COMMERCIAL WATER SOFTENERS

1. DAY CLOCK REGENERATION

a. 7 and 12 day regeneration cycles available.

b. Standard regeneration time 2:00 am - this can be altered with new 24 hour label.

c. Twin systems with clock regeneration usually will have staggered regen eration times (Min. 3 hour difference).

d. Twin clock systems come standard with hard water by-pass during regenera tion. systems can be designed with no hard water by-pass.

e. Single or twin systems must be designed for minimum 1 day capacity. (Note - special systems with multiple regenerations per day are avail able - consult Duff Co.)

f. Clock type systems are best suited where water consumption is constant on a day-to-day or peak demand days are predictable on the same day(s) each week.

g. Twin systems usually are used when high peak flows are needed.

2. WATER METER INITIATED

a. 5 Basic Metered Systems:

1) 1 tank-1 meter - immediate regeneration - hard water by-ass during regeneration has no bearing on system. No reserve capacity required.

2) 1 tank-1 meter - delayed regeneration - hard water by-pass during regeneration must be at low usage time. 1 day capacity reserve required.

3) System #5-2 tanks-2 meters - Both units in service at the same time; only 1 unit can regenerate at a time (lock out). Can be designed with immediate or delayed regeneration, hard water by-pass or no hard water by-pass. Delayed regeneration should have a 1 day reserve.

4) System #6 - 2 tanks-1 meter - both units in service at the same time. Once meter zeroes out, #1 unit regenerates, then #2 regen erates. (Series regeneration). Can be designed with immediate or delayed regeneration should have a 1 day reserve.

5) System #7-2 tanks - 1 meter - One unit in service, one unit fresh and ready on standby, (also referred to as Alternators). Systems are usually designed with no hard water by-pass and with immied iate regeneration. 3 hour meter reset reserve capacity needed.

System #7 may be ordered as a tri-plex or quadplex. This will allow 2 or 3 units to be in service at all times, with 1 unit on standby. The systems are of particular value when access to the location of installation is limited. Also, these will afford much greater flow rates, without the expense and handling of very large tanks.

b. Metered systems are best suited for erratic, unpredictable water usages. Twin systems both in service at the same times are usually used when high peak flows are needed. Alternator systems are used where soft water must be available at all times.

For additional information call: 610-275-4453 or Fax: 610-279-6299.

Please call for current prices.

DWC TRAINING INFORMATION

AN INFORMATION LIST FOR COMMERCIAL SIZING

1. Always measure the installation area and pathway to the area.
2. What is water temperature? _____
3. Where is drain and is it sufficient to handle the drain flow?
4. Is there a uninterrupted source of electric? Confirm voltage.
5. What is the pipe size of the system? _____
6. What is the water going to be used for? _____
7. What is the desired quality of the product water? _____
8. Where is the water being supplied from? _____
9. What is the operating pressure of the system? _____
10. What hours will the system be needed? _____
11. What will be the estimated water usage in the timed listed above?

_____

12. Do they look to expand this system in the future? _____
13. What will be the required continuous flow rate required? _____
14. What will be the required peak flow rate? _____
15. From the water analysis determine the compensated hardness.
    _____ GPG
16. From the water analysis what is the Total Dissolved Solids?
    TDS_____PPM

First determine how much resin will be needed. If possible a system should last 24 to 72 hours between regeneration. From above take the estimated water usage from line 10 _____ x the compensated hardness on line 13 _____ = total grains required per day _____. Then multiply by days between regeneration x _____ = total grains required each regeneration _____.

Example: usage _____ x hardness _____ = total grains per day _____ x days between _____ = grains per regeneration.

Next determine desired salting level keeping in mind there will be some hardness leakage at lower salting levels. (Always consult resin specifications and be sure the water quality will meet the customer's requirements inline 6.)

Select a salting level @ _____ pounds per cubic ft. Next locate on the capacity charge the total grains per regeneration required from above in the desired salting level column to find the resin volume needed in cu.ft. _____.

Example: at _____ lb. per cu ft it will require _____ cubic feet of resin to meet the demand. Now we can select our system.

What type of system will be needed to supply the needs of your customer.?