

Manufacturing

Resistance Welding Inspection Course Description

COURSE AGENDA

Day 1

- Resistance Welding Definition
- Types of Resistance Welding
- Weld Sequence
- Weld Zone Fundamentals

Day 2

- Weld Types
- Weld Component Factors
- Visual Inspection
- Non-Destruct Inspection
- Destruct Audit
- Safety Weld Inspection
- Corrective Action



COURSE NUMBER: MFG229

Course Purpose

This course is designed to increase knowledge and skills of personnel whose responsibilities include identifying the difference between an acceptable weld and a discrepant weld, which determines production stoppage allowing for maintenance or repair of the welding equipment.

At the completion of this course, participants will be able to:

- Identify a discrepant weld, coordinate corrective action, fill out required documentation and reprocess or impound suspect parts
- Identify variables in the resistance welding process that affect weld quality
- Perform destruct and non-destruct test procedures used to identify discrepant welds
- Identify the difference between an acceptable weld and a discrepant weld when observing a non-destructive chisel check
- Identify the purpose and requirements of process standards
- Indicate the safety, critical and ordinary welds on actual production parts (if available) and the weld engineering graphics

Course Purpose (continued)

- Determine when production must be stopped to allow for maintenance or repair of the welding equipment
- Describe the procedures necessary to quickly identify which line, station and weld gun is causing the discrepant welds
- Identify the quantity and location of discrepant parts in the system when a discrepant weld is found

Who Should Attend

Individuals in the workplace who have responsibility for weld quality and assurance such as supervisors, production, and inspection personnel should attend this course.

Prerequisites

To successfully complete this course, a basic understanding of the following topics is required:

- Hand tools
- Resistance welding familiarity

Technology Requirements

All technology is provided for student use in the classroom by Rockwell Automation. It is not necessary for students to bring any technology with them when attending this course.

Student Materials

To enhance and facilitate your learning experience, the following materials are provided as part of the course package:

- *Student Manual*, which contains the definitions, key concepts, examples, and exercises presented in the course.

Hands-On Practice

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of interactive and hands-on exercises. These exercises focus on the skills introduced during the lessons.

To complete the exercises, a welder will be used to observe the production of welds using course acquired weld variable values followed by performing weld quality tests. Because the learned skills taught in the course apply to basic welding applications, the exercises permit you to apply what has been learned in the workplace environment.

Course Length

This is a two-day course.

Course Number

The course number is MFG229.

To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at <http://www.rockwellautomation.com/training>

www.rockwellautomation.com

Power, Control and Information Solutions

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