

COMPRESSOR TECHNOLOGY TRAINING

TRAINING INFORMATION FOR LABY®-GI

Training Location: Winterthur, Switzerland

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.

Here at Burckhardt's Education Campus, we provide training with specialized trainers and unique programs that consist of theoretical and hands-on courses. We offer a large modern training center in Winterthur with full size compressors that prepare your staff for the real experience. We believe classroom sessions combined with the **hands-on** training experience is the key to fully understanding the function of a compressor.

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 operation and maintenance training

- 2 days (theory & hands on)
- Optional + 2 days of Prognost training. Theory & computer hands on. Min. 5 participants

Target Group		<ul style="list-style-type: none"> • Maintenance supervisors • Superintendents • Operator and maintenance personnel • Service engineers, chief engineers, cargo engineers • Process managers, control specialists
Participants		Minimum 3 / Maximum 8
Training Days	Laby®-GI	3-day training
Training Options	Prognost	2-day training in addition to the Laby®-GI 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

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

Other available trainings

Laby® compressor training

General reciprocating compressor training

Hyper compressor training

Process gas compressor training

LABY[®]-GI

3-Day training program (Theory & hands on)

1. INTRODUCTION
2. PLANT DESIGN AND AUXILIARY EQUIPMENT
 - Learning and understanding your plant design in 3D view
 - Introduction to P & ID
 - Auxiliary equipment
 - Oil separator, oil demister and waste oil management
 - Cylinder lubrication
3. COMPRESSOR DESIGN
 - History and development of Laby[®]-GI compressors
 - Designation of the Laby[®]-GI compressors
 - Balancing technology
 - Design aspects of Laby[®]-GI
4. SPARE PARTS ON BOARD
5. INSTRUCTION MANUAL
6. GENERAL MAINTENANCE TOPICS (HANDS ON TRAINING)
 - Clearance measurements
 - Dismantling packings and shaft seal
 - Dismantling valves, piston, and piston rings
 - High pressure parts
7. OPERATION AND CONTROL PROCESS
 - General process overview
 - LNG marine process and control concept
 - Compressor related control valves
 - Different modes of control system
 - Abbreviations
 - Capacity control and valve unloaders
 - Control valves basics
 - Process control dependencies
8. DISCUSSION AND Q&A
9. 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. ADITIONAL TOPICS

- Signal plausibility
- Operations conditions
- Warning thresholds
- Safety limits
- VISU options

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

Please contact:

Mr. Alex Blickenstorfer

Tel.: + 41 52 261 56 08

alex.blickenstorfer@burckhardtcompression.com

www.burckhardtcompression.com