

COMPRESSOR TECHNOLOGY TRAINING

TRAINING INFORMATION FOR PROCESS GAS

Training Location: Customer Site

Training is essential for the safe operation and maintenance of compressors. In order to minimize downtime and maximize profit, these complicated machines need the attention of competent, professionally trained people.

Burckhardt's Education Campus offers you training at your site. Our professional trainers with many years of field service experience will travel to your site to teach your staff the theory of compressor function. (*Hands-on training is only available in Winterthur, Switzerland*).

Burckhardt Compressor Technology Training prepares your staff in every aspect of compressor handling; Compression theory, preventive maintenance, reliable operation, maximizing mechanical availability and maintenance planning are just some of the key topics covered that will enhance your compressors life cycle.



Options for operational and maintenance training

- 3 days (only theory)

Target Group		<ul style="list-style-type: none"> • Maintenance supervisors • Operator and maintenance personnel • Service engineers • Process managers, control specialists
Participants		Maximum 10 recommended: or to be defined on customer's classroom infrastructures. Classroom features: Beamer, flipchart, whiteboard etc.
Training Days	Process Gas	2 days (adjustment of topics and further duration can to be determined)
Training Options	Prognost	2-day training in addition to the Process Gas training
Languages		English, German
Training Dates		To be agreed
Tailor-made training		Customized training courses can be developed to suit your exact requirements. Please contact the Training Center for further Information
Travel to job site		Burckhardt Compression AG specialist arrives at the closest airport to the job site. Customer is asked to arrange pick-up from the airport to the hotel. Daily pick-up to and from the job site will be provided by the customer.

Training is not limited to Burckhardt compressors. Training on Non-Burckhardt compressors can also be provided.

Other available trainings

Hyper compressor training

General reciprocating compressor training

Laby® compressor training

Laby®-GI compressor training

Process Gas

2-Day training program (Theory only)



1. INTRODUCTION
2. COMPRESSOR DETAILS & DESIGN
 - In depth understanding of design features and Process Gas compressors
 - Designation of the Process Gas compressors
 - Compressor components: crank gear, distance piece
 - Superbolt and hydraulic connections
3. PROCESS GAS COMPRESSOR CYLINDER
 - Design aspect of cylinders
 - Cylinder piston & piston rod, piston rod packing, valves
4. CAPACITY CONTROL AND MONITORING SYSTEM
 - Methods to control compressor capacity
 - Suction valve unloaders, bypass control, monitoring diagnostics
5. OPERATION
 - Project information
 - Compressor operating range
 - Discuss the process and the P & ID's of gas, oil, coolant
 - Capacity control
 - Controls and logic
 - Control description, Start/Stop, continuous operation
6. COMMISSIONING
 - Special activities for pre-commissioning of the equipment
 - Startup procedure
 - Do's and don'ts during operation
7. INSTRUCTION MANUAL
8. TROUBLE SHOOTING
 - Discuss possible problems
 - Learning what to do in case of emergency situations
9. VALVES AND UNLOADERS
 - Removal and installation of valves and other key components
10. MAINTENANCE AND REPAIR OF THE COMPRESSOR
11. FINAL DISCUSSION AND Q&A
12. TEST

PROGNOST SYSTEM

2-Day optional training program (Theory and computer hands on)

1. INTRODUCTION
2. START UP
 - Start of VISU
 - Systems connection
 - Windows and desktop
 - Machine status
 - Warning and alarm colors
 - DSC data
3. ONLINE DATA
 - Basic knowledge
 - Online diagram
 - Scaling
 - Using online compositions
 - Daily snapshot
4. TREND DATA
 - Basic knowledge
 - Trend diagram
 - Scaling
 - Using trend compositions
 - 3D trend effects
5. RINGBUFFER
 - Basic knowledge
 - View data
 - Using data trend compositions
 - Triggering user ring buffer
 - Specific ring buffer analysis
6. LOGBOOK
 - Logbook
 - One Click-fast check
7. PRESENTING OF SIGNALS ANALYSIS
 - Basic knowledge
 - Type: Vibration (acceleration and velocity)
 - Type: Dynamic pressure (time based and pV)
 - Type: Displacement (Proximity – rod/plunger position)
 - Machine depending analysis (power, hours, losses, rotation and torque)
8. ADDITIONAL TOPICS
 - Signal plausibility
 - Operations conditions
 - Warning thresholds
 - Safety limits
 - VISU option

GENERAL INFORMATION

Travel to Switzerland

Participants arriving at Zürich Airport are kindly requested to travel by train to Winterthur.

The railway station is located in the airport building itself.

Direct trains to Winterthur are available every 15 minutes. Travelling time is approx. 15 minutes.

Recommended hotels in Winterthur

<u>Hotel Banana City</u> www.bananacity.ch/en Schaffhauserstrasse 8 CH - 8400 Winterthur Tel. +41 52 268 16 16 E-Mail: info@bananacity.ch	<u>Hotel Wartmann</u> www.wartmann.ch/en Am Bahnhof Winterthur Rudolfstrasse 15 8400 Winterthur Tel. +41 52 260 07 07 Fax +41 52 213 30 97 E-Mail: wartmann@wartmann.ch
<u>Park Hotel Winterthur</u> phwin.ch/en Stadthausstrasse 4 CH-8400 Winterthur Tel +41 52 265 02 65 Fax +41 52 265 02 75 E-Mail:welcome@phwin.ch	<u>Plaza Hotel Winterthur</u> www.plazahotel.ch Technikumstrasse 12, 8400 Winterthur Tel +41 52 212 15 15 E-Mail: info@plazahotel.ch

For more information

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