

Quality Assurance Inspection Instruments eLearning | Interactive Multimedia Curriculum

Surface Texture and Hardness Testing - WXMT211-XX01XEN-E2

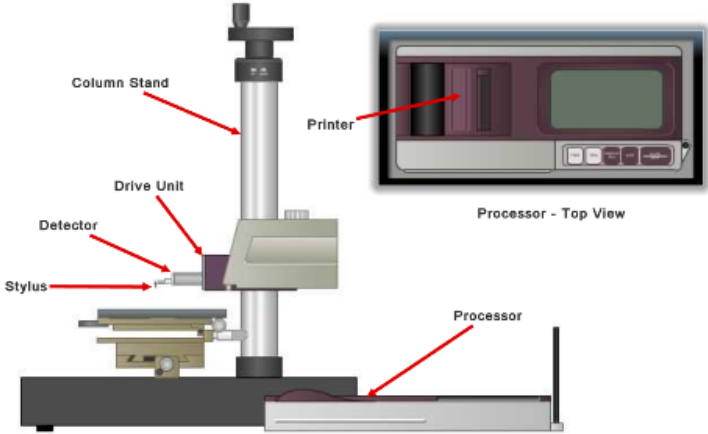
Objective 5: Describe the Construction of a Profilometer

Common Components

The most common type of profilometer in manufacturing has the following components:

- Stylus
- Detector
- Drive Unit
- Processor
- Printer
- Column Stand

Other components are unique to the type of profilometer, specifically whether it is a skidded or skidless version.



Column Stand

Drive Unit

Detector

Stylus

Processor

Printer

Processor - Top View

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eLearning Course: MXMT211

Amatrol's Quality Assurance Inspection Instruments eLearning course (MXMT211) covers topic areas for quality assurance inspection like: surface texture, profilometers, and hardness testing. Within these areas, Amatrol's interactive multimedia courseware covers the types of surface texture symbols, the types of profilometers, and common methods of indentation testing.

Teach QA Inspection Instruments

What is Surface Texture? Why is it Important?

Surface texture describes the characteristics of a part's surface as a result of the machining process. The term 'surface texture' may also be referred to as surface finish or surface roughness. No surface is perfectly smooth. When examining the surface texture of a machined part closely, it forms either a balanced and uniform pattern or one that is uneven. If the surface is magnified, it becomes apparent that it forms an intricate three-dimensional landscape.

Surface texture is important not only in the appearance of a product, but also in the manufacture of parts that require specific friction, lubrication, and wear demands. When a part is machined, even a small deviation in its surface texture can affect its reliability, cost, and shorten its overall life span.

Interactive eLearning

Quality Assurance Inspection Instruments 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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Address

**Amatrol
2400 Centennial Blvd
Jeffersonville, IN 47130**

Contacts

**email: contact@amatrol.com
phone: (800) 264 8285**