



Resistance Welding Training Program (Day One)

Module	Title	Learning Objectives
	AMADA WELD TECH INC.	OVERVIEW
Introduction	Overview of Resistance Welding and Terminology	Familiarize students with common terminology that will be used in the training program
Module 1	Resistance Welding Fundamentals	Definitions, Weld Heat Formula, Bond Types, Electrode Configurations, Common Part Geometries, etc.
Module 2	Resistance Welding Materials	Types of Metals, Welding Compatibility, Welding App, Electrode Materials, Part Surface Conditions
Module 3	Resistance Welding Power Supplies	Four Most Common Types, Attributes, Closed Loop, Feedback Modes, Pulse Shaping, Envelope limits, Monitoring
Hands-On 1	Resistance Welding Power Supplies	Set up power supply for RW process, Cable Connections, settings on unit, Advanced settings like APC
	AMADA WELD TECH INC.	FACILITY TOUR
Module 4	Resistance Welding - Weld Heads	Weld head types, Electrode Configurations, Weld Head Actions, Force, Actuation Methods, Timing with the power supply
Hands-On 2	Resistance Welding - Weld Heads	Setting up different types of weld heads for operation in RW process, setting force, aligning and adjusting electrodes

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(Day Two)

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	AMADA WELD TECH INC.	OVERVIEW
	Overview of Resistance Welding Training (Day One)	Question and Answers from Day One Training
Module 5	Resistance Welding Checkers and Monitors	What to monitor, checker and monitor types, Closed-loop Process tools, Envelope Limits, Displacement & Force Monitoring, and Advanced Process Tools.
Hands-On 3	Resistance Welding Monitors	Setup monitor to capture data occurring during weld process.
Module 6	Resistance Welding Optimization	Application Perspective, Feedback Modes, and Heat Balance Techniques.
Hands-On 4	Welding sample parts	Dial in settings and process for sample parts
Module 7	Resistance Welding Trouble Shooting	Electrode Cleaning, Electrode Design, Force & Timing Problems, and Material & Process Problems.
Hands-On 5	Mini DOE - Optimize for Weld Strength	Example of setting up and running DOE of the sample parts