

# Surface Plates eLearning | Multimedia Courseware

## Surface Plates - WXMT202-XX01XEN-E2



Objective 1: Describe a Surface Plate and Explain Its Importance

Measuring in Manufacturing

ELECTRONIC DIGITAL CALIPER

In manufacturing, measuring is required to make a part to a **specification**, and again after manufacturing during inspection to make sure the part was built to specification.

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## Surface Plates Web Course: MXMT202

The Surface Plates eLearning course focuses on the types and uses, components and accessories, and best practice uses and applications of surface plates. Major topics include: the function of a surface plate; the information on the nameplate; the significance of surface plate color; common grades; calibration tests; and surface plate safety and care.

### Teach Hands-On Skills

#### What is a Surface Plate?

In manufacturing, measuring is required to make a part to a specification, and again after manufacturing during inspection to make sure the part was built to specification. Measurements must be started from a known reference point. The surface plate, which represents flatness, is the most basic and common starting point for the most inspection work because it defines a flat plane.

A surface plate is a solid, flat plate used as the main horizontal reference plane for precision inspection, layout, and tooling setup. The surface plate is used as a baseline for all workpiece measurements. Though it may look like a simple block of stone, it is actually as precise an instrument as any other in the factory. Without an accurate surface plate, even some of the most complex inspection instruments are useless. All of the instruments shown here are useless without an accurate surface plate as a reference point. Surface plates are used for inspection, both in the shop and in the inspection area, for layout, for quality control, and for setting tools precisely.

#### Surface Plates eLearning Features Multimedia Curriculum

Amatrol's unmatched [multimedia](#) utilizes text, audio, and stunning 3D animations that engage learners in theoretical knowledge and concepts. This thorough, exceptionally detailed curriculum is built to begin with the basics and steadily advance to more complex concepts. Through partnerships with key industry leaders and leading edge educators, Amatrol developed the right balance of knowledge needed to train learners to work in their chosen field.

## Additional Info

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- **Additional Requirements**

- Computer: [See requirements](#)

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