



VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

(Accredited by NAAC & NBA, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)
Aziznagar Gate, C.B. Post, Hyderabad – 500 075

DEPARTMENT OF MECHANICAL ENGINEERING

II B.Tech II Semester

PRODUCTION TECHNOLOGY LAB (A14384)

Upon the completion of the lab the students should be able to

1	Understand pattern designs & making, test sand properties and perform moulding, melting & casting
2	Attain knowledge on arc and spot welding processes and able to perform them.
3	Analyze and select suitable welding process based on the type of material used.
4	Study different mechanical press working operations and perform operations like blanking, piercing, deep drawing, extrusion and bending operations
5	Attain knowledge on processing of plastics and perform operations like injection moulding and blow moulding



LIST OF EXPERIMENTS

S. No.	NAME OF THE EXPERIMENT
1	Pattern Design and making –for one casting drawing
2	Sand Properties Testing –Exercise- For Strengths and permeability –1
3	Moulding Melting and casting -1 Exercise
4	ARC Welding Lap &Butt joint -2 Exercise
5	Spot welding –1 Exercise
6	TIG Welding -1 Exercise
7	Plasma Welding and Brazing -2 Exercise



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8	Blanking & piercing operation and study of simple, compound and Progressive press Tools
9	Hydraulic press: Deep Drawing and extrusion operation.
10	Bending and other operations
11	Injection moulding
12	Blow moulding

LIST OF EQUIPMENTS

S.No.	NAME OF THE EQUIPMENT	QUANTITY
01	Wood turning lathe & accessories	02
02	Arc welding equipment & accessories	01
03	Gas welding equipment & accessories	01
04	Spot welding machine	01
05	Bench grinding machine	01
06	Bench grinding cutter	01
07	Hydraulic press bending machine	
08	Air compressor	01
09	Sand rammer	01
10	Permeability tester	01
11	Electric air blower	01
12	Bench vice 4"	02
13	Bench plumbing machine	01
14	Injection moulding machine	01
15	Blow moulding machine	01
16	Tig welding machine	01
17	Plasma welding machine	01