

TransCritical CO₂ Industrial Chiller

A natural refrigerant-based refrigeration system that is safe, sustainable, and energy efficient in all climates.



Design Features:

- High pressure design eliminates a need for back-up generator and synthetic condensing unit during off-cycle
- Single heat exchanger (shell and tube) or multiple heat exchangers (brazed-plate)
- Pumped direct CO₂ design available for ice rink applications
- Transcritical semi-hermetic compressors
- High efficiency oil management system with multiple coalescing separator
- VFD on lead compressors
- Cooling capacities from 50 to 500 tons
- Flexible for different control systems
- Superheat and liquid sub cooler
- Microprocessor or PLC-based control systems with HMI and remote monitoring.
- Heat reclaim benefits
- Direct heat recovery (HVAC)
- Snow melt
- · Domestic hot water
- Sub slab warming
- Process heating

Benefits:

Contractor:

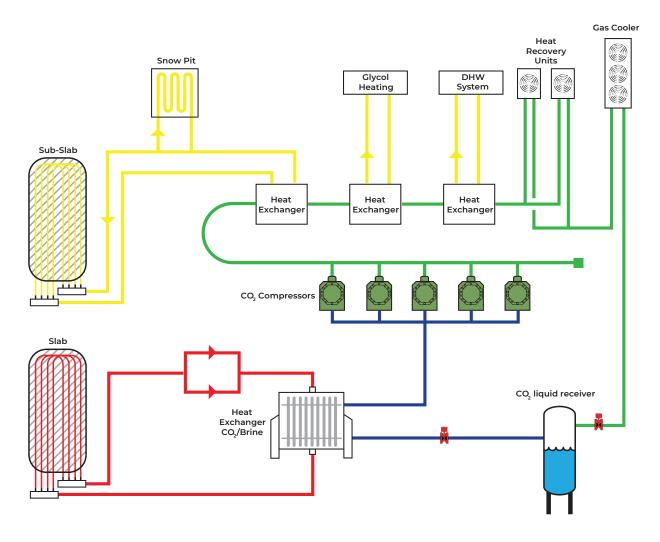
- Single point power connection
- Full access doors for commissioning, start-up and service
- Built-in pumping station
- Insulated vessels and piping
- Easy rigging
- Option for gas cooler roof support

End User:

- Regulatory cost and burden are significantly reduced
- Reduced energy costs
- · Operating at higher suction temperatures
- Floating head pressure down to 50°F
- Intelligent and efficient heat recovery
- Significant reduction in maintenance
- No water treatment
- No sewer costs
- Semi-hermetic compressors do not require inspections for shaft seal replacements
- Outdoor design available to save on engine room
- Environmentally friendly, future-proof, natural refrigerant that costs 1\$/lb. on average







Technical Data

Model	Capacity TR	Compressor Manufacturer	Compressor Quantity	Motor Power (HP)	Dry Weight (lbs.)	Dimensions (in.)
AQUILON CHILL 150	155	Bitzer or Dorin	Up to 4	Up to 200	14,000	200 x 72 x 100
AQUILON CHILL 300	309	Bitzer or Dorin	Up to 8	Up to 400	19,000	250 x 78 x 100
AQUILON CHILL 450	464	Bitzer or Dorin	Up to 12	Up to 600	23,000	300 x 78 x 100
AQUILON CHILL 600	619	Bitzer or Dorin	Up to 16	Up to 800	28,000	360 x 78 x 100

Performances based on PG 30% at 30°F Supply Duty. GC Return temp at 85°F.

