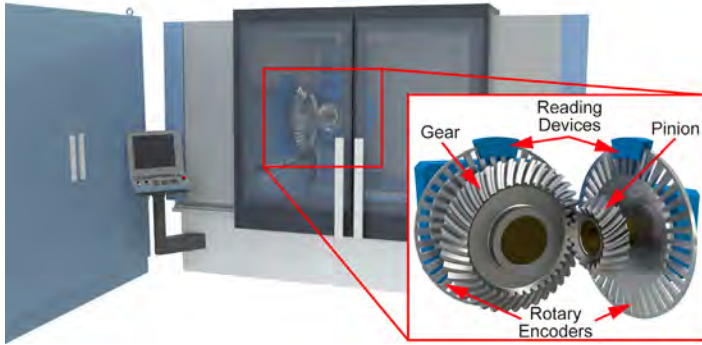


Gear Chart Interpretation: Composite Measurements on Bevel Gears

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Credit Hours **1.5**

The THORS *Gear Chart Interpretation: Composite Measurements on Bevel Gears* course introduces learners to the composite measurement methods applied to bevel gears tested in pairs rather than individual gears. It explores tooth contact pattern testing and flank composite testing to evaluate gear meshing quality and overall functional performance. Presented in THORS' highly interactive format, the course includes a detailed overview of the associated equipment, testing procedures, and interpretation of test results.

Learning Objectives

- Understand the purpose of composite measurements on bevel gears.
- Explain tooth contact pattern testing, including the testing procedure, required equipment, and contact pattern recording methods.
- Interpret the results of the tooth contact patterns to identify the tooth contact condition.
- Explain how the V and H check is used to evaluate contact pattern changes caused by vertical and horizontal pinion displacement.
- Gain insight into the flank composite testing procedure and the specific equipment used.
- Distinguish between single flank and double flank composite testing, including how to interpret their results.

Table of Contents

I. Tooth Contact Pattern Testing

- Gear Roll Testing Machine
- Testing Procedure
- Pattern Recording
- Pattern Interpretation
 - Tooth Contact Pattern Data Analysis
 - Total Runout Deviation Characterization
- V and H Check
 - Testing Procedure
 - Bias Measurement

II. Flank Composite Testing

- Single Flank Composite Test
 - Single Flank Tester
 - Testing Procedure
 - Results Interpretation
- Double Flank Composite Test
 - Double Flank Tester
 - Testing Procedure
 - Results Interpretation
 - Traditional Method
 - New Method

