



KRONES Academy

Automation Concept und
IT Solutions



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KRONES Automation Concept

The overall package for best training concepts

Nothing will happen in your production as if by magic. You rather need precise knowledge about automation technology, the option to quickly intervene into the software, and suitable tools for a safe programming of the procedures.

KRONES offers the ideal overall package for you with its Automation Concept. In cooperation with you, we will develop your individual overall concept for all tasks of Automation Technology tailored perfectly to your needs.

Your success is based on three elements:

- Automation Engineer
- Automation Equipment
- Automation Notebook

Regardless if racks, machine simulation units, Notebooks or training offers, on the following pages, we will inform you in detail about all services of the KRONES Automation Concept.

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KRONES Automation Concept

Our Automation Concept is the formula for your electrical and automation specialists for accurate diagnostics and optimisation of the entire automation technology.

One concept, three components

■ KRONES Automation Equipment

Using different racks and machine simulation units, all staff members can learn and enhance their knowledge of handling the machines as well as develop and test their own programs – without any downtimes during production.

■ KRONES Automation Notebook

It contains the required software as well as all adapters necessary for the diagnostics and data back-up of your line.

■ KRONES Automation Engineer

We offer modular basic courses and workshops for IT system technology, for line documentation systems, for visualisation systems as well as for automa-

tion and network concept.

Benefits to you

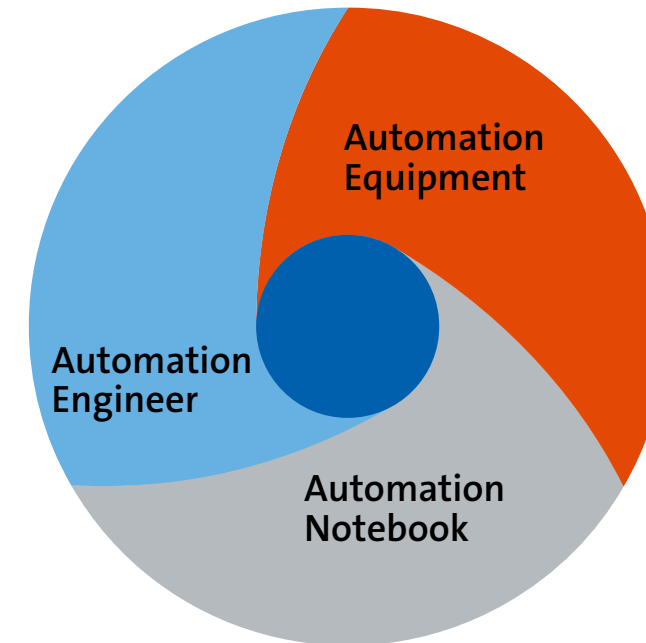
■ Coordinated components

The three elements of the KRONES Automation Concept can be used separately, as single automation modules, or as interacting components.

■ Maximum efficiency for all automation tasks

Whether training your own staff or troubleshooting: The KRONES Automation Concept is a benefit for your production – in daily operation on the machine and in simulation sequences.

Automation Concept



You will find more information about this topic under:

www.krones.com > Products > Service > Academy > Automation Concept



KRONES Automation Equipment



KRONES Automation Racks

You want to get the best out of your automation training? The various KRONES automation racks are the ideal equipment to enhance your knowledge after the training course and to develop your own programs.

S7 rack

The basic module that is also used in our trainings. You can use this hardware to upload your own projects in conjunction with the Siemens Step 7 software without having to interfere with the machines during production.

- Developing and testing your own programs
- Holding automation courses
- Practising replacement of components

Touch-screen rack

The extension with which you simulate your machine on your rack.

- Importing and simulating existing machine projects
- Holding machine training courses for all employees
- Holding training courses for Zenon touch-screen software
- Processing your own projects

AS-i Safety rack

The rack for making your engineers fit for safety technology

- Practising and testing the AS-i Safety components
- Replacing components
- Displaying and simulating faults on the touch-screen rack
- Analysis and diagnostics on the touch-screen

Each of the three IT racks will be delivered installed ready to use and tested in a specially developed frame. We also provide aluminium carrying cases for the racks to guarantee safe transport in a protective housing.

Price: on request

Notice:

For a full overview of our Automation racks, please see the KRONES website and our "Automation Concept" brochure.

KRONES Automation Racks Overview



KRONES
SIMATIC S7-300 Rack



KRONES
SIMATIC S7-1500 Rack/TIA



KRONES
Touch-Screen Rack



KRONES
Touch-Screen/
SIMATIC S7 Rack



KRONES
AS-i Safety Rack



KRONES
Frequency inverter
rack for Danfoss



KRONES
B&R Rack (FVC)



KRONES
B&R Rack (SDC)

KRONES Automation Racks Training opportunities and possible combinations



KRONES Filler simulation

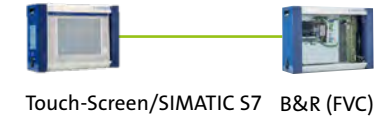
Filler simulation – basic

- S7 basic and advanced course
- Zenon course
- Filler operator training



Filler simulation – basic (FVC)

- Zenon course
- B&R workshop
- Advanced filler operator training



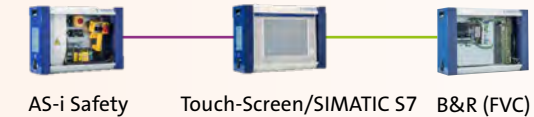
Filler simulation – technician

- AS-i safety workshop
- S7 basic and advanced course
- Zenon course
- Filler operator training



Filler simulation – professional

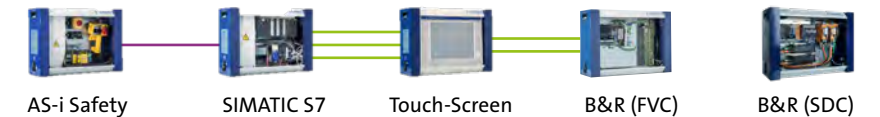
- AS-i safety workshop
- Zenon course
- B&R workshop
- Advanced filler operator training

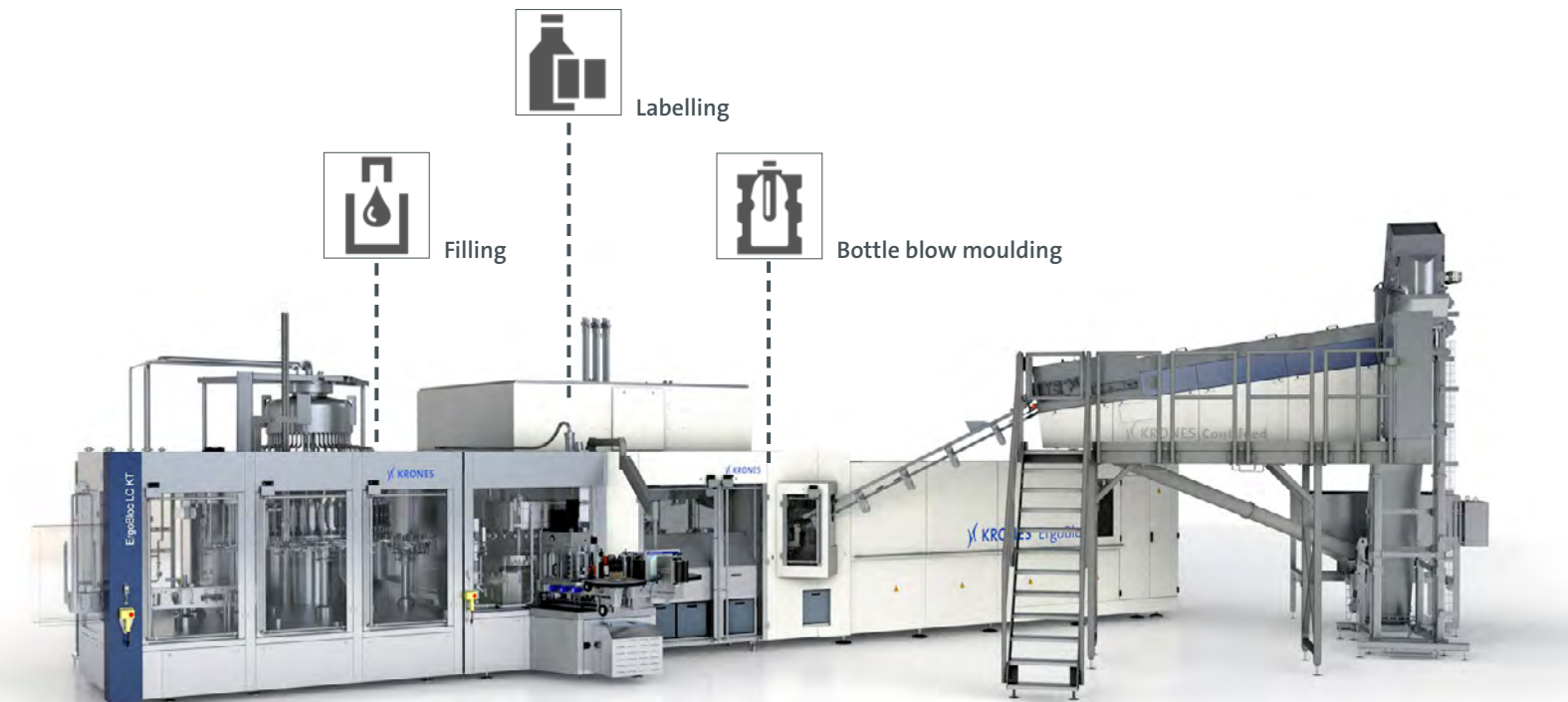


Bestseller

Filler simulation – Automation Engineer Training

- AS-i safety workshop
- S7 basic and advanced course
- Zenon course
- B&R workshop
- Expert filler operator training





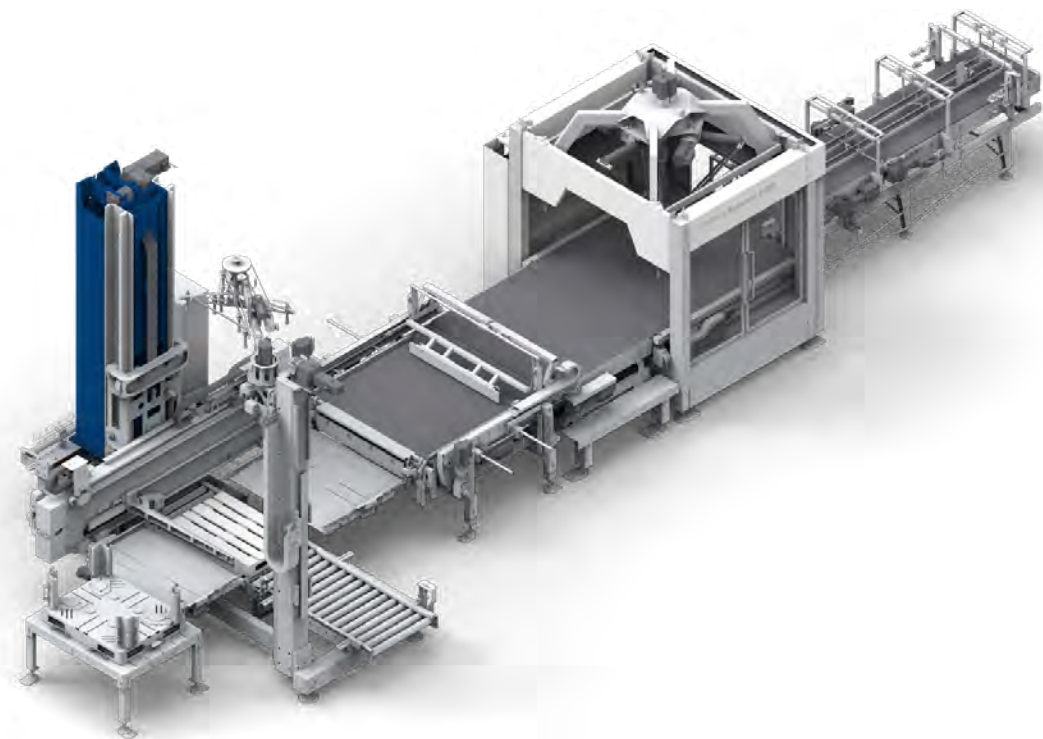
KRONES ErgoBloc LM/LC KT simulation (S7-1500/TIA)



With the combination of a modified touch-screen S7 rack with an S7-1518 controller, a B&R (FVC) rack and a B&R (SDC) rack, you will efficiently learn and solidify your handling the ErgoBloc LM/LC KT machine. The ErgoBloc LM/LC KT simulation enables you to test proficient knowledge on a small scale without having to hazard the failure of your real machine. Among other things, your teams can learn to operate the ErgoBloc LM/LC KT under conditions close to reality as the simulation represents all filler, labeller and blow moulder functions. Even special processes, such as the automated drive synchronisation of the infeed and discharge starwheels together with the carousel can be displayed.

This combination can be used to train the contents of the following training programmes:

- S7-1500 TIA basic course
- B&R automation (electronics) workshop
- ZENON visualisation training course
- ErgoBloc operator training



KRONES Connected HMI rack



Innovation in the field of machine visualisation systems:

In the machines of the latest generation, KRONES banks on a completely new visualisation system.

To familiarise your teams with the innovative system, the KRONES Academy will offer the “KRONES Connected HMI” training course and the new “KRONES Connected HMI rack” touch-screen rack.

This new training course and the pertaining training rack will enable your teams to come to know the new visualisation system and fully utilise its innovative functions.



KRONES SIMATIC S7-300 rack

Description

With the SIMATIC S7-300 rack, the user can perform preliminary tests of the program changes made in the S7 controller and learns how to use AS-Interface, Profibus or network technology. The SIMATIC S7-300 rack serves as a basis for the touch-screen rack and the ASI safety rack.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in the »Basic course Siemens SIMATIC S7-300 for KRONES machines«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Hardware and peripherals of a KRONES machine with communications to HMI and subsystems; understanding data security/diagnostics
- Structure of the user software, Profibus/ASI configuration structure

Technical data, scope of supply

- KRONES SIMATIC S7-300 rack
- Connection diagram and operating instructions

Benefits to you

- Realistic simulation of changes on the machine controller
- Development and testing of user programs and projects
- Practicing the replacement of components without affecting production
- Training for e.g. S7 control technology, Profibus and ASI bus



KRONES SIMATIC S7-1500 rack/TIA

Description

The SIMATIC S7-1500 rack/TIA is an ideal tool for testing S7 controller settings and programs you have configured yourself using the SIMATIC Step7 (TIA portal), as well as for learning how to handle AS-In-terface and Profinet or network technology. The SIMATIC S7-1500 rack/TIA, just like the SIMATIC S7-300 rack, serves as a basis for the touch-screen rack and the ASI safety rack.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in the basic course »Siemens SIMATIC S7-1500 for KRONES machines«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Hardware and peripherals of a KRONES machine with communications to HMI and subsystems; understanding data security/diagnostics
- Structure of the »TIA portal and SIMATIC Step7 (TIA portal)« user software
- Structure of the Profinet/ASI configuration

Technical data, scope of supply

- KRONES SIMATIC S7-1500 rack/TIA
- Connection diagram and operating instructions

Benefits to you

- Performing simulations of machine controller changes as realistically as possible
- Configuring and testing own programs and projects
- Practicing the replacement of components without affecting production
- Holding training courses on topics such as S7 control technology with SIMATIC Step7 (TIA portal), Profinet and ASI bus



KRONES Touch-Screen rack

Description

The Touch-Screen rack serves as an expansion for the SIMATIC S7-300 or 1500 rack with an integrated KRONES machine visualisation system where the user can exercise and call all functions known from the machine on the touch-screen.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- KRONES SIMATIC S7-300 or 1500 rack (prerequisite)
- Participation in the course »KRONES visualisation technology – Zenon touch-screen software«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- KRONES emergency package solution, practical use of the Zenon tools
- Alarm handling, diagnostics and interpretation of faults
- Use of the type and user management system, data back-up

Technical data, scope of supply

- KRONES Touch-Screen rack
- Connection diagram and operating instructions
- Customer transponder set
- Including current filler software project

Benefits to you

- KRONES machine visualisation system with all included parameters visible
- Learn how to use the production machines in a reliable and targeted manner via training with the Touch-Screen rack
- Holding training courses on visualisation technology
- Quicker and more efficient use of the help tools



KRONES Touch-Screen/SIMATIC S7 rack

Description

The Touch-Screen/SIMATIC S7 rack is a combination of the SIMATIC S7 rack and the Touch-Screen rack. The controller works only with integrated KRONES visualisation systems.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in the course »KRONES visualisation technology – Zenon touch-screen software«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- KRONES emergency package solution, practical use of the Zenon tools
- Alarm handling, diagnostics and interpretation of faults
- Use of the type and user management system, data back-up

Technical data, scope of supply

- KRONES Touch-Screen/SIMATIC S7 rack
- Connection diagram and operating instructions
- Customer transponder set
- Including current filler software project

Benefits to you

- KRONES machine visualisation system with all included parameters visible
- Learn how to use the production machines in a reliable and targeted manner via training with the Touch-Screen rack
- Training for visualisation technology
- Quicker and more efficient use of the help tools
- Inexpensive solution if no S7 training courses are required or no S7 training contents are to be conveyed



KRONES AS-i Safety rack

Description

The ASI Safety rack can be used in training courses on the standard components of KRONES safety equipment. The rack allows you to exercise with these components and test or replace them.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in the course »KRONES Electrical Components – System Engineering«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Replacing components
- Data back-up
- Online functionality (ASIMon software)

Technical data, scope of supply

- KRONES ASI Safety rack
- Connection diagram and operating instructions
- Replacement components of the safety equipment
- ASI programming unit including adapter and programming cable

Benefits to you

- Safe and quick replacement of the safety components
- Correct detection and analysis of faults
- Practical exercises possible by connecting the S7 controller and the touch-screen visualisation system (display and diagnostics on touch-screen)
- Back-up of safety logic (in conjunction with the ASIMon software)



KRONES B&R rack (FVC)*

Description

The B&R rack (FVC) (filling technology) can be used in conjunction with the SIMATIC S7-300 or 1500 rack and the Touch-Screen rack in order to simulate the control of the filling valves and thus the filling process. The operating processes and the parameter settings can be visualised.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in »B&R Automation (electrical system) workshop«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Powerlink network and network structure
- Data back-up and replacement of components
- B&R AS 3.0.9x basics; integrated help system

Technical data, scope of supply

- KRONES B&R rack (FVC)
- Connection diagram and operating instructions

Benefits to you

- Specific training with regard to Automation Studio
- Fault simulation for B&R controllers, including possible replacement of components
- Holding of training courses on the topics of the »B&R Automation Workshop« (creation of CF cards, use of KRONES tools)

*FVC = Filling Valve Control



KRONES B&R rack (SDC)*

Description

With the B&R rack (SDC) in conjunction with the SIMATIC S7-300 or -1500 rack, the B&R rack (FVC), and the touch-screen rack, you can not just simulate but also implement control, parameterisation, synchronisation and optimisation of the servo drives. The B&R rack (SDC) is equipped with two incorporated servo motors which can be used for calling the complex functionality of the SDC module.

Accessories and extensions

- Options for combination of automation racks (see page 11)
- Participation in »B&R Automation (electrical system) workshop«
- Optional: training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Powerlink network and network structure
- Data back-up and replacement of components
- B&R AS 3.0.9x basics;
- integrated help system
- Servo drive control

Technical data, scope of supply

- KRONES B&R rack (SDC)
- Operating manual

Benefits to you

- Specific training with regard to Automation Studio
- Fault simulation for B&R controllers, it is also possible to replace components
- Holding of training courses on the topics of the »B&R Automation Workshop« (creation of CF cards, use of KRONES tools)
- Specific training with regard to servo drive control and the KRONES SDC module

*SDC = Servo Drive Control



KRONES frequency inverter rack for Danfoss

Description

The frequency inverter rack for Danfoss enables the parameterisation of motors and their parameters to be simulated in a realistic manner.

Accessories and extensions

- Participation in the course
»KRONES Electrical Components – System Engineering«
- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Data transmission via Profibus
- Data back-up and replacement of devices
- Structure, functions and connection options
- Parameterisation using the operator panel (LCP)

Technical data, scope of supply

- KRONES frequency inverter rack for Danfoss
- Profibus options card MCA101, Profibus cable
- Profinet option card MCA120, Ethernet cable
- USB cable for communications and data back-up

Benefits to you

- Locating and fixing minor malfunctions
- Use of the MCT10 set-up software from Danfoss
- Back-up of parameter records



KRONES LCT4 rack

Description

The LCT4 rack is a mobile training module which is suitable for KRONES machines.

Accessories and extensions

- Participation in seminars on conveyor technology
- Optional: Training documentation

Learning objectives

- Data back-up
- Replacing components
- Diagnostics options

Technical data, scope of supply

- KRONES LCT4 rack
- Operating manual
- Customer transponder set

Benefits to you

- Specific training with regard to parameterisation
- Training courses in the field of Glideline and block synchronisation



KRONES Filler Simulation – our bestseller

Description

Looking for the ideal combination for the best training results? ASI Safety rack, Touch-Screen/SIMATIC S7 rack and B&R rack – that is what we recommend if you want to simulate the visualisation system of the KRONES filler in a realistic manner. This way it is possible to visualise operating and diagnostics processes that relate to the control of KRONES filling technology.

Accessories and extensions

- »KRONES Electrical Components – System Engineering«, »KRONES Visualisation Technology – Zenon Touch-Screen Software« and »B&R Workshop«

- Optional: Training documentation
- Optional: KRONES Automation Notebook

Learning objectives

- Quick and efficient use of the comprehensive diagnostics and test functions
- Understand effects of changes in the process (filling program)
- Replacement of components and data back-up

Technical data, scope of supply

- ASI Safety rack, Touch-Screen/SIMATIC S7 rack and B&R (FVC) rack
- Connection diagram and operating instructions
- Customer transponder set
- Including current filler software project

Benefits to you

- KRONES machine visualisation system with all included parameters visible
- Simulation and understanding of the filling process or the filling program



Digital KRONES Academy

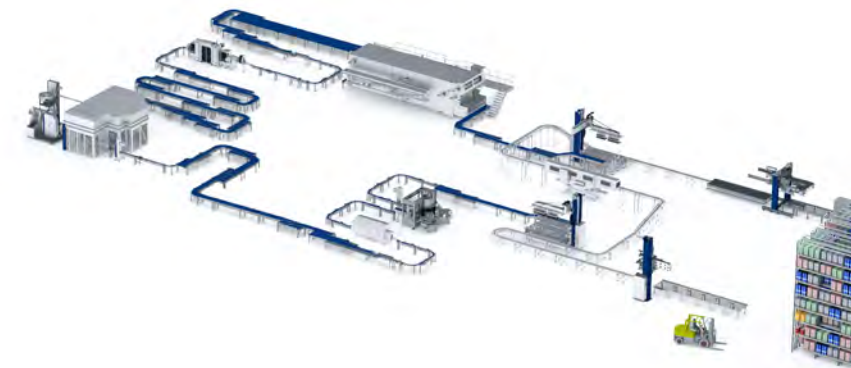
Digital KRONES Academy

Your direct line to KRONES know-how

All machine information stored at a central location and available for calling up by a range of different devices? The Digital KRONES Academy makes it possible. The concept is simple yet ingenious at the same time:

Via integrated Wi-Fi you can access all the materials in the training terminal using your smartphone or tablet. You will therefore be able to carry out crucial tasks on the KRONES machine confidently and reliably.

You get operating manuals, custom-tailored training materials and short video sequences – and all in one place: the training terminal. But the Digital KRONES Academy is more than a central storage space. After all, it goes without saying that you also need to have the right tools to hand where they are needed – which means at the machine itself.





Digital KRONES Academy live trainer

Live training by video conference in your company:

- Opportunity to delve further into individual training units
- Instruction in new KRONES technologies
- Instruction in the use of the KRONES automation equipment/notebook

Our experienced trainers send you your knowledge using the most up-to-date video conference equipment in short training units and thus make it possible for you to increase your knowledge directly in your familiar working environment.* Please contact us for more information.

* Requirements:
An adequate internet infrastructure and on-site video conference equipment





KRONES Automation Engineer

Your own expert

KRONES will support you with all questions around Automation Technology. Our objective is keeping your staff always up to date with the latest technology. With your certificate of the KRONES Automation Engineer we will guarantee high-quality enhanced training and you will have your personal expert on-site.

Modular design

In theoretical and practical units, the future KRONES Automation Engineers will learn

- technology of KRONES components.
- the optimum interaction of network technology and control technology.
- performing maintenance and malfunction diagnostics without any problems.
- minimising sources of errors in the system.
- performing changes in the program.
- performing safe and quick data back-up.

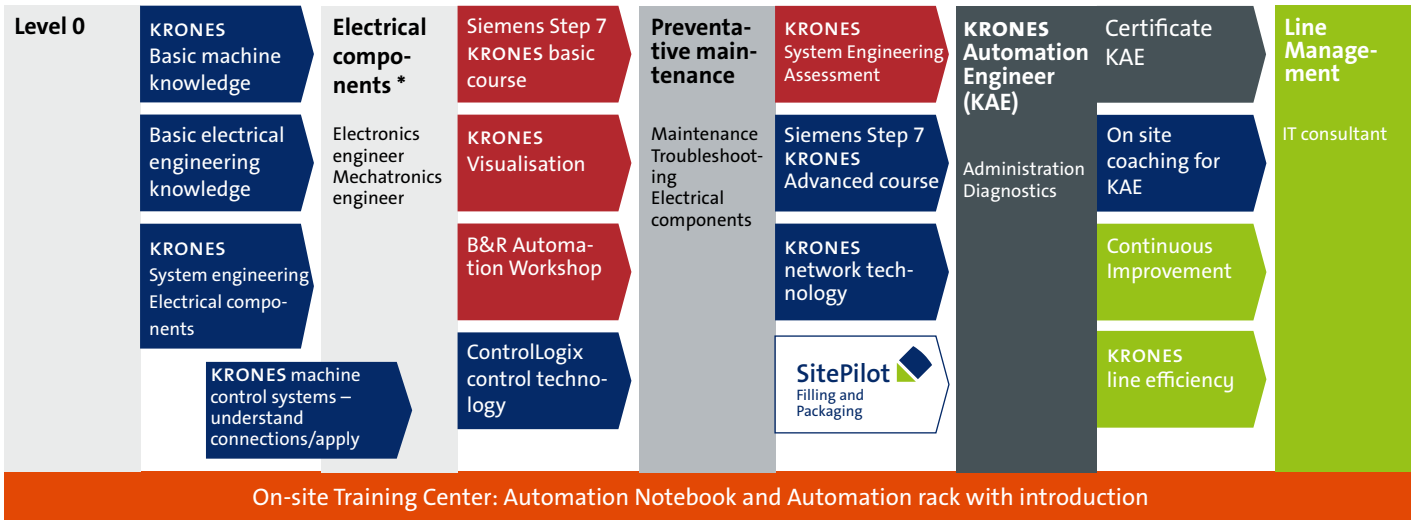
Individual and efficient

On his way to KRONES Automation Engineer, the participant will only take the courses he really needs for his successful certification.

Always up to date

At the end of the course, the participant will receive the KRONES certificate which is valid for two years. This way, KRONES will guarantee that the qualification of the owner of the certificate is at the state of technology.

Your way to the KRONES Automation Engineer



■ Compulsory modules – your learning path to KRONES Automation Engineer in **9 days**:



* Electrical components level is the prerequisite for the KAE



KRONES Machine control systems – understanding and using relationships (SIMATIC S7-300)

Target group:

Engineers, technicians, mechatronics technicians, electricians, line managers

Suitable for the following software:

Siemens Step 7 V5.5, Zenon 6.22/7.10, Runtime Utility Centre (B&R)

Requirements: Basic technical knowledge, basic PC knowledge

Recommendation:

KRONES Automation notebook

Topics:

- System relationships:
 - General overview of the control system and consideration of the individual components
 - Insight into data communications within the machine/system

Control technology maintenance:

- Backing up of the system-relevant data of the entire system (CPU subcontroller, HMI, etc.)
- Replacement of components
- Preventive maintenance (e.g. imaging)

Troubleshooting:

- Specific troubleshooting of the general HMI fault message for PLC diagnostics
- Bus and network diagnostics (AS-i, Profinet, Profibus, Ethernet, etc.)
- Touch-screen diagnostics options
- PLC diagnostics with/without programming unit

Locations:

Neutraubling (DE), Franklin (US), Johannesburg (ZA), Bangkok (TH), Nairobi (KE)

Course objective:

Avoiding downtimes, quickly diagnosing faults and backing up data completely are the basis for machine maintenance. In this course you will learn about the interplay of all control components, providing you with a better understanding of the system controller. Especially for new KRONES systems, the course offers a quick introduction, and with it a smooth transition from commissioning to production.



Siemens S7-1500 controller and STEP 7 in the TIA portal

Innovations in the field of machine controllers: The latest generation of machines features Siemens S7-1500 controllers and the latest engineering software »STEP 7 in the TIA portal«.

To enable you to use this software structure to optimum effect, the KRONES Academy now also offers courses on this system. In addition you will also receive the corresponding SIMATIC S7-1500 rack/TIA from KRONES.

Your route to TIA Expert in 8 days

TIA basics <ul style="list-style-type: none"> ■ PLC system ■ Variables and addressing ■ Communication 	TIA system set-up <ul style="list-style-type: none"> ■ PLC configuration ■ Bus systems ■ Hardware configuration 	Program basics <ul style="list-style-type: none"> ■ TIA portal handling ■ Diagnostics options ■ Bit programming ■ Profibus communication 	KRONES TIA structure <ul style="list-style-type: none"> ■ Programming ■ Communication ■ Documentation ■ State machine 	Step 7/ TIA basic course
TIA System Advanced <ul style="list-style-type: none"> ■ TIA basics ■ System set-up 	Program modules <ul style="list-style-type: none"> ■ KRONES shift register ■ Signal transmission ■ TIA module functions 	Interaction with machine <ul style="list-style-type: none"> ■ Touch-screen/HMI communication ■ Working with the KRONES shift register ■ Program modifications 	Programming languages <ul style="list-style-type: none"> ■ SCL and S7-Graph ■ Basics ■ Programming structure ■ Commands 	Step 7/TIA advanced course



KRONES Automation Notebook

KRONES Automation Notebook

Description

Regardless if for training support in automation training or diagnostics and troubleshooting in the line – with the KRONES Automation Notebook, you can start right away. The KRONES Automation Notebook contains the most important KRONES software applications; all required cables and adapters are included in the scope of supply.

Technical data, scope of supply

- Dell 5590 with adequate equipment
- Alternatively: SIMATIC Field PG M5 Comfort
- SIMATIC S7 V5.6
- Zenon emergency package

- Danfoss MCT 10 set.up software, B&R-CPU diagnostics, K-DOT, PD-WIN, PDEXE, DCopy, EasyConfig, MOVITOOLS, DbamGR2k and more
- Acronis® Backup & Recovery™
- Cable and adapter for communication and online connection
- ElonWeb

Optional additional equipment

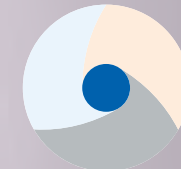
- Allen Bradley RS Logix 5000 Standard Edition
- B&R Automation Studio Maintenance Set
- S7-PLCSim V5.4 Simulation Software
- ASiMon software
- SIMATIC Step7 in the TIA Portal
- Zenon Supervisor Edition 6.20/6.22 and 7.10

Possible applications

- Suitable for all training modules from the automation and electrical area
- Developing and testing own programs (Siemens Step7, Zenon HMI, etc.)
- Data backup using KRONES Backup and diagnostics tools

Benefits to you

- Expanded fault diagnostics for quick troubleshooting
- All tools for data back-up are already installed
- Simply turn it ON and you can start immediately
- Zenon emergency package included: Machine control using the Automation Notebook if system-relevant hardware has failed.





IT Solutions

SitePilot course navigator

Engineer 5 days	4 days	SitePilot LD Course: IT 30	Shift leader 4 days
	4 days	KAM Course: IT 31	
	0,5 days	KAM Light Course: IT 32	
	0,5 days	KAM HMI Course: IT 33	Operators 0,5 days

KRONES IT solutions – SitePilot Line Diagnostics (LD)

SitePilot – all KRONES IT solutions under one roof. Plan, visualise and document your entire production with the SitePilot LD.

Optimal total cost of ownership for the entire production

KRONES SitePilot LD allows you to ensure that your line is working to capacity. For the system supports you in optimally coordinating your processes.

Clear and continuous batch tracking

You are provided with a complete image of your products and their components through the automatic recording of all production data.

Transparency is everything

Collect all the information and data from production and make it available throughout the whole company. That is how to create optimal production processes and high transparency for all decisions.

Costs and availability under control

You can be sure that all products can be delivered rapidly and that jobs are completed efficiently even when schedules are tight.

Optimally informed - even with paperless production

The comprehensive flow of information from the company headquarters down to the individual machines puts all production departments equally in the picture.



Line analysis using the KRONES SitePilot LD

Course: IT 30; duration: 4 days

Target group:

Electricians, shift supervisors, production managers

Suitable for the following

software: SitePilot LD

Requirements: None

Topics:

- Overview of all SitePilot LD modules
- Practical work using SitePilot LD modules on your own PC
- Data Acquisition
 - Basics, structure and design
 - Network overview
 - Client/server hardware
- Information Board,
 - Status of the line
 - Observation and monitoring of procedures and processes
- Analysis Board
 - The analysis is performed by the graphical comparison of process and status data
 - Information on downtimes of the lead machine
- Reporting
 - Web-based reports for the standardised and comparable evaluation of the production situation
- Downtime Management
 - Targeted weak point analysis of bottling and packaging lines
 - Manual classification of downtimes
 - Detection of weak points and bottlenecks in the production

- Line overview
 - Graphical overview of the complete line represented in real time
 - Visual allocation of events to the actual event location
- Order Management (optional)
 - Order-specific display and analysis of information and key figures

Location:

directly on site

Course objective:

Are you using KRONES SitePilot LD to measure the efficiency of your line? Do you know all parameters of this tool? This seminar will make you more familiar with the instrument, starting with the touch-screen functions up to the analysis of standard reports.



IT Solutions

Maintenance and warehouse management using the KRONES Asset Management KAM

Course: IT 31; duration: 4 days

Target group:

Maintenance managers,
engineers, warehouse staff

Suitable for the following software:

KRONES Asset Management KAM

Requirements: None

Topics:

- Working with the workbench
- Servicing
 - Equipment and personnel
 - Work instructions
 - Maintenance plan and order
 - Check-back signal
 - Creating messages
 - Reporting system

■ Parts management

- Spare parts management
- Bookings, orders, reservations

■ Configuration

- Basic configuration
- Personnel and user configuration
- Shift configuration

Locations:

Neutraubling (DE), on site

Course objective:

KRONES KAM can do a lot for you. However, to fully benefit from this instrument, you have to understand what it is all about. Spend four days with our experts to gain a thorough insight into the system and to get answers to all of your questions. Profit from the knowledge and the experience of our trainers and their practice-oriented teaching methods.

KAM-Light: Introduction to the KAM web version

Course: IT 32; duration: 0,5 days

Target Group:

Maintenance managers,
engineers, warehouse staff

Requirements: KAM is recommended, but is not absolutely necessary

Topics:

- Introduction to the basics
- KAM Web
 - Easy access to important KAM functions
 - Messages, check-back signals
 - Overview of materials
 - Work instructions

Locations:

Neutraubling (DE), on site

Course objective:

KAM Web offers you virtually a light version of the KRONES Asset Management on any Dateal. In only half a day you will know this tool and receive a thorough insight into the system. You will receive answers to all your questions and benefit from the knowledge and experience of our training course instructors and their hands-on teaching methods.

KAM on the machine: Operator training for KAM HMI

Course: IT 33; duration: 0,5 days

Target group:

Operators

Suitable for the following software:

KRONES Asset Management KAM

Requirements: KAM is recommended, but is not absolutely necessary

Requirements: None

Topics:

- Introduction
 - Basics
 - Machine touch-screen
- KAM HMI
 - Messages
 - Check-back signals
 - Work instructions
 - Documents

Locations:

Neutraubling (DE), on site

Course objective:

If you use KAM HMI, you will have maintenance information directly on the machine screen. After only half a day your operators will be able for example to send messages or retrieve and reset upcoming work.

Recording and evaluating key performance indicators using KRONES LDS

Course: IT 34; duration: 2 days

Target group:

Electrical engineers, shift supervisors, production managers

Suitable for the following software:

Line documentation system LDS

Requirements: None

Topics:

- Introduction
 - Basics, structure and design
 - Network overview
- Data monitor
 - Real-time touch-screen of the line
 - Operating statuses, counters, trend values
 - Flow diagrams

■ Data Chart

- Graphical representation of trend values
- Scalable curve generation

■ KRONES web report manager

- Operating status report
- Malfunction analysis report
- Program report
- Product List
- Production report
- Customer-specific reports

Locations:

Neutraubling (DE), on site

Course objective:

Are you using KRONES LDS to measure the efficiency of your line? Do you know all parameters of this tool? This seminar makes you more familiar with this instrument, starting with the visualisation functions in the data monitor up to the standard reports in the Webreport Manager.

Administration of a KRONES LDS

Course: IT 35; duration: 0,5 days

Target group:

IT experts, electrical engineers, shift supervisors, production managers

Suitable for the following software:

Line documentation system LDS

Requirements:

Participation in the course: “Recording and evaluating key performance indicators using KRONES LDS” (IT 34)

Topics:

- Introduction
 - Overview of networks, client/server hardware
- Data Archive
 - Recovery of archived data bases
 - Data security concepts
- KRONES Data Acquisition: Real-time data recording
- Shift administration, user administration

Locations:

Neutraubling (DE), on site

Course objective:

This course provides you with the necessary skills for fulfilling the role as LDS administrator with expertise. You will gain a basic understanding for the configuration of the program and you will find out which safety aspects must be considered. You will also learn how to back up and restore data and you will then be able to independently configure and manage both the shift system and the users.

KRONES Line Performance Analyser LPA – reports and data analysis

Course: IT 36; duration: 1 day

Target group:

Shift supervisors, production managers

Suitable for the following software:

Line Documentation System LDS and Line Performance Analyser LPA

Requirements:

“Recording and evaluating key performance indicators using KRONES LDS” (IT 34)

Topics:

- Introduction
 - Basics
 - Requirements
- OEE entries
 - Classifying, grouping and dividing filler downtimes
 - Time mode online/historical

- Web reports
 - OEE dashboard
 - Key factors of the line (KPIs)
 - Daily, monthly and annual reports
 - Creating and editing downtime classes
- Order and product management (optional)
 - Creating, processing, deleting
 - Product management
 - Status report
- Operator panel (optional)
 - Starting and Dateating orders
 - Classifying non-productive times
 - Downtime classification

Locations:

Neutraubling (DE), on site

Course objective:

The Line Performance Analyser monitors your line and “serves up” all the key performance indicators you require in a clearly ar-ranged and convenient format. To help you get the best out of LPA right from the start, we offer this workshop. Learn in only one day how to efficiently and safely use this system!

KRONES Line Performance Analyser LPA – data input

Course: IT 37; duration: 0,5 day

Target Group:

Operators

Suitable for the following software:

Line Documentation System LDS and Line Performance Analyser LPA

Requirements: none

Topics:

- Introduction to the basics
- Classifying downtimes and non-productive times of the lead machine
 - Assigning non-productive times such as cleaning, changing over, etc.
 - Classifying lead machine downtimes
- Operator panel (optional)
 - Starting and ending production orders

Locations:

Neutraubling (DE), on site

Course objective:

The LPA supplies correct analyses only if you know how to properly classify the downtimes of the lead machine. This course will give you a solid foundation for your daily work using the Line Performance Analyser – the best prerequisite for the LPA to provide you with exactly those analyses which you also require.

Social Media

KRONES is using the social media for exchange with business partners, employees and all those who are interested in the company and its products.



“KRONES Academy – achievers aren’t born, they are built”

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