



Mosaic Microsystems is a thin glass solutions company that will usher in the next generation of microelectronic and photonics packaging requirements.

Mosaic Microsystems is currently in need of an equipment engineer who can support both Research and Development as well as Manufacturing initiatives in a cleanroom environment.

Experience with Semiconductor Equipment and clean room protocols required; preferably with Plasma Etch systems, Metal Deposition Systems, vacuum pumps, wet benches, DI water systems, furnaces, associated metrology equipment, etc.

<b>Essential Duties and Primary Responsibilities:</b>
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**1. General Skill Requirements:**

1. Support capital equipment purchases and installations.
2. Act as point person for equipment down events as appropriate. Facilitate communication and planning for resolution. Drive determination of root cause for failures and assist in the development of plans to address equipment failures.
3. Verify and establish preventative maintenance requirements for major equipment based upon tool cycles.
4. Act as documentation editor or co-author of written maintenance procedures and checklists. Support the identification of gaps in maintenance documentation, and work to drive closure of these gaps.
5. Support training on equipment as new members join the team.
6. Monitor tool performance based on uptime, MTBF, MTTR or other appropriate metrics. Verify performance to historical baseline. Investigate deviations from baseline and correct associated problems. Drive baseline improvement and establish critical spares.
7. Investigate, qualify, and establish secondary suppliers for consumable parts with focus on cost, quality, and on time delivery.
8. Investigate, qualify, and establish hardware improvements on process equipment with focus on cost, quality, MTBF, and MTTR. Interact with equipment vendors to stay up-to-date on equipment improvements and changes in best known methods (BKM's).
9. Support Yield Improvement and Process Development initiatives as needed.
10. Adhere to all Corporate and HSE directives.



**Required Competencies:**

**Technical Skills:**

- Demonstrates expertise in electrical concepts and electrical systems.
- Demonstrates expertise in vacuum technology and how it applies to the equipment and process.
- Demonstrates expertise in mechanical systems.
- Is consistently capable of adjustments, repairs and implementing improvements to the equipment.
- Has strong troubleshooting skills with the ability to find root cause and make modifications when needed.
- Designs, installs and debugs complex processes and equipment.
- Proposes and implements hardware changes in order to improve equipment or process performance.
- Capable of designing and executing advanced tool partitioning for defect or other troubleshooting purposes.
- Shows the ability to work independently and train others on all major aspects of tool maintenance.
- Has the ability to utilize advanced diagnostic equipment Understands process and equipment interactions.
- Can perform tool qualifications and support operations as needed.

**Additional Requirements:**

Two-year technical degree or equivalent work experience. Previous equipment experience required. Demonstration of sound planning, data analysis, decision making, communication and initiative.

This position is subject to federal export control regulations under ITAR. These regulations may require applicants to be either a U.S. citizen, a U.S. permanent resident, or an individual granted refugee or asylum status in the U.S..

**Physical and Mental Requirements:**

Incumbent must be able to perform the following functions:

X
X
X
X

Lift up to \_50\_\_pounds.

Push or pull heavy objects using up to \_50\_\_pounds of force.

Stand and walk for extended periods of time.

Reach, bend, squat, crawl and climb.



X
X
X

Use fine motor skills to operate office equipment and/or machinery.

Receive and comprehend instructions verbally and/or in writing.

Use logical reasoning for simple and complex problem solving.

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Hours (If Applicable): M-F 8AM-5PM or as required by manufacturing

This job description in no way states or implies that these are the only duties to be required by this employee. He or she will be required to follow any other instructions and to perform any other duties as assigned or as requested by his or her supervisor.