

ADVANCED FUSION SYSTEMS

JOB DESCRIPTION

TITLE: Electromechanical Assembler II

DEPARTMENT: Operations

REPORTS TO: Director of Operations

FLSA STATUS: Non-Exempt

EMPLOYMENT STATUS: Full-time

Position Summary

Advanced Fusion Systems, located in Newtown, CT, is seeking a skilled Electromechanical Assembler II to support the assembly, wiring, soldering, and integration of highreliability components used in our UFSA (UltraFast Surge Arrester) product line and related pulsedpower systems. This role requires strong handson assembly skills, attention to detail, and the ability to work to aerospacegrade workmanship standards.

The ideal candidate will have experience in soldering, wire harness fabrication, coaxial cable termination, PCB assembly (including SMT rework), and electromechanical integration, preferably in a defense, aerospace, or highreliability manufacturing environment. Experience with IPCA610, IPCJSTD001, or similar workmanship standards is strongly preferred.

This position replaces a retiring team member and is critical to maintaining production continuity and quality in our UFSA assembly workflow.

Core Responsibilities

- **Electromechanical Assembly:** Assemble electromechanical subassemblies, wiring harnesses, PCB assemblies, and mechanical components according to engineering drawings, schematics, and work instructions.
- **Soldering & PCB Work:** Perform highreliability soldering on throughhole and SMT components in accordance with IPCA610 and JSTD001 standards. Conduct SMT touchup, rework, and inspection as needed.
- **UFSA Assembly Support:** Support the full assembly workflow for UFSA units, including mechanical buildup, wiring, coax routing, PCB installation, and final integration.
- **Mechanical Assembly** Install brackets, fasteners, hardware, and mechanical components using torque tools, adhesives, and precision assembly methods.
- **Inspection & Quality Control** Inspect assemblies for workmanship, continuity, polarity, and compliance with IPC standards. Document nonconformances and support corrective actions.

- **Documentation & Traceability** Complete travelers, assembly logs, and inspection records. Maintain accurate documentation for traceability and quality assurance.
- **Collaboration** Work closely with engineering, manufacturing, and test personnel to resolve assembly issues and support prototype builds.
- **Perform other related responsibilities as assigned.**

Minimum Qualifications

Education:

- **3+ years of electromechanical assembly experience in aerospace, defense, medical, or highreliability manufacturing environments.**

Technical Skills

- **Proficiency in soldering to IPCA610 or JSTD001 standards certification preferred.**
- **Experience assembling wire harnesses, coaxial cables, and RF connectors (SMA, N-type, BNC) preferred.**
- **Ability to read and interpret engineering drawings, schematics, wiring diagrams, and assembly instructions.**
- **Familiarity with PCB handling, ESD procedures, and SMT rework.**
- **Skilled with hand tools, torque drivers, crimpers, microscopes, and inspection equipment.**

Professional Skills:

- **Strong attention to detail and commitment to highquality workmanship.**
- **Ability to work independently and as part of a team.**
- **Good communication skills and willingness to collaborate with engineering and manufacturing staff.**
- **Ability to follow detailed instructions and maintain accurate documentation.**

Physical Demands and Work Environment:

- **Regularly required to sit, stand, walk, and use hands for fine assembly work.**
- **Ability to lift up to 40 pounds occasionally.**
- **Visual acuity required for smallcomponent assembly and inspection.**

Work environment includes moderate noise typical of a manufacturing area.

Additional Considerations

This job description is not exhaustive and may be modified to meet organizational needs. Employment is atwill.

Salary and Benefits

Competitive and commensurate with experience. AFS offers benefits comparable to other leading companies in the region.