



## **Position Opening: Prototyping Specialist**

Concept Prototyping is where new ideas start. Our teams provide everything needed to make and test the cutting-edge technologies that enable products at 3DX Industries, Inc.: mechanical and electrical design, machining, printing, casting, molding, assembly, laser processing, and repair. We move fast and are looking for people who are driven to find quick, efficient ways to realize ideas in real materials on complex geometries and compressed timelines. We get deeply involved in the hardware development process, partnering with the product design and industrial design teams to apply our specific areas of expertise to their challenging problems. We take pride in being more than just a prototype production service to our customers.

### **Position Requirements:**

- Leverage knowledge of additive manufacturing processes to prototype solutions to open ended engineering and design challenges
- Handle tasks ranging from fully-tolerance CAD files to napkin sketches. Engagement with our adjacent design, machining, and assembly teams where needed to enable the customer's goals
- Highlight opportunities for cost/performance/quality improvement quickly, ensuring rapid turnaround of parts at a greater cost benefit than as originally submitted
- Frequent communication with engineering customers to enable quick revisions, allowing parts to evolve towards design intent rather than simply to print
- Expand capabilities into new technologies and processes to meet growing engineering and prototyping needs
- Manipulate CAD to prepare it for printing, including changes to make the parts more readily manufacturable
- Contribute to and oversee the following stages of the printing process, sometimes performing the work yourself and sometimes with our staff technicians
- Efficiently lay out print builds with likely functional or cosmetic features in ideal orientations for the technology being used
- Load consumables, check printer status, and launch builds at regular intervals to ensure delivery commitments are made
- Remove finished parts from machines and transfer to post processing equipment and/or personnel, being careful to protect or highlight key features
- Make updates in internal task management platform to keep requesters apprised of job status
- Maintain equipment and ensure all tools and materials needed are on hand to ensure continuous production
- 4+ years of experience in a hands-on digital fabrication, experience in a prototyping environment and an interest for making things

- Formal education in a discipline relevant to the field: engineering, science, product design, or manufacturing, or equivalent work experience
- Extensive, hands on experience with commercial-grade 3D printing equipment. (Stratasys, 3D Systems, HP, Carbon 3D, etc.)
- Proficiency with at least two 3D printing software packages, plus mechanical CAD
- Communication skills
- Technical background in materials science of polymers
- Experience with latticing, topology optimization, generative design, and computational design. (Grasshopper, Dynamo, nTopology, Fusion 360)
- Experience with soft goods (sewing, heat press, lamination, wrapping)
- Experience designing and manufacturing of 3D printed tools (atmospheric casting or injection molding)
- Experienced in Materialise Magics and Adobe illustrator
- Experienced in DFAM for mass production

To apply to this position please submit a cover letter and resume by email to: [info@3dxindustries.com](mailto:info@3dxindustries.com)

*We would like to thank all applicants in advance for submitting their application. Please note, only those candidates chosen to continue through the selection process will be contacted.*