LHE HIGH EFFICIENCY
Central Chiller

Available Refrigerant Options for LHE Central Chillers	
R-410A	Traditional
R-454B	Low GWP (Global Warming Potential)

Technical Specifications

The LHE high efficiency central chillers are remarkably energy efficient and can save processors up to 60% in electrical costs. The system continuously measures ambient and process conditions and will adjust to operate in the most efficient manner. Designed with electrical, mechanical and control redundancy, downtime is virtually eliminated.

The LHE high efficiency central chiller is available in single circuits from 20 to 60 tons and is designed with modularity in mind. Users can purchase a system to meet their current process cooling needs. Expansion is made easy by plugging similar capacity units in parallel for up to 600 tons of cooling. The chillers control off the temperature of the tank and can maintain between 20°F to 80°F (-7°C to 26.6°C).

ENERGY EFFICIENT

- Up to 60% energy savings compared to traditional cooling systems.
- Improved fan motor and compressor energy usage.

MODULAR & EXPANDABLE

- Parallel one to ten units within the same control platform.
- Invest in additional units as the process needs grow.

VIRTUALLY ELIMINATE DOWNTIME

- Advanced control platform provides live monitoring.
- Automatic mechanical and electrical redundancy through intuitive controls.

Features

Remote Air & Water Cooled

- **Intuitive 10" Touch Screen Control**
  Monitor one to ten paralleled units with a large, high resolution color touch screen.
- **Simple Strainer Maintenance**
  Cleaning is easy with the Stainless Steel Brazed Plate Evaporator. Incorporated TS Tech™ tool-less technology allows for quick access with less effort. The large surface area on the strainer also increases the time between required cleanings.
- **More Accurate Temperature Control**
  Chilling system operates based on tank temperature instead of unit leaving fluid temperature.
- **Built in Auto-Redundancy & Controls**
  Zones communicate between one another to maintain tank temperatures via Ethernet connectivity.
- **Increased Energy Efficiency**
  Tandem Scroll Compressors with Staging Capability are managed by proprietary algorithms.
- **Replaceable Filter Core**
  Easily replace and maintain filters without having to cut out old unit and braze in new.
- **Welded Frame**
  Provides better structural integrity during transport & operation. The frame is powder coated for increased corrosion resistance.

Water Cooled

- **Controlled to Optimize Performance**
  The electronic water regulating valve automatically adjusts to control head pressure.
- **Resistant to Corrosion**
  Shell & Tube Condenser designed to be more resilient to clogging and easier to clean.
- **Increased Stability**
  Condenser is closer to the ground to reduce operational vibration.

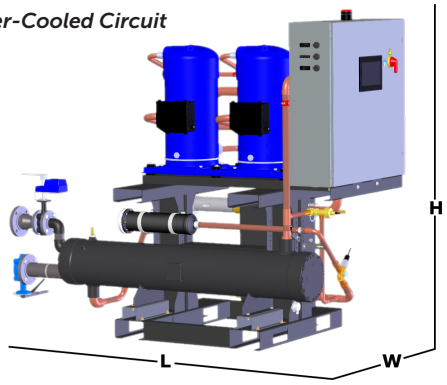
Remote Air-Cooled

- **Higher Performance Motors**
  The electronically commutated (EC) brush-less motor increases reliability, controllability and energy savings.
- **Robust Design**
  Tube & Fin Condensers have a higher resistance to corrosion while providing ore efficiency.

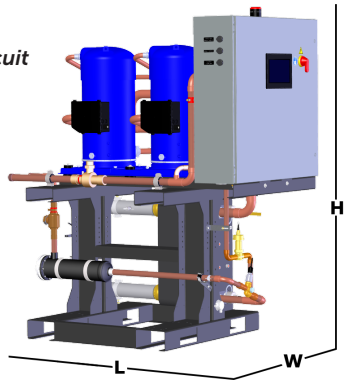
STERLING LHE HIGH EFFICIENCY CENTRAL CHILLER

System Diagram

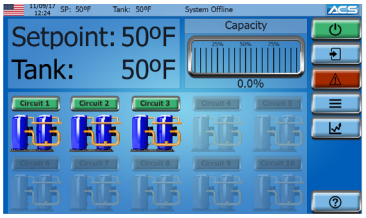
Water-Cooled Circuit



Remote Air-Cooled Circuit

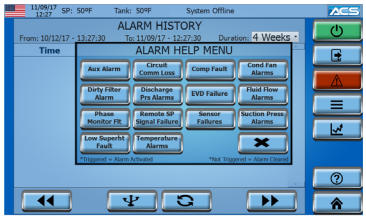


Advanced Controller



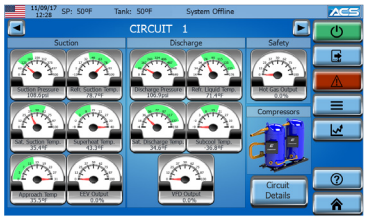
Home Screen

Quick visual representation of the entire system, easily allowing you to enable or disable circuits in your system.



Alarm Help Screen

Guides users through common alarms and offers suggestions on solutions.



Individual Circuit Overview

An in-depth look at each circuit for a full representation of status and performance.

Specifications

High Efficiency Central Chiller (Water-cooled)

Model	Cooling Capacity Net Tons @ 50° LFT [1]		Condenser Water Flow GPM		Dimensions in Inches			Shipping Wt. Lbs [2]
	R-410A	R-454B	R-410A	R-454B	Height	Width	Depth	
20W	23.0	21.8	67	63	76	40	90	1250
25W	29.7	28.2	86	82	76	40	90	1380
30W	34.2	32.1	99	92	76	40	90	1490
40W	46.0	42.7	133	124	76	40	90	2250
50W	55.1	51.7	160	150	76	40	90	2450
60W	70.8	65.8	205	191	76	40	92	2623

1. Net cooling capcity available @50° F LWT and 85° F entering condenser water temperature. (60hz)
2. Shipping weight estimated, actual weight determined at time of shipment.

High Efficiency Central Chiller (Remote Air-cooled)

Model	Cooling Capacity Net Tons @ 50° LFT [1]		Dimensions in Inches			Shipping Wt. Lbs [2]
	R-410A	R-454B	Height	Width	Depth	
20R	20.6	19.9	76	40	68	1000
25R	26.6	25.6	76	40	68	1100
30R	30.5	29.3	76	40	68	1200
40R	41.1	39.1	76	40	68	1900
50R	49.3	46.7	76	40	68	2050
60R	63.3	59.6	76	40	68	2200

1. Net cooling capacity available @ 50° F LWT and 95° F ambient air temperature. (60hz)
2. Shipping weight estimated, actual weight determined at time of shipment.

Remote Condenser

Model	Condenser Fan Sections	Dimensions in Inches			Shipping Wt. Lbs [1]
		Height	Width	Depth	
20R	2	50	45.5	127	650
25R	2	50	45.5	127	700
30R	3	50	45.5	180	1030
40R	4	50	45.5	233	1250
50R	4	50	45.5	233	1350
60R	5	50	45.5	286	1700

1. Shipping weight estimated, actual weight determined at time of shipment.

High Efficiency Central Chiller

Model	Compressor HP	Process Water Flow GPM	Full Load Amperage (FLA)[1]
20	20	48	34.2
25	25	60	38.8
30	30	72	45.2
40	40	96	58.7
50	50	120	71.5
60	60	144	92.3

1. Full load amperage (FLA) @ 460/3/60.