

# Tooling for Machining Centers eLearning | Industrial Machining Training

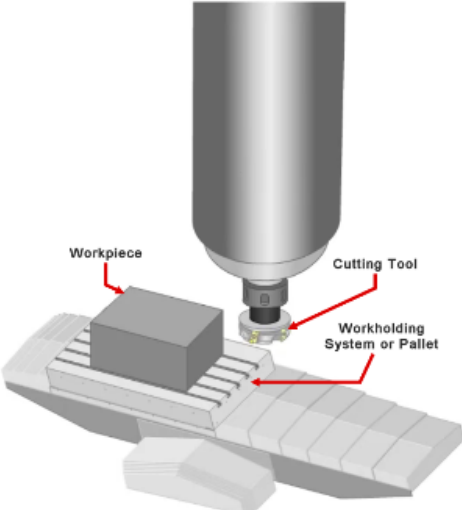
**Machining Center Tools - WXTL203-XX01XEN-E2**

Objective 1: Define a Machining Center and Describe the Function and Operation of Two Types

**Machining Center Definition**

A **machining** center is a power-driven machine that moves a rotating cutting tool into a **workpiece** to create a part.

With a workpiece mounted on a workholding system or pallet, the machining center relies on its Computer Numerical Control (CNC) to manage the machine movements and systems to apply the cutting tool to the workpiece.



The diagram illustrates a machining center setup. A vertical cutting tool is positioned above a rectangular workpiece. The workpiece is mounted on a grey, multi-tiered workholding system or pallet. Red arrows point from labels to the 'Workpiece', 'Cutting Tool', and 'Workholding System or Pallet'. The Amatrol logo is in the bottom left, and navigation icons and 'Page 2 of 88' are in the bottom right.

## eLearning Course: MXTL203

Amatrol's Tooling for Machining Centers eLearning (MXTL203) focuses on machining center tools, nomenclature, proper care, and equipment assembly. This industrial machining course covers topics like: the types of machining centers; the components of a tool holder; the general identification of non-indexable tools; proper care required for inserts and tool holders; and when to submit damage reports.

## Teach Machine Tool Nomenclature

### Indexable Insert Identification Codes

The standardized naming systems created by ANSI (American National Standards Institute) and ISO (International Organization for Standardization) are broken down for learners in this course. This includes an explanation of their similarities and differences. The use of various numbers and letters and their meaning based on their position within the identification code is explained with examples and practice questions. Users will learn how indexable cutting tools are identified by their geometric shape, relief angle, tolerance range, insert features, inscribed circle, thickness, and corner radius.

## Interactive eLearning

### Tooling for Machining Centers eLearning Features Multimedia Curriculum

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](#))
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