Discussion of Results

In the Plate heat exchanger lab we collected data using Armfield software. Temperature readings were collected using thermocouples. Data for the flow rates of hot and cold water were also collected. Specific heat, average temperature, density, temperature change, heat power emitted, heat power stored, and heat power lost, temperature efficiencies and fluid volume were also collected. The data collected allowed us to see the energy transfer in the plate heat exchanger

For this lab there could have been error due largely to systematic purposes with the reading being slightly off due to calibration errors in the thermocouples, or human error in setting up the lab or perhaps not waiting until the flow was at the right temperature to begin the data collection software.

Our data showed that with higher flow rates between hot and cold water the heat transfer would be higher than with lower flow rates. This is similar to what we expected would happen for the plate heat exchanger lab and our values were within expected parameters.