

Vacuum Gauges

MODULE 101

Learning Activities	Time in Class	Outside Time
8	6.5 hrs	3 hrs

OVERVIEW

Semiconductor manufacturing equipment requires the use of many different types of vacuum gauges. Selection is based on range of process operations and production requirements. This MATEC module explores the theory and functionality of vacuum gauges and provides many examples of different types of gauges. The focus is on understanding the operation and applications constraints of each type of gauge. Practical applications of vacuum measurement are discussed, and mathematical equations are used to explain calibration, sensitivity, and overall operations of each type of gauge.

MODULE CONTENTS



Narrative Overview

- Learning Activity 01: Direct Liquid Wall Gauges
- Learning Activity 02: Direct Solid Wall Gauges
- Learning Activity 03: Vacuum Gauge Technology
- Learning Activity 04: Indirect Viscosity and Thermal Gauges
- Learning Activity 05: Measuring Temperatures
- Learning Activity 06: Indirect Ionization Gauges
- Learning Activity 07: Magnetron and Extractor Gauges
- Learning Activity 08: Questor Game
- Slide Show 01: Direct Liquid Wall Gauges
- Slide Show 02: Direct Solid Wall Gauges
- Slide Show 03: Indirect Viscosity and Thermal Gauges
- Slide Show 04: Indirect Ionization Gauges
- Slide Show 05: Crossword Puzzle
- Performance Assessment 01:
- Animation 01: "The Questor Game"
- Animation 02: Bourdon Tube Gauge



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