

DELTA COLLEGE
COUNSELING/ADVISING & CAREER SERVICES
MACHINE REPAIRER

Salary range: \$12.84 - \$34.89 per hour
Personal Interests: Working with tools and equipment
Work Environment: Basically indoors

Description

Machine repairers maintain or repair machinery in a plant or factory. Their work is important because an idle machine will delay production and a machine that is not working correctly may damage the product or injure the operator.

Machine repairers may observe and inspect equipment regularly, oil, grease and clean parts, remove and replace worn or defective parts, redesign parts, adjust controls on machinery and equipment and test equipment to ensure proper function. They also keep maintenance records of the equipment serviced.

Machine repairers must be able to diagnose and detect minor problems before they become major. For example, after hearing a vibration from a machine they must be able to decide whether it is due to worn belts, weak motor bearings or some other problem.

Some of the tools and equipment machine repairers use include hoists and cranes, milling machines, hand and power tools, shapers, lathes and grinders, micrometers, rules and calipers, testing equipment and operators manuals.

Installation of new machinery is another responsibility of machine repairers. As plants invest in new equipment they increasingly rely on these workers to properly situate and install the machinery. In many plants, this has traditionally been the job of millwrights. As employers increasingly seek workers

who have a variety of skills, machine repairers are taking on new responsibilities.

Working Conditions

Machine repairers usually work under the direction of a plant or shop supervisor. They may work alone or as a member of a repair team depending on the type of machinery being repaired and the extent of the job.

Most repairers work inside factories or other industrial areas although some outdoor work may be required due to the location of a particular piece of machinery. Work areas may be hot and greasy and may require working in cramped or stooped positions. They are subject to common shop injuries such as cuts and bruises. Goggles, helmets and safety shoes help to protect them from injury.

Repairers generally work a 5-day, 40-hour week, although they may work night or weekend shifts. They may be called to the plant during off-duty hours for emergency repairs. Overtime is very common among machine repairers because factories cannot afford breakdowns.

Training, Other Qualifications

Many machinery repairers learn their trade through a 4-year apprenticeship program combining classroom instruction with on-the-job training. These programs are usually sponsored by a local trade union. Some workers start as helpers and pick up the trade informally while taking courses.

Classroom courses focus on subjects such as mathematics, blueprint reading, machine reconditioning, industrial physics, metallurgy, drive components, bearings, welding, hydraulics and pneumatics, machine methods and computer training. Apprentice repairers learn from experienced repairers how to operate, disassemble, repair and assemble machinery.

Most employers prefer to hire those who have completed high school. High school courses such as mechanical drawing, mathematics, blueprint reading, physics, computers and electronics are especially useful.

Delta College offers the required trade related instruction which can lead to an Associate in Applied Science Degree for this skilled trade career. Students must earn a total of 62 credits from Delta College and receive a journeyman card from their employer to earn the Associate Degree.

Mechanical aptitude and manual dexterity are important characteristics for machine repairers. Good physical conditioning and agility are also necessary because repairers sometimes have to lift heavy objects or climb to reach equipment located high above the floor.

Job Outlook

About 7,455 industrial machine repairers were employed in Michigan in 2004. Most worked in or near metropolitan areas and large cities. A small number of industrial machine repairers were self-employed. Most machine repairers were employed by manufacturers of motor vehicles, machinery, fabricated and primary metal products, and chemical and food products. Other industries employing industrial machine repairers included mining, wholesale trade, and utilities.

The employment of industrial machine repairers in Michigan is expected to grow about as fast as the average for all occupations through the year 2014. Approximately 230 openings will occur yearly during this period

Earnings

Hourly wages in Michigan for Industrial Machine Repair Workers in early 2005 were:

Area	Average
Michigan	\$24.67
Battle Creek	\$20.79
Detroit	\$25.60
Grand Rapids	\$25.97
Jackson	\$24.67
Kalamazoo	\$21.88
Lansing	\$26.09
Muskegon	\$22.64
Warren	\$25.87

Related Occupations

Some occupations related to machine repairers include aircraft mechanic, truck and bus mechanic, machinist, farm equipment mechanic and railway equipment mechanic.

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Sources: Occupational Outlook Handbook, MI Occupational Information System, and Delta College Catalog.

Career Center, D132
Bay City/Saginaw: (989) 686-9072
Midland/Auburn: (989) 495-4000, Ext. 9072
Frankenmuth, Birch Run, Reese & Vassar: (989) 758-3400, Ext. 9072
<http://www.delta.edu/careercenter>

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