



Senior/Staff Mechanical Design Engineer

Why Owens Design?

Owens Design Inc. (ODI) is an engineering services company that designs and builds advanced custom manufacturing equipment for technology companies from VC-funded start-ups to S&P500 corporations. We specialize in technically challenging projects. For over 35 years ODI has been developing leading edge manufacturing equipment in Silicon Valley, specializing in the development of complex, high speed, high precision and mission-critical process, metrology and automation factory equipment.

ODI is an engineer's dream company. If you believe that "variety is the spice of life" then ODI is the place for you. We serve a diverse range of industries such as biomedicine, consumer electronics, electric cars/energy storage, solar, semiconductor, display, laser processing, and a constantly growing list of emerging technologies being developed by Silicon Valley's most innovative companies. Every engineer works on 4+ projects a year, and the equipment we develop covers the range from \$100k benchtop work stations to multi-million dollar semiconductor wafer metrology tools. A team environment, ODI runs fast with small teams focused on individual projects. Engineers own their projects from start to finish and have complete responsibility for their part of the design from concept through detailing, build & commissioning.

Who are we seeking?

ODI seeks a senior or staff level mechanical engineer who likes to design and build sophisticated industrial machines. The ideal candidate will be able to independently execute the design process, working either as or with a system architect, from concept definition based on (sometimes) minimal specifications through detail design, documentation, manufacturing build and validation/troubleshooting.

Common design elements include a wide variety of robots, high speed/high precision motorized mechanisms & stages, pneumatic systems, complex process and metrology integration, including lasers/optics, vision systems, vacuum/plasma, RF power, pico-liter and high viscosity fluid handling, etc.; stringent environmental control systems (ex. aseptic, particle-free, oxygen-free, temperature/humidity controlled, ...). Experience with capital equipment design in an industry such as semiconductor, display, solar/energy storage, medical device/pharmaceutical, automotive or consumer electronics is required.

As a senior engineer the successful candidate will also be expected to quickly create rough concepts and assist with estimating BOM and NRE costs for program budgeting purposes. As a team player, they must be able to work with, and inspire confidence in, customers, colleagues, program managers, electrical and software engineers and manufacturing personnel. The successful candidate will be expected to demonstrate technical leadership within project teams.



Requirements/Qualifications:

- BSME or equivalent, plus at least 10 years' experience as a mechanical design engineer in the design of automated capital factory equipment. Must have practical experience with equipment design from concept development through build and test. Position requires excellent verbal and written communications skills and the ability to work effectively in teams in a technical leadership role. Must work efficiently with minimal supervision in a fast-moving and fluid environment.
- Mechanical design and documentation using SolidWorks 3D design tools. Experience with additional CAD tools is a plus. Includes concept development, system architecture design, assembly & detail drawings, bills of materials and manufacturing instructions. Experience with stress, vibration and thermal analyses a plus. Detailed knowledge of common automation components (motors, bearings, gearboxes, pneumatics, gas and water components, frame types, sheet metal and other enclosure materials, etc.) is required. Familiarity with PLC control systems a plus.
- Able to design and deliver prototypes to specification, including performance, cost and schedule. Develop and execute proof-of-principle and reliability/cycle tests as required. Able to rapidly learn new technologies, techniques and requirements on the fly.
- Regular, mostly local to the Bay Area, travel will be required for meetings and technical support at customer sites. Occasional travel outside the Bay Area, including overseas, may be required.
- Must be authorized to work in the United States.