New Conversion Systems for Waste Energy

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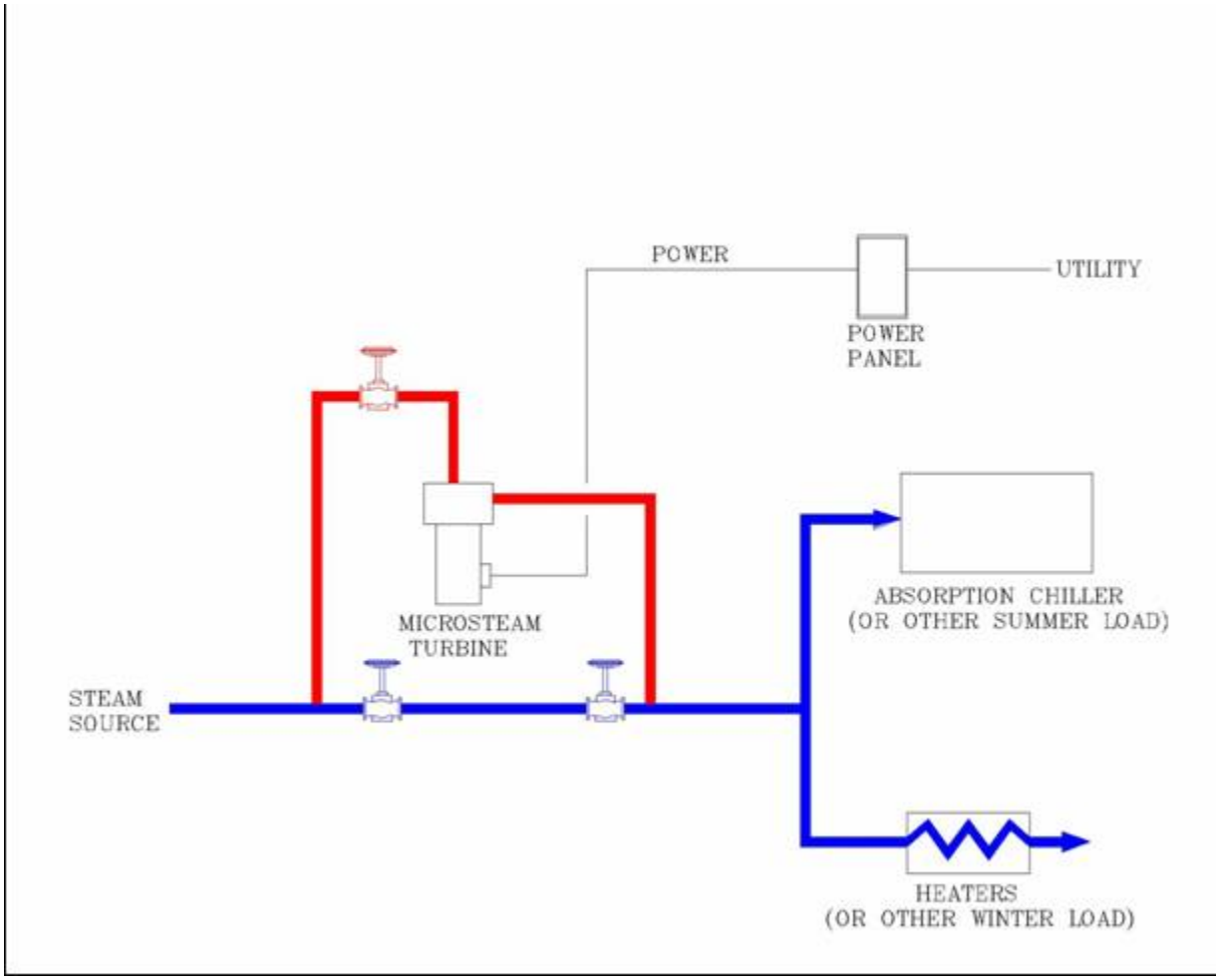


Figure 1 Operation of a Steam Turbine Generator in Parallel to a Pressure Reduction Valve

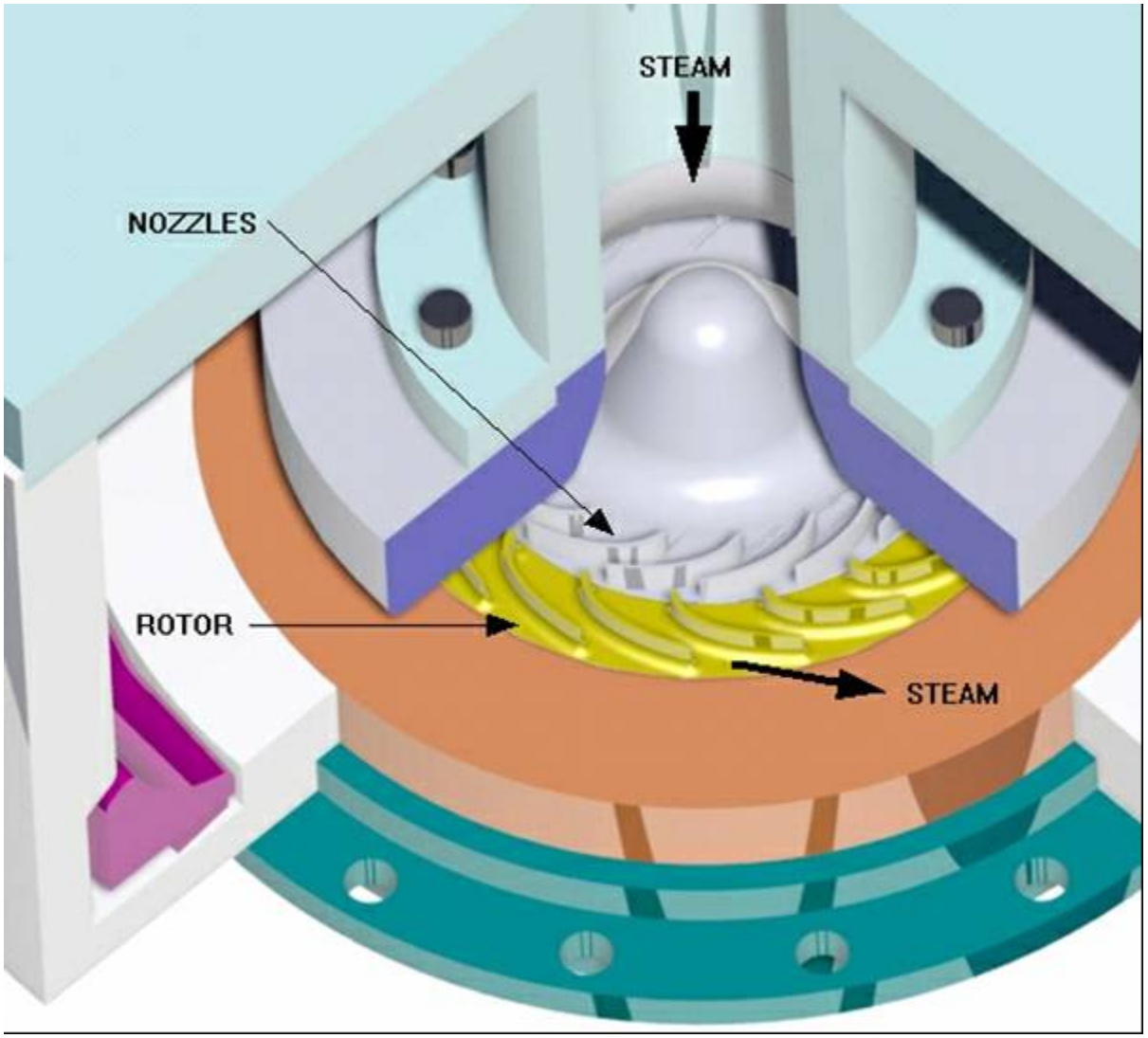


Figure 2 Solid Model of Dual Pressure Euler Turbine

Figure 3 Dual Pressure Euler Turbine During Operation at Rolex Building

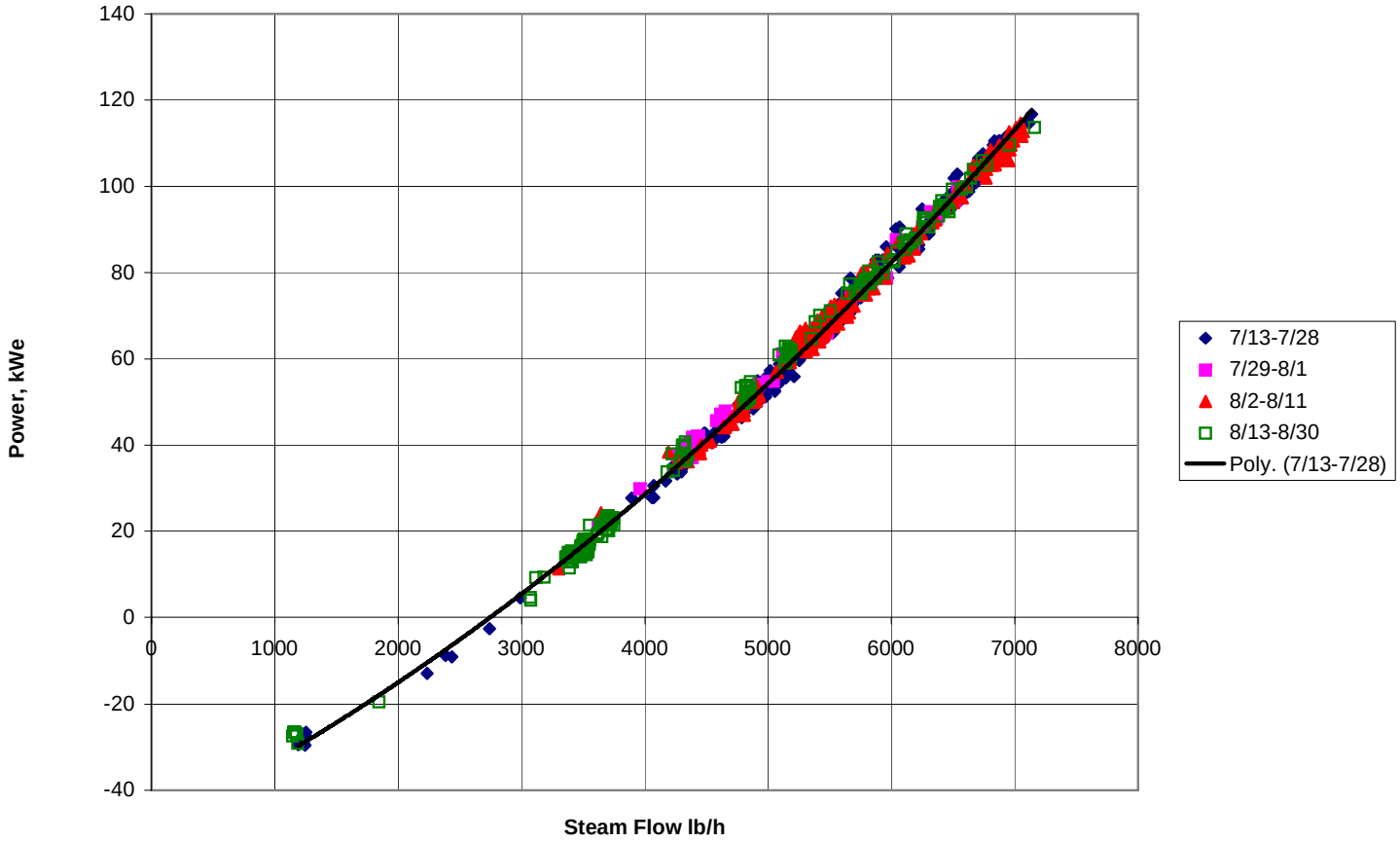


Figure 4 Power versus Steam Flow for Rolex Demonstration dpEt

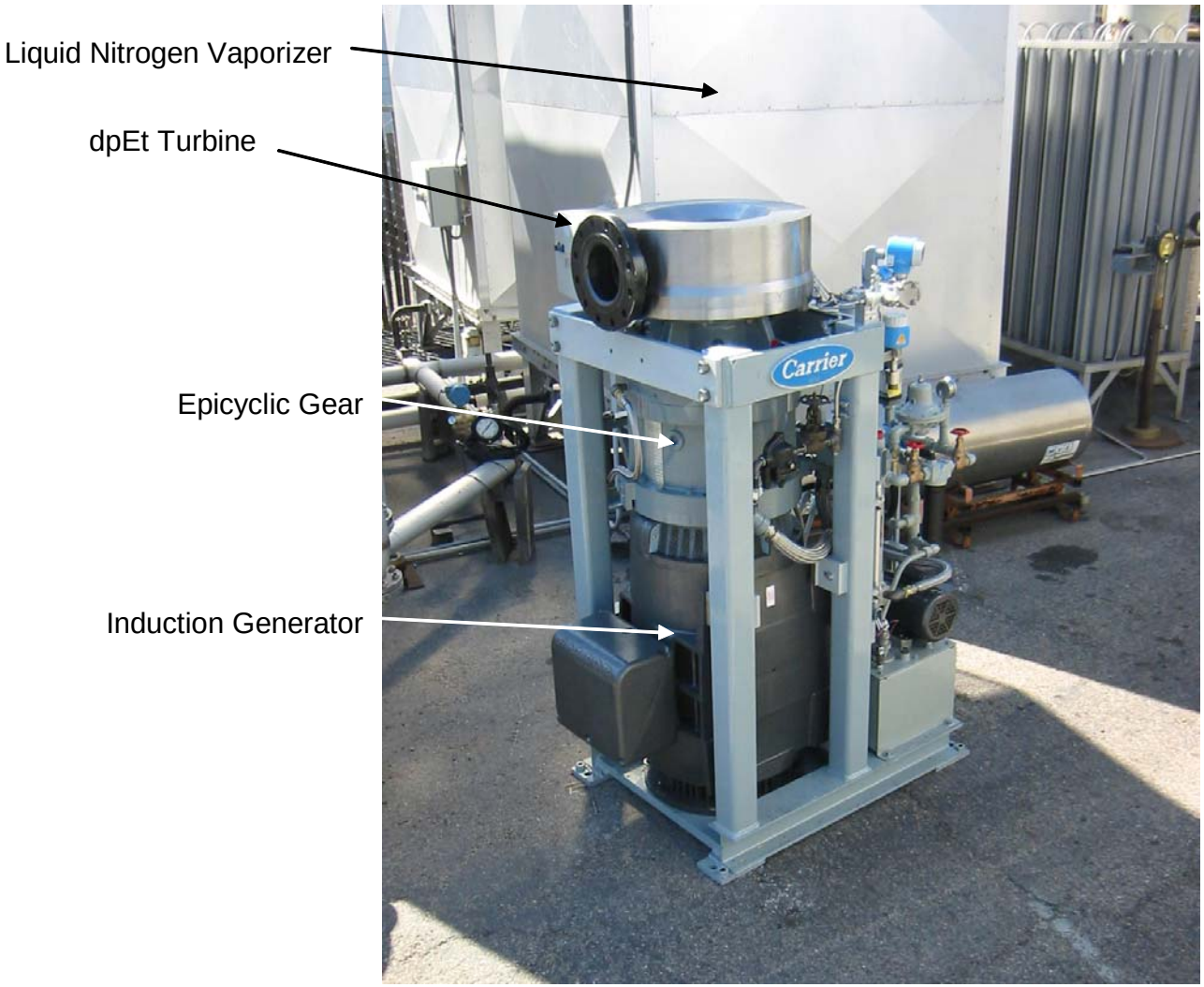


Figure 5 Commercial Dual Pressure Euler Steam Turbine at Factory

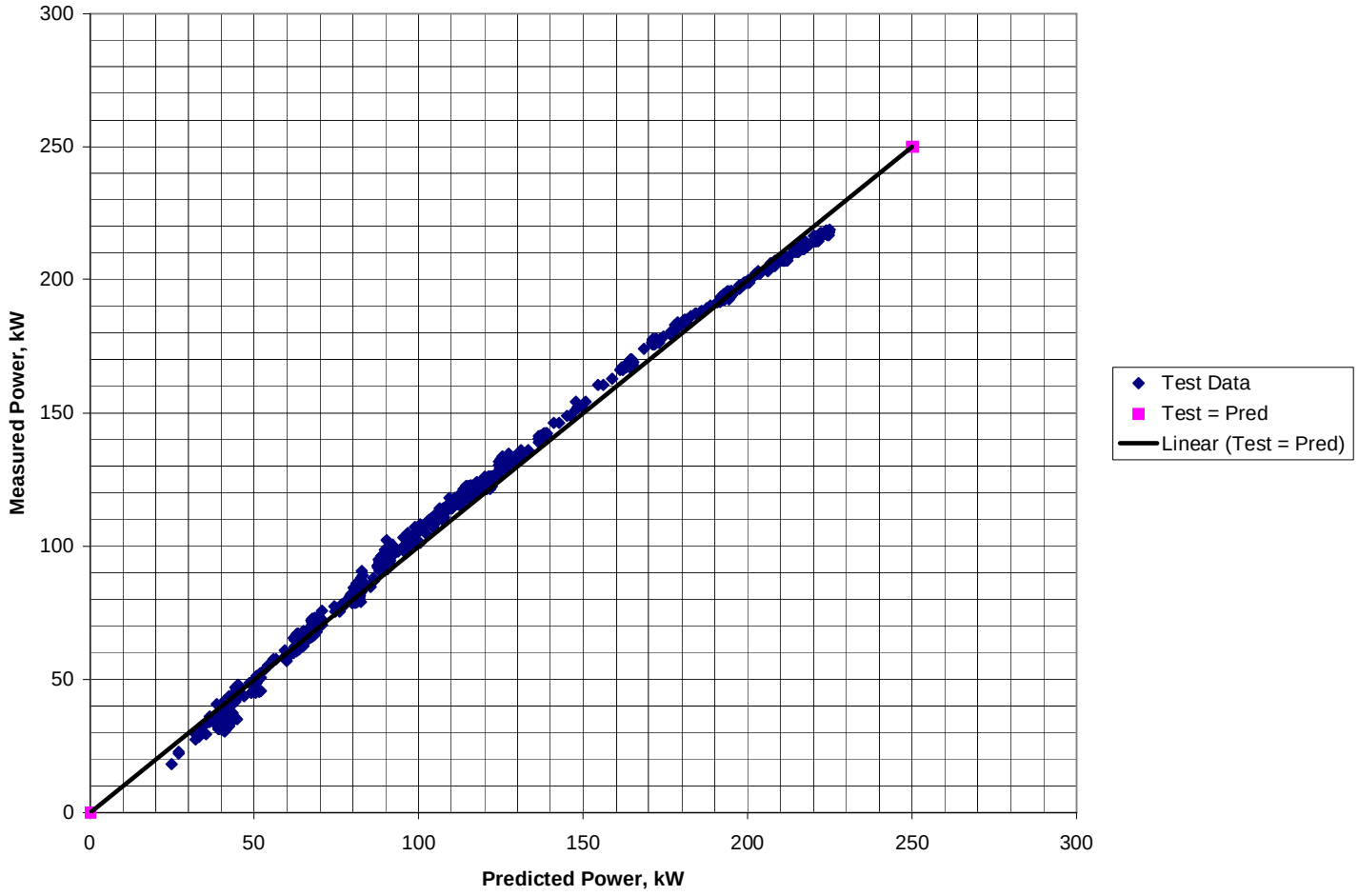


Figure 6 Comparison of Measured Performance with Predicted for Commercial Dual Pressure Euler Steam Turbine

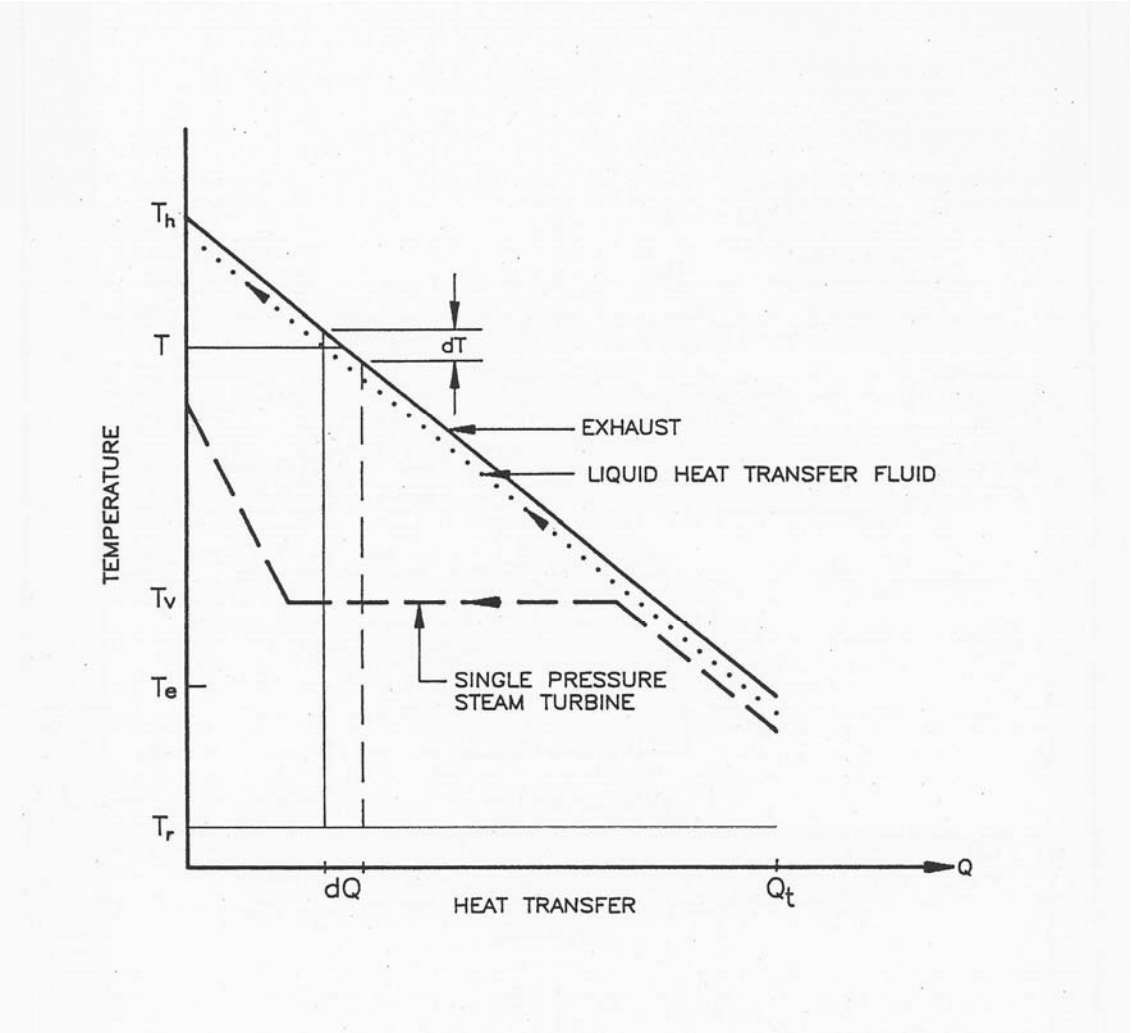


Figure 7 Conversion of Waste Heat to Power by Rankine Cycle

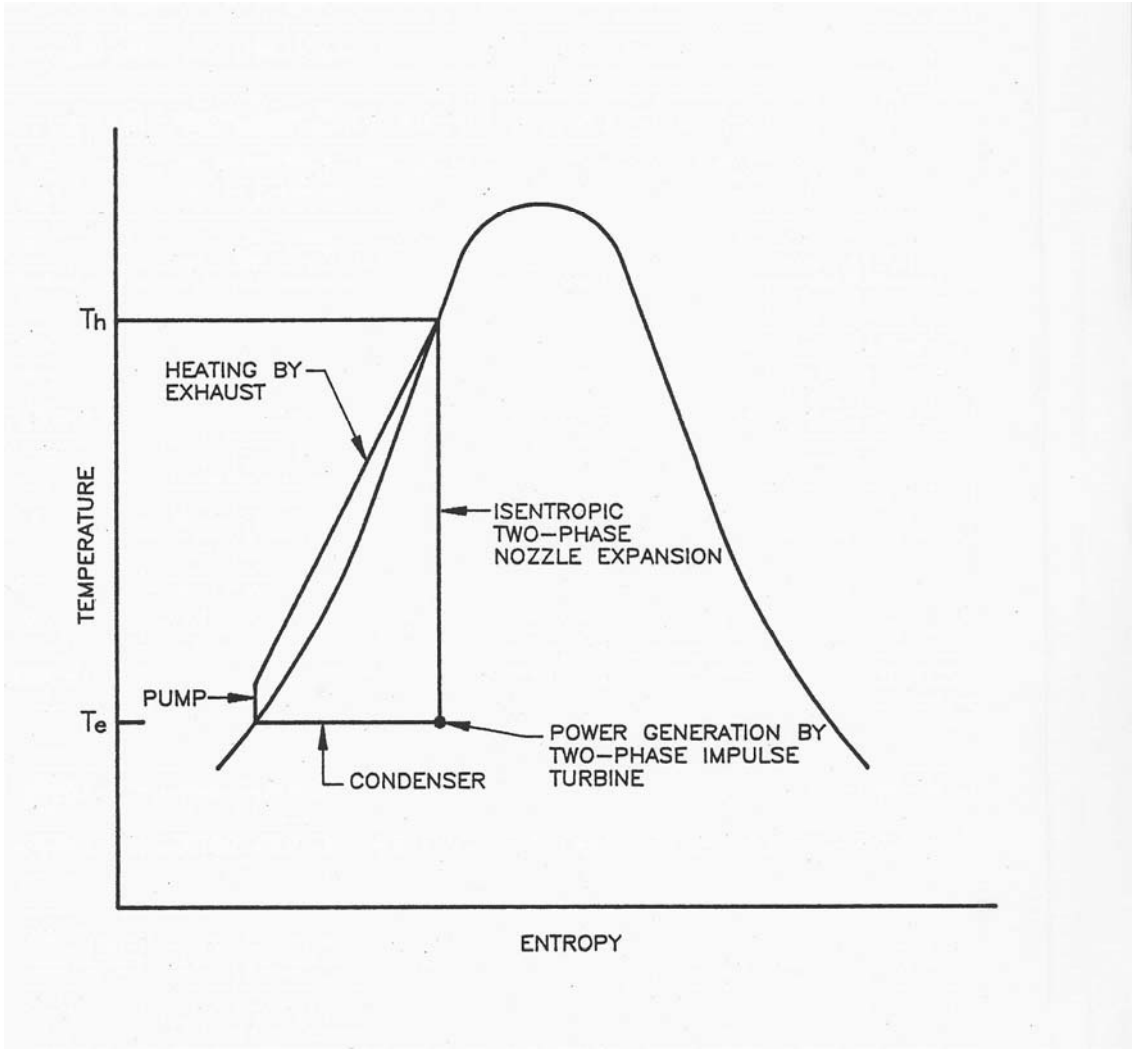


Figure 8 Conversion of Waste Heat to Power by Sensible Heat Power Cycle

Figure 14 Commercial Chiller Incorporating Two-Phase Turbine for Energy Recovery

Refrigeration Turbine Rotor

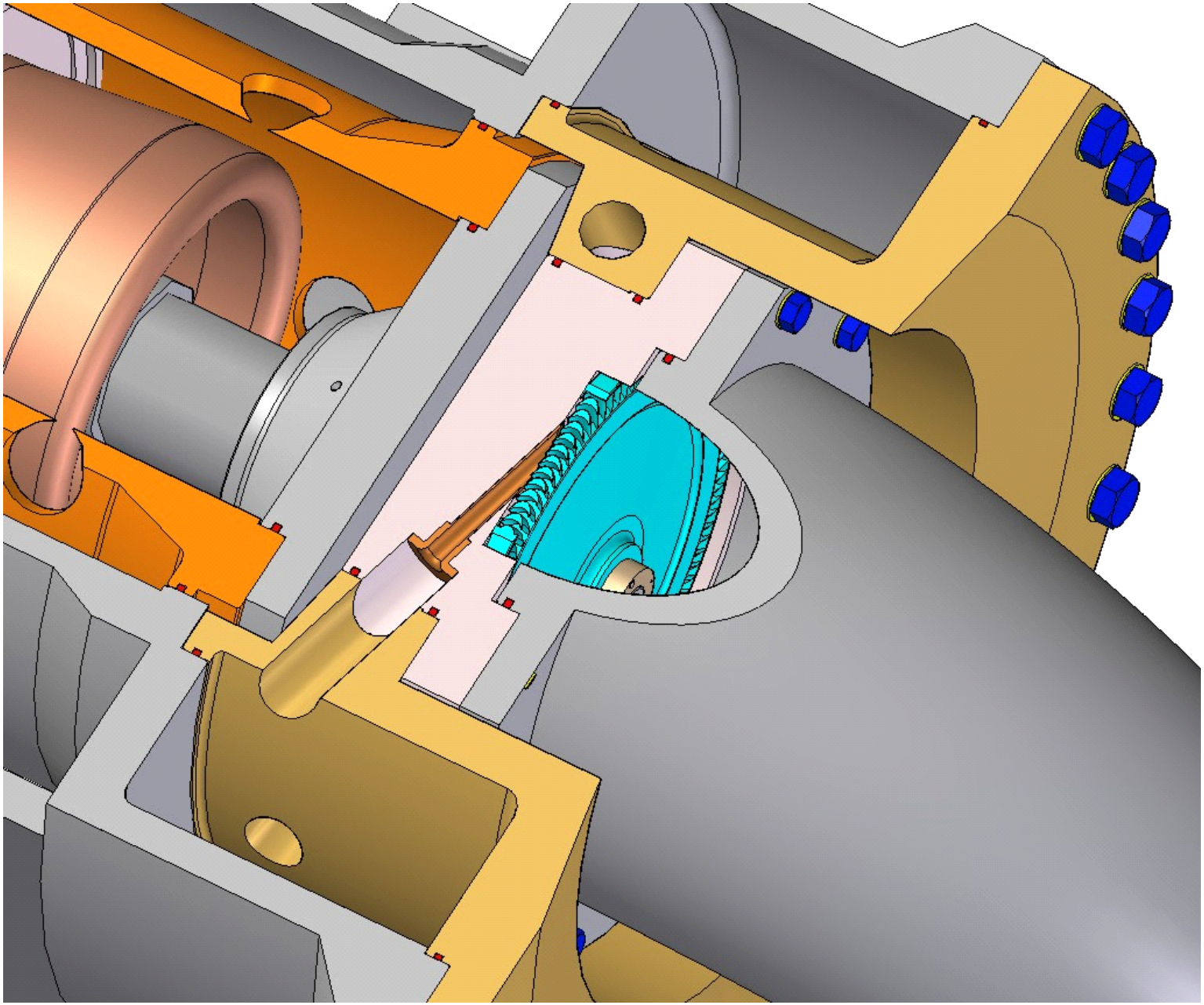


Figure 9 Cut Away of VPT Showing Nozzle Insert and Axial Turbine Wheel

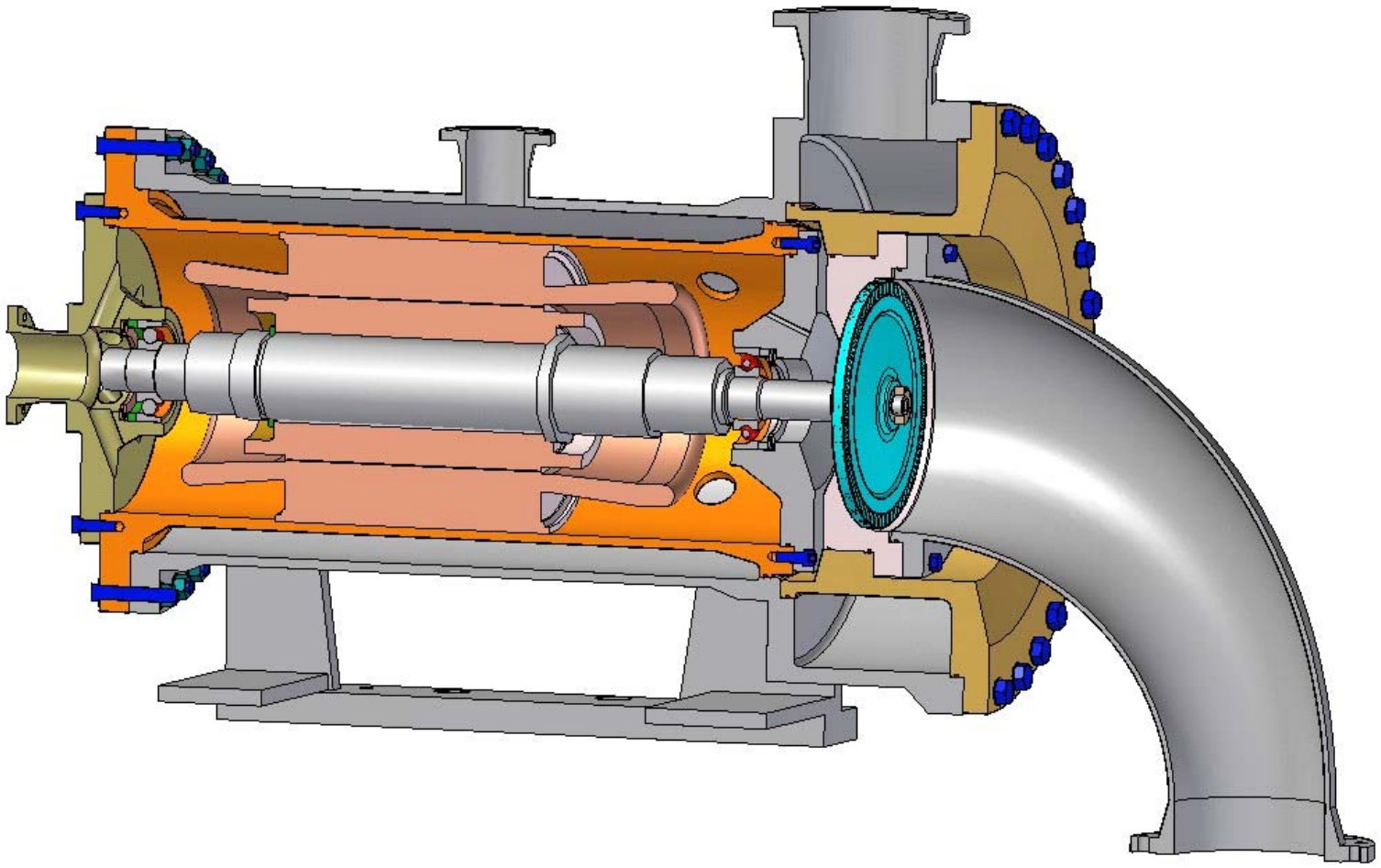


Figure 10 Cut Away of VPT Assembly

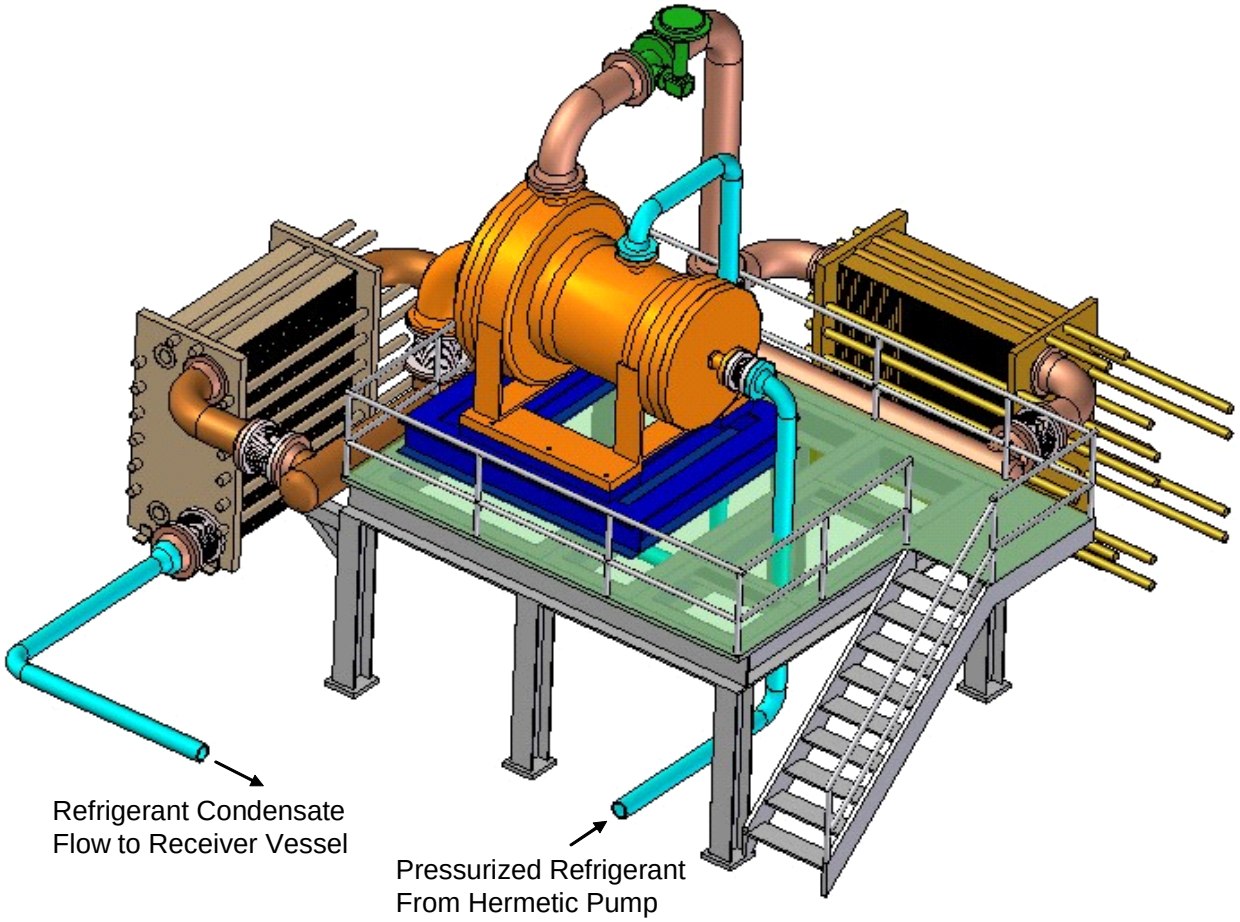
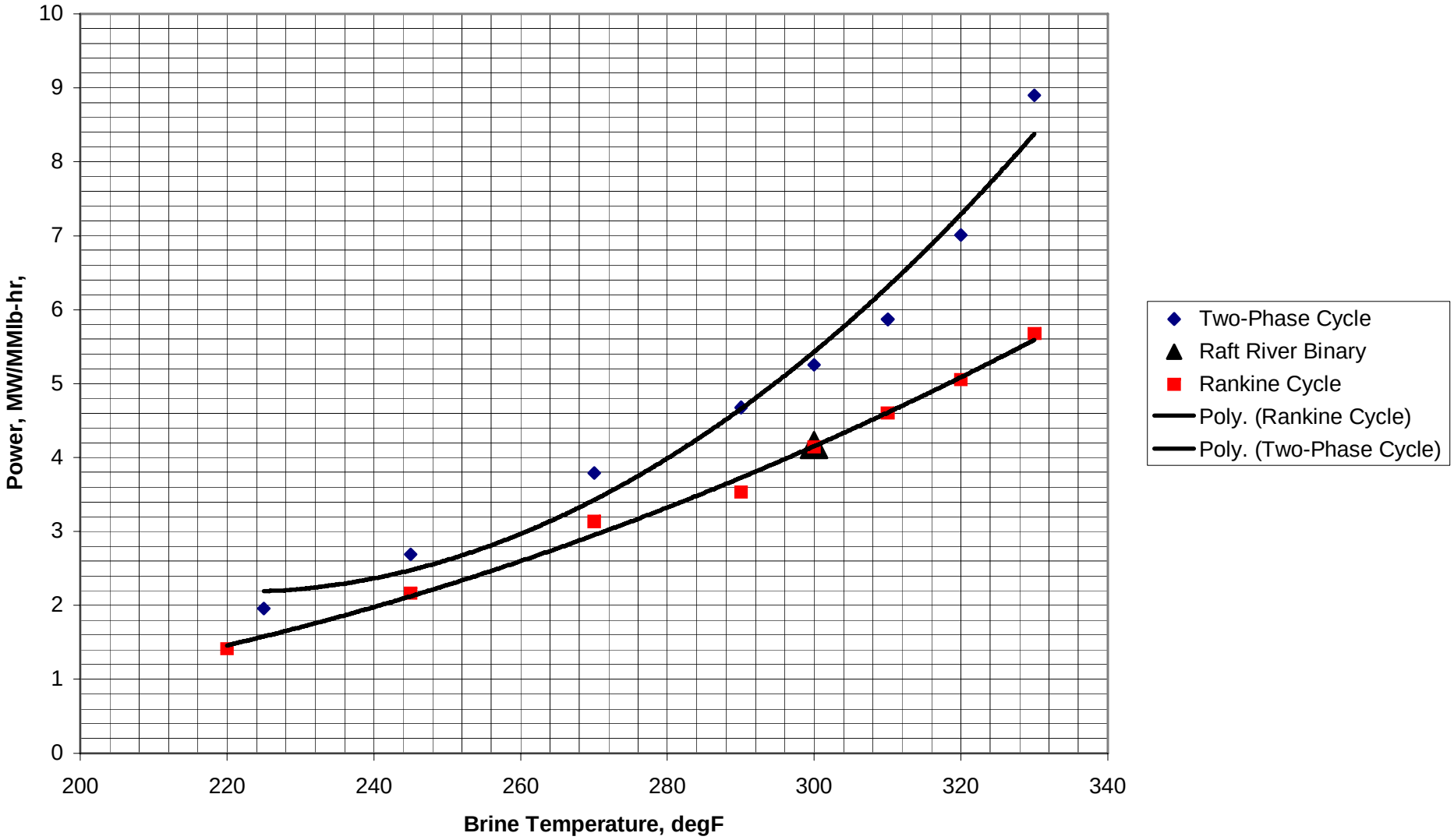


Figure 11 Low Temperature Geothermal System Incorporating Two-Phase Turbine

Power Produced per Million Pounds per Hourof Brine for Two-Phase VPT Cycle Compared to Rankine Cycle and Raft River Binary



Cycle Efficiency versus Resource Temperature for Two-Phase VPT and Rankine Cycle, Condensing Temperature = 78 degF