ENGINEERING TRAINER

Introduction to Steam Turbines

This introductory steam-turbine course explains the thermal dynamics of a steam cycle and how the key gas path components fit into this cycle. It covers work, enthalpy, phase and heat-flow diagrams, flow direction, blade types and common industrial turbine configurations. This self-paced online course includes video lectures, and a completion certificate with PDH credits.

Buy This Course

Request a Quote or Invoice

ONLINE	SELF-PACED	1-YEAR ACCESS
1 MODULE	1.5 PDH	1.5 HOURS

TRUSTED BY ENGINEERING TEAMS WORLDWIDE

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What you'll learn

Join us in this course to learn about steam turbines in an industrial setting. You will first be introduced to the thermodynamics of steam turbines, covering concepts such as work done and enthalpy, followed by phase diagrams and heat flow diagrams based on industry-relevant steam turbines.

The course will then explain the different classifications of steam turbines, starting with radial vs. axial and impulse vs. reaction blading, before moving on to velocity compounding. In the third part, the classification will be explored in more detail, covering topics such as condensing turbines, extraction turbines, back-pressure turbines, reheat turbines, and the role of the API 611 and API 612 standards.

Skills you'll gain

- ✓ understand what a steam turbine is and how it operates
- ✓ understand the key thermodynamic principles behind turbine performance
- ✓ can explain the conversion of steam energy into mechanical motion
- ✓ understand turbine classifications based on flow direction and blade type
- ✓ can identify common turbine configurations used in industry

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About the instructor

Dimitris Antoniadis

Power Plant Maintenance Manager

Who this course is for

- ✓ Mechanical engineers new to steam-turbine systems
- ✓ Rotating-equipment engineers who need a turbine introduction
- ✓ Operations engineers working with steam turbines
- ✓ Maintenance engineers supporting steam turbines
- ✓ Power-plant technicians who need turbine-system context

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COURSE CONTENT

Introduction to Steam Turbines

- Course Introduction
- What is a Steam Turbine?
- Thermodynamics
- According to Flow Directions
- According to Blade Type
- Classification
- Summary