Quick Deaerator Selection Guidelines

**Boiler Operating Pressure**

- **Up to 20 psig**
  - **80% or more MAKE-UP**
    - Are there Gravity Returns?
      - **NO**
        - USE EITHER...
          - Preheat Boiler Feed Unit
            - OR — Type .03 DA Single Tank
      - **YES**
        - USE EITHER...
          - If DA height in relation to Gravity Returns is...
            - **Lower**
              - USE Type .005 DA Single Tank
            - **Higher**
              - USE Type .03 DA-2T with Separate Surge Tank
                - OR — Type .03 DA-2C Two-Compartment Unit
  - **20% or more RETURNS**
    - Are there Gravity Returns?
      - **NO**
        - USE Type .03 DA Single Tank
          - AND EITHER...
            - Condensate Unit
            - Pump returns to a .03 DA Single Tank
              - All MAKE-UP in DA Unit
          - All MAKE-UP in surge tank or surge compartment
      - **YES**
        - USE Type .03 DA-2T with Separate Surge Tank
          - OR — Type .03 DA-2C Two-Compartment Unit
            - All MAKE-UP in surge tank or surge compartment
  - **80% or more MAKE-UP**
    - Are there Gravity Returns?
      - **NO**
        - USE Type .005 DA Single Tank
          - AND EITHER...
            - Condensate Unit
            - Pump returns to a .005 DA Single Tank
              - All MAKE-UP in DA Unit
          - All MAKE-UP in Surge Tank
      - **YES**
        - USE Type .005 DA-2T with Separate Surge Tank
          - OR — Type .005 DA-2C Two-Compartment Unit
            - All MAKE-UP in surge tank or surge compartment
  - **20% or more RETURNS**
    - Are there Gravity Returns?
      - **NO**
        - MUST USE BOTH
          - Condensate Unit
          - Pump returns to a .005 DA Single Tank
            - All MAKE-UP in DA Unit
      - **YES**
        - MUST USE BOTH
          - Condensate Unit
          - Pump returns to a .005 DA Single Tank
            - All MAKE-UP in DA Unit
            - AND EITHER...
              - Type .005 DA-2T with Separate Surge Tank
                - OR — Type .005 DA-2C Two-Compartment Unit

**Consult Shipco® Navigator on our website for a more detailed selection.**

- **High pressure drips from a steam header go into the deaerator with a diffuser tube below the water line.**
- **If you have returns above the saturation point, generally they will be added below the water line in a surge compartment or chamber.**
- **You do not want the deaerator to be a giant flash tank where the regulator and controls are ineffective.**
- **If all returns are above the saturation point, use an HS style deaerator unit.**
- **Deaerator operation is 24 hours/day, 7 days/week. If shutting system off nightly or weekly, then select a preheat boiler feed unit.**