

CNC MACHINE SHOP LEAD || Autodesk Pier 9 Technology Center || 05.2018

JOB DESCRIPTION

In our Autodesk Technology Centers, we collaborate with industry, academic, and entrepreneurial communities to speculate, validate and test ideas about the future of design and making; inform our product and business strategy; and make stories that inspire our community.

Our Pier 9 Technology Center is a 35,000-sq./ft. workshop and office space located on the waterfront along the Embarcadero, a few blocks from Autodesk's San Francisco headquarters and gallery at One Market. It is the San Francisco home of our residency program—hosting external teams from industry, colleges and universities, and startups working on the future of manufacturing. It is also the San Francisco home for advanced research teams working under the office of our Chief Technology Officer on the future of design and making.

We run 50 machine training courses a month for Autodesk Employees throughout the company to further a wide range of research and exploratory projects. We support the engineers, innovators, and designers of Pier 9 with custom workshops, project assistance, material handling, and machine trainings. Our Shop Staff Team consists of 6 Shop Leads who maintain and lead our CNC, Wood, Metal, and 3D printing operations. The CNC Shop Lead is a key component of this team, reporting directly to the Senior Workshop Manager and working closely the CNC Instructor Lead to help facilitate and coordinate the projects going through this space.

Our facility includes:

- CNC shop complete with an Omax 5-axis water jet, 5-axis Matsuura MX-330, Haas VF2SS mill and Haas ST10Y lathe with live tooling, a DMS 5-axis router and Datron Neo mill.
- Full Wood Shop that can support fine furniture work, lathe turning, and finishing in our walk-in spray booth.
- Metal Shop with full machine shop capabilities that include manual mill, lathe, MIG+TIG welding set-up, and sheet metal fabrication.
- Digital Fabrication lab stocked with a range of industrial 3d printers and laser cutters.
- Additional workshop spaces include: an electronics lab, industrial textiles shop, a project assembly area, and the Commercial Test Kitchen.

Pier 9 is tasked with defining and exploring the factories of the future, supporting our

industry partners in projects that shape the future, and ensuring that our products are grounded in real industry. Our goal is to fabricate, explore, and innovate the way our customers use our products to shape the future of making things.

The CNC MACHINE LEAD is responsible for working directly with a wide range of users to show off the amazing capabilities of our hardware and software. Our unique workshop relies on a CNC Lead to have both excellent technical skills, including g-Code fluency and tool library management, and well-honed industry experience to help push the boundaries of what these machines can do with our software. A background in multi-axis machining, CAD/CAM software, and machine troubleshooting and repair are required. The perfect fit for this position will be someone who is humbled by what they don't know, excited by what they can learn, and passionate about what they can share with others.

OVERVIEW

Unique Project Support w/Users	60%
CNC Shop Management	20%
Machine + Tooling Maintenance	20%

RESPONSIBILITIES

PROJECT ASSISTANCE + FACILITATING USERS

- Facilitate empowering CNC experience for new users, skilled machinists, sales teams, engineers, customers, affiliated partners, and stakeholders throughout the company
- Assist users with machine operation, CAM programming, job planning, material selection and procurement on a per-project basis
- Troubleshoot user projects from design to toolpathing to machine operation to help push the boundaries of what is possible
- Manage ongoing communication and prioritization of CNC machine scheduling
- Oversee summer interns for Fusion Team and other internal collaborators including candidate interviews, selection and mentoring throughout the summer engagement at Pier 9
- Assist with skill development path for individual workshop users to approach complex machinery and reach their project goals
- To conceive self-directed projects that help utilize the full capabilities of the pier 9 facility

CNC SHOP MANAGEMENT

- Oversee all operations within the CNC Shop, including: basic machine maintenance and operation, post-processor and software updates, resource development for users, and all supply purchasing and stocking
- Provide backup for classes on advanced CNC machine operation (Haas Mill, Haas

Lathe, DMS Router, Datron, Matsuura, and additional equipment as added) for the CNC Instructor Lead

- Demonstrate machine operation, CAM strategies, and clear pedagogical approach to successfully operate manufacturing equipment
- Mentor CNC Instructors, teaching technical skills, clear communication, team building, community support, and career advice
- Provide engineering expertise and consultation on high level CNC projects

MACHINE + TOOLING MAINTENANCE

- Oversee sophisticated tooling systems, including: database management, tool library management, tool loading, labeling, repairing, setting, and accounting
- Maintain onsite supplies, tool replacements, and ongoing upgrades for machines
- Refine post-processors, be fluent in G-code, update tooling library, develop solid models, and troubleshoot CAM software as needed
- Monitor periodic maintenance calendar and schedule technician visits
- Outreach to vendors, manufacturers, and techs to maintain machine functions, upgrades, and industry relationships
- Hazardous material handling such as coolant swaps and waterjet garnet removal
- Ongoing basic maintenance such as mopping, rust prevention, and clear work areas

MACHINE EXPERTISE: Some or All

HAAS VF2SS

HAAS ST10Y

DMS CNC 5-axis Router

Omax 60120 Waterjet

Shopbot 3-axis Router

Speroni Tool Measurer

Speroni Tool Setter

Datron Neo Mill

Matsuura Mx-330

Bridgeport

Tool Room Lathe

REQUIRED SKILLS

- Clear and frequent communication across the shop staff, shop management, vendors, contractors and shop users- in person, over the phone, and through email
- Ability to juggle many different projects and workshop users at once
- Organized and accountable
- Demonstrated background in engineering, machining, and CNC operation
- Excellent teaching capabilities and patience with new learners
- Good team builder
- Experience managing workshop supplies and budget
- Interest in learning what you don't know, sharing what you do know, and building an empowering workshop space