Maci Cummings

Senior PECVD Process Engineer

(312) 555-4821 | macicummings@example.com | linkedin.com/example/macicummings | Dallas, TX 75201

STRENGTHS

Structured Troubleshooting
Used production data and issue investigation to separate symptoms from causes, giving technical teams clearer next steps.

Process Documentation
Created procedures and records for consistent execution, and teams relied on clearer guidance during daily operations.

Cross Functional Coordination
Aligned production priorities with engineering activities, keeping improvement work moving when several teams needed support.

Continuous Improvement
Applied practical improvement methods to workflow concerns, and peers recognized a steadier path from findings to action.

Operational Discipline
Supported safety, quality, and compliance through dependable controls, with daily habits that made execution more predictable.

SKILLS

PECVD process engineering

Thin film processing

Process optimization

Process characterization

Root cause analysis

Statistical process control

Design of experiments | Gage R&R

JMP | Excel | MES systems

Thin film metrology

Cleanroom operations

Yield improvement

Equipment performance

SUMMARY

Manufacturing and operations professional with experience supporting semiconductor PECVD process engineering through process improvement, production analysis, equipment optimization, documentation, and **cross functional execution**. Leads daily activities for complex manufacturing processes, applies structured problem solving, and works with engineering and production stakeholders to address performance concerns. Uses process metrics, operational controls, **root cause analysis**, and continuous improvement methods to strengthen quality, reliability, and workflow consistency. Develops procedures that support disciplined execution, safe operations, and clear accountability. Brings practical experience with manufacturing systems, **process documentation**, technical coordination, and performance measurement. This background supports thoughtful **process ownership**, reliable troubleshooting, and sustained improvement across cleanroom manufacturing environments and thin film operations.

EXPERIENCE

Senior PECVD Process Engineer

NanoFab Process Solutions | January 2022 - Present | Dallas, TX

Owns daily support for complex **semiconductor manufacturing** processes, coordinating production priorities, process analysis, documentation, and improvement work across technical and operational teams. Supports reliable execution through structured problem solving, performance review, and disciplined **operational controls**.

- Led production process reviews using structured problem solving, resolving performance concerns before broader workflow disruption.
- Developed operating procedures and records, supporting consistent execution across quality controlled manufacturing activities.
- Analyzed **process metrics** with engineering partners, identifying improvement opportunities for reliable production performance.
- Coordinated technical resources and priorities, keeping production support activities aligned with business needs.
- Applied **continuous improvement** methods, strengthening workflow **reliability** and employee capability across manufacturing operations.
- Supported safety and compliance objectives through disciplined operational management and clear **process documentation**.

Operations Specialist

Previous Manufacturing Solutions Group | June 2019 - December 2021 | Madison, WI

Supported manufacturing initiatives through production data review, issue investigation, **process documentation**, and coordination with technical teams. Helped convert operational findings into corrective actions, standard work, and clearer decisions for production and engineering stakeholders.

- Reviewed production data during manufacturing initiatives, helping teams isolate recurring operational concerns.
- Investigated process issues with analytical methods, guiding corrective actions for improved manufacturing consistency.
- Maintained operational records and reports, giving stakeholders dependable information for improvement planning.
- Assisted technical teams with equipment and **quality** activities, translating findings into practical process updates.
- Contributed to **standard work** development, making routine execution clearer for production personnel.
- Communicated findings to production and engineering stakeholders, supporting timely decisions during improvement efforts.

LANGUAGES

English — Native

Spanish — Intermediate

MY CAREER

- Senior PECVD Process Engineer at NanoFab Process Solutions (4.7 Years)
- Operations Specialist at Previous Manufacturing Solutions Group (2.5 Years)

PROJECTS

PECVD Process Improvement Program 2025

Applied production data review, structured problem solving, and process documentation methods to support more consistent PECVD manufacturing performance. Work connected technical findings with practical operating improvements.

Manufacturing Workflow Reliability Study 2021

Reviewed operational records, investigated recurring issues, and organized corrective action findings for manufacturing stakeholders. Results supported clearer standard work and more dependable production decisions.

LEADERSHIP & AWARDS

- Operational Excellence Recognition for contributions to disciplined manufacturing performance and workflow improvement.
- Continuous Improvement Achievement for practical process improvements supporting stronger operational consistency.

EDUCATION

Bachelor's Degree in Materials Science

University of Wisconsin Madison GPA: 3.5 2019 Madison, WI

Coursework: *Semiconductor manufacturing, thin film materials, process engineering, statistical analysis*

CERTIFICATIONS

- Lean Six Sigma Green Belt 2024
- PECVD Process Engineering Training 2024

TECHNICAL SKILLS

- **PECVD Processing:** PECVD, thin films, GaAs, InP
- **Process Engineering:** Process ownership, process development, process optimization
- **Statistical Methods:** SPC, DOE, Gage R&R
- **Data Analysis:** JMP, Excel, production data analysis
- **Manufacturing Systems:** MES systems, production records, operational reporting
- **Thin Film Metrology:** Film thickness, process measurement, metrology analysis
- **Equipment Operations:** Equipment performance, equipment troubleshooting, process tools
- **Quality Methods:** Root cause analysis, corrective action, quality control
- **Manufacturing Operations:** Semiconductor manufacturing, production operations, standard work
- **Cleanroom Practices:** Cleanroom operations, safe operations, contamination control
- **Process Documentation:** Operating procedures, process records, technical documentation
- **Improvement Methods:** Lean manufacturing, Six Sigma, continuous improvement

PROFESSIONAL AFFILIATIONS

- Manufacturing Improvement Association Member, sharing practical process improvement perspectives with peers.
- Professional Development Mentor, supporting colleagues through structured growth and operational learning.

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST