



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

PRODUCTION TECHNOLOGY LAB

Course Code: GR15A2031
II Year II Semester

L:0 T:0 P:2 C:2

Prerequisites: Fundamentals of Production of Technology

Course Objectives

- To provide practical experience in various welding processes with different materials
- To give knowledge and practical exposure on how to form plastic formation by using plastic moulding machine
- To impart knowledge in Casting Process with various types of Tools

Course Outcomes

- Practical orientation methods for improving the advanced education system
- Knowledge on different kinds of joining processes
- Layout of the shop floor for different applications can be known
- Knowledge on different kinds of production processes available for shaping or moulding several daily used
- Practical experiences and overall knowledge on various manufacturing processes

List of Experiments

I. CASTING

1. Pattern Design and making-for one casting drawing.
2. Sand properties testing-Exercise-for strengths and permeability-1
3. Moulding, Melting and Casting-1Exercise

II. WELDING

1. ARC Welding Lap & Butt Joint-2Exercises
2. Spot Welding-1Exercise
3. TIG Welding-1Exercise
4. Plasma welding and Brazing - 2 Exercises (Water Plasma Device)

III. MECHANICAL PRESS WORKING

1. Blanking & Piercing operation and study of simple, compound and progressive press tool.
2. Hydraulic Press: Deep drawing and extrusion operation.
3. Bending and other operations



IV.PROCESSING OF PLASTICS

1. Injection Moulding
2. Blow Moulding

Teaching Methodology

Welding Equipment, Plastic Moulding Equipment, Casting Equipment