

METALLURGY LAB

Objective: To impart practical exposure on the microstructures of various materials. Also, to impart practical knowledge on the evaluation of material properties through various destructive testing procedures.



Sections Handled: II-A, II-B

Major Equipment Details:

S. No	Name of the Equipment	Quantity
1	Belt polisher	1
2	Binocular microscope	1
3	Double disc polishing machine	1
4	Jominey end quench apparatus	1
5	Muffle furnace	1
6	Monocular microscope	1
7	Metallurgical mounting press	1
8	Trinocular microscope	1

Faculty In charge with qualification: - Mr. K. Pavan Kumar, M.Tech

Lab Technical name with qualification: K. Suresh -D.M. E

Experiment list as per curriculum:

1. To prepare and study of the microstructure of pure metals Copper and Aluminum.
2. To prepare and study of the microstructure of mild steel and High carbon steels
3. To prepare and study of the microstructure of cast irons
4. To prepare and study of the microstructure of non-ferrous alloys.
5. To observe the micro structure of heat-treated steels
6. Study of microstructure of welded component and HAZ (Heat Affected Zone) macro examination.

Experiment list beyond the curriculum

1. Study of microstructure of welded component and HAZ (Heat Affected Zone) macro examination.