



Chemical Engineering Department
Chemical Technology Lab. I (10626478)
Raw Data Sheet

Instructor Name	Dr. Majd Shhadi
Academic Year	First Semester 2023/2024
Semester	Fall 2023

Experiment Title: Hardness Testing

Table M2.1: Vickers Hardness Testing Data

Specimen's material:				
Total magnification:				
Load (kgf)	d ₁ (μm)	d ₂ (μm)	d average (μm)	VNH (kgf/mm ²)
50	12.5	12.5		
100	30	26.5		
200	39.5	40		
500	61	61		
1000	94	91.5		

Group: All	Instructor Signature:
Date: 29/11/2023	



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Instructor Name	Dr. Majd Shhadi
Academic Year	First Semester 2023/2024
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Experiment Title: Heat Treatment: (Quenching, Normalizing, and Annealing)

Table M4.1: Heat Treatment Experiment's Data

Total magnification of scanning objective lens				
The total magnification of the microscope				
Cooling Media	d ₁ (μm)	d ₂ (μm)	d average (μm)	VNH (kgf/mm ²)
Original Specimen	98	97		
Water	62.5	62.5		
Oil	92.5	88.5		
Air	116	117		
Furnace	117	119		

Group: All	Instructor Signature:
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