



## SOLDERING TOOLS 2022



Expertise for 100 years

Ersa Soldering Irons Soldering and Desoldering Stations Solder Fume Extractions Hybrid Rework Equipment and Accessories

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## SOLDERING IRONS AND SETS.

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## STANDARD SOLDERING IRONS

#### Ersa 50 S. Ersa 80 S and Ersa 150 S

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The soldering irons Ersa 50 S/80 S/150 S are designed for soldering operations with a greater heat requirement, as, for example, on copper conductors with a cross-section of 2.5 mm<sup>2</sup> (Ersa 50 S, 50 W) to 6 mm<sup>2</sup> (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 include soldering thin sheet metal and lead glazing (Ersa 150 S).







Standard soldering iron Ersa 150 S. Soldering tip series 152 see page 52.

#### Order information:

Order no.	US version 115 V	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0055JD	1055JDA068	Ersa 50 S soldering iron	0052JD, ERSADUR	50 W/230 V	approx. 3 min	approx. 400 °C	160 g
0085JD	1085JDA068	Ersa 80 S soldering iron	0082JD, ERSADUR	80 W/230 V	approx. 3 min	approx. 410 °C	220 g
0155JD	1155JDA068	Ersa 150 S soldering iron	0152JD, ERSADUR	150 W/230 V	approx. 3 min	approx. 450 °C	245 g

\*without cable

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## WORKSHOP SOLDERING IRONS

Ersa 200, Ersa 300 and Ersa 550

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.



#### see page 52.

#### Order information:

Order no.	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0200MD	Ersa 200 hammer soldering iron	0202MD, ERSADUR	200 W/230 V	approx. 5 min	approx. 470 °C	550 g
0300MD	Ersa 300 hammer soldering iron	0302MD, ERSADUR	300 W/230 V	approx. 5 min	approx. 470 °C	870 g
0550MD	Ersa 550 hammer soldering iron	0552MD, ERSADUR	550 W/230 V	approx. 7 min	approx. 600 °C	1.770 g

\*without cable

## UNIVERSAL SOLDERING IRONS Ersa 30 S and MULTI-TIP

**Ersa 30 S** stands out by its sturdiness and longevity and is available with **30 W** and **40 W.** It can be used in a variety of ways for soldering tasks in handicrafts, service and hobbies. Delivery includes a practical, easy to mount rubber stick-on support disk.

The **MULTI-TIP** irons cover a wide range of applications and stand out by low weight and compact design. The handle stays relatively cool while soldering. The MULTI-TIP is available with 15 W and 25 W and suitable for micro-soldering joints and mediumsized soldering. Internally heated soldering tips and long-life PTC heating elements provide high efficiency and a constant tip temperature.



Micro soldering iron MULTI-TIP C25. Soldering tip series 172 see page 51.

#### Order information:

Order no.	US version 115 V	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0330KD	1330KDA068	Ersa 30 S soldering iron	0032KD, ERSADUR	30 W/230 V	approx. 2 min	approx. 380 °C	80 g
0340KD	1340KDA068	Ersa 30 S soldering iron	0032KD, ERSADUR	40 W/230 V	approx. 2 min	approx. 420 °C	80 g
0910BD		MULTI-TIP C15 soldering iron	0162BD, ERSADUR	15 W/230 V	approx. 120 s	approx. 350 °C	28 g
0920BD		MULTI-TIP C25 soldering iron	0172BD, ERSADUR	25 W/230 V	approx. 90 s	approx. 450 °C	34 g

\*without cable

## HIGH-SPEED SOLDERING IRONS

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 longlife 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.



series affords a wide range of applications, and not just in service and repairs.

MULTI-SPRINT high-speed solder gun. Soldering tip series 832/842 see page 47.

Order no.	US version 115 V	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0960ED	1960EDA068	MULTI-SPRINT solder gun	0832EDLF, ERSADUR	150/75 W/ 230 V,	approx. 15 s	subject to how long the button	100 g
				50 – 60 Hz		is pressed	

# HIGH-SPEED SOLDERING IRONS



PTC 70 - power soldering iron with temperature control. Soldering tip series 832/842 see page 47.

The Ersa **PTC 70** is a powerful and sturdy universal soldering iron with Ersa RESIS-TRONIC 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 longlife 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.

#### Order information:

Order no.	US version 115 V	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0710CD	1710CDA068	PTC 70 soldering iron	0832CDLF, ERSADUR	75 W (350 °C)/ 230 V AC	up to 285 W/ approx. 34 s (280 °C)	250 – 450 °C	approx. 60 g

\*without cable



MULTI-TC - power soldering iron with temperature control. Soldering tip series 832/842 see page 47.

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 recovers 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 a rating of 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.

Order no.	Description	With soldering tip	Rating/ Voltage	Heating time	Max. tip temperature	Weight*
0760CD	MULTI-TC soldering iron	0842CD, ERSADUR	75 W (350 °C) 230 V, 50 – 60 Hz	approx. 34 s	250 – 450 °C	60 g

# GAS SOLDERING IRON



INDEPENDENT 75 PROFI-SET

- 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
- Deflector 0G072RE to shrink heat-shrinkable sleeves
- Tool holder 0A20
- Cleaning sponge 0006G/SB and sponge container 0G156

Mobile power – wherever you want! Powerful, with comprehensive and top-quality equipment, small, handy and practically packed. The Ersa **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

Soldering tip series G072 see page 51.

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 BASIC-SET**

- INDEPENDENT 75 gas soldering iron with soldering tip 0G072KN
- Soldering tip 0G072CN
- Holder 0A20
- Cleaning sponge 0006G/SB and sponge container 0G156

Order no.	Description	With soldering tip	Rating/ Voltage	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

## GAS SOLDERING IRON **INDEPENDENT 130**



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#### **INDEPENDENT 130 PROFI-SET**

- 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
- Deflector 0G132RE to shrink heat-shrinkable sleeves
- Cleaning sponge 0006G/SB and sponge container 0G156

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 range 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 BASIC-SET**

- INDEPENDENT 130 gas soldering iron with soldering tip 0G132KN
- Soldering tip 0G132CN
- Holder 0A20
- Cleaning sponge 0006G/SB and sponge container 0G156

Order no.	Description	With soldering tip	Rating/ Voltage	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



## SOLDERING STATIONS.



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## RDS 80

## The universal, digital soldering station of Ersa

Order information:				
Order no.	Description			
0RDS80	RDS 80 soldering station, complete, with RT 80 soldering iron (0890CDJ), soldering tip 0842CD and tool holder 0A39			
1RDS800000A67	RDS 80, 115 V version			

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RDS 80 with RT 80 soldering iron, Ersa RESISTRONIC control system. Soldering tip series 832 and 842, see page 47.

The Ersa **RDS 80** digital soldering station with the proven the Ersa RESISTRONIC temperature control provides **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  $^{\circ}$ C and 450  $^{\circ}$ C, three fixed temperatures or two fixed temperatures and one standby temperature can be programmed.

Great priceperformance ratio 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 k $\Omega$  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 36).

#### Technical data

Station	Rating/Voltage	Temperature	Soldering iron	Rating/Voltage	Heating time	Weight*
RDS 80	80 W/230 V, 50 – 60 Hz/24 V or 80 W/115 V, 50 – 60 Hz/24 V	150 – 450 °C	RT 80	105 W (280 °C)	approx. 40 s (280 °C)	approx. 130 g

<sup>\*</sup>without cable





Application example

Multifunctional display

## ANALOG 60/ANALOG 60 A

## Reliable soldering with industry-proven technology!

#### Order information:

Order no.	Description
0ANA60	ANALOG 60 soldering
	station, complete, with
	BASIC TOOL 60 soldering
	iron (0670CDJ), with
	soldering tip 0832CDLF
	and tool holder 0A42

ANALOG 60 with BASIC TOOL 60 soldering iron. Soldering tip series 832 and 842, see page 47.

The electronically temperature-controlled Ersa **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.

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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.

Description

holder 0A42

ANALOG 60 A soldering station, complete, with ERGO TOOL soldering iron (0680CDJ), with soldering tip 0832CDLF and tool

> 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 36).

#### Technical data

Order information:

Order no.

0ANA60A

Station	Rating/Voltage	Temperature	Soldering iron	Rating/Voltage	Heating time	Weight*
ANALOG 60	60 W/230 V, 50 – 60 Hz/24 V	150 – 450 °C	BASIC TOOL 60	60 W (350 °C)	approx. 60 s (280 °C)	approx. 60 g
ANALOG 60 A	60 W/230 V, 50 – 60 Hz/24 V	150 – 450 °C	ERGO TOOL	60 W (350 °C)	approx. 60 s (280 °C)	approx. 60 g

## DIGITAL 2000 A

Proven 1000 times: the universal, robust industrial soldering station

#### Order information:

Order no.	Description	
ODIG20A84	DIGITAL 2000 A electronic station, complete, with POWER TOOL soldering iron (0840CDJ) with soldering tip 0842CDLF and tool holder 0A42	Si Si
ODIG20A64	DIGITAL 2000 A electronics station, complete, with TECH TOOL soldering iron (0640ADJ) with soldering tip 0612ADLF and tool holder 0A42	e
ODIG20A45	DIGITAL 2000 A electronic station, complete, with CHIP TOOL desoldering tweezers (0450MDJ), with tips 0452MDLF020 and tool holder 0A43	



DIGITAL 2000 A with POWER TOOL soldering iron and Ersa SENSOTRONIC control. Soldering tip series 832 and 842, see page 47; Fig. with 0A08MSET

The Ersa **DIGITAL 2000 A** is a microprocessor controlled soldering station distinguished by its flexibility and multifunctionality. It is antistatic according to the MILSPEC/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 the POWER TOOL and TECH TOOL soldering irons



or the CHIP TOOL desoldering tweezers, whereas the station automatically detects the tools when inserted and adapts the control characteristics accordingly. The soldering and desoldering tips are connected with high impedance to the front-installed potential equalization socket.

By just three buttons and a simple menu guide the desired temperatures, the unit of temperature (°C/°F), the standby time, a tip offset and calibration feature and a three-character password-controlled lock can all be set.

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 35), 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.

#### Technical data

Station	Rating/Voltage	Temperature	Soldering iron	Rating/Voltage	Heating time	Weight*
DIGITAL 2000 A	80 W/230 V, 50-60 Hz/24 V	50 – 450 °C	POWER TOOL	80 W (350 °C)	approx. 40 s (280 °C)	approx. 50 g
DIGITAL 2000 A	80 W/230 V, 50-60 Hz/24 V	50 – 450 °C	TECH TOOL	60 W (350 °C)	approx. 12 s (280 °C)	approx. 50 g
DIGITAL 2000 A	80 W/230 V, 50-60 Hz/24 V	150 – 450 °C	CHIP TOOL	2 x 20 W (350 °C)	tip dependent	approx. 75 g

\*without cable



## i-CON SOLDERING AND DESOLDERING STATIONS.

ersa I-CON VARIO 2

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## i-CON SERIES Safe and innovative lead-free 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 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.

The i-CON series comprises both single as well as double iron soldering stations for the use of various soldering and desoldering tools. Due to the modern "One Touch" operating concept with i-OP control and features such as process window alarm, energy levels and automatic standby sensor, the operator experiences an unrivalled process control.

## PATENTED SOLDERING TIP TECHNOLOGY

The engineering goal behind the i-CON stations 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 i-TOOL clearly meets this requirement: It is one of the smallest and most powerful soldering irons in the market. 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. In contrast to cartridge tips, only the soldering tip is changed - quickly and easily and without any additional tool required. The expensive heating element remains in place.

A comprehensive range of standard and customized tips provides an unrivalled flexibility, even with difficult and unusual soldering jobs. The high-performance heating element supplies 150 W of heating power ensuring fastest heat-up and recovery so that the i-TOOL never runs out of energy, even during heatintensive soldering. At the same time, at 30 g and a compact 150 mm overall length, it is comfortable to hold.

#### 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.





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



Unprecedented intelligence: the i-TOOL has a powerful control system directly in the handle.

i-CON MATRIX - MODELS, TOOLS, PERIPHERALS								
i-CON station/tools + peripherals		1			×0.	-		NUMBER OF
i-CON control stations	i-TOOL	i-TOOL AIR S	i-TOOL HP	CHIP TOOL	CHIP TOOL VARIO	X-TOOL VARIO*	IR heating plate	EASY ARM 1 + 2
i-CON 1	•							
i-CON 1V				•		•		
i-CON 2V	3			•		•		
i-CON 1C	•						•	
1-CON 1 VC					-			
i-CON 2 VC	•					•	•	
i-CON VARIO 2		•		•		•	•	
i-CON VARIO 4		•	-	•		•	•	

\*A vacuum station is required to operate this tool with an i-CON control station (except i-CON VARIO stations).

## i-CON WITH INTERFACE:

#### One control unit for preheating, soldering, fume extraction



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

Fume extraction systems and heating plates are the two most important peripheral systems on the workbench. Ersa's i-CON C stations incorporate an interface to control Ersa IR heating plates and Ersa EASY ARM fume extraction systems.

Up to two i-CON 1C or i-CON 2VC stations can be combined with a filter unit EASY ARM 1 or EASY ARM 2 using an interface cable. The extraction unit is only working while at least one of the attached soldering stations is in operation. When both i-CON stations are in standby mode, the EASY ARM filter unit automatically



Fully equipped i-CON 2 VC workplace with i-CON 2 VC station, i-TOOL, CHIP TOOL VARIO and solder fume extraction.

switches off, which results in longer filter lifetime, lower energy costs and less noise.

The safe and powerful medium-wave IR heating plate technology offers enormous advantages in modern hand soldering: soldering iron, internally heated SMD desoldering tweezers and/or desoldering tool can be operated with considerably lower tip temperatures.

This reduces the risk of damage to the assembly while at the same time tip lifetime will substantially increase!

## i-CON PICO & i-CON NANO

#### The entry into professional soldering

#### Order information:

Order no.	Description
01C1300	i-CON PICO soldering station, complete, with i-TOOL PICO (0130CDK) soldering iron with soldering tip 0102CDLF16 and holder 0A53
1IC1300000A67	i-CON PICO, 115 V version



i-CON PICO with i-TOOL PICO soldering iron. Soldering tip series 102, see page 45/46.

Fast, efficient and good value for money - these requirements are met by the i-CON PICO and i-CON NANO - the two entry-level stations for professional soldering within Ersa's i-CON soldering station series.

The configuration via PC software and microSD card is unique in this product class. In addition to the continuously variable temperature control, three fixed temperatures and three energy levels can be individually set so that the

user can quickly switch between the parameters depending on the soldering job. The standby function protects the soldering tip and significantly increases its service life. Another highlight: the soldering station can also be locked for other users via the microSD card. The i-CON PICO and i-CON NANO are operated using the two buttons next to the easy-to-read LC display.

Weighing only 30 g, the i-TOOL PICO and i-TOOL NANO soldering irons are extremely ergonomic, making them a pleasure to work with. Heat-up from room temperature to operating temperature

only takes 9 seconds. The integrated tempera-

Description

sponge 0008M

i-CON NANO, 115 V version

i-CON NANO soldering station, complete, with i-TOOL NANO soldering iron (0120CDK), soldering tip 0102CDLF16 and holder 0A52 with dry

Small footprint: only 145 mm x 80 mm! ture sensor reacts immediately and accurately, ensuring a constant temperature for safe soldering, even with sensitive components. With the 102 series, a comprehensive range of cost-effective soldering tips is available for a

wide variety of applications.

Order information:

Order no.

0IC1200A

1IC1200A00A67

The i-CON NANO realizes ESD safety including potential equalization up to the soldering tip and is the ideal entry-level model for the professional sector and industry. The i-CON PICO is the perfect solution for semi-professional users and ambitious users in the hobby sector who can do without ESD capability.



<i>i-CON NANO with i-TOOL NANO soldering iron.</i>
Soldering tip series 102, see page 45/46.

#### Technical data

Station	Rating/Voltage	Temperature	Soldering iron	Rating/Voltage	Heating time	Weight*
i-CON PICO	max. 80 W/230 V (115 V), 50 Hz	150 – 450 °C	i-TOOL PICO	max. 80 W/220 – 240 VAC	approx. 9 s (350 °C)	approx. 30 g
i-CON NANO	max. 80 W / 230 V (115 V), 50 Hz	150 – 450 °C	i-TOOL NANO	max. 80 W	approx. 9 s (350 °C)	approx. 30 g

## i-CON 1 & i-CON 1V

#### Professional soldering station for industry, test field and development!

#### Order information:

Order no.	Description
0IC1100A	i-CON 1 electronic station, complete, with i-TOOL soldering iron (0100CDJ), soldering tip 0102CDLF16 and holder 0A52 with dry sponge 0008M
1IC1100A00A67	i-CON 1, 115 V version
0IC1100A0C	i-CON 1C electronic station with interface, complete, with i-TOOL soldering iron (0100CDJ), soldering tip 0102CDLF16 and holder 0A52 with dry sponge 0008M
1IC1100A0CA67	i-CON 1C, 115 V version



The **i-CON 1** is the popular and proven "workhorse" for electronics production. It comes with the lightweight and ergonomic 150 W i-TOOL soldering iron – the perfect tool for all SMD and THT applications. The comprehensive 102 tip series enables the i-TOOL to be perfectly set for each job. The digital i-CON 1 control station features the modern "One-Touch" operating concept with iOp Control and large, backlit plain text display. The version with interface provides for the connection of an IR heating plate and a solder fume extraction system.

Order information:

	Order no.	Description
	0IC1100V	i-CON 1V soldering and desoldering station, with i-TOOL soldering iron (0100CDJ) with soldering tip 0102CDLF16 and holder 0A52
SAFE A ersa	1IC1100V00A67	i-CON 1V, 115 V version
Prsa Prsa L'-CON T/V Prsa L'-CON T/V Prsa L'-CON T/V Prsa L'-CON T/V Prsa	0IC1100A0C	i-CON 1V soldering and desoldering station, with CHIP TOOL VARIO desoldering tweezers (0460MDJ), with tips 0462MDLF007 and holder 0A54
	1IC1100VCVA67	i-CON 1C, 115 V version
	0IC1100V0C	i-CON 1VC soldering and desoldering station with interface, with i-TOOL soldering iron (0100CDJ) with tip 0102CDLF16 and holder 0A52
i-CON 1 V with i-TOOL soldering iron.	1IC1100V0CA67	i-CON 1VC, 115 V version

Soldering tip series 102, see page 45/46.

The **i-CON 1V** uses the same new control technology users as the i-CON VARIO stations. This means, that in addition to existing tools, such as POWER TOOL for example, it is now possible to operate the new soldering and desoldering tools CHIP TOOL VARIO

and X-TOOL VARIO. Consequently, the operator can select from a total of eight tools for different soldering and desoldering applications A vacuum unit that can be connected to the station is required for the vacuum supply of the X-TOOL VARIO.

## i-CON 2V

## Double channel soldering and desoldering station – a plus in flexibility for professionals



#### Order information:

Order no.	Description
01C2200V	i-CON 2V double channel soldering and desoldering station with i-TOOL soldering iron (0100CDJ) with tip 0102CDLF16 and holder 0A52
1IC2200V00A67	i-CON 2V with i-TOOL, 115 V version
0IC1100A0C	i-CON 2V double channel soldering and desoldering station with i-TOOL soldering iron (0100CDJ) with tip 0102CDLF16, CHIP TOOL VARIO desoldering tweezers (0460MDJ) with tips 0462MDLF007 and holders 0A52 and 0A54
1IC2200VC0A67	i-CON 2V with i-TOOL and CHIP TOOL VARIO, 115 V version
0IC2200VIT	i-CON 2V double channel soldering and desoldering station with 2 i-TOOL soldering irons (0100CDJ) with tip 0102CDLF16 and 2 holders 0A52
1IC1100V0CA67	i-CON 2V with 2 pcs. i-TOOL, 115 V version
01C2200V0C	i-CON 2VC soldering and desoldering station with interface, with i-TOOL soldering iron (0100CDJ) with tip 0102CDLF16 and 0A52
1IC2200V0CA67	i-CON 2VC with interface, 115 V version

The double channel soldering and desoldering station **i-CON 2V** is a consistent further development of the well-known i-CON 2 based on the future-oriented Ersa VARIO platform.

In addition to the present soldering and desoldering tools, the station can also drive the SMD desoldering tweezers CHIP TOOL VARIO (2 x 40 W) and the PTH desoldering iron X-TOOL VARIO (150 W). The station utilizes an intelligent power management to shift dynamically its power between the attached tools. The i-CON 2V, like all other i-CON stations, convinces by its intuitive one-touch operation and the large multifunctional display. The station meets the ESD requirements and is available in a version with interface to connect a fume extraction unit, a heating plate and a PC. If required, the i-CON 2V can be updated like the i-CON VARIO stations with a microSD memory card and thus is prepared for future necessities.

#### TECHNICAL DATA i-CON 1/1V/1VC & i-CON 2V/VC

Station	Rating/Voltage	115 V version	Temperature range
i-CON 1/i-CON 1C,	max. 150 W/230 V, 50 Hz	max. 150 W/115 V, 60 Hz	150 – 450 °C
i-CON 1V/i-CON 1VC	max. 80 W / 230 V, 50 Hz	max. 150 W/115 V, 60 Hz	50 – 450 °C
i-CON 2V/i-CON 2VC	max. 150 W/230 V, 50 Hz	max. 150 W/115 V, 60 Hz	50 – 450 °C

#### TECHNICAL DATA SOLDERING & DESOLDERING TOOLS

Soldering iron	Rating/Voltage	Heating time	Weight*
i-TOOL	150 W	approx. 9 s (350 °C	approx. 30 g
CHIP TOOL VARIO	2 x 20 W (350 °C)	subject to tips	approx. 75 g

## i-CON VARIO 2 & i-CON VARIO 4

Multichannel soldering and desoldering station



The **i-CON VARIO 4** multichannel soldering and desoldering station meets even highest demands placed on professional soldering and desoldering equipment. This high-end model of the i-CON family is the only soldering station in the world to provide the user with four soldering tools for demanding soldering tasks:

- The i-TOOL AIR S hot air iron (200 W) flexible SMD soldering and -desoldering with non-contact energy transfer
- The i-TOOL soldering iron (150 W) efficient and powerful contact soldering with extensive tip selection
- The CHIP TOOL VARIO desoldering tweezers (80 W) – precise desoldering of finest SMD components
- The X-TOOL VARIO desoldering iron (150 W) – fast and clean desoldering of PTH components

For soldering applications with very high heat requirements, the i-TOOL HP soldering iron (250 W) can be operated as an alternative to the i-TOOL AIR S.

The connection of further Ersa soldering tools is possible.

The **i-CON VARIO 2** multi-channel soldering and desoldering station provides the professional user with two soldering tools that can be used simultaneously. A version with-out pumps addresses users who want to use i-TOOL HP and i-TOOL only. The i-CON VARIO 2 is otherwise similar to the i-CON VARIO 4 in its function and operation.

All functions, including the generation of the air and the vacuum required in the process, are bundled in the supply unit, which is equipped with the easy to operate i-Op facility and its clearly arranged displays. In addition, the stations have interfaces for the Ersa solder fume extraction units or infrared heating plates, as well as a USB port.

With a microSD memory card, the stations can be quickly and safely configured, so that they are optimally prepared for all applications in professional electronics manufacturing. They are of course well-suited for the use in ESD protected zones.



#### Soldering tools for i-CON VARIO 2 & 4

#### i-TOOL AIR S

Ergonomic, handy, strong in performance – that is an apposite 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 be adjusted very easily directly on 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. Various nozzle sizes are available for an optimal component heat-up. Hot-air nozzle series 472, see page 51

#### i-TOOL

The i-TOOL is an extremely lightweight but powerful soldering iron, accompanied by a wide range of inexpensive Ersa lonlife soldering tips. 150 W heating power guarantee fastest heat-up times and heat recovery. Process window alarms,



energy levels and standby sensor grant all i-CON users an unrivalled process control in hand soldering. Soldering tip series 102, see page 45/46

#### i-TOOL HP

The i-TOOL HP offers maximum power for high-mass solder joints. With 250 W and exchangeable soldering tips, it delivers HIGH POWER in manual soldering. This tool can be operated on all i-CON VARIO



stations. For stand-alone operation, Ersa recommends the i-CON VARIO 2 HP (OICV2000HP) version. Soldering tip series 242, see page 48

#### **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 on 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. Further-

more, the operating mode of this precision tool can be set from self-closing mode to self-opening mode with an integrated switch. The CHIP TOOL VARIO is equipped with the proven and reliable motion sensor to activate it out of standby.



Desoldering tip pairs of the series 462, see page 49

#### **X-TOOL VARIO**

The X-TOOL VARIO convinces with highly efficient 150 W heating technology. The design of heating element and desoldering tip ensure an efficient thermal transfer and a fast evacuation of the extracted solder. For users the ergonomic handle means



relaxed working with a healthy hand position. The slim shape of heating head and desoldering tip allow desoldering even on densely populated PCBs.

Desoldering tip series 742, see page 49



#### CONFIGURATIONS & COMPATIBILITY

Order no.	Description	i-TOOL AIR S	i-TOOL	CHIP TOOL VARIO	X-TOOL VARIO	i-TOOL HP
0ICV2000A	i-CON VARIO 2					
0ICV2000AI	i-CON VARIO 2					
OICV2000AC	i-CON VARIO 2					
0ICV2000AXV	i-CON VARIO 2					
OICV2000HP	i-CON VARIO 2					
0ICV2000XV	i-CON VARIO 2					
0ICV2000XVI	i-CON VARIO 2					
0ICV4000AI	i-CON VARIO 4					
0ICV4000AIC	i-CON VARIO 4					
0IC4000AICXV	i-CON VARIO 4					

scope of supply, 🗆 compatibility

#### TECHNICAL DATA SOLDERING & DESOLDERING TOOLS

Order no.	Description	Rating/Voltage	Weight*
0470ERJ	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. 30 g
0740EDJ	X-TOOL VARIO desoldering iron	150 W	approx. 210 g incl. cable and desoldering iron
0240CDJ	i-TOOL HP high-performance soldering iron	250 W	approx. 110 g

\*without cable

#### TECHNICAL DATA ELECTRONIC STATIONS

Order no.	Description	Rating/Voltage	Vacuum	Air Flow	Temperature range
OICV403A	i-CON VARIO 4 electronic station	max. 500 W/230 V, 50 Hz	max. 700 mbar	2 – 201/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)
OICV203A	i-CON VARIO 2 electronic station	max. 200 W/230 V, 50 Hz	_	2 – 201/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)
OICV203AP	i-CON VARIO 2 electronic station	max. 200 W/230 V, 50 Hz	max. 700 mbar	2 – 201/min	150 – 450 °C (50 – 550 °C – i-TOOL AIR S)
OICV203HP	i-CON VARIO 2 electronic station	max. 200 W/230 V, 50 Hz	_	—	150 – 450 °C
0ICV203X	i-CON VARIO 2 electronic station	max. 200 W/230 V, 50 Hz	max. 700 mbar	_	150 - 450 °C

# THE MISSING

## NEW: i-CON TRACE IOT SOLDERING STATION



GLOBAL. AHEAD. SUSTAINABLE.



#### I-CON TRACE Complete traceability for manual soldering at last!

Manufacturers of electronic assemblies are currently facing numerous challenges – including the advancing miniaturization of the components to be processed, an ever increasing component density on the PCBs to be processed and the growing variance of different assemblies. In order to keep the overview here and to be able to continuously improve processes, traceability and precise process data documentation in assembly production are becoming more and more important.

Traceability has long been an integral and indispensable part of the machine soldering process. The situation is different with traceability in the manual reworking of assemblies with a hand soldering station. However, as soon as rework is carried out with a soldering iron, the complete documentation of the entire soldering process was previously no longer possible. For this reason, many electronics manufacturers have completely dispensed with a manual soldering process or only permitted this following elaborate special approval.

100 years after the patent application of the first electric soldering iron by company founder Ernst Sachs, Ersa has reinvented hand soldering - for the digital age. The i-CON TRACE is the world's first IoT-enabled soldering station. With its integrated WLAN, Bluetooth and network card, it can be fully integrated even into MES-controlled production processes and makes the entire hand soldering process traceable and verifiable. Discover the new IoT hand soldering on the next pages!

#### 100 % Connectivity

With the i-CON TRACE, Ersa is offering the first soldering station specifically designed for use in a digitally networked environment and for complete traceability in hand soldering. With integrated WLAN, Bluetooth and an upgradeable network card it offers an allnew connectivity. The operating software ERSA TRACE COCKPIT is available free of

charge as a download and is installed only once centrally on the customer's server. As soon as a soldering station is integrated into the company network, all mobile end devices (PC, tablet, smartphone) that are in the company network and have the appropriate authorization can access the soldering stations. Access is via web browser,

e.g. Google, Chrome, Firefox, Windows Explorer. The server-based communication concept decisively facilitates the administration of the individual soldering stations by means of connectivity: Firmware updates, calibration intervals and much more can be carried out and monitored centrally from one computer.





#### **Fully comprehensive** documentation/MES connection

Seamless process data documentation is a key-feature of future electrical production. The i-CON TRACE closes the last gap in the manual soldering process and can be completely integrated into MES-controlled production processes. Thus it is already possible to download a recording of the entire soldering task via a desired file format and save this in a higher-level control system. In the future, even real-time communication between the soldering station and the customer's MES will be possible.

#### **Traceability**

stations.

Specific soldering tasks can be centrally assigned to each soldering station - via MES, PC or mobile device. Thereby all essential parameters such as the soldering tip to be used, temperature, soldering wire and flux are set centrally by qualified personnel. This significantly increases process reliability: Each workpiece is soldered according to the predefined specifications. The operator can concentrate fully on soldering and the susceptibility to errors is reduced.



# Versa I-CON TRACE\* DRLINE READY SERVICE

## GREEN MEANS GO!

With only one on/off switch and three LEDs, the interface of the soldering station differs significantly from all other industrial soldering stations with their complex setting options and a display. The work for the personnel at the soldering station is significantly simplified. By means of a hand-held scanner the component, soldering tip, solder wire and flux used are recorded. In this way, the system "knows" that all the conditions for the assigned soldering task are met. The LED interface then literally gives the user the green light as soon as the predefined temperature is reached at the soldering tip. An effective measure to ensure that each solder joint is soldered with the exact temperature and the right material. Any malfunctions (e.g. defective heating element, wrong soldering tip in relation to the component) are detected by the system and reported to the operator. If all parameters are correct, the soldering process is authorized. During soldering, the i-CON TRACE records the process data. Every soldering process is precisely documented and traceable.



Unique operating concept: GREEN MEANS GO. Once all the requirements for the assigned soldering task have been fulfilled, the LED interface of the i-CON TRACE literally switches to green and the user can start the soldering process.



Process data documentation - the connectivity of the i-CON TRACE allows the documentation of every single soldering process: Assembly, tip used, temperature and soldering duration are recorded electronically and can be traced. Left picture: Scanning the QR code of the soldering tip with the hand-held scanner before soldering.

## PREMIUM PERFORMANCE. MINIMUM COST.

New features of the i-CON TRACE set standards not only in terms of connectivity and operating concept, but also in hardware.

Proven technologies have been refined: With 150 W heating power, the i-CON TRACE offers outstanding performance. It heats up very quickly, and reheats even faster, and thus ensures a stable temperature profile. Newly designed soldering tips bring the heat to the solder joint with pinpoint accuracy.

The heating element and soldering tip can still be replaced separately. This saves resources and money, because each wearing part only needs to be replaced when it is really necessary. The i-CON TRACE is therefore not only an economic but also an ecological benefit for every electronics production.

(3)

Among

#### **Features**

1. i-TOOL TRACE: extremely lightweight, powerful fine soldering iron

(2)

 $(\mathbf{1})$ 

- 2. New heating element: high power 150 W, SENSOTRONIC temperature control, quick tip exchange (tip'n'turn release) of the tip
- 3. New soldering tip series: thermally optimized new tip design, quick tip fastening with QR code on each soldering tip

✤ ersa

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#### Tip change in record time

In order to always have the right soldering tip at hand for the various soldering applications, Ersa offers a variety of different shapes and sizes of soldering tips. Even customized tip shapes for special applications are no problem. Tip'n'Turn is the patented concept for joining heating element and soldering tip, which enables tip change in record time.

Each tip has a bayonet lock which, in combination with the multifunctional holder, allows particularly fast and safe changing of the soldering tip. The soldering iron including tip only has to be placed in one of the openings provided and turned through approx.  $10^{\circ}$  – the old soldering tip can then be removed and a new, suitable tip can be fitted. This can be done by hand, even without the storage stand. Even while hot.



#### Economic-ecological benefit for every electronics manufacturing

Via a mobile app for smartphones and tablets, the i-CON TRACE can be used like a conventional stand-alone soldering station even without a connection to a company network. The program for controlling the soldering station runs on the mobile end device  relevant information such as set and actual temperature is displayed on a smart device via Bluetooth or WLAN and can also be changed there. This enables demand-oriented, smart operation for the user.



#### Order Information:

Order No.	Description
0ICT1000A	i-CON TRACE soldering station, complete with soldering iron i-TOOL TRACE (0140CDJ) and holder 0A58 with dry sponge 0008M
1ICT1000A00A67	i-CON TRACE soldering station, complete 115 V version
0ICT125	Network card i-CON TRACE

#### **Technical Data**

Name	Nominal power/Voltage	Temperature	Soldering Tool	Secondary Voltage	Heat up time	Weight
i-CON TRACE	Max. 150 W/230 V (115 V), 50/60 Hz	50 – 450 °C	i-TOOL TRACE	24 V	ca. 9 s	72 g



## HYBRID REWORK.

HR 200

100

Further information on our complete rework product range is available on page 56 and at rework.ersa.com



## HR 200 Rework out of the Box! Rework can be that simple today.

#### Easy parameter setup:

				Top I	Heat				
	<b>*</b>		smo	ooth	intensive				
		Time*	>180 s	180-120 s	120-90 s	90-60 s			
		Power level	1	2	3	4			
ä	smooth	1	ultra light weight	sensitive bottom side		light sensitiv		intensive	tarc
Bottom Heat	sn	5 2	sensitive	typica	typical SMT- application		Darameters		
ottor	ive	3	top side	ápplic	ation		Da		
ä	intensive	4	intensive bottom du						
	*Expectable soldering time, depending on application an preheating with bottom heater.								



#### Order information:

Order no.	Description
0HR200	HR 200 hybrid rework system with foot switch, positioning laser and PCB holder
1HR2000000A67	HR 200, 115 V version
OHR200-HP	HR 200 hybrid rework system with foot switch, positioning laser, PCB holder and heating plate
1HR200-HP0A67	HR 200 with heating plate, 115 V version

#### **Technical highlights:**

- 400 W hybrid high-power heating element
- Optional 800 W IR heating plate
- Simple power selection in four levels
- Foot switch to activate the heating process
- Very compact and handy system (footprint
  - 300 x 300 mm)
- Usage without software

Unpack, setup, solder! It's as simple as that to rework a PCB nowadays. The Ersa **HR 200** hybrid rework system contains a 400 W hybrid highpower heating element to desolder and solder SMT components up to 30 x 30 mm.

As an option, the system can operate a powerful 800 W infrared heating plate. This bottom heater guarantees ideal preheating of the assembly to rework.

Technical Data

The operator selects the required power for top and bottom heating with a control knob, each with four levels. A foot switch activates the heating process. The operator's hands are free to remove the desoldered component with appropriate tools.

Depending on the assembly and the preselected power a typical soldering time for components can range from 60 to 180 s (1 -3 min). During working breaks, the bottom heater switches back to standby level. The integrated PCB holder positions the assembly in optimum working distance to top and bottom heater. Ersa recommends an optional cooling fan, a thermocouple sensor and a temperature measuring instrument to complete the workplace. Additional accessories including a Reflow Process Camera to observe the soldering processes round off the equipment.

reennear bate			
Station	Rating/Voltage	Heated area	Weight*
HR 200	400 W/230 V respectively 115 V, 50 – 60 Hz	30 x 30 mm	3.7 kg
Heating plate	800 W/230 V respectively 115 V, 50 – 60 Hz	125 x 125 mm	2.5 kg
			AL 11 1

\*without cable

CE

## ERSA HR 100 & IRHP 100

#### Combined handheld and tabletop rework station



The **HR 100** uses Ersa's revolutionary and patented hybrid rework technology for safe removal and replacement of small SMDs. 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 homogenous heat to components. Interchangeable hybrid adapters direct up to 200 W of targeted hybrid heat to the component - and adjacent areas are protected. The user-friendly operation allows for even non-experienced operators to handle the HR 100 safely and quickly.

The handle of Ersa's ergonomically designed HYBRID TOOL contains a positioning laser which helps the operator to focus the heat precisely throughout the entire process. Via the USB 2.0 port, the HR 100 can be connected to Ersa's top-of-the-line and wellestablished IR Soft rework software.

#### Order information:

Order no.	Description
0IRHR100A	HR 100 hybrid rework system, complete, with HYBRID TOOL (3IRHR100A-01), Vac-Pen vacuum pipette (0VP020), hybrid adapters 0IRHR100A-14, -15, -16 and adapter changer 0IRHR100A-24
1IRHR100A0A67	HR 100, 115 V version
OIRHR100A-HP	HR 100 hybrid rework system, complete, with HYBRID TOOL (3IRHR100A-01), Vac-Pen vacuum pipette (0VP020), 3 hybrid adapters, adapter changer, HYBRID TOOL holder and IR heating plate with PCB holder
1IRHR100AHPA67	HR 100 with heating plate, 115 V version
0IRHR-ST050	Hybrid rework tripod, complete

#### **Technical Data**

recinical Data	<b>λ</b>		
Station	Rating/Voltage	Heated area	Weight*
HR 100	200 W/230 V respectively 115 V, 50 – 60 Hz		
HYBRID TOOL		6 x 6 mm to 20 x 20 mm	300 g
Heating plate	200 W, 800 W/230 V respectively 115 V, 50 – 60 Hz	125 x 125 mm	2.5 kg
			*without cable



Component is lifted off the print stencil

## **DIP&PRINT STATION**

#### For Ersa rework systems

#### **Technical highlights:**

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



Flux application in a dip stencil

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.



Dip&Print Station with accessories

#### Order information:

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

Customized and further stencils on request



# EASY ARM FOR THE WORKBENCH.

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# SOLDER FUME EXTRACTIONS







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#### **Technical highlights:**

- Efficient 3-stage particle and gas filtering
- Super silent operation
- Independently adjustable suction power per arm
- Optical and acoustical filter exchange status
- Easy and fast filter exchange – without tools
- Identical filters for EASY ARM 1 and EASY ARM 2

Ersa solder fume extraction **EASY ARM 1** and **EASY ARM 2** stand out by a high suction power and an efficient filter performance combined with super silent operation. Exhaust volume per arm is 110 m<sup>3</sup>/h. Both are equipped with filters that clean the process air in three stages: The pre-filter absorbs dust and big particles. The combined filter separates micro particles which occur during soldering and absorbs dangerous gas molecules in the incorporated activated carbon filter.

The operator can choose between a system with one exhaust arm – the **EASY ARM 1** – and a unit with two exhaust arms – the **EASY ARM 2.** Both units can be mounted individually by means of their table clamp. Exhaust power is set independently for each extraction arm at the touch of a button. The **EASY ARM 1** and **EASY ARM 2** use an identical pre-filter and combined filter. Optical and acoustical signals inform the operator when filters have to be exchanged.

A wide range of exhaust arms and nozzles for all applications are available so that the user will find the proper solution for his requirements. For energy saving purposes and to extend filter lifetime, both units can be connected with Ersa i-CON soldering stations or a standby switch. In this way, 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.



Order no.	Description	Dimensions (L x B x H)	Rating	Volume flow/ Vacuum	Noise level	Filter
0CA10-001	Ersa EASY ARM 1 filter unit, complete, with i-CON C interface	255 x 255 x 470 mm	40 W / 100 – 240 V 50 – 60 Hz	130 m³/h max. / 1,800 Pa	max. 50 dB (A)	HEPA activated carbon
0CA10-002	Ersa EASY ARM 2 filter unit, complete, with i-CON C interface	490 x 255 x 470 mm	80 W / 100 – 240 V 50 – 60 Hz	2 x 130 m³/h max. / 2 x 1,800 Pa	max. 50 dB (A)	HEPA activated carbon









## ACCESSORIES EASY ARM 1 and EASY ARM 2



	Order no.	Description		Order no.	Description
$\bigcap$	0CA10-4002	Extraction arm Highflex, 1,000 mm, direct mount at the filter unit		3CA10-9001	Table clamp for EASY ARM 1
$\cap$	0CA10-4003	Extraction arm Omniflex, 900 mm, direct mount at the filter unit	* *	3CA10-9002	Table clamp for EASY ARM 2
<b>Q</b>	0CA10-4001	Hinged extraction arm, 500 mm, Highflex, table mount, incl. 0CA10-2002		0CA10-1001	Combined filter, particle filter H13, gas filter activated carbon
Q	0CA10-4004	Hinged extraction arm, 600 mm, Omniflex, table mount, incl. 0CA10-2002		0CA10-1002/04	Prefilter, particle filter F7 (4 pcs./packing unit)
$\bigcirc$	0CA10-2002	Connecting hose, 2,000 mm	Ø	3CA10-2003	Interface cable to connect sold- ering stations with interface
<b>S</b>	0CA10-9006	Nozzle coupling Omniflex (only with extraction arms Omniflex and extraction nozzles 5001/5004)		3CA10-2004	Standby switch


	Order no.	Description		Order no.	Description
2	0CA10-5001*	Extraction nozzle, metallic, antistatic, 60 mm ø		0CA10-9004	Appliance coupling
	0CA10-5002	Extraction nozzle, round, ø 118 mm, antistatic		3CA10-9008	Cover lid for EA 2
<b>N</b>	0CA10-5003	Extraction nozzle, rectangular, 155 mm x 90 mm, antistatic	Ø	0CA10-4005	Table duct Omniflex incl. 0CA10-2002
<	0CA10-5004*	Extraction nozzle Plus, 230 mm x 85 mm, transparent	Ô	291405	Table duct with extraction arm Omniflex, 600 mm, incl. 0CA10-2002
0	0CA10-5005*	Extraction nozzle, plastic antistatic, 60 mm ø	Ô	290763	Table duct with extraction arm Highflex, 500 mm, incl. 0CA10-2002

 $^{*}$  In combination with an Omniflex arm, nozzle coupling Omniflex 0CA10-9006 is required.



## ACCESSORIES AND PROCESS MATERIALS.



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# INFRARED HEATING PLATES

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.





The Ersa **IRHP 100 A** infrared heating plate offers bottom-side PCB preheating for hand soldering, desoldering and touchup 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-CON 1C or the i-CON 2C.

#### Order information:

Order no.	US-Version 115 V	Description	Heated area (L x B)	Dimensions (L x B 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
0IRHP100A-03	0IRHP100A-04	IRHP 100 A infrared rework heating plate	125 x 125 mm	200 x 260 x 53.5 mm	250 W (Stufe 6) 230 V~(115 V~), 50 – 60 Hz	approx. 2.6 kg

\*without cable

## SOLDER BATHS



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 tinplating 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.



Temperature regulator

oracin	mormation.							
Order no.	US-Version 115 V	Description	Rating/ Voltage	Tempera- ture	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
OT56	1T5600A068	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 03²	360 W/230 V	430 °C	100 x 30/15 <sup>1</sup> 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 <sup>1</sup> x 90	approx. 2,850 g	3,400 g	2 pcs. 08X800
0T06		Solder bath T 06	1000 W/230 V	560°C	120 x 80 x 60	approx. 4,800 g	5,200 g	6 pcs. 05X100P2
OT07		Solder bath T 07	1200 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	1600 W/230 V	450 °C	300 x 60 x 50	approx. 7,500 g	8,000 g	8 pcs. 05X100A3

<sup>1</sup>Tapered solder pot. <sup>2</sup>VDE tested, all other solder baths are produced according to VDE standards.

Order information:

## 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 with optionally available temperature sensor F008

#### Order information:

Order no.	Description	Connected load / voltage	Tolerance	Temperature range	Switch
0RA4500D	Temperature regulator RA 4500 D	3000 W/230 V, 50 – 60 Hz	max. ±2%	50 – 600 °C	2-position with P-characteristics
0F007	Temperature sensor, 8 mm ø				
0F008	Longlife temperature sensor, 3 mm ø				

# TEMPERATURE MEASURING DEVICE

In certified businesses and from a quality standpoint, regular checks of the soldering tip temperature are obligatory. Ersa

soldering stations are extremely temperature-stable over their entire service life.

Also available with calibration certificate

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 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.



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 information:

Order no.	Description	Measuring range	Operating temperature	Power supply	Dimensions without sensor unit	Weight
0DTM100	DTM 100 temperature measuring device, packed in a plastic case	-50 – 1.150 °C	0–45°C	9 V flat battery 6F22	100 x 60 x 26 mm	approx. 134 g
ODTM100P	DTM 100 temperature measuring device with calibration certificate, packed in a plastic case	-50 – 1.150 °C	0-45°C	9 V flat battery 6F22	100 x 60 x 26 mm	approx. 134 g

# DESOLDERING DEVICES





VAC X 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.

SOLDAPULLT AS 196 desoldering device

### Order information:

Order no.	Description	Desoldering tips	Suction capacity
OVACX	VAC X antistatic desoldering device	OVACX2 (2 pcs.)	11.3 cm <sup>3</sup>
0AS196	SOLDAPULLT AS 196 antistatic desoldering device	0LS197	34 cm <sup>3</sup>

## VACUUM PIPETTE SVP 100

The **SVP 100** vacuum pipette can be used to handle nearly all components, except MELFs and MINI-MELFs. 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.

#### Order information:

Order no.	Description	Length	ø Housing diameter	ø 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	60 g

# 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.

Order information:			
Order no.	Description		
3ZT00164	Tip exchanger		



## STACKING RACKS STR 100 and STR 200

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 in a practical and spacesaving 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.

> Stacking racks for a wellorganized workplace (delivery without soldering stations)



STR 100

#### Order information:

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

# 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.



Solder wire dispenser (delivery without solder wire)



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

#### Order information:

Order no.	Description	Solder wire spools	Spool receiver diameter
0SR100	SR 100 solder wire dispenser for one spool	250 g, 500 g, 1,000 g	14 mm
0SR101	Retrofit kit SR 101 for a 2nd spool	250 g, 500 g, 1,000 g	14 mm

## TOOL HOLDERS AND CLEANING SPONGES

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 viscose or dry sponge for tip cleaning, as well as options for conveniently resting and storing soldering and desoldering tips.

## TOOL HOLDERS & CLEANING SPONGES

	Order no.	Description		Order no.	Description
A	0A04	Tool holder for soldering irons from 50 W – 150 W output; ISOTYP and 0185PZ soldering irons		0A55	Tool holder for i-TOOL AIR S hot air iron
<b>a</b>	0A05	Tool holder for medium-sized and small soldering irons	Ê	0A56	Tool holder for X-TOOL VARIO desoldering iron
	0A08MSET	Dry sponge 0008M with container for dry cleaning of soldering tips (espescially for lead-free)	P	0A57	Tool holder for i-TOOL HP soldering iron
M	0A17	Tool holder for soldering irons from 200 W to 550 W		0A58	Tool holder for i-TOOL TRACE soldering iron
5	0A18	Tool holder for soldering irons of the MULTI-TIP series; TIP 260 soldering iron	0	3N194/SB	Rubber support disk for MULTI-TIP, MULTI-PRO, Ersa 30 S soldering irons
S	0A39	Tool holder for RT 80 soldering iron		0SH03	SMS soldering and desoldering tip holder for soldering and desoldering tips of the series 212, 422 und 452
-	0A42	Tool holder for TIP TOOL, POWER TOOL, ERGO TOOL, MICRO TOOL and TECH TOOL soldering irons	Ē	0G156	Sponge container G156 for INDEPENDENT 75 and INDEPENDENT 130 gas soldering irons
S	0A43	Tool holder for CHIP TOOL		0003B/SB	Viscose sponge, blue, 55 x 55 mm, for tool holders 0A09, 10, 13, 16, 24, 25, 28, 29, 30, 34, 35, 36, 39, 41 – 45, 48
	0A45	Universal holder for 832 tip series (C8 – C18, MD, QD, ZD models), solder wire feed unit and solder fume extraction		0004G/SB	Viscose sponge, 34 x 65 mm for tool holders 0A05, 0A21 and 0A26
Ó	0A52	Tool holder for i-TOOL, i-TOOL NANO soldering irons	0	0006G/SB	Sponge, ø 36 mm for sponge container 0G156 for INDEPENDENT 75 and INDEPENDENT 130 gas soldering irons
	0A53	Tool holder for i-TOOL PICO solder- ing irons		0008M/10	Dry sponge for dry sponge holder 0A08MSET
<b>W</b>	0A54	Tool holder for CHIP TOOL VARIO desoldering tweezers			

## TIP HOLDER SMD 8015





SMD 8015 - tip holder 0SH11 with adapter

SH 03 - tip holder, unequipped

The tip holder **SMD 8015** 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.

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

#### Order information:

Order no.	Description	Equipped with ERSADUR soldering tips	Equipped with ERSADUR desoldering tips
OSH03	Tip holder SH 03, unequipped	none	none
0SMD8015	Tip holder SMD 8015, complete	0102PDLF04,PDLF10,CDLF24,WDLF23, ADLF40,SDLF06L and tip fastener 3IT1045-00 (green version) for i-T00L, complete	0742ED0819H,1023H,1225H, 0462SDLF002 and 0462CDLF018, 0472BR,CR,DR andER

## SPECIAL TOOLS ERSA 185 PZ

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.



#### Order information:

Order no.	US-Version 115 V	Description	with welding blade	Rating/ voltage	Heating time	Temperature range	Weight*
0185PZ	1185PZA068	Ersa 185 PZ plastics welding device	0182PZ004	150 W/230 V	approx. 5 min	approx. 370°C	370 g

\*without cable

## SOLDER BARS

Ersa **solder bars**, 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, solder bar is also used for soldering cable lugs of larger crosssections and in sheet metal work.



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

#### Order information:

Order no.	Alloy	Melting temperature	Delivered in
4L0T230GAG3.5CU0.7	Sn95.8Ag3.5Cu0.7	217 – 218 °C	Bars of approx. 230 g
4L0T230G64B	Sn64Pb36	183 °C	Bars of approx. 230 g

## SOLDER WIRE

Ersa **solder wire** consists exclusively of highquality raw materials. Manufactured on stateof-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 electronic industry.

Please refer to the Ersa price list or to www.ersa.com for a detailed list including wire diameters, further information and order numbers.





Available in different alloys and drum sizes in order to meet various fields of application.

### Order information:

Solder alloy according to DIN EN 29453	Flux according to DIN EN % flux share	Melting temperature
Sn96.5Ag3.0Cu0.5	29453, J-STD-004A/EN61190-1-1: ROLO, halogen-free, 3.5 %	217 °C
Sn96.5Ag3.0Cu0.5	29453, J-STD-004A/EN61190-1-1: RELO, halogen-free, 1.6 %	217 °C – 219 °C
· 5	o-Clean solder wire. Especially adapted to the requirements in electronic production. Th pray while melting. The light, solid flux residues are neither corrosive nor electrically con rom the solder joint.	, 5 1
Sn60Pb40	29453, J-STD-004A/EN61190-1-1: ROM1, 2.2 %	183 °C – 190  °C

Sn60Pb40	29453, J-STD-004A/ EN61190-1-1: REL0, 1.4 %	183°C – 190 °C
Sn63Pb37	29453, J-STD-004A/EN61190-1-1: ROLO, halogen-free, 0.9 $\%$	183 °C

## 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 information:

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

\*single-piece package.also available

FLUX-REMOVER

FLUX-REMOVER

## FLUX AND FLUX REMOVERS



Ersa No-Clean flux creams available in different quantities

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 easily and precisely be applied by means of the FLUX-PEN or cartridge, supplied with plunger and needle.



FLUX-PEN

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.

Order information	:		
Order no.	Description	Quantities	Danger sign
0FMKANC32-005	No-Clean flux cream, EN 29454/1.1.3 C	5 ml cartridge	05; 07
0FMKANC32-200	No-Clean flux cream, EN 29454/1.1.3 C	200 ml can	05; 07
4FMJF8300-005	Flux gel 8300 for rework, EN 29454-1/1.2.3 C (F-SW33), resinous, halogen-free, low residues	5 ml cartridge	07
4FMJF8300-030	Flux gel 8300 for rework, EN 29454-1/1.2.3 C (F-SW33), resinous, halogen-free, low residues	30 ml cartridge	07
OFMPEN	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	02; 08
0FMIF8001-001	IF 8001 flux, EN 29454/2.2.3 A	100 ml	02; 08
4FMJF6000-PEN	FLUX-PEN with IF 6000 flux, for lead-free rework, EN 29454/1.1.3 A, solid 7.5 $\%$	7 ml	02; 07
0FMIF6000-001	IF 6000 flux 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	02; 07
0FMIF2005-002	IF 2005 M low-solid No-Clean flux EN 29454/2.2.3 A	200 ml sprayer	02; 07; 08
0FR400	FLUX-REMOVER (0FR400), with brush 0FR202 and protective cap 0FR203	400 ml cartridge	02; 07; 09





## SOLDERING AND DESOLDERING TIPS.

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## ERSADUR LONGLIFE SOLDERING 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 stability. In addition, the soldering tip also has to convey the necessary amount of sensitivity back to the operator. ERSADUR longlife 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 and desoldering tips for the diverse requirements.



## PROFESSIONAL TIP CARE

## for optimal soldering quality and a long tip life

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 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.

### Dry cleaning with metal wool



340 – 360  $\,^\circ\!\mathrm{C}$  for lead-free solder



Just stick soldering tip into dry cleaner and turn



Remove dirty metal wool and empty the solder collecting box



Add new solder after cleaning

#### Cleaning with damp sponge



Sponge (0003B) must be damp



DAMP – NOT WET!



Carefully wipe off tip



Immediately add new solder

## PRODUCTS FOR TIP CARE



### Ersa Dry Sponge

The Ersa Dry Sponge (order no. 0008M) is an alternative to the wet sponge and can be beneficial, especially in leadfree soldering.



Service tool for X-TOOL VARIO

Service tool for tip exchange and cleaning of the X-TOOL VARIO desoldering iron (order no. E074600).



#### Cleaning kit for tip series 742H (X-TOOL VARIO)

The cleaning kit includes the fitting drill bits for the tips of the 742H series to remove residues in the suction channel of the tip (order no. E074700).



#### **Cleaning brush**

Brush with brass bristles for gentle tip cleaning (order no. 3ZT00051). It can also be used to clean heating elements.

## SERIES 102 ERSADUR LONGLIFE SOLDERING TIPS

All i-CON stations with i-TOOL, i-TOOL NANO or i-TOOL PICO soldering iron



Dimensions without pre-tinning

## SERIES 102 ERSADUR LONGLIFE SOLDERING TIPS

All i-CON stations with i-TOOL, i-TOOL NANO or i-TOOL PICO soldering iron



## SERIES 142 ERSADUR LONGLIFE SOLDERING TIPS

■ i-CON TRACE with i-TOOL TRACE soldering iron



Dimensions without pre-tinning

Identifiable

tip'n' turn release

## SERIES 142 ERSADUR LONGLIFE SOLDERING TIPS

SERIES 142 ERSA	ADUR LONGLIFE S	OLDERING TIPS	tip'n' turn release
0142SDLF04L/SB pencil point, bent, extended, 0.4 mm ø	0142SDLF06L/SB pencil point, bent, extended, 0.6 mm ø	0142SDLF08L/SB pencil point, bent, extended, 0.8 mm ø	0142ADLF13/SB angled face, 1.3 mm ø
0142ADLF15/SB angled face, 1.5 mm ø	0142ADLF22/SB angled face, 2.2 mm ø	0142ADLF32/SB angled face, 3.2 mm ø	0142ADLF40/SB angled face, 4.0 mm ø
0142ZDLF100/SB WICK-TIP, 10.0 mm	0000 01422DLF150/SB WICK-TIP, 15.0 mm	933 933 0142ZDLF200/SB WICK-TIP, 20.0 mm	0142BDLF20/SB PLCC blade
6 0.26 0.26 0.303 0.303 0.303 0.303	6 0,236 0,536 0,536 0,536 0,536 0,536 0,536 0,536 0,536 0,536		014 014 014 014 014 014 014 014 014 014
0142WDLF16/SB PowerWell with concave portion, 1.6 mm ø	0142WDLF23/SB PowerWell with concave portion, 2.3 mm ø	0142WDLF35/SB PowerWell with concave portion, 3.5 mm Ø	
			Dimonsions without are tinning



## SERIES 242 ERSADUR LONGLIFE SOLDERING TIPS

### ■ i-CON VARIO 2 and 4 with i-TOOL HP soldering iron





## SERIES 462 DESOLDERING TIPS

All i-CON stations with CHIP TOOL VARIO desoldering pincette



All i-CON Stations with X-TOOL VARIO desoldering iron





## SERIES 172 ERSADUR LONGLIFE SOLDERING TIPS

### MULTI-TIP C25



Dimensions without pre-tinning





### SERIES G 072 & G 132 SOLDERING TIP ■ INDEPENDENT 75 gas soldering iron (series G 072) ■ INDEPENDENT 130 gas soldering iron (series G 132) 0G072CN/SB, 0G132CN/SB 0G072KN/SB, 0G132KN/SB 0G072AN/SB, 0G132AN/SB 0G072VN/SB, 0G132VN/SB chisel-shaped, 1.0 mm chisel-shaped, 2.4 mm chisel-shaped, 3.2 mm chisel-shaped, 4.8 mm 0G072HE/SB, 0G132HE/SB 0G072RE/SB, 0G132RE/SB 0G072MN/SB, 0G132MN/SB 0G072BE/SB, 0G132BE/SB hot gas nozzle deflector for hot gas nozzle hot blade flame nozzle 0G072HE / 0G132HE to shrink heat shrinkable sleeves

## SERIES 032 ERSADUR LONGLIFE SOLDERING TIPS

### MULTI-TIP C25



052 ERSADUR LONGLIFE SOLDERING TIP

### SERIES 082 ERSADUR LONGLIFE SOLDERING TIPS



### SERIES 152 ERSADUR LONGLIFE SOLDERING TIPS Ersa 50 S



Dimensions without pre-tinning

#### SERIES 202, 302 & 552 ERSADUR LONGLIFE SOLDERING TIP Ersa 200 (Series 202) Ersa 300 (Series 302) Ersa 550 (Series 502) 0202MD 0302MD 0552MD chisel-shaped, reinforced, 18 mm chisel-shaped, reinforced, 25 mm chisel-shaped, reinforced, 35 mm 45 56 46 ø18 13,8 2E¢ ø25 115 120 140



## PERSONNEL QUALIFICATION AND SERVICES

For 100 years Ersa has been the first address for all soldering needs. Ersa equipment is designed for top performance – but for top soldering results the user also needs the latest tech knowledge. We provide you with the appropriate know-how to make your electronics production even better. Whatever your needs, our training program covers all aspects of professional soldering – from solder paste printing, reflow, selective and wave soldering to rework and hand soldering. You can join any time! Our wide range of digital and on-site trainings certainly offers the fitting qualification measure for your needs. Some examples:

- Process trainings and practical training courses
- Customer-specific technology days
- Operation and maintenance trainings
- WEBinERSA webinars
- Live demonstrations and test soldering

## WEBinERSA

Current topics in the electronics industry. Substantial. Virtual. In real time.

## WEBINERSA WEBINAR PROGRAM

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

Our webinars, each lasting 60 to 90 minutes, provide information on current topics in soldering technology and offer a wide variety: whether stencil printing, high-end soldering machines, rework and inspection systems or intelligent solutions in classical hand soldering – there is something for everyone. In the field of rework and hand soldering for example, we'll be covering the basics as well as specific topics such as soldering of THDs and SMDs on high thermal mass assemblies or big board rework. Our current WEBinERSA program is available

online at www.webinar.ersa.com.



WEBinERSA webinars

## ERSA SOLDER SMART

The Ersa soldering robot



The Ersa SOLDER SMART soldering robot is an alternative to classical hand soldering processes, especially in applications where machine soldering processes reach their limits: This is the case, for example, if cable strands are to be soldered on a PCB. In such a case one would normally resort to the hand soldering process, which is usually not permitted in the automotive industry or communications technology, however.

The SOLDER SMART is equipped with an i-TOOL soldering iron and features a high-precision, low-maintenance axis system which approaches the soldering position from any side. Programming of single solder joints, flow soldering with pre-tinned tip or drag soldering (line soldering) sequences is easy and intuitive. A camera monitors the single process steps and automatically saves them in the software so that they can be traced any time.

## ERSA INSPECTION SYSTEMS

**Optical BGA inspection for all budgets** 

For nearly fifteen years now, thousands of users worldwide have been benefiting from the ability to inspect hidden solder joints with the patented and 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.







Ersa inspection systems

## ERSA REWORK SYSTEMS

## For the most demanding applications

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 twenty 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 several thousand 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".

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Ersa HRSoft - comfortable software for process control and documentation

### HR 600 XL hybrid rework system

Developed for large board sizes of up to  $625 \times 625$  mm. Safe handling of components with a size of up to  $60 \times 60$  mm. Innovative IR Matrix Heater<sup>TM</sup> and 16 kW heating power for assemblies with high thermal demands.



## HR 550 hybrid rework system

High-performance rework for specialists – the new Ersa rework platform



### HR 600/2 hybrid rework system



Ersa rework systems

## ELECTRONICS PRODUCTION EQUIPMENT

Worldwide presence



#### America

Kurtz Ersa, Inc. 1779 Pilgrim Road Plymouth, WI 53073 USA Phone +1 920 893 3772 aus den US: 1 800 363 3772 usa@kurtzersa.com www.ersa.com

#### Mexico

Kurtz Ersa, S.A. de C.V. Av. Lopez Mateos Sur Núm. 1450 Int. 7 Col. Las Villas (Plaza las Villas) Tlajomulco de Zúñiga, Jalisco C.P. 45643 México Phone +52 33 15 93 18 63 info-kmx@kurtzersa.com www.ersa.com

#### Asia

Kurtz Ersa Asia Ltd. Unit 03-05, 8th Floor One Island South No. 2 Heung Yip Road Wong Chuk Hang Hongkong China Phone +852 2331 2232 asia@kurtzersa.com www.ersa.com

#### China

Ersa Shanghai Room 720, Tian Xiang Building No. 1068 Mao Tai Rd., Shanghai 200336 China Phone +86 213126 0818 info-esh@kurtzersa.com www.ersa.com

#### Vietnam

Kurtz Ersa Vietnam Company Limited B916 Road 3, Kizuna 2 Factory Area, Lot B4-3-7-8, Tan Kim IP, Can Giuoc Dist. Long An Province, Vietnam Phone +84 2723 733 682 info-kev@kurtzersa.com www.ersa.com

### India

Kurtz Ersa India Smart Production Technologies Private Limited Plot Nr 18, Survey No. 43 KA 560100 Bangalore Telefon: +91 973 954 5461 india@kurtzersa.com www.kurtzersa.com

#### France

Kurtz Ersa FRANCE 2, Avenue de Wissembourg 67500 Haguenau France Phone: +33 6 07 78 01 87 kefrance@kurtzersa.com www.ersa.com

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Ersa GmbH Leonhard-Karl-Str. 24 97877 Wertheim/Germany Phone +49 9342 800-0 Fax +49 9342 800-127 info@ersa.de www.ersa.com

