

**Centrifugal Pump & Motor Assembly ONLY** being replaced on a CONDENSATE UNIT:

1. Required pump flow rate (GPM) \_\_\_\_\_
  - a. If customer can not supply GPM, then measure tank (**in inches**) to calculate tank volume:
    - For rectangular tanks, measure length x width x height
    - For cylindrical tanks, measure diameter x length
  - b. To calculate volume:
    - For rectangular tanks: (length x width x height)/231
    - For cylindrical tanks: (radius squared x 3.14 x length)/231
  - c. The value obtained in above calculation indicates the tanks size (in gallons) and this equals pump flow rate (GPM).
  
2. Required pump discharge pressure \_\_\_\_\_
  - a. If customer cannot provide discharge pressure, measure the vertical lift in feet \_\_\_\_\_.
  - b. Also ask if condensate unit is pumping into a gravity return line or a pressurized line \_\_\_\_\_.
  - c. If pumping into a gravity line, take the vertical lift (in feet) and divide by 2.31 to determine discharge pressure (PSIG). Note: **Add an additional 5 PSIG as safety margin to answer.**
  - d. If pumping into a pressurized line, take the vertical lift (in feet) and divide by 2.31 to determine discharge pressure (PSIG) AND add the pressure in that line. Note: **Add an additional 5 PSIG as safety margin to answer.**
  - e. Note: **If pump is working on a vacuum system, add 5 PSIG to discharge pressure IN ADDITION to the 5 PSIG for safety margin.**
  
3. Required pump voltage \_\_\_\_\_
4. Required motor phase: Single or Three Phase \_\_\_\_\_
5. Required pump speed: 1750 RPM or 3500 RPM \_\_\_\_\_ (can leave blank)
6. Required pump enclosure: ODP or TEFC or Explosion Proof or Other \_\_\_\_\_
7. Required pump style: Vertical or Horizontal \_\_\_\_\_

If style is vertical:

  - a. Will an adapter flange be required to mount our pump to customers tank? Yes or No \_\_\_\_\_  
Note: **We can directly bolt our units ONLY to ITT Domestic or Hoffman units that have pump flows less than 130 GPM or Skidmore Protector Series units. Otherwise our pump must be fitted with an adapter flange.**
  - b. Please supply name of manufacturer of existing pump \_\_\_\_\_ and bolt pattern of pump suction flange (centerline to centerline) \_\_\_\_\_
  - c. If studs used on steel tank to bolt on pump flange, what is diameter and length of bolts \_\_\_\_\_
  - d. Note: **If customer wants pump to be vertical but doesn't have a tank to bolt pump directly to an adapter flange with a foot, called a threaded adapter flange, must be included.** What is pipe size diameter \_\_\_\_\_
  - e. Note: **If pump is used as a vacuum air pump, we cannot fit our pumps on unit made by another manufacturer because of discharge manifold piping.**
  
8. Temperature of returning condensate \_\_\_\_\_
9. Elevation of tank above pump \_\_\_\_\_
10. Does customer want premium efficient motors? Yes or No \_\_\_\_\_  
If yes, provide efficiency rating \_\_\_\_\_
11. Does customer want close coupled or flexible-coupled pump \_\_\_\_\_
12. Note: **Make sure copper bleed line can be attached to receiver.**