

ROTOFLOW ENGINEERING TRAINING

Invest in Your Team. Protect Your Assets.



Maximize Uptime. Minimize Risk. Empower Your Team.

Rotoflow Engineering Training Services are designed to help your team operate, maintain, and troubleshoot your turbomachinery with confidence and precision. Our training programs deliver practical, hands-on knowledge tailored to your specific equipment and operational environment. Participants not only gain a thorough understanding of the intricacies of turbomachinery, but emerge equipped to proactively identify risks, implement best practices and drive greater operational efficiency.

Training Service Details

Summary: Ensure your team has the skills necessary to safely operate Rotoflow equipment, analyse problems and take necessary actions. Emphasis is placed on the description of the major components and the functions of the auxiliary systems found on the expander.

Duration: Three 8-hour days (with scheduled breaks) of hands-on instruction with the option of remote classroom training in substitution of one of the in person days.

Audience: Ideal for engineers, supervisors, operations & maintenance personnel (up to 15 trainees, please advise for larger groups).

Instructor: One highly qualified Rotoflow engineer with decades of experience and operational know-how.

Why Choose Rotoflow Training?

Expert-Led Instruction

Learn directly from Rotoflow engineers who design, build, and service the very equipment you rely on. Our trainers bring decades of real-world experience and deep technical insight.

Customized for Your Equipment and Team

Training is tailored to your specific machinery, operating conditions, and team skill levels—ensuring relevance and immediate applicability.

Boost Operational Efficiency

Well-trained teams make faster, smarter decisions. Reduce downtime, avoid costly errors, and extend the life of your equipment.

Safety First

Equip your team with the knowledge to identify risks early and follow best practices for safe operation and maintenance.

Flexible Delivery Options

On-site, virtual, or hybrid formats available to meet your scheduling and logistical needs.



Training Content

Section	Topics
1. Expander General Overview	History of turboexpander technology, Application Overview
2. Expander Theory	Isentropic Expansion Principles, Joules-Thompson Effect, Efficiency, Gas Composition, Components which effect operation and efficiency, Classes of Turboexpander
3. Expander Components and Assemblies	Impellers, Bearings, Shafts, Seals, Centrifugal Compression, Other Types of Expander Loading, Installation Layout, Major Equipment Location
4. Auxiliary Systems	Lube Oil System, Control & System, Seal Gas System, Process Components, Quick Shutoff Valve
5. Turboexpander Control System	PLC & Human Machine Interface (HMI), Machine Protection, Startup & Shutdown Sequences, IGV Control and Load Variation
6. Key Parameters During Turboexpander Startup and Running Conditions	Operating Parameters Monitoring, Operating Parameters Evaluation
7. Turboexpander Performance Curves	Review performance curves and their interpretation
8. Turboexpander Assembly	Intricacies of turboexpander assembly
9. Turboexpander Maintenance Overview	Operating factors affecting maintenance intervals, Preventive maintenance
10. Turboexpander Scheduled Maintenance	Scheduled inspection, Repair process overview
11. Turboexpander Emergency Maintenance	Addressing emergency maintenance protocols
12. Recommended Spare Parts Strategy	Suggests strategies for managing spare parts inventories
13. Turboexpander Troubleshooting	How-to..., Frequently asked questions
14. Turboexpander Instruction Manual	Navigating the manual, Improving organizational efficiency

How do I get more information/sign up?

To learn more about our training services and course curriculum, or to set up a program for your team, contact your local Commercial Manager or call 610-706-6000 or email connect@rotoflow.com.

About Rotoflow

Rotoflow, an Air Products business, combines one of the industry's most trusted names in turbomachinery with world-leading industrial gas expertise. We're transforming the hydrocarbon, LNG, petrochemical, and industrial gas markets with superior equipment performance and unrivaled reliability, safety, and value.

Technological innovations expertly integrated with decades of know-how are the foundation for Rotoflow's valued products, proven performance, and world-class service. Rotoflow has collectively built over 4,000 expanders and our proven designs have hundreds of millions of successful hours of operation. We help customers around the world reach their unique technology and operational targets more efficiently than ever before.