

Senior Design I

Team 12556

3/7/2012

Experimental Results

Objective: To see if the sensor is functional with objects at 1100°C and to see if the infrared radiation will interfere with the sensor's ability to measure.

The sensor was zeroed on the cold billet placed within the furnace.

Material = 4340 Steel

Temperature = 1100 °C

Heating Time = 120 mins

Reading (n)	Hot Reading (mm)
1	-0.66
2	-1.02
3	-0.77
4	-0.66

Average = -0.78 mm = 0.031 in

Accuracy = 0.24 mm = 0.0094 in

Repeatability = 0.36 mm = 0.014 in

