



Senior Mechanical Design Engineer

REACTION ENGINES INC

Date: August 2023

Pioneering innovation. Seamless teamwork. Unparalleled skill.

Our people have always been our most valuable asset. They are brilliant problem solvers who believe challenges are opportunities. Reaction Engines takes pride in attracting the industry's brightest minds and it is their diverse sets of skills, personalities and experiences that will help us achieve our ambitious goals. Sound exciting? Then join us on our epic journey.

JOB SUMMARY

Reaction Engines is committed to developing cutting-edge thermal management technology to enable breakthroughs in performance and sustainability in several high-tech sectors including aerospace, automotive, and energy. The Senior Mechanical Design Engineer will work to develop our thermal management product lines for unique market applications as well as supporting design efforts within our Advanced Programs and Systems & Test departments. This role represents an opportunity to perform mechanical design within the Reaction Engines Inc (US) team. Candidates should demonstrate proficiency in several design-related skill sets including CAD modeling, structural and thermal analysis, tolerancing, material properties, mechanical joining processes, manufacturing methods, assembly processes, verification and validation program development, and applicable industry design specifications. Candidates will be expected to innovate on the Reaction Engines portfolio of heat exchanger and thermal management technology to meet new applications opportunities. Candidates will also be expected to work closely with UK counterparts to follow standardized design methods and practices. We are seeking to grow our design capability with this Senior Mechanical Design Engineer role and support further development of our world-class thermal management technology.

Responsibilities

- Performs design of hardware for advanced propulsion and thermal management system
- Develops/innovates new heat exchanger product lines based on customer requirements
- Works with Reaction Engines Ltd. (UK) counterparts to follow design guides and standards
- Participates in customer-facing engagements to assess product feasibility and applicability
- Develops hardware requirements for heat exchanger and thermal management systems
- Performs computer-aided design (CAD), managing assembly and subassembly architecture
- Performs structural and thermal analysis on complex assemblies
- Applies principles of materials, thermal, and fluid dynamics in product development
- Generates manufacturing drawing with appropriate tolerancing and assembly considerations
- Develops FMEA and verification and validation requirements for new hardware
- Identifies vendors to perform prototype manufacturing of piece parts
- Reviews technical documentation and manufacturing drawings
- Provides design support to Advanced Programs and Systems & Test business units
- Supports proposal scoping, costing, and scheduling of new business development opportunities
- Establishes effective relationship with clients, customers, officials, contractors, and others
- Provides leadership to the team through technical expertise and guidance
- Reports on project/task progress during company meetings
- Supports writing & presenting of reports and proposals



Attributes

- Applies broad knowledge of principles and practices in a specific practice area
- Independently evaluates, selects, and adapts standard techniques, procedures, and criteria
- Has general knowledge of principles and practices of related fields, and ability to function on multidisciplinary teams

Basic Qualifications

- Bachelor's degree in Aerospace or Mechanical Engineering, Applied Physics, or other equivalent field of discipline from an accredited institution.
- Previous experience in mechanical design and/or product development.
- Must comply with all applicable import and export control laws and regulations including, ITAR and EAR regulations.
- The ability to conform to U.S. Government space technology and advanced propulsion export regulations, applicant must be a U.S. citizen or lawful permanent resident of the U.S.

Desired Qualifications

- 4+ years of work experience in mechanical design and/or product development
- Experience with working with design standards and processes
- Familiarity with standard quality managements systems (AS9100, ISO9001)
- Experience with the development of mechanical and electrical systems
- Experience engaging with external parties and presenting technical information
- Experience in mentoring engineers and teaching technical skill sets

Skills & Behaviors

- Practical mind-set, strong creative problem-solving skills and positive "can do" attitude
- Ability to think in an entrepreneurial way
- Self-motivated, and able to thrive as part of a small, focused team
- Effective oral and written communication skills
- Demonstrates behaviors consistent with Reaction Engines' core values:
[Commitment](#) | [Innovation](#) | [Trust](#) | [Quality](#) | [Teamwork](#)

EMPLOYMENT BENEFITS

- Career development and unshackled opportunities to tackle diverse challenges
- Exciting, diverse and fast-paced learning environment to master new skills
- Small, tightly integrated, high-performance team
- Individual accountability and power to influence future success
- Potential bonus on achieved company objectives
- Competitive medical, dental, and vision health plans
- 401(K) or Roth retirement savings options with a generous company match
- Generous paid time off in addition to paid holiday and sick leave
- Attractive 9/80 work schedule promotes improved work/life balance
- Pet friendly office
- Educational assistance program
- Free onsite private gym



ADDITIONAL INFORMATION

Experience Level: Professional – Senior Engineer I (Level III)

Work Location: Glendale, Colorado

Work Schedule: Our 9/80 work schedule features every other Friday off resulting in a 3-day weekend every other week.

Telecommuting: Company employees are enabled to often telecommute from home at the discretion of company management, business needs, and job role requirements.

Travel: Minimal travel required

Expected Salary Range: Annual salary compensation to be matched with successful candidate's level of experience and capabilities. Colorado applicants can contact careers@reactionengines.com for the salary range.

How to apply: Email a cover letter and resume to careers@reactionengines.com

Reaction Engines makes employment decisions based upon the capabilities and merits of qualified candidates and encourages all qualified candidates regardless to race, color, religion, gender, gender identity, sexual orientation, marital status, age, veteran status, disability status or other protected legal status to apply.