

### CNC Machining Professional

#### What is a CNC Machining Professional?

CNC Machining Professionals program and operate computer-controlled metalworking machines to produce precision components through processes such as milling, turning, drilling or grinding. After setting up the CNC machines, they monitor them to ensure they are working properly; if malfunctions occur during operations, the professional runs tests to identify the cause of the problem and correct it.

#### What are the daily duties of a CNC Machining Professional?

CNC Machining Professionals operate, set up, and program CNC equipment and systems to mill, turn, drill or grind precision components. When setting up the machines and systems, they conduct tests to ensure the machines are running properly. They verify that the components that are produced meet the quality requirements, including documenting the progress and the results. Professionals may also determine the best methods for manufacturing complex parts and create the code used by the machinery for the manufacturing process.

#### What types of skills make a CNC Machining Professional successful?

Successful professionals work safely and understand the appropriate precautions. They are able to interpret technical diagrams and documents, and are comfortable with geometry. Professionals enjoy creating things and have a strong attention to detail, especially when it comes to correct documentation. Finally, a professional should be able to communicate effectively and efficiently.

#### What's the difference between the CNC Machining Professional and the Advanced Manufacturing Technician Role?

While the roles and responsibilities vary greatly, the main difference is specialization. A CNC Machining Professional is an expert with deep knowledge of metalworking and machining processes, whereas an Advanced Manufacturing Technician has broad knowledge of many different aspects of high-tech manufacturing.

Illinois-related activities are part of a project or programs funded in whole or in part with Federal money through a grant, AP-27959-15-60-A-17, received from the US Department of Labor's Employment and Training Administration in the amount of \$3,995,000. The expenditure for these program materials accounts for (1) <1 percent of the total grant financed with Federal money; (2) the dollar amount of Federal grant funds is \$3,995,000; and (3) Federal funds represent 12 percent of the total costs of the project or program, with the balance financed by non U.S.-governmental sources.

