



# Upstart Power

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## JOB DESCRIPTION

Job Title:	<b>PRINCIPAL MECHANICAL ENGINEER</b>
Department:	Engineering
Reports To:	VP of Product Development
Status:	Salaried – Exempt
Hours/Work Days:	40 hours per week (Monday through Friday)
Location:	Southborough, MA
Last update (date):	August 2, 2021

## COMPANY OVERVIEW

Upstart Power is a start-up company focused on state of the art power generation equipment utilizing fuel cell technology for back up and primary applications and specifically designed to work with solar. We are expanding our world class team of engineers to support the market launch of several new products. We are seeking highly motivated individuals that can work in a dynamic, high pace environment to meet the demands of our customers.

## PRIMARY EMPLOYMENT OBJECTIVES

Reporting into the VP of Product Development, the Principal Mechanical Design Engineer will work as part of a cross functional team to develop low-cost, high-reliability SOFC power systems. The Principal Mechanical Design Engineer will lead the design, test and validation efforts and manage project plans and resources.

## ESSENTIAL DUTIES & RESPONSIBILITIES

- Manage all aspects of mechanical engineering projects from concept through detailed design, prototyping and testing
- Develop and maintain product specifications
- Create and manage to product development schedules and budgets
- Propose design solutions based on assessment of situations or data, and evaluation of design variables and associated trade-offs
- Create and manage Solidworks CAD models, drawings and assemblies
- Manage top level assemblies in a PDM system environment
- Control drawing and model releases through the engineering change process
- Track assembly and part costs

- Value engineer current design by reducing part counts, leveraging off the shelf components, and best manufacturing practices
- Relay design and engineering intent within cross functional product development teams
- Step into other roles as necessary, in order to assist with the completion of high priority projects
- Direct efforts of junior team members (supervisory role available depending on candidate experience)

**KNOWLEDGE, SKILL & EXPERIENCE REQUIREMENTS**

- Minimum BS degree in Mechanical Engineering, with 10+ years progressively responsible experience in new product development. Proven experience bringing products from concept through successful product launch is highly desired
- Significant experience using Solidworks for CAD modeling and detailing
- Experience designing products for cost effective, high volume production (gas appliance related is desirable)
- Experience designing equipment with high temperature systems is a plus
- Experience in the use of collaborative project management tools is a plus
- Ability to provide creative, yet pragmatic solutions to complex engineering problems
- Working knowledge of engineering principles and practices including drafting standards and tolerance analysis methods
- Knowledge of hazard and risk analysis approaches and design for regulatory compliance
- Working knowledge of fluidics, mechanics, heat transfer
- Understanding of engineering analysis tools (FEA, Thermo, CFD, etc.)
- Understanding of sheet metal, machining, diecasting, and welding techniques
- Ability to understand existing mechanisms and visualize improvements
- Demonstrated ability to lead and mentor engineers to complete projects
- Excellent communication skills
- Ability to work both independently and as part of a fast moving team
- Attention to detail and organization
- Teamwork, integrity, positive attitude, and professionalism

**BEHAVIORAL COMPETENCY REQUIREMENTS**

<i>Action oriented</i>	<i>Drive for results</i>	<i>Functional or Technical skills</i>
<i>Organizational agility</i>	<i>Time management</i>	<i>Problem solving</i>

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**WORK ENVIRONMENT (include physical requirements)**

- Office and workshop presence

*Upstart Power provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, disability, genetic information, marital status, amnesty, or status as a covered veteran in accordance with applicable federal, state and local laws. Upstart Power complies with applicable state and local laws governing non-discrimination in employment in every location in which the company has facilities. This policy applies to all terms and conditions of employment, including, but not limited to, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training.*