

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 Marc Raßbach 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.



KLAUS KUBITSCH

T +49 202 697 273
kubitsch@becker-international.com

MARC RASSBACH

T +49 202 697 285
rassbach@becker-international.com

BECKER TRAINING

Basic training6

Vacuum basics & pump principles

Electr. engineering basics in pump technology

Product training.....8

Rotary vane pumps

Screw pumps

Claw pumps

Roots booster pumps & pump stands

Side channel blowers

Radial blowers

Technical training9

Pumps with VARIAIR frequency converter

System controller VACON+

Software training 11

BECKER characteristic curve tool

BECKER Choice

BECKER parameterization tool

BECKER KombiTool

BECKER calculation tool

Pneumatic Conveying

Individual training 14

Face-to-face training in the training center

Online training – Webinars



FORUM GENNEBRECK

Gebr. Becker GmbH
Gennebrecker Str. 8
42279 Wuppertal
Germany

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

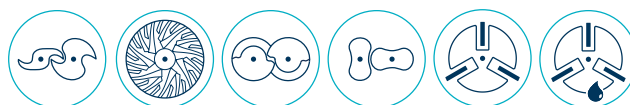
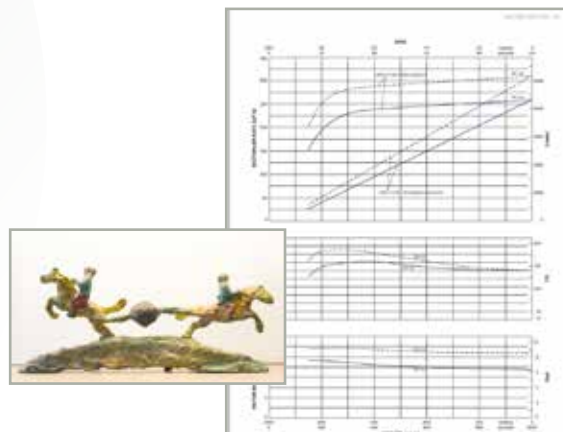
Good overview also for non-technicians

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

MAKE IT BECKER.

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

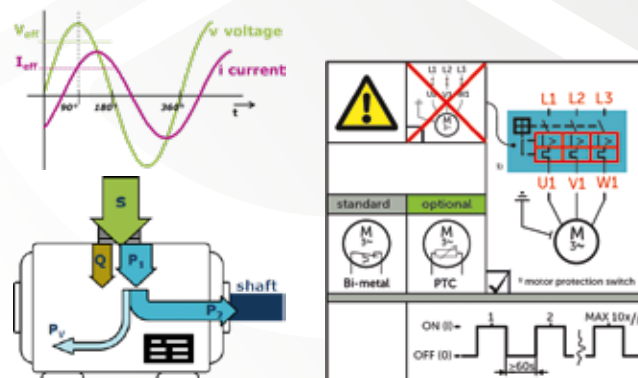
Not required!

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.

**PRICE ON
REQUEST**

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



PRODUCT TRAINING

MAKE IT BECKER.

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.

**PRICE ON
REQUEST**

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



VACUUM PUMPS & COMPRESSORS WITH FREQUENCY CONVERTER

MAKE IT BECKER.

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.

**PRICE ON
REQUEST**

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



SYSTEM CONTROLLER VACON+

MAKE IT BECKER.

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.

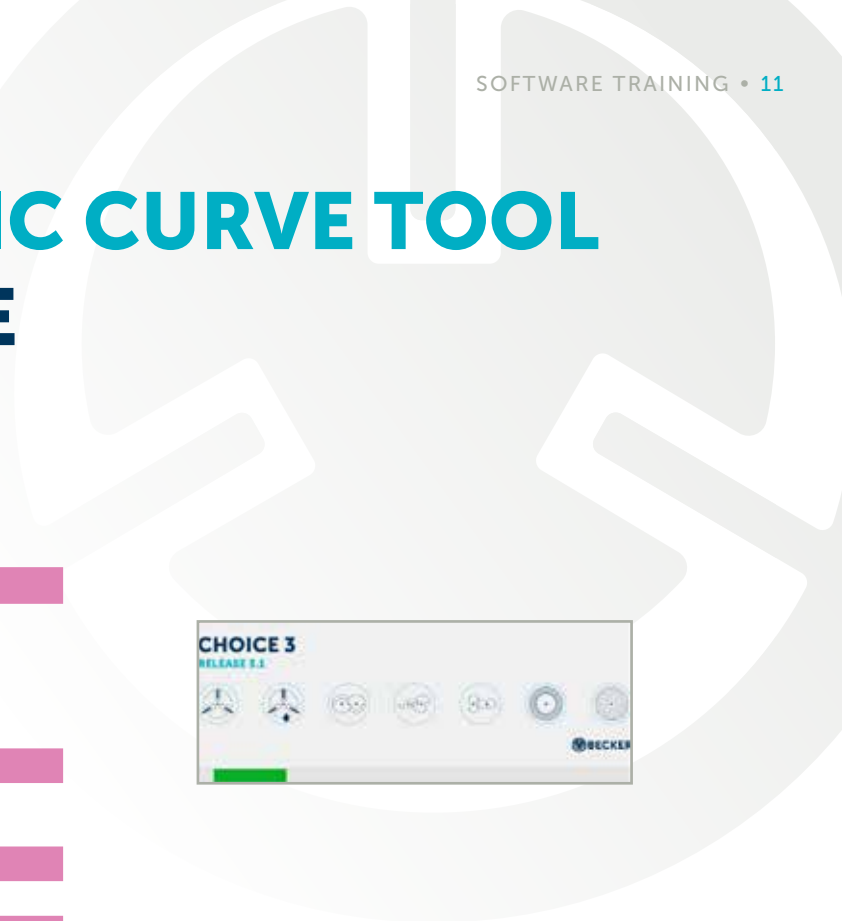
**PRICE ON
REQUEST**

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

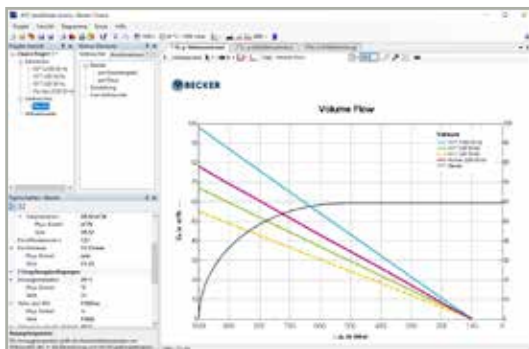


MAKE IT BECKER.

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



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



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



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.

**PRICE ON
REQUEST**

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



CALCULATION TOOL PNEUMATIC CONVEYING TOOL

MAKE IT BECKER.

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

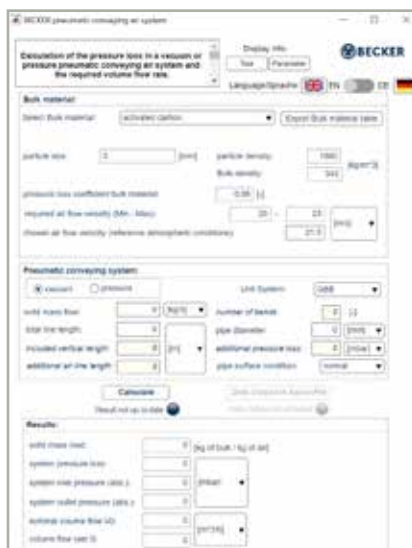
Hints

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.

**PRICE ON
REQUEST**

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



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.

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

**CUSTOM
PRICING PER
INDIVIDUAL
AGREEMENT**

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

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



ONLINE TRAINING WEBINARS

MAKE IT BECKER.

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**

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

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



YOUR CONTACT ON SITE

REGISTRATION
VIA THE
BECKER
SALES TEAM

CHINA

Becker Vacuum & Air Equipment (Shanghai) Co. Ltd.

Room 737, Sanlian Building
Huajing Road, Waigaoqiao FTZ 8
Pudong, Shanghai 200131
T +86 021 59867988
F +86 021 33250530
info@becker-china.com
www.becker-china.com

DENMARK

Becker Danmark A/S

Lunavej 1
8700 Horsens
T +45 7626 0233
F +45 7626 0234
becker@becker-danmark.dk
www.becker-danmark.dk

FRANCE

Becker France S.à.r.l.

Rue de Cutesson, Z.A. du
Bel-Air, Gazeran - B.P. 55
78512 Rambouillet Cedex
T +33 1 30418989
F +33 1 30410600
becker@becker-france.fr
www.becker-france.fr

GERMANY

HEADQUARTERS, INTERNATIONAL SALES & SERVICE, MANUFACTURING

Gebr. Becker GmbH

Hölker Feld 29-31
42279 Wuppertal
T +49 202 697 0
F +49 202 660855
info@becker-international.com
www.becker-international.com

NATIONAL SUBSIDIARIES

Gebr. Becker GmbH

Vertriebs- und Service-Center Nord
Riedemannstr. 2 / Halle 2 Abt.6
28239 Bremen
T +49 421 487024
F +49 421 481929
servicenord@becker-international.com

Gebr. Becker GmbH

Vertriebs- und Service-Center Ost
Im Dürstborne 2
99510 Apolda
T +49 3644 543 -440, -441
F +49 3644 543 432
serviceost@becker-international.com

Gebr. Becker GmbH

Vertriebs- und Service-Center Süd
Schuckertstr. 1-3
71277 Rutesheim
T +49 7152 99923 0
F +49 7152 99923 23
servicesued@becker-international.com

Gebr. Becker GmbH

Vertriebs- und Service-Center West/Mitte
Hölker Feld 32
42279 Wuppertal
T +49 202 697 3350
F +49 202 697 200
servicewest@becker-international.com

GREAT BRITAIN

Becker UK Ltd.

Link 63
Liverpool Street
Hull HU3 4XS
T +44 1482 835280
F +44 1482 831275
sales@becker.co.uk
www.becker.co.uk

ITALY

Becker Italia S.r.l.

Via Bargello, 24
40055 Villanova (Bo)
T +39 051 6063811
F +39 051 6053168
becker@becker.it
www.becker.it

JAPAN

Becker Air Techno Co. Ltd.

Mita 3 Cyome MT-Bldg. 6F
3-14-10, Mita, Minato-ku,
Tokyo, 108-0073
T +81 3 5418 5131
F +81 3 5418 3750
info@becker-japan.co.jp
www.becker-japan.co.jp

KOREA

Becker Korea Co., Ltd.

Room 419-425, A dong, Samsung Techno
Valley, 140 Tongil-ro
Deogyang-gu, Gyeonggi-do,
10594
T +82 2 2219-4500
F +82 2 2219-4501
becker@beckerkorea.co.kr
www.beckerkorea.co.kr

NETHERLANDS

Becker Druk- en Vacuümpompen B.V.

Eurolaan 11
8447 SM Heerenveen
T +31 513 651800
F +31 513 651855
info@beckerdvp.nl
www.beckerdvp.nl

POLAND

Becker Polska Sp. z o. o.

Pianowo 46
64-000 Kościan
T +48 065 5114170
F +48 065 5110828
info@becker-polska.com
www.becker-polska.com

SINGAPORE

Becker Asia Pacific PTE Ltd.

12 Little Road #01-01
Lian Cheong Industrial Building
Singapore 536986
T +65 6487 5951
F +65 6487 5952
info@beckerasia.com.sg
www.beckerasia.com.sg

SPAIN/PORTUGAL

Becker Iberica de Bombas de Vacío y Compresores S.A.

Calle Masia Nova 3-5, Nave E
P.I. Santa Magdalena
08800 Vilanova i la Geltrú
T +34 93 816 51 53
F +34 93 816 58 74
comercial@becker-iberica.com
www.becker-iberica.com
Servicio técnico oficial Madrid:
T +34 91 662 35 23
F +34 91 661 19 61

SWEDEN

Becker Vakuumenteknik AB

Söderforsgatan 33
75228 Uppsala
T +46 18 565200
F +46 18 565209
kundservice@beckervakuum.se
www.beckervakuum.se
Höganäs:
Verkstadsgratan 12 F
26339 Höganäs
T +46 18 565200

SWITZERLAND

Becker AG

Ringstr. 20
8600 Dübendorf
T +41 44 824 18 18
F +41 44 824 18 19
becker@becker.ch
www.becker.ch

TAIWAN

Becker Pumps Taiwan Co. Ltd.

1F, No. 542-15, Zhongzheng Rd.,
Xinzhuang Dist., New Taipei City 242
T +886 2 29040077
F +886 2 29040500
info@beckertaiwan.com
www.beckertaiwan.com

USA/CANADA

Becker Pumps Corporation

100 East Ascot Lane
Cuyahoga Falls
Ohio 44223
T +1 330 928 9966
F +1 330 928 7065
Cust. Service +1 330 916 6858
info@beckerpumps.com
www.beckerpumps.com
www.beckerpumps.ca



MAKE IT BECKER.