

Discipline: Mechanical Engineering

Job Title: Project Engineer

Summary:

The Project Engineer (Mechanical) supervises various engineering activities, including but not limited to, design, layout, detail, time cycle studies, calculations and documentation relating to custom conveyors, equipment, process, tooling, and structures using OCC products, as well as our competitors. This position reports to the Engineering Manager, assists the Project Manager, while directing and checking the work of other engineering team members.

Reports to:

Engineering Manager

Required Skills:

- MS Office Outlook, Word, Excel.
- MS Office Access.
- MS Office Project.
- AutoCAD 2014 or higher Capable.
- 3D ACAD Inventor proficient, preferred
- Technical Math skills, including algebra, trigonometry, geometry.
- Technical skills in physics, including work force, energy, time and distance calculations.
- Ability to travel for meetings, field checking and supporting installation department.

Educational Requirements:

- B.S.E. preferred with 5 years of experience in an engineering office environment involved in design and detail of fabrication and erection drawings, or 10 years of documented work experience in the automotive conveyor industry including all listed responsibilities

Responsibilities:

- Initiate product development designs, supervise drawing creation and review for design adherence.
- Conduct engineering calculations, cylinder sizing, shaft sizing, motor sizing, etc.
- Conduct and document timing studies of automation equipment, conveyor transfers and related systems and conveyors.
- Create workable layouts of conveyor path, solving bottle necks, addressing production rates and physical space constraints.
- Drafting skills, 2-D, orthographic projection, dimensioning, layers, line types, etc. 3D in Autodesk Inventor a plus.
- Create, edit and issue work orders and advance bills of materials for purchasing of long lead items.
- Check drawings created by others that work in the project engineer's team.
- Familiar with industry Power and Free conveyor systems, including major components and the function of same.
- Familiar with customer specifications, codes and practices.
- Conduct structural (support steel) calculations, beam and column sizing, conveyor weight, point loading and kip loading, size cover plate, base plates and column pads.

- Select structural member sizes (plates, bars, shapes, etc.) and specify fasteners and weld requirements. Review same with Professional Engineer assigned to job.
- Review chain pull calculations including: Drive placement and balancing.
- Create work assignments for others; respond to Project Goals and timing.
- Create, update and issue project documents including formal calculations, matrices, charts, etc.
- Create update and issue customer maintenance requirements including spare parts, TMS, etc.
- Create update and issue maintenance and system manuals.
- Create and issue installation support items such as printed tags, laminations, etc.
- Attend job site / shop / field checks, meetings.
- System Startup assistance.
- Assist Subcontractors, including outsourced mechanical and controls engineering.
- Maintain a personal Task List.
- Assist Project Manager.