

FuelCell Energy, Inc.

www.fuelcellenergy.com



Position: Mechanical Designer

Location: Danbury, CT

We are currently seeking a highly motivated and agile Mechanical Designer to join the multi-disciplinary Advanced Technology team responsible for designing advanced fuel cell-based systems for both power generation and carbon capture applications. The Mechanical Designer will be responsible for creating CAD models and drawing specifications for a broad range of fuel cell module and balance-of-plant components and assemblies for these systems. Additionally, the Mechanical Designer will be expected to work with various team member from different disciplines to create and maintain Bills of Materials as well as update and release drawing specifications to ensure timely delivery of fabrications. This position requires flexibility to work on multiple projects in various stages of the design or validation process.

Responsibilities:

- Produce detailed solid models of components and complex assemblies, often from provided hand sketches, as part of innovative fuel cell systems using Autodesk Inventor (and SolidWorks).
- Responsible for generating the build-to-print drawings using while adhering to ANSY Y14.5 dimensioning standards.
- Prepare and present CAD designs and packaging concepts to the project team using MS Power Point, CAD software, or other means
- Manage a Microsoft Excel-based Bill of Materials consisting of approximately 500 unique line items and assist with procurement of these line items.
- Interface with legacy FCE vendors for quoting, manufacturability, and schedule purposes of custom FCE design. Also work with new vendors as required for COTS products
- Read and help generate Process and Instrument Diagrams (P&IDs) for the purpose of packaging process instruments and equipment within the system solid model.
- Work may include assistance with physical assembly or construction of some components and/or systems and/or test set-ups.
- Work with a broad multi-disciplinary team to gather design inputs requirements and implement into to CAD model designs.
- Work may include hands-on assistance with physical assembly or construction of some components and/or systems and/or test set-ups. Includes assisting with assembly or builds, and designing tooling to assist with builds or test set-ups.
- Assist with writing technical reports, providing input, graphics from CAD, and write-ups as needed.
- Performs other tasks and projects as required.
- Travels (5% to 15%) domestically and/or internationally to support and execute project activities.

Qualifications:

Education: Associate's Degree in Mechanical Design or related field preferred.

Experience: Minimum of 5 years working in product development or commercial design environment with expert CAD proficiency.

Required Experience and Characteristics:

- Highly proficient 3-D CAD part and assembly modeling skills to generate concept models using Autodesk Inventor and SolidWorks for a variety of metal fabrications.
- Able to create detailed build-to-print engineering drawings, including proper dimensioning and weld callouts, while taking into account materials availability, manufacturability, and cost issues.
- Understanding of AWS weld call-outs and familiarity with ASME Y14.5 GD&T.
- Experience using revision control vault software such as Autodesk Vault or SolidWorks PDM.
- Working knowledge of MS Office products, especially Excel for Bills of Material (BoM) of assemblies.
- Experience with electrical cabinet design, panel wiring, conduit systems, and cable sizing.
- Experience with use instrumentation in design models and drawings such as thermocouples, pressure transducers, flow elements, and associated I/O equipment.
- Must be able to work independently and rapidly generate concepts from preliminary models or hand sketches provided by engineering, and present them to others in the team.
- Comfortable with multi-tasking, working in an environment that requires rapid design changes, and take the initiative to address all impacted areas associated with the developing design
- Understanding of manufacturing processes and equipment such as laser/water-jet machines, sheet metal equipment, pipe and tube fabrication, structural (I-beams,C-channel).
- Ability to do basic hand calculations and/or have practical experience to justify designs such as structure thicknesses, wiring sizes, material call-outs, etc.
- Experience designing and completing drawing packages for systems that involve, gas flows, bellows, process equipment, and insulation is helpful.
- Excellent oral and written communication skills to work effectively and openly with others, both internally and externally.
- Ability to obtain/maintain a valid US passport and travel internationally without restrictions is required.

Working Environment/Physical Requirements:

- Desk work using a computer.
- This position is located indoors and requires the ability to move between separated rooms within the same building.
- Occasional travel via car and/or commercial airlines.
- Occasional work outdoors in a power plant environment during commissioning activities.

How to Apply:

Submit a copy of your resume, along with the voluntary self-identification forms, to **jobs@fce.com**. Please reference the Position (Job Title) in the subject header of your email.

Please note only those authorized to work in the United States will be considered.

No agency submissions, please. Resumes submitted to any FuelCell Energy employee without a current, signed and valid contract in place with the FuelCell Energy Recruiting team for this position will become the property of FuelCell Energy and no agency fees will be paid.

Equal Opportunity Employer - Vet/Disability

We offer a competitive compensation package as well as comprehensive benefits including medical, dental, vision, company-paid life/disability insurance, 401(k) plan, employee stock purchase plan and generous paid leave.

Employment with FCE is subject to pre-employment drug-screen and background investigation.

FuelCell Energy, Inc. is committed to ensuring that its application process provides an equal employment opportunity to all U.S. job seekers, including individuals with disabilities. If you believe you need a reasonable accommodation in order to search for a job opening or to submit an application, please send an email with your resume to jobs@fce.com indicating the specifics of the assistance needed.

You may also use **203-205-2070**, a phone line designed **exclusively** to assist disabled job seekers whose disability prevents them from being able to apply online. Only messages left for this purpose will be acknowledged. A response to your request may take up to two business days.