1. Completed mechanical designs for HVAC, air control, fire protection and elevators while providing SME input to client and design teams.
2. Devised overall strategy for documentation and identified design sets planned for each stage of work including as-built designs and final building information models (BIM).
3. Prepared sheet metal fabrication drawings, modifications and commercial specification drawings using Revit and AutoCAD.
4. Analyzed and verified all energy savings calculations to promote environmental sustainability and energy conservation in order to meet aggressive project LEED requirements.
5. Applied technical troubleshooting ability to create quality HVAC and air control solutions.
6. Incorporated solutions that met various project challenges and adhered to environmental, packaging and vibration requirements.
7. Assisted in preparation of production cost quotations by aiding with estimates of equipment, material and labor costs.
8. Designed utilities and HVAC systems for high technology facilities, including cleanrooms, general manufacturing and process and institutional facilities.
9. Provided technical guidance, peer review and mentorship to junior engineers engaged in building system designs.
10. Provided and maintained forecast estimates for project-related costs and general project task tracking for adherence to project milestones.
11. Contributed to [Type] project by [Action] and [Action] which increased company revenue by [Number]% and improved [Result].
12. Collaborated with [Type] teams to develop and implement product improvements to enhance performance.
13. Designed and built process tooling including insert molds, arbor press tooling, soldering and welding.
14. Developed and tested models of alternate designs and processing methods to assess feasibility, operating condition effects, possible new applications and necessity of modification.
15. Assisted drafters with detailed machinery plans using drafting tools, computer-assisted design and drafting equipment and software.
16. Supported [Type] engineering design through analysis and simulation of prototypes and [Type] computer models.
17. Applied engineering principles to develop and operate electrical, mechanical and data processing systems.
18. Developed internal processes and plans for mechanical verification, product development and factory processes.
19. Developed and coordinated effective predictive, preventive and corrective maintenance approaches.
20. Coordinated technicians to verify form, fit and function of pneumatic gas flow designs.