



Madanapalle Institute of Technology & Science

(UGC- AUTONOMOUS INSTITUTION)

Madanapalle-517325, Annamayya Dist., Andhra Pradesh

TECHNICAL SKILL DEVELOPMENT INSTITUTE (t-SDI)

APSSDC SIEMENS : Manufacturing – Welding Lab

Description

A welding lab is a specialized facility designed for the teaching, practice, and research of welding processes and techniques. Welding is a critical skill used in various industries, including manufacturing, construction, aerospace, automotive, and more. A welding lab is equipped with the necessary tools, equipment, and safety measures to ensure that individuals can learn and practice welding safely and effectively.

Objectives of Manufacturing-Welding Lab

The objectives of a manufacturing welding lab are to encompass technical proficiency, safety awareness, innovation, and real-world application of welding technology, contributing to a skilled workforce and advancements in the welding industry.

After completing the course, a student will be able to:

- Gain hands-on training, practice, and hone their welding skills for various applications.
- Develop proficiency in operating welding equipment and performing various welding processes in different welding positions.
- Understand and follow safety protocols, use appropriate personal protective equipment (PPE), and be aware of fire safety measures.
- Aware of weld joint preparation, fit-up, and various inspection techniques. Also ensure cleanliness, joint design, and quality control measures for welded components.
- Apply their welding skills through projects, such as welding together components, fabricating complex structures, and creating functional products.

Key areas covered

- Fundamentals of welding processes
- ARC Welding - AC, DC



APSSDC

Andhra Pradesh State Skill Development Corporation



Skill AP
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- TIG, MIG/MAG Welding
- Oxy Acetylene Welding and Cutting
- Operator Controlled and Input Parameters
- Welding Defects, Testing, Analysis and Corrective Actions
- Weld Quality Standards, Weld Geometry, Arc Physics, Safety and Precautions

Equipment Available

- ESAB Transweld 400
- ESAB RS 400
- ESAB Suffire 2HP
- ESAB PUG With Straight Track
- EASB Cutogen
- ESAB MIGMATIC 250
- ESAB AUTO K 400
- ESAB Easy Weld SSR 400T



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View of Manufacturing - Welding Lab



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