ThermoEnergy’s Turbo CAST® (Controlled Atmosphere Separation Technology) is our most energy efficient CAST wastewater recovery and treatment system. Designed for applications that have high flows or areas that have high energy costs, Turbo CAST significantly reduces the energy requirements of our CAST system while keeping the CAST advantages of low maintenance, ease of operation, high uptime and compact footprint. Using the principles of vapor recompression combined with our Controlled Atmosphere Separation Technology process, we are able to increase energy efficiency by 75% over our CAST system making distillation a viable technology for most applications. Our CAST technology is designed for high-strength wastewaters with high Total Dissolved Solids and Total Suspended Solids typically found in industrial, municipal and agricultural processes. Because there are no plates or parts in the CAST vessel, scaling is eliminated resulting in greatly reduced maintenance. CAST has the highest uptime of all atmospheric and vacuum evaporators significantly reducing your operational costs.

Our Turbo CAST systems come in several standard sizes to fit your plant needs:

- 1,000 Gallons Per Day (GPD)
- 3,000 GPD
- 5,000 GPD
- 10,000 GPD
- 20,000 GPD

Custom systems can also be fabricated to meet a specific requirement.

ThermoEnergy’s Turbo CAST® has Significant Competitive Advantages:

- Handles high wastewater flows
- Reduces high energy costs
- Applicability across many process chemistries
- Recovery of process chemistry for reuse or recycle
- High-strength wastewaters
- Compact footprint
- High uptime
- Lower maintenance and operational costs
- Lower capital cost
Learn why ThemoEnergy’s Turbo CAST® is the ideal choice for wastewater recovery and treatment at your plant. Email info@thermoenergy.com or call 1-508-854-1628.

Features
• Large heat transfer surface
• Low cost materials of construction
• External pumps and valves for ease of operation
• Fully automated process controls
• One-year warranty
• Service and support

Specifications (Turbo CAST 3000)
• Flow rate: 3000 gpd
• Power requirements: 3 kw@80% evaporation
• Heat requirements: heat at startup only
• Cooling requirements: 17 tons, based on 12,000 btu/ton
• Width: 16 ft
• Length: 23 ft
• Height: 16 ft
Dimensions include tanks and peripherals.

Applications
• Plating chemistries
• Rare Earth and transition metals recovery
• Brine concentration
• Glycol recovery
• Sugar recovery
• Zero liquid discharge
• Ammonia recovery

Industries
• Avionics and aerospace
• Solar manufacturing
• Battery production
• Metals production
• Beverage production
• Airport deicing fluid
• Aircraft fire-fighting fluid
• Platers
• Metal and surface finishing industries
• Antifreeze recycling