Background...

Pharmaceutical production often requires low temperature chilling of preparations. A large manufacturer approached us with the requirement for a minus 30°F leaving fluid temperature, along with seal-less magnetic pumping and ASME storage tank.

Solution...

A four-hundred HP air cooled chiller was engineered using four circuit design, screw compressors, mag-drive pumps and a large -30°F Syltherm tank.

Results...

Since installing the system, the process has worked well without downtime. The low temperature is critical enough to monitor at the process as well.

Critical Duty and Ultra-Low Temp

Few chiller manufacturers would accept this project, however our experience with ultra-low-temp, high horsepower refrigeration and pumping was the deciding factor.

KEY SOLUTION FEATURES

- Critical cooling of reaction vessels in pharmaceutical production.
- Four discrete R-507 refrigeration circuits of 100 HP per circuit.
- Screw compressors feature slide unloading from 10-100% capacity.
- Designed to deliver minus 30°F Syltherm year-round.
- ASME rated reservoir with heavy insulation and metal jacket.
- Deep-V coils with controls selected to operate in cold climate.
- Dual lead/lag magnetic drive pumps deliver high fluid velocities.
- System included turn-key installation and commissioning.