

MSE 227L  
Charpy impact testing

Name \_\_\_\_\_

	Poor	Fair	Average	Good	Excellent
Memorandum Format Used	1	2	3	4	5
Spelling, grammar, & punctuation correct	1	2	3	4	5

<b>Report includes:</b>	Poor	Fair	Average	Good	Excellent
<b>Include table of results (measured values, averages and standard deviations).</b>	2	4	6	8	10
For aluminum and steel, graph <b>changes in width</b> vs. test temperature; <b>overlay graphs</b>	2	4	6	8	10
Graph <b>shear lip</b> % vs. test temperature; <b>overlay graphs</b> for aluminum and steel.	2	4	6	8	10
Graph <b>impact energies</b> vs. test temperature; <b>overlay graphs</b> for aluminum and steel.	2	4	6	8	10
For <b>steel</b> , graph <b>average</b> fracture energy, <b>upper</b> and <b>lower standard deviation</b> versus temperature on the same chart. ( <b>3 curves overlaid on 1 graph</b> )	2	4	6	8	10
For <b>aluminum</b> , graph <b>average</b> fracture energy, <b>upper</b> and <b>lower standard deviation</b> versus temperature on the same chart. ( <b>3 curves overlaid on 1 graph</b> )	2	4	6	8	10
Relate the type of fractures observed (e.g. shear or cleavage) to the test temperatures.	1	2	3	4	5
Compare the variation of impact energy with temperature observed for 1018-steel and (2024 or 6061) Aluminum.	1	2	3	4	5
Relate type of fracture observed to the <b>energy absorbed</b> by the metal being fractured.	1	2	3	4	5

	Poor	Fair	Average	Good	Excellent
Overall level of effort apparent	1	2	3	4	5
Quality of graphs	1	2	3	4	5
Quality of Abstract	1	2	3	4	5
Quality of work description	1	2	3	4	5
Quality of conclusions	1	2	3	4	5