



Job Title: **Fluid Systems Engineer / Senior Fluid System Engineer**

SUMMARY

NorthStar's mission is to transform the medical radioisotopes industry by becoming a global leader of innovative diagnostic & therapeutic medical radioisotopes. In fulfillment of this mission, NorthStar continues to develop groundbreaking isotope processing methods.

NorthStar is in search of a Mechanical or Chemical Engineer to assist the development of a particle accelerator based radioisotope processing system. This position will assist senior engineers in the integration of already designed cooling, vacuum, piping, and gas systems into the building housing the accelerator. The position will also ensure the vacuum of the accelerator beamline, and will develop the needed requirements. The individual will join the Accelerator team and will contribute to the entire design and development of its ongoing work.

All projects and duties will be completed in compliance with applicable cGMP, FDA, and all other regulatory agencies standards.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following, other duties may be assigned:

1. Develop internal P&IDs and evaluate P&IDs created by outside vendors and National Laboratories as needed for NorthStar's requirements
2. Perform detailed mechanical design and analysis of precision components from a variety of materials and production processes
3. Create and modify complex product assemblies
4. Integrate commercial and custom accelerator hardware to further NorthStar's mission
5. Work with supporting scientists and engineers at Argonne and Los Alamos National Laboratories currently working on this project under National Nuclear Security Administration (NNSA) funding.
6. Develop test and production equipment and tooling using SolidWorks software
7. Deliver engineering solutions in response to development, hardware, manufacturing, and operational needs
8. Document designs, trials and other work in engineering reports, manages and updates drawings, specifications, and BOM's through Change Orders
9. Present designs and project progress to peers and occasionally company leadership
10. Work collaboratively in cross-functional teams

Ability and willingness to travel up to 10% of the time.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

The level of this position will be set commensurate with experience.

Minimum Requirements

- 14) Bachelor's degree in Mechanical or Chemical Engineering, or an associated discipline.
- 15) Experience with SolidWorks tools
- 16) Experience with piping and flow diagrams and techniques
- 17) Hands on experience in mechanical development including mechanical tolerancing.
- 18) Ability and willingness to travel domestically occasionally, including possible visits to Argonne and Los Alamos labs. During install, commissioning, and qualification, daily presence in Beloit will be required.
- 19) Demonstrated ability to work within a multidisciplinary team.

Preferable Qualifications

- 1) 2 or more years' experience in the mechanical development of mechanical devices in a regulated environment (medical, automotive, aerospace), or equivalent combination of education and experience
- 2) Knowledge of particle accelerator technology
- 3) Experience with industrial cooling systems
- 4) Experience in vacuum systems and/or helium systems
- 5) Experience with medical device design and development and/or FDA/cGMP compliance
- 6) Experience with thermal and/or FEA modeling

OFFICE COMPUTER SKILLS

Proficient knowledge of Microsoft Office software programs including Outlook, Word, and Excel.

OTHER QUALIFICATIONS

- Excellent communication skills, verbal and written
- Ability to handle multiple tasks simultaneously
- Ability to work in a fast-paced environment
- Adaptable to change in the work environment
- Ability to work in a team environment, as well as independently