G&D CHILLERS

COMMITTED TO COLD

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Meeting Overview

- Introductions
- Chiller sizing
- Selection/customization
- Components
- Maintenance
- Installation
- Piping
25 Years Experience in the Brewery Industry
About us

- Founded in 1993 in Eugene, Oregon
- Started with Pacific Northwest winery & craft brewing booms
- Now nationally renowned, with chillers in all 50 states and abroad
- Privately held company
G&D Chillers has been manufacturing brewery chillers specifically for the brewery industry since 1993. Now, you will find G&D Chillers installed in over 1,700 breweries where our experience and expertise are meeting the needs of brewers around the world. Beginning with the construction of package units that were not commercially available, our current brewery chillers have been continually refined from their original design by incorporating the best of our client’s ideas and suggestions into our own standard units.
CHILLER SIZING & SELECTION

Andy Backer– VP of Sales
Chiller Sizing Considerations

- Brew House / Batch Size
  - How many batches: Daily? Weekly?
- CLT
- Heat Exchangers
Chiller Sizing Considerations

- 2 Stage Heat Exchanger
- City Water Temperatures
- Wort Knockout time
Heat Exchanger Offerings
Chiller Sizing Considerations

- **Fermenters**
  - Quantity
  - Size

- **Brite Tanks**
  - Quantity
  - Size
Additional Sizing Considerations

- Worst case scenario for city water supply
- Ambient Temperatures
- Walk-in cooler
- Lagering
Chiller Selection

• Thinking about the future:
  → Do you have current plans for growth?
  → What is your total build out scenarios?
• Chiller location matters
• Is the chiller being tied into an existing chiller/system/reservoir?
Common Customization

- Remote Condenser
- Remote Pump & Reservoir Stand
- Cooling Tower / Onsite Chiller Build
CHILLER COMPONENTS
AND MAINTENANCE

John McCoy– General Manager
Chiller Components

1. Fully coated steel frame
2. Fully coated aluminum housing
3. Fully insulated oversize stainless steel reservoir
4. Various types of compressors depending on application
5. Air cooled or water cooled condensers
6. Brazed plate heat exchangers
7. Adjustable bypass valves
8. Pumps & variable frequency drives
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Chiller Components

Electrical components
- Non-proprietary ETL listed electrical components
- Phase & Voltage monitor as standard
- Multiple safety devices as standard
- Single point electrical connection
- Micro processing controls as standard
Chiller Components
Chiller Maintenance

- Glycol Level
- Glycol Mixture
- Condenser cleanliness
- Periodic/annual maintenance schedule
- Reputable refrigeration contractor
- 24/7 support
CHILLER INSTALLATION

Seth McEldowney – Senior Project Manager
Chiller Installation

- Placement & Rigging
Electrical and Process Glycol Connections
Piping Materials

- GF CoolFit+
- PI- PVC80
- Welded SS
- Copper
Piping Materials

Stony Creek Brewing – PI- PVC80

Ninkasi Brewing – GD CoolFit+
Reverse-Return Piping

- Line Sizing
- Flow Rate
- Velocity
Pipe Racking and Support

Great Notion Brewing

Pfriem Brewing
Tank and Equipment Piping

- Parallel vs In Series
Tank and Equipment Piping

- Fan Coils
Tank and Equipment Piping

Heat Exchanger Piping

Flex Connections
Strainers and Backflow Prevention
Strainers, Backflow Prevention, and Air Vents
Pressure and Flow Regulation

- Process Bypass Loops
Pressure and Flow Regulation

- Pressure regulating valves
- VFDs
Temperature and Flow Controls
System Commissioning

- 3ph motor rotation
- Pressure testing
- Flushing
- Glycol mixing
- System testing
Committed to Cold

- 24/7 Support
- No proprietary parts
- Install support included with every chiller
- Piping design and consultation free of charge

Watch how we build
https://gdchillers.com/applications/breweries/
Q&A