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Heavy Equipment Operator

Job Description

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.

Work Conditions

Construction equipment operators work in nearly every weather condition. Workers often get dirty, greasy, muddy, or dusty. Most work full time, and some operators may have irregular hours. Some construction projects, especially road building, are done at night.

How to Become a Heavy Equipment Operator

Many workers learn equipment operation on the job, while others learn through an apprenticeship or by attending private trade schools.

- **Education**

- A high school diploma or equivalent is required for most jobs. High school courses in English, math, and shop are useful. A course in auto mechanics can also be helpful because workers often perform maintenance on their machines.
- Private vocational schools offer programs in certain types of construction equipment operation. Finishing one of these programs may help someone get a job. However, people considering this kind of training should check the school's reputation among employers in the area and find out if the school offers the opportunity to train on actual machines in realistic situations.
- A lot of information can be learned through instruction; to become a skilled construction equipment operator, however, a worker needs to be able to physically perform the various tasks. Many training facilities incorporate sophisticated simulators into their training, allowing beginners to familiarize themselves with the equipment in a controlled environment.

- **Training**

- Many workers learn their jobs by operating light equipment under the guidance of an experienced operator. Later, they may operate heavier equipment, such as bulldozers. Technologically advanced construction equipment with computerized controls and improved hydraulics and electronics requires greater skill to operate. Operators of such equipment may need more training and some understanding of electronics.
- Other workers learn their trade through a 3- or 4-year apprenticeship. For each year of the program, apprentices must have at least 144 hours of technical instruction and 2,000 hours of paid on-the-job training. On the job, apprentices learn to maintain equipment, operate machinery, and use special technology, such as a global positioning system (GPS). In the classroom, apprentices are taught map reading, operating procedures for special equipment, safety practices, and first aid. Because apprentices learn to operate a wider variety of machines than do other beginners, they usually have better job opportunities.



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- After completing an apprenticeship program, apprentices are considered journey workers, doing tasks with less guidance.
- A few groups, including unions and contractor associations, sponsor apprenticeship programs. The basic qualifications for entering an apprenticeship program are as follows:
 - Minimum age of 18
 - High school education or equivalent
 - Physically able to do the work
 - Valid driver's license
- **Licenses, Certifications, and Registrations**
 - Construction equipment operators often need a commercial driver's license to haul their equipment to various jobsites. State laws about commercial driver's licenses vary.
 - A few states have special operator's licenses for operators of backhoes, loaders, and bulldozers.
 - Currently, 18 states require pile-driver operators to have a crane license because these states classify pile-drivers as cranes. In addition, the cities of Chicago, New Orleans, New York, Omaha, Philadelphia, and Washington, DC require special crane licensure.
 - Some construction equipment operators choose to teach in training facilities. Other operators start their own contracting business, although doing so may be difficult because of high equipment startup costs.
- **Important Qualities**
 - **Hand-eye-foot coordination**
Workers should have steady hands and feet to guide and control heavy machinery precisely, sometimes in tight spaces.
 - **Mechanical skills**
Construction equipment operators must perform basic maintenance on the equipment they operate. As a result, they should be familiar with hand and power tools and standard equipment care.
 - **Unafraid of heights**
A few equipment operators must work at great heights. For example, pile-driver operators may need to service the pulleys that are located on the roof of a building.

Wage Information:

The table below shows the estimated Employment Wage Statistics for individuals in North Dakota employed as Heavy Equipment Operators in 2013.

Rate Type	Entry level	Mean	Experienced
Annual Wage	\$38,370	\$48,690	\$53,850
Hourly Wage	\$18.45	\$23.41	\$25.89

For more information [click here.](#)



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