SUBJECT: TYPICAL TWO PUMP TOWER SYSTEM - METAL CELL

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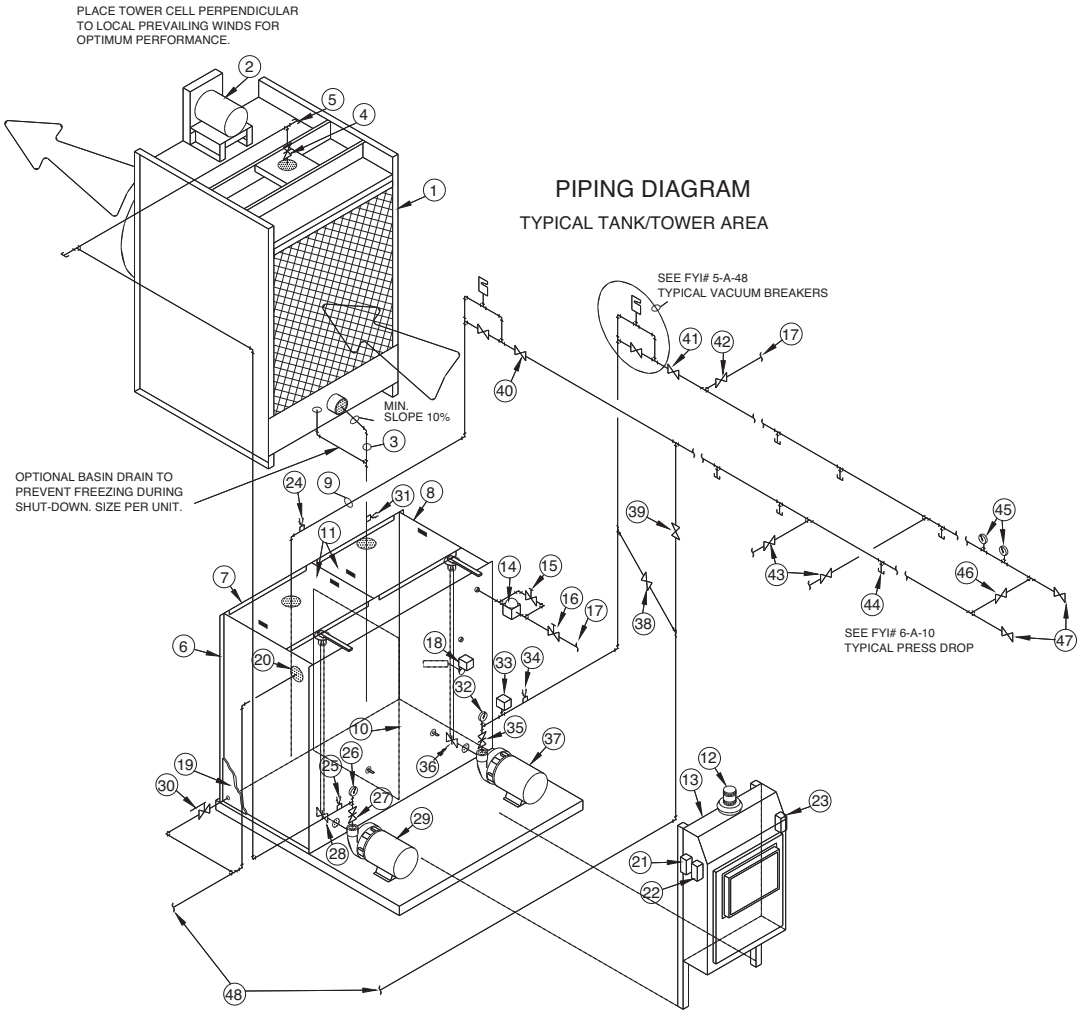

ATS - ADVANTAGE TOWER SYSTEM

*Items included with typical ATS ^Options

- * **1** Tower cell
- * **2** Tower fan motor
- **3** Tower return line to tank 8-10" from bottom
- ^ **4** Tower balance valve
- **5** Capped tees for future add'l tower cells
- * **6** PTS pump tank assembly
- **7** Tank hot side - from process
- **8** Tank cold side - to process
- **9** From process header 8-10" from bottom
- * **10** Tank baffle
- ^ **11** Tank lid - hinged or lift off
- ^ **12** System temperature and pressure alarm
- ^ **13** 'SCC' system control console
- ^ **14** Automatic water make-up solenoid
- ^ **15** Manual fill valve
- **16** Tank make-up service valve
- **17** From plant water service
- ^ **18** Water level control
- ^ **19** Tank insulation - recommended for outdoors applications in freeze areas
- * **20** Tank overflow port
- * **21** Tower fan thermostat
- * **22** Tower pump thermostat
- * **23** Alarm thermostat
- * **24** 'From process' temperature probe
- * **25** 'Tower in' temperature probe
- * **26** Tower pump discharge pressure gauge
- * **27** Tower pump discharge valve
- * **28** Tower pump suction valve
- * **29** Tower pump
- * **30** Tank drain valve
- * **31** 'Tower out' temperature probe
- * **32** System supply pressure gauge
- ^ **33** Alarm pressure switch
- * **34** 'To process' temperature probe
- * **35** Process pump discharge valve
- * **36** Process pump suction valve
- * **37** Process pump
- **38** Tower bleed valve - set at 2 GPH per ton of tower capacity
- **39** Emergency operation drain valve
- **40** 'From process' main header valve
- **41** 'To process' main header valve
- **42** Emergency operation water supply valve
- **43** Valves at header branches to provide service flexibility and balance flow
- **44** Tees at existing and future machine drops
- **45** Temperature and pressure gauges at header end to monitor performance
- **46** System balance valve - sized per system capacity. Use CASH ACME K-20, K-5 or equiv.
- **47** Valve or cap header ends to allow for future expansion

GENERAL INSTALLATION NOTES:

1. Avoid extensive use of elbows, fittings, and other flow restricting devices.
2. All valves are to be of non-restrictive gate or butterfly type.
3. Extra tees and valves should be added per customer's specifications.
4. Brace all piping to prevent sway, vertical and horizontal.
5. Consult local codes for backflow prevention on city water make-up lines. Also, some water companies require removal of the spool on the water meter during operation.
6. Run tank drains and overflows to open drain. Run 'from process' lines to open drain when operating with plant water back-up service.

This drawing is supplied to demonstrate a possible piping configuration. The drawing is general in nature and is not intended to be all inclusive of every detail that might be required for your specific location and installation. Advantage accepts no responsibility for piping and any other component supplied or installed by others.

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