

WORKSHEET FOR THE MECHANICAL PROPERTIES EXPERIMENT

Section_____

Instructor_____

Date_____

Lab Partners_____

Equipment

Hardness Tester Model_____ Serial Number_____

Tensile Tester Model_____ Serial Number_____

Load capacity_____kN Max Extension_____m

Specimens

Specimen Identification

Specimen Number	Name/Composition	Processing History
1		
2		
3		
4		

Hardness Tests

Results of the hardness tests

Specimen Number	Test 1	Test 2	Test 3	Test 4	Test 5	Average
1						
2						
3						
4						

Tensile Tests

Test method number_____ Crosshead speed_____m/s

Initial sampling rate_____Hz Second sampling rate_____Hz

File names

Specimen Number	Directory	File Name (*.mrd or *.mad)
1		
2		
3		
4		

Initial specimen dimensions

Specimen Number	Length mm	Width mm	Thickness mm	Area m ²
1				
2				
3				
4				

Final specimen dimensions

Specimen Number	Length mm	Width mm	Thickness mm	Area m ²
1				
2				
3				
4				

Analysis of the tensile tests

Specimen Number	Young's Modulus GPa	Yield Strength MPa	UTS MPa	Elongation %	Reduction in Area %	Toughness MPa	Work Done J
1							
2							
3							
4							

Typical tensile properties and hardness as reported in the literature

Specimen Number	Young's Modulus GPa	Yield Strength MPa	UTS MPa	Elongation %	Reduction in Area %	Rockwell Hardness
1						
2						
3						
4						

References used in the above table:

1. _____
2. _____
3. _____
4. _____

Notes
