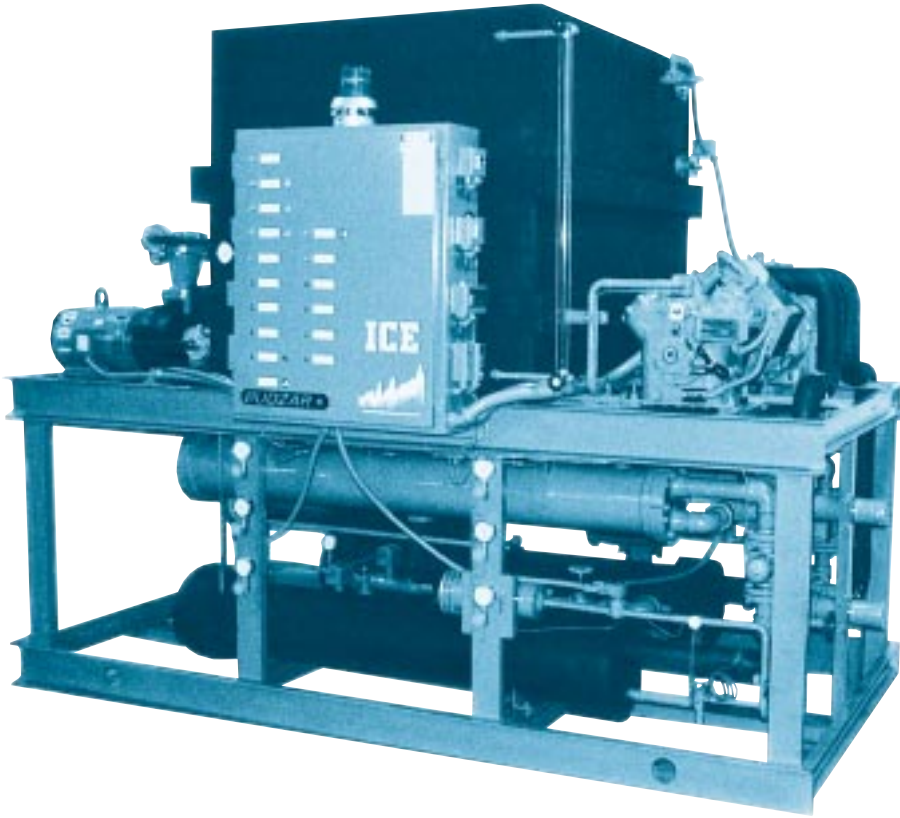


# DUAL-CIRCUIT WATER-COOLED CHILLER



## *Gemini Series Dual-Circuit Central Chillers*

ICE Gemini Series Dual-Circuit, Water-Cooled Chillers are the most reliable chillers on the market. This reliability comes from the dual-circuit design. The Gemini is essentially two chillers in one. Each of the dual chiller circuits is totally unaffected by operating conditions in the other circuit, guaranteeing 50% chiller capacity even if one circuit becomes inoperative. If your process cannot afford a chiller breakdown, the Gemini is for you.

The Gemini Series Chillers offers capacities from 20 to 80 nominal tons. This series is designed for processes requiring chiller fluid temperatures from +30°F to +60°F.

Budzar also designs and manufactures specialized equipment for non-standard applications. Our engineers have extensive experience in process chilling and heating applications for such industries as: rubber, paper, plastics, chemical, food, and metal working. We take the time to understand your current and future needs and design a solution targeted at high quality and fast payback.



Bulletin #35

engineering  
**PRECISION**

### **EXCELLENT RETURN ON INVESTMENT**

- Each Budzar unit is designed to maximize the productivity of your process. Budzar quality and reliability provide excellent value for each dollar invested.
- Gemini Series chillers achieve rapid payback by reducing lost production due to chiller down-time.

### **LOW-COST, SIMPLE OPERATION AND MAINTENANCE**

- Semi-hermetic compressors feature cylinder unloading capacity control for precise temperature control and extended equipment service life under varying load conditions.
- A.S.M.E. constructed steel shell and copper tube chiller vessels and evaporators are specifically selected for optimum performance and efficiency.
- Easy-to-monitor functions status indicators provide safe, easy operation.

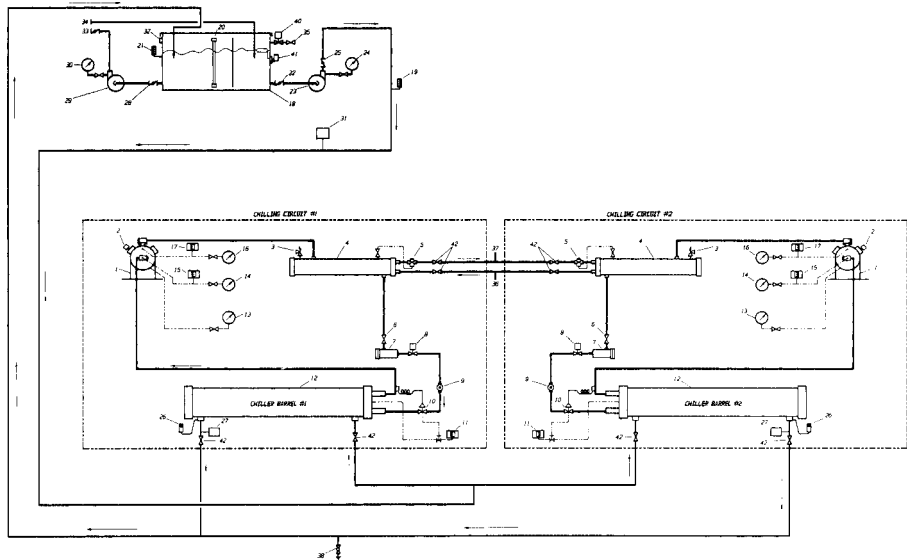
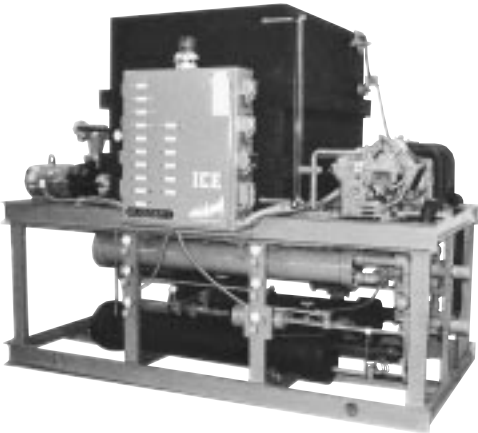
### **QUICK AND EASY INSTALLATION**

- Installation cost is lowered by combining our chillers with water reservoir assemblies. Our units arrive at your plant pre-piped, and pre-wired.
- All units are factory tested prior to shipment.



process  
**TEMPERATURE**  
control

- |                                   |   |   |
|-----------------------------------|---|---|
| 1. Compressor                     | 16. High Pressure Gauge (Discharge)           | 28. Process Pump Suction Shut-Off Valve |
| 2. Unloader Solenoid              | 17. High Pressure Switch                      | 29. Process Pump                        |
| 3. Relief Valve                   | 18. Reservoir, Baffled & Insulated with Cover | 30. Process Water Pressure Gauge        |
| 4. Water Cooled Condenser         | 19. Process Return Thermometer                | 31. Chiller Sequencing Thermostat       |
| 5. Water Regulating Valve         | 20. Sight Glass                               | 32. Over Flow Port                      |
| 6. Liquid Line Service Valve      | 21. Process Supply Thermometer                | 33. Process Water Supply                |
| 7. Filter Drier                   | 22. Chiller Pump Suction Shut-Off Valve       | 34. Process Water Return                |
| 8. Liquid Line Solenoid Valve     | 23. Chiller Pump                              | 35. Make-Up Water Shut-Off Valve        |
| 9. Sight Glass/Moisture Indicator | 24. Chiller Water Pressure Gauge              | 36. Condenser Tower Water Inlet         |
| 10. Expansion Valve               | 25. Chiller Water Flow Control/Shut-Off Valve | 37. Condenser Tower Water Outlet        |
| 11. Low Pressure Freeze Control   | 26. Low Temperature Freezestat                | 38. Drain Valve                         |
| 12. Chiller Barrel                | 27. Flow Switch                               | 39. Condenser Purge/Access Valve        |
| 13. Oil Pressure Gauge            |   | 40. Make-Up Water Solenoid Valve        |
| 14. Low Pressure Gauge (Suction)  |   | 41. Make-Up Water Float Switch          |
| 15. Pumpdown Control              |   | 42. Service Valve                       |



**GEMINI SERIES DUAL-CIRCUIT CENTRAL CHILLERS WITH INTEGRAL TANK & PUMPS**  
**WATER-COOLED; DUAL-COMPRESSORS; DUAL-EVAPORATORS; DUAL-CONDENSERS**

MODEL		GP-20D	GP-30D	GP-40D	GP-50D	GP-60D	GP-70D
Capacity -	TONS	20.8	32.6	36.1	46.1	53.8	71.1
Compressors (2) -	HP EACH	7 1/2	15	20	25	30	35
Chiller Pump -	HP	1 1/2	2	3	3	3	5
Chiller Flow -	GPM / PSI	62 @ 15	93 @ 13	110 @ 15	140 @ 14	160 @ 12	203 @ 17
Process Pump -	HP	5	7 1/2	7 1/2	10	15	15
Process Flow -	GPM / PSI	83 @ 52	125 @ 54	140 @ 51	190 @ 51	210 @ 55	272 @ 54
Reservoir Size -	Dimensions	2.5x5x3'	2.5x5x4'	2.5x5x4'	3x6x4'	3x6x4'	3.5x6x5'
Reservoir Volume -	GAL	225	312	312	455	455	680
Amps @ 460 V. -	AMPS	46.2	66.6	78.8	95.8	131.6	140.8
MCA / mtdf -	AMPS	51 / 60	74 / 90	87 / 100	106 / 125	145 / 175	155 / 175
MODEL		GP-80D	GENERAL NOTES				
Capacity -	TONS	78.6	1. CAPACITIES ARE LISTED AS GROSS TONS 2. COMPRESSORS ARE COPELAND "DISCUS" HIGH-EFFICIENCY TYPE 3. CHILLER FLOWS ARE BASED ON 8 DEG. F WATER DELTA 4. PROCESS FLOWS ARE BASED ON A 6 DEG. F WATER DELTA 5. FOR AMPS @ 230 V. DOUBLE THE LISTED VALUES 6. MCA = MINIMUM CIRCUIT AMPACITY 7. MTDf = MAXIMUM TIME DELAY FUSE				
Compressors (2) -	HP EACH	40					
Chiller Pump -	HP	5					
Chiller Flow -	GPM / PSI	240 @ 13					
Process Pump -	HP	20					
Process Flow -	GPM / PSI	320 @ 55					
Reservoir Size -	Dimensions	3.5x6x5'					
Reservoir Volume -	GAL	680					
Amps @ 460 V. -	AMPS	161.6					
MCA / mtdf -	AMPS	178 / 200					

Budzar Industries reserves the right to discontinue or change specifications without notice, consistent with sound engineering practice and current industrial standards.



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