

An LDI Training Course

Advanced Turbine Operational Issues, Performance and Evaluation

by Rachmat Sudjana, ST.

Introduction

This course provides Engineers and Company Staff, who seeking an in-depth understanding of Turbine Operational Issue, Performance and Evaluation

This will cover the discussion of why it is important to lean this skill? Gas turbines are a significant prime mover in industrial plant application. For this reason, it is important for the Engineers to understand the principles of operational issues, performance and evaluation of gas turbine.

The Aims

It is important to understand the basic knowledge of Turbine Operational Issue, Performance and Evaluation to support long maintenance program to keep the equipment availability and reliability in accordance with specified codes and standards.

Course Contents

- Describe the working principles, components, types, applications, systems,
- Startup & Shutdown procedure
- Regular Gas turbine maintenance
- Describe energy transformation in gas turbine engine
- Describe turbine engine performance and specifications
- Advanced methods of gas turbine maintenance (bore scope condition monitoring)
- The gas turbine engine
- Basic cycle
- Advantages and disadvantages
- Applications
- Gas turbine engine components



- Radial and axial air compressor
- Combustors and it types
- Turbine and its type
- Gas turbine engine performance and specifications
- Leading particulars
- Compressor characteristics
- > Turbine characteristics
- Component losses and matching
- > Gas turbine maintenance
- Air inlet filtration
- Compressor blades erosion
- Compressor fouling
- Inspection schedules
- Safety precautions
- Bore-scope inspections
- Cracks testing
- Bearings
- > Fuel nozzles
- Condition monitoring instrumentation description
- Application of Standards and Codes
 - ISO 19859:2016 API 619: Gas Turbines Application Requirements
 - ASME PTC 22 2023: Gas Turbines

Who Should Attend

Mechanical Engineers, Electrical Engineers, Operations Engineers, Instrumentation Engineers whom are working in gas turbine operation and maintenance

Course Leader

Rachmat Sudjana, ST

Education: - Industrial Engineering, University of Indonusa, - Mechanical Engineering, AKAMIGAS

Qualifications: - Professional Instructor for Oil and Gas Industry, - Technical Subject Matter Expert for Oil Company, - Lecturer and Mentor for Graduate Engineering Trainee, - Engineering Manager, - Senior Staff Pipeline/Facility Engineer, - Pipeline Material Selection Specialist

He possesses highly experienced and dedicated Professional Instructor with over 40 years of experience in the Oil & Gas industry, both domestically and internationally. Proven track record as a Technical Subject Matter Expert, Lecturer, and Mentor for



graduate engineers. Skilled in pipeline material selection, facility engineering, and engineering management.

He is a seasoned professional with a passion for sharing knowledge, and eager to contribute his expertise to the next generation of engineers and continue to stay updated with industry developments.

He was an Oil & Gas Industry Practitioner in World class Oil Companies (Retired), Company Engineer of Foster Wheeler, Reading, UK, Lecturer, and Mentor of Graduate Engineering Trainee.

He presented technical papers at national and international forums **c**ontributed to the development of oil and gas industry professionals

Course Information

- This offline (face to face) course is conducted in Bahasa Indonesia
- Training hours are from 08:00 to 16:00 WIB
- Participants will receive course materials
- Participants will receive a certificate after completing the training

For course registration and more information please email to

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