

SURFACE FINISH MEASUREMENT BASICS

eLearning courses designed to increase productivity and profits



Learning Made Simple, Visual, and Interactive

The THORS *Surface Finish Measurement Basics* course introduces the learner to the types of measurement of surface finish. This course also covers various surface finish parameters, exploring their interpretation and significance. Presented in THORS' highly visual and interactive learning format, this course will equip the learner with a foundational knowledge of surface finish measurement.

Credit Hours **2**

Learning Objectives

- 💡 Understand the terminology associated with surface finish.
- 💡 Define the various surface finish parameters and their significance.
- 💡 Understand the different ways of representing surface finish on engineering drawings.
- 💡 Distinguish the different types of surface finish measurement techniques.
- 💡 Interpret the various surface finish parameters.

Table of Contents

I. Terminology

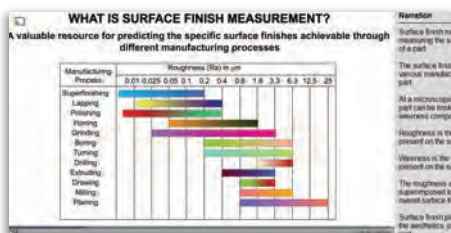
- Profile
 - ▣ Primary Profile
 - Periodic Profile
 - Nonperiodic Profile
 - ▣ Filtering
- Surface Finish Parameters
 - ▣ Amplitude Surface Finish Parameters
 - ▣ Spacing Surface Finish Parameters
- Surface Finish Symbols
- Surface Finish Representation
 - ▣ Basic Representation
 - ▣ Detailed Representation

II. Measurement and Interpretation

- Qualitative Measurement
 - ▣ Surface Finish Master
 - ▣ Measurement Process
- Quantitative Measurement
 - ▣ Contact-Type Measurement
 - Components
 - Measurement Process
 - Advantages and Limitations
 - ▣ Noncontact-Type Measurement

II. Measurement and Interpretation (continued)

- Interpretation of Surface Finish Parameters
 - ▣ Amplitude Surface Finish Parameters
 - Ra
 - Rq
 - Rmax
 - Rz
 - ▣ Surface Surface Finish Parameters
 - RSm
 - RPlc
 - RHSC



Irregularity	Amplitude Surface Finish Parameter	Description
Roughness	Ra	Average Amplitude of Roughness
	Rq	Root Mean Square Average of Roughness
	Rmax	Maximum Peak-to-Valley Distance of Roughness
	Rz	Average Maximum Height of Roughness
Waviness	Wa	Average Amplitude of Waviness
	Wq	Root Mean Square Average of Waviness
	Wmax	Maximum Peak-to-Valley Distance of Waviness
	Wz	Average Maximum Height of Waviness

