Academy Product Catalogue
Training Area Inspection
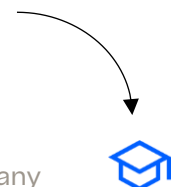
www.koerber-pharma.com/en/services/academy#Inspection

academy.ph.inspection@koerber.com

Table of contents

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 Training   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

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 h
Language	English, German
Equipment to be provided by customer	Personal computer with internet access, headset

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 (advanced) • Operating modes • Maintenance tasks • HMI • Test run / verification • Maintenance intervals • Maintenance management, reliability and safety
Target group	Production staff, maintenance staff, technicians
Previous experience	Technical background
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 3 h
Language	English, German
Equipment to be provided by customer	Personal computer with internet access, headset

V90+ Troubleshooting Training (E-learning)
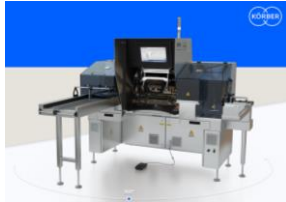
Training objective	Ability to solve typical problems with the V90+ semi-automatic inspection machine, regarding the topics: • Light sources • Safety components • Battery exchange • Power supply unit • O-rings & lateral guidance • Recipe management • User groups & access rights • Teaching • Resetting a sensor • Smart maintenance spare parts app • Customer support tickets
Target group	Technicians, supervisors, QA, administrators
Previous experience	Technical background, experience with the V90+
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 3.5 h
Language	English, German
Equipment to be provided by customer	Personal computer with internet access, headset

V90+ Light Calibration Training (E-learning)
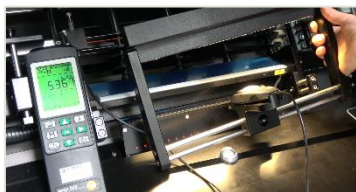
|	
Training objective	Understanding of the procedure of calibrating the different light sources for V90+ (front tyndall lights, axial tyndall light, behind tyndall light): • Introduction • Safety rules and responsibilities • Calibration setup • Calibration procedure • Performance verification
Target group	Production staff, technicians
Previous experience	Technical background
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 1 h
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset

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 basic 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 the entire time.

V90+ Maintenance Training (Instructor-led Training)

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 / Alarm interpretation • Operating modes • Maintenance tasks • HMI • Test run / verification • Maintenance intervals • Documentation and spare part information
Target group	Production staff, maintenance staff, technicians
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 the entire time.

Trainings for machines with HVLD

HV Calibration Training (Blended Learning)

Part 1 Safety Training HVLD

Part 2 HV Calibration Training

Part 3 HV Calibration live 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: Live session: HV Calibration (instructor-led training at customer's site)

Product ID: 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

Part 1 is required in order to take "Part 3: HV Calibration live session".

Target group	(Electro)-technicians
Previous experience	Technical background, knowledge about HVLD
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 0.5 h
Language	English, German
Equipment to be provided by customer	Personal computer with internet access, headset
Validity of the certification	1 year

Can´t be booked individually; Product ID: 10031298 (Part 1 & 2)

Part 2   HV Calibration Training (E-learning)

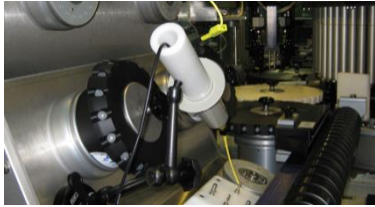|	
Training objective	Detailed knowledge about calibrating an inspection machine with HVLD. • Introduction & Security • General preparation • Machine preparation • Measurement of the electrode voltage and calibration of the HV Station • Checking the measuring bridges on different stations • Further information Part 2 is required in order to take "Part 3: HV Calibration live session".
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 h
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset
Validity of the certification	1 year

Product ID: 10031300

Part 3   HV Calibration (Instructor-led Training)
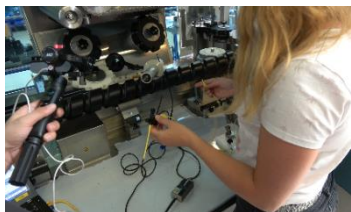
Training objective	Ability to calibrate an inspection machine with HVLD: • General preparation • Machine preparation • Measurement of the electrode voltage and calibration of the HV Station • Checking the measuring bridges • Technical questions and answers
Target group	Certified electricians
Previous 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	Instructor-led training at customer's site
Duration	Approx. 4-5 h
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

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 the entire time.

Vision Trainings

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

Vision Basic Training (blended learning)	Vision Application Training	Advanced Vision Application

- **Part 1** Introduction
- **Part 2** SVIM Basic
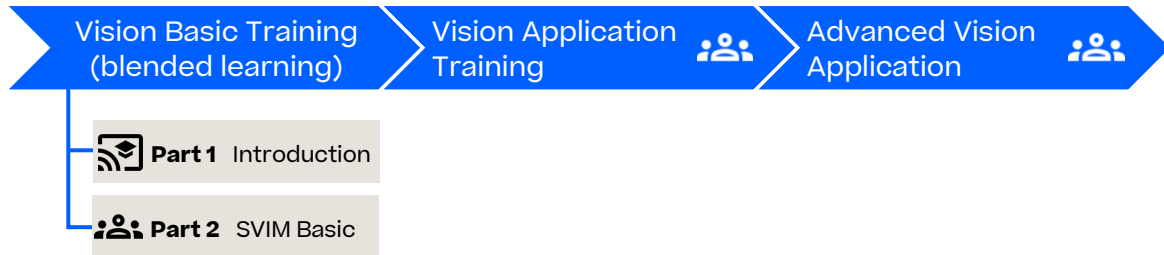
Product ID: 10031290

Vision Basic Training (Blended Learning)

Contains two parts:

Part 1: Vision Introduction (e-learning)

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

All parts can also be booked individually.

Product ID: 10031296

Part 1 Vision Introduction (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 h
Language	English, German
Equipment to be provided by customer	Personal computer with internet access, headset

Product ID: 10031263

Part 2 SVIM 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 module) and SVObserver (machine vision program)
	• Window tool with luminance analyzer
	• Linear tool – measurement
	• Math tool – calculation
	• Shift / Transformation 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
Duration	3 days
Max. participants	6
Language	English, German
Equipment to be provided by customer	Option 2: Separate room with enough capacity for all training participants

Product ID: 10031488

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 upon
Max. participants	6
Language	English, German
Equipment to be provided by customer	The machine must be available with sufficient sample material for operation the entire time.

Product ID: 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 • 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 customer site or at Körber Pharma Inspection site possible to a limited extent)
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 the entire time.

Trainings for fully automatic machines

Product ID: 10031483

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 • Standard operator 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 the entire time.

Product ID: 10031481

Maintenance Training (Instructor-led Training)

Training objective	Proficient usage and maintenance of the machine and detailed information about technical components and maintenance. • Detailed information about components • Extended HMI explanation and maintenance • Format changeover for maintenance • Cleaning during and after production • Recipe management • Extended troubleshooting • Standard maintenance intervals • 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 the entire time.

Eject-X Training: Fundamentals (E-learning)

|	
Training objective	Deep Learning can increase the vision performance and enhance results for difficult to inspect products. False-ejects can be reduced to save millions of operational costs by avoiding a costly re-inspection by the human operator. This course covers the basics of deep learning, how to benchmark a deep learning model, the sample selection and data acquisition, as well as the saving, organizing and labelling of images and the labelling tools within the Eject-X software.
Target group	Production staff, operators, technician, supervisors, maintenance staff, QA, administrators
Previous experience	Technical background
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 4.5 h
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset

Knapp Test Training (E-learning)
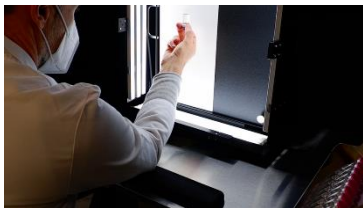
Training objective	This training describes the background and preparation of the Knapp test, how to perform the test (manual inspection vs. automatic inspection), the calculation of Knapp efficiency and report generation.
Target group	Production staff, operators, technician
Previous experience	None
Delivery type	E-learning (location: Academy Learning Platform)
Duration	Approx. 0.5 h
Language	English
Equipment to be provided by customer	Personal computer with internet access, headset

Overarching Trainings

Spare Parts App Training (E-learning)

Training objective	In order to be able to order spare parts practically and at any time, it is essential to operate the Smart Maintenance Spare Parts app. This training introduces the software and its most important functions.

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

What now?

Trainings coming soon:

- HMI Basic Training (E-learning, EN) – for fully automatic machines
- Eject-X Training: Practical Application (E-learning, EN)

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.