to cool the optics of a laser machine. The brazed plate heat exchanger is constructed fully of stainless steel (no copper). The water circuit contains some plastic and brass components but is completely free of copper, aluminum, and carbon steel. Every unit comes fully packaged with a 4 gallon tank and fixed speed pump.

CHILLER FOR LASER OPTICS ¹		
Model (230/1/60)		QBS002-E LSR
Cooling Capacity	[tons]	0.5
Flow	[gal/min]	1.3
Pressure	[psig]	43
Dimensions, W x D x H	[inch]	17 x 19 x 23
Installation		Indoor (Minimum Ambient: 50°F)

¹ Performance based on Water Inlet 79°F, Water Outlet 70°F, Ambient 90°F

CHILLER FOR LASER SOURCE & OPTICS

Why not cool both the source and the optics at the same time? One unit, two independent cooling circuits! Each circuit has its own pump that provides separately controlled water temperatures. This setup can accommodate the varying heat load of each side of the laser equipment at once. For example, a unit within this configuration can precisely control the laser source at $72 \pm 0.2^{\circ}\text{F}$ while the secondary water flow for the optics is maintained at $80 \pm 2^{\circ}\text{F}$. An electric heater maintains minimum water temperature to avoid cold startup.



Large unit with two circuits for dual cooling

CHILLERS FOR LASER SOURCE & OPTICS ¹											
MODEL (Dual 460/3/60 & 400/3/50)		QBL006-R	QBL010-R	QBL012-R	QBL017-R	QBL022-R	QBL024-R	CWL035-R ²	CWL038-R ²	CWL046-R ²	CWL051-R ²
Cooling Capacity	[tons]	1.9	3.5	4.2	5.8	7.4	8.2	12.0	13.0	15.6	17.5
Flow Source / Optics	[gal/min]	4.3 / 0.5	7.8 / 0.5	9.3 / 0.5	12.9 / 0.5	16.5 / 0.5	18.2 / 0.5	26.6 / 0.5	28.8 / 0.5	34.7 / 0.5	38.7 / 0.5
Pressure Source / Optics	[psig]	81 / 92	82 / 92	83 / 92	66 / 92	63 / 92	52 / 92	104 / 92	105 / 92	94 / 92	90 / 92
Dimensions, W x D x H	[inch]	40 x 30 x 49						36 x 74 X 63			
Installation		Indoor or Outdoor (Minimum Ambient: Standard 50°F, Optional 26.6°F)									

¹ Performance based on Water Inlet 79°F, Water Outlet 70°F, Ambient 90°F

² Optional UL-Certified [cULus] Control Panel