Catalog

Ersa soldering irons, soldering and desoldering stations, solder fume extractions, hybrid rework equipment and accessories

kurtz ersa

Our Vision

Our competitive lead in technology optimizes quality, costs and delivery service in our customers' production process.

Our Mission

- Our products serve to optimize manufacturing processes used in production environments.
- The requirements of our customers are the measure for our actions.
- We are a global player with a singular product range.
- We are a member of a strong, diversified group of companies, and draw from this extensive synergy potentials.
- As a family enterprise, we place as much emphasis on achieving adequate growth of our equity and a reasonable return on our investment, as we do on sustainably securing the jobs of our employees.

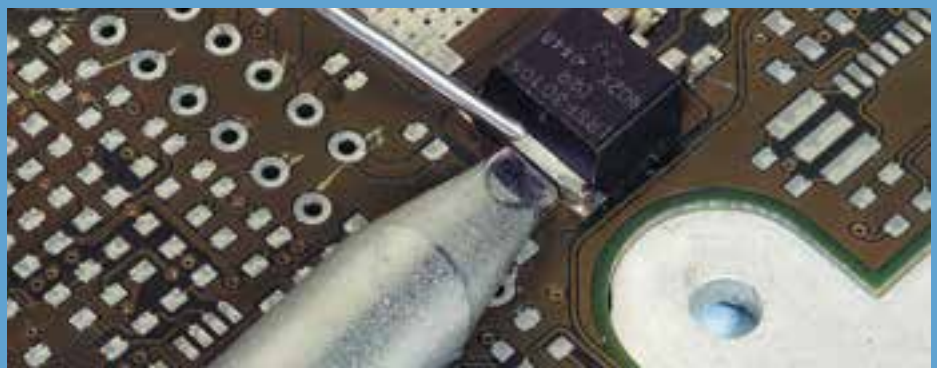
Contents

Quickfinder – the alpha-numerical product index

Soldering irons and sets

The success story of Ersa soldering irons started in 1921 when the company's founder Ernst Sachs applied for patent for the first electric soldering iron.

Today, the soldering irons and sets, high-speed soldering irons and gas powered soldering irons have proven their merit many times over throughout the world, always providing the fitting solution for various applications.



Ersa **miniature soldering irons**

The **MINOR S (5 W)** and **MINITYP S (6 W)** miniature soldering irons with ERSADUR tips are suitable for the finest-detailed soldering work on micro-circuits.

The MINOR can be operated with a 6 V transformer or a 6 V battery. Besides electronics, the Minor can also be used in watch repair, in the photographic industry and in dental technology.

The MINITYP can be operated with a 12 V battery.

MINOR S

Soldering tip series 042 see page 47

MINITYP S

Soldering tip 012 see page 47

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0045BDG	MINOR S soldering iron	0042BD, ERSADUR	5 W/6 V	12 s	approx. 440 °C	6 g
0015BDH	MINITYP S soldering iron	0012BD, ERSADUR	6 W/12 V	20 s	approx. 390 °C	7 g

Ersa **micro/universal soldering irons**

PTC

The Ersa **MULTITIP** series covers a wide range of applications. It stands out by its low weight and compact design (short distance between soldering tip and the handle's front part). The handle stays relatively cool while soldering.

The MULTITIP is available for **15 W** and **25 W** and suitable for both micro-soldering joints and medium-sized soldering, as on distributor strips. Long-life and industrially tested PTC heating elements and internally heated soldering tips provide high efficiency and fast heat supply.

The **TIP 260** is also heated in this especially efficient way. **16 W** power and slim design make this soldering iron an ideal aid when working on electronic assemblies in places difficult to access.

MULTITIP C15

Soldering tip series 162 see page 48

MULTITIP C25

Soldering tip series 172 see page 48

TIP 260

Soldering tip series 162 see page 48

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0910BD	MULTITIP C15 soldering iron	0162BD, ERSADUR	15 W/ 230 V	approx. 60 s	approx. 350 °C	28 g
0920BD	MULTITIP C25 soldering iron	0172BD, ERSADUR	25 W/ 230 V	approx. 60 s	approx. 450 °C	34 g
0260BD	TIP 260 soldering iron	0162BD, ERSADUR	16 W/ 230 V	approx. 60 s	approx. 350 °C	40 g

Ersa **universal soldering irons**

Wide range of soldering tips!

Thanks to its large range of tips, the Ersa **MULTI-PRO** is the ideal soldering iron when great flexibility is required. The device has a heat-resistant connecting cable. Internally heated tips provide a high level of efficiency.

ERSA 30 S, the best selling and most tried and tested universal soldering iron, is known the world over for its sturdiness and longevity. It can be used in a variety of ways for soldering tasks in handicrafts, service and hobbies. Delivery includes a practical, easily mounted rubber stick-on support disk. The ERSA 30 S is available with **30 W** and **40 W.**

MULTI-PRO

Soldering tip series 832/842 see page 42/43

30 W 40 W

ERSA 30 S*

Soldering tip series 032 see page 47

*also available with heat-resistant cable, order no. 0330KD0028

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0930CD	MULTI-PRO	0832CDLF, ERSADUR	20 W/ 230 V	approx. 5 min	approx. 430 °C	60 g
0330 KD	ERSA 30 S	0032KD, ERSADUR	30 W/ 230 V	approx. 2 min	approx. 380 °C	80 g
0340 KD	ERSA 30 S	0032KD, ERSADUR	40 W/ 230 V	approx. 2 min	approx. 420 °C	80 g

Ersa **standard soldering irons**

The tried and proven soldering irons of the **ERSA 50 S / 80 S / 150 S** series are designed for soldering operations with a greater heat requirement, as, for example, on copper conductors with a cross-section of 2.5 mm² (ERSA 50 S, 50 W) to 6 mm² (ERSA 150 S, 150 W).

The devices are supplied with an angled soldering tip as standard. Thanks to their elaborately generated "protective coating", ERSADUR tips have a much longer service life than their simple mates.

Other areas of application of the Ersa standard soldering irons include soldering thin sheet metal and lead glazing (ERSA 150 S).

ERSA 50 S

Soldering tip series 052 see page 47

ERSA 80 S

Soldering tip series 082 see page 47

ERSA 150 S

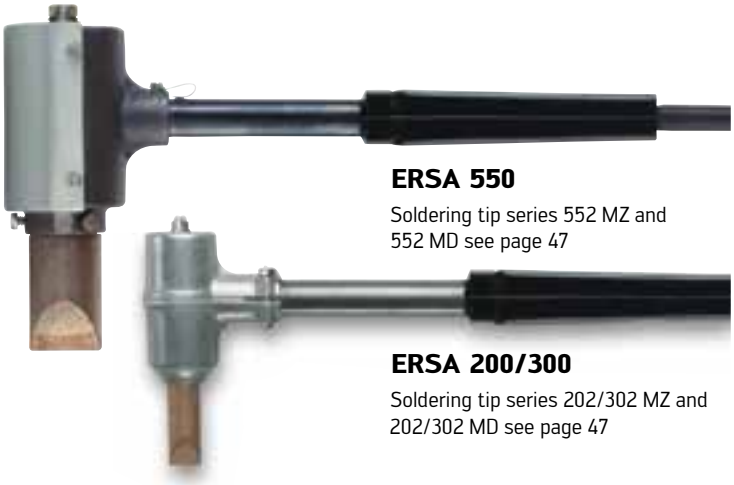
Soldering tip series 152 see page 47

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0055JD	ERSA 50 S soldering iron	0052JD, ERSADUR	50 W/230 V	approx. 3 min	approx. 400 °C	160 g
0085JD	ERSA 80 S soldering iron	0082JD, ERSADUR	80 W/230 V	approx. 3 min	approx. 410 °C	220 g
0155JD	ERSA 150 S soldering iron	0152JD, ERSADUR	150 W/230 V	approx. 3 min	approx. 450 °C	245 g

Ersa **workshop soldering irons**

The **ERSA 200, 300** and **550** hammer soldering iron series are especially suitable for sheet metal processing, installation work and for soldering commutators and copper bus bars.

Hammer soldering irons have also proven their merit in automotive body adjustments and lead glazing.



ERSA 550

Soldering tip series 552 MZ and 552 MD see page 47

ERSA 200/300

Soldering tip series 202/302 MZ and 202/302 MD see page 47

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0200MZ	ERSA 200 hammer soldering iron	0202MZ, nickel-plated	200 W/ 230 V	approx. 5 min	approx. 470 °C	550 g
0200MD	ERSA 200 hammer soldering iron	0202MD, ERSADUR	200 W/ 230 V	approx. 5 min	approx. 470 °C	550 g
0300MZ	ERSA 300 hammer soldering iron	0302MZ, nickel-plated	300 W/ 230 V	approx. 5 min	approx. 470 °C	870 g
0300MD	ERSA 300 hammer soldering iron	0302MD, ERSADUR	300 W/ 230 V	approx. 5 min	approx. 470 °C	870 g
0550MZ	ERSA 550 hammer soldering iron	0552MZ, nickel-plated	550 W/ 230 V	approx. 7 min	approx. 600 °C	1,770 g
0550MD	ERSA 550 hammer soldering iron	0552MD, ERSADUR	550 W/ 230 V	approx. 7 min	approx. 600 °C	1,770 g

Ersa **high-speed soldering irons**

Wide range of soldering tips!

PTC

The Ersa **MULTI-SPRINT** is an extremely light, transformer-independent solder gun with a heat-up rating of up to **150 W** and an ergonomic design.

In combination with the internally heated ERSADUR long-life soldering tip, the MULTI-SPRINT's PTC heating element offers especially high performance. The short heat-up time makes it ideal for high-speed series soldering. The MULTI-SPRINT is heated only as long as the button is pressed.

The large selection of tips of the 832 / 842 series affords a wide range of applications, and not just in service and repairs.

MULTI-SPRINT

Soldering tip series 832/842
see page 42/43

Order no.	Description	With soldering tip	Rating/ voltage	Heating time	Max. tip temperature	Weight (w/o cable)
0960ED	MULTI-SPRINT solder gun	0832EDLF, ERSADUR	150/75 W/ 230 V, 50–60 Hz	approx. 15 s	subject to how long the button is pressed	100 g

Ersa **power soldering iron with temperature control**

PTC

RESIS-TRONIC control

Wide range of soldering tips!

The Ersa **PTC 70** is a powerful and sturdy universal soldering iron with Ersa RESISTRONIC temperature control. This proven temperature control system together with the ceramic PTC heating element provides unusually fast heat-up and heat recovery.

Due to the accurate temperature control and the wide range of ERSADUR long-life tips of the 832 and 842 series, the PTC 70 is a perfect tool for both very small solder joints as well as for applications with medium heat requirements. The PTC 70 is supplied with the soldering tip 0832CDLF.

PTC 70

Soldering tip series 832/842 see page 42/43

Order no.	Description	With soldering tip	Rating/ voltage	Heat-up rating/ heating time	Temperature range	Weight (w/o cable)
0710CD	PTC 70 soldering iron	0832CDLF, ERSADUR	75 W (350 °C)/ 230 V AC	up to 285 W/ approx. 34 s (280 °C)	250 °C – 450 °C	approx. 60 g

Ersa **power soldering iron with temperature control**

PTC

The Ersa **MULTI-TC** is a powerful, sturdy, temperature-controlled universal soldering iron with a precise temperature sensor located directly under the internally heated soldering tip. This temperature sensor registers the actual temperature in the immediate vicinity of the solder joint. The heating system with internal PTC heating element immediately reacts to the heat loss and re-heats extremely fast.

The high heating efficiency and the large selection of soldering tips and inserts serve both filigree applications in electronics and applications with standard soldering irons with power up to 150 W. Examples are classical lead glazing and Tiffany soldering.

By dispensing with a heavy transformer and thanks to its heat-resistant connecting cable, the Ersa Multi-TC is especially suitable for mobile use in service, maintenance and repairs.

MULTI-TC

Soldering tip series 832/842 see page 42/43

SENSO-TRONIC control

Wide range of soldering tips!

Order no.	Description	With soldering tip	Rating/ voltage	Heating time (to 280 °C)	Temperature range	Weight (w/o cable)
0760CD	MULTI-TC soldering iron	0842CD, ERSADUR	75 W (350 °C) 230 V, 50 – 60 Hz	approx. 34 s	250 °C – 450 °C	60 g

Ersa **INDEPENDENT 75 gas soldering sets**

Mobile power – wherever you want! Powerful, with comprehensive and top-quality equipment, small, handy and practically packed. The **INDEPENDENT 75 BASIC-SET** and **PROFI-SET** gas soldering sets will meet your every need! The ergonomic, antistatic gas soldering iron with piezo ignition is ideal for service and maintenance work, especially if there is no power supply available! The continuously adjustable output of **15 – 75 W (compared with electrical soldering irons)** allows maximum soldering tip temperatures of up to 580 °C. The Independent is powered by filtered butane gas. Operating time per gas filling is about 60 min.

Both sets come with a practical carrying case. Besides the standard "BASIC-SET" equipment, the "PROFI-SET" contains two additional soldering tips, a hot blade for cutting high-resistance foam, a hot-gas nozzle, a deflector for heat-shrinkable sleeves and a flame nozzle for micro-welding.

INDEPENDENT 75 PROFI-SET

consisting of INDEPENDENT 75 gas soldering iron with soldering tip 0G072KN, soldering tips 0G072CN, 0G072AN and 0G072VN, flame nozzle 0G072BE, hot gas nozzle 0G072HE, hot blade 0G072MN and deflector 0G072RE to shrink heat-shrinkable sleeves, tool holder 0A20, cleaning sponge 0006G and sponge container 0G156, packed in a practical plastic case.
Soldering tip series G 072,
see page 48

INDEPENDENT 75 BASIC-SET

consisting of INDEPENDENT 75 gas soldering iron with soldering tips 0G072KN and 0G072CN, holder 0A20, cleaning sponge and sponge container, packed in a practical plastic case

Order no.	Description	With tip 0G072...	Rating	Heating time	Max. tip temperature	Weight
0G07400041	INDEPENDENT 75 BASIC-SET gas soldering set	..KN; ...CN	15 – 75 W	approx. 46 s (280 °C)	approx. 580 °C	73 g
0G07400141	INDEPENDENT 75 PROFI-SET gas soldering set	...KN; ...CN; ...AN; ...VN; ...BE; ...HE; ...MN; ...RE	15 – 75 W	approx. 46 s (280 °C)	approx. 580 °C	73 g

Ersa **INDEPENDENT 130 gas soldering sets**

The "big" gas soldering device from Ersa, the **INDEPENDENT 130,** can be applied wherever demanding soldering tasks have to be performed without a power supply.

Its broad range of continuously variable **25 – 130 W (compared with electrical soldering irons)** and its comprehensive line of soldering tips allow a wide variety of uses in service, installation, maintenance and repair work.

The integrated piezo ignition and powering by filtered butane gas ensure the easiest possible handling and great reliability. The operating time per gas filling is about 120 minutes, with a maximum tip temperature of about 580 °C.

Like its smaller mate, the INDEPENDENT 75, the INDEPENDENT 130 is also available in both set versions, namely as a **BASIC-SET** or **PROFI-SET.**

INDEPENDENT 130 PROFI-SET

consisting of INDEPENDENT 130 gas soldering iron with soldering tip 0G132KN, soldering tips 0G132CN, 0G132AN and 0G132VN, flame nozzle 0G132BE, hot gas nozzle 0G132HE, hot blade 0G132MN and deflector 0G132RE to shrink heat-shrinkable sleeves, cleaning sponge 0006G and sponge container 0G156, packed in a practical plastic case.
Soldering tip series G 132,
see page 48

INDEPENDENT 130 BASIC-SET

consisting of INDEPENDENT 130 gas soldering iron with soldering tips 0G132KN and 0G132CN, cleaning sponge and sponge container, packed in a practical plastic case

Order no.	Description	With tip 0G132...	Rating	Heating time	Max. tip temperature	Weight
0G13400041	INDEPENDENT 130 BASIC-SET gas soldering set	..KN; ...CN	25 – 130 W	approx. 50 s (280 °C)	approx. 580 °C	121 g
0G13400141	INDEPENDENT 130 PROFI-SET gas soldering set	...KN; ...CN; ...AN; ...VN; ...BE; ...HE; ...MN; ...RE	25 – 130 W	approx. 50 s (280 °C)	approx. 580 °C	121 g

Solder baths

Ersa does not only provide a wide range of standard soldering irons, it is also the first choice when it comes to static solder baths and fitting temperature regulator.

Apart from a wide range of static solder baths with different solder capacities Ersa also provides a large selection of dynamic solder baths namely wave and selective soldering systems. The photo shows a solder bath with multi-wave module of a VERSAFLOW selective soldering system.

Ersa **solder baths**

Lead-free Bleifrei SAFE ersa

Ersa solder baths are electrically heated melting pots for solders. The high-capacity ceramic heating elements are exchangeable and mounted on the pot. They are thermally insulated from the external sheet metal housing.

The **T 02, T 03, T 04, T 05, T 06** and **T 07** solder baths can be switched to half-power operation. Thanks to the high temperature of approximately 600 °C the T 02 and T 07 baths are especially suitable for tin plating enameled copper wires.

All solder baths are supplied with a 1.5 m connecting cable. To enhance solder quality as well as to reduce oxide formation, and for energy-saving reasons, we recommend the RA 4500 D temperature regulator together with one of the temperature sensors mentioned below.

The **T 50 S / T 10 S** mini solder baths are primarily used for tin-plating stranded wire braids, connecting leads and cable lugs. The heat resistant special color (order no. 4HMFARBE1) can be applied to the crucible as a protection against corrosion and wetting.

T 07

T 11

T 04

T 50 S

Order no.	Description	Rating/ Voltage	Temperature	Dimensions in mm (L x W x D)	Capacity	Weight	Heating elements
0T55	Solder bath T 50 S	65 W / 230 V	300 °C	28 x 20 x 13	approx. 40 g	370 g	1 pc. 0051T001
0T56	Solder bath T 10 S	130 W / 230 V	340 °C	60 x 30 x 25	approx. 185 g	615 g	1 pc. 0151B0
0T02	Solder bath T 02	240 W / 230 V	600 °C	25 Ø; 47 D	approx. 125 g	1,200 g	1 pc. 0241T0
0T03	Solder bath T 03[2]	360 W / 230 V	430 °C	100 x 30/15[1] x 55	approx. 1,000 g	2,300 g	2 pcs. 05X100
0T04	Solder bath T 04	400 W / 230 V	410 °C	52 x 52 x 84	approx. 1,900 g	3,900 g	4 pcs. 05X100A1
0T05	Solder bath T 05	500 W / 230 V	440 °C	86 x 68/20[1] x 90	approx. 2,850 g	3,400 g	2 pcs. 08X800
0T06	Solder bath T 06	1,000 W / 230 V	560 °C	120 x 80 x 60	approx. 4,800 g	5,200 g	6 pcs. 05X100P2
0T07	Solder bathT 07	1,200 W / 230 V	600 °C	90 x 90 x 100	approx. 6,400 g	5,500 g	4 pcs. 08X800A5
0T11	Solder bath T 11	1,600 W / 230 V	450 °C	300 x 60 x 50	approx. 7,500 g	8,000 g	8 pcs. 05X100A3

1 tapered solder pot;
2 VDE tested, all other solder baths are produced according to VDE standards

Ersa **temperature regulator RA 4500 D**

The **RA 4500 D** temperature regulator can be operated with various solder baths. The solder baths can be connected to the regulator through simple plug connectors. With its five operating programs, the RA 4500 D's easy program selection allows the user to change quickly between different solder baths.

The station can also be used for simple temperature measurements (Pr5) by means of the temperature sensor (option). Its wide variety of features and great control precision (especially with Ersa solder baths) makes the RA 4500 D especially suitable for production processes with high quality requirements.

RA 4500 D

A microprocessor sets new standards with regard to the temperature regulator's functions and provides comfortable operation of the RA 4500 D.
Fig.: RA 4500 D with optionally available temperature sensor 0F008

Order no.	Description	Connected load / voltage	Tolerance	Temperature range	Switch
0RA4500D	Temperature regulator	3,000 W 230 V, 50 – 60 Hz	max. ±2 %	50 °C – 600 °C	2-position with P-characteristics
0F007	Temperature sensor, 8 mm ø				
0F008	Long-life temperature sensor, 3 mm ø				

Soldering stations

High-tech soldering and desoldering, diverse applications and high-precision: easily attained with Ersa top-quality products.

Precise temperature measurement near the soldering tip and a microprocessor controlled heating system guarantees safe lead-free soldering at low temperatures. The high capacity of Ersa soldering stations ensures superior reheating. Even high-mass soldering can be carried out without problems.

Ersa **RDS 80 soldering station**

PTC

Superb price-per-formance ratio

The Ersa **RDS 80** digital soldering station offers the Ersa RESISTRONIC temperature control, tried and proven for many years and now with **80 W** heating power.

The ceramic PTC heating element (positive temperature coefficient) acts as the temperature sensor in this control system and ensures extremely fast heating thanks to the high initial output.

High heating power and the large selection of soldering tips allow a very wide range of applications. The heating system with the internally heated soldering tips has a high thermal efficiency.

The redesigned ergonomic handle, the housing design and the large, digital multifunctional display do not leave much to be desired.

Besides the arbitrary temperature selection between 150 °C and 450 °C, three fixed temperatures or two fixed temperatures and one standby temperature can be programmed.

In addition to a power bar graph display the station also has a calibrating and power-off feature. The potential equalization socket (with an integrated 220 kΩ resistor) allows the soldering tip to be equalized with the workplace potential.

The RT 80 soldering iron has a sprayed-on, flexible PVC connecting cable.

For tip exchange we recommend to use the tip exchanger 3ZT00164 (see page 34).

RDS 80

with RT 80 soldering iron, Ersa RESISTRONIC control system
Soldering tip series 832 and 842 see page 42/43

RT 80: very slim soldering iron featuring a large selection of soldering tips

Potential equalization socket

Application example

Multifunctional display

Ersa **ANALOG 60/60 A soldering stations**

PTC

The electronically temperature-controlled **ANALOG 60** soldering station is the basic model of the Ersa soldering station series. It has the tried and proven Ersa RESISTRONIC temperature control technology, with the ceramic PTC heating element serving as the temperature sensor. The high initial power enables fast heat-up.

The large selection of soldering tips allows a broad range of applications. The internal heating provides high thermal efficiency. A front-installed socket with integrated, high-impedance allows potential equalization between the soldering tip and the workplace.

The device is primarily used for smaller and medium-sized solder joints. The low-voltage operated soldering iron BASIC TOOL 60 has a highly flexible, heat-resistant connecting cable.

The electronically temperature-controlled Ersa **ANALOG 60 A** soldering station is antistatic according to the MIL-SPEC / ESA standard and has all the positive features of the Ersa ANALOG 60.

The light and slim ERGO TOOL soldering iron has a highly flexible, heat-resistant and antistatic connecting cable.

The ANALOG 60 A soldering station is especially suitable for producing small and medium-sized solder joints.

For tip exchange we recommend to use the tip exchanger 3ZT00164 with an additional flat nose pliers and side cutter (see page 34).

Application example

ANALOG 60

with BASIC TOOL 60 soldering iron, Ersa RESISTRONIC control system
Soldering tip series 832 and 842 see page 42/43

ANALOG 60A

with ERGO TOOL soldering iron, Ersa RESISTRONIC control system
Soldering tip series 832 and 842 see page 42/43

SAFE ersa

Order no.	Description	Rating / Voltage	Heating time	Temperature range	Weight (with cable)
0RDS80	RDS 80 soldering station complete with RT 80 soldering iron 0890CDJ, soldering tip 0842CD and tool holder 0A39	80 W / 230 V, 50 – 60 Hz /24 V 105 W (280 °C)	approx. 40 s (280 °C)	150 °C – 450 °C	approx. 130 g
0ANA60	ANALOG 60 soldering station complete with BASIC TOOL 60 soldering iron 0670CDJ, with soldering tip 0832CDLF and tool holder 0A41	60 W / 230 V, 50 – 60 Hz / 24 V 60 W (350 °C)	approx. 60 s (280 °C)	150 °C – 450 °C	60 g
0ANA60A	ANALOG 60 A soldering station complete with ERGO TOOL soldering iron 0680CDJ, with soldering tip 0832CDLF and tool holder 0A42	60 W / 230 V, 50 – 60 Hz / 24 V 60 W (350 °C)	approx. 60 s (280 °C)	150 °C – 450 °C	60 g

i-CON soldering/desoldering stations

Ersa i-CON – innovative technology for efficient and comfortable hand soldering

Ensuring quality in lead-free soldering is a huge challenge for hand soldering. Consequently the users have a wide range of requirements a modern hand soldering tool should meet: It should be small, light-weight and ergonomic. It may not become too hot during the soldering process. And it has to provide high power and efficiency for fast heat-up and recovery during soldering. In addition, tip exchange should be quick and easy, and the station's operation and programming should be simple and user-friendly.

The stations of the Ersa i-CON series fully comply with these requirements. Various models are available that all convince with innovative technology – from the smallest and cheapest station, the i-CON PICO, up to the new flagship, the i-CON VARIO 4. Low-cost exchangeable tips and the intelligent standby function provide for low operating costs, high economic efficiency and considerable energy savings.

Ersa **i-CON: innovative lead-free hand soldering**

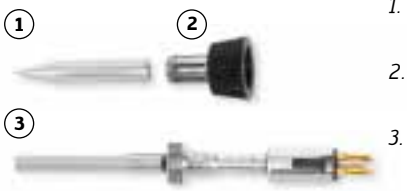
The engineering goal behind the i-CON was to invent a new soldering iron which outperforms the competitive tip-cartridge irons, and works with low-cost, exchangeable tips at the same time.

Mission accomplished: Ersa's 150 W i-TOOL clearly exceeds the market's expectations for a high-powered, micro soldering iron with low-cost tips. The i-TOOL „Silver Bullet" heating element represents the most significant heating element design accomplishment in Ersa's over 90-year-history.

With its rapid recovery and ultra low weight i-TOOL (approx. 30 gr.), the extensive i-TIP soldering tip range, as well as the Process Window Alarm, Energy Levels and Motion Sensor for Auto-Sleep functions, i-CON users worldwide are benefiting from the highest level of process control ever seen in the industry.

Tremendous savings in tip costs make this line even more attractive. The extensive range of standard and special tips offers an unparalleled level of flexibility even for the most difficult and unconventional applications.

The i-CON product range is antistatic and includes both single and double iron stations for use of various soldering and desoldering tools. Equipped with an interface, the i-CON C stations can additionally control peripheral systems such as fume extractions or heating plates.

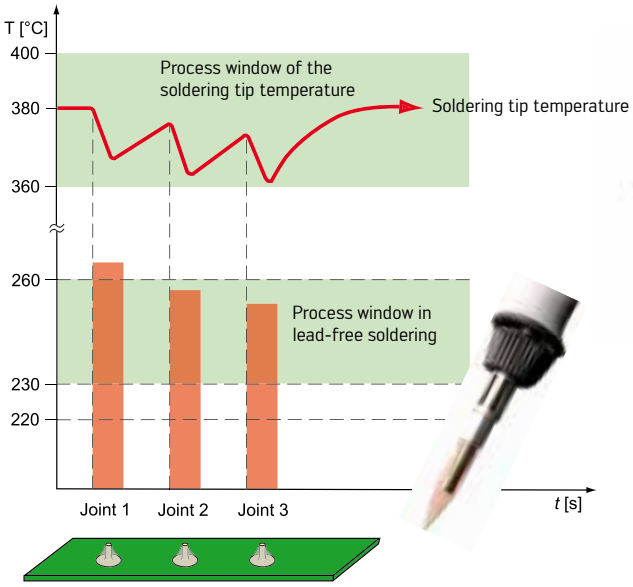


1. *Low-cost i-TIP (Consumable, easy to change, long-life)*
2. *i-TIP fastener available in black or green*
3. *High-power heating element (stick-on type, long-life)*

i-TOOL soldering iron: ultra light (only 30 grams), ultra short (only 155 mm), and ultra short tip-to-grip (only 45 mm).

The i-TOOL has a highly advanced PCB integrated into the handle for a level of intelligence never before seen in a soldering iron.

Wide range of soldering tips, series 102



The i-TOOL recovers so fast that all solder joints can be made with nearly the same temperature. The sensor measures the actual tip temperature very close to the tip extremity. The Process Window Alarm enables a repeatable soldering quality for the operator.

Ersa has succeeded in designing one of the smallest, lightest and most powerful soldering irons in the world – the Ersa i-TOOL. The true value added for our customers lies not only in the fact that it will increase both the hand soldering quality and productivity, but also in a tremendous reduction of operational costs associated with manual soldering.

Ersa's new technology offers – compared to the soldering irons with expensive heating cartridge tips – a standard low-cost, long-life exchangeable tip for a similar performance!

The Ersa i-CON advanced digital power supply offers Ersa's "One Touch" easy-to-use operation with the new i-Op Control, as well as numerous value added functions.

Power level settings:
Three different power level settings are available which control the heating element overshoot depending on the heat required. Thus, the operator can choose the right setting for the right job – either more power or more control! Power level "Low" guarantees no overshoot for maximum component safety!

Process window and alarm:
Signals the operator if the temperature leaves the pre-set process window.

Automatic standby:
Recognizes when the iron is not used and automatically reduces the temperature to a standby temperature after expiration of a pre-determined standby time.

i-TOOL calibration:
Unlike other systems, the microprocessor which stores the temperature calibration of the iron is actually located in the PCB which is installed in the handle. This now allows for each individual i-Tool to be calibrated independent of the station.

Ersa **i-CON: innovative lead-free hand soldering**

i-CON matrix

i-soldering tools & auxiliary systems										
i-CON control stations	i-TOOL PICO	i-TOOL NANO	i-TOOL	i-TOOL AiR S	CHIP TOOL	CHIP TOOL VARIO	X-TOOL	IR heating plate	EasyArm 110 i	EasyArm 55 i
i-CON PICO	●									
i-CON NANO		●								
i-CON			●		●		●			
i-CON1			●							
i-CON2			●		●		●			
i-CON1 C			●					●	●	●
i-CON2 C			●		●		●	●	●	●
i-CON VARIO 2			●	●	●	●	●	●	●	●
i-CON VARIO 4			●	●	●	●	●	●	●	●

Ersa **i-CON PICO soldering station**

The **i-CON PICO** station offers the beginner all essential features of a soldering station, such as fastest heat-up and heat recovery, standby function and calibration mode. Due to the i-CON PICO's simple and user-friendly operating concept, the factory settings provide for a variable adjustment of operating temperature as well as setting of standby time and calibration value. Using the free-of-charge PC software and by an optional micro smart SD card further setting options like fixed temperatures, energy level, interlock and shutdown functions are available.

The technological master plan of the i-CON PICO assures that the optimal parameters are used for each application. Hereby the i-CON PICO stands for highest process stability and quality control at low investment costs and operation expenses. The automatic standby and shutdown function provide for energy savings and an increased tip lifetime.

The i-CON PICO comes fully equipped with the i-TOOL PICO soldering iron. This ultra-light and powerful iron uses exactly the same heating element technology as his larger brothers of the ERSA i-TOOL family. A wide range of cost-effective soldering tips is available for the i-TOOL line.

i-CON PICO

with i-TOOL PICO soldering iron
Soldering tip series 102 see page 40/41

i-CON PICO

Software download: www.ersa.com/pico

Order no.	Description	Dimensions (L x W x H)	Rating / Voltage	Temperature range	Heating time
0IC1300	i-CON PICO soldering station complete i-TOOL PICO (0130CDK) soldering iron with soldering tip 0102CDLF16 and holder 0A53.	145 x 80 x 103 mm	max. 80 W/230 V, 50 HZ, max. 80 W (350 °C) 220 – 240 VAC	150 °C – 450 °C	9 s

Ersa **i-CON NANO soldering station**

The fully antistatic **i-CON NANO** soldering station, satisfies all needs of today's industrial manufacturing requirements combined with lowest space requirement. It is predestined for the continuous operation in electronic production as well as for special applications in laboratories and development.

Due to the i-CON NANO's simple and user-friendly operating concept, the factory settings provide for a variable adjustment of operating temperature as well as setting of standby time and calibration value.

Using the free-of-charge PC software and by an optional micro smart SD card further setting options like fixed temperatures, energy level, interlock and shutdown functions are available.

The technological master plan of the i-CON NANO assures that the optimal parameters are used for each application. Hereby the i-CON NANO stands for highest process stability and quality control with regard to low investment costs and operation expenses.

i-CON NANO

with i-TOOL NANO soldering iron
Soldering tip series 102 see page 40/41

Micro SD card with SD card and USB adapter

i-CON NANO

Software download: www.ersa.com/nano

Order no.	Description	Rating/ voltage	Heating time	Temperature range	Weight
0IC1200A	i-CON NANO soldering station complete with i-TOOL NANO soldering iron (0120CDK), soldering tip 0102CDLF16 and holder 0A50 with dry sponge 0008M	max. 80 W / 230 V, 50 Hz, max. 80 W (350 °C)	approx. 9 s (350 °C)	150 °C – 450 °C	approx. 30 g
0IC128	Micro SD card with i-CON NANO software and card reader				

Small, strong & intelligent: The Ersa i-CON NANO packs a punch!

Designed for continuous use in professional industrial companies, the new Ersa i-CON NANO also offers smaller companies a more budget-oriented solution for top-quality hand soldering applications.

The i-CON NANO comes fully equipped with the i-TOOL NANO soldering iron. This ultra light and powerful iron uses exactly the same heating element technology as his larger brother, the Ersa i-TOOL.

Features and options:

1. Small footprint (145 x 80 mm) – saves valuable workbench space
2. Fully antistatic according to MIL-SPEC/ESA standards
3. Three fixed temperature settings or continuous temperature setting from 150 °C up to 450 °C
4. Three selectable energy levels
5. Ultra light and ergonomically designed i-TOOL NANO with max. 80 W of power
6. Large spectrum of low-cost & long-life replaceable soldering tips
7. Automatic standby function and non-operative mode saves energy & tip life
8. Password lockout function for increased process control
9. Calibration function for exact tip temperatures
10. Complete system parameterization via simple PC software and micro SD card

i-TOOL NANO soldering iron

Ersa **i-CON1 soldering station**

The i-CON product range is antistatic and includes both single and double iron stations for use of various soldering and desoldering tools. Equipped with an interface, the i-CON C stations can additionally control peripheral systems such as fume extractions or heating plates.

Ersa's technology offers – compared to the soldering irons with expensive heating cartridge tips – a standard, long-life exchangeable tip at low costs!

The Ersa i-CON advanced digital power supply offers Ersa's "One Touch" easy-to-use operation with i-Op Control, as well as numerous value added functions.

Please refer to page 15 for further information on the technical highlights of the Ersa i-CON.

i-CON1

with i-TOOL soldering iron with micro heating element
Soldering tip series 102 see page 40/41

i-TOOL soldering iron with micro heating element
Soldering tip series 102 see page 40/41

Ersa **i-CON C stations** – neat solutions for the workbench

Today's modern hand soldering/touch-up workbench must meet the specific requirements of a demanding operator. In this context two fundamental requirements are all important:

1. Having the right tool and the right amount of power to handle all jobs safely and efficiently
2. An organized and ergonomically set up working area which guarantees maximum productivity and operator satisfaction.

The i-CON C family of professional soldering stations are setting a new standard for today's workbench. Whether for TH or for SMT applications, the i-CON C offers the perfect tool for the job.

The 150 W i-TOOL has one of the largest ranges of standard and special tips and clearly outperforms the competition for high-mass applications.

The 120 W X-TOOL is a high-powered desoldering iron for the toughest TH applications. The 60 W CHIP TOOL is an ergonomically designed heated pair of tweezers for safe and rapid removal of small to medium sized SMTs as well as for small TH Dip packages.

The i-CON C comes as either a single or a double tool station both with stacking rack capability.

i-CON C soldering stations with EA 110 plus i solder fume extraction: intelligent filter unit control by means of soldering stations' standby function – filter unit is started as soon as one of the soldering stations is operated

Ersa i-CON1 C and i-CON2 C – one control unit for preheating, soldering, fume extraction

The most exciting aspect of the i-CON C is its capability to control the two most important peripheral systems on the workbench – the Ersa IR heating plate and the Ersa EASY ARM fume extraction systems. All hand soldering tasks can be handled more rapidly and more safely when the assembly is preheated during the touch-up.

The proven IR heating plate technology which comes directly out of Ersa's world renowned IR rework product line offers bottom-side preheating for hand soldering, desoldering and touch-up applications. The safe yet powerful medium wavelength IR preheating system offers a tremendous benefit to today's workbench: Working temperatures of the soldering iron, heated SMD tweezers and/or desoldering iron can be greatly reduced. Lower tip temperatures decrease the risk of PCB damage while at the same time greatly increasing tip lifetime!

Finally, the intelligent fume extraction units Ersa EASY ARM EXTRACTION EA 110 plus i and EA 55 i are compact and powerful systems to efficiently clean soldering process air at the workbench. Combined with up to two i-CON1 C or i-CON2 C soldering stations, connected with an interface cable, these filter systems open up a completely new dimension of intelligent solder fume filtration. The extraction unit is only working while at least one of the attached soldering stations is in operation. When both i-CON units rest in the "standby" mode, the EA 110 plus i or EA 55 i will automatically switch off.

Filter usage times will increase, energy costs and operation noise level will be significantly reduced to a minimum.

Green i-TIP fastener to distinguish the lead-free tip from the conventional one when soldering lead-free and conventional joints at one station.

Fully equipped i-CON1 C workplace with i-CON1 C station, i-TOOL, IR heating plate and solder fume extraction EA 55 i

SMD desoldering with the CHIP TOOL desoldering tweezers. Bottom-side preheating with heating plate provides for gentle processes.

Fully equipped i-CON2 C workplace with i-CON2 C station, i-TOOL, CHIP TOOL, IR heating plate and solder fume extraction EA 100 plus i

Order no.	Description	Rating/ Voltage	Heating time	Temperature range	Weight (w/o cable)
0IC1100A	i-CON1 electronic station complete with i-TOOL soldering iron 0100CDJ with soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W/230 V, 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C – 450 °C	approx. 30 g
0IC1100A0C	i-CON1 C electronic station with D-Sub connector, complete with i-TOOL soldering iron 0100CDJ with soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W/230 V, 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C – 450 °C	approx. 30 g
0IC2000A0C	i-CON2 C electronic station with D-Sub connector complete with i-TOOL soldering iron 0100CDJ with soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W/230 V, 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C – 450 °C	approx. 30 g

Ersa **i-CON2 soldering station**

PTC

Today's PCBs are becoming more complex due to smaller components and a more densely population. In order to meet these difficult hand soldering touch-up and repair challenges, Ersa continues to be a market leader in supplying special tools for special applications.

The i-CON2 offers all the value-added features of the revolutionary i-CON in a double iron digital station with multiple soldering and/or desoldering tools for maximum flexibility.

Developing the i-TOOL Ersa has created one of the smallest, lightest and most powerful soldering irons in the world. The true value added for our customers lies not only in the fact that it will increase both the hand soldering quality and productivity, but also in a tremendous reduction in operational costs associated with manual soldering.

The i-CON2 (order no. 0IC2000AIT) is supplied with 2 i-TOOL soldering irons.

i-CON2

with two i-TOOL soldering irons with micro heating element; order no. 0IC2000AIT
Soldering tip series 102 see page 40/41

i-TOOL soldering iron with micro heating element
Soldering tip series 102 see page 40/41

Ersa **i-CON2 SMT soldering/ desoldering station**

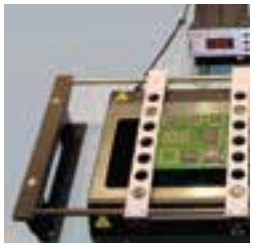
PTC

The CHIP TOOL is based on a "Best Seller" in rework tools, but has been re-designed for improved ergonomics and precision repair. This newly designed heated pair of tweezers offers a wide range of SMT desoldering tips for safe and fast removal of the smallest chips (0201, 0402, etc.) up to medium size PLCCs. Even large PLCCs up to 84 pins can be removed safely when using the CHIP TOOL in combination with the IRHP 100 A/IRHP 200 heating plate (see page 32).

The i-CON2 soldering station with order no. 0IC2000AC is equipped with one i-TOOL soldering iron and one pair of CHIP TOOL desoldering tweezers. Thus this station is perfectly suited for SMD soldering and desoldering applications.

i-CON2

with i-TOOL soldering iron with micro heating element and CHIP TOOL; order no. 0IC2000AC
Soldering tip series 102 see page 40/41
Desoldering tip series 422/452 see page 45



IRHP 200 (option) infrared rework heating plate, see page 32

CHIP TOOL application example

CHIP TOOL desoldering tweezers for safe desoldering of heat-sensitive SMD components

Ersa **i-CON2 desoldering station**

PTC

The X-TOOL is an extremely high powered desoldering iron which has been specifically designed for the toughest through-hole desoldering applications on the heaviest of PCBs. Safe lead-free desoldering is much more challenging due to the higher process temperatures and will require a desoldering tool which can function effectively at the lowest possible temperature.

The Ersa X-TOOL with 120 W allows operators to conduct through-hole repair at the lowest and safest temperatures possible. The unique "Heat Reservoir" concept guarantees the shortest dwell times and the tip temperature control guarantees fastest recovery. The X-TOOL must be used in combination with the CU vacuum unit.

The i-CON2 soldering station with order no. 0IC2000AXT is equipped with an i-TOOL soldering iron and X-TOOL desoldering iron.

i-CON2

with i-TOOL soldering iron with micro heating element and X-TOOL; order no. 0IC2000AXT
Soldering tip series 102 see page 40/41,
Desoldering tip series 722 see page 43

X-TOOL – powerful desoldering iron for safe desoldering of heat-sensitive through-hole components

High-mass through-hole desoldering

High-mass through-hole soldering with the i-TOOL

Order no.	Description	Rating/ voltage	Heating time	Temperature range	Weight (w/o cable)
0IC2000A	i-CON2 electronic station, complete with i-TOOL soldering iron 0100CDJ with soldering tip 0102CDLF16 and holder 0A50, complete	150 W/230 V, 50 Hz 150 W	 approx. 9 s (350 °C)	150 °C – 450 °C	 approx. 30 g
0IC2000AC	i-CON2 electronic station, complete with i-TOOL soldering iron 0100CDJ with tip 0102CDLF16, CHIP TOOL desoldering tweezers 0450MDJ with tips 0452MDLF020, holders 0A50 and 0A43, complete	150 W/230 V, 50 Hz 150 W 2 x 20 W (350 °C)	 approx. 9 s (350 °C) subject to tips	150 °C – 450 °C	 approx. 30 g approx. 75 g
0IC2000AIT	i-CON2 electronic station, complete with 2 i-TOOL soldering irons 0100CDJ with soldering tip 0102CDLF16, and 2 holders 0A50, complete	150 W/230 V, 50 Hz 150 W	 approx. 9 s (350 °C)	150 °C – 450 °C	 approx. 30 g
0IC2000AXT	i-CON2 electronic station, complete with vacuum unit 0CU103A i-TOOL soldering iron 0100CDJ with tip 0102CDLF16, X-TOOL desoldering iron 0720EDJ with tip 0722ED1226, holders 0A50 and 0A44, complete	150 W/230 V, 50 Hz 45 W 150 W 2 x 60 W (350 °C)	 approx. 9 s (350 °C) subject to application	150 °C – 450 °C	 approx. 30 g approx. 240 g

Ersa **i-CON VARIO 2 multi-channel station**

The **i-CON VARIO 2** multi-channel soldering and desoldering station can operate two soldering tools at the same time: In addition to the i-TOOL AIR S hot air iron (200 W) the user can plug in the i-TOOL soldering iron (150 W) for classical soldering applications or the new CHIP TOOL VARIO desoldering tweezers (80 W). Alternatively the i-CON VARIO 2 can operate further Ersa soldering tools.

Just like any other i-CON model the compact and ESD safe station offers the well-known simple and clear "i-CON operability". And just like the larger i-CON VARIO 4, the i-CON VARIO 2 comes standard with interfaces for the Ersa solder fume extraction units and heating plates. The simple and safe configuration with a micro SD memory card is a further standard feature of the i-CON VARIO 2.

i-CON VARIO 2

antistatic multi-channel soldering and desoldering station with i-TOOL AIR S hot air tool and CHIP TOOL VARIO desoldering tweezers, order no. 0ICV2000AC.

Choose your configuration from 4 professional **i-CON VARIO tools**

i-TOOL AIR S

Ergonomic, handy, strong in performance – that is a particularly apt description of the i-TOOL AIR S. The slim and light handle holds a heating cartridge with 200 W power permitting the user to process a wide range of SMDs in a non-exhausting way.

The hot air volume can very easily be adjusted directly at the handle; and the set air volume (2 – 20 l/min) is clearly visible on the display of either the i-CON VARIO 2 or the i-CON VARIO 4.

The air volume can be measured out exactly, also for soldering most delicate chip resistors. Various nozzle sizes are available for an optimal component heat-up.

i-TOOL AIR S

i-TOOL AIR S hot air iron
Hot air nozzle series 472 see page 45

CHIP TOOL VARIO

The CHIP TOOL VARIO stands out by its high power (2 x 40 W) and its very compact design.

Thus it is perfectly suited for working very small and delicate SMD components. The heating element pairs are plug-in components. They can be aligned exactly in the handle, and exchanging them is quick and easy. Furthermore, the operating mode of this precision tool can be set from self-closing mode to self-opening mode with an integrated switch. Just like the i-TOOL soldering iron, the CHIP TOOL VARIO is equipped with the proven and reliable motion sensor to activate it out of standby.

CHIP TOOL VARIO

CHIP TOOL VARIO desoldering tweezers
Desoldering tip pairs of the series 462 see page 44

i-TOOL

i-TOOL soldering iron with micro heating element
Soldering tip series 102 see page 40/41

X-TOOL

X-TOOL – powerful desoldering iron for safe desoldering of heat-sensitive through-hole components
Desoldering tip series 722 see page 43

Ersa **i-CON VARIO 4 multi-channel station**

i-CON VARIO 4

antistatic multi-channel soldering and desoldering station with X-TOOL desoldering iron, i-TOOL AIR S hot air iron, CHIP TOOL VARIO desoldering tweezers and i-TOOL soldering iron

The **i-CON VARIO 4** multichannel soldering and desoldering station meets highest demands in the field of professional soldering and desoldering. It is the i-CON family's flagship and offers the user 4 tools for demanding soldering tasks: the new, ergonomic i-TOOL AIR S hot air iron with 200 W for flexible soldering and desoldering with non-contact energy transfer; the i-TOOL with 150 W for efficient soldering; the new CHIP TOOL VARIO desoldering tweezers with 80 W for precise desoldering of most delicate SMDs and the well-proven X-TOOL with 120 W for desoldering through-hole components. Alternatively the i-CON VARIO 4 can operate further Ersa soldering tools.

All functions, including air and vacuum units are integrated in the central supply unit featuring Ersa's well-known i-Op operation and clearly arranged displays. Furthermore the station has interfaces to connect Ersa solder fume extraction units or infrared heating plates as well as a USB port. The configuration of the station is quick and easy via micro SD card leaving it optimally prepared for all applications in professional electronics production. The i-CON VARIO 4 is perfectly suited for the use in ESD protected zones.

Order no.	Description	Rating/voltage	Vacuum	Air flow	Temperature range	Weight (w/o cable)
0ICV403A	i-CON VARIO 4 electronic station	max. 500 W/ 230 V, 50 Hz	max. 700 mbar	2 – 20 l/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)	
0ICV203A	i-CON VARIO 2 electronic station	max. 200 W/ 230 V, 50 Hz		2 – 20 l/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)	
0ICV203AP	i-CON VARIO 2 electronic station	max. 200 W/ 230 V, 50 Hz	max. 700 mbar	2 – 20 l/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)	
0470BRJ	i-TOOL AIR S hot air iron	200 W				approx. 90 g
0100CDJ	i-TOOL soldering iron	150 W				approx. 30 g
0460MDJ	CHIP TOOL VARIO desoldering tweezers	2 x 40 W				approx. 75 g
0720EDJ	X-TOOL desoldering iron	2 x 60 W				approx. 240 g

Contents/order no.	**0ICV2000A**	**0ICV2000AI**	**0ICV2000AC**	**0ICV2000AX**	**0ICV4000A**	**0ICV4000AI**	**0ICV4000AC**	**0ICV4000AX**
i-CON VARIO 2	1x	1x	1x	1x				
i-CON VARIO 4					1x	1x	1x	1x
i-TOOL AIR S	1x	1x	1x	1x	1x	1x	1x	1x
i-TOOL		1x				1x	1x	1x
CHIP TOOL VARIO			1x				1x	1x
X-TOOL				1x				1x
Tool holders	1x	2x	2x	2x	1x	2x	3x	4x

Ersa **DIGITAL 2000 A soldering station**

PTC

The Ersa **DIGITAL 2000 A** is a top-class microprocessor-controlled soldering station distinguished by its flexibility and multifunctionality. It is antistatic according to the MIL-SPEC/ESA standard and designed for industrial use where high quality is demanded and for repairs and laboratory applications.

The station can alternatively be operated with various soldering and desoldering tools. Besides the POWER TOOL and TECH TOOL universal soldering irons, the MICRO TOOL micro-soldering iron, the CHIP TOOL desoldering tweezers and the X-TOOL desoldering iron can be connected.

The tools are automatically detected when inserted, and the control characteristics are adapted accordingly. The soldering and desoldering tips are then always connected with high impedance to the front-installed potential equalization socket.

The station is easy to operate and user-friendly. The desired temperatures, the unit of temperature (°C/°F), the standby time of 0 to 60 minutes, a tip offset and calibration feature and a three-character password-controlled lock can all be set with just three buttons and a simple menu guide. The energy feature allows you to influence the heat-up and reheating characteristics.

In addition, the soldering station has 4 programs. Each program can be separately and differently configured with the aforementioned functions.

A fixed program is assigned to each soldering and desoldering tool. The station automatically changes the program in case of a tool change.

If only one tool is used, then all programs can be used with this tool. A 5th program slot contains a temperature measuring function. For this purpose the temperature sensor DIG207 is required.

The calibration feature allows the actual soldering tip temperature to be precisely adjusted to the temperature shown in the LED display. For this purpose a suitable soldering tip temperature measuring device, such as the Ersa DTM series (see page 33), is required.

The Ersa DIGITAL 2000 A soldering station regulates the temperature through a digital PID algorithm, optimized for very precise and fast temperature control.

All connectable soldering and desoldering devices have enormous power reserves thanks to the PTC heating elements located inside the tips.

At a peak temperature of 280 °C the following power is available, for example:

- POWER TOOL – 105 W
- TECH TOOL – 70 W
- MICRO TOOL – 30 W
- CHIP TOOL – 2 x 30 W
- X-TOOL – 120 W.

These power reserves also ensure safe and top-quality soldering and desoldering results.

All soldering and desoldering tools are operated at the low voltage of 24 V and have a highly flexible, heat-resistant and antistatic connecting cable.

For tip changes we recommend the tip exchanger 3ZT00164 with flat nose pliers and side cutter (see page 34).

DIG20A84

with POWER TOOL soldering iron and Ersa SENSOTRONIC control system
Soldering tip series 832 and 842 see page 42/43, fig. with 0A08MSET

POWER TOOL

with Ersa SENSOTRONIC control system
Soldering tip series 832 and 842 see page 42/43

TECH TOOL

with Ersa SENSOTRONIC control system
Soldering tip series 612 see page 44

MICRO TOOL

with Ersa RESISTRONIC control system
Soldering tip series 212 see page 46

CHIP TOOL

with Ersa RESISTRONIC control system
Desoldering tip series 422/452 see page 45

X-Tool

with Ersa SENSOTRONIC control system
Desoldering tip series 722 see page 43

Ersa **DIGITAL 2000 A desoldering station with vacuum unit**

This desoldering station is suitable for removing residual solder and for desoldering wired components, even from multilayer PCBs. The station consists of the Ersa **DIGITAL 2000 A** described on page 24, a vacuum unit with the **X-TOOL** desoldering iron and the 0A44 tool holder. The desoldering tip is heated by two PTC heating elements.

A thermocouple temperature sensor near the desoldering tip immediately reacts to any heat loss. Practically delay-free reheating is therefore ensured.

The vacuum to suck up the liquefied solder is immediately available when the push-button is pressed.

The recesses of the tool holder 0A44 allow exchanging inserted soldering tips, even when hot, without an additional tool.

X-TOOL with Vacuum Unit

with electronic station 0DIG203A and Ersa SENSOTRONIC control system
Desoldering tip series 722 see page 43

Figure with optional stacking rack

Order no.	Description	Rating/ Voltage	Heating time	Temperature range	Weight (w/o cable)
0DIG20A84	DIGITAL 2000 A electronic station, complete with POWER TOOL soldering iron 0840CDJ with soldering tip 0842CDLF and holder 0A42, complete	80 W/230 V, 50 – 60 Hz/24 V 80 W (350 °C)	approx. 40 s (280 °C)	50 °C – 450 °C	1.25 kg approx. 50 g
0DIG20A64	DIGITAL 2000 A electronic station, complete with TECH TOOL soldering iron 0640ADJ with soldering tip 0612ADLF and holder 0A42, complete	80 W/230 V, 50 – 60 Hz/24 V 60 W (350 °C)	approx. 12 s (280 °C)	50 °C – 450 °C	approx. 50 g
0DIG20A27	DIGITAL 2000 A electronic station, complete with MICRO TOOL soldering iron 0270BDJ with soldering tip 0212BDLF and holder 0A42, complete	80 W/230 V, 50 – 60 Hz/24 V 20 W (350 °C)	approx. 50 s (280 °C)	150 °C – 450 °C	approx. 25 g
0DIG20A45	DIGITAL 2000 A electronic station, complete with CHIP TOOL desoldering tweezers 0450MDJ with tips 0452MDLF020 and holder 0A43, complete	80 W/230 V, 50 – 60 Hz/24 V 2 x 20 W (350 °C)	subject to tips	150 °C – 450 °C	approx. 75 g
0DIG20AXT	DIGITAL 2000 A electronic station, complete with vacuum unit 0CU103A (vacuum 800 mbar max.) X-TOOL desoldering iron 0720EDJ with tip 0722ED1226 and holder 0A44, complete	80 W/230 V, 50 – 60 Hz/24 V 45 W 2 x 60 W (350 °C)	subject to application	50 °C – 450 °C	1.25 kg approx. 240 g*

* incl. tip and cable

Ersa **SMD 8014 tip holder**

The **SMD 8014** tip holder is equipped with the latest soldering tips or desoldering tip pairs, in particular for SMD technology. Tips can be stored neatly arranged in a space-saving way for quick access.

The range of soldering tips and desoldering tip pairs with the component-specific dimensions can be found on pages 40, 41 and 46.

All soldering tips and desoldering tip pairs are manufactured according to the ERSADUR process. They have excellent thermal conductance and a long service life.

Ersa SMD 8014

Soldering tip series 102 see page 40/41, desoldering tip series 422 and 452 see page 45

Order no.	Description	Equipped with ERSADUR soldering tips	Equipped with ERSADUR desoldering tips
0SMD8014	SMD 8014 tip holder, complete	0102PDLF04, ...PDLF10, ...CDLF12, ...CDLF16, ...WDLF16,...WDLF23, ...BDLF20 and tip fastener 3IT1045-00 (green version) for i-TOOL, complete	0422SD, 0452EDLF060, ...FDLF100, ...FDLF150, ...MDLF020, ...QDLF100, ...QDLF175

Ersa **HR 100 A hybrid rework system**

HR 100 A

with HYBRID TOOL rework iron with patented heating technology and VAC-PEN vacuum pipette

The **HR 100 A** uses Ersa's revolutionary and patented Hybrid Rework Technology for safe removal and replacement of small SMDs in a lead-free environment. Safe, medium-wave IR radiation combined with a gentle hot air stream guarantees optimal energy transfer to the component.

The HYBRID TOOL delivers smooth and homogeneous heat to lead-free components sizing from 0201s to 20 x 20 mm SMDs and even larger. Exchangeable Hybrid Adaptors focus 200 W of safe hybrid heating power onto the component while protecting neighboring areas from blowing away adjacent chips.

The user-friendly operation allows for even non-experienced operators to handle the HR 100 A safely and quickly. Advanced operators using the HR/IRHP 100 A complete system can not only set air volume and heating power levels, but they can also run and record profiles! The ergonomically designed HYBRID TOOL handle contains a positioning laser which helps the operator to focus the heat precisely throughout the entire process.

Rapid, simple and safe hand-held component removal

Temperature-controlled SMD soldering

Order no.	Description	Rating / Voltage	Heated area	Weight (w/o. cable)
0IRHR100A	HR 100 A hybrid rework system, complete with HYBRID TOOL rework iron 3IRHR100A-01, VAC-PEN vacuum pipette 0VP020, hybrid adaptors 0IRHR100A-14, -15, -16 and adaptor changer 0IRHR100A-24	200 W/230 V, 50 – 60 Hz	6 x 6 mm up to 20 x 20 mm	300 g
	Recommended acessories:			
0IRHR-ST050	Hybrid rework tripod, complete			

HR 100 A and IRHP 100 A

with HYBRID TOOL rework iron with patented heating technology, hybrid adapters, IRHP 100 A IR heating plate, Z-axis tool stand, X-Y PCB holder and VAC-PEN vacuum pipette

Detailed information on these systems as well as further Ersa rework systems is available in our brochure "Ersa Inspection & Rework".

Technical highlights:

- HYBRID TOOL with 200 W heating element; positioning laser in the HYBRID TOOL handle
- Three exchangeable hybrid adaptors (6 x 6 mm, 10 x 10 mm and 20 x 20 mm)
- Low noise rework blower (below 40 dB)
- Integrated vacuum pump & VAC-PEN, tool holder and K-type TC input socket, USB interface, LED display, "Turn & Push" control
- 1 channel temperature recording: AccuTC and Flexpoint TC holder (optional)
- HYBRID TOOL holder with axis height adjust & lock
- X-Y PCB board holder (290 mm x 250 mm)
- 800 W IR heating plate with glass cover: 125 mm x 125 mm high-performance IR heating element
- Closed loop profiles with Ersa IR-SOFT rework documentation software, user level access

Ersa **DIP & PRINT STATION** for solder paste printing

The user of an Ersa rework system can prepare components (application of solder paste or flux) in an easy, reliable and reproducible manner with the Ersa **DIP & PRINT STATION.**

Optionally available dip stencils permit – using defined parameters – to immerse the components into flux or solder paste, building up a defined depot on the contacts to be soldered. This method is suitable for BGAs and for most fine-pitch components. Using a component specific print stencil, solder paste depots can be easily and precisely be added on QFN/MLF pins, for example, and on pins of other SMD components.

In the printing process, the solder paste is applied from below onto the component fixed in the print stencil. The component is then lifted off the stencil with the placement unit and positioned on the board.

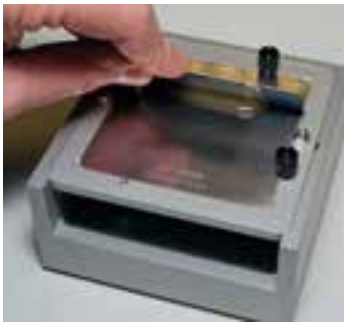
A fitting frame fixation is available for every Ersa rework system to install the DIP & PRINT STATION's stencil frame on the placement unit.

Component is lifted off the print stencil

DIP & PRINT STATION with accessories

Features DIP & PRINT STATION

- Easy solder paste printing on the component
- Component dip-in for solder paste or flux
- Fits for every Ersa rework system
- Easy stencil exchange
- Easy cleaning

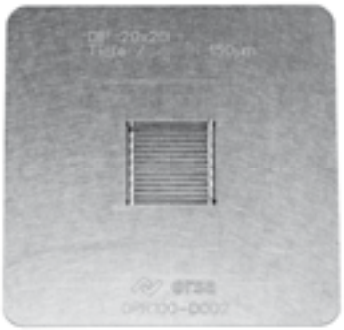


Flux application in a dip stencil

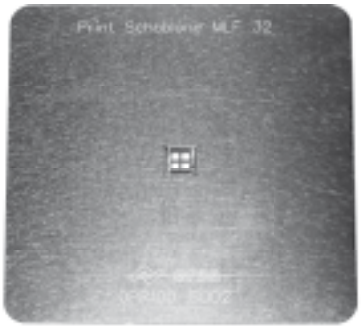
Order no.	Description
0PR100	DIP & PRINT STATION
0PR100-PL550	Frame fixation for PL 550
0PR100-PL650	Frame fixation for PL 650
0PR100-D001	Dip stencil, 40 x 40 mm / 300 µm
0PR100-D002	Dip stencil, 20 x 20 mm / 150 µm
0PR100-D003	Dip stencil, 20 x 20 mm / 100 µm

Connecting pads of SMD components may have tolerances and significant deviations. Therefore print stencils can be offered and produced after exact technical review.

MLF 32 with solder paste printed on the bottom



Dip stencil, 20 x 20 mm, 150 µm



Top side of a MLF 32 print stencil

CLEAN-AIR solder fume extractions

Noxious gases develop in every soldering process due to the use of fluxes. This aspect, together with the fact that flux condensate on the PCB can cause problems, results in an increased requirement to use solder fume extraction systems, also with regard to quality.

Ersa EASY ARM solder fume extractions ensure clean boards and a healthy environment in an efficient and economic way when hand soldering. They clear off an entire working area via large nozzles which are available in different designs.

The Ersa CLEAN-AIR systems with their robust, long-life metal housings are very compact and flexible in their application. Their noise level is pleasantly low. Due to the intelligent interface for the i-CON C soldering stations, the extraction units automatically switch into standby mode as soon as the station connected does which considerably saves energy costs and resources.

Ersa **EA 55 i solder fume extraction**

EA 55 i with optional table clamp

EA 55 i

Powerful solder fume extraction unit for the workbench, supplied with a 1 m extraction arm and connection cable for one i-CON1 C or i-CON2 C

0CA09-3005

Standby switch

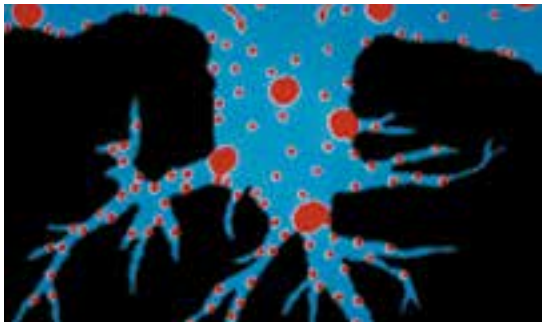
The intelligent filter unit Ersa EASY ARM EXTRACTION **EA 55 i** is a compact and powerful system to efficiently clean soldering process air at the workbench. Utilized with either the i-CON1 C or i-CON2 C soldering stations, connected with an interface cable, this filter system opens up a completely new dimension of intelligent solder fume extraction.

The extraction unit is only working whilst the attached soldering station is in operation, stopping as soon as the soldering station goes into standby mode. Filter usage times are increased, energy costs and operational noise level are significantly reduced.

Due to the variable and easy to change mounting of the unit it can be used in virtually any industrial environment.

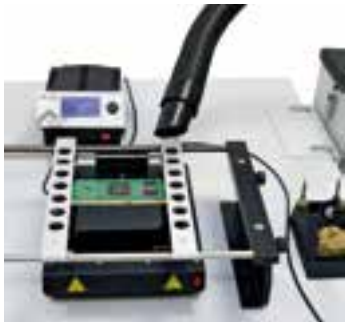
The solder fume filtration occurs in three stages: First a pre-filter to capture the large particles which results in a longer filter life for the more expensive second stage HEPA particulate filter which removes all the remaining hazardous particles. Thirdly the activated carbon gas filter adsorbs any harmful gas molecules. A powerful blower guarantees an adequate airflow throughout the filter life. When the filter needs changing an optical alarm is triggered.

A very low noise level is another feature of this filter unit. Quiet operation in a robust metallic case allows running the system in basically all industrial surroundings from, testing floor and laboratories to electronic production.



Activated carbon absorbs dangerous gas molecules

Table clamp, order no. 3CA09-4005



ERSA i-CON C – just one interface to control preheating, soldering and fume extraction

Order no.	Description	Dimensions (L x W x H)	Rating/voltage	Volume flow/ vacuum	Noise level	Filter
0CA09-001	Ersa EASY ARM EXTRACTION EA 55 i filter unit, complete	290 x 270 x 410 mm	75 W / 100 – 250 V 50 – 60 Hz	105 m^3/h max. / 1,400 Pa	56 dB (A)	HEPA activated carbon

Ersa **EA 110 plus i solder fume extraction**

CE SAFE ersa extremely quiet

The **EA 110 plus i** filter unit is a compact and efficient system with economical air recirculation. Thanks to the continuously variable suction power, the unit can be adapted to any given situation. It can suction the solder fumes from one or two workplaces effectively and economically.

The variable setup and installation options allow use even where space is limited.

The solder fumes are filtered in two stages: first, the particulate filter removes smallest suspended particles from the suctioned air. Harmful gases are then absorbed in the activated carbon filter.

The powerful suction turbine provides a nearly constant suction flow during the filter's entire service life. The filtering action is monitored by means of a time limit and constant monitoring of the suction power. As soon as a filter change is necessary the user is promptly notified by visual and acoustic signals.

For protection of the drive motor, the Ersa EA 110 plus i has an automatic cut-off feature.

The combination filter can be changed fast and easily without tools after the housing top has been removed.

Two suction arms, three suction nozzles and a check valve are available for different work conditions.

The plug-in system with its flexible suction arms allows fast adaptation to altered conditions at the soldering workplace.

Especially noteworthy is the low noise level, allowing use of the device not only in production, but also in repairs, engineering and in the lab. The decentralized design requires no extensive pipe system and offers the greatest possible flexibility.

EA 110 plus i

Powerful solder fume extraction unit for the workbench for up to 2 extraction arms.

Please select the extraction arms and nozzles suitable for your requirements from our wide range of accessories.

EA 110 plus i is controllable either by an optional interface cable set via one or two i-CON1 C/i-CON2 C stations, or it is manually controllable by a standby switch (see page 19).

Order no.	Description	Dimensions (L x W x H)	Rating/voltage	Volume flow/ vacuum	Noise level	Filter
0CA08-002	Ersa EASY ARM EXTRACTION EA 110 plus i filter unit, complete with i-CON C interface	460 x 210 x 470 mm	100 W / 100 – 250 V 50 – 60 Hz	140 m³/h max. / 2,200 Pa	max. 51 dB (A)	HEPA activated carbon

Accessories for EA 110 plus i

3CA06-4001

Extraction arm with 700 mm flexible hose, incl. connecting hose, table mounting and quick coupling

3CA06-4002

Extraction arm 1,000 mm flexible hose (to be installed directly at the filter unit) with 2 quick couplings

3CA06-5004

Nozzle "Plus", plastic, ESD, 215 x 90 mm

3CA06-5001

Metallic nozzle, 50 mm ø

3CA06-5002

Antistatic nozzle, plastic, transparent, 190 x 100 mm

0CA08-3004

Interface cable set

0CA08-3005

Standby switch

3CA06-9001

Table clamp

Accessories and process materials

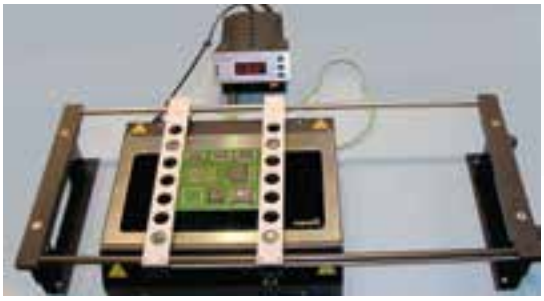
All about soldering – supplied from one source: Ersa special devices and tools, temperature measurement devices, auxiliaries and consumables for the production and repair of high-quality boards.

Ersa **IRHP 200 infrared heating plate**

The Ersa **IRHP 200** is a compact and ergonomically designed heating plate to preheat all SMD components as well as assemblies and substrates during the hand soldering process. It can also be used to reflow solder one-sided SMD boards and for reballing BGAs.

The IR emitters' even heat distribution ensures non-contact, gentle heating of the assembly. Thus the IRHP 200 is perfectly suited for lead-free applications.

The control station can be placed independently from the heating plate on the workbench in an ergonomically favorable way.



Application example with optionally available X/Y PCB table 0IR5500-01

Ersa IRHP 200

Electronically temperature-controlled infrared rework heating plate with integrated thermocouple, incl. control station 0RA4500D

Order no.	Description	Heated area (L x W)	Dimensions (L x W x H)	Rating/ voltage	Weight
0IRHP200	IRHP 200 infrared rework heating plate with control station 0RA4500D	260 x 135 mm	300 x 250 x 90 mm	max. 800 W / 230 V~, 50 – 60 Hz	approx. 4 kg

Ersa **IRHP 100 A infrared heating plate**

The **IRHP 100 A** infrared heating plate offers bottom-side PCB preheating for hand soldering, desoldering and touch-up applications. The safe and powerful medium wavelength IR heating technology offers a tremendous benefit to today's workbench. Working temperatures of the soldering tools can be greatly reduced. Lower tip temperatures decrease the risk of PCB damage while at the same time greatly increasing tip lifetime. The heating plate is controlled by either the i-CON1 C or the i-CON2 C.

Ersa IRHP 100 A

Infrared rework heating plate, controlled in 6 stages via the optional i-CON1 C control station

Order no.	Description	Heated area (L x W)	Dimensions (L x W x H)	Rating/ voltage	Weight
0IRHP100A-03	IRHP 100 A infrared rework heating plate	125 x 125 mm	200 x 260 x 53.5 mm	250 W (stage 6) 230 V~, 50 – 60 Hz	approx. 2.6 kg

Ersa **special tools**

The **ERSA 185 PZ** plastics welding device can be used to cut, weld and seal thermoplastic foil, fabric and sealing sections. In cutting plastic cords, the ERSA 185 PZ simultaneously welds the ends, to prevent untwisting.

Ersa 185 PZ

Plastics welding device

Order no.	Description	Rating/ voltage	Heating time	Temperature range	Weight (w/o cable)
0185PZ	ERSA 185 PZ plastics welding device with welding blade 0182PZ004	150 W / 230 V	approx. 5 min	approx. 370°C	370 g

Ersa **DTM 100 temperature measuring device**

In certified businesses and from a quality standpoint, regular checks of the soldering tip temperature are obligatory. Viewed through their entire service life, Ersa soldering stations are extremely temperature-stable depending on the system.

Possible differences between the set and actual value due to differences in tips or to slight heating element tolerances in the RESISTRONIC control system can be easily ascertained with the **DTM 100** temperature measuring device and corrected easily and fast on nearly all Ersa soldering stations.

The measurement is conducted by cleaning the heated soldering tip with a moist sponge and wetting it with new solder. The soldering tip is then put on the sensor wires. As soon as the display has stabilized the temperature is determined.

DTM 100

The DTM 100 is equipped with a patented sensor unit (K-type) with sensor wires made of chromel and alumel. It provides exact temperatures of even finest soldering tips.

Order no.	Description	Measuring range	Operating temperature	Power supply	Dimensions (mm) without sensor unit	Weight
0DTM100	DTM 100 temperature measuring device, packed in a plastic case	-50 °C to +1,150 °C	0 °C to +45 °C	9 V flat battery 6F22	100 x 60 x 26 mm	approx. 134 g
0DTM100P	DTM 100 temperature measuring device with calibration certificate, packed in a plastic case	-50 °C to +1,150 °C	0 °C to +45 °C	9 V flat battery 6F22	100 x 60 x 26 mm	approx. 134 g

Ersa **SVP 100 vacuum pipette**

The **SVP 100** vacuum pipette can be used to handle nearly all components, except MELFs and MiniMELFs. This tool consists of a nickel-plated aluminum handle, sealed at the rear end by a plug. When opened, replacement tips and suction cups can be stored here.

SVP 100

Vacuum pipette

Order no.	Description	Length	Housing diameter	Cup diameters	Weight
0SVP100	SVP 100 vacuum pipette complete with bent tip 0SVP12K and 3 silicone cups 0SVP13A	150 mm	14 mm	4 mm, 6 mm, 9 mm	69 g

Ersa **desoldering device**

The **VAC X** desoldering device is distinguished by its high suction power and low-recoil desoldering. The antistatic design allows desoldering work on electrostatically endangered assemblies. Due to the long and slim desoldering tips the VAC X can also be used on densely populated PCBs.

The **SOLDAPULLT AS 196** model is distinguished by extremely good recoil damping and has proven its merit many times over in industry. The dual seal ring system guarantees constant suction power on a high level.

VAC X

Antistatic desoldering device with plastic housing

Soldapullt AS 196

Proven desoldering device with plastic housing and excellent recoil damping

Order no.	Description	Desoldering tips	Suction capacity
0VACX	VAC X antistatic desoldering device	0VACX2 (2 pcs.)	11.3 cm³
0AS196	Soldapullt AS 196 antistatic desoldering device	0LS197	34 cm³

Ersa **STR 100 and STR 200 stacking racks**

The Ersa **STR 100** stacking rack can be used for combining two soldering stations, e.g. the DIG 2000 A electronic station with the vacuum unit as required (see adjacent illustration) in a practical and space-saving way.

The Ersa **STR 200** stacking rack can be used for combining two i-CON soldering stations or one i-CON station with any other Ersa soldering station.

STR 100/STR 200

Stacking racks for a well-organized workplace
(Delivery without soldering stations)

Order no.	Description
0STR100	STR 100 stacking rack to arrange soldering stations (except i-CON) in a safe and space-saving way at the workbench
0STR200	STR 200 stacking rack to arrange the Ersa i-CON soldering stations in a safe and space-saving way at the workbench

Ersa **SR 100 solder wire dispenser**

The Ersa **SR 100** solder wire dispenser is extremely durable and can accept solder wire reels of up to 1,000 g.

Optimal unwinding of different reels is ensured by a conical centering nut.

The flexibly mounted solder wire guide is suitable for all current solder wire diameters and allows unwinding in the desired direction without having to change the location of the SR 100.

Available as an accessory and easily retrofitted, the Ersa **SR 101** kit allows simultaneous use of a second spool.

SR 100

Solder wire dispenser (delivery without solder wire)

SR 101

Retrofit kit for a second solder wire spool, optionally available
(Delivery without solder wire and SR 100)

Order no.	Description	Solder wire spools	Spool receiver diameter
0SR100	SR 100 solder wire dispenser for one spool (without solder wire)	250 g, 500 g, 1,000 g	14 mm
0SR101	Kit for 0SR100 for 2nd spool (without solder wire)	250 g, 500 g, 1,000 g	14 mm

Ersa **tip exchanger**

For changing all internally heated soldering and desoldering tips as well as hot air nozzles, we recommend tip exchanger 3ZT00164 with flat nose pliers and side cutter. These special pliers allow tips to be replaced safely and protectively, even when hot.

3ZT00164

Tip exchanger with flat nose pliers and side cutter

Order no.	Description	Application
3ZT00164	Tip exchanger	For changing all internally heated Ersa soldering tips and desoldering tips of the 422/452 desoldering tip series and 802 hot air nozzles

Ersa **tool holders and cleaning sponges**

0A04

0A05

0A08MSET **0008M**

Soldering and desoldering devices are heating devices and depending on the application can attain high temperatures during operation. This equipment must never be operated without supervision; during longer interruptions of work they should be switched off and always be stored in suitable tool holders.

Most of the Ersa tool holders are made of metal or heat-resistant duroplastic, and most are antistatic.

Most holders have a viscous sponge for tip cleaning, as well as options for conveniently resting and storing soldering and desoldering tips.

0A17

0A18

0A41/0A42

0A45

0A50

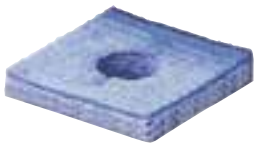
3N194

0A53

0A54

0A55

0003B



0004G

Order no.	Description	for
0A04	Tool holder A 04	Soldering irons from 50 W – 150 W output; ISOTYP and 0185PZ soldering irons
0A05	Tool holder A 05	Medium-sized and small soldering irons
0A08MSET	Dry sponge 0008M with container	Dry cleaning of soldering tips (especially for lead-free)
0A17	Tool holder A 17	Soldering irons with an output ranging from 200 W – 550 W
0A18	Tool holder A 18	Soldering irons of the MULTITIP series; TIP 260 soldering iron
0A39	Tool holder A39	RT 80 soldering iron (fig. see page 13)
0A41	Tool holder A 41	Irons of the MULTITIP series; MULTI-PRO, MULTI-TC, BASIC TOOL 60 / 80 soldering irons
0A42	Tool holder A 42, antistatic	TIP TOOL, POWER TOOL, ERGO TOOL, MICRO TOOL and TECH TOOL soldering irons
0A43	Tool holder A 43, antistatic	CHIP TOOL (fig. see page 20)
0A44	Tool holder A 44, antistatic	X-TOOL desoldering iron (fig. see page 21)
0A45	Universal holder A 45	832 tip series (C8 – C18, MD, QD, ZD models), solder wire feed unit and solder fume extraction
0A50	Tool holder A 50, antistatic	i-TOOL, i-TOOL NANO soldering iron
0A53	Tool holder A 53	i-TOOL PICO soldering iron
0A54	Tool holder A 54, antistatic	CHIP TOOL VARIO desoldering tweezers
0A55	Tool holder A 55, antistatic	i-TOOL AIR S hot air iron
3N194	Rubber support disk 3 N 194	MULTITIP, MULTI-PRO, ERSA 30 S soldering irons
0SH03	SMD soldering and desoldering tip holder	Soldering and desoldering tips of the 212, 422 and 452 series
0G156	Sponge container G156	INDEPENDENT 75 and INDEPENDENT 130 gas soldering irons
0003B	Blue viscose sponge, 55 x 55 mm	Tool holders 0A09, 10, 13, 16, 24, 25, 28, 29, 30, 34, 35, 36, 39, 41 – 45, 48
0004G	Viscose sponge, 34 x 65 mm	Tool holders 0A05, 0A21 and 0A26
0006G	Sponge, ø 36 mm	Sponge container 0G156 for the INDEPENDENT 75 / 130 gas soldering irons
0008M	Dry sponge 0008M	0A08MSET

Ersa **bar solder**

Ersa **bar solder,** like solder wire, is recovered from initial melt solder. It is primarily used for filling solder baths. For easier melting, it can be supplied as required in 50 mm sections. In combination with soldering irons of greater power and with suitable flux, bar solder is also used for soldering cable lugs of larger cross-sections and in sheet metal work.

Bar solder

High-quality bar solder recovered from initial melt solder to refill solder baths.

Order no.	Alloy	Melting temperature	Delivered in
4LOT230GAG3.5CU0.7	Sn95.8Ag3.5Cu0.7	217 – 218 °C	Bars of approx. 230 g
4LOT230G64B	Sn64Pb36	183 °C	Bars of approx. 230 g

Ersa **solder wire**

Ersa solder wire consists exclusively of high-quality raw materials. Manufactured on state-of-the-art machines, the wire meets all quality requirements. It is manufactured in different dimensions and with different alloys, to meet all practical requirements. Different types of "flux cores" allow individual adaptation to all soldering needs, especially in electronics and the electronics industry.

Solder wire

Available in different alloys and drum sizes in order to meet various fields of application. Please refer to the Ersa price list or to www.ersa.com for a detailed list including wire diameters.

Solder alloy according to DIN EN 29453	Flux according to DIN EN ... ... % flux share	Melting temperature (°C)
Sn96.5Ag3.0Cu0.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	217
Sn96.5Ag3.0Cu0.5	29454, type 1.2.3., J-STD-004 RE/LO 1.6 %, halogen-free	217 – 219
Sn96.5Ag3.0Cu0.5	29454, type 1.2.3., J-STD-004 RE/LO 2.2 %, halogen-free	217 – 219
Sn99.3CuNiGe0.7 (based on Sn99.3Cu0.7)	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	227
Sn99.3Cu0.7	29454, type 1.2.3., J-STD-004 RE/LO, 1.6 %, halogen-free	227
Sn96.5Ag3.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	221
Sn96.5Ag3.5	29454, type 1.2.3., J-STD-004 RE/LO, 1.6 %, halogen-free	221
Low-residue, halogen-free No-Clean solder wire. Especially adapted to the requirements in electronics production. The flux stands out by high temperature resistance, and it does not spray while melting. The light, solid flux residues are neither corrosive nor electrically conductive. Consequently it is not necessary to remove them from the solder joint.		
Sn60Pb40	29454/1.1.2, 2.2 %	183 – 190
Sn60Pb40	29454/1.2.3, 1.4 %	183 – 190
Sn63Pb37	29454/1.1.3, 2,2 %, halogen-free, eutectic	183
Sn63Pb37	29454, type 1.2.3, J-STD-004 RE/LO, 0.9 %, halogen-free	183
Sn63Pb37	29454, type 1.2.3, J-STD-004 RE/LO, 0.6 %, halogen-free	183
Sn62Pb36Ag2	29454, type 1.2.3, J-STD-004 RE/LO, 0.6 %, halogen-free	178 – 188

subject to changes

Ersa **desoldering wicks**

Ersa **desoldering wicks** are saturated with halogen-free No-Clean flux. They are suitable for protectively removing excess solder and old solder, especially from boards carrying SMD components. A fine copper fabric with high capillary power ensures optimal desoldering results. The additional use of a flux cream may be appropriate under certain circumstances.

Order no.	Description	Package size
0WICKNC1.5/10	No-Clean wicks, length 1.5 m, width 1.5 mm	10 pcs.
0WICKNC1.5/SB	No-Clean wicks, length 1.5 m, width 1.5 mm	single-piece package
0WICKNC2.2/10	No-Clean wicks, length 1.5 m, width 2.2 mm	10 pcs.
0WICKNC2.2/SB	No-Clean wicks, length 1.5 m, width 2.2 mm	single-piece package
0WICKNC2.7/10	No-Clean wicks, length 1.5 m, width 2.7 mm	10 pcs.
0WICKNC2.7/SB	No-Clean wicks, length 1.5 m, width 2.7 mm	single-piece package
0WICKNC4.9/10	No-Clean wicks, length 1.5 m, width 4.9 mm	10 pcs.
0WICKNC4.9/SB	No-Clean wicks, length 1.5 m, width 4.9 mm	single-piece package

Ersa **flux and flux removers**

Ersa **No-Clean flux** and **flux cream** have proven their merit especially in all repair processes in SMD technology. Like all Ersa consumables, they meet the applicable standards and quality requirements. They can be easily and precisely applied by means of the FLUX-PEN or cartridge, supplied with plunger and needle.

Excess residue is removed, if necessary, by means of the **FLUX REMOVER** with the aid of absorbent, non-pulping paper towels or specially offered ESD-safe products.

Flux Cream

Ersa No-Clean flux creams available in different quantities

FLUX-REMOVER

FLUX-PEN

Order no.	Description	Quantities	Danger sign
0FMKANC32-005	No-Clean flux cream, EN 29454/1.1.3 C	5 ml cartridge	1); 3)
0FMKANC32-200	No-Clean flux cream, EN 29454/1.1.3 C	200 ml can	1); 3)
4FMJF8300-005	Flux gel 8300 for rework, EN 29454-1/1.2.3 C (F-SW33), resinous, halogen-free, low residues	5 ml cartridge	1)
0FMPEN	FLUX-PEN without flux		
4FMJF8001-PEN	FLUX-PEN with IF 8001 flux, EN 29454/2.2.3 A (F-SW 34/DIN 8511)	7 ml	1); 2)
0FMIF8001-001	IF 8001 flux, EN 29454/2.2.3A	100 ml	1); 2)
4FMJF6000-PEN	FLUX-PEN with IF 6000 Flux, for lead-free rework, EN 29454/1.1.3 A, solid 7.5 %	7 ml	1); 2)
0FMIF6000-001	Flux IF 6000 for lead-free rework, EN 29454/1.1.3.A (F-SW 32), resinous, halogen-free, long activation time, low residues, solid 7.5 %	100 ml	1); 2)
0FMIF2005-002	IF 2005 M low-solid No-Clean flux EN 29454/2.2.3 A	200 ml sprayer	1); 2)
0FR200	FLUX REMOVER 0FR200, with brush 0FR202 and protective cap 0FR203	200 ml cartridge	1); 2); 3)

1) = Xi Irritating

2) = F+ Highly inflammable

3) = N Environmentally hazardous

Ersa **TIP-REACTIVATOR**

The Ersa **TIP-REACTIVATOR** allows the regeneration of oxidized soldering tips. It is environmentally safe, free of lead and halogens and functions even at low soldering tip temperatures. For this purpose the heated soldering tip is wiped on the surface of the regeneration compound.

Lead-free
Bleifrei
SAFE ersa

Order no.	Description	Quantity	Danger sign
0TR01/SB	Tip-Reactivator, lead-free	15 g can	1)
0TR02/SB	Tip-Reactivator, lead-free, minimal residues	15 g can	1)

Soldering and desoldering tips

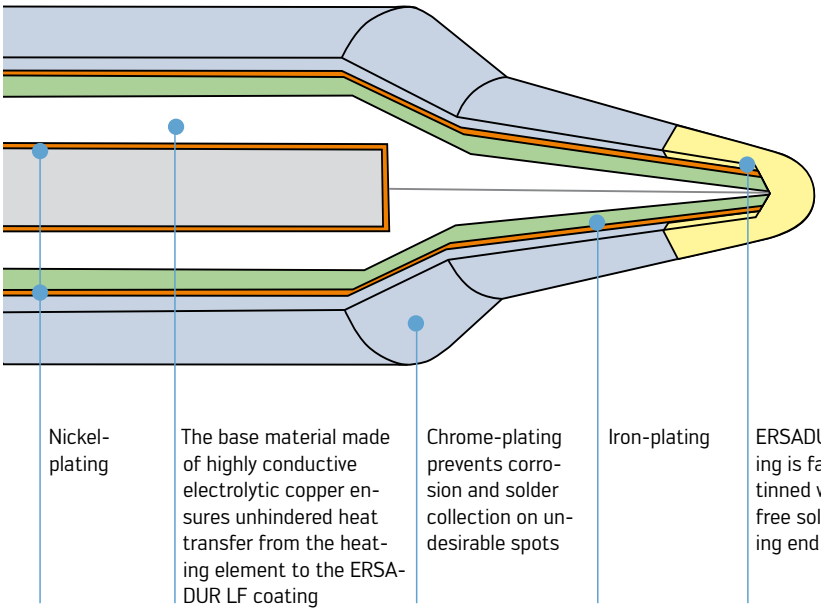
The soldering tip is the “heart” of the soldering iron. Its job is to transfer the heat from the heating element via the solder to the solder joint. Depending on the soldering iron and the application, different types of tips are available. Prerequisites for good solder joints are a correct tip shape, perfect heat transfer, an excellent condition of the tip and a reliable performance over time. In addition, the soldering tip also has to convey the necessary amount of sensitivity back to the operator.

ERSADUR long-life tips are designed for continuous operation and for high-quality results. They are galvanically plated with an iron coating and protected against corrosion and oxidation by an additional chrome layer. This manufacturing process was developed and is used exclusively by Ersa. The ERSADUR tips’ perfect thermal conductivity protects the heating element from overheating and premature wear. Ersa offers a comprehensive range of soldering tips for the diverse requirements.

ERSADUR **soldering tips**

Lead-free
Bleifrei
SAFE ersa

Cross-section of an ERSADUR tip, non-scale representation



Nickel-plating

The base material made of highly conductive electrolytic copper ensures unhindered heat transfer from the heating element to the ERSADUR LF coating

Chrome-plating prevents corrosion and solder collection on undesirable spots

Iron-plating

ERSADUR LF coating is factory pretinned with lead-free solder at working end

Special care for soldering tips

Important facts:

1. When a soldering tip remains hot for a long period of time, the tip will oxidize or blacken. An oxidized tip will no longer "wet" or melt solder properly.
2. The higher the **working temperature** of the soldering tip, the faster this oxidation will take place and tip lifetime will be shorter.
3. Soldering irons that automatically go into a lower "standby" temperature increase tip life.
4. **The oxidation of the tip will be very rapid** if the tip is left "cooking" without molten solder covering the tip end. It happens, for example, if the tip is not wetted with solder right after cleaning it.
5. Excessive **mechanical force** during soldering will shorten the tip life.
6. Proper care of the tip will greatly **increase tip life.**
7. **Lead-free soldering** requires **higher temperatures,** is more aggressive to the tip and will always lead to shorter tip life.

Special care:

1. Always clean the tip by wiping on a slightly wet sponge after each use. Alternatively, tips can be dry cleaned using the Ersa dry sponge.
2. Always put fresh solder onto the end of the tip BEFORE putting the tip back into the iron holder.
3. Always use lowest working temperature possible.
4. Never leave an iron "cooking" unattended for some time. Always set iron into automatic standby if possible or turn off when not in use.
5. Never use excessive mechanical force when soldering.
6. Soldering tip oxidation can be easily removed if detected early. Early detection and removal will greatly increase tip life.
7. Tip oxidation removal or tip refurbishing is accomplished in 4 consecutive steps:

- Clean on damp sponge,
- Clean with wire brush,
- Use of a tip reactivator chemical
- Retinning using proper flux cored solder wire.

Ersa Dry Sponge

The Esa Dry Sponge is an alternative to the wet sponge and can be beneficial, especially in lead-free soldering.

In the field of hand soldering a long tip lifetime with continuously good soldering results is essential for the users. Oxidized soldering tips can only slowly melt the solder, which decreases productivity. A soldering tip needs care in order to ensure an efficient process.

Dry cleaning of soldering tips offers substantial advantages. The soldering tips are not cooled abruptly and contaminated tips resulting from dirty sponges are avoided. Due to the slightly abrasive properties of the special wire mesh, passive layers that accumulated on the tip can easily be removed. Tip life is thus increased considerably in lead-free hand soldering.

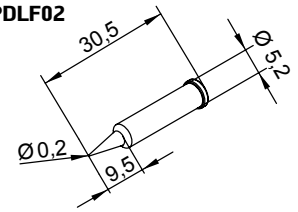
ERSADUR long-life soldering tip series **102**

Large selection ranging from 0.2 mm to 25 mm

Lead-free Bleifrei SAFE ersa

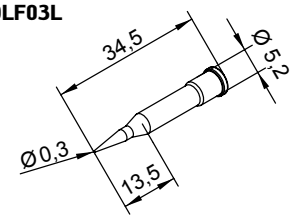
- i-CON PICO
- i-CON NANO
- i-CON with i-TOOL soldering iron
- i-CON1 with i-TOOL soldering iron
- i-CON2 with i-TOOL soldering iron
- i-CON1 C with i-TOOL soldering iron
- i-CON2 C with i-TOOL soldering iron
- i-CON VARIO 2 with i-TOOL soldering iron
- i-CON VARIO 4 with i-TOOL soldering iron

0102PDLF02



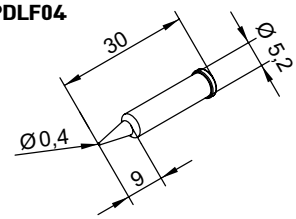
pencil point, 0.2 mm ø

0102PDLF03L



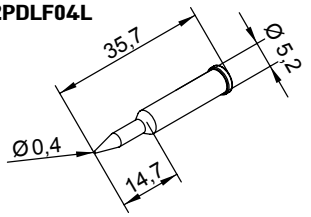
pencil point, extended, 0.3 mm ø

0102PDLF04



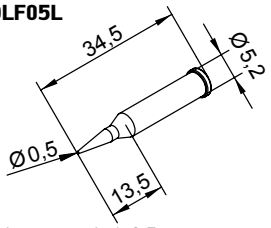
pencil point, 0.4 mm ø

0102PDLF04L



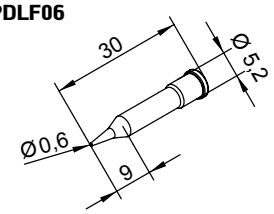
pencil point, extended, 0.4 mm ø

0102PDLF05L



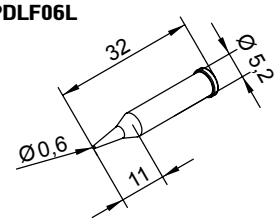
pencil point, extended, 0.5 mm ø

0102PDLF06



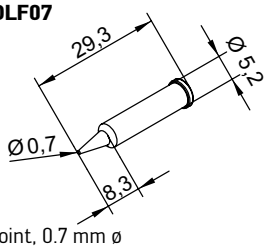
pencil point, 0.6 mm ø

0102PDLF06L



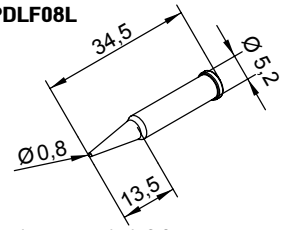
pencil point, extended, 0.6 mm ø

0102PDLF07



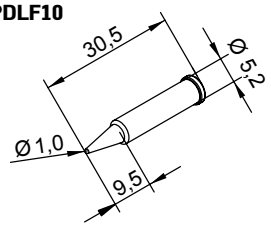
pencil point, 0.7 mm ø

0102PDLF08L



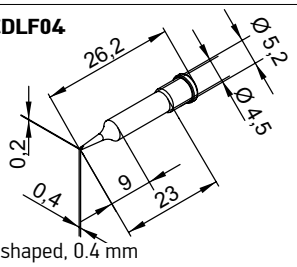
pencil point, extended, 0.8 mm ø

0102PDLF10



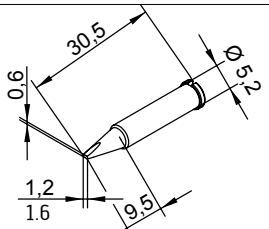
pencil point, 1.0 mm ø

0102CDLF04



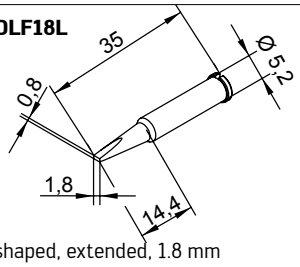
chisel-shaped, 0.4 mm

0102CDLF12/ 0102CDLF16



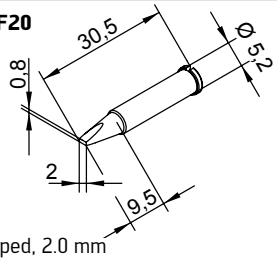
chisel-shaped, 1.2 mm/1.6 mm

0102CDLF18L



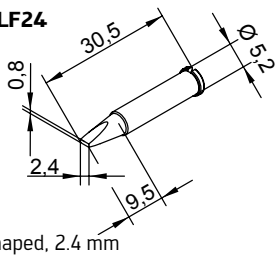
chisel-shaped, extended, 1.8 mm

0102CDLF20



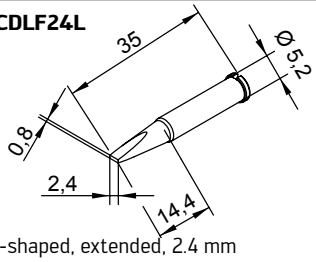
chisel-shaped, 2.0 mm

0102CDLF24



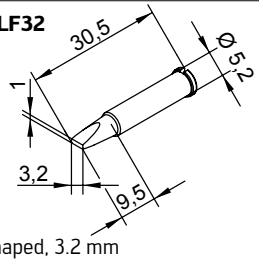
chisel-shaped, 2.4 mm

0102CDLF24L



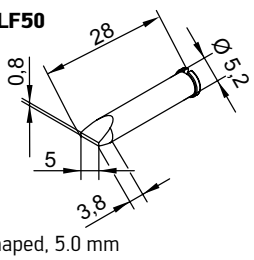
chisel-shaped, extended, 2.4 mm

0102CDLF32



chisel-shaped, 3.2 mm

0102CDLF50



chisel-shaped, 5.0 mm

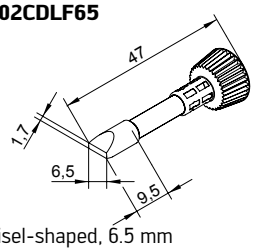
ERSADUR long-life soldering tip series **102**

Wide range of special tips online at: www.ersa.com

Lead-free Bleifrei SAFE ersa

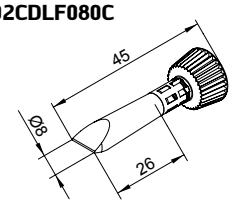
- i-CON PICO
- i-CON NANO
- i-CON with i-TOOL soldering iron
- i-CON1 with i-TOOL soldering iron
- i-CON2 with i-TOOL soldering iron
- i-CON1 C with i-TOOL soldering iron
- i-CON2 C with i-TOOL soldering iron
- i-CON VARIO 2 with i-TOOL soldering iron
- i-CON VARIO 4 with i-TOOL soldering iron

0102CDLF65



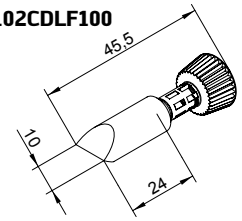
chisel-shaped, 6.5 mm

0102CDLF080C



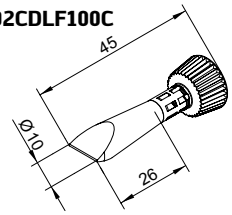
chisel-shaped, 8.0 mm

0102CDLF100



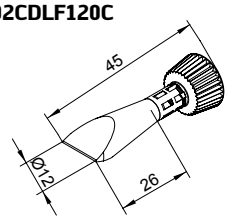
chisel-shaped, 10.0 mm

0102CDLF100C



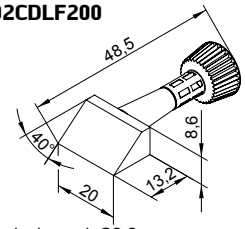
chisel-shaped, conical, 10.0 mm

0102CDLF120C



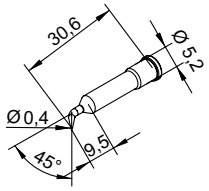
chisel-shaped, conical, 12.0 mm

0102CDLF200



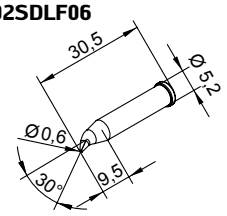
chisel-shaped, 20.0 mm

0102SDLF04



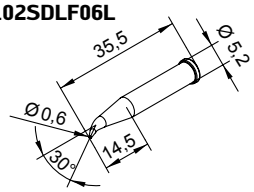
pencil point, bent, 0.4 mm ø

0102SDLF06



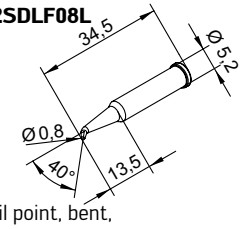
pencil point, bent, 0.6 mm

0102SDLF06L



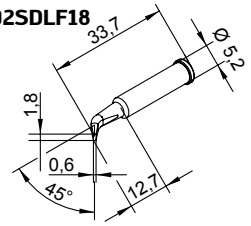
pencil point, bent, extended, 0.6 mm ø

0102SDLF08L



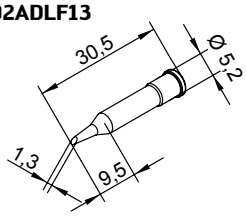
pencil point, bent, extended, 0.8 mm ø

0102SDLF18



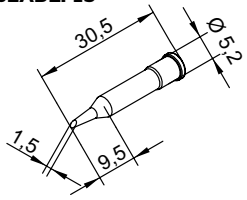
chisel-shaped, bent, 1.8 mm ø

0102ADLF13



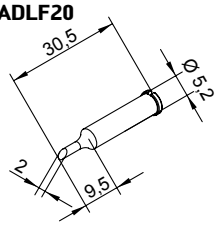
angled face, 1.3 mm ø

0102ADLF15



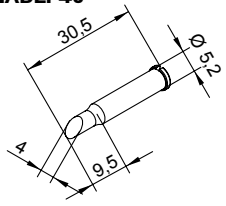
angled face, 1.5 mm ø

0102ADLF20



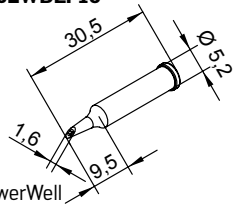
angled face, 2.0 mm ø

0102ADLF40



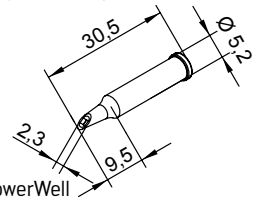
angled face, 4.0 mm ø

0102WDLF16



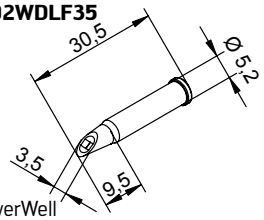
PowerWell with concave portion, 1.6 mm ø

0102WDLF23



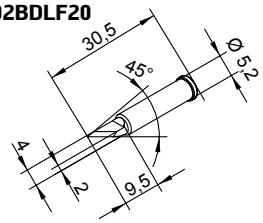
PowerWell with concave portion, 2.3 mm ø

0102WDLF35



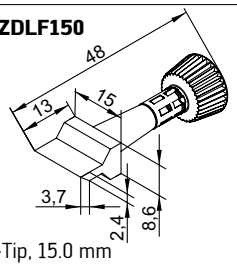
PowerWell with concave portion, 3.5 mm ø

0102BDLF20



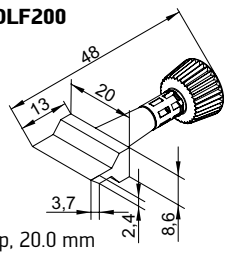
PLCC blade

0102ZDLF150



Wick-Tip, 15.0 mm

0102ZDLF200



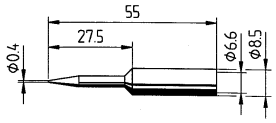
Wick-Tip, 20.0 mm

ERSADUR long-life soldering tip series **832**

Lead-free Bleifrei SAFE ersa

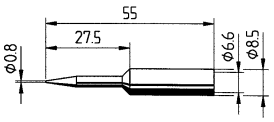
- ANALOG 60/60 A
- ANALOG 80/80 A
- DIGITAL 80 A
- DIGITAL 2000 A with POWER TOOL soldering iron
- ELS 8000/M/D
- MICRO-CON 60 iA with POWER TOOL soldering iron
- MS 6000
- MS 8000/D
- MULTI-PRO
- MULTI-SPRINT
- MULTI-TC
- RDS 80
- TWIN 80 A with ERGO TOOL soldering iron

0832UD/UDLF



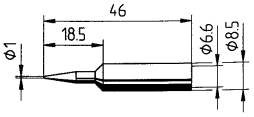
pencil point, 0.4 mm ø, extended

0832SD/SDLF



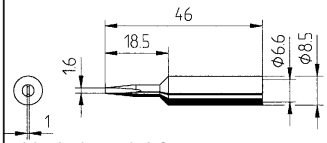
pencil point, 0,8 mm ø, extended

0832BD/BDLF



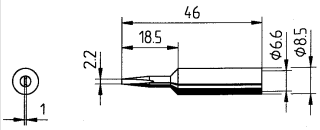
pencil point, 1.0 mm ø

0832YD/YDLF



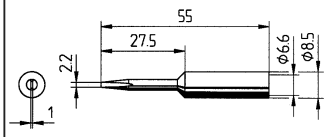
chisel-shaped, 1.6 mm

0832CD/CDLF



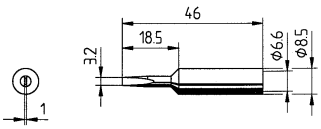
chisel-shaped, 2.2 mm

0832KD/KDLF



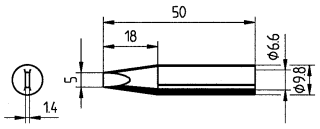
chisel-shaped, 2.2 mm, extended

0832ED/EDLF



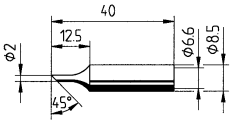
chisel-shaped, 3,2 mm

0832VD/VDLF



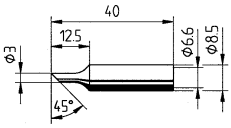
chisel-shaped, 5.0 mm

0832FDLF



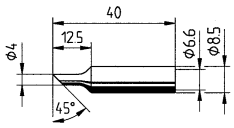
angled face, 2.0 mm

0832TDLF



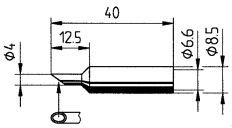
angled face, 3.0 mm ø

0832NDLF



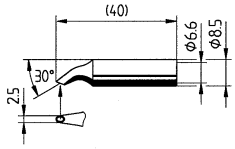
angled face, 4.0 mm ø

0832PW



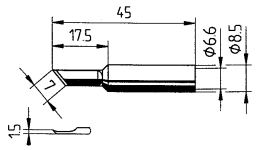
PowerWell with concave portion

0832HD



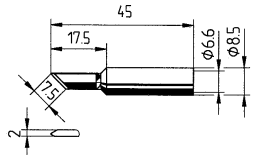
SolderWell with concave portion, bent

0832AD



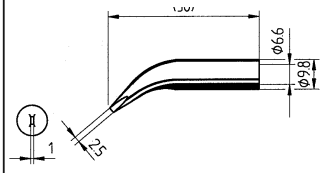
PLCC blade, 1.5 mm

0852OD



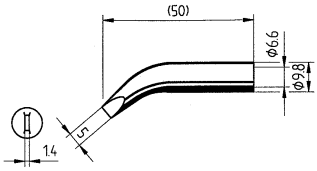
PLCC blade, 2.0 mm

0832WD



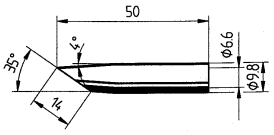
chisel-shaped, 2.5 mm, bent

0832RD



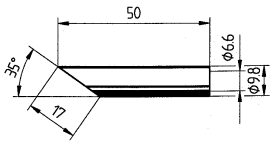
chisel-shaped, 5.0 mm, bent

0832GDLF



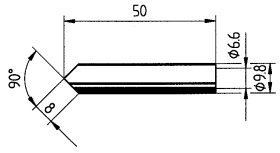
angled face, 14 mm, 35°

0832LDLF



angled face, 17 mm, 35°

0832MDLF



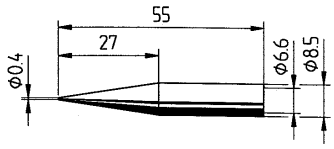
angled face on both sides, 8 mm

ERSADUR long-life soldering tip series **842**

Lead-free Bleifrei SAFE ersa

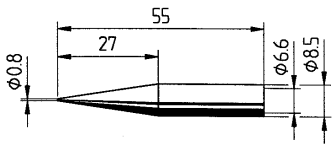
- ANALOG 60/60 A
- ANALOG 80/80 A
- DIGITAL 80 A
- DIGITAL 2000 A with POWER TOOL soldering iron
- ELS 8000/M/D
- MICRO-CON 60 iA with POWER TOOL soldering iron
- MS 6000
- MS 8000/D
- MULTI-PRO
- MULTI-SPRINT
- MULTI-TC
- RDS 80
- TWIN 80 A with ERGO TOOL soldering iron

0842UD/UDLF



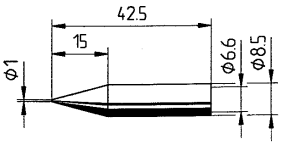
pencil point, 0.4 mm ø, extended

0842SD/SDLF



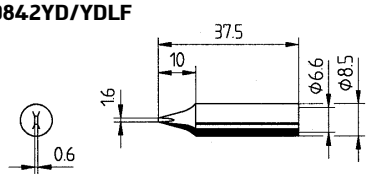
pencil point, 0.8 mm ø, extended

0842BD/BDLF



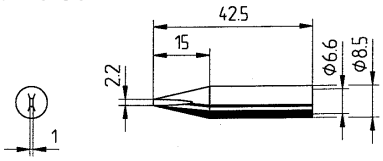
pencil point, 1.0 mm ø

0842YD/YDLF



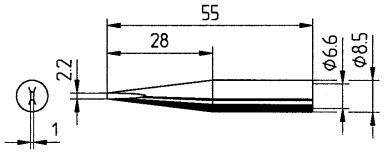
chisel-shaped, 1.6 mm

0842CD/CDLF



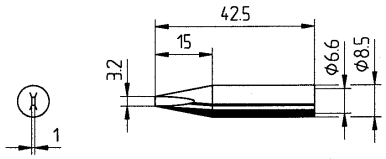
chisel-shaped, 2.2 mm

0842KD/KDLF



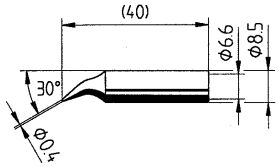
chisel-shaped, 2.2 mm, extended

0842ED/EDLF



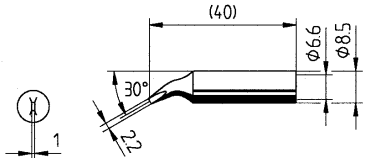
chisel-shaped, 3.2 mm

0842ID



pencil point, 0.4 mm ø, bent

0842JD



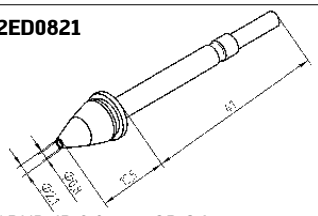
chisel-shaped, 2.2 mm, bent

ERSADUR/nickel-plated desoldering tip series **722**

Lead-free Bleifrei SAFE ersa

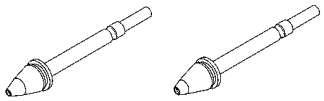
- DIGITAL 2000 A with X-TOOL desoldering iron
- XTOOLKIT1
- i-CON with X-TOOL desoldering iron
- i-CON2 with X-TOOL desoldering iron
- i-CON2 C with X-TOOL desoldering iron
- i-CON VARIO 2/4 with X-TOOL desoldering iron

0722ED0821



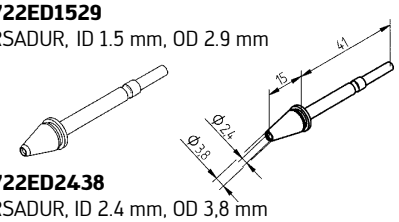
ERSADUR, ID 0.8 mm, OD 2.1 mm

0722ED1023
ERSADUR, ID 1.0 mm, OD 2.3 mm



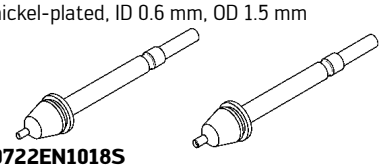
0722ED1226
ERSADUR, ID 1.2 mm, OD 2.6 mm

0722ED1529
ERSADUR, ID 1.5 mm, OD 2.9 mm



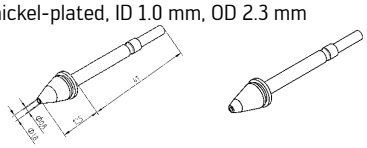
0722ED2438
ERSADUR, ID 2.4 mm, OD 3,8 mm

0722EN0615S
nickel-plated, ID 0.6 mm, OD 1.5 mm



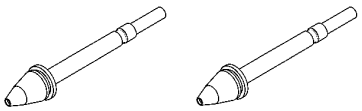
0722EN1018S
nickel-plated, ID 1.0 mm, OD 1.8 mm

0722ED1023
nickel-plated, ID 1.0 mm, OD 2.3 mm



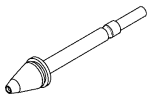
0722EN0823
nickel-plated, ID 0.8 mm, OD 2.3 mm

0722EN1020
nickel-plated, ID 1.0 mm, OD 2.0 mm



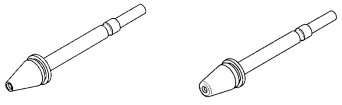
0722EN1023
nickel-plated, ID 1.0 mm, OD 2.3 mm

0722EN1223



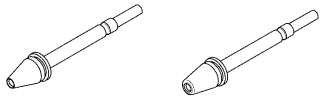
nickel-plated, ID 1.2 mm, OD 2.3 mm

0722EN1529
nickel-plated, ID 1.5 mm, OD 2.9 mm



0722EN1548
nickel-plated, ID 1.5 mm, OD 4.8 mm

0722EN2332
nickel-plated, ID 2.3 mm, OD 3.2 mm



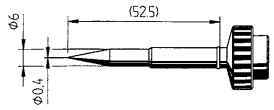
0722EN2348
nickel-plated, ID 2.3 mm, OD 4.8 mm

ERSADUR long-life soldering tip series **612**

Lead-free Bleifrei SAFE ersa

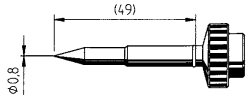
- CPS 60.10
- DIGITAL 60 A
- DIGITAL 2000 A with TECH TOOL soldering iron
- MICRO-CON 60 iA with TECH TOOL soldering iron

0612SDLF



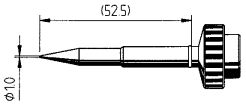
pencil point, 0.4 mm ø

0612UDLF



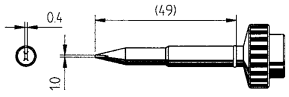
pencil point, 0.8 mm ø

0612BDLF



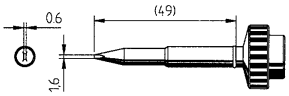
pencil point, 1.0 mm ø

0612CDLF



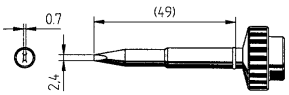
chisel-shaped, 1.0 mm

0612ADLF



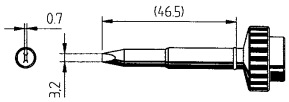
chisel-shaped, 1.6 mm

0612KDLF



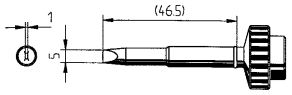
chisel-shaped, 2.4 mm, bent

0612EDLF



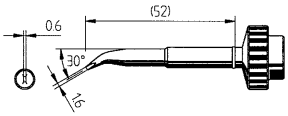
chisel-shaped, 3.2 mm ø

0612GDLF



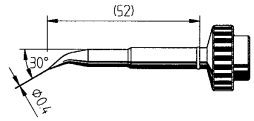
pencil point, 1.6 mm ø

0612JD



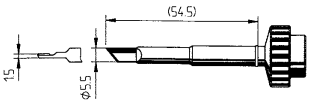
chisel-shaped, 1.6 mm, bent 30°

0612ID



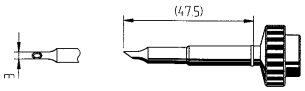
pencil point, 0.4 mm ø, bent 30°

0612MD



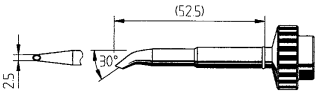
PLCC blade, 1.5 mm

0612TW



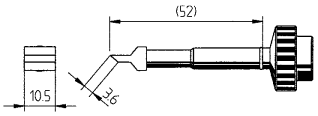
Ersa TechWell with concave portion, 3.0 mm

0612HD



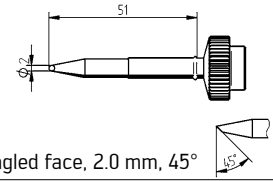
Ersa SolderWell with concave portion 2.5 mm, 30° bent

0612ZD



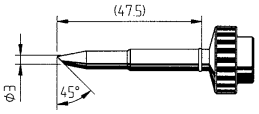
WickTip, 10.5 x 3.6 mm

0612FDLF



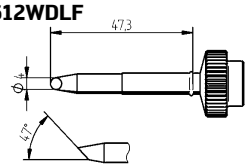
angled face, 2.0 mm, 45°

0612ND



angled face, 3.0 mm, 45°

0612WDLF



angled face, 4.0 mm, 45°

Pairs of desoldering tips, series **462**

Lead-free Bleifrei SAFE ersa

- i-CON VARIO 2 with CHIP TOOL VARIO desoldering tweezers
- i-CON VARIO 4 with CHIP TOOL VARIO desoldering tweezers

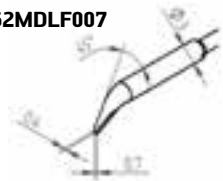
0462CDLF010

chisel-shaped, 1 mm

0462CDLF018

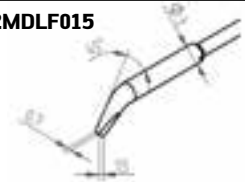
chisel-shaped, 1.8 mm

0462MDLF007



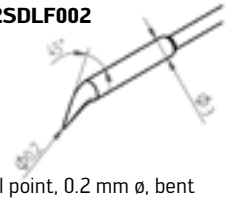
chisel-shaped, 0.7 mm, bent

0462MDLF015



chisel-shaped, 1.5 mm, bent

0462SDLF002



pencil point, 0.2 mm ø, bent

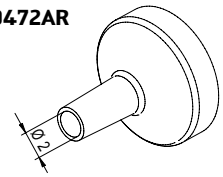
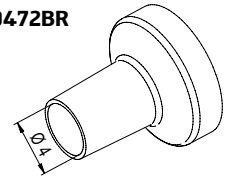
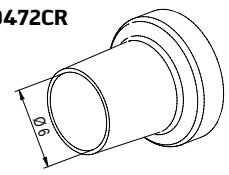
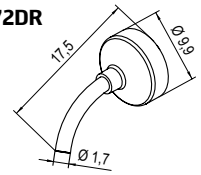
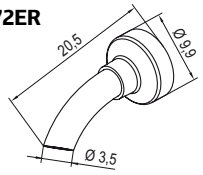
0462PDLF005

pencil point, 0.5 mm ø

Hot air nozzle series **472**

- i-CON VARIO 2
  with i-TOOL AIR S hot air iron
- i-CON VARIO 4
  with i-TOOL AIR S hot air iron

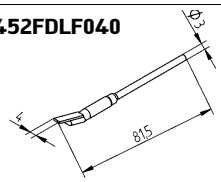
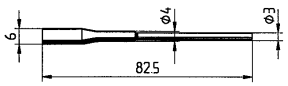
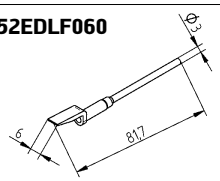
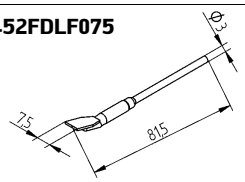
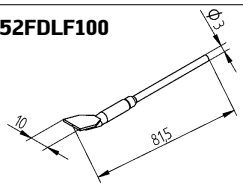
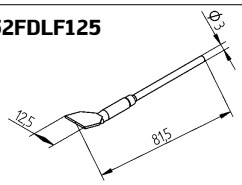
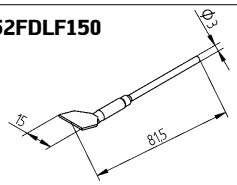
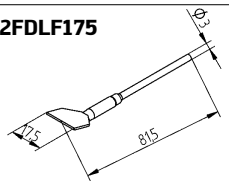
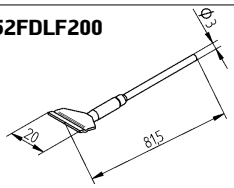
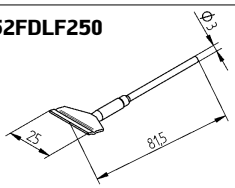
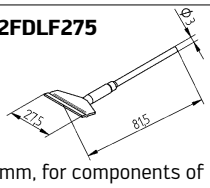
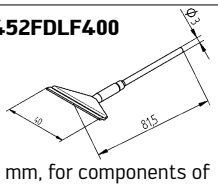
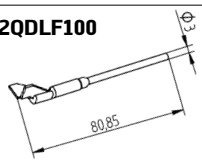
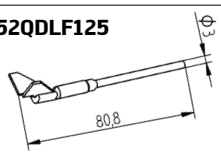
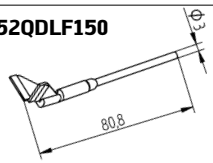
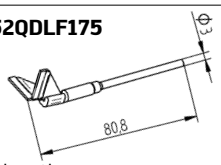
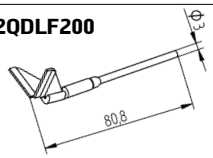
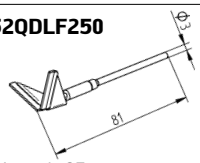
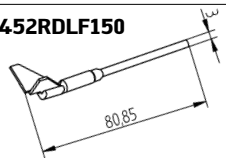
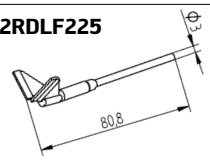
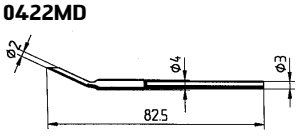
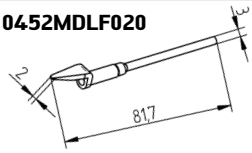
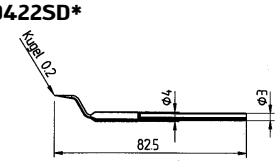
Lead-free Bleifrei SAFE ersa

0472AR  hot air nozzle, 2 mm ø	**0472BR**  hot air nozzle, 4 mm ø	**0472CR**  hot air nozzle, 6 mm ø	**0472DR**  hot air nozzle, bent, 1.7 mm / 0.067 in ø	**0472ER**  hot air nozzle, bent, 3.5 mm / 0.138 in ø

ERSADUR pairs of desoldering tips, series **422/452**

Lead-free Bleifrei SAFE ersa

- DIGITAL 2000 A with CHIP TOOL
- MICRO-CON 60 iA SMD DESOLDERING PINCETTE 40
- REWORK 80
- SMD 8000
- SMT UNIT 60 AC/A with CHIP TOOL/
  SMD DESOLDERING PINCETTE 40
- i-CON with CHIP TOOL
- i-CON2 with CHIP TOOL
- i-CON2 C with CHIP TOOL

0452FDLF040  4 mm, for e. g. SO 8 GT/14 GT/16GT	**0422ED**  6 mm, for e. g. SOIC 8	**0452EDLF060**  6 mm, for e. g. SOIC 8	**0452FDLF075**  7.5 mm, for e. g. SOIC 2 / SOT 23
0452FDLF100  10 mm, for e. g. SOIC 16	**0452FDLF125**  12.5 mm, for e. g. SOIC 20	**0452FDLF150**  15 mm, for e. g. SOIC 24	**0452FDLF175**  17.5 mm, for e. g. SOIC 28
0452FDLF200  20 mm, for e. g. SOIC 32	**0452FDLF250**  25 mm, for e. g. SOIC 40	**0452FDLF275**  27.5 mm, for components of 27.5 mm side length	**0452FDLF400**  40 mm, for components of 40 mm side length
0452QDLF100  90°, length 10 mm, for e. g. PLCC 20	**0452QDLF125**  90°, length 12.5 mm, for e. g. PLCC 28	**0452QDLF150**  90°, length 15 mm, for e. g. QFP, TQFP and TTQFP 80T25	**0452QDLF175**  90°, length 17.5 mm, for e. g. PLCC 44
0452QDLF200  90°, length 20 mm, for e. g. PLCC 52	**0452QDLF250**  90°, length 25 mm, for e. g. PLCC 68	**0452RDLF150**  length 15 x 12.5 mm, for e. g. PLCC 32	**0452RDLF225**  length 22.5 x 16.5 mm, for e. g. QFP 100
0422MD  ellipse, for MELF and MINIMELF	**0452MDLF020**  ellipse, for MELF and MINIMELF	**0422SD***  for MICROMELF	

***Please note:**

Tips 0422SD must be used in combination with the tip turn protection set to ensure good results.

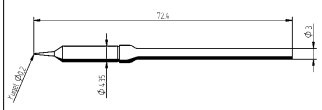
Tip turn protection set for TC 40 desoldering tweezers and DESOLDERING PINCETTE 40 on request.

ERSADUR long-life soldering tip series **212**

Lead-free Bleifrei SAFE ersa

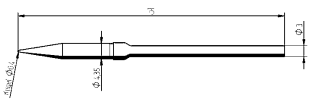
- ANALOG 20 A
- DIGITAL 2000 A with MICRO TOOL soldering iron
- MICRO-CON 60 iA with MICRO TOOL soldering iron
- REWORK 80
- SMD 8000
- SMT UNIT 60 A/AS
- TWIN 40 A/AS
- TWIN 80 A with MICRO TOOL soldering iron

0212SDLF



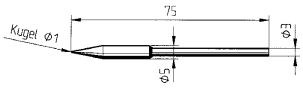
pencil point, 0.2 mm ø

0212BDLF



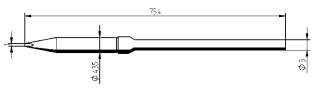
pencil point, 0.4 mm ø

0212ADLF



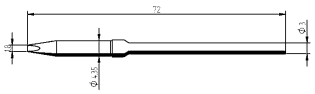
pencil point, 1.0 mm ø, reinforced

0212CDLF



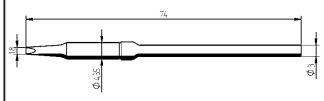
chisel-shaped, 1.0 mm

0212EDLF



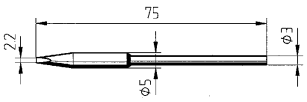
chisel-shaped, 1.8 mm

0212KDLF



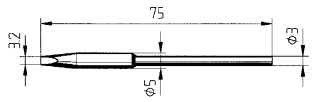
chisel-shaped, 1.8 mm, extended

0212FDLF



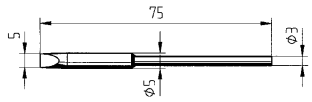
chisel-shaped, 2.2 mm, reinforced

0212GD



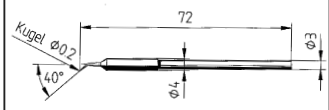
chisel-shaped, 3,2 mm, reinforced

0212VD



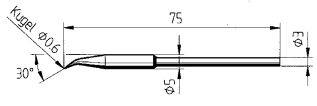
chisel-shaped, 5.0 mm, reinforced

0212RD



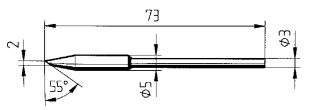
pencil point, 0.2 mm ø, bent

0212ID



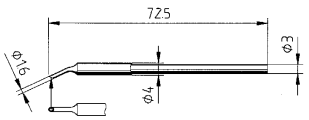
bent, 0.6 mm ø, reinforced

0212ND



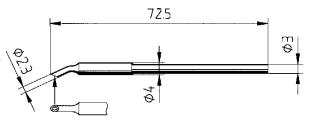
angled face, 2.0 mm, reinforced

0212WD



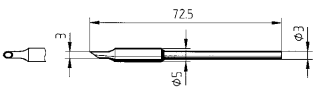
MiniMicroWell, 1.6 mm ø

0212MS



MicroWell, 2.3 mm ø

0212OD



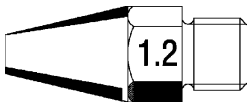
SolderWell, 3.0 mm ø

Desoldering tip series **662**

Lead-free Bleifrei SAFE ersa

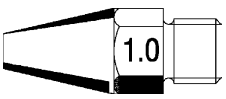
- ELS 8000/M/D
- ELS 8100
- MS 8100D

0662AE



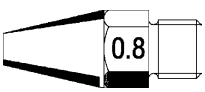
ERSADUR, 1.2 mm ø (for joints with medium heat requirements)

0662BE



ERSADUR, 1.0 mm ø (for joints with medium heat requirements)

0662CE

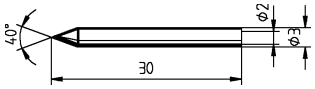


ERSADUR, 0.8 mm ø (for joints with medium heat requirements)

ERSADUR long-life soldering tip series **042 and 012**

- MINOR S (tips 042)
- MINITYP S (tip 0012BD)

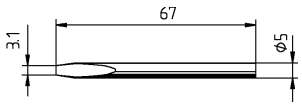
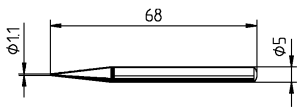
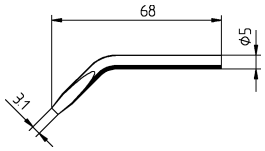
Lead-free Bleifrei SAFE ersa

0042BD	0042LD	0012BD
		
pencil point, 0.1 mm ø	angled face, 1 mm	pencil point

ERSADUR long-life soldering tip series **032**

- ERSA 30 S

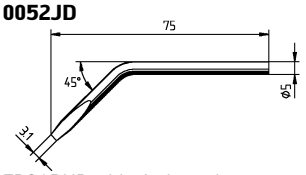
Lead-free Bleifrei SAFE ersa

0032KD	0032BD	0032JD
		
ERSADUR, chisel-shaped, 3.1 mm	ERSADUR, pencil point, 1.1 mm ø	ERSADUR, chisel-shaped, 3.1 mm, bent

ERSADUR long-life soldering tip series **052**

- ERSA 50 S

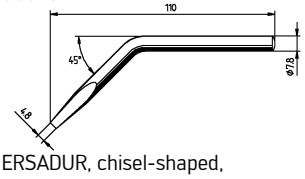
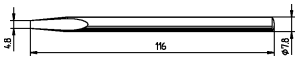
Lead-free Bleifrei SAFE ersa

0052JD

ERSADUR, chisel-shaped, 3.1 mm, bent

ERSADUR long-life soldering tip series **082**

- ERSA 80 S

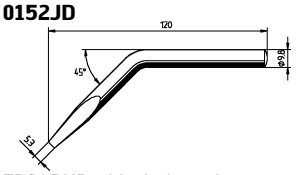
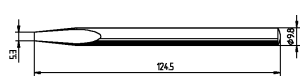
Lead-free Bleifrei SAFE ersa

0082JD	0082KD
	
ERSADUR, chisel-shaped, 4.8 mm, bent	ERSADUR, chisel-shaped, 4.8 mm

ERSADUR long-life soldering tip series **152**

- ERSA 150 S

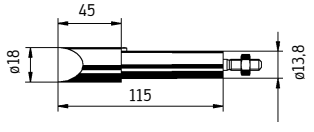
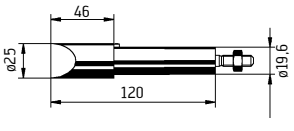
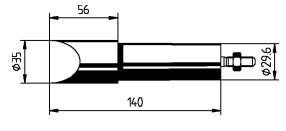
Lead-free Bleifrei SAFE ersa

0152JD	0152KD
	
ERSADUR, chisel-shaped, 5.3 mm, bent	ERSADUR, chisel-shaped, 5.3 mm

ERSADUR/nickel-plated soldering tip series **202, 302 and 552**

- ERSA 200 (series 202)
- ERSA 300 (series 302)
- ERSA 550 (series 552)

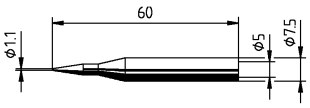
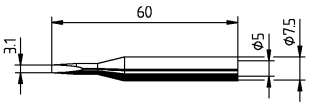
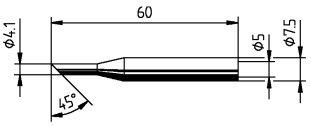
Lead-free Bleifrei SAFE ersa

0202MZ/0202MD	0302MZ/0302MD	0552MZ/0552MD
		
MZ: nickel-plated, MD: ERSADUR chisel-shaped, reinforced, 18 mm	MZ: nickel-plated, MD: ERSADUR chisel-shaped, reinforced, 25 mm	MZ: nickel-plated, MD: ERSADUR chisel-shaped, reinforced, 35 mm

ERSADUR long-life soldering tip series **172**

- MULTITIP 25

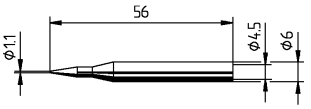
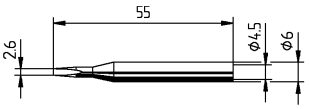
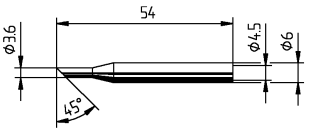
Lead-free Bleifrei SAFE ersa

0172BD	0172KD	0172LD
		
ERSADUR, pencil point, 1.1 mm ø	ERSADUR, chisel-shaped, 3.1 mm	ERSADUR, angled face 45°, 4.1 mm

ERSADUR long-life soldering tip series **162**

- MULTITIP 15
- TIP 260

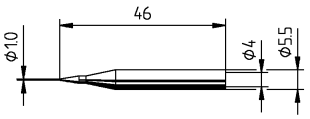
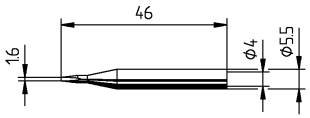
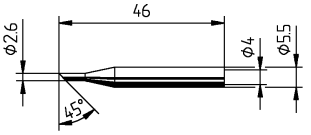
Lead-free Bleifrei SAFE ersa

0162BD	0162KD	0162LD
		
ERSADUR, pencil point, 1.1 mm ø	ERSADUR, chisel-shaped, 2.6 mm	ERSADUR, angled face, 45°, 3.6 mm

ERSADUR long-life soldering tip series **132**

- MULTITIP 08

Lead-free Bleifrei SAFE ersa

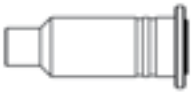
0132BD	0132KD	0132LD
		
ERSADUR, pencil point, 1.0 mm ø	ERSADUR, chisel-shaped, 1.6 mm	ERSADUR, angled face, 45° Winkel, 2.6 mm

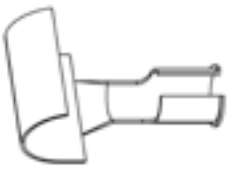
Soldering tip series **G 072 and G 132**

- **INDEPENDENT 75 gas soldering iron (series G 072)**
- **INDEPENDENT 130 gas soldering iron (series G 132)**

Lead-free Bleifrei SAFE ersa

0G072CN/0G132CN	0G072KN/0G132KN	0G072AN/0G132AN
		
chisel-shaped, 1.0 mm	chisel-shaped, 2.4 mm	chisel-shaped, 3.2 mm

0G072VN/0G132VN	0G072BE/0G132BE	0G072HE/0G132HE
		
chisel-shaped, 4.8 mm	flame nozzle	hot gas nozzle

0G072RE/0G132RE	0G072MN/0G132MN
	
deflector for hot gas nozzle 0G072HE / 0G132HE to shrink heat shrinkable sleeves	hot blade

Ersa **inspection systems**

For nearly fifteen years now, thousands of users worldwide have been benefiting from the ability to inspect hidden solder joints with the patented & award-winning ERSASCOPE inspection technology.

Industry experts, including the IPC, approve the great importance of using ERSASCOPE technology for the inspection of hidden solder joints. In combination with X-ray inspection equipment, the ERSASCOPE systems provide the most complete view of potential problems in the production process. ERSASCOPE remains to be the undisputed industry standard for optically inspecting BGAs and other hidden solder joints!

Whether for inspection under Flip-Chips or for inspection where other microscopes cannot see, ERSASCOPE technology offers a significant added value to any quality assurance program.

ERSASCOPE 1 – the original

90° viewing capability with high magnification for the inspection of all common types of components

ERSASCOPE series

"Best in class" optical inspection technology for inspection of hidden solder joints.

The award-winning & patented original ERSASCOPE technology has been further developed in order to meet today's challenges of lead-free soldering and low-profile components.

The ERSASCOPE 1 is a cost effective and economic system for the optical inspection of BGAs and hidden interior solder joints of SMT and THT components in accordance with the new IPC Inspection Standards (see IPC-7095B)

The ERSASCOPE 2 is currently the **only** inspection system worldwide offering exchangeable optical heads for Flip-Chip, CSP, BGA and 0201 optical inspection.

ERSASCOPE 2

Designed to handle low-profile components such as Flip-Chips, µBGAs and CSPs

Ersa **MOBILE SCOPE**

The Ersa MOBILE SCOPE is a compact and handy, portable video microscope to inspect solder joints in electronic production environments. It has been designed for optical inspection and digital image recording including measurements of solder joints on Ball Grid Array (BGA), µBGA, CSP and Flip-Chip packages.

The Ersa MOBILE SCOPE is also suitable to inspect PCB lands and solder paste prints or for the optical inspection of components on printed circuit boards in Surface Mount Technology (SMT) or in Trough Hole Technology (THT) in general. Its application fields are in quality control, production, laboratories or R&D departments.

MOBILE SCOPE

Mobile optical inspection system

Ersa **IR rework systems**

Over the past two decades, rework and repair of electronic assemblies has been one of the most exciting and challenging undertakings in the industry. The PCBs' increasing complexity as well as the advancements in packages has put additional demands on both rework specialists and their equipment. Applications oriented, innovative solutions are the key to success in this demanding field.

Ersa took on the rework challenge almost fifteen years ago when it introduced its first patented medium wavelength infrared rework system, the Ersa IR 500. Today, we are proud to boast one of the world's largest installed equipment bases of over 6,000 systems ranging from smaller benchtop units to larger semi-automated machines. Ersa rework systems have proven themselves to be the undisputed leaders in handling the largest variety of rework applications. From the smallest 0201 up to large SMT connectors, from SMT Flip-Chips to THT Pin Grid Arrays, from BGA on flex circuit to stacked BGAs and from metal shields to plastic processor sockets, the safe IR technology handles it all.

The market leader's complete range of rework products is introduced and described in the Ersa "Rework and Inspection Catalog".

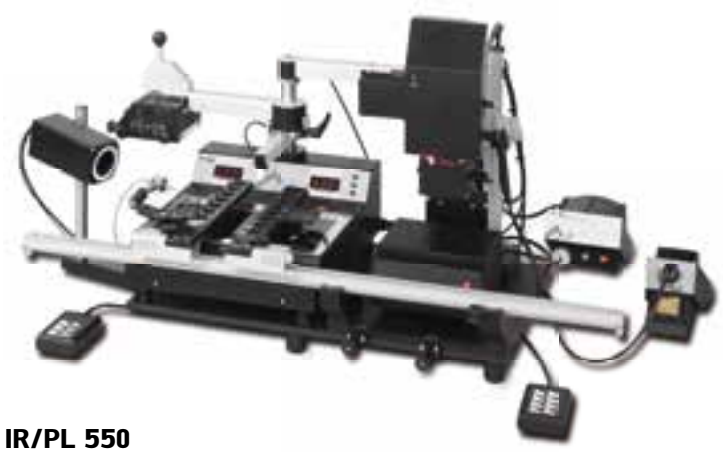
Ersa HRSoft – comfortable software for process control and documentation

HYBRID REWORK 600

Redefinded repair of assemblies – flexible, efficient, automated, safe! The new flagship of Ersa's rework product line with innovative technology

IR/PL 650

DynamicIR heating technology for large boards (460 mm x 560 mm); 9 programmable heating zones with 4,600 W; exact and user-friendly "Auto Pick & Place"



IR/PL 550

Top-selling rework system with unrivalled price-performance-ratio; DynamicIR heating technology with 1,600 W; suitable for plastic or metal components, high- or low-mass SMD or PTH components

Ersa **staff training and services**

In addition to its comprehensive product range Ersa offers a wide range of services such as staff qualification and training, equipment- and process audits, ramp-up support or equipment capability studies and consultations in special applications. Ersa provides its customers comprehensive possibilities to carry out application tests in the 400 m² Ersa Application and Demo Center.

Staff qualification is extremely important to Ersa. Take advantage of qualified employees yourself and participate in our training and qualification courses. Being a member of the soldering training union "Ausbildungsverbund Lötschulungen" Ersa offers, for example, trainings as Qualified Hand Soldering Specialist/Electronics Production according to uniform standards throughout the year and conducts Know How Seminars on machine and process technology. Please refer to our website or program flyers for further information and current dates.

Training as **qualified hand soldering specialist**

Your advantages

Well-educated and qualified employees save costs: process deviations can be identified and corrected before they lead to defects avoiding unnecessary rework. Further benefits are the optimal use of materials and reproducible quality. Since the participants are trained according to standardized and approved regulations they will all reach one level, finishing the 5 day training course with a certified technical and practical exam.

Target group

Electronics production industry, mechanical engineering companies with their own electronics production, prototype and pattern makers. Employees from production departments, quality managers and engineers who are to produce or repair RoHS complying electronic products in the hand soldering process.

Contents

The qualified hand soldering specialist will obtain a basic understanding for hand soldering electronic components – this means he/she will learn to understand the contents of working instructions and to professionally and independently create hand solder joints according to instructions.

Material properties will be discussed, and the necessity of a balance between soldering heat requirements and soldering heat resistance will be explained and tested afterwards by the trainees. The trainees will intensify the theoretical and practical knowledge they gained during the training course later in their daily work.

Teaching methods and equipment

Each participant will obtain a hand soldering workplace with ESD equipment. Therefore the courses are limited to max. 10 persons. Furthermore, heating plates, soldering and desoldering stations, one inspection workplace as well as component preparation spots are available. The participants' progress in their capabilities is evaluated and documented during the training course. These practical results are the basis for the admission to the final exams for the qualified hand soldering expert.

Ersa – Europe's largest manufacturer of **soldering systems**

Being Europe's largest manufacturer of soldering systems Ersa has the most comprehensive product range in the joining technology in electronics production.

In the field of soldering systems, solder paste printers, reflow ovens as well as wave- and selective soldering systems are offered. On account of the close cooperation with many leading manufacturers in global electronics production, our awareness of the stringent demands pertaining to this dynamic industry has been able to grow and to mature over the years.

Reliable processes, lowest defect rates and ever increasing productivity at an extremely economical consumption of resources and very low maintenance costs – these are challenges Ersa machines face every day.

Learn more in one of our soldering machine brochures or on our website.

Screen printing

Wave soldering

Reflow soldering

Selective soldering

Screen printers

The patented high-end models P1 and S1 of Ersa's VERSAPRINT screen printers offer the user unique advantages with their fully integrated full-area AOI at line speed after the printing process. Being the ideal printer to enter line production the F1 rounds off the VERSAPRINT product line.

Reflow soldering

Ersa's reflow systems have been in the technological lead for many years already. The present generation, the Ersa HOTFLOW 3 series, convinces with lowest TCO values attained through the systems' unsurpassed thermal performance, highest machine uptimes and lowest operating costs. A number of models differing in process tunnel length, process gas cleaning and conveyor system are available. Reflow programs are quickly and easily generated off-line with the very user-friendly system software and the Autoprofiler.

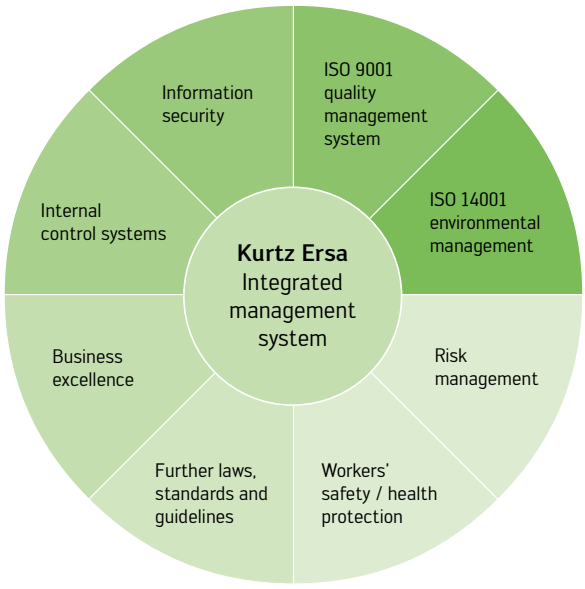
Wave soldering

The POWERFLOW e N2 wave soldering system has been designed for medium-size batches. Due to a minimal dross formation, it provides enormous cost savings. Therefore the POWERFLOW pays off within a very short time, especially at today's raw material prices. Like the high-end model of the successful POWERFLOW line the POWERFLOW e N2 is available with a finger or frame conveyor.

Selective soldering

Having sold and installed over 1,000 VERSAFLOW in-line selective soldering systems worldwide Ersa is both market and technology leader. The modular design of the VERSAFLOW 3 offers virtually unlimited combination possibilities in a "classical production line" whereas the ECOCELL is ideally suited for production islands. The ECOSELECT models are perfect start-up solutions which can be operated as stand-alone or in-line systems.

Sustainability is an integral part of our corporate culture



Rightfully, our customers expect that we take the extra step, and that is why we have an understanding of quality not permitting any compromises. Permanently monitoring our customers' expectations and matching these to our own strategic objectives defines our target. To achieve our target, we build on consequent quality management as our guiding principle, on comprehensive internal and external certifications as well as on competent, quality-conscious employees.

Our first production plant – a forge hammer mill, which started to produce in 1779 – was operated with water power. This historical industrial landmark is maintained as a visual symbol of a sustainable corporate development.

Sustainability is an integral part of Kurtz Ersa's corporate culture, in our product development and manufacturing processes. In this way we want to contribute our share to sustainably improve the living conditions on our planet earth.

The base for the processes' systematic control is our management system. For this reason, we have incorporated the sustainability aspect into this management system, thereby creating the basis so that all our employees are included as well in their daily actions.

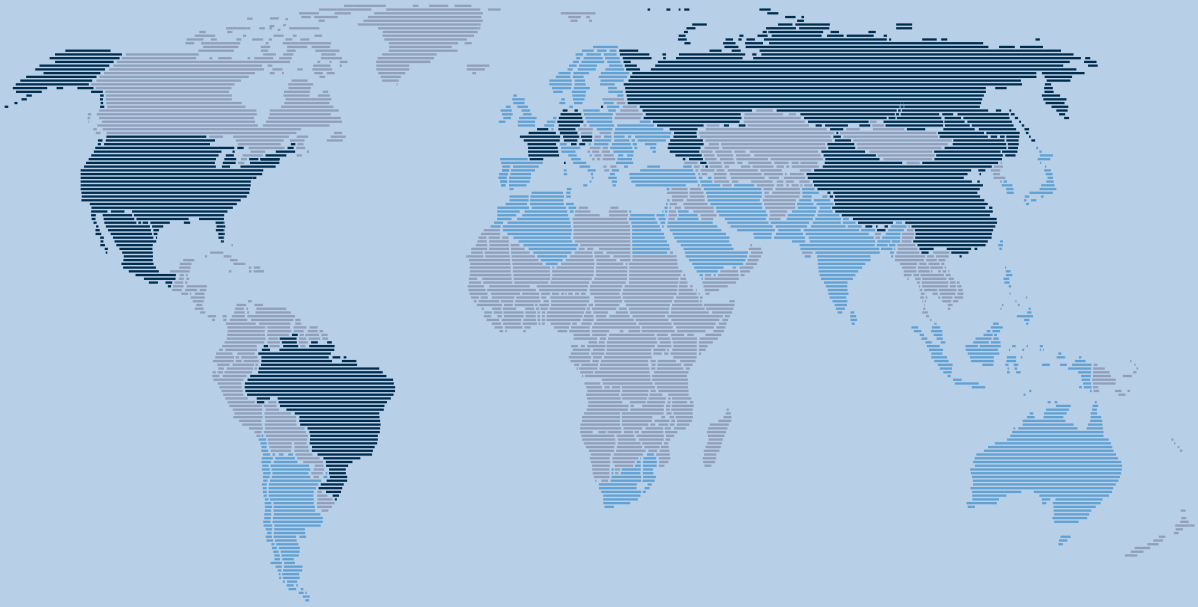
The sustainability aspect in our own diverse manufacturing processes is closely monitored with improvements being mandated regularly. Internal and external audits ensure the success of this process.

In the development cycle of our own products, the improvement potential regarding the use of resources is defined already in the equipment specification.

At Kurtz Ersa, the concept of sustainability is taken seriously.

Electronics Production Equipment

Presence in 135 countries



- Production plants/ subsidiaries
- Local agents
- Other presence

America
Ersa North America
info-ena@kurtzersa.com

Kurtz Ersa S.A.de C.V.
info-kmx@kurtzersa.com

Asia
Ersa Asia Pacific
info-eap@kurtzersa.com

Ersa Shanghai
info-esh@kurtzersa.com

Ersa Korea
kmc@kmckr.co.kr

France
Ersa France
info@ersa-electronics.fr

Ersa GmbH
Leonhard-Karl-Str. 24
97877 Wertheim/Germany

Tel. +49 9342 800-0
Fax +49 9342 800-127
info@ersa.de
www.ersa.com

kurtz ersa