

PERFECT SOLUTIONS FOR YOUR ELECTRONICS PRODUCTION.

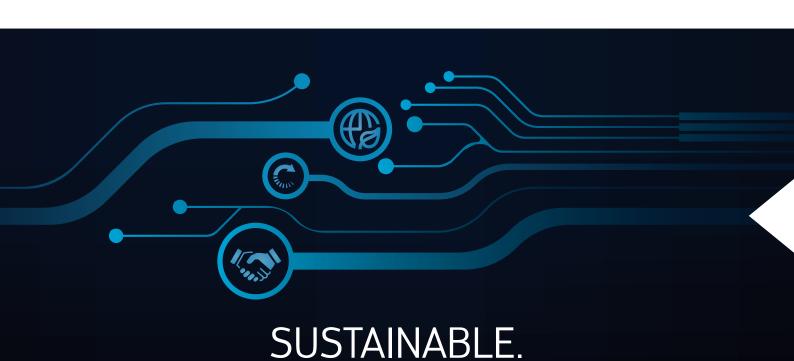


SERVICES · TRAINING & SUPPORT

REWORK PROCESS MONITORING TURNKEY SOLUTIONS · SYSTEM SUPPLIER

INDUSTRY 4.0 PRINTING 3D-SPI

AUTOMATION
INSPECTION & VISION
SOLDERING
REFLOW · VACUUM · WAVE · SELECTIVE · MANUAL
ROBOTIC



KURTZ ERSA CONNECT

GERMANY

WORLDWIDE SALES & SERVICE NETWORK
FRANCE · INDIA · VIETNAM
USA · MEXICO
E-LEARNING

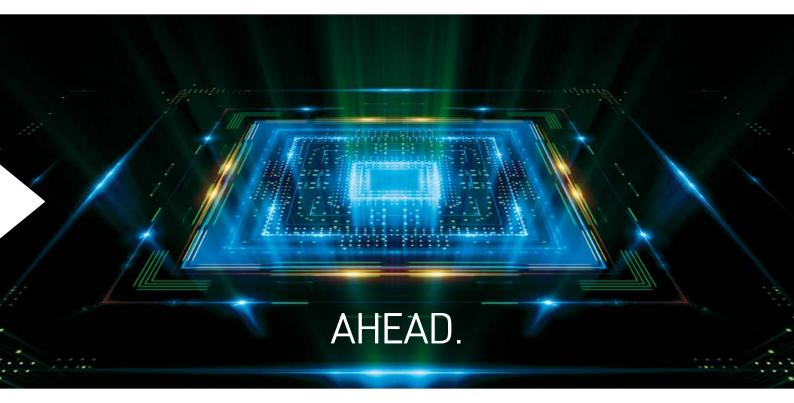
WORLDWIDE APPLICATION CENTERS

WEBSHOP · ONLINE-DEMOS

SHANGHAI · ZHUHAI HONGKONG

WORLDWIDE QUALITY STANDARDS

24/7 SERVICES



SINCE 1779
ALWAYS THERE WHEN NEEDED
SOLUTIONS

PROCESS RESPONSIBILITY

RESOURCE-SAVING PRODUCTS

LONG-TERM PARTNERSHIPS

ENERGY-EFFICIENT PRODUCTS

LONGSTANDING CONTACT PERSONS

RELIABILITY

SPARE PART AVAILABILITY



DRIVEN BY KURTZ ERSA.

For 5G applications, we offer you process efficient solutions for electronics manufacturing to securely connect components and assemblies of various forms and sizes. In selective and wave soldering up to PCB formats of 610-3,000 mm. For rework applications from micro chips (01005) to components of 120 x 120 mm edge length (BGA). We offer POWERFLOW ULTRA wave soldering systems for up to 850 mm and HOTFLOW reflow soldering systems for up to 1,200 mm board length also with split conveyor, without "changeover times".

STENCIL PRINTERS

THE STENCIL PRINTERS THAT CONTROL THEMSELVES.

The VERSAPRINT 2 is the new generation of stencil printers from Ersa, based on the proven concept of the VERSAPRINT series. Modern drive technology with encoders enhances control and verification of positioning processes on all process relevant axes. The VERSAPRINT 2 uses modern camera technologies for fast setup and integrated 100 % inspection of the print area. The new software design provides, together with touch monitor and

compact 180 degree rotatable monitor arm provides for, an efficient and space-saving operation of the printer. "Features on demand" flexibility means that the VERSA-PRINT 2 can be ideally adapted to customer requirements.

Four models are available. The VERSAPRINT 2 ELITE and VERSAPRINT 2 ELITE plus are ideal printers for the entry into line production or when a 100 % inspection is not desired – for example, because a SPI system already exists in the line. The VERSAPRINT 2 ELITE plus can be retrofitted with 2D or



3D SPI. If a 2D or 3D inspection is necessary from the outset, the VERSAPRINT 2 PRO² and the VERSAPRINT 2 ULTRA³ fulfill all requirements.



VERSAPRINT 2 ELITE plus

The sturdy basic version uses an area camera to align the substrate to the stencil and can use this to carry out optional inspection tasks. The stencil support can be adjusted without tools for frame sizes from 450 mm to 740 mm. The ELITE plus can be upgraded or retrofitted with all the options available for the VERSAPRINT 2 series, including 2D and 3D-camera.



VERSAPRINT 2 PRO²

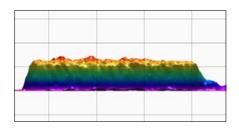
With its fast 2D-LIST camera (LIST = Line Scan Technology), this system is particularly suitable for products with a high inspection requirement. It can also be upgraded or retrofitted with all the options of the VERSAPRINT 2 series.



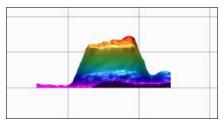
VERSAPRINT 2 ULTRA³

The ULTRA³ model uses the very latest measuring technology provided by the 3D-LIST camera. The shape of the smallest solder paste depots plays a major role in the printed volume and ultimately for the shape of the solder connection. Is the height of the paste depot consistent or does it drop towards the edges? The ULTRA³ can answer this question for you. It is both a stencil printer and 3D-SPI in one. It can also be upgraded or retrofitted with all the options of the VERSAPRINT 2 series.

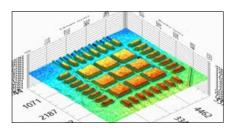
The inspection results are clearly displayed on the monitor.



Profile picture of the inspection result with height indication



Profile of the inspection result incl. height indication – rotated by 90°



Inspection result

REFLOW SOLDERING



THE HOTFLOW SERIES: INDIVIDUALLY TAILORED TO YOUR NEEDS.

Outstanding thermal performance, highest machine uptime and lowest operating costs have been the convincing advantages of Ersa reflow soldering systems for many years already.

We offer two series, which solve practically every task on the highest technical level and can be configured individually according to your needs.

The HOTFLOW 3 series: Precision for each size.

For particularly wide PCBs Ersa offers their reflow models HOTFLOW 3/20 and HOTFLOW 3/26 as XL-versions, as well. The working width of machines with single conveyor consequently increases from 560 mm to 720 mm. The HOTFLOW 3 can be equipped with dual, triple and even quad track conveyors. Ersa therefore offers the right machine for every SMT requirement.

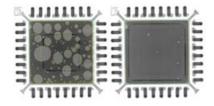
The HOTFLOW 4 series: 100% power with 65% production costs.

With the HOTFLOW 4 series Ersa achieved a further decisive reduction of nitrogen and energy consumption without loss of performance. In addition to best economic efficiency also an important contribution to saving resources and sustainability.

A number of models differing in process tunnel length, process gas cleaning or innovative conveyor systems are available. In the relation footprint to productivity, the HOTFLOW 4 series redefines the industry standard. Thanks to the dual or triple conveyor option, the throughput can be substantially increased without enlarging the footprint.



REFLOW SOLDERING



Before and after comparison: more than 99 % void reduction



nfeed Heating

zone

Vacuum module

zone

The Ersa EXOS conveyor system is available in four segments, in the vacuum section free of lubricants and therefore extremely low-maintenance.

Ersa EXOS 10/26: Voidless reflow soldering with vacuum.

With the EXOS 10/26, Ersa offers a vacuum reflow soldering system with eleven heating zones, three heating circuits for the vacuum chamber and four cooling zones for extremely voidfree connections in electronics production.

The absolute highlight of the EXOS is the vacuum chamber, which is part of the peak process area - this allows the void rate (depending on paste, component and PCB) to be reduced by up to 99 %.

The conveyor system is divided into four segments. Infeed, preheating and peak zone, vacuum module as well as cooling zone are equipped with their own individually controllable conveyor. The conveyor

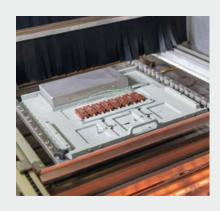


The Ersa EXOS 10/26 has a 4-part transport system which is lubricant-free in the vacuum module.

system of the vacuum section is free of lubricants and therefore - like the system as a whole - of very low-maintenance. The EXOS software also allows the operator simple and intuitive operation of the various functions and ensures safe continuous operation.



GLOBALPOINT MEASURING SYSTEMS AND PROCESS MONITORING HELPS TO AVOID ERRORS BEFORE THEY OCCUR.



GlobalPoint is a 100% Kurtz Ersa subsidiary and develops measurement systems for process acquisition, analysis and optimization as well as online monitoring in real time. With the precise, innovative PTP® measurement technology - Professional Temperature Profiler - as well as matching measurement boards and intelligent, user-friendly software, globalPoint has been setting worldwide standards for all soldering processes for more than

20 years. The new Professional Temperature Monitoring (short PTM) now even enables the online monitoring of reflow soldering processes in real time. The decisive factor here is the temperature-time curve of the assemblies and, in parallel, the thermal setup of the reflow system.





Just as electromobility is gaining more and more momentum, also electric drives are becoming increasingly important in all areas of everyday life: from automobiles to scooters and e-bikes on the one hand, to tools and outdoor equipment on the other - less and less runs without batteries. Kurtz Ersa offers individual systems for these market segments for practically all tasks that require a secure connection of all conceivable components and assemblies.

WAVE SOLDERING

POWERFLOW: INDIVIDUAL SOLUTION IN EACH SIZE.

The POWERFLOW ULTRA full-tunnel nitrogen wave soldering system represents the maximum expansion stage of this new generation of machines and offers a wide range of configuration options, thanks to which the system can be adapted for special customer requirements. The machine is available with both frame and finger conveyor. Working widths from 330 up to 610 mm

are possible in the XXL version. Thus, for example, server boards for 5G telecommunication can also be soldered with the POWER-FLOW ULTRA XXL.

The POWERFLOW PRO wave soldering system has been conceived for average production volumes and batch sizes, and its design concept allows achieving substantial cost savings through the drastic reduction of dross generated. It is available, as is the highend model of the POWERFLOW series, with a pallet as well as a finger type conveyor.





SELECTIVE SOLDERING













Thanks to the modular design, the systems can be optimally configured to meet individual requirements. A large number of highly efficient standard modules are available for this purpose.

VERSAFLOW 3 AND 4: EXACTLY CONFIGURABLE FOR EVERY NEED.

Having sold and installed more than 2,000 selective soldering systems worldwide, Ersa is both market as well as technology leader. The product range is always ideally tuned to the user's requirements. In the "classical line" version, the flexible modular concept of the VERSAFLOW 3 offers virtually unlimited combination possibilities, while the ECOCELL with its U-layout of the process zone offers the ideal prerequisites for manufacturing in production islands. ECOCELL can also be used universally: from mini wave soldering for high flexibility to multi-wave soldering for high-volume applications.

The ECOSELECT line is appropriate for those situations where the production volumes are not very high, but where the quality and the repeatability have to be up to the highest standards and may not be compromised.



The Ersa CAD Assistant creates four optimal soldering programs quickly and easily - with autorouting and 3D views.

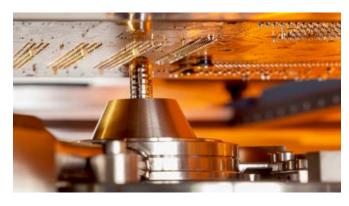
The new models of the VERSAFLOW 4 series convince not only by the flexible modular concept and the improved process flexibility, but also with a ultra-modern user interface – the new ERSASOFT 5.

Part of the new machine generation is the VERSAFLOW 4 XL, which is especially designed for the soldering of PCBs in "XL" sizes. With the new VERSAFLUX and VERSAFLEX modules the machine offers revolutionary flexibility at highest soldering quality.

The compact system SMARTFLOW 2020 convinces with technology without compromise on smallest footprint – the ideal system for small batches or prototypes.



SELECTIVE SOLDERING



The innovative "Peel-Off" function of the Ersa mini wave soldering modules in single solder pots enables to optimally form solder joints when soldering on a horizontal level, and the formation of solder shorts (bridging) can be almost eliminated. Since there is no preferred direction in the run-off of the solder from the nozzle, the solder wave can be moved in any direction.



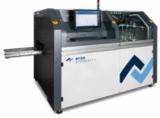
In addition to mini wave soldering modules in single solder pots, Ersa offers multi-wave soldering modules for large quantities, which are used in the VERSAFLOW series and the ECOCELL. This allows the cycle time to be reduced extremely and the throughput - with reproducible soldering results - to be increased to the max.



SMARTFLOW 2020: Perfect start-up solution! Compact, extremely easy to maintain and with full-area IR preheating top and bottom side



ECOSELECT 1: Small dimensions - big technology. Compact batch system with up to two flux heads and two solder pots for small and special series



ECOSELECT 4: Compact inline and batch system with up to two flux heads and two solder pots, power convection, VERSACAM and 508 x 508 mm soldering area



ECOCELL: Inline and batch system for maximum flexibility in production layout; ideal for connection to working stations and peripherals





DRIVEN BY KURTZ ERSA.

We offer you individual process optimization through perfectly synchronized handling and automation solutions. The Kurtz Ersa modular system impresses with a wide range of conveyor systems, work stations for assembling or quality inspection, ROBOPLACE robotic solutions and much more.

HANDLING & AUTOMATION



SYSTEM OF ALMOST UNLIMITED POSSIBILITIES.

Ersa is successful worldwide with systems and machines for the production of electronic assemblies. There is less and less demand for single machines. Rather, it is about offering complete solutions, i.e. complete production lines and integrated process automation, and thus assuming responsibility for the entire production process. This applies both to the require-

ments of mass production and to the individual, demand-oriented production of customer-specific products. Especially in this area, there is an increasing demand for solutions that enable flexible manufacturing strategies.

In any case, Ersa has the know-how and the right solution for every individual requirement.

In addition to its broad portfolio of machines equipped with innovative technology for practically every requirement and its extensive process know-how in electronics manufacturing, Kurtz Ersa also offers customized handling and automation solutions.

Further, there is a modular system with various conveyor/handling modules as

well as manual/inline workstations with different focuses, and processes can be automated through the use of robotics. The wide Ersa range can be individually adapted to practically all conceivable wishes and requirements.

The goal is always to make production and processes more efficient and economical, thus improving our customers' profitability.







YOUR ADVANTAGES

- Ersa modular system with various transport elements
 - Lifting stations
 - Rotary modules
 - Workstations for assembly, inline quality inspection, process ejection
 - Cooling and buffer modules
- Workstations for assembly and quality assurance
- Robot automation solutions
- "State of the art" drive solutions
- Commissioning in a machine network
- Modular system in Ersa quality and design with many different elements
- Use of the highest quality components
- Individual solutions realizable

REWORK

REWORK MADE EASY. IN ALL DIMENSIONS.

For more than a decade now, over 5,000 users worldwide are drawing benefits from using the patented IR rework technology. Aside from its very attractive price-performance ratio, the units have gained their strong market position because they deliver excellent results even with the most complex rework tasks.

Ersa has a model diversity that extends to automated hybrid stations with extensive accessories.

The hybrid rework system HR 600/2, sets standards in the automated rework of PCBs.

In addition, Ersa offers the HR 550 – a further high-performance model for safe and easy manual rework with guided processes. The latest Ersa system, the HR 600 XL, has been developed for large PCB formats of up to 625 x 625 mm and handles component sizes of 60 x 60 mm without any problems. Thanks to the innovative IR Matrix Heater™ and 16 kW power, the HR 600 XL ensures the safe processing of large, high-mass assemblies.



The compact system HR 200 for rework applications "out of the box" convinces professionals and beginners not only with its easy setup, but also with its intuitive operation.



RFWORK





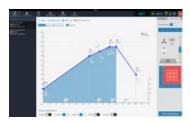


HR 500 HR 550 XL HR 600/3P





Highest precision and reliability for every conceivable component size (from 01005) is guaranteed with Ersa Rework systems.





Guided processes in HRSoft 2.0 and with a 5-MPx camera ensure perfect and reproducible rework results. Screenshot shows the screenshot of a 01005 component placement.

News from the Rework family.

At productonica 2019, Ersa will present three brand new systems for assembly repair, expanding the successful rework product line.

The youngest members of the family inspire with their interesting technological features in the field of heating and placement technology and expand the variety of options for users.

With the HR 550 XL, Ersa provides a semi-automatic system for large assemblies up to approx. 530 x 610 mm. A real performance package with eight bottom radiator heating zones and motorized X-/Y-fine adjustment and component rotation. The system is suitable for industrial and power electronics as well

as large-format printed circuit boards and is particularly attractive for service providers.

If you are looking for a system with the highest precision requirements, the HR 600/3P will automatically repair fine pitch components such as μBGA and the smallest chip components (01005). The high-precision axis system and 5-MPix cameras offer the most precise desoldering and placement technology in rework available today.

Finally, the new HR 500 presents the full Ersa Hybrid Rework technology for budget oriented users. The HR 550's little brother allows flexible repair of standard assemblies up to $380 \times 300 \text{ mm}$ and $50 \times 50 \text{ mm}$ component sizes.

ERSA HYBRID REWORK			
Stations	Systems (with component placement)		
S	М	L	XL
HR 100	HR 500 NEW	HR 550	HR 550 XL NEW
HR 200		HR 600/2	HR 600 XL
IR 550 (infrared radiation only)		HR 600/3P NEW	

PROCESSES ERSA HYBRID REWORK SYSTEMS			
semi-automatic	automatic		
HR 500 NEW	HR 600/2		
HR 550	HR 600/3P NEW		
HR 550 XL NEW	HR 600 XL		

HAND SOLDERING



PRECISION TOOLS FOR EACH INDIVIDUAL TASK.

The i-CON VARIO 2 multi-channel soldering and desoldering station makes it possible for the user to operate two tools at the same time. A portfolio of ten soldering and

desoldering tools offers a suitable tool for every application. Starting with the proven i-TOOL with its huge portfolio of tips, the i-TOOL AIR S for professional soldering and desoldering of components with hot air, to the i-TOOL HP for highest solder heat requirements.

The soldering and desoldering stations i-CON 1V and i-CON 2V are the advancement of the popular i-CON series on basis of the future-oriented VARIO platform. Both soldering stations are equipped with an intelligent and, dynamic power management and are able to run additionally to the hitherto soldering and desoldering tools the SMD desoldering tweezers CHIP TOOL VARIO, the desoldering tool X-TOOL VARIO and the new i-TOOL High Power.

For the Ersa soldering tool division, the emphasis rests on soldering and desoldering stations for the use in microelectronics and SMD assemblies up to thick-copper applications.

Ersa stations impress by their compact size, high performance, energy efficiency and low operating costs, since inexpensive exchange soldering tips are used.

The multi-channel soldering and desoldering station i-CON VARIO 4 is the flagship of the i-CON family. With up to four connectable soldering and desoldering tools it meets the highest demands of professionals.



HAND SOLDERING ROBOTS



Ersa SolderSmart SR 500

SR 500: ACCURATE, AUTOMATIC, PRECISE.

The Ersa SolderSmart SR 500 soldering robot works with the powerful Ersa i-T00L, which has proven itself thousands of times in industry. Its enormous heating power of 150 W allows fast soldering processes at stable soldering temperatures and the use of very fine soldering tips from 0.4 mm up to mighty wide tips up to 5 mm and more!

The X-/Y-portal opens a large working area of 500 x 400 mm. The soldering robot has two separate Z-axes for precise and almost powerless positioning of the soldering tip. In addition, each soldering point can be approached from any direction with the aid of a rotary axis and practically every soldering process can be programmed. The operating software (for WindowsTM) supports the user in all work processes and also documents them.

SOLDER FUME EXTRACTION



FOR CLEAN AIR IN SILENCE.

The highly flexible solder fume extractions EASY ARM 1 and EASY ARM 2 are based on over 15 years of experience in the field of process air cleaning.

The functional design combined with a high extraction rate, an efficient filter system and the silent operation characterize both devices. The large choice of extraction arms allow the easy adaption to any individual workspace.



INSPECTION

ERSASCOPE: IF YOU NEED TO KNOW IT EXACTLY.



It does not matter whether the purpose is to inspect a BGA which has just been replaced using the rework system, or whether the aim is to establish or verify correct process parameters – the ERSASCOPE inspection system has established itself as the preferred tool to non-destructively inspect hidden solder joints, and as such it should be at hand in each and every electronics manufacturing environment. The MOBILESCOPE is the mobile version of Ersa inspection systems.





DRIVEN BY KURTZ ERSA.

We offer you future-proof industry 4.0 solutions and services with added value for production, process monitoring and quality control. For example, standardized connectivity with maximum security through Kurtz Ersa CONNECT and Kurtz Ersa GATE.

INDUSTRY 4.0



Intelligent ticket system for fast, efficient solution of error situations at Ersa systems. With digital real-time data from other modules. Also available as mobile APP.

ADDED VALUE THROUGH DIGITALIZATION.

Through the use of modern communication and information technologies, people and machines can be networked with each other. Digitization and networking of the smallest components to highly complex systems lead to a significant increase in productivity. Kurtz Ersa offers Industry 4.0 solutions as a powerful way to optimize processes and make them technologically future-proof.

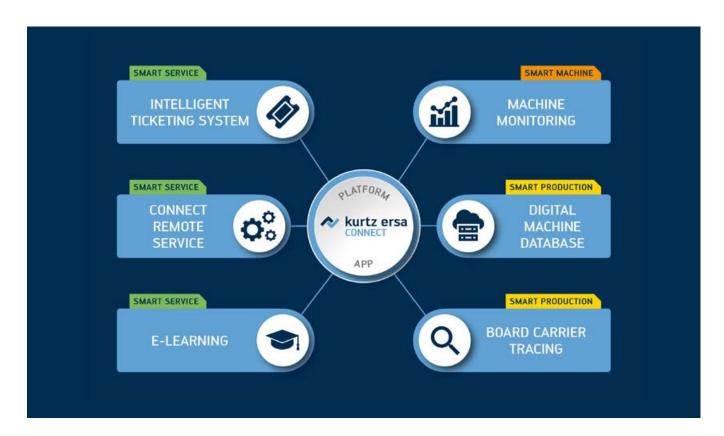


Kurtz Ersa CONNECT.

With Kurtz Ersa CONNECT, Ersa provides a platform with an integrated hardware and software infrastructure that ranges from the Kurtz Ersa machine portfolio to standardized interfaces and systems in use at customers. These digital offers are accessible independent of location and device, as well as they increase the reliability and availability of each individual system. Whereas in the past it was only possible to respond to specific situations, today information can be evaluated and interpreted in advance on the basis of data.

YOUR ADVANTAGES

- Increase in service speed/quality and process reliability
- Acquisition of important data for process and machine monitoring
- Intelligent and comfortable ticket system
- Benefit from expert know-how through integrated digital service and training processes
- Safeguarding competitiveness through increased efficiency and better capacity utilization of the overall systems



INDUSTRY 4.0

Technical Infrastructure.

Our gateway (Edge Device) provides a secure and standardized connection between Ersa facilities and the outside world - including communication between cloud, applications and systems. The gateway processes the measured data and information obtained and transfers it securely to the Kurtz Ersa Cloud or, optionally, directly to the customer's systems.

Thanks to Kurtz Ersa GATE's edge device capabilities, Ersa can offer intelligent solutions and features without a permanent internet connection.



In addition to the transfer, e.g. of live information for real-time monitoring applications, the gateway offers many other options, such as remote access in urgent service cases.

Kurtz Ersa CONNECT Data security: Safety first!

The security of the resulting and stored data is always guaranteed - all current standards such as MQTT (Message Queuing Telemetry Transport) and AMQP (Advanced Message Queuing Protocol) are applied to ensure the highest possible protection of customer data and interests.

If necessary, a hardware switch is also available to interrupt the connection.



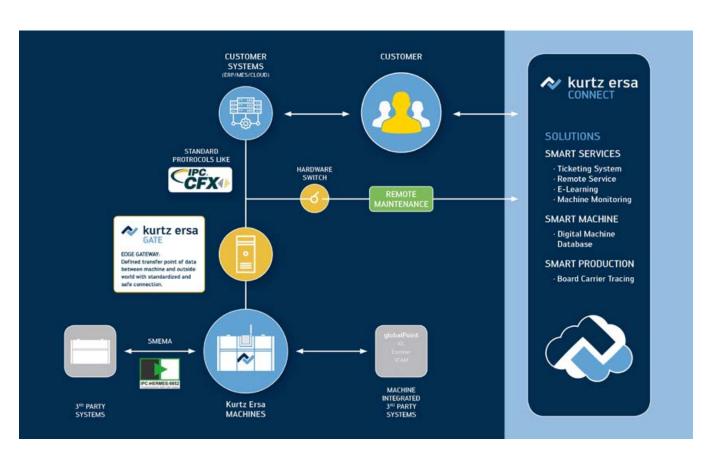
INDUSTRY 4.0 on board: The Gateway Kurtz Ersa GATE ensures safe, standardised connections between Ersa systems and the outside world.

YOUR ADVANTAGES

- Standardized basic system for all Industry 4.0 solutions
- Possibilities for intelligent data preparation
- Centralized information
- Connection with the highest possible security
- Intelligent Edge Gateway with the ability to operate offline

HIGHEST POSSIBLE SAFETY

- End-to-end data protection
- Hardware switch
- Edge Device
- Location Kurtz Ersa-Server
- Continuous monitoring





DRIVEN BY KURTZ ERSA.

For the new vehicle concepts of tomorrow we already offer you the perfect equipment today. This includes intelligent and safe connections of sensor technology, safety systems and power electronics with automotive electronics as well as internal and external networks.

SERVICES

EXCELLENT SERVICES - AROUND THE GLOBE.

Ersa and soldering have been a uniquely successful combination in the electronics processing industry since 1921. Right from the start, the focus was on the entire manufacturing process - in addition to first-class products.

In accordance with its corporate philosophy, Ersa offers attractive services and service packages that optimize the manufacturing processes on the customer side. We are particularly proud of our comprehensive system consulting for every aspect of soldering, which our customers use in their production to create invaluable added value - whether as a concrete application, in the form of complex process details or in terms of total cost of ownership!

In our fully equipped application centers, our customers in Europe, North America and Asia - supported by Ersa engineers - determine optimum process parameters for their assemblies.

With 7 application centers worldwide and over 85 highly qualified service employees, we are excellently positioned around the globe to offer our customers first-class service - complemented internationally by 10 sales and service offices and over 70 high-performance Ersa agencies with their own service teams and spare parts warehouses.

OUR APPLICATION CENTERS

- Wertheim, Germany
- Plymouth, USA
- Guadalajara, Mexico
- Shanghai, China
- Shenzhen, China
- Penang, Malaysia
- Ho-Chi-Minh-City, Vietnam



Machine parts, spare parts & consumables available 24/7 The full range of spare parts available around the clock. Learn more st. www.ersashop.com

OUR ADDED VALUE FOR YOU

- Worldwide service network
- 24/7 in Europa, USA and China
- Remote service
- Order 24/7 spare parts online
- Spare parts delivery within 24 hours
- Machine and Process audits
- Maintenance contracts
- Ramp-up support
- Process support
- Machine capability studies
- Pilot production, test production and rework
- LIVE streaming sessions for customers
- Kurtz Ersa Connect Portal
- Service-APP with Ticket System

TAILOR-MADE TRAINING AND EDUCATION OFFERS.

Qualified employees are the key to increasing productivity. Ersa therefore supports its customers and interested parties all year round and worldwide with practice-oriented personnel qualification offers and technology transfers in a wide variety of forms.

The Ersa training and education catalogue, which is published annually and available online, provides information about the individual seminars, training courses, training and education offers. For this purpose, professional training facilities with the latest equipment are available in in-house application and demo centres around the world.

Whatever your needs, the Ersa training program covers all aspects of professional soldering - from solder paste printing to reflow, selective and wave soldering to rework and hand soldering.

TECHNOLOGY TRANSFER





OUR TRAINING OFFERS

- Know-how seminars
- Customer-specific technology days in theory and practice
- Practical trainings
- LIVE streaming applications
- AVLE training modules
- E-Learning offerings





During our exclusive Technology Days, you are welcome to explore the limits of the industrial soldering technology in theory and practice. These Technology Days are organized individually and carried out to your company's needs and requirements so that an exchange across departments and locations is also possible. Whether manufacturer- neutral or specifically aligned to Ersa soldering systems - with us you are the focus! Whether customer-specific Technology Days, process technology and optimization or further topics from the wide world of soldering - what would you like to focus on?

Numerous global players have already benefited sustainably from our individual Technology Days - face the future demands of the market with the support of Ersa! In 2020, the exclusive Technology Days will also be available for the first time

to users who purchase their products from EMS service providers or suppliers, such as auditors or quality managers.

Being the no. 1 system supplier for electronics manufacturing, we also offer you a wide range of soldering courses, including manufacturer-neutral seminars with seminars for beginners to machine experts. All courses consist of a balanced mix of theory and practice. Due to the small groups of participants, it is possible for the trainers to answer questions individually.

At productronica 2019, Ersa is launching its new e-learning program, which can be accessed via the web-based service platform Kurtz Ersa CONNECT and is also available as an APP.



WE ARE THERE FOR YOU WORLDWIDE.



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Kurtz Ersa Vietnam Company Limited Ho-Chi-Minh-City info-kev@kurtzersa.com In addition to our own branches, we have a tight network of more than 75 competent sales and service partners around the globe.