

# 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	Equipment Name	Qty
1	Belt Polisher	1
2	Binocular Metallurgical Microscope	2
3	Cold Setting Dies	5
4	Double Disc Polishing Machine	1
5	Image capture system	1
6	Jomney End Quench Apparatus	1
7	Muffle Furnace	1
8	Monocular Metallurgical Microscope	1
9	Metallurgical Mounting Press	1
10	Trinocular Metallurgical Microscope	1

Faculty In charge with qualification : - V.Satish Babu M.Tech  
Lab Technical name with qualification: S.Venkata Rao -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.