




Academy Product Catalogue Training Area Inspection

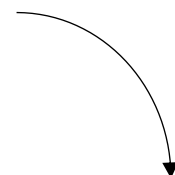
 www.koerber-pharma.com/en/services/academy#Inspection

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Introducing the Academy

Körber Pharma Inspection machines are packed with complex machine parts and hard- and software that work together to deliver the best inspection results. If you want to get the best results and have as little machine downtime as possible, it is essential to have perfectly qualified staff working with the machine.

For that, the Academy offers high-quality training for your entire team. The trainings are targeted, flexible (on-site or in a digital format) and cost-efficient. With them, you and your team will constantly expand your knowledge about the machine, develop expertise how to handle even unexpected situations and inspect your products successfully.

Training approach

Learning is more than passively absorbing information. Therefore, we include these 4 aspects in our trainings:



Explore new concepts and discover new information about your inspection machine.

Apply knowledge and skills and deepen your machine knowledge with interactive, hands-on training options.

Evaluate your performance and assess whether you are already confident enough to advance to the next chapter.

Review training material any time after completing the training to refresh your knowledge.

Course design

We offer:

		
Instructor-led Trainings	E-learning	Blended Learning

Our courses are structured in levels: There is the **basic** level for people who are not familiar with a topic and the **advanced** level for experienced learners. We also differentiate some of our trainings into **operator** and **maintenance** trainings, so they fit the needs of our individual target audience and everyone learns exactly what they need to know.

Since hands-on knowledge is the priority for learners to gain experience on our machines, we emphasize this in the development of our interactive online courses. For that purpose, we use elements such as 3D machine models, videos, interactive tasks, graphs and meaningful quizzes to keep up learner engagement.

Looking for more details? Please see our detailed course offer below.

Trainings for semi-automatic machines

AP: 100000656

V90+ Operator Training (e-learning)



Training objective



Ability to use the V90+ semi-automatic inspection machine and knowledge about operating the machine in production, specifically:

- Technical setup
- Startup procedure
- Batch loading process
- Machine operation
- Notification messages
- Ending an operation
- Batch closure requirements
- Machine cleaning

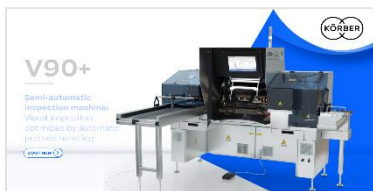
Target group	Production staff, operators
Previous experience	None
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 3 hours
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset

AP: 10031414

V90+ Maintenance Training (e-learning)



Training objective



Ability to use and maintain the V90+ semi-automatic inspection machine and knowledge about operating the machine in production and standard maintenance:

- Technical setup
- Notification messages
- Operating modes
- Maintenance tasks
- HMI
- Test run / verification
- Maintenance intervals
- Maintenance management, reliability and safety

Target group	Production staff, technicians
Previous experience	Technical background
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 2,5 hour
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset

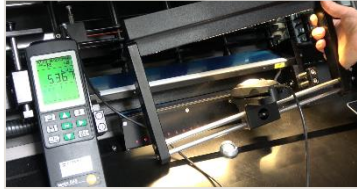


AP: 10031297

V90+ Light Calibration Training (e-learning)



Training objective



Understanding of the procedure of calibrating the different light sources for V90+ (front tyndall lights, axial tyndall light, behind tyndall light):

- Introduction
- Safety rules and responsibilities
- Calibration setup
- Calibration procedure
- Performance verification

Target group

Production staff, technicians

Previous experience

Technical background

Delivery type

E-learning (location: Academy Learning Platform)

Duration

Approx. 1 hour

Language

English

Equipment to be provided by customer

Personal computer with internet access, headset

AP: 10031304

V90+ Operator Training (instructor-led training)



Training objective

Ability to use the V90+ semi-automatic inspection machine and knowledge about operating the machine in production, specifically:

- Machine overview
- Process technology
- HMI explanation and operation
- Production
- Cleaning
- Alarm interpretation
- Introduction of machine documentation

Target group

Production staff, operators

Previous experience

None

Delivery type

Instructor-led training (at Körber Pharma Inspection or customer site)

Duration

1 day

Max. participants

6

Language

English, German

Equipment to be provided by customer

The machine must be available with sufficient sample material for operation during whole time.



AP: 10031305

V90+ Maintenance Training (instructor-led training)



Training objective	Ability to use the V90+ semi-automatic inspection machine and knowledge about operating the machine in production, specifically: <ul style="list-style-type: none"> • Machine overview • Process technology • HMI explanation and operation • Production • Cleaning • Alarm interpretation • Introduction of machine documentation
Target group	Production staff, operators
Previous experience	None
Delivery type	Instructor-led training (at Körber Pharma Inspection or customer site)
Duration	1 day
Max. participants	6
Language	English, German
Equipment to be provided by customer	The machine must be available with sufficient sample material for operation during whole time.



Trainings for machines with HVLD

HV Calibration Curriculum



Part 1 Safety Training HVLD



Part 2 HV Calibration Training



Part 3 HV Calibration remote session

Part 1: Safety Training - For machines with HVLD (e-learning)

Part 2: HV Calibration Training (e-learning); can only be booked in combination with Part 1

Part 3:

Option 1: HV Calibration (instructor-led training remote)

Option 2: HV Calibration (instructor-led training at customer's site)

AP: 10031480

Part 1 Safety Training – For machines with HVLD (e-learning)



Training objective



Detailed knowledge about safety issues for machines with HVLD, which must be observed with special caution:

- Before working with a machine with HVLD
- While working with or inside a machine with HVLD
- In case of failure or fire

Target group	(Electro)-technicians
Previous experience	Technical background, knowledge about HVLD
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 30 minutes
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset
Validity of the certification	1 year

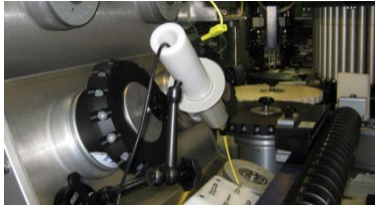


Can't be booked individually; AP: 10031298 (Part 1 & 2)

Part 2 HV Calibration Training (e-learning)



Training objective



Detailed knowledge about calibrating an inspection machine with HVLD.

Required in order to take "Part 3: HV Calibration live session".

- Introduction & Security
- General preparation
- Machine preparation
- Measurement of the electrode voltage and calibration of the HV Station
- Checking the measuring bridges on different stations
- Further information

Target group

Certified electricians

Previous experience

Electro-technical background, knowledge about HVLD, already worked with HVLD, Participation in "Safety Training – For machines with HVLD"

Delivery type

E-learning (location: Academy Learning Platform)

Duration

Approx, 2 hours

Language

English

Equipment to be provided by customer

Personal computer with internet access, headset

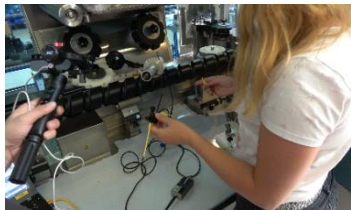
Validity of the certification

1 year

Part 3 HV Calibration (instructor-led training)



Training objective



Ability to calibrate an inspection machine with HVLD:

- General preparation
- Machine preparation
- Measurement of the electrode voltage and calibration of the HV Station
- Checking the measuring bridges
- Technical questions and answers

Target group

Certified electricians

Previous experience

Electro-technical background, knowledge about HVLD, already worked with HVLD, participation in "Safety Training – For machines with HVLD" & participation in "HV Calibration Training"

Delivery type

Option 1: AP: 10031299
Instructor-led training remote (via webcam at customer's site) and supervision

Option 2: AP: 10031300
Instructor-led training at customer's site

Duration

Approx. 4-5 hours

Language

English, German

Equipment to be provided by customer

Personal computer with internet access, headset, external webcam/smartphone, HV Calibration equipment

Validity of the certification

1 year



AP: 10031476

HV Application Training (instructor-led training)



Training objective



Consolidated knowledge about your application HV Basics

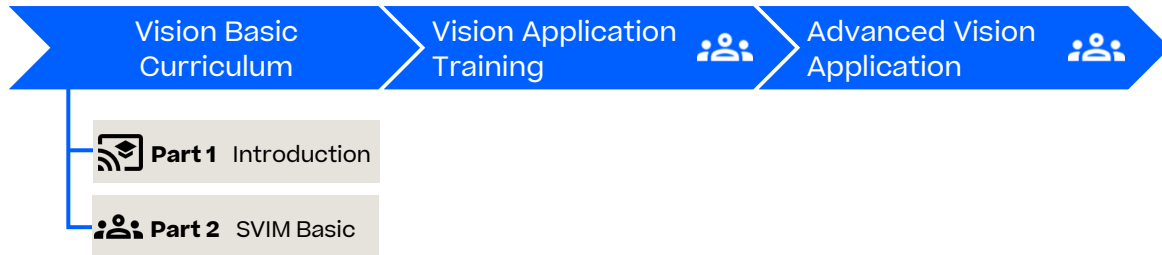
- Dangers and safety precautions (high voltage, ozone)
- Setup of the HV module
- HV test runs
- Evaluation of HV parameters

Target group	Supervisors, maintenance staff, QA, administrators
Previous experience	Technical background
Delivery type	Instructor-led training (at Körber Pharma Inspection or customer site)
Duration	1 day
Max. participants	6
Language	English, German
Equipment to be provided by customer	The fully automatic machine must be available with sufficient sample material for operation during whole time.



Vision Trainings

For vision trainings, we highly recommend the following training path:



AP: 10031290

Vision Basic Curriculum

Contains two parts:

Part 1: Introduction to the Vision Inspection Module (e-learning)

Part 2: SVIM Basic Training (instructor-led training)

All parts can also be booked individually.

AP: 10031296

Part 1 Introduction to the Vision Inspection Module (e-learning)

Training objective



Basic knowledge about camera inspection and the hardware (SVIM) and software (SVObserver) for machine vision.

- Hardware overview
- Background information
- Toolset structure
- Troubleshooting

Target group

Supervisors, maintenance staff, QA, administrators

Previous experience

Technical background

Delivery type

E-learning (location: Academy Learning Platform)

Duration

Approx. 2.5 hours

Language

English

Equipment to be provided by customer

Personal computer with internet access, headset



AP: 10031263

Part 2 Vision Basic Training (instructor-led training)



Training objective



Basics about camera inspection and application of the hardware (SVIM) and software (SVObserver) for machine vision.

- Basics
- First steps of camera and lens adjustment
- Operation of SVIM (machine vision computer) and SVObserver (machine vision program)
- Window Tool with Luminance Analyzer
- Linear Tool – measurement
- Math Tool – calculation
- Transformation / Shift Tool – reference
- Binarization – conversion to a binary image
- Image Tool – image operations
- Image treatment – filter, mask, LUT
- Window Tool with Pixel- and BLOB-Analyzer
- Conditional – control the execution
- Archive Tool – store images and results
- Regression Test Mode

Target group

Supervisors, maintenance staff, QA, administrators

Previous experience

Technical background

Delivery type

Option 1: Instructor-led training at Körber Pharma Inspection in Markt Schwaben

Option 2: Instructor-led training at customer site

➔ Options 1 or 2 are recommended

Option 3: Instructor-led training remote (via remote connection at customer site) – please contact us for further information

Duration

3 days

Max. participants

4-6

Language

English, German

Equipment to be provided by customer

For option 3: Personal computer with internet access, at least 2 screens, headset, quiet workspace with minimal background noise, Zoom connection for remote control of the SVIM & Teams for communication (please verify that these connections can be accessed, if you have concerns about the connection we can provide a test session)



AP: 10031301

Vision Application Training (instructor-led training)



Training objective



Consolidated knowledge about your application.

- Detailed information about machine vision components
- HMI explanation and operation for supervisor
- Explanation of the vision inspection configuration for each camera station
- Defect categories and definition for good / bad products
- Assignment of defects to camera stations
- Machine vision documentation
- Machine communication (SVIM – PLC – HMI)

Target group

Supervisors, maintenance staff, QA, administrators

Previous experience

SVIM Basic Training or comparable knowledge about technical image processing

Delivery type

Instructor-led training (at customer site or at Körber Pharma Inspection site possible to a limited extent)

Duration

Amount of days are individually agreed

Max. participants

6

Language

English, German

Equipment to be provided by customer

The machine must be available with sufficient sample material for operation during whole time.

AP: 10031485

Advanced Vision Application Training (instructor-led training)



Training objective



Extended knowledge about your camera inspection application

- Extended explanation of the vision inspection configuration for each camera station
- Machine vision documentation in detail
- Add additional defects in camera inspection without a new result output
- Adjust machine parameter for detection
- Background knowledge about error detection and display
- Impact of up- and downstream machines for machine performance
- Detailed explanation of rotation and light parameters
- False-reject reduction
- Create recipe for new product
- Comparison of inspection configurations
- Audit trail & change management

Target group

Supervisors, maintenance staff, QA, administrators

Previous experience

Technical background and basics about SVObserver

Delivery type

Instructor-led training (at Körber Pharma Inspection or customer site)

Duration

Amount of days are individually agreed

Max. participants

3

Language

English, German

Equipment to be provided by customer

The machine must be available with sufficient sample material for operation during whole time.



Trainings for fully automatic machines

AP: 10031302

Operator Training (instructor-led training)

Training objective



Proficient usage of the machine and detailed information for operation in production.

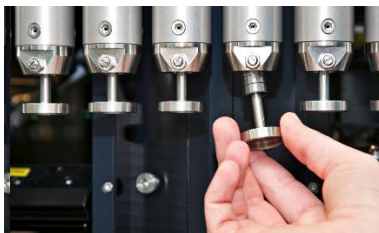
- Basics
- Overview components
- HMI explanation and operation
- Format changeover for existing recipe
- Production
- Cleaning during and after production
- Troubleshooting

Target group	Production staff, operators
Previous experience	None
Delivery type	Instructor-led training (at Körber Pharma Inspection or customer site)
Duration	2 days
Max. participants	6
Language	English, German
Equipment to be provided by customer	The machine system must be available with sufficient sample material for operation during whole time.

AP: 10031303

Maintenance Training (instructor-led training)

Training objective



Proficient usage and maintenance of the machine and detailed information for operation in production and standard maintenance.

- Basics
- Detailed information about components
- Extended HMI explanation and operation
- Format changeover for existing recipe
- Production
- Cleaning during and after production
- Recipe management
- Options for troubleshooting
- Standard maintenance plan for devices
- Documentation and spare part information

Target group	Production staff, technician
Previous experience	Technical background
Delivery type	Instructor-led training (at Körber Pharma Inspection or customer site)
Duration	2 days
Max. participants	4
Language	English, German
Equipment to be provided by customer	The machine system must be available with sufficient sample material for operation during whole time.

AP: 10031444

Eject-X Training (e-learning)



Training objective



Deep Learning can increase the vision performance and enhance results for difficult to inspect products. False-jects can be reduced to save millions of operational costs by avoiding a costly re-inspection by the human operator. This course covers deep learning basics, collection of training data, saving and labelling of images and provides tools for understanding deep learning results.

Target group

Production staff, operators, technician, supervisors, maintenance staff, QA, administrators

Previous experience

Technical background

Delivery type

E-learning (location: Academy Learning Platform)

Duration

04 h 30 min.

Language

English

Equipment to be provided by customer

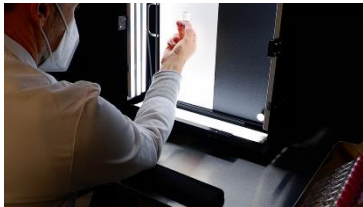
Personal computer with internet access, headset

AP: 10031435

Knapp Test Training (e-learning)



Training objective



This training describes the background and preparation of the Knapp test, how to perform the test (manual inspection vs. automatic inspection), the calculation of Knapp efficiency and report generation.

Target group

Production staff, operators, technician

Previous experience

None

Delivery type

E-learning (location: Academy Learning Platform)

Duration

30 min.

Language

English

Equipment to be provided by customer

Personal computer with internet access, headset



AP: 10031495

Defect Sample Creation Guide (e-learning)



Training objective



The visual inspection of vials, syringes, cartridges and ampoules is an important step in the production process of parenterals. This E-Learning helps you to create your own customized reference standard test kits for the visual inspection of parenteral for the pharmaceutical industry.

Target group	Production personal, operators, technician
Previous experience	None
Delivery type	E-learning (location: Academy Learning Platform)
Duration	20 min.
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset





What now?

Trainings coming soon:

- V90+ Troubleshooting Training
- Introduction to SVIM (German version)

If you are interested in one or more trainings or have further questions, please feel free to contact academy.ph.inspection@koerber.com

As we are constantly revising and expanding our training catalogue, we would also be pleased if you have a specific training need that the Academy could help you with in the future.

