

# Mechanical Lead Designer/Engineer

## INTRODUCTION

Nearfield Instruments (NFI) brings together the most creative minds in science and technology to develop a revolutionary high throughput atomic force microscopy system enabling atom-scale resolution 3D metrology at industry-level throughput, based on three pillars:

- Unrivaled measurement speed;
- Parallelization capability;
- Advanced measurement modes.

At NFI, we design, develop, integrate, market and service these advanced metrology machines, which enable our customers - the world's leading chipmakers – to increase the production yields, and thus, functionality of their microchips, which in turn leads to smaller, more powerful consumer electronics. We aim to develop leading edge metrology systems, to be installed at the customer site, within specifications, on time, with quality exceeding the customer's expectations.

## WHAT WILL YOU BE DOING?

As a Mechanical Lead Designer/Engineer you will be responsible for the design of the equipment infrastructure of our metrology systems. This work consists of a translation of the architecture into a design that meets the requirements: creation of the 3D CAD design, volume control, engineering changes, and communication to (and where necessary negotiation between) the interfaces. The other part of the work is to make sure the design can be manufactured, will be serviceable and meets the availability requirements. You collect specifications needed to generate a design and create a design within a multidisciplinary module which needs specific flows or temperature requirements, document this and present where necessary. Moreover, you make sure the design is documented with proper models and drawings. You can perform the right calculations to predict the functionality (MATLAB, Finite Element analysis, Mathcad, or similar tools), interface with (internal) customers and suppliers. If needed, you can steer junior designers in making high quality designs. In conclusion, you are able to work together with the architect, lead engineers, team lead and (junior) designers, to enable reliable, stable, safe, contamination-free, cost effective and easy to manufacture/service systems. You will report directly to the CTO.

## WHAT DO WE REQUIRE OF YOU?

The Mechanical Lead Designer/Engineer we seek ideally has at least 5 years of experience as a mechanical designer in the field of mechatronics systems development in a working environment which, in terms of complexity, is in line with that of NFI. Experience in the field of semiconductor equipment is a plus. Furthermore, you need to recognize yourself in the profile as described below.

### You have:

- BSc or MSc degree in Mechanical engineering;
- NX, Solid Works, Solid Edge or ProEngineer experience is a pre, CAD experience is a must;
- Experience in design in a complex, technical, multi-disciplinary environment;
- Ability to excel in creative design and flawless execution of parts/(sub)modules;

- Experience in analyzing applicability, accuracy and adherence to design specifications;
- Affinity with precision mechanics;
- Experience with MATLAB, Finite Element (ANSYS or COMSOL), MATHCAD is a plus;
- Prepared written technical reports on an independent basis;
- Experience in system design and analysis;
- Experience working in a multi-disciplinary engineering environment, with suppliers and co-developers, to ensure timely realization of competitive, high precision, complex components and assemblies;
- Strong written and oral communication skills and a commitment to achieving results on time;
- You have a good command of the English language, both written and spoken.

### HAS THIS VACANCY AROUSED YOUR INTEREST?

Then please feel free to apply on this vacancy! Nearfield Instruments offers an exciting, fast-paced working environment where you will be able to shape the system and the company.

For further questions don't hesitate to contact us.

**Hiring manager:** Hamed Sadeghian (CTO)

**Email address:** [hamed.sadeghian@nearfieldinstruments.com](mailto:hamed.sadeghian@nearfieldinstruments.com)

**Phone number:** +31(0)646966027

