

BECKER TRAINING

GROW YOUR SKILLS WITH OUR EXPERTISE

MAKE IT BECKER.





Dear readers,

welcome to our training centre, the Forum Gennebreck.

Discover the possibilities of the medium air in our extensive range of training courses and get to know various fields of application in different markets and areas. In our training courses, you have the opportunity to become familiar with the BECKER products.

We answer questions regarding operation, application and maintenance. Because only proper handling guarantees reliable, efficient operation – and therefore your satisfaction with our products.

Back in 1657 Otto von Guericke demonstrated the existence of vacuum with his spectacular experiments. Since then, the knowledge about vacuum technology has grown tremendously.

This results in a high demand for training, which we meet in our training centre - inspired by the pioneer, Otto von Guericke.

Our product trainer Klaus Kubitsch and our service technician Thomas Jacob are looking forward to entering the world of modern air technology together with you!



We are pleased about your interest in BECKER training courses. **Please contact our worldwide sales team for details and registration.** You will find a list of addresses at the end of the catalogue or visit us on our homepage. For any further questions regarding our training courses, our trainers will be happy to help you.

Of course we are also pleased to support you in finding suitable accommodation.



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BECKER TRAINING

Basic training6

Vacuum basics & pump principles

Electr. engineering basics in pump technology

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Rotary vane pumps

Screw pumps

Claw pumps

Roots booster pumps & pump stands

Side channel blowers

Radial blowers

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Pumps with VARIAIR frequency converter

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BECKER characteristic curve tool

BECKER Choice

BECKER parameterization tool

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Face-to-face training in the training center

Online training – Webinars



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VACUUM BASICS & PUMP PRINCIPLES

MAKE IT BECKER.

Content

Physical basics

Definition pressure & volume flow

Basics air supply system

Supplier and air consumer curves, determining operating points

Pipe pressure losses

Pump down time

Vacuum pumps & compressors at high altitudes

Vacuumpumps & compressors – different pump principles

Rotary vane pumps & gas ballast

Side channel blowers & radial blowers

Screw pumps & claw pumps

Roots-Booster-Pump stands

Pumps with frequency converter

Target group

Ideally suited for technicians, sales staff and users of vacuum technology.

Prior knowledge

Not required!

Hints

1-day compact training*

Basic knowledge

Good overview also for non-technicians

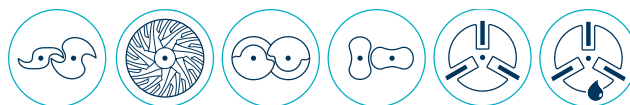
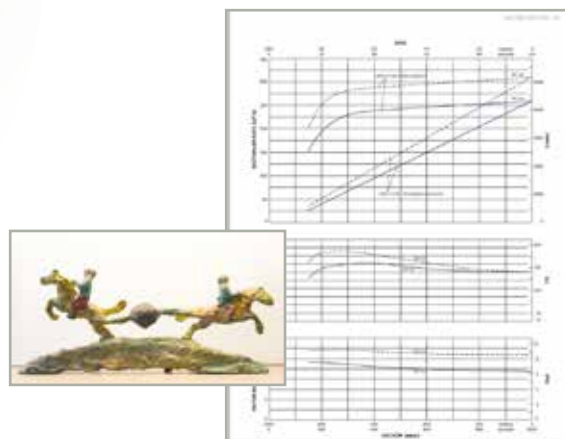
2-day intensive training course*

Especially suited for technicians

Optional:

+ Software training characteristic curve tool

BECKER Choice (2.5 days)



KEY DATA

This seminar is designed for 4 to 12 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Acquire basic knowledge of vacuum technology
- Get to know and understand the operating principles of BECKER vacuum pumps and compressors
- Get to know the BECKER product Portfolio

* All participants receive a certificate of participation at the end of each seminar.

**PRICE ON
REQUEST**

**REGISTRATION
VIA THE BECKER
SALES TEAM**
see list of addresses



ELECTRICAL ENGINEERING BASICS IN PUMP TECHNOLOGY

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Content

Dangers of electrical current

Safety measures

Basics electric circuit

Voltage, current & power

Direct current (DC), alternating current (AC), three-phase current

Cables

Circuit breaker

Electric motors to drive vacuum pumps and compressors

AC motor

Three phase motor

Nameplate

Efficiency classes (IE3)

Frequency converter drives for vacuum pumps and compressors

Target group

Ideally suited for technicians, sales staff and users of vacuum technology

Prior knowledge

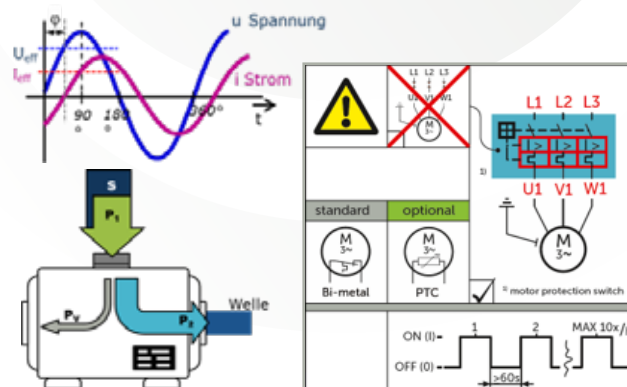
Not required!

Hints

2-day intensive training course*

Fundamental basic knowledge of electrical engineering with strong reference to pump technology

This seminar provides theoretical content from the field of electrical engineering but does not qualify the participants as electricians!



KEY DATA

This seminar is designed for 4 to 12 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Acquire basic knowledge of electrical engineering
- Learn and understand the design, function and use of different drives for vacuum pumps and compressors

* All participants receive a certificate of participation at the end of each seminar.

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PRODUCT TRAINING

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Specific training for the BECKER products



Oil-free
rotary vane pumps



Oil-lubricated
rotary vane pumps



Screw
pumps



Claw
pumps



Roots Booster
pump stands



Side channel
blowers



Radial
blowers

Content

Module 1 - Theory (M1)

Basics

Working principle and structure

Device overview and accessories

Applications & pump selection

Pump demonstration

Module 2 - Practice (M2)

Maintenance on different BECKER pumps

Target group

Ideally suited for maintenance staff, (service) technicians, sales staff and users of vacuum technology

Prior knowledge

Basic technical qualification basic knowledge of vacuum technology is recommended!

Hints

(1/2 day) Module 1:

Extensive basic knowledge for users and sales staff

(1/2 day) Module 2:

Especially for (service)technicians (please bring safety shoes)

The modules can also be booked separately!

KEY DATA

This seminar is designed for 4 to 8 people (M1) resp. for 2 to 4 people (M2) and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Acquire established knowledge about BECKER products
- Selection of the suitable pump solution for different applications
- Get to know the special features of the different pumps
- Carrying out maintenance independently (module 2 only)

* All participants receive a certificate of participation at the end of each seminar.

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VACUUM PUMPS & COMPRESSORS WITH FREQUENCY CONVERTER

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Content

Basics

Vacuum pumps & compressors – overview of frequency converters

Functions

Operation & fault messages

Application examples

Parameterisation & diagnosis software

BECKER KombiTool

Practical tests

on various devices

Target group

Ideally suited for technicians, sales staff and users of vacuum technology

Prior knowledge

Technical basic education

Basic knowledge of vacuum technology is beneficial!

Hints

For the practical tests a laptop is required on which the BECKER software KombiTool can be installed.

1-day compact training*

Basic knowledge for sales staff and users of vacuum technology

Some simple practical tests

2-day intensive training*

Especially for technicians

Get to know all functions

Numerous practical tests

VARIAIR
UNIT



KEY DATA

This seminar is designed for 4 to 8 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Acquire established knowledge about BECKER pumps driven by frequency converter
- Selection of the suitable pump solution for different applications
- Independent commissioning, operation and troubleshooting (only intensive training)
- Independently implement and test various functions (only intensive training)

* All participants receive a certificate of participation at the end of each seminar.

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SYSTEM CONTROLLER VACON+

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Content

Basics

Possible uses of the BECKER Controller

Hardware

Modular concept: Selection of components

Software

Installation & configuration (intensive training only)

Practical tests

at a System

Target group

Ideally suited for technicians and sales staff of vacuum technology

Prior knowledge

Technical basic education

Basic knowledge of vacuum technology is beneficial!

Hints

1-day compact training*

Extensive basic knowledge

Testing and operating the system

2-day intensive training course*

Get to know all functions

Independently perform installation and configuration

Remote control (desktop sharing) & create/adapt configurations

VARIAIR
CONTROLLER+



KEY DATA

This seminar is designed for 4 to 8 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Acquire established knowledge about the BECKER controller
- Selection of suitable components for different applications
- Knowing how to operate and troubleshooting
- Independently carry out the installation, configuration and remote control (only intensive training)

* All participants receive a certificate of participation at the end of each seminar.

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CHARACTERISTIC CURVE TOOL BECKER CHOICE

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Content

Features of the software

Structure and operation of the software

Installation and registration

A wide range of exercises

Target group

Ideally suited for technicians, engineers, sales staff and generally for users of BECKER pumps

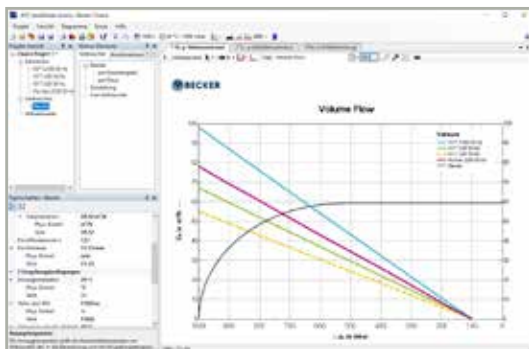
Prior knowledge

Basic knowledge of vacuum technology

Hints

1-day training*

The exercises require a laptop on which the BECKER Choice software can be installed.



KEY DATA

This seminar is designed for 4 to 12 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Get to know extensive functions and possibilities of the software
- Knowledge of how to operate the software
- Compare different pumps
- Determine operating points
- Selection of the suitable pump solution

* All participants receive a certificate of participation at the end of each seminar.

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PARAMETERIZATION TOOL BECKER KOMBITOOL

MAKE IT BECKER.

Content

Features of the software

Structure and operation of the software

Installation and registration

A wide range of exercises with frequency converters

Target group

Ideally suited for technicians, engineers, sales staff and generally for users of BECKER pumps

Prior knowledge

Basic knowledge of vacuum technology

Hints

1/2-day training*

The exercises require a laptop on which the BECKER KombiTool software can be installed.



BECKER
VARIAIR
KombiTool 8.0



KEY DATA

This seminar is designed for 4 to 12 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Get to know extensive functions and possibilities of the software
- Knowledge of how to operate the software
- Independent parameter setting of BECKER pumps with frequency converters
- Independently implement & test various functions of the frequency converter

* All participants receive a certificate of participation at the end of each seminar.

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CALCULATION TOOL

PNEUMATIC CONVEYING TOOL

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Content

Basics of pneumatic conveying systems

Structure, functions and operation of the software

Typical application examples

A wide range of exercises

Target group

Ideally suited for technicians, engineers, sales staff and generally for users of BECKER pumps

Prior knowledge

Basic knowledge of vacuum

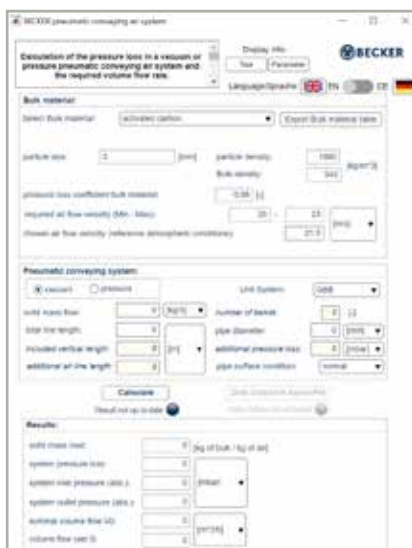
Hints

1/2-day training*

The exercises require a laptop on which the BECKER pneumatic conveying tool software and the MATLAB runtime can be installed.



**pneumatic conveying
air system**



KEY DATA

This seminar is designed for 4 to 12 people and can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Get to know extensive functions and possibilities of the software
- Knowledge of how to operate the software
- Selection of the suitable pump size for pneumatic vacuum or pressure conveying systems

* All participants receive a certificate of participation at the end of each seminar.

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FACE-TO-FACE TRAINING IN THE TRAINING CENTER

MAKE IT BECKER.

Content

Combination of individual training modules up to completely individually arranged training courses

Depending on requirements, more or less intensive theoretical and practical parts possible

Customised seminars

Selection from all existing seminar modules

Mixture of theory and practice

Multi-day seminars with different contents possible

Hints

The duration is agreed individually. From a 1/2-day basic training course to an intensive training over several days, we can customise your programme to meet your individual needs.

**CUSTOM
PRICING PER
INDIVIDUAL
AGREEMENT**

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KEY DATA

This seminar is designed for 2 to 8 people in a theoretical training course and 2 to 4 people in a practical training course. It can be booked in English or German. Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Training content precisely adapted to your requirements
- Training with individual focus
- Acquire fundamental knowledge about the selected products



**We design training courses to
meet your individual needs.**



ONLINE TRAINING WEBINARS

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Content

We can also offer some training courses online in form of webinars. Best suited for this are the training

Vacuum basics & pump principles

Electrical engineering basics in pump technology

Software training: Characteristic curve tool – BECKER CHOICE

Software training: Calculation tool – Pneumatic Conveying

By arrangement, other training courses from the catalogue or also individually arranged training can be carried out as online training courses.

Hints

Online training courses provide the basis for additional practical training at the Forum Gennebreck training centre.

The contents and duration of the online training courses are arranged individually with the trainers.

**CUSTOM
PRICING PER
INDIVIDUAL
AGREEMENT**

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KEY DATA

Use of Microsoft Teams to run the online training courses.

Almost any number of people can participate in the webinars. It can be booked in English or German.

Appointments are made by arrangement.

YOUR BENEFITS AT A GLANCE

- Cover theoretical training content independent of location
- Acquire fundamental knowledge about the selected BECKER products



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