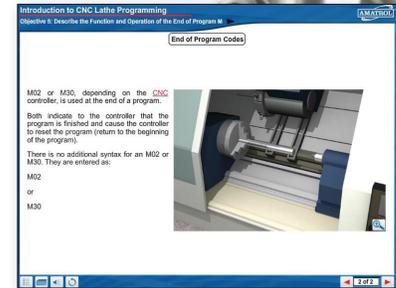


CNC Machines 3 Learning System

96-CNC3D



CNC Denford Microturn Lathe included with 96-CNC3D



Interactive Multimedia and Student Reference Guide



Learning Topics:

- CNC Lathe Programming
- Safety Checkout
- Basic Lathe G-Codes
- Basic Lathe M-Codes
- Lathe Circular Interpolation
- Absolute and Incremental Programming
- Program Interpretation

Amatrol's CNC Machines 3 Learning System (96-CNC3D) introduces learners to the CNC lathe and covers the operation and programming of this vital industrial machine. Learners will study the basic components and function of the lathe and then write programs to reduce the diameter of a shaft and create a part with a specific fillet. Lathes are one of the most widely used machines in industrial settings, found in every machine shop, so understanding their operation and function is vital for future members of the workforce.

CNC Machines 3 includes a Denford Microturn CNC Lathe, a tooling package, multimedia curriculum, an instructor's guide, installation guide, and a student reference guide. Learners will use the curriculum to study CNC lathe topics like basic lathe G- and M-codes, absolute and incremental programming, circular interpolation, and program interpretation, and then practice applicable, industry-relevant skills with the Denford Microturn CNC lathe.



Technical Data

Complete technical specifications available upon request.

Denford Microturn CNC Lathe (94-CNC-L60)

Tooling Package for CNC Lathe

- Tool Bit, Carbide Tipped, Right Hand (2)
- Tool Bit, Carbide Tipped, Left Hand (2)
- Threading Tool, Carbide Tipped (2)
- Cutoff Tool and Holder (2)
- Boring Bar, 1/4-in. Shank
- Insert for 3/8-in. Boring Bar (4)
- Drill Stub, 1/4-in.

Multimedia Curriculum (MB709D)

Instructor's Guide (CB709D)

Installation Guide (DB709D)

Student Reference Guide (HB709D)

Additional Requirements:

- CNC Machines 1 Learning System (96-CNC1)
- CNC Lathe Raw Metal Material Kit (94-RM9)
- Computer: See requirements: <http://www.amatrol.com/support/computer-requirements>

Additional Recommendations:

- Mobile Technology Workstation (82-610)

Utilities:

- Electricity (120 VAC/60 Hz/1 phase)

Design a CNC Lathe Program for use on the Denford Microturn CNC Lathe

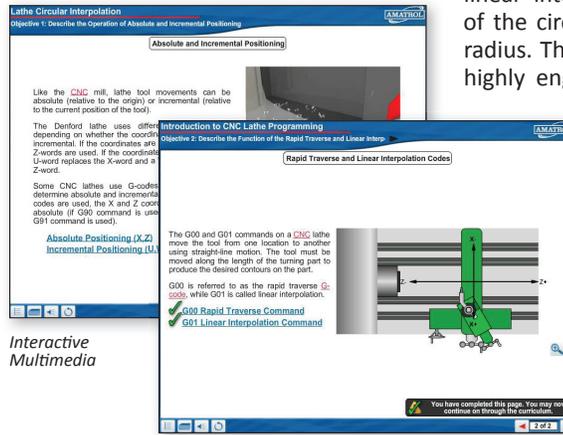


Denford Microturn
CNC Lathe

The Denford Microturn CNC lathe is a compact, 2-axis CNC lathe with totally covered interlocking guards. The Denford Microturn lathe was designed specifically for training and education and features variable spindle speeds and feedrates that make it ideal for cutting a vast array of synthetic materials. Specific to the 96-CNC3D, learners will practice hands-on skills like determining coordinates based on a dimensional part drawing, designing a program using linear interpolation, writing a program using absolute and incremental positioning, and designing a program using circular interpolation. If you already own a Denford Microturn CNC lathe, Amatrol also offers the 96-CNC3-DC, which provides all of the tooling and curriculum included with the 96-CNC3D, but excludes the Microturn lathe.

Learn About Circular Interpolation G-codes Using Direct Radius

The 96-CNC3D's curriculum covers a wide range of CNC lathe topics. Examples of these topics include safety checkout and component identification, the function of the rapid traverse and linear interpolation G-codes, and the operation of the circular interpolation G-codes using direct radius. This curriculum is presented in a stunning, highly engaging multimedia format. The curriculum is designed for both self-paced and classroom use and can be accessed anywhere with a computer.



The multimedia curriculum features the depth of topical knowledge for which Amatrol is well known, but adds 3D graphics, videos, interactive quizzes and activities, and voiceovers of the text.

Interactive
Multimedia

Build Teamwork, STEM, and Problem-Solving Skills with Project Based Learning

The 96-CNC3D is just one system among many that are part of Amatrol's Project Based Learning program. Designed specifically for high school students, Amatrol's Project Based Learning program offers a rock-solid foundation of teamwork, STEM, and problem-solving skills across a wide range of industry-relevant areas. Within Project Based Learning, students will practice real-world skills on electrical, fluid power, thermal, automation, and mechanical systems, just to name a few. Students will then use these skills to complete team-based project kits like building a hovercraft or an automated can crusher.

Student Reference Guide

A sample copy of the CNC Machines 3 Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.

