

Mechanical Research Mechanic

Job Description

Mechanical research mechanics are the hands-on workers that install and maintain any mechanical components that are involved in the accelerator, beam line, accumulator ring, targets, and instruments.

Education

- High School Diploma

- Training in an electrical field is required (apprenticeship program, military training, technical school, etc.)

- Work experience in a mechanical trade field is preferred

Approximate Salary Range

The approximate salary range for research mechanics is about \$45,000 – \$90,000

What can I do now to prepare?

- Learn how to use many types of tools: screw drivers, wrenches, drills, etc.

- Research apprenticeship opportunities or military opportunities in the mechanical field and determine what qualifications you need to get into one of those programs.

Career Spotlight



Bill Smith: Field Supervisor of Mechanical Research Mechanics

Mechanical research mechanics are in charge of the hands-on installation and maintenance of the specialized systems involved in the beam line, the accelerator, the accumulator ring, the target, and the instruments at the SNS. The research mechanics work with many unique mechanical systems that are crucial to the function of the whole facility. Some examples include water systems, vacuum systems, systems controlling gasses going in and out of the beam, and piping systems. There is so much variety of what a research mechanic might be working on any given day. Bill Smith is a field supervisor over many different groups of mechanical research mechanics at the Spallation Neutron Source. After high school, Bill went to college to play football and earn a degree in education. He rerouted his path after a football injury and thought that going into a trade was a stable career option. He went to a trade school and then spent some time as a plumber before expanding his career into pipe fitting. As he gained work experience, he learned more and more about mechanics and how different equipment functions. Bill ended up coming to work for the SNS as it was being built which then led to a position as a research mechanic. Now as a supervisor, he is able to help other research mechanics using his extensive experience in the field. In addition to a background in mechanic trades, this job requires a good work ethic and willingness to learn and ask questions.

Interview: Bill Smith

- What is your job title?

Mechanical Field Supervisor for Mechanical Research Mechanics

- Describe your job as if you were talking to a middle schooler.

Bill supervises the research mechanics but before this position he was a research mechanic himself. Research mechanics work on the intricate equipment involved in the accelerator, the accumulator ring, the beam line, the target and the instruments. The mechanics work with systems involved with water, air, gases, piping, and vacuum.

- What qualifications or education are necessary in order to begin a career in this field?
What other jobs did you have that got you to this position?

High school diploma plus trade school, technical school, apprenticeship program through a union or military training are the usual requirements for this job.

After high school, Bill went to college to play football and earn a degree in education. He rerouted his path after a football injury and thought that going into a trade was a good stable career option. He went to a trade school and then spent some time as a plumber before expanding his career into pipe fitting. As he gained work experience, he learned more and more about mechanics and how different equipment functions. Bill ended up coming to work for the SNS as it was being built which then led to a position as a research mechanic. Now, he is able to help other research mechanics using his extensive experience in the field.

- What skills (besides the background knowledge) do you think are essential in your job in order to be successful?

A hard-working mindset and willingness to learn and ask questions.

- Why is your job important to the Spallation Neutron Source?

We build and maintain the machine and make the facility run.