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Do I need a tank? How do I know what type?

Steps and questions to help determine if a tank is necessary and the best type of tank for your process when selecting Drake equipment.

1. Potential reasons for selecting a tank:

- Accurate or tight temperature control
- Process return temperatures over 70°F
- Capacity control
- Load buffering
- High temperature differences
- Varying load
- Varying process flow/or stop and start
- Increasing process fluid volume

2. Is your system (process or whatever it is that you are cooling) open loop (open to the atmosphere) or closed loop (pressurized non-vented)?

- a) For open loop applications you **may** use a Poly tank (open vented) **OR** a closed loop Stainless Steel tank (there is a valve at the top that can be opened for venting).
- b) For closed loop applications you **MUST** use a Stainless Steel tank (pressure rated).

3. If a tank is required there are 2 basic types of tank applications listed below:

- a) **Storage/Volume tanks** are simply to add fluid storage or volume capacity in a process loop. This includes Drake models **VPACT (Value Line) and FPACT (Fractional Line) w/onboard tanks.**
- b) **Recirculation/Mix tanks** are required for any applications requiring a tank other than mentioned in item **a)** directly above. This includes Drake models **PACT and EST/CS (Dual loop or Process Chillers) w/onboard tanks.**

4. VPACT and FPACT include an onboard open vented poly tank, process pump and castors.

- a) **VPACT** models from **1.3hp w/6 gallon tank** through **10hp w/31 gallon tank.**
- b) **FPACT** models from **1/4hp w/2.5 gallon tank** through **1hp w/2.5 gallon tank.**
- c) For capacity requirements above items **a)** and **b)** above see **6.** below.

5. PACT, PWCT and EST/CS include an onboard stainless steel pressure rated tank, internal tank/evaporator recirc pump (circulation only internal to chiller) available as follows below:

- a) **PACT** available from **1.3hp w/30 gallon tank** through **20hp w/135 gallon tank.**
- b) **EST/CS, PWCT** available from **1.3/1.5hp w/30 gal. tank** through **24hp w/135 gal. tank.**
- c) For capacity requirements above items **a)** and **b)** above see **6.** below.

6. If you require a chiller with a capacity beyond those listed above w/onboard tanks then you may use a chiller and remote tank section. Drake offer's two types of tank sections:

- a) **TSR** for Tank Section Recirculation (True Process 4 connections).
- b) **TSS** for Tank Section Storage (Storage/Volume 2 connections).