

ENERGY CONSERVATION TIPS FOR REFRIGERATION

TOTAL
ENERGY
CONSULTANT

- ✓ Use water-cooled condensers rather than air-cooled condensers.
- ✓ Challenge the need for refrigeration, particularly for old batch processes.
- ✓ Avoid over sizing -- match the connected load.
- ✓ Consider gas-powered refrigeration equipment to minimize electrical demand charges.
- ✓ Use "free cooling" to allow chiller shutdown in cold weather.
- ✓ Use refrigerated water loads in series if possible.
- ✓ Convert firewater or other tanks to thermal storage.
- ✓ Don't assume that the old way is still the best -- particularly for energy-intensive low temperature systems.
- ✓ Correct inappropriate brine or glycol concentration that adversely affects heat transfer and/or pumping energy.
- ✓ If it sweats, insulate it, but if it is corroding, replace it first.
- ✓ Make adjustments to minimize hot gas bypass operation.
- ✓ Inspect moisture/liquid indicators.
- ✓ Consider change of refrigerant type if it will improve efficiency.
- ✓ Check for correct refrigerant charge level.
- ✓ Inspect the purge for air and water leaks.
- ✓ Establish a refrigeration efficiency-maintenance program. Start with an energy audit and follow-up, then make a refrigeration efficiency maintenance program a part of your continuous energy management program.

SAVE NATION