

# CNC Machines 3 eLearning Courseware | Denford Microturn

**Introduction to CNC Lathe Programming - WB709D-AB01UEN-E1**

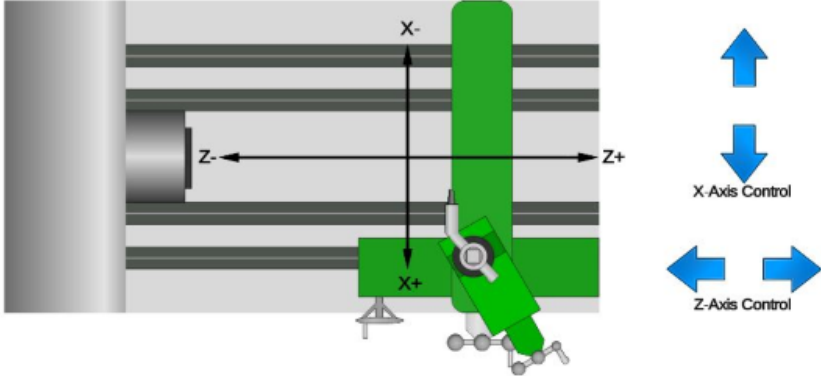
Objective 1: Describe the Operation of a CNC Lathe

**Lathe Axial Movement**

A lathe only has two axes of tool movement, X and Z. These axes differ from the X and Z-axes of a mill.

The Z-axis of a lathe runs along the length of the part, while the X-axis runs in and out at a 90-degree angle to the Z-axis.

When a program is run on a CNC lathe, the cutter is moved along the length of the part at various depths to create the desired part.



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## eLearning Course: MB709D

Amatrol's CNC Machines 3 - Denford Microturn eLearning course (MB709D) covers an introduction to CNC lathe programming and lathe circular interpolation. Learners will study the operation, programming, and components of a CNC lathe and then write a program to create a part with a specific fillet, based on part drawing.

## Teach Introductory CNC Lathe Operation

### Basic Lathe Code

Users will learn about basic lathe codes, including both G-code for rapid traverse and linear interpolation commands and M-code for end of program commands. Circular interpolation G-Codes using I,K and direct radius are also explored in depth.

## Interactive eLearning

### CNC Machines 3 eLearning Curriculum Focuses on Industry-Relevant Skills

Amatrol's peerless [interactive multimedia curriculum](#) utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

## Additional Info

### Requires:

- Computer ([see Computer Requirements](#))

### Options:

- CNC Machines 3 Learning System - Denford Microturn ([96-CNC3D](#))

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