





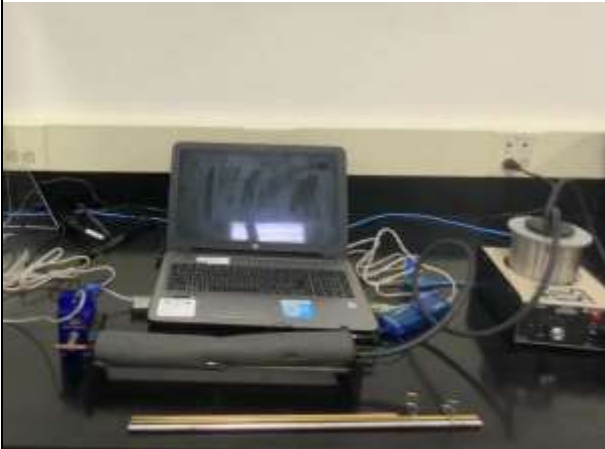


EQUIPMENT AND THEIR FUNCTIONS IN 32-C04C MATERIALS TESTING LAB

EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
	<p>Lever-and-Fulcrum Apparatus with mass set</p>	<p>Testing instrument device used to explore Hooke's Law and Tensile Properties of common samples like springs, rubber bands, and pasta.</p>
	<p>Tensile Machine ADMET MTEST Quattro Material Testing System. 50kN Maximum and Extensometer</p>	<p>Testing Instrument utilized to measure stress-strain properties of materials specimen as well as 3-pt and 4-pt loading of beams under compression.</p>
	<p>Portable Ultrasonic Hardness Tester Novoltest T</p>	<p>Instrument device used for Non-destructive measuring hardness of small products (screws, nuts, washers, etc.) weighing 100g or even less, products of complex shape (gear teeth, bearings etc.) and hard-to-reach</p>

EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
		<p>places that need to be tested (grooves, radius surfaces, welds and heat affected zones etc.) with minimal destruction The imprint after measuring with UCI Novoltest T hardness tester is very small. The method is considered the most non-destructive of the known implemented in portable hardness testers.</p>
	<p>Torsion Apparatus STR6 Torsion of Circular Sections equipment TQ TecEquipment</p>	<p>Testing apparatus used for the study of Torque and deflection (Angle of Twist) in different rod materials with circular section. Digital force measurement.</p>
	<p>Measurement tools: Calipers, micrometers, and rulers.</p>	<p>Testing devices utilized to educate students on measurement techniques using measuring tools of different sensitivity and uncertainty.</p>

EQUIPMENT	EQUIPMENT NAME	EQUIPMENT FUNCTION
	3D Printer	The 3D printing or additive manufacturing equipment is used for the construction of a three-dimensional object from a CAD model or others digital 3D model. Materials printed: PLA or ABS.
	Computer-Based Thermal Expansion Apparatus PASCO Scientific Model TD-8579A	Instrument testing device used for determination of the coefficient of linear expansion for materials such as copper, aluminum, and brass. Digital radial sensor for rod displacement as well as thermocouple temperature measurement.