

JOB DESCRIPTION

Job Title:	Junior Engineer – Product Configuration & Manufacturing Support
Department:	Engineering / Application Engineering
Reports To:	Josh Michel / Doug Frazier
FLSA Status:	Full-Time / Hourly
Location:	Montclair, CA 91763
Job Type:	Full Time
Education Level:	Technical program, CAD coursework, fabrication/manufacturing exposure, or equivalent experience preferred

SUMMARY

The Junior Engineer supports engineering, manufacturing, and production operations through configuration-based product development, CAD support, documentation control, and continuous improvement activities. Unlike traditional engineering roles focused on designing products from a blank screen, this position centers on configuring, modifying, validating, and improving existing products, assemblies, drawings, and manufacturing documentation.

Most products, assemblies, and drawings already exist and are adapted to meet customer requirements. This role provides hands-on exposure to practical engineering, manufacturing, production support, product configuration, and problem-solving processes that are highly transferable throughout the manufacturing industry.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Modify and configure existing Autodesk Inventor assemblies and drawings.
- Support configuration-driven product development utilizing Inventor assemblies, drawings, iParts, iAssemblies, and related parametric design tools.
- Maintain consistency between drawings, assemblies, BOMs, and manufacturing documentation.
- Review engineering documentation for accuracy, completeness, and manufacturability.
- Support engineering change implementation and document revisions.
- Follow established engineering and manufacturing standards, procedures, and workflows.
- Work directly with production personnel to resolve manufacturing and assembly issues.
- Support first-article reviews and validation of new product configurations.
- Participate in continuous improvement initiatives focused on quality, efficiency, and cost reduction.
- Maintain engineering, manufacturing, and configuration data within spreadsheets, BOMs, and controlled documentation systems.
- Support Autodesk Vault document management and revision control activities.
- Utilize Microsoft Excel to organize, validate, and maintain engineering information.
- Coordinate with Engineering, Production, Purchasing, Sales, and Product Management teams.
- Participate in engineering and production meetings and communicate technical findings effectively.
- Perform duties in accordance with company procedures, work instructions, quality standards, and safety requirements.

WHAT THIS ROLE IS NOT

- This position is not primarily focused on creating entirely new products from blank CAD models.
- This is not a research-and-development engineering role.
- Most work involves adapting, configuring, improving, and supporting existing products and manufacturing processes.

EDUCATION AND/OR EXPERIENCE

- Bachelor's degree in Mechanical Engineering, Manufacturing Engineering, Engineering Technology, or related field preferred.
- Strong Microsoft Excel or spreadsheet experience required.
- Understanding of engineering drawings, BOMs, and manufacturing documentation.
- Autodesk Inventor experience preferred.
- SolidWorks experience may be considered if familiar with configurations, design tables, mates, and assembly patterns.
- Familiarity with Autodesk Vault or other PDM/document management systems is a plus.
- Exposure to sheet metal fabrication, manufacturing, plastics, welding, or production environments is a plus.
- Ability to follow detailed instructions and identify discrepancies from established standards.

TECHNOLOGY USED IN THIS OCCUPATION

- Autodesk Inventor
- Autodesk Vault
- Microsoft Excel / Microsoft Office Suite

- Microsoft Teams
- E2 Shop Tech or similar ERP/MRP systems
- SolidWorks (if applicable)

KEY SKILLS AND COMPETENCIES

- Attention to detail
- Engineering problem solving
- Mechanical aptitude
- CAD literacy
- Spreadsheet proficiency
- Manufacturing awareness
- Process discipline
- Organization
- Communication
- Continuous learning mindset

CAREER DEVELOPMENT OPPORTUNITY

This position is intended to develop future engineering talent within EnviroGuard. Successful candidates will gain experience in product configuration engineering, manufacturing engineering, engineering change management, Autodesk Inventor, Vault workflows, production support, and continuous improvement initiatives.

Potential growth paths include Application Engineer, Manufacturing Engineer, Product Engineer, Design Engineer, and Engineering Project Manager.

8 KEY BEHAVIORAL PERFORMANCE EXPECTATIONS

1. Be courteous, respectful, and helpful to workers, customers, and visitors.
2. Maintain the highest standards of safety.
3. Avoid involvement in rumors and workplace negativity.
4. Support coworkers and company objectives.
5. Demonstrate professional conduct and business ethics.
6. Be punctual and dependable.
7. Take ownership of your work and maintain high quality standards.
8. Remain safety conscious in all activities.
9. Submit time-off requests in a timely manner.

I have read and understand the Job Description and will comply with the requirements as detailed above.

Employee Signature: _____ DATE: _____

Supervisor / Manager: _____ DATE: _____