



Laser Welding Training Course Syllabus

Objective: Attendees will learn the process and steps required to implement a successful production process

Level: Beginner to intermediate

Who should attend: Manufacturing Engineers, Welding & Application Engineers, Design Engineers, Manufacturing Managers, Operators (parts 1 & 3)

Duration: Around 6-7 hours over 2-3 days

Course Structure

Part 1: Laser & Laser Welding Fundamentals

1. What is a Laser
2. How a Laser Welds
3. Laser Welding Modes
4. Features of Laser Welds
5. Laser Welding Capability
6. Lasers
7. Focus Heads

Part 2: Design for Laser Welding

8. Materials and Plating Weldability, Selection
9. Weld Geometry, Joint Tolerances

Part 3 Introduction to Laser Weld Parameters

10. Pulsed Laser Parameters
11. Continuous Wave Laser parameters
12. Cover Gas
13. Tooling

Part 4: Defining the Weld

14. Testing
15. Inspection
16. Standards



Part 5: Weld Optimization

- 18. Weld Qualification Methodology
- 19. Weld Optimization for Pulsed Welding
- 20. Weld Optimization for Continuous Wave Welding

Part 6: Maintaining the Weld in Production

- 21. System Benchmarking & Troubleshooting
- 22. In-Process Monitoring

For more information and more details on the course contact -

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