

Candle Powered Desalinator Project Weekly Assignments

- Week of November 8 Problem Recognition and Specification
- Week of November 15: Design Alternatives, Boiler Efficiency Calculation
- Week of November 22: Preliminary Design Drawings and Assessment, Condenser
Size Calculations
- Week of November 29: Flame Temperature Calculation, Radiation and Convection
Boiler Calculations, Preliminary Testing
- Week of December 6: Device Assessment, Comparison with Model, Design
Competition

Technical help sheets are posted on the ME 412 web site to assist the team in the calculations.

The web posting on “Thermal Analysis” provides the thermodynamics properties of the candles and addresses the following analyses:

- Boiler Efficiency Calculation
- Flame Temperature Calculation
- Boiler Radiation Calculation
- Boiler Convection Calculations

The web posting on “Condenser Sizing” provides some guidance involving the heat transfer with the condenser.