

Production

Occupations within this sector:

- **Assemblers and fabricators**

Employment of assemblers and fabricators is expected to grow 5 percent from 2010 to 2020, slower than the average for all occupations.

Within the manufacturing sector, employment of assemblers and fabricators will be determined largely by the growth or decline in the production of certain manufactured goods. In general, overall employment is not expected to grow as fast as all other occupations because many manufacturing sectors are expected to become more efficient and able to produce more with fewer workers.

However, automation is not expected to have a large effect on the assembly of products that are low in volume or very complicated. Intricate products and complicated techniques often cannot be automated.

- **Dental laboratory technicians**

Employment of dental laboratory technicians is expected to experience little or no change from 2010 to 2020.

- **Food processing occupations**

Employment of food processing occupations is expected to grow by 12 percent from 2010 to 2020, about as fast as the average for all occupations. More people around the world are demanding prepared and pre-cut food. Also, more people are buying partially prepared and easy-to-cook products. Both of these trends are expected to drive demand for food processing workers. These trends will create growth in the occupation even as new machines make the work more productive.

- **Medical appliance technicians**

Employment is expected to grow 4 percent from 2010 to 2020, slower than the average for all occupations.

Although advances in technology may spur demand for prostheses that allow for more natural movement, increased productivity in manufacturing due to automation will slow growth for technicians

- **Metal and plastic machine workers**

Employment of metal and plastic machine workers is projected to grow 6 percent from 2010 to 2020, slower than the average for all occupations. Employment will be affected by advances in technology, changing demand for the goods these workers produce, foreign competition, and the reorganization of production processes.

- **Power plant operators, distributors, and dispatchers**

Employment of power plant operators, distributors, and dispatchers is expected to experience little or no change from 2010 to 2020. Although electricity usage is expected to grow, advances in technology and

increased energy efficiency are projected to result in a 2 percent decline in employment for the occupation. Employment growth will vary by specialty.

- **Printing workers**

Employment of printing workers is expected to decline 4 percent from 2010 to 2020. Newspapers and magazines have seen substantial declines in print volume in recent years, as these media have increasingly moved to online formats. With a declining volume of printed material in these areas, demand for print workers has decreased.

- **Quality control inspection**

Employment of quality control inspectors is expected to grow 8 percent from 2010 to 2020, slower than the average for all occupations. Projected employment growth reflects the continuing need to have quality assurance testing in a variety of manufacturing industries, particularly in pharmaceuticals and medical equipment.

- **Semiconductor processors**

Employment of semiconductor processors is projected to decline rapidly, by 18 percent from 2010 to 2020. Although there is a strong demand for semiconductors in many products, automation at fabricating plants is expected to grow, meaning the plants will hire fewer workers. Because the rooms have to be kept so clean, it is more effective to use robots to do many of the simple tasks that processors once did. In addition, the increasing complexity of chips, combined with their reduced size, makes it difficult for people to work on them.

- **Sewers and tailors**

Employment of sewers and tailors is expected to experience little or no change, growing 1 percent from 2010 to 2020. Growth will be limited as clothing continues to be made in other countries and the demand for custom clothing keeps declining.

- **Upholsterers**

Employment of upholsterers is expected to grow by 4 percent from 2010 to 2020, slower than the average for all occupations. Growth is expected because demand is projected to increase for reupholstering work on used and antique furniture.

Although overall employment of upholsters is expected to increase by 4 percent, employment of upholsterers in manufacturing industries is expected to decline by 3 percent from 2010 to 2020. Much furniture manufacturing has been sent to countries where labor is less expensive, thus limiting the demand for upholsterers.

- **Water and wastewater treatment plant and system operators**

Employment of water and wastewater treatment plant and system operators is projected to grow 12 percent from 2010 to 2020, about as fast as the average for all occupations.

Job prospects for water and wastewater treatment plant and system operators should be excellent. New jobs will be created when existing plants expand and new plants are built. Applicants will also have many job opportunities because many current operators are expected to retire.

- **Welders**

Employment of welders, cutters, solderers, and brazers is expected to grow 15 percent from 2010 to 2020, about as fast as the average for all occupations.

Employment growth reflects the need for welders in manufacturing because of the importance and versatility of welding as a manufacturing process. The basic skills of welding are the same across industries, so welders can easily shift from one industry to another, depending on where they are needed most. For example, welders laid off in the automotive manufacturing industry may be able to find work in the oil and gas industry.

Overall job prospects will vary by skill level. Job prospects should be good for welders trained in the latest technologies. Welding schools report that graduates have little difficulty finding work, and many welding employers report difficulty finding properly skilled welders. However, welders who do not have up-to-date training will face competition for jobs.

- **Woodworkers**

Employment of woodworkers is projected to grow 18 percent from 2010 to 2020, about as fast as the average for all occupations.

Employment growth should be good for woodworkers who specialize in items used in renovation, such as moldings, cabinets, stairs, and windows.