

WASTE HEAT POWERED ICEMAKER

After a fifteen-year demonstration period, a waste heat powered refrigeration unit for an icemaker has now been replaced with a commercial model. The ice-making system is installed at the Kotzebue Electric Association in Kotzebue, Alaska. It supports the salmon fishing industry. The photo below shows the original proof-of concept unit in the center, with the newly installed absorption refrigeration unit on the right. This ice-making system is powered by 165°F engine jacket coolant from the KEA diesel engines. The ThermoChiller ammonia absorption refrigeration unit converts that heat to twenty tons of refrigeration at 0°F. The refrigeration is supplied to the scraped barrel type icemaker on the roof of an insulated container. There it makes fifteen tons per day of flake ice.



