

QUALIFICATION. NETWORKING. ONE STEP AHEAD.



BENEFIT FROM  
> 100 YEARS  
OF SOLDERING  
EXPERIENCE

TRAININGS 2024.

DRIVEN BY KURTZ ERSA.

CUSTOMIZED TRAINING AND EDUCATION FOR  
STAFF QUALIFICATION IN ELECTRONICS PRODUCTION.

# TRAININGS 2024 – OVERVIEW



## MACHINE SOLDERING AND STENCIL PRINTING

### PROCESS

- Ersa Know-How Seminars
- Customer-specific technology days

### SERVICE

- VERSAFLOW 4 – Operating and Maintenance Training Basic & Advanced
- Customer-specific practical training – Operation and maintenance



## DIGITAL

### DIGITAL

- Live-Demonstrations
- WEBinERSA
- Customer-specific WEBinERSA
- eLearning via Kurtz Ersa CONNECT



## SEMINAR INFORMATION

- Customer Care & Application Centers
- Training dates 2024, Registration



# QUALIFICATION PAYS OFF!

**Dear Ladies and Gentlemen,**

The dynamics in electronics manufacturing are unbroken, the signs continue to point to growth. To get the best out of your hardware, you should consistently invest in the know-how of your employees so that you can reliably and reproducibly achieve soldering results at the highest level. We qualify your team so that you are always one step ahead of the competition in electronics manufacturing and can provide top quality at low cost.

The Erska Training Program 2024 traditionally covers all aspects of professional soldering – from solder paste printing,

reflow, selective and wave soldering to rework and manual soldering.

Depending on your needs, you can enter thematically anywhere at any time – whether fundamentals, process or service/maintenance. We have the right qualification offer ready for you – digitally or directly on site: basic process training, machine training for service, practical training for process technology or optimization, individually designed technology days or digital refresher courses in machine or manual soldering with offers such as the WEBinERSA webinars or our

live demos from the Application Center. As a system supplier, we also offer a wide range of soldering courses based on a balanced theory-practice mix, including the manufacturer-neutral AVLE-seminars with offers for beginners up to rework specialists (modules 1-4) or machine experts (modules 5-8) including recertification. Small groups of participants enable the trainers to address questions individually.

**We are happy to support you in planning your individual training needs!**

**Your Erska Team:**

**f.l.t.r. Patrick Stumpf, Hansjürgen Bolg, Laura Schulz and Rainer Krauss.**





# MACHINE SOLDERING AND STENCIL PRINTING.

Cost-effective production and highest quality are the basis for competitive products on the market, know-how and qualification of the personnel are the keys to success. The Erska Know-How Seminars are the ideal podium for further training and exchange of experience with other participants. In the seminars, the trainers repeatedly allow theory and practice to merge for the benefit of the seminar participants. Process trainings (basics) and service (machines) are the perfect combination to achieve the highest quality and output in production.



# PROCESS BASIC TRAINING

**Join in any time – whether process or service, whether digital or on site!**

Important foundations are laid in the area of process training – whether as basic training or advanced training, in which external instructors also examine soldering topics in greater detail.

Furthermore, there are our exclusive Technology Days, which are tailored to your wishes and needs on request.



# ERSA KNOW-HOW SEMINAR: LEAD-FREE WAVE AND SELECTIVE SOLDERING

## Short description

Experience first-hand soldering know-how both in theory and practice: The two-day intensive course "Lead-free wave and selective soldering" is a balanced mix of theory and practice.

In the theoretical part of the seminar, participants acquire detailed knowledge

of the various variables influencing solder joint quality and their interactions in the soldering systems, the process limits and their associated monitoring options, as well as the treatment of soldering defects. This knowledge can be applied and thus consolidated in the subsequent practical part on various systems.

## Theory

- Materials and equipment
- Boundary conditions and influences
- Layout design
- Process control and temp. measurement
- Defect patterns and solutions

## Your benefit

- Build up detailed knowledge and gain confidence in your daily work
- Refreshing and deepening the subjects
- Understanding and questioning the interaction of influencing parameters and boundary conditions
- Faster defect detection, faster isolation & fixing – higher quality of soldering results

## Practice

- Machine checks in preparation for production
- Setting and control of flux, preheating and soldering parameters
- Measurement of temperature profiles

- Acquisition of further competence and qualifications in special fields
- Application of the new theoretical knowledge in the practical session
- A better understanding and further approaches for your own production line
- Benefit from information exchange with other companies

## DO YOU HAVE QUESTIONS?



### Kristin Düll

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### Laura Schulz

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## Dates

24<sup>th</sup> – 25<sup>th</sup> April, 2024

Start: 8:30 am



## Requirements

Basic knowledge of industrial electronics manufacturing recommended



## Course documentation

In printed form



## Fee

€ 800 per person plus VAT incl. examination costs



## Certificate

Theoretical examination with certificate



## Option

You are welcome to bring your own assemblies to the seminar



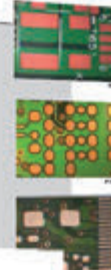
## Book training dates on

You can find all details of the training on:  
[kurtzrsa.com/trainings](https://kurtzrsa.com/trainings)

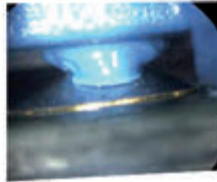


## PCB SURFACE FINISHES

HAL	Tinned finish
OSP	Organic Solderability Protection
ENIG	Nickel-Gold
ENIG	Nickel-Palladium-Gold
ISn	Immersion tin
IAG	Immersion silver



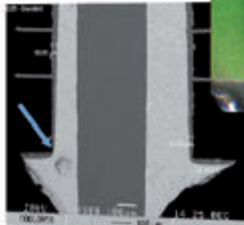
## ERROR PATTERN – COMPONENT DAMAGE / RESISTANCE TO SOLDERING HEAT



Transfer of heat energy from the liquid solder via the component pins into the component is enormous and may cause a plastic deformation of the component package. Temperature and time are the affective factors.

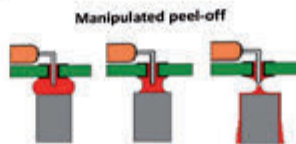
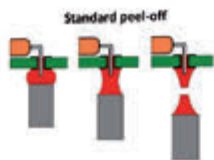
LATEST  
TECHNOLOGY  
NEUTRAL  
PRESENTATION

## COPPER LEACHING



- If a solder joint requires a high amount of solder heat, the solder temperature should be increased very carefully.
- At high temperatures, the copper will be leached very quickly. In the worst case, the entire pad will dissolve.
- The correlation between the leaching speed and the solder temperature is not linear!

## PEEL-OFF WITH WETTABLE SOLDER NOZZLE SURFACES



forms



# ERSA KNOW-HOW SEMINAR: REFLOW SOLDERING AND SOLDER PASTE PRINTING

## Short description

Experience first-hand soldering know-how both in theory and practice: The two-day intensive course "Reflow soldering and solder paste printing" of multi-pole SMT and QFN components teaches the theoretical and practical know-how of both areas. During the theoretical part, participants will acquire knowledge about the different

parameters influencing soldering and paste print, and they will also learn how processes interact. Next they will take a closer look at the process limits and the handling of defects in the soldering and print result. In the practical session, the participants consolidate their acquired knowledge while working with the different systems.

## Stencil printing

- Print materials
- Stencil and layout
- Influence of the print parameters
- Printing defects and their causes

## Your benefit

- Build up detailed knowledge and gain confidence in your daily work
- Refreshing and deepening the subjects
- Understanding and questioning the interaction of influencing parameters and boundary conditions
- Faster defect detection, faster isolation & fixing – higher quality of soldering results

## Reflow soldering

- Materials and equipment
- Boundary conditions and influencing parameters
- Create, measure & analyze temp. profiles
- Soldering defects and their causes
- Reduction of void formation

- Acquisition of further competence and qualifications in special fields
- Application of the new theoretical knowledge in the practical session
- A better understanding and further approaches for your own production line
- Benefit from information exchange with other companies

## DO YOU HAVE QUESTIONS?



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### Laura Schulz

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Mail: Laura.Schulz@kurtzrsa.de



## Dates

16<sup>th</sup> – 17<sup>th</sup> October, 2024

Start: 8:30 am



## Requirements

Basic knowledge of industrial electronics manufacturing recommended



## Course documentation

In printed form



## Fee

€ 800 per person plus VAT incl. examination costs



## Certificate

Theoretical examination with certificate



## Option

You are welcome to bring your own assemblies to the seminar



## Book training dates on

You can find all details of the training on:  
[kurtzrsa.com/trainings](https://www.kurtzrsa.com/trainings)





LATEST  
TECHNOLOGY  
NEUTRAL  
PRESENTATION

### STEP STENCILS

Individual components can have different stencil thicknesses.

- Small pitches get thinner stencil areas.
- Components with a high paste requirement are given thicker areas (slugs, shims etc.).
- Each height difference causes a transition area.
- Extreme differences in height can be overcome with segmented stencils – e.g. with 3D stencils.
- Steps can also create cavities on the bottom side of the stencil.

Step stencils are available for all frame types.

### SOLDER PASTE HEIGHT CONTROL

Variants:

- Sensor measures the paste roll diameter during printing from above.
- Sensor measures the height of the resting paste before squeegee.
- Sensor in the paste wiper checks whether paste is present.

Paste level limits (mm):	10.0	41.0	0.0 mm
# disp. below:	display and stop		

### GRADIENT RATE IN THE PEAK ZONE

Shallow gradient

0,7 K/s

Steeper gradient

2,75 K/s

For components according to IEC 60720, max. grad rate is 3 K/s

If PCB layout is tombstoning is

### DEFECT PATTERN – TOMBSTONING / MANHATTAN

Due to the different pad geometry, the solder paste melts earlier on the small pad. Surface tension can tilt the component upwards.

Exemplary pad design to avoid different melting times of the pads.



# CUSTOMER-SPECIFIC TECHNOLOGY DAYS

## Short description

For technology companies we offer customer-specific Technology Days, which are individually arranged according to your wishes and needs.

Since the seminars are organized and conducted exclusively for your company, the theoretical and practical sessions can be tailored exactly to the needs of your

employees. In addition, the exchange of knowledge and experience among your own employees across departments and locations is stimulated.

The focus of the one- or two-day intensive course is to observe and analyze all boundary conditions affecting the soldering process.

## Technology Days for Auditors

Exclusively for users who follow the soldering process in the supply chain, we offer Technology Days that deal specifically with the knowledge of process technology that is relevant to you. Our experts will give you an insight into our technology, processes, and explain, for example, what

needs to be taken into account when auditing suppliers in these processes.

In addition, we take the time to explicitly address your questions about joining technology.

## Your benefit

- Understand and interpret your supplier's processes
- High quality at the lowest possible cost
- Being one step ahead and demanding the latest technologies
- Future-oriented market approach

## DO YOU HAVE QUESTIONS?



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### Laura Schulz

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Mail: Laura.Schulz@kurtzsa.de



## Dates

On request



## Agenda

Individually arranged according to your wishes and needs



## Course documentation

In printed form



## Participants

Minimum of 6 attendees



## Fee

1<sup>st</sup> day: € 475 per person plus VAT

2<sup>nd</sup> day: € 375 per person plus VAT

Examination Fee:  
€ 100 per person plus VAT

Optional examination for all participants with certificate. Seminar participants who do not take the exam will receive a certificate of attendance.



## References

Automotive manufacturers, industrial electronics, consumer electronics

# CUSTOMER-SPECIFIC TECHNOLOGY DAYS

**Design your Technology Days together with us choosing from the content below**

## **Exemplary module Solder Paste Printing**

- Stencil types, layouts
- Print materials and parameters
- Print defects and their causes

## **Exemplary module Wave and Selective Soldering**

- Demands on PCB and PCB design
- Selective mini- and/or multiwave soldering
- Process windows and production throughput

## **Exemplary Module Optical Inspection**

- Assistance instead of control
- Influence of cleaning and calibration intervals on the test quality
- Detection and reduction of defects

## **Exemplary Module Design**

- Printed circuit board technology and production-oriented design for the economical production of reliable electronic assemblies

## **Practical Session in the Ersa Application Center**

The practical session covers the machine construction and the practical application. The main focus is on parameter setting

## **Exemplary module Reflow Soldering**

- Definition of process windows
- Soldering defects and their causes
- Quality parameters in reflow soldering

## **Exemplary module press-fit**

- Requirements for the printed circuit board and the printed circuit board design
- Variance of the press-fit zones
- Influencing factors and monitoring of the process

## **Soldering technology for high reliability electronics**

- Design Challenges for high reliability assemblies and devices
- Optimized PCB layout under thermo-dynamic aspects
- Flexible system concepts which, considering throughput and variant range, allow precise adaptation of the process parameters to the individual solder joints

and monitoring, as well as on the effect on the soldering result when parameters are within or outside of the limits.



### **Dates**

On request



### **Agenda**

Individually arranged according to your wishes and needs



### **Course documentation**

In printed form



### **Participants**

Minimum of 6 attendees



### **Fee**

1<sup>st</sup> day: € 475 per person plus VAT

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### **References**

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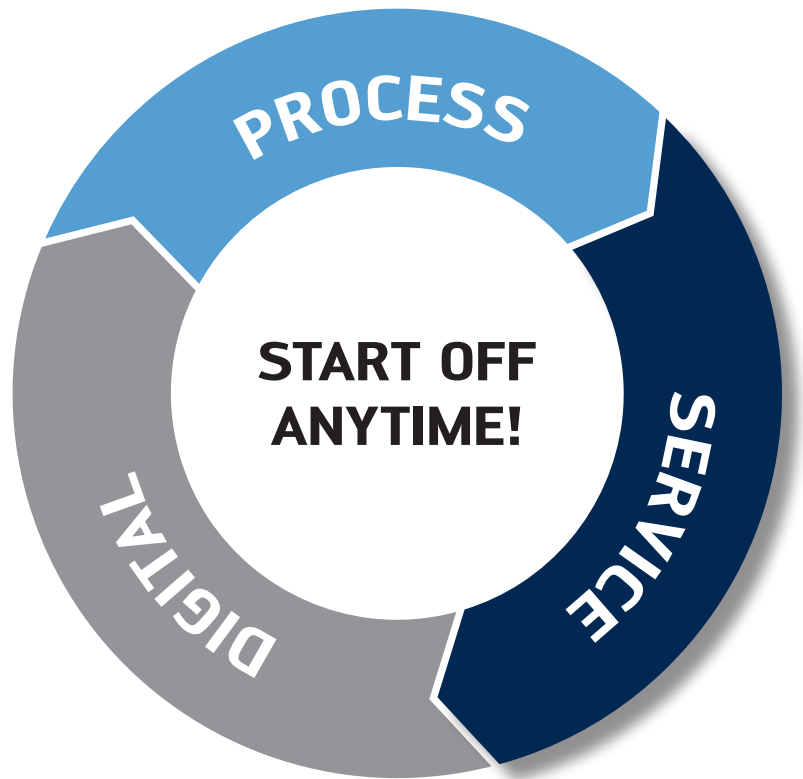
# SERVICE

## MACHINE TRAININGS

**Join in any time – whether process or service, whether digital or on site!**

Machine training specifically adapted to your needs. We train your service team or individual employees specifically on Erska soldering systems in the technology areas of reflow, wave and selective soldering and stencil printing.

In exclusive practical training courses topics and contents are optimally coordinated.



# VERSAFLOW 4

## OPERATION AND MAINTENANCE TRAINING

### Short description

You will receive comprehensive information on our high-end soldering systems at first hand. The theory gives an overview, in the

practical part you will experience and learn in "hands-on" yourself the operation, maintenance and handling of the machine.

### Theory

- Overview of the machine with options
- Basics of the soldering process
- Modules in detail and special features
- Preparations for production

### Practice

- Operation and settings of the machine
- Maintenance and special features
- Calibration
- Soldering program creation and optimization

### Your benefit

- Better understanding of the soldering process and correlations
- Expansion of skills in operation and maintenance
- Assurance of the process stability
- Optimization of quality in production

**Combine our basic seminar with the advanced seminar for maximum benefit for your employees. Booking of the trainings are also possible individually:**

#### BASIC SEMINAR: 1 day

- 04<sup>th</sup> June, 2024
- 12<sup>th</sup> November, 2024

#### ADVANCED SEMINAR: 2 days

- 05<sup>th</sup> – 06<sup>th</sup> June, 2024
- 13<sup>th</sup> – 14<sup>th</sup> November, 2024

## DO YOU HAVE QUESTIONS?



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### Dates

See below



### Target group

This training is the ideal platform for employees of manufacturing and production divisions who need first-hand practical knowledge in their daily use of the systems.



### Participants

Min. 4 attendees,  
max. 6 attendees



### Fee

#### BASIC SEMINAR: 1 day

€ 375 per person,  
plus VAT

#### ADVANCED SEMINAR: 2 days

€ 700 per person,  
plus VAT



# CUSTOMER-SPECIFIC PRACTICAL TRAINING

## OPERATION AND MAINTENANCE

### Short description

You will receive full information on our high-end soldering systems at first hand. The theory gives you an overview, in the practical part you will experience and learn

in "hands-on" all about operation, maintenance and handling of the machine for optimal processes in your production and entirely according to your wishes.

### Theory

- Overview of the machine with options
- Basics of the soldering process
- Modules in detail and special features
- Preparations for production
- Optimal soldering process and influencing factors

### Practice

- Operation and settings of the machine
- Maintenance and special features
- Calibration
- Soldering program creation and optimization

### Your benefit

- Better understanding of the soldering process and correlations
- Expansion of skills in operation and maintenance
- Assurance of the process stability
- Optimization of quality in production
- Ensure high machine availability

## DO YOU HAVE QUESTIONS?



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### Dates

Dates and duration according to individual arrangement. Location of the event at your site or in Wertheim at Ersa GmbH.



### Target group

This training is the ideal platform for employees of manufacturing and production divisions who need first-hand practical knowledge in their daily use of the systems.



### Participants

Max. 6 attendees  
(min. 2 attendees)



### Fee

On request

# CUSTOMER-SPECIFIC PRACTICAL TRAINING

## OPERATION AND MAINTENANCE

### Short description

Together we define topics according to your target group and depth of the content to be trained, as well as the location. Choose from modules and

configure with us a training for your requirements. Choose for example from these topics and contents:

### Structure and functions of the machine

- General structure of the machine
- Technical data (commissioning)
- Tricks for effective troubleshooting

### Operation of the machine

- The operating modes of the machine (setup, automatic)
- Simple management of users
- Data backup of the machine

### Creating and optimizing programs

- The soldering program editor
- Optimization of the most important parameters

### Optimal service and maintenance

- Aids and tools for best results
- Maintenance table

### Timely error detection and reduction

- Displaying messages and faults
- The description of the message
- Troubleshooting and possible failure causes

### Calibration and settings for constant quality

- Conveyor (e.g.: referencing, teaching)
- Fluxer (e.g.: Set up spray head, calibrate axes)
- Solder pot (e.g.: Axis calibration, offset and gradient adjustment)

## DO YOU HAVE QUESTIONS?



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### Dates

Dates and duration according to individual arrangement. Location of the event at your site or in Wertheim at Ersa GmbH.



### Target group

This training is the ideal platform for employees of manufacturing and production divisions who need first-hand practical knowledge in their daily use of the systems.



### Participants

Max. 6 attendees  
(min. 2 attendees)



### Fee

On request





# DIGITAL.

Time is a precious resource – especially in the constantly changing electronics manufacturing industry. In the continuously growing market, specialist expertise at the latest technological level is increasingly required.

Just get it digitally as an ideal supplement to your on-site training needs!





# DIGITAL – REFRESHERS

## FOR HAND SOLDERING AND REWORK FOR MACHINE SOLDERING AND STENCIL PRINTING

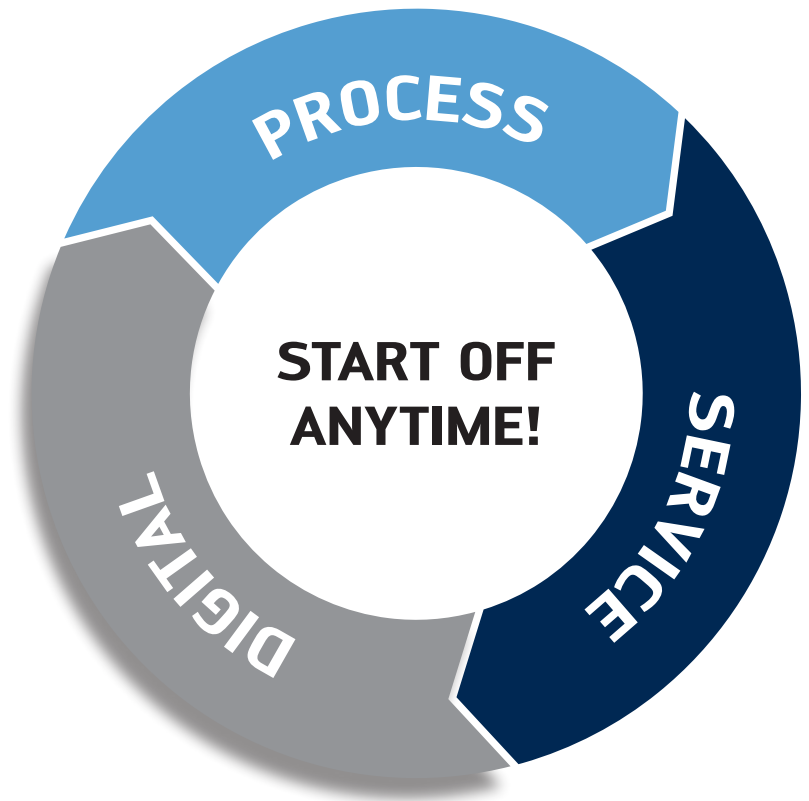
**Join in any time – whether process or service, whether digital or on site!**

Whether manual soldering or automated rework, machine soldering or solder paste printing – in electronics production, numerous technologies must be mastered in order to achieve a permanent, high-quality soldering result in the end.

With Ersa's digital refresher courses, you will get exactly the knowledge you need – whether for manual soldering and rework or in the field of machine soldering and stencil printing.

During a live demonstration of one of our systems, which is conducted by our experienced application engineers, you can check whether the Ersa system and your product are compatible.

Or inform yourself online and independent of location with our WEBinERSA: Learn about current topics in electronics production and exchange ideas with Ersa's soldering experts.



### The future: eLearning

In the near future, you will also have the opportunity to use Ersa eLearning to obtain information on our machine training courses at any time and to receive direct assistance.



# LIVE DEMONSTRATIONS

## LIVE DEMONSTRATIONS AND TESTS ON YOUR ASSEMBLIES IN THE ERSA APPLICATION CENTER

### Short description

Your electronics production is humming, the soldering systems are working at the limit of productivity – with constant product change, highest flexibility, classic high mix/low volume. An attractive offer for a high-quality assembly which you definitely want to produce and which at the same time represents a real soldering challenge has just landed on your table. What to do? The product must be manufactured as

quickly as possible - but nobody in your team is available? Ersas, your partner and system supplier No.1 for electronics production, has the solution: Simply send us your assemblies and description of the soldering task, Ersas engineers will immediately create the corresponding soldering programs and temperature profiles – we will present this solution to you directly in the live stream.

### That's how it works

- Make an appointment
- Connect to the live stream
- Introduction of the participants
- Overview Ersas soldering system
- Explanation of the settings made
- Print/solder assembly and track cycle
- Presentation of results

### Your benefit

- No travel costs and time savings, as there is no need to travel
- Unlimited number of participants possible on your part
- Experienced Ersas engineers with high-quality video equipment will explain the process step by step – you will have the same results as if you were at an on-site appointment!



### Dates

On request



### Agenda

Individually arranged according to your wishes and needs



### Fee

Free of charge



## DO YOU HAVE QUESTIONS?

### Soldering systems and stencil printers



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### Hand soldering, rework & inspection systems



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## FOR HAND SOLDERING AND REWORK FOR MACHINE SOLDERING AND STENCIL PRINTING

### Short description

Our goal is to give all interested parties access to the desired soldering know-how – or in short: With the WEBinERSA we want to make your production even stronger!

Our webinars, each lasting 60 to 90 minutes, provide information on current topics in soldering technology and offer a wide variety:

whether stencil printing, high-end soldering machines, rework and inspection systems or intelligent solutions in classical hand soldering – there is something for everyone.

You can find our current WEBinERSA program on our homepage in the Ersas Training section.

### That's how it works

- Register via our homepage
- Receive confirmation and a link to access your WEBinERSA
- Dial in 5 minutes before the WEBinERSA starts
- Listen to the presentation and get directly in touch with the experts
- Note: The software does not have to be available in the company, it is a web link

### Your benefit

- Worldwide and location-independent access to technology know-how
- Qualification of employees through digital system and process training
- Increased flexibility due to online trainings
- Exchange with experts on current topics in electronics production

## DO YOU HAVE QUESTIONS?

### Soldering systems and stencil printers



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### Hand soldering, rework & inspection systems



**Marco Schöllig**  
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**Fee**  
Free of charge



**Book training dates on**  
You can find all details of the training on:  
[kurtzrsa.com/trainings](http://kurtzrsa.com/trainings)



# CUSTOMER-SPECIFIC WEBinERSA

## FOR HAND SOLDERING AND REWORK FOR MACHINE SOLDERING AND STENCIL PRINTING

### Short description

In our customized WEBinERSA we offer exclusive 60- to 90-minutes of interactive technology sessions which are individually tailored to your wishes and needs. You choose the focus of the online session: Whether stencil printing, reflow soldering,

wave and selective soldering, hand soldering, rework, optical inspection, Industry 4.0 or practical explanations on the system matching the process know-how - the contents are precisely tailored to the needs of your employees.

### That's how it works

- Select subject area with focus together with your contact person
- Listen to customized presentation and enter into exchange with subject matter experts
- Make an appointment
- Receive link for dial-in

### Your benefit

- Worldwide and location-independent access to technology know-how
- Increased flexibility due to online trainings
- Qualification of employees through digital system and process training
- Exchange with experts on current topics in electronics production



### Dates

On request



### Fee

On request



## DO YOU HAVE QUESTIONS?

### Soldering systems and stencil printers



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### Hand soldering, rework & inspection systems



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# eLEARNING VIA Kurtz Ersa CONNECT FOR MACHINE SOLDERING AND STENCIL PRINTING

## Short description

With our online courses, we are expanding our range of training courses digitally, so that you can continue your training at your own pace, independent of time and place (24/7), and refresh your knowledge with new course material at any time.

In the modularly structured online courses, you can click through our service and training processes interactively and also receive quick direct help with maintenance, operation and other topics related to the machine.



## Registration

See brochure:  
Kurtz Ersa CONNECT

## Your benefit

- Worldwide and device-independent access to machine and technology trainings
- Continuous exchange of knowledge 24/7
- Use of Ersa technology know-how through integrated digital service and training processes
- Qualifying employees with interactive trainings
- Fast direct help on maintenance, machine, process and other topics
- Increase of process quality on Ersa systems
- Increased flexibility
- Faster training of new employees and refreshing the know-how of experienced employees at their own learning pace





# SEMINAR INFORMATION.

Increase the know-how in soldering systems in your electronics production with the comprehensive Erska training portfolio: On site in the fully equipped Application Center and additionally via the available online offers.

Plan individually according to your needs.  
Register now – by phone, e-mail or on the web.

**Ersa GmbH, Leonhard-Karl-Str. 24, 97877 Wertheim/Germany**  
**Phone +49 9342 800-0, [www.ersa.com](http://www.ersa.com)**



# CUSTOMER CARE & APPLICATION CENTERS

## ERSA CUSTOMER CARE & APPLICATION CENTERS WORLDWIDE

Look forward to the modern Erska Seminar Center in Wertheim/Germany – on the top floor of the new Erska location you will find ideal conditions for knowledge transfer in the generously proportioned conference rooms. Just a few steps away is also the AVLE course center – a few steps further are our clocked assembly lines operating according to Industry 4.0 standards and the Customer Care Center, where tests and machine acceptance tests take place.

& Inspection” division. Erska’s experienced application engineers are ready to demonstrate and test Erska hardware for your specific requirements. For us, the job is not done until we have worked out a perfect match and are allowed to optimize your assembly together with you under precisely defined conditions. Directly adjacent conference rooms round off our infrastructure to enable an intensive

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**Wertheim, Germany**



**Wertheim, Germany**



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**Pulau Penang, Malaysia**



**Ho-Chi-Minh-City, Vietnam**



**Guadalajara, Mexico**






**Plymouth, USA**



# TRAINING DATES 2024

## OVERVIEW

 <b>MACHINE SOLDERING AND STENCIL PRINTING</b>	
Process	
Course	Dates
<b>Ersa Know-How Seminar:</b> Lead-free wave and selective soldering	24 <sup>th</sup> – 25 <sup>th</sup> April, 2024
<b>Ersa Know-How Seminar:</b> Reflow soldering and stencil printing	16 <sup>th</sup> – 17 <sup>th</sup> October, 2024
<b>Customer-Specific Technology Days</b>	On request
Service	
Course	Dates
<b>VERSAFLOW 4</b> Operation and maintenance training BASIC SEMINAR	04 <sup>th</sup> June, 2024 12 <sup>th</sup> November, 2024
<b>VERSAFLOW 4</b> Operation and maintenance training ADVANCED SEMINAR	05 <sup>th</sup> – 06 <sup>th</sup> June, 2024 13 <sup>th</sup> – 14 <sup>th</sup> November, 2024
<b>Customer-specific practical training</b> Operation and maintenance	On request

 <b>HAND SOLDERING AND REWORK</b>	 <b>MACHINE SOLDERING AND STENCIL PRINTING</b>
Digital	
Course	Dates
<b>Live demonstrations</b> Live demonstrations and tests on you assemblies in the Ersa Application Center	On request
<b>WEBinERSA</b> For hand soldering and rework For machine soldering and stencil printing	Please refer to our website. webinar.ersa.com
<b>Customer-Specific WEBinERSA</b> For hand soldering and rework For machine soldering and stencil printing	On request
<b>eLEARNING via Kurtz Ersa CONNECT</b> For machine soldering and stencil printing	See brochure: Kurtz Ersa CONNECT
<b>Special dates and in-house trainings on request!</b>	

register now





[kurtzrsa.com/trainings](https://kurtzrsa.com/trainings)



# REGISTRATION

## BY PHONE, E-MAIL OR ON THE WEB



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Mail: [ersa-training@kurtzersa.com](mailto:ersa-training@kurtzersa.com) | [kurtzersa.com/trainings](http://kurtzersa.com/trainings)

## Conditions of participation

### 1. Participants

Participation is open to everyone meeting the requirements for each course specified in the program catalog.

### 2. Registration

Registration for courses must ensue in written form. The details you provide will be stored in an address file for internal processing. Registrations will be processed in the order in which they reach us. The registration deadline ends two weeks before the beginning of the respective course. Registrations reaching us later will be taken into account should places still be available.

### 3. Fees and payment

**3.1** The fees are subject to VAT and are payable by five days prior to the beginning of the course at the latest. The course fees also cover the course documentation and break-time snacks during the event. Travel expenses and any costs for accommodation and the evening meal on multi-day courses will be borne by the participants or the registering party.

**3.2** For cancellations up to two weeks prior to the beginning of the course, a handling charge of EUR 120 plus VAT will be levied per participant.

**3.3** In the case of cancellations at a later point, or non-participation, the full course fee will be charged.

**3.4** Participation authorisation can be transferred at any time to a substitute participant specified in writing. Notification of cancellation must be submitted by post, e-mail or telefax.

**3.5** Interrupting or discontinuing participation in a course which has already commenced does not release the party concerned from the obligation to pay the course fee in full.

### 4. Rules

The participant is obliged to acknowledge and observe the rules for the course. He must also comply with the instructions of the training staff. An infringement of these obligations can lead to the attendee being excluded from further participation in the course without their being released from the obligation to pay the fee.

### 5. Cancellation of lessons

Should the training facility be prevented from holding lessons by events which are outside its sphere of influence, no entitlement to replacement sessions at a later date shall apply.

### 6. Cancellation of courses

The training facility is entitled to cancel a course for economic or organisational reasons. In this event, the training facility shall refund the fees already paid. Further claims, e.g. reimbursing of cancellation or change of reservation fees for transport or overnight stays booked by the participant are excluded.

### 7. Use of course documents

Course documentation is protected by copyright. Participants are granted only a simple, non-transferable right of use for personal purposes. In particular, participants and third parties are not permitted to amend the course documents, or extracts thereof - either in editorial terms or with regard to content - or to use amended versions, to copy them for third parties, make them publicly accessible, post them on the internet or on other networks, either with or without charge, to reproduce them, sell them on or use them for commercial purposes.

Ersa, as the organiser, shall not be liable for damage to, or the loss or theft of personal items or the vehicle.





# WE ARE THERE FOR YOU WORLDWIDE.

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