

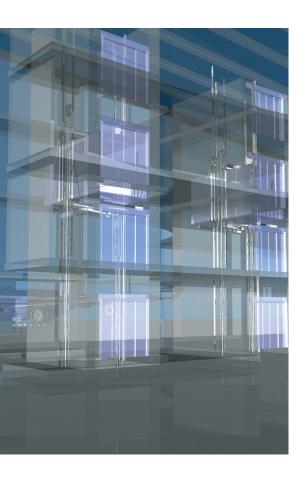
# Training Program 2024

Investment in the future of your employees



# Elevator Hydraulics

From theory to practice



# Welcome to Bucher Hydraulics

Every day we are asked how we can improve the travel characteristics of older hydraulic elevator installations. In many cases, a few small steps are enough to do the job. But which ones?

The first requirement for this task is that service personnel are familiar with the functionality of the installed components, and know and understand the control options and the various settings.

In the elevator world, as in every industry, the demands for energy efficiency and safety are increasing, and elevators face the additional challenge of providing ever-improved travel comfort.

In many cases it does not make sense to replace a complete system, either from an ecological or an economic point of view.

With its MULTIkit system, Bucher Hydraulics offers a staged modernization program. With the right choice of components, modernization provides for improvements in travel characteristics, a potential reduction in the required electrical-supply rating, and massive energy savings.

Take part in our training course and learn about the modernization program directly from the experts. Benefit from our know-how, apply your new knowledge immediately and thus raise your customers' satisfaction levels.

Heinrich Uhe, Technical Trainer Elevator

### Which Courses Are Available?

iValve – Actual Valve Generation Course 200

LRV-1 – Electronically Controlled Elevator Valve

Course 300

Frequency Controlled Drives
Course 400

Lifter / Cylinder Course 500

Hydraulic Elevator Systems Compact Course (3 Days)

Course 600

Course dates

in Neuheim, Switzerland

Dates on request

in Brensbach, Germany

Dates on request

Additionally, at the customer on request





# What kind of training ambiance do we offer?

- Qualified and experienced instructors
- Professional introduction into theory and practice
- Individually designed workshops
- Extensive training documentation
- Freely selectable training location
- Courses in three different languages

### Actual Valve Generation iValve – Course 200

#### Goals

- Understanding the functionality of the valve
- Problem recognition, solution and improvements on site
- Modernization with iValve

#### Content

- Mechanical and hydraulic functions
- Electrical functions
- Basic settings, parameter overview using handterminal and software – iWin
- Tips and tricks for settings in theory and practice
- Requirements for controller
- Notes for maintenance and service
- Modernization opportunities MULTIkit iValve

#### Target group

- Maintenance and service technicians
- New-system technicians
- Final inspection technicians and testing engineers
- Service managers / technical supervisors
- Trouble-shooter

#### Course duration

- 1 dav

### Electronically Controlled Elevator Valve LRV-1 – Course 300

#### Goals

- Understanding the functionality of the valve
- Problem recognition, solution and improvements on site

#### Content

- Mechanical and hydraulic functions
- Electrical functions
- Basic settings, parameter overview using handterminal and software – WinDelta
- Tips and tricks for settings in theory and practice
- Notes for maintenance and service
- Modernization opportunities MULTIkit iValve

#### Target group

- Maintenance and service technicians
- New-system technicians
- Final inspection technicians and testing engineers
- Service managers / technical supervisors
- Trouble-shooter

#### Course duration

1 day

# Frequency Controlled Drives Course 400

#### Goals

- Understanding the functionality of the frequency-controlled technology
- Recognizing and understanding the advantages compared to standard hydraulic
- Problem recognition, solution and improvement on existing installations

#### Content (based on course 200 and 300)

- Mechanical and hydraulic functions with and without hydraulic counterweight
- Comparison of frequency inverter mechanism against standard power unit
- Electrical functions incl. frequency inverter
- Basic settings, parameter overview using handterminal and software WinDelta
- Tips and tricks for settings in theory and praxis
- Notes for maintenance and service
- Modernization opportunities

#### Target group

- Maintenance and service technicians
- New-system technicians
- Final inspection technicians and testing engineers
- Service managers / technical supervisors
- Trouble-shooter

#### Course duration

- 1 day

# Lifter / Cylinder Course 500

#### Goals

- Understanding the functionality of the different types of cylinders (plunger, tele, pulling) incl. pipe rupture valve
- Correct installation and commissioning
- Problem recognition, correct repair

#### Content

- Mechanical and hydraulic functions
- Installation instructions
- Resolving problems caused by dry running conditions, stickslip effect, noise emission
- Tips and tricks for seal kit change
- Notes for maintenance and service
- Function and testing of the pipe rupture valve

#### Target group

- Maintenance and service technicians
- New-system technicians
- Final inspection technicians and testing engineers
- Service managers / Technical supervisors
- Trouble-shooter

#### Course duration

- 1 dav

## Hydraulic Elevator Systems Compact Training Course 600

#### Goals

- Understanding the functionalities
- Recognizing and understanding different drive technologies (motor control – valve technology)
- Problem recognition, solution and improvements
- Modernization opportunities

#### Content

- Summary of courses 200 to 500
- Mechanical, hydraulic and electrical functions of the drive and the elevator control valve
- Function of the safety valve (pipe-rupture valve A3)
- Control and wiring requirements
- Required settings, parameters and maintenance instructions using the handterminal and software
- Comparison of frequency-inverter drive (with and without energy storage) with standard drive
- Modernization opportunities MULTIkit iValve

#### Target group

- Maintenance and service technicians
- New-system technicians
- Final inspection technicians and testing engineers (Accredited Inspection Body)
- Service managers / technical supervisors
- Trouble-Shooter

#### Course duration

- 3 days

# Which Consultants Are Supporting You?



#### Josè Guiot

Function:

**Head of Customer Support** 

Languages:

German, English and French



#### Heinrich Uhe

Function:

Service and training manager Germany

Languages:

German



#### **Patrick Furrer**

Function:

Service technician
Switzerland / worldwide

Languages:

German and English

# Training services and course fees

#### Training at Bucher Hydraulics AG in Neuheim, Switzerland

380 € / CHF 380.- excl. VAT per person per day.
 Compact course (3 days) fee 880 € / CHF 880.- excl. VAT per person per day.

#### Training services include:

- Training documentation
- Catering during training times
- Training attendance certificate

#### **Training duration**

- Courses 200 to 500 take 1 day (theory and practice)
- The compact course 600 takes place over 3 days (theory and practice)

#### Travel / accommodation

- Travel and hotel expenses shall be borne by the participant
- Hotel reservations for training courses in Neuheim can be arranged by Bucher Hydraulics AG on request

#### Training at the customer

- On request

# How to create the practical relevance?

#### Training using our Training Vehicle (trailer)

We attach great importance to the practical sessions. Thanks to our Training Vehicle you have the chance to take matters into your own hands after the theoretical part. We offer you the challenge to set parameters on our elevator simulator and learn about their influence.

Practice what you have just learned and improve the implementation with the help of our experts!

#### The Training Vehicle at your site

If you plan to train your personnel in house, the Training Vehicle can come to you (April to October). Only 3 parking spaces, 6 m free height (for the elevator-cylinder simulator) and a 3-phase 16 A power connection (400 V) is necessary.

### Registration Information

#### How to sign up?

Please fill out the registration form on our website www.bucherhydraulics.com/training and send it back to us:

E-Mail: service.elevator@bucherhydraulics.com

Phone: +41 41 757 03 53 (José Guiot)

+49 172 98 00 369 (Heinrich Uhe)

The costs have to be paid 4 weeks before the training starts.

#### Are there other training courses?

On demand we are happy to run other customized training. Please contact us to discuss your requirements.

#### Cancellation by participants

A personal cancellation of a participant can be submitted in written form by e-mail up to 4 weeks before the event. Later cancellations can not be taken into account and the course fee will not be refunded.

## **Training Location**



#### **Bucher Hydraulics AG**

Industriestrasse 15 CH-6345 Neuheim Tel.: +41 41 757 03 33

#### bucherhydraulics.com

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