



# Upstart Power

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## **JOB DESCRIPTION**

Job Title:	<b>PRINCIPAL MECHANICAL ENGINEER</b>
Department:	Engineering
Reports To:	VP of Engineering
Status:	Salaried – Exempt
Hours/Work Days:	40 hours per week (Monday through Friday)
Location:	Southborough, MA
Last update (date):	Winter 2024

## **ABOUT UPSTART POWER**

[Upstart Power](#) is a growth stage company focused on state-of-the-art power generation equipment utilizing fuel cell technology for back up and primary applications that integrates seamlessly with industry leading Home Energy Management Systems for long duration back up and distributed generation. Made up of a dynamic team of engineers, scientists, technical specialists, and visionaries, Upstart Power’s innovative team thrives in our fast paced, collaborative work environment.

We are doers, actively making a change in the fabric for our future. Join our team and touch the whole business from conception to commercialization and everything in between. We are expanding our world class team of engineers to support the commercialization of new products. We are seeking highly motivated individuals that can work in a dynamic, high pace environment to meet the demands of our customers.

Our business is at an inflection point: products in field testing, critical design and testing work happening everyday as we ready the platform for volume deployment and commercialization. Join us as we accelerate the future of distributed electricity generation for a cleaner tomorrow.

## **PRIMARY EMPLOYMENT OBJECTIVES**

Reporting into the VP of Engineering, the Principal Mechanical Engineer will work as part of a cross functional team to develop low-cost, high-reliability SOFC power systems. They 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 product development schedules and budgets

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- Propose design solutions based on assessments of situations or data, and evaluation of design variables and associated trade-offs
  - Create and manage Solidworks CAD models, assemblies and drawings within a SW PLM software
  - Manage model, drawing and BOM releases through PLM software
  - 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 of progressively increasing responsibility in new product development. Proven experience bringing products from concept through successful product launch is highly desired.
- Expert user of SolidWorks with significant experience (10+ years in modeling, assembly, sheet metal modules)
- Experience designing products for high volume production (gas appliance related is desirable)
- Industrial and Enclosure Design experience including vents and louvers
- Experience designing equipment with high temperature systems is a plus.
- Experience with cost down design optimization
- Ability to provide creative, yet pragmatic solutions to complex engineering problems.
- Knowledge of engineering principles and practices including tolerance analysis methods and drafting standards. Formal GD&T training a strong plus Knowledge of hazard and risk analysis approaches and design for regulatory compliance
- Knowledge of fluidics, mechanics and heat transfer.
- Basic understanding of engineering analysis tools (FEA, Thermal, CFD, etc.) Solidworks Simulation and Flow Simulation a strong plus.
- Understanding of sheet metal, machining 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 in a start-up environment
- Attention to detail and organization
- Teamwork, integrity, positive attitude, and professionalism.

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## 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>

### 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.*