

Abinash Khanal

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WORK EXPERIENCE

Agnitron Technology

Project Engineer / Equipment Design / PDM Administrator

June 2019 – May 2020

Chanhassen, MN

- Designed layouts of major components, delegated subcomponents design and detailed MOCVD (Metal Organic Vapor Deposition) equipment
- Supervised a team of designers and drafters assigned to individual projects based on need
- Worked with sales department to conceptualize equipment for potential customers
- Improved the workplace safety standard by implementing PPE in the cleanroom
- Oversaw project and mechanical resources. to effectively manage and meet project milestones
- Led an initiative to implement a PDM (Product Data Management) System. This included researching viable options, working with a third-party vendor, installing, testing and training employees on the new PDM system
- Established and defined a company standard on Product Revision Control using PDM system
- Migrated, revised and updated engineering documents that were outdated to meet current engineering standards
- Selected vendors based on process capabilities and cost analysis for manufacturing system and components
- Reverse engineered components for refurbished systems which was the primary revenue source for the company

Aspect Automation

Mechanical Design Engineer

May 2016 – October 2018

St. Paul, MN

- Contrived unique industrial automated systems using engineering principles; working from initial evaluation of theoretical design through to development state, prototyping, testing and releasing to manufacturing
- Collaborated with sales and application team to develop concepts and capital requirements to potential customers
- Worked with external suppliers to select off the shelf components to reduce manufacturing cost while facilitating quick turnaround of projects
- Estimated production cost and effect of design changes for management and customer review.
- Evaluated and recommended methods for improving current system throughput and productivity to the customers
- Rigorously tested Solidworks 2017 and EPDM system before implementing to companywide end users.
- Participated in ISO auditing process to verify whether the company was conforming to the current ISO standard issued

Perbix

Mechanical Design Engineer

December 2014 – May 2016

Minneapolis, MN

- Evaluated customer design specifications to access the feasibility of the proposed system
- Created complete and detailed designs of machines and systems on schedule and within the allocated budget using Solidworks
- Conferred with vendors, staff, and management personnel regarding purchases, procedures, product specifications, manufacturing capabilities, and project status.
- Supported manufacturing to ensure components were manufactured as per the engineering standards
- Provided on-site support for machines that were previously delivered to the customers under warranty
- Drafted and designed layout of equipment, materials, and workspace to illustrate maximum efficiency, using drafting tools and computer

- Designed automated systems that would verify quality assurance of injection molded parts using Solidworks
- Assembled and tested prototypes to determine the limits of the functional mechanism and optimized as necessary
- Reverse engineered product designs to be used in prototyping
- Communicated with management and user personnel to develop production and design standards.
- Applied DFM (Defused Deposition Modeling) to manufacture fixtures and machine parts to lower the cost of manufactured components.

EDUCATION

St. Cloud State University
Bachelors of Science, Manufacturing Engineering

December 2010
St. Cloud, MN

SKILLS & INTERESTS

- **Skills**

Strategic Planning	Solidworks
Concept Generation	EPDM
Electro-Mechanical Design	GD&T
Engineering Documentation	Multi-axis robot
Machine and personnel safety	FDM (Fused Diffused Manufacturing)

- **Interests**

Meeting new people; Traveling; Camping and Hiking; Computers; Weight Training; Soccer