

Dairy Energy Efficiency Program Milk Processing Specifications

Variable Speed Drives for milking vacuum pumps

- Installed on single-phase power with three-phase adapter or installed on three-phase power supply
- Units must have manual and automatic emergency shutoffs
- A line reactor is recommended to further reduce harmonics on the power line

Variable Speed Drives for milk transfer pumps (MTP VSD)

- All MTP VSDs must be installed with fluid level sensor units that truly regulate the motor speed rather than with fluid level floats that turn on a two or three speed motor
- Pump motors must be variable speed motors rather than multiple speed motors
- The plate cooler, through which the milk transfer pump pumps the milk, must have an open water system
- The plate cooler must not be a closed, chilled water system
- The MTP VSD may be installed where the plate cooler has an open water system and then a closed water system
- The MTP VSD may be installed on single-phase power with three-phase adapter or installed on three-phase power supply
- A line reactor is recommended to further reduce harmonics on the power line

Compressor Heat Recovery Unit

- These units must be installed only where the facility's water is heated with electricity
- Units must be sized to meet the minimum cooling needs of the compressor refrigeration system as determined by the producer's equipment dealer

Scroll Compressor

- Scroll compressors must meet or exceed the minimum specifications necessary to meet the cooling requirements of the refrigeration system as determined by the producer's equipment dealer
- Qualified refrigeration technicians must install units

Plate Coolers

- Plate coolers must be set up to have a minimum of 1:1 water to milk flow ratio
- Plate coolers must have an open, once in – once out water flow system
- Plate coolers may not be closed, chilled water systems
- Plate coolers may consist of first an open, in-out water system plus a closed, chilled water system