

#### **Job Situation**

Office with computer, phone, fax. Also work in the plant, around machines. Reporting to upper management.

## Weekly Hours of Work

40

### **Overtime**

As required

#### **Monthly Salary**

\$3,600

#### Student Loan - Owing

\$22,000

# **Student Loan – Monthly Payment**

\$300

#### **Duties**

Supervise the design, fabrication, and installation of mechanical systems. Develop maintenance standards, schedules, and programs. Investigate mechanical failures. Supervise technicians, technologists and mechanics. Administer budget. Report to management. Consult with other specialists.

#### **Prospects**

Senior management. Larger, more ambitious projects. Consulting.

#### **Job Title**

# Mechanical Engineer

# **National Occupational Classification (NOC)**

2132

## **Job Description**

It is the Mechanical Engineer's duty and pleasure to build and maintain a system of machines and equipment to perform a particular job or process. This requires an understanding of machinery, the people who maintain it and use it, and the process or product desired. Every situation is unique and requires creative thinking to find the unique solution. It is a tall order, but for you it is a giant puzzle you can't wait to put together.

The first step is choosing components—finding machines that can do the job and accessories like hoppers and conveyors necessary to link them together. If the equipment can't be bought ready-made it must be designed and made to order under your supervision. Installing a new system is a real challenge. Will the floor support that machine or must it be reinforced? Is there enough power or do you call in the electrical engineer? How will you connect the new equipment to the existing machinery? Everyone loves to work with you because of your creative ideas and because you are so easy to get along with.

When the basic installation is complete, the system must be fine-tuned to run smoothly and efficiently, with no pile-ups or bottlenecks. This stage involves a lot of consultation with the people working on the plant floor. Because the machinery is all linked, if one machine is down the whole system stalls, and downtime is money lost. If something serious does go awry in the middle of the night shift, it will probably be you they call to get out of bed and lead the rescue effort.

Developing maintenance programs and instructing and supervising maintenance staff and equipment users helps prevent problems. You need excellent communications skills for working with the staff. You also report to and consult with management, who may not understand the first thing about nuts and bolts issues. That's why they hired you!