

GEAR CHART INTERPRETATION: ELEMENTAL MEASUREMENTS ON CYLINDRICAL GEARS

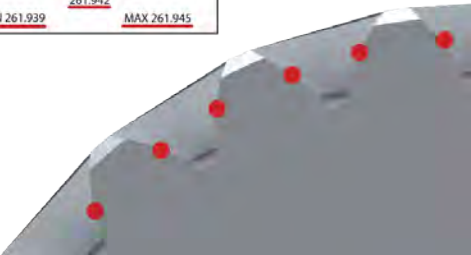
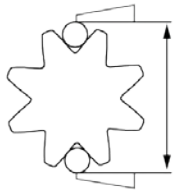
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Gear Chart Interpretation: Elemental Measurements on Cylindrical Gears introduces learners to the latest ISO global gear accuracy standard, the factors that define gear accuracy, and the evaluation of measured deviations against the allowable deviations on a gear inspection report, or “gear chart”. In this course, learners engage with animations and interactives demonstrating the analytical quality inspection processes performed to obtain the values classified as elemental measurements according to the global standard

Credit Hours 1.5

THORS WORKS		THORS E-LEARNING SOLUTIONS v0.1
ISO 1328-1-B14 VAL	M _s (mm) 261.900 / 261.950 261.942	
	MIN 261.939	MAX 261.945



Learning Objectives

- 💡 Recognize how common standard ANSI/AGMA ISO 1328-1-B14 defines a gear’s accuracy class.
- 💡 Differentiate between the three geometry parameters of pitch, profile, and helix deviation, that make up elemental measurements according to the common standard, and the terminology related to each.
- 💡 Understand the significance of runout and tooth size measurements, in addition to elemental measurements, in helping determine a gear’s quality level.
- 💡 Identify the typical components of a gear inspection report, or “gear chart”, for cylindrical gears.
- 💡 Relate the relative distance of an actual measurement from the zero, or design, line on a gear chart to what that means about the inspected gear’s geometry.

Table of Contents

I. What are Gear Charts?

II. Gear Accuracy Measurements

- Pitch Deviation Measurements
- Profile Deviation Measurements
- Helix Deviation Measurements
- Runout Measurement
- Size Measurement

III. Gear Chart Interpretation

- Chart Header
- Pitch Deviation Chart
 - Radial Runout Chart
 - Tooth Size Chart
- Profile Deviation Chart
- Helix Deviation Chart

