Customer wants a <u>COMPLETE NEW DEAERATOR:</u>

1. Required pump flow rate (GPM)_____
   a. Number of boilers pump is feeding _____
   b. Capacity of each boiler[s] being feed _____
   c. Maximum number of boilers that run at one time _____ or total capacity of system_____

2. Required pump discharge pressure_____
   a. Operating pressure of boiler_____
   b. If more than one pressure please list all _____
   c. Does pump run continuously? Yes or No_____
      If yes, what is the pressure drop through the boiler modulating valve _____
   d. Does the system have a stack economizer? Yes or No_____
   e. **What is the boiler Relief Valve Setting**? _____

3. Required pump voltage/motor phase _____ (***Must be exact!***)
   Single Phase: 115/1/60 or 208/1/60 or 230/1/60
   Three Phase: 208/3/60 or 230/3/60 or 460/3/60 or 575/3/60 or Other
   _____

4. Required motor speed? 1750 RPM or 3500 RPM_____ (can leave blank)
5. Required motor enclosure? ODP or TEFC or Explosion Proof or Other _____
6. What is the blend temperature? To calculate, determine percent of makeup water and various condensate return temperatures.
   _____ Percent of returns at _____ Temperature
   _____ Percent of returns at _____ Temperature
   _____ Percent of returns at _____ Temperature
   Note: ***Systems with returns should have a surge tank or use a two-compartment deaerator.***

7. Number of pumps desired _____
8. Does customer want premium efficient motors? Yes or No_____
   If yes, provide rating _____

9. Note: ***No suction strainers can be in the suction piping when using centrifugal pumps!***
10. Pressure available at steam regulator on deaerator _____
    Note: ***higher pressure is better but cannot exceed 125 psig.***
    If pressure exceeds 125 psig, a pressure-reducing valve must be installed in front of regulator.

11. Does customer want a three-valve bypass around regulator furnished? Yes or No_____
12. Does customer want an emergency back-up regulator? Yes or No_____
13. Does customer want an emergency back-up make-up valve? Yes or No_____
14. Does customer need a control panel? Yes or No_____
    If panel needed, does customer want disconnects? Yes or No_____

15. Required panel enclosure? Nema 1, Nema 2, Nema 4, Nema 7, or Nema 12_____
16. Does customer have air available for Pneumatic controls? Yes or No_____

17. Type of deaerator rating desired? .03 or .005_____
    a. If .005 rating, does customer want an atmospheric or pressurized unit? Yes or No_____
    b. Are gravity returns present? Yes or No_____
       Note: ***If gravity returns present, the deaerator must be an atmospheric style unit since gravity returns will not flow into a pressurized deaerator***.
    c. If gravity returns present, what is the inlet height of gravity returns_____ ***(Must Know!)***

18. Does customer want a single compartment unit? Yes or No_____
    Note: ***Systems with over 20 % returns should have a surge tank or two-compartment unit.***

    a. If **yes**, does customer have an existing surge tank? Yes or No_____
    b. If **no**, does customer want a two-compartment unit or a separate surge tank? Yes or No_____
    c. What type of material do you want surge tank or two-compartment unit made out of? Plasite Lined , Black Steel, Cast Iron, or Stainless Steel_____
    d. Will surge tank sit on the floor or be elevated?_____

19. Does customer want unit factory insulated? Yes or No_____
    If yes, what style of insulation? metal jacketing or polyurethane foam_____

20. Does customer want pumps close-coupled or flexible-coupled? _____
21. Does customer have an overall height or length restriction? Yes or No_____
    If yes, provide height and/or length dimensions_____

22. Does customer want premium efficient motors? Yes or No_____
    If yes, provide efficiency rating _____