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RECIPROCATING COMPRESSORS, MAINTENANCE AND TROUBLESHOOTING

Start Date:	24/11/2025	**End Date:**	28/11/2025
Categories:	Engineering & Maintenan	**Venues:**	London
Formats:	In Person	**Instructors:**	Marinel Hercut

OVERVIEW

This technical course offers participants an in-depth understanding of reciprocating compressor systems used in oil, gas, and industrial applications. It focuses on design principles, maintenance planning, failure diagnostics, and troubleshooting techniques that improve reliability and reduce downtime.

OBJECTIVES

By the end of this course, participants will be able to: – Understand the construction and working principles of reciprocating compressors. – Perform routine and preventive maintenance procedures. – Identify and troubleshoot common operational problems. – Analyze vibration, temperature, and performance data. – Apply best practices in inspection, lubrication, and overhauling.

COURSE OUTLINE

1- Introduction to Reciprocating Compressors 2- Component Design, Operation, and Performance 3- Maintenance Procedures and Planning 4- Troubleshooting Techniques and Case Studies 5- Predictive Diagnostics and Condition Monitoring

TARGET AUDIENCE

Maintenance engineers, mechanical technicians, rotating equipment engineers, and reliability professionals in oil & gas and industrial facilities.

METHODOLOGY

Classroom instruction, equipment case studies, fault simulation exercises, group diagnostics, and maintenance planning workshops.

CONCLUSION

Participants will gain hands-on skills to maintain, inspect, and troubleshoot reciprocating compressors, ensuring safe and efficient operations.

DAILY AGENDA

Day 1: Compressor Principles and Design

Understand types of compressors, working cycles, and components like pistons, valves, and crank mechanisms.

Day 2: Operational Parameters and Performance

Study performance curves, pressure ratios, flow calculations, and thermodynamics of operation.

Day 3: Maintenance and Inspection Practices

Apply scheduled maintenance, lubrication standards, wear checks, and overhaul planning.

Day 4: Failure Modes and Troubleshooting

Explore common failures such as valve wear, pressure leaks, vibration issues, and temperature surges.

Day 5: Diagnostics and Predictive Monitoring

Use vibration, oil, and temperature analysis for condition-based monitoring and predictive alerts.

For more information, please contact us:
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