Catalogue 2007

Soldering Irons, Soldering / Desoldering Stations, Special Tools and Accessories

ERSA GmbH

Soldering Division: Tools & Inspection Systems

Greetings

Editorial

Dear Valued ERSA Customer,

ERSA's Board of Directors: Bernd Schenker, Rainer Kurtz and Mark Cannon

It is a distinct pleasure this year to introduce our newest ERSA Tools Catalogue 2007 with some remarks from ERSA's Board of Directors. For the most part, the intense activities which have surrounded the implementation of lead-free into our customer's production processes have come and gone without problem. The headaches associated with this tremendous task have now subdued. As a leading manufacturer of soldering equipment, ERSA now has time to reflect on what will be the major concern for our customers over the coming years. We have worked hand-in-hand with our customers over the years and we have listened very closely to your needs. It is our strong belief that the answer lies in streamlining production to achieve a maximum on cost efficiency. For this reason, ERSA has re-defined its Corporate Vision Statement:

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

Our sole purpose as a manufacturer is to provide those production solutions to our customers which will increase their competitive edge and which will ultimately increase their profitability. Maintaining a competitive advantage in today's ever changing and fast moving market requires an intelligent approach to manufacturing. The decision to purchase top quality production equipment is based not only on a Return of Invest analysis, but also on Time to Market, Service and Quality issues. Our customers' bottom line is to achieve the most cost effective and efficient production possible; and our bottom line is to make this possible!

For over 85 years, ERSA has been a technology leader delivering those production solutions to the market as the industry required. The ERSA product range covers the areas of hand soldering, rework, reflow, wave and selective soldering as well as PCB inspection and solder paste printing. The ERSA Tools Catalogue 2007 covers in depth the product area of hand tools and accessories for manual soldering applications.

We trust that the practical solutions presented in the following pages will correspond with our customers' applications requirements. In the name of all ERSA employees here in Germany as well as in North America and Asia, we would like to thank you for your continued trust in our brand. We look forward to providing to you high quality products with the highest level of service and process expertise.

Sincere regards,

Rainer Kurtz
CEO

Mark Cannon
President & COO
Engineering, Logistics & Marketing

Bernd Schenker,
President & COO
Sales & Production

Product Range

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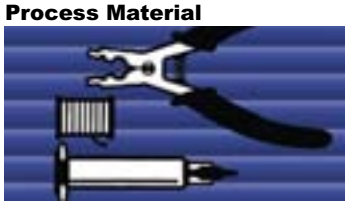
Accessories & Process Material



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Process-Safe and Efficient Lead-Free Hand Soldering

Successfully mastering the lead-free hand soldering process

As of 1 July 2006 the elements lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) and biphenyl ether (PBDE) are prohibited, and electric or electronic equipment and assemblies containing these substances can no longer be offered on the market.

This means that, in many cases, manufacturers of electronic products will have to say goodbye to the established soft solders which are based on tin and lead.

Hand soldering represents a real challenge for lead-free soldering technology. ERSA has been ready to face this challenge, and is geared up for lead-free hand soldering operations. The heating technology of the ERSA soldering stations is perfectly designed to fit the lead-free process requirements.

Guaranteeing quality in a lead-free environment will put the greatest demands on hand soldering applications. From a repeatability standpoint, all solder joints should be made with the same temperature, e. g. the tip temperature must remain constant! Hand soldering quality is completely determined by the skills of the operator and the efficiency of the soldering iron. Due to the fact, however, that irons generally do not recover lost heat fast enough, operators use high set temperatures (380 – 440 °C). These already high temperatures will need to be even higher for lead-free as the process temperature increases by 40 °C.

Three critical design demands required for successful lead-free hand soldering:

1. Accurate control not of the heating element only but also of the soldering tip during the soldering process.

2. Rapid heat recovery is essential to ensure constant soldering tip temperatures.

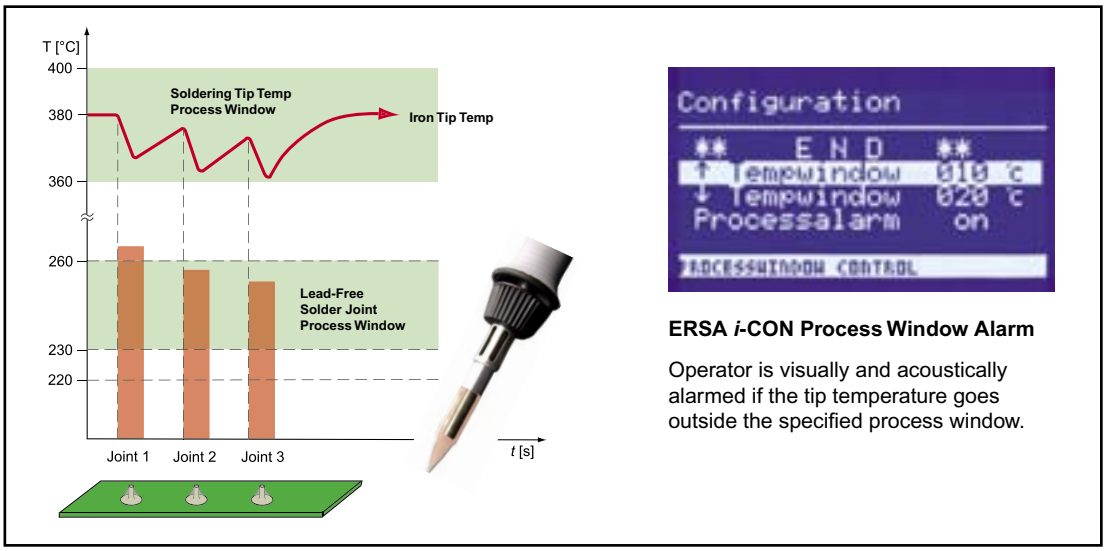
3. Low-cost, long-life soldering tips specially designed for lead-free.

ERSA top of the range digital soldering stations allow for low temperature settings, lock-out password function, and the attachment of any of 6 special tools designed for a variety of lead-free applications. Long-life, lead-free soldering tips make the package perfect!

Don‘t let hand soldering and touch-up be the Achilles‘ Heel of your lead-free soldering operations!

ERSA i-CON - soldering station featuring innovative technology

Innovative and Efficient Heating and Control Technology



ERSA *i*-CON Process Window Alarm

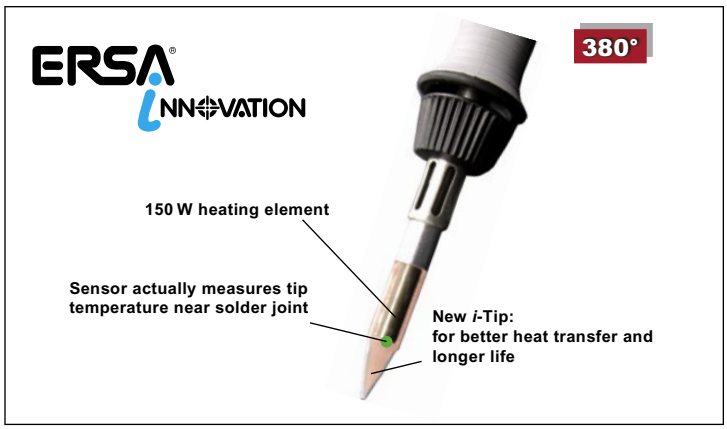
Operator is visually and acoustically alarmed if the tip temperature goes outside the specified process window.

ERSA i-CON and i-Tool - the ultimate innovation in hand soldering process control

i-TRONIC control

The 150 W micro heating element technology with digital PID algorithm allows for rapid heat-up: from room temperature to 350 °C in approx. 9 seconds; from stand-by to 350 °C in approx. 3 seconds.

The new technology offers one of the fastest heat recoveries of all soldering irons that have exchangeable, low-cost tips, which now guarantees a stable hand soldering process. This can only be achieved via the innovative, multiple sensor heating element control technology which is a part of the patent application.



SENSOTRONIC control

The ERSA SENSOTRONIC control system with precise temperature measurement by means of thermocouples near the soldering track, where the soldering tip transfers the heat to the solder joint, has been standard at ERSA for three decades. The system guarantees the fastest possible supply of heat and a high level of temperature constancy through the entire service life.

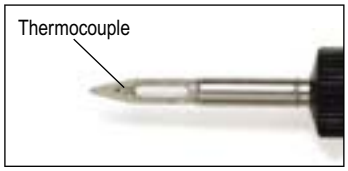
RESISTRONIC control

With fine soldering tools for SMD technology, the ERSA RESISTRONIC temperature control system is unbeatable, since the heating elements also serve as temperature sensors. The result is a slim design and stable temperature conditions.

Internal heating of soldering tips

ERSA is also a pioneer in state-of-the-art soldering iron design. The internal heating of soldering tips has been the preferred method for many years.

It guarantees high thermal efficiency and the greatest possible range of application for soldering devices.



Cross-section of internally heated tip on the Tech Tool soldering iron with SENSOTRONIC control

Cross-section of internally heated tip on the Micro Tool SMD soldering iron with RESISTRONIC control

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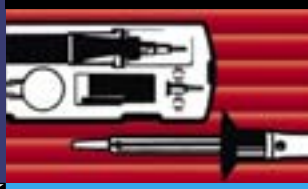
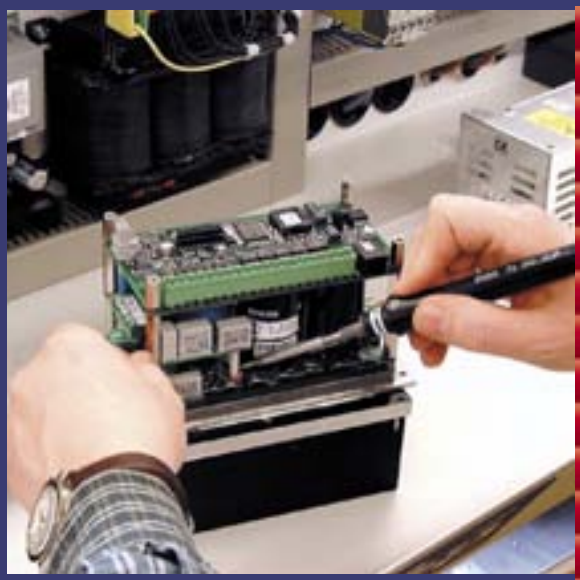


Soldering Irons & Sets



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

042 soldering tip series see page 40

Minityp S

012 soldering tip see page 40

Order no.	Description	With soldering tip	Rating / Voltage	Heating time	Max. soldering 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 Microsoldering Irons

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** 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. **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

162 soldering tip series see page 44

Multitip C25

172 soldering tip series see page 44

Tip 260

162 soldering tip series see page 44

Order no.	Description	With soldering tip	Rating / voltage	Heating time	Max. soldering 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

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 also available with **40 W**.

Multi-Pro

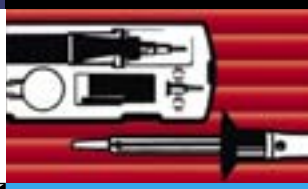
832 / 842 soldering tip series see page 38 / 39

*ERSA 30 S**

032 soldering tip series see page 43

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

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



ERSA Standard Soldering Irons

ERSA 50 S

052 soldering tip series
see page 43

ERSA 80 S

082 soldering tip series
see page 43

ERSA 150 S

152 soldering tip series
see page 43

Order no.	Description	With soldering tip	Rating / voltage	Heating time	Max. soldering 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

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 mm^2 (ERSA 50 S, 50 W) to 6 mm^2 (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 Workshop Soldering Irons

ERSA 550

552 MZ and 552 MD soldering tip series
see page 43

ERSA 200 / 300

202 / 302 MZ and 202 / 302 MD soldering tip series
see page 43

Order no.	Description	With soldering tip	Rating / voltage	Heating time	Max. soldering 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

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 High-Speed Soldering Irons

The ERSA **Multi-Sprint** is an extremely light, transformer-independent solder gun with a heat-up rating 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

832 / 842 soldering tip series
see page 38 / 39

Wide range of soldering tips!

Order no.	Description	With soldering tip	Rating / voltage	Heating time	Max. soldering tip temperature	Weight (w/o cable)
0960ED	Multi-Sprint solder gun	0832EDLF, ERSADUR	150/75 W / 230 V, 50 - 60 Hz	approx. 20 s	subject to how long the button is pressed	100 g

ERSA Power Soldering Iron with Temperature Control

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 can then immediately react to the heat loss and re-heat extremely fast. The high preheating power with the internal PTC heating element provides unusually fast heating. 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 methods. 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.

SENSOTRONIC control

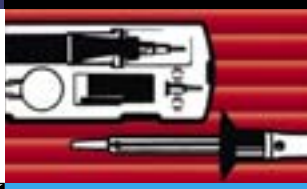
Multi-TC

832 / 842 soldering tip series *see page 38 / 39*

Wide range of soldering tips!

The 832 / 842 soldering tip series make the Multi-TC a proper all-rounder

Order no.	Description	With soldering tip	Rating / voltage	Heating time	Max. soldering tip temperature	Weight (w/o cable)
0760CD	Multi-TC soldering iron	0842CD	75 W at 350 °C / 230 V, 50 - 60 Hz	approx. 34 s	250 °C - 450 °C	60 g



ERSA Independent 75 Gas Soldering Sets

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.

Independent 75 Profi-Set

consisting of
Independent 75 gas soldering iron with soldering tip 0G072KN, 0G072CN, soldering tips 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.
G 072 soldering tip series see page 44

Order no.	Description	With soldering tips 0G072 ...	Rating	Heating time	Max. soldering 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

Mobile power – wherever you want! Powerful, with comprehensive and top-quality equipment, small, handy and practically packed. The gas soldering **Independent 75 Basic Set** and **Profi Set** 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 ordinary butane as used in gas lighters. 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.

ERSA Independent 130 Gas Soldering Sets

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

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.
G 132 soldering tip series see page 44

Order no.	Description	With soldering tips 0G132 ...	Rating	Heating time	Max. soldering 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

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 piezo ignition integrated in the device and powering by ordinary gas lighter butane ensure the easiest possible handling and great reliability. The operating time per gas filling is about 120 minutes, with a maximum soldering 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**.

Solder Baths

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 multiwave module of a VERSAFLOW selective soldering system.

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.

ERSA Solder Baths

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 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** small solder baths are primarily used for tin-plating stranded wire braids, connecting leads and cable lugs. The heat resistant special color (order no. 4HMFARBE[1]) can be applied to the crucible as a proctection against corrosion and wetting.

1) = Xi Irritating

ERSA RA 4500 D Temperature Regulator

*Fig.: RA 4500 D with **optionally available** temperature sensor F008*

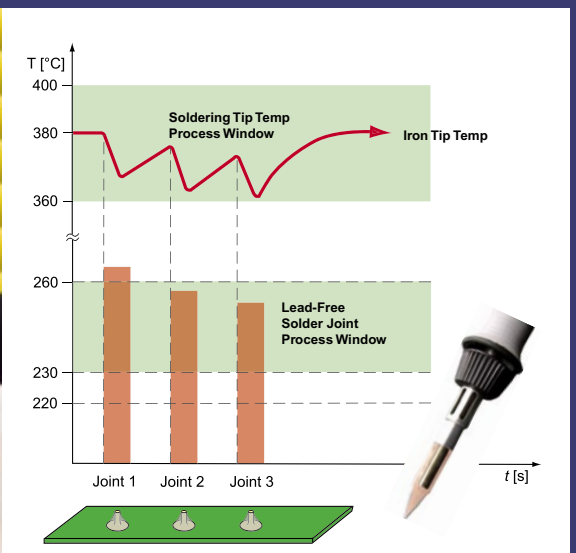
RA 4500 D

A microprocessor sets new standards with regard to the temperature regulator's functions and provides comfortable operation of the RA 4500 D.

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				

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.

Soldering & Desoldering 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 will guarantee safe lead-free soldering at low temperatures in the future. The ERSA soldering stations' high capacity ensures superior reheating. Even high-mass soldering can be carried out without problems.

ERSA RDS 80 Soldering Station

CE PTC

Superb price-performance ratio

RDS 80

with RT 80 soldering iron, ERSA RESISTRONIC control system
832 and 842 series see page 38 / 39

Order no.	Description	Rating / Voltage	Heating time	Temperature range	Weight (with cable)
0RDS80	RDS 80 soldering station complete	80 W / 230 V, 50 - 60 Hz /24 V		150 °C - 450 °C	
	with RT 80 soldering iron 0890CDJ, soldering tip	105 W (280 °C)	approx. 40 s (280 °C)		approx. 130 g
	0842CD and tool holder 0A39				

Potential equalization socket

Application example

Multifunctional display

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

The ERSA **RDS 80** digital soldering station offers 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.
The very 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 new housing design and the large, digital multifunctional display don't leave much to be desired.
Besides the arbitrary temperature selection between 150 °C and 450 °C, 3 fixed temperatures or 2 fixed temperatures and one stand-by temperature can be programmed.
The device also has a calibrating and power-off feature, in addition to a power bar graph display. 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 changing the tips we recommend tip changing tool 3ZT00164 (see page 30).

ERSA ANALOG 60 Soldering Station

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.

PTC

ANALOG 60

with Basic Tool 60 soldering iron, ERSA RESISTRONIC control system
832 and 842 soldering tip series see page 38 / 39

Order no.	Description	Rating / Voltage	Heating time	Temperature range	Weight (w/o cable)
0ANA60	ANALOG 60 soldering station complete	60 W / 230 V, 50 - 60 Hz / 24 V		150 °C - 450 °C	
	with Basic Tool 60 soldering iron 0670CDJ, with	60 W (at 350 °C)	approx. 60 s (280 °C)		60 g
	soldering tip 0832CDLF and tool holder 0A41				

Application example

Application example

ERSA Tip Reactivator

Basic Tool 60 with powerful PTC heating element

ERSA ANALOG 60 A Soldering Station

PTC

ANALOG 60 A

with Ergo Tool soldering iron, ERSA RESISTRONIC control system
832 and 842 soldering tip series see page 38 / 39

Order no.	Description	Rating / voltage	Heating time	Temperature range	Weight (w/o. cable)
0ANA60 A	ANALOG 60 A soldering station complete	60 W / 230 V, 50 - 60 Hz / 24 V		150 °C - 450 °C	
	with Ergo Tool soldering iron 0680CDJ, with	60 W (at 350 °C)	approx. 60 s (280 °C)		60 g
	soldering tip 0832CDLF and tool holder 0A42				

Application example

Application example

Dry sponge for dry tip cleaning

Ergo Tool: slim and ergonomic soldering iron

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

It has the tried and proven ERSA RESISTRONIC temperature control technology based on the ceramic PTC heating element and the fast heat-up characteristics.

Internally heated tips guarantee high thermal efficiency. The unusually wide range of tips allows a varied range of applications. The front-installed potential equalization socket is connected with high impedance to the soldering tip.

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 changing we recommend the tip exchanger 3ZT00164 with an additional flat nose pliers and side cutter (see p. 30).

ERSA *i*-CON Soldering Station

Guaranteeing quality in a lead-free environment puts the greatest demands on hand soldering applications.

Today's hand soldering operators expect a great deal from a state-of-the-art hand solder tool: a small and lightweight, ergonomically designed hand tool that does not get too hot during use, maximum power and efficiency for rapid heat-up and recovery during soldering, fast and easy tip change, as well as easy-to-use station operation and programming.

Today's QA and purchasing managers, however, have much different concerns. In order to guarantee quality, soldering stations must be designed for superior performance. The higher working temperatures and smaller process windows for lead-free hand soldering demand precise temperature control of the soldering tip and rapid heat recovery of the heating element in order to prevent cold solder joints. Low-cost, long-life soldering tips are a must from a running cost efficiency standpoint and are the major concern for the purchasing department.

To meet this challenge, ERSA is proud to introduce its newest technology for a state-of-the-art soldering station that has been specifically designed to meet the challenges the industry will face with lead-free implementation. The ERSA ***i*-CON** and *i*-Tool is an exciting innovation at the core of our existence.

i-CON

with i-Tool soldering iron with innovative heating technology
102 soldering tip series see page 36 / 37

Order no.	Description	Rating/ Voltage	Heating time	Temperature range	Weight (w/o cable)
0IC1000A	*i*-CON electronic station complete with *i*-Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A48 and dry sponge with container 0A08MSET	80 W / 230 V / 50 Hz, 150 W (350 °C)	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
0IC2000A	*i*-CON 2 electronic station complete with *i*-Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A48 and dry sponge with container 0A08MSET	80 W / 230 V / 50 Hz, 150 W (350 °C)	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
0IC1000A0C	*i*-CON C electronic station complete with *i*-Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A48 and dry sponge with container 0A08MSET	80 W / 230 V / 50 Hz, 150 W (350 °C)	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g

Innovative features of this technology

i-Tool soldering iron with 150 W micro heating element:

New heating technology for ultra fastest heat-up and recovery of the *i*-Tool soldering iron: room temperature of 350 °C in approx. 9 sec., from standby to 350 °C in approx. 3 sec. Tip and heating element designed as two separate pieces.

Lead-free i-Tips:

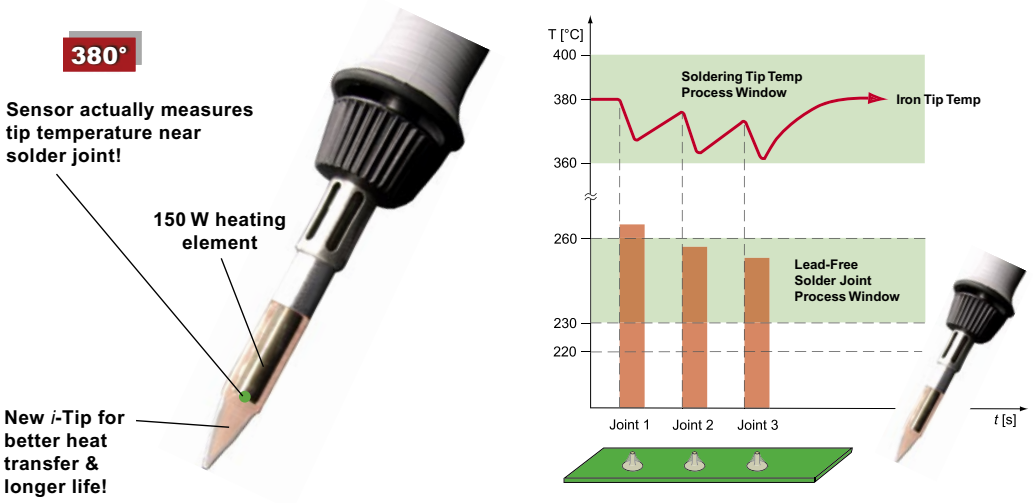
The low-cost *i*-Tips are specially plated with the new ERSADUR LF galvanic process lasting 2 to 3 times longer than standard tips!

"One Touch" easy-to-use operation:

User-friendly station software with large, multifunctional display has online help text and easy menu navigator with *i*-Op control.

i-CON C soldering stations with EA110 plus i solder fume extraction
Intelligent filter unit control by means of the soldering stations' STANDBY function - filter unit is started as soon as one of the soldering stations is operated

Safe and Innovative Lead-Free Hand Soldering



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 assists the operators in guaranteeing repeatable quality.

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 soldering station.

Automatic stand-by motion sensor:

Recognizes when the iron is being used and automatically goes into a stand-by temperature when the iron is put into its holder.

Power level settings:

Allows for the use of three different power settings 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 alarm:

Informs operator with a visual and acoustic signal if the soldering iron tip gets too hot or too cold.

i-Set Tool (Order no. 0103IST):

This optional item allows for automatic downloading of station settings and lockout by acting as a type of USB stick. Simply upload the station setting from an *i*-CON into the *i*-Set Tool. The *i*-Set Tool is then plugged into any other *i*-CON station and all set parameters are automatically downloaded in less than 5 seconds and the station is locked out!

1. *Low-cost i-Tip (Consumable, easy to change, long-life)*
2. *i-Tip fastener*
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.

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 that it can realize a tremendous reduction in operational costs associated with manual soldering.

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

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

Leadfree Bleifrei DESIGNED FOR ERSA SAFE

ERSA *i*-CON2 SMD Soldering & Desoldering Station

Today's PCBs are becoming more complex with smaller and more densely compact components. 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.

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.

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 pincette 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 safely removed when using the Chip Tool in combination with the IRHP 200 heating plate (see page 28).

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.

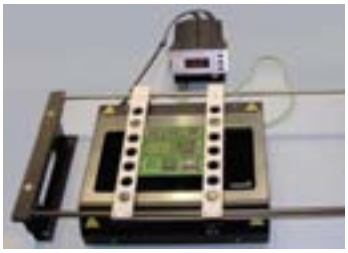
The ERSA X-Tool with 120 W can allow operators to conduct through-hole repair at the lowest and safest temperatures possible. The unique "Heat Reservoir" concept guarantees the shortest dwell times and the tip temperature control guarantees the fastest recovery. This unit must be used in combination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

i-CON2

with i-Tool soldering iron with innovative heating technology and Chip Tool
102 soldering tip series see page 36 / 37, 422 desoldering tip series see page 41

Chip Tool SMT desoldering tweezers for low-temperature, safe SMD soldering

Chip Tool application



IRHP 200 (optional item)

Infrared rework heating plate see page 28

i-CON2

with i-Tool soldering iron with innovative heating technology and X-Tool
102 soldering tip series see page 36 / 37, 722 desoldering tip series see page 39

X-Tool desoldering iron for high-power, low-temperature, safe through-hole desoldering

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

High-mass through-hole desoldering

ERSA *i*-CON and *i*-CON2: Range of Models

0IC1000A

0IC1000AC

0IC1000AXT

0IC2000A

0IC2000AIT

0IC2000AC

0IC2000AXT

0IC1000A0C

0IC2000A0C

Order no.	Description
0IC1000A	***i*-CON** electronically temperature-controlled soldering station, antistatic, complete, consisting of: Electronic station 0IC103A, ***i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16, antistatic tool holder 0A48, and dry sponge with container 0A08MSET
0IC1000AC	***i*-CON** electronically temperature-controlled soldering station, antistatic, complete, consisting of: Electronic station 0IC103A, **Chip Tool desoldering pincette** 0450MDJ with desoldering tip pair 0422MD, antistatic tool holder 0A43, and dry sponge with container 0A08MSET
0IC1000AXT	***i*-CON** electronically temperature-controlled soldering station, antistatic, complete, consisting of: Electronic station 0IC103A, **X-Tool desoldering iron** 0720ENJ, antistatic, with desoldering tip 0722EN1223, vacuum unit 0CU103A for X-Tool, antistatic tool holder 0A44, and dry sponge with container 0A08MSET
0IC2000A	***i*-CON2** electronically temperature-controlled twin soldering station, antistatic, complete, consisting of: Electronic station 0IC203A, **one *i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16, antistatic tool holder 0A48, and dry sponge with container 0A08MSET
0IC2000AIT	***i*-CON2** electronically temperature-controlled twin soldering station, antistatic, complete, consisting of: Electronic station 0IC203A, **2 x *i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16, 2 x antistatic tool holder 0A48, and dry sponge with container 0A08MSET
0IC2000AC	***i*-CON2** electronically temperature-controlled twin soldering and desoldering station, antistatic, complete, consisting of: Electronic station 0IC203A, ***i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16 **Chip Tool desoldering pincette** 0450MDJ with desoldering tip pair 0422MD, antistatic tool holders 0A48 and 0A43, and dry sponge with container 0A08MSET
0IC2000AXT	***i*-CON2** electronically temperature-controlled twin soldering and desoldering station, antistatic, complete, consisting of: Electronic station 0IC203A, ***i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16 **X-Tool desoldering iron** 0720ENJ, antistatic, with desoldering tip 0722EN1223, vacuum unit 0CU103A for X-Tool, antistatic tool holders 0A48 and 0A44, and dry sponge with container 0A08MSET
0IC1000A0C	***i*-CON C** electronically temperature-controlled soldering station with interface, antistatic, complete, consisting of: Electronic station 0IC203A with interface, ***i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16, antistatic tool holder 0A48, and dry sponge with container 0A08MSET
0IC2000AXT	***i*-CON2 C** electronically temperature-controlled soldering station with interface, antistatic, complete, consisting of: Electronic station 0IC203A with interface, ***i*-Tool soldering iron** 0100CDJ with soldering tip 0102CDLF16 antistatic tool holder 0A48, and dry sponge with container 0A08MSET

Technical data	*i*-Tool soldering iron	Chip Tool desoldering pincette	X-Tool desoldering iron
Voltage	24 V~	24 V~	24 V~
Max. heating power	150 W ±10 % (80 W mean)	PTC 2 x 30 W / 280 °C; 2 x 20 W / 350 °C	2 x 60 W at 350 °C
Heating time	approx. 9 s to 350 °C	subject to the desoldering tip	subject to the desoldering tip
Weight	approx. 30 g (without supply line)	approx. 75 g (without supply line)	approx. 240 g (incl. supply line and tip)
Antistatic	antistatic design suitable for operation in an ESD environment. MIL-SPEC/ESA standard	antistatic design suitable for operation in an ESD environment. MIL-SPEC/ESA standard	antistatic design suitable for operation in an ESD environment. MIL-SPEC/ESA standard

Four versions of this new double station are offered standard and differ only in the tool packout:

1. One *i*-Tool soldering iron
2. Two *i*-Tool soldering irons
3. *i*-Tool and Chip Tool for SMD removal
4. *i*-Tool and X-Tool for TH desoldering.

The tools are automatically detected when inserted into the station and a predetermined program is started.

For further information please refer to:
www.ersa-i-Tool.com

ERSA DIGITAL 2000 A Soldering Station

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 is designed for industrial use where high quality is demanded and for repairs and laboratory applications.

The device 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 pincette and the X-Tool desoldering iron can be connected.

The tools are automatically detected when inserted and the control characteristics accordingly adapted. The soldering and desoldering tips are therefore 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 stand-by 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, all programs can also be used. A 5th program slot contains a temperature measuring function. For this purpose the temperature sensor DIG207 is required.

DIG20A84

with Power Tool soldering iron and ERSA SENSOTRONIC control system
832 and 842 soldering tip series ***see page 38 / 39***

Wide range of soldering tips!

Power Tool

with ERSA SENSOTRONIC control system
832 and 842 soldering tip series
see page 38 / 39

Tech Tool

with ERSA SENSOTRONIC control system
612 soldering tip series
see page 40

Micro Tool

with ERSA RESISTRONIC control system
212 soldering tip series
see page 42

Chip Tool

with ERSA RESISTRONIC control system
422 desoldering tip series
see page 41

X-Tool

with ERSA SENSOTRONIC control
722 desoldering tip series
see page 39

Multifunctionality Combined With Comfort

DIG20A64

with Tech Tool soldering iron and ERSA SENSOTRONIC control system
612 soldering tip series see page 40

DIG20A27

with Micro Tool soldering iron and ERSA RESISTRONIC control system
212 soldering tip series see page 42

DIG20A45

with Chip Tool and ERSA RESISTRONIC control system.
422 desoldering tip series see page 41

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, soldering tip 0842CDLF, tool holder 0A42, and dry sponge with container 0A08MSET	80 W / 230 V, 50 - 60 Hz / 24 V 80 W (350 °C)	approx. 40 s (280 °C)	50 °C - 450 °C	approx. 50 g
0DIG20A64	DIGITAL 2000 A electronic station complete with Tech tool soldering iron 0640ADJ, soldering tip 0612ADLF, tool holder 0A42, and dry sponge with container 0A08MSET	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, tool holder 0A42, and dry sponge with container 0A08MSET	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 pincette 0450MDJ, desoldering tips 0422MD, tool holder 0A43, and dry sponge with container 0A08MSET	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

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 29), 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 30).

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 pages 22 and 23, 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 for suctioning 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
722 desoldering tip series see page 39

Figure with optional rack

* incl. tip and cable

Order no.	Description	Rating / Voltage	Vacuum	Temperature range	Weight
0DIG20AXT	DIGITAL 2000 A desoldering station complete	80 W / 230 V, 50 - 60 Hz / 24 V		50 °C - 450 °C	1.25 kg
	with vacuum unit 0CU103A,	45 W	800 mbar max.		
	X-Tool desoldering iron 0720ENJ,	2 x 60 W (350 °C)			approx. 240 g*
	tip 0722EN1223, holder 0A44				

ERSA SMD 8012 and SMD 8013 Tip Holders

The **SMD 8012** and **SMD 8013** tip holders are 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 currently available soldering tips and desoldering tip pairs, with the component-specific dimensions, can be found on pages 41 and 42.

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

212 soldering tip series see page 42,
422 desoldering tip series see page 41

ERSA SMD 8012

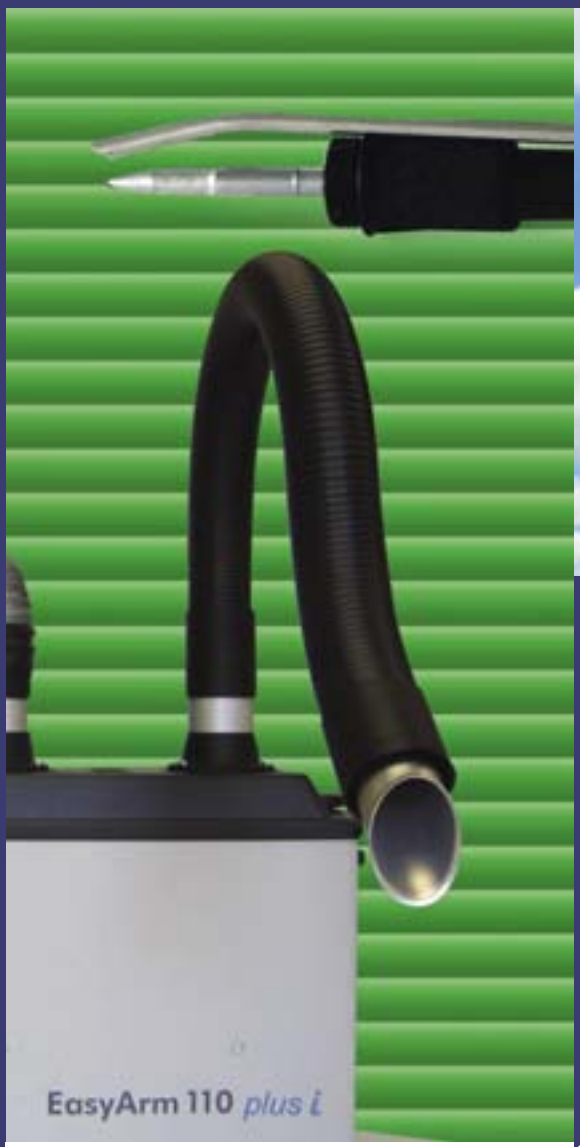
ERSA SMD 8013

Order no.	Tip holder	Equipped with 212... ERSADUR soldering tips	Equipped with 422 desoldering tip pairs
0SMD8012	SMD 8012 tip holder, complete	...BDLF, ...CDLF, ...EDLF, ...KDLF	...ED, ...FD1, ...FD2, ...QD1, ...QD3, ...QD4, ...QD2, ...MD
0SMD8013	SMD 8013 tip holder, complete	...BDLF, ...CDLF, ...EDLF, ...MS, ...WD, ...SDLF, ...FDLF, ...GD	...ED, ...FD1, ...FD2, ...FD4, ...FD5, ...FD6, ...QD3, ...QD5, ...MD, ...SD

Flux Cream

A wide range of accessories and consumables, process descriptions on soldering and desoldering are available at: ***www.ersa.com***

CLEAN-AIR Solder Fume Extractions



Health Protection During Soldering

The breathing zone lies very close to the soldering process during manual soldering. Suspended particles and gases in the work area cannot be prevented from entering the respiratory system. Noxious gases conveyed through the circulatory system may, over longer periods of time, cause damage to other organs like the liver and kidneys.

The causal relevance of solder fumes to allergic reactions, asthma attacks and chronic bronchitis is medically established.

It must be kept in mind that safeguarding human resources is crucial for any company's success. Risks not detected in due time usually prove more expensive than their prevention would have been.

From a health standpoint, neither eating, drinking nor smoking should be permitted in areas where soldering occurs.

As long as lead-containing solder is used, there is a risk of lead traces remaining on hands entering the human organism through food or cigarettes. For this reason, hands should always be carefully washed after soldering work.

Solder waste and used solder fume filters are hazardous waste and must not be discarded with household rubbish.

Noxious gases develop during the soldering process due to the use of fluxes. This aspect, together with the fact that condensated flux 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.

ERSA EA 110 *plus i* Solder Fume Extraction

The new **EA 110 *plus i*** filtering device is a compact and efficient system with economical air recirculation. Thanks to the continuously variable suction power, the device 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. The user is promptly notified of a necessary filter change 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 upper part is 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 affords 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.

Table mounting, order no. 3CA06-9001

Application example

Application example

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	460 x 210 x 470 mm	100 W / 100 - 250 V 50 - 60 Hz	140 m^3/h max. / 2,200 Pa	51 dB (A) max.	HEPA activated carbon

Accessories for the 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 EA 110 plus filter unit) with 2 quick couplings

3CA06-9006

Stop valve for extraction arm

3CA06-5001

Metallic nozzle, 50 mm ø

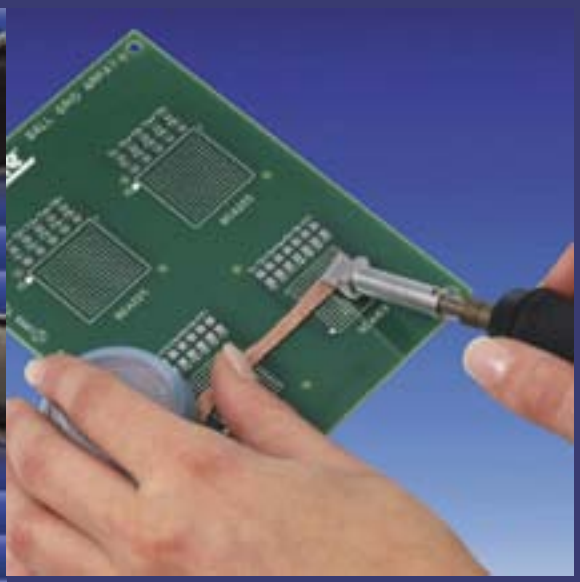
3CA06-5002

Antistatic nozzle, plastic, 190 x 100 mm

3CA06-5004

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

Accessories & Process Material



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.

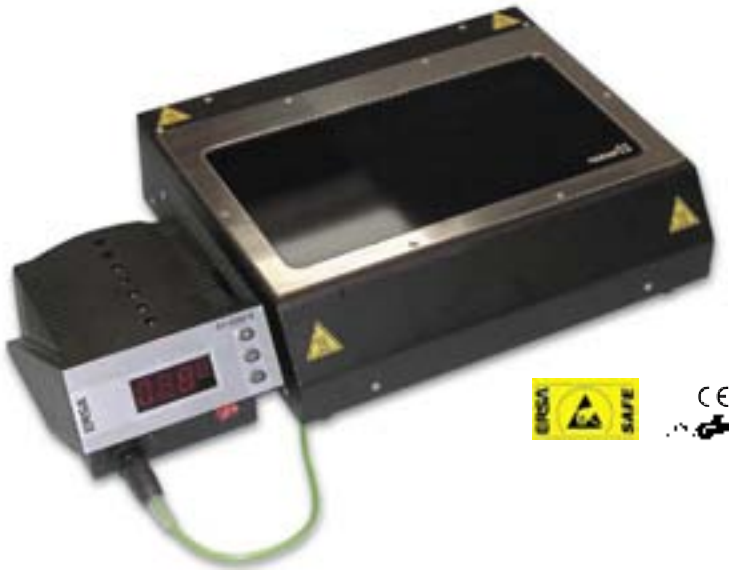
ERSA IRHP 200 Infrared Rework Heating Plate

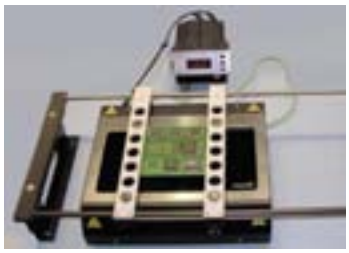
The ERSA IRHP 200 is a compact and ergonomically designed heating plate to preheat all SMD components as well as assemblies and substrates during the hand soldering process. It can also be used to reflow solder one-sided SMD boards and for reballing BGAs.

The heating plate temperature can be adusted continuously from 50 °C to 600 °C.

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 favourable way.





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

IRHP 200

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

Order no.	Description	Heated area	Rating / voltage	Temperature range	Weight
0IRHP200	IRHP 200 infrared rework heating plate with control station 0RA4500D	260 x 135 mm (L x W)	max. 800 W / 230 V~, 50 - 60 Hz	50 °C - 600 °C (at the heating element)	approx. 4 kg

ERSA SVP 100 Vacuum Pipette

The device 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 DTM 50 & DTM 100 Temperature Measuring Devices

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.

DTM 50

temperature measuring device with flexible NiCrNi thermocouple (K-type)

Order no.	Description	Measuring range	Operating temperature	Power supply	Dimensions (mm) without sensor unit	Weight
0DTM050	DTM 50 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
0DTM050P	DTM 50 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
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

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

Possible differences between the rated and actual data due to differences in tips or to slight heating element tolerances in the RESISTRONIC control system can be easily ascertained with the **DTM 50** and **DTM 100** temperature measuring devices and corrected easily and fast on nearly all ERSA soldering stations.

The measurement is practically conducted by cleaning the heated soldering tip with a moist sponge and soaking it in new solder. The soldering tip is then connected to the given temperature sensor and the temperature determined as soon as the display has stabilized.

ERSA Desoldering Devices

VAC 2

Slim antistatic desoldering device with metal housing

VAC 3

Slim antistatic desoldering device with plastic housing

VAC X

Antistatic desoldering device with plastic housing

Soldapullt AS 196

Proven desoldering device with plastic housing and extremely good recoil damping

Order no.	Description	Desoldering tips	Suction capacity
0VAC2	VAC 2 antistatic desoldering device	0VAC22 (2 pcs.)	8.9 cm³
0VAC3	VAC 3 antistatic desoldering device	0VAC32 (2 pcs.)	10 cm³
0VACX	VAC X antistatic desoldering device	0VACX2 (2 pcs.)	11.3 cm³
0AS196	Soldapullt AS 196 antistatic desoldering device	0LS197	34 cm³

The **VAC 2, VAC 3** and **VAC X** desoldering devices are distinguished by their high suction power and low-recoil desoldering. The antistatic design of the devices allows desoldering work on electrostatically endangered assemblies.

The long, slim desoldering tips also allow soldering operations on tightly assembled 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.

ERSA STR 100 Stacking Rack

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 rack 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 desoldering tip series and 802 hot air nozzles

ERSA Tool Holders and Cleaning Sponges

3N194

0A05

0A04

0A17

0A18

0A19

0A41 / 0A42

0A45

0A08MSET

0003B

0004G

0008M

Order no.	Description	for
0A04	Tool holder A 04	Soldering irons from 50 W - 150 W output; Isotyp and 0180PZ soldering irons
0A05	Tool holder A 05	Medium-sized and small soldering irons
0A17	Tool holder A 17	Soldering irons with an output ranging from 200 W - 550 W
0A08MSET	Dry sponge 0008M with container	Dry cleaning of soldering tips (especially for lead-free)
0A18	Tool holder A 18	Soldering irons of the Multitip series; Tip 260 and TC 65 soldering irons
0A19	Tool holder A 19	Soldering irons of the Multitip series
0A39	Tool holder A39	RT 80 soldering iron
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 / 22)
0A44	Tool holder A 44, antistatic	X-Tool desoldering iron (fig. see page 22)
0A45	Universal holder A 45	832 soldering tip series (C8 - C18, MD, QD, ZD models), solder wire feed unit and solder fume extraction
0A48	Tool holder A 48, antistatic	i-Tool soldering 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 and 422 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
0007G	Viscose sponge, 70 x 46 mm	Tool holder 0A19
0008M	Dry sponge 0008M	0A08MSET

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 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.

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
4LOT230GAG3.8CU0.7	Sn95.5Ag3.8Cu0.7	217 °C	Bars of approx. 230 g
4LOT230G3.5AG	Sn96.5Ag3.5	221 °C	Bars of approx. 230 g
4LOT400GCUNIGE	Sn99.3CuNiGe (based on Sn99.3Cu0.7)	227 °C	Bars of approx. 400 g
4LOT230G63 B	Sn63Pb37	183 °C	Bars of approx. 230 g
4LOT230G64 B	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

Solder alloy according to DIN EN 29453	Flux according to DIN EN ... ... % flux share	Melting temperature (°C)	Quantities (g)	Diameters (mm) 0.35	0.5	0.6	0.7	0.8	1.0	1.5	2.0
Sn96.5Ag3.0Cu0.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL0 3.5 %, halogen-free	217	100 250 500		● 				● ●	●	
Sn99.3CuNiGe (based on Sn99.3Cu0.7)	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL0 3.5 %, halogen-free	227	100 250 500	●	● 		● 		● ●		
Sn99.3Cu0.7	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL0 3,5 %, halogen-free	227	250 500		● 		● 		● 	● 	
Sn96.5Ag3.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL0 3,5 %, halogen-free	221	100 250 500	●	● 		● 		● ●		
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	100 250 500 1000			● ● ●		● ●	● ● ● ●	●	
Sn60Pb40	29454/1.2.3 1.4 %	183 - 190	100 500	●	● 		● 		● 		
Sn60Pb38Cu2	29454/1.1.2 2.2 %	183 - 190	100 250 500 1000					● ●	● ● ● ●	● 	● ●
Sn63Pb37	29454/1.1.3 2,2 %, halogen-free	183	1000						●		

subject to changes

ATTENTION: According to the EU Directive as of July 1, 2006 lead may no longer be used in electronic assemblies (see page 4).

ERSA Desoldering Wicks

Desoldering wicks

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

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.

ERSA Flux and Flux Remover

Flux cream

ERSA No-Clean flux creams available in different quantities

Flux-Pen

Flux Remover

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); 3)
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)

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.

1) = Xi Irritating

2) = F+ Highly inflammable

3) = N Environmentally hazardous

ERSA Tip-Reactivator

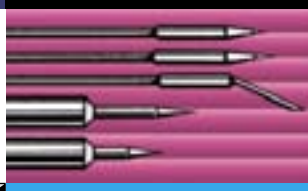
Tip-Reactivator

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

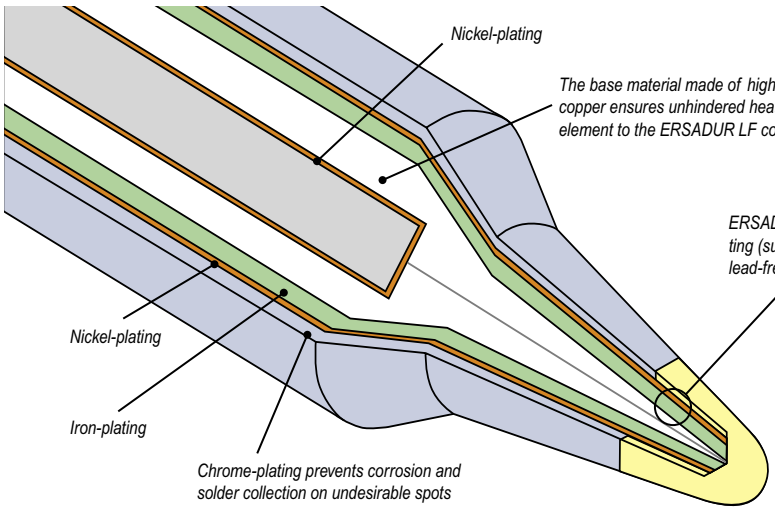
The ERSA **Tip-Reactivator** allows the regeneration of oxidized soldering tips. It is environmentally safe, free of lead and halogens and functions even at low soldering tip temperatures. For this purpose the heated soldering tip is wiped on the surface of the regeneration compound.

Soldering and Desoldering Tips

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.



ERSADUR Long-Life Soldering Tips



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

Conventional soldering tips can also be used for lead-free solders. Since lead-free soldering requires higher process temperatures, and due to the fact that lead-free solder is more aggressive to the soldering tip, the tip's service life is shorter. **ERSADUR LF soldering tips** have an increased layer of iron, which increases tip life. Consequently they are especially suitable for lead-free soldering.

Special Care for Soldering Tips

ERSA Dry Sponge

The ERSA Dry Sponge is included as a standard alternative to the wet sponge and can be beneficial especially for lead-free.

Hand soldering operators are happy when their soldering tips last a long time and continue to solder well. Soldering tips that do not allow the solder to melt rapidly due to excess oxidation clearly disrupt productivity! Special care of the soldering tip should be taken in order to solder efficiently.

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 "stand-by" 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 stand-by 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: a. clean on damp sponge, b. clean with wire brush, c. using a Tip reactivator chemical, and d. retinning using proper flux cored solder wire.

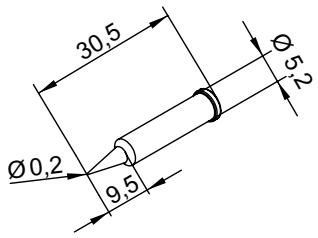
Dry cleaning of soldering tips offers substantial advantages. The soldering tips are not cooled abruptly and contaminated tips resulting from dirty sponges are avoided. Due to the slightly abrasive properties of the special wire mesh, passive layers that accumulated on the tip can easily be removed.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

For:

- ***i*-CON**
- ***i*-CON2**
  with *i*-Tool soldering iron

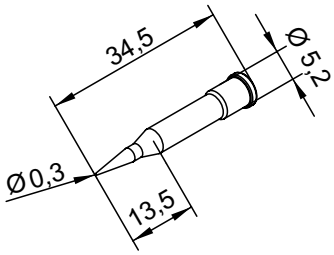
102 ERSADUR Long-Life Soldering Tip Series

0102PDLF02



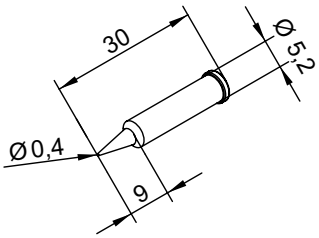
pencil point, 0.2 mm ø

0102PDLF03L



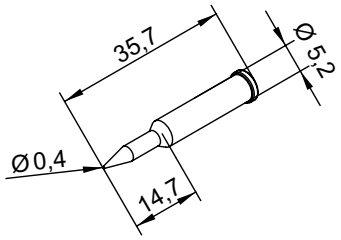
pencil point, extended 0.3 mm ø

0102PDLF04



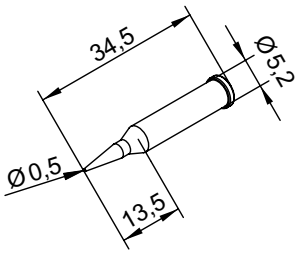
pencil point, 0.4 mm ø

0102PDLF04L



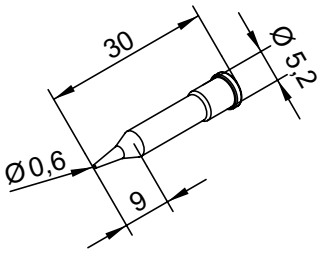
pencil point, extended, 0.4 mm ø

0102PDLF05L



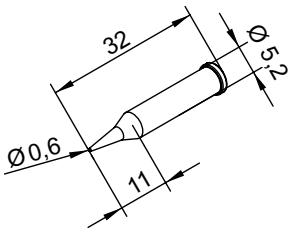
pencil point, extended 0.5 mm ø

0102PDLF06



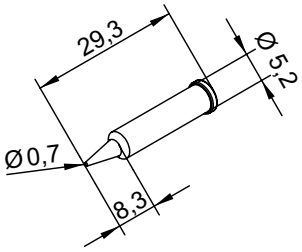
pencil point, 0.6 mm ø

0102PDLF06L



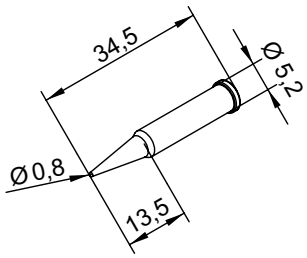
pencil point, extended, 0.6 mm ø

0102PDLF07



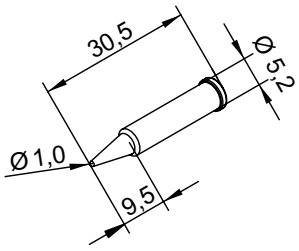
pencil point, 0.7 mm ø

0102PDLF08L



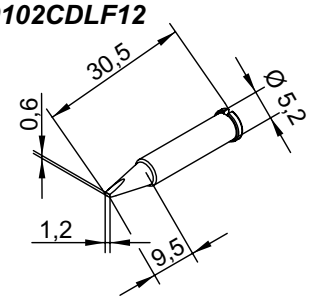
pencil point, extended, 0.8 mm ø

0102PDLF10



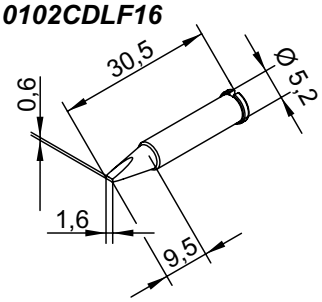
pencil point, 1.0 mm ø

0102CDLF12



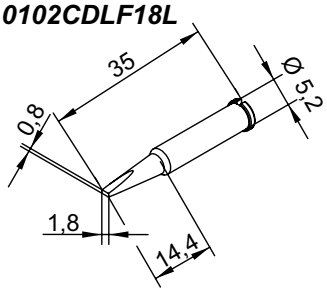
chisel-shaped, 1.2 mm

0102CDLF16



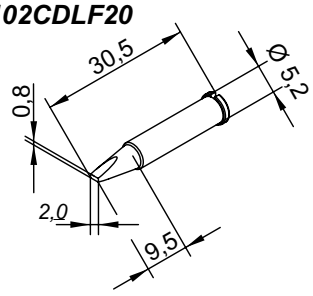
chisel-shaped, 1.6 mm

0102CDLF18L



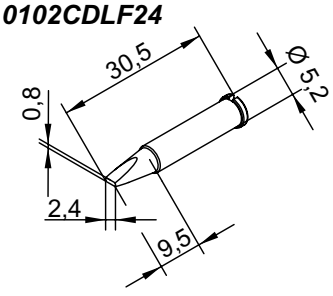
chisel-shaped, extended, 1.8 mm

0102CDLF20

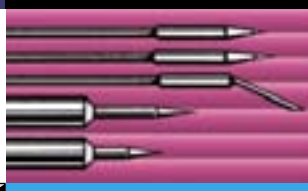


chisel-shaped, 2.0 mm

0102CDLF24



chisel-shaped, 2.4 mm



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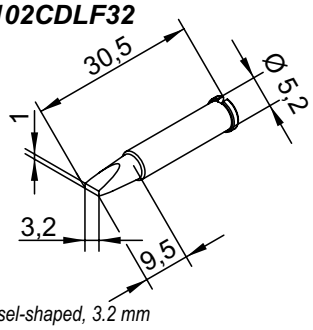
For:

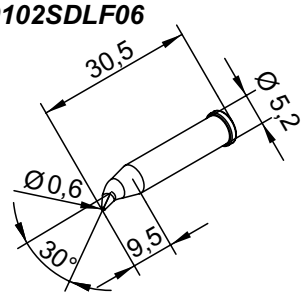
- ***i*-CON**
- ***i*-CON2**
  with *i*-Tool soldering iron

0102CDLF32



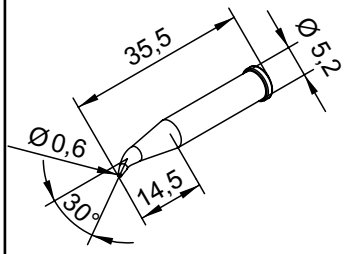
chisel-shaped, 3.2 mm

0102SDLF06



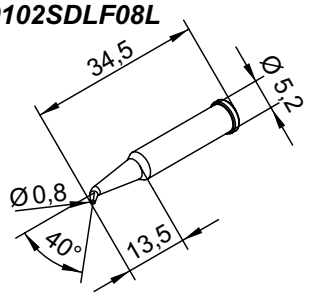
pencil point, bent, 0.6 mm ø

0102SDLF06L



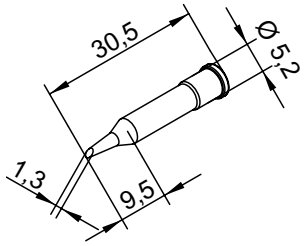
pencil point, bent, extended, 0.6 mm ø

0102SDLF08L



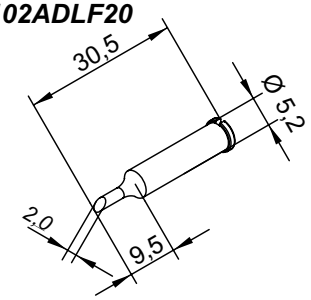
pencil point, bent, extended, 0.8 mm ø

0102ADLF13
0102ADLF15



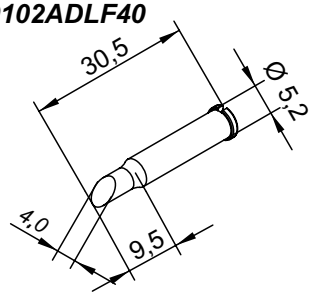
angled face, 1.3 mm ø / angled face, 1.5 mm ø

0102ADLF20



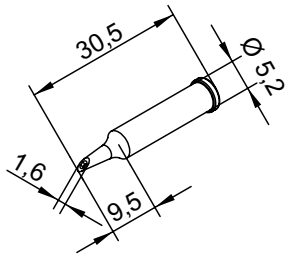
angled face, 2.0 mm ø

0102ADLF40



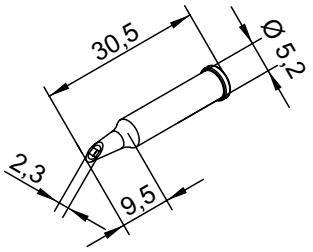
angled face, 4.0 mm ø

0102WDLF16



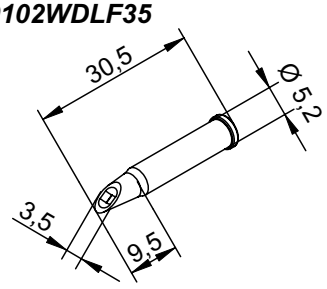
PowerWell with concave portion, 1.6 mm ø

0102WDLF23



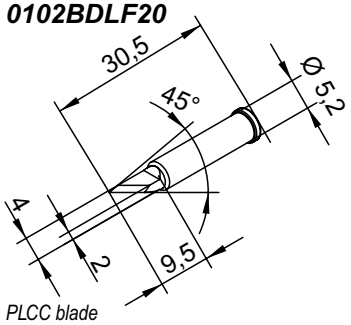
PowerWell with concave portion, 2.3 mm ø

0102WDLF35



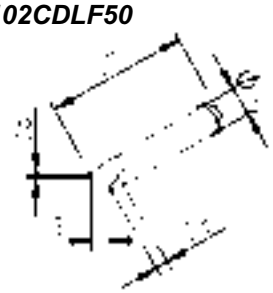
PowerWell with concave portion, 3.5 mm ø

0102BDLF20



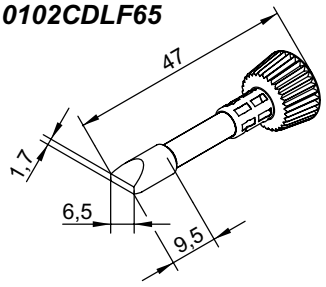
PLCC blade

0102CDLF50



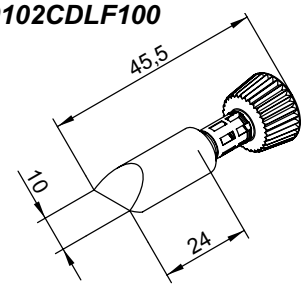
chisel-shaped, 5.0 mm ø

0102CDLF65



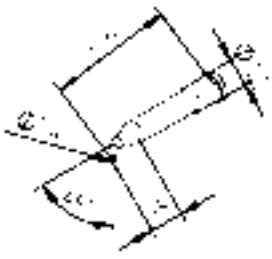
chisel-shaped, 6.5 mm ø

0102CDLF100



chisel-shaped, 10.0 mm ø

0102SDLF04

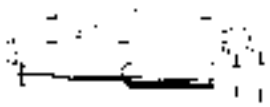
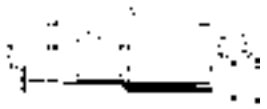
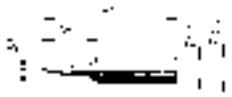
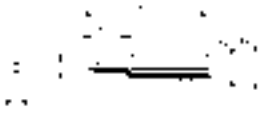
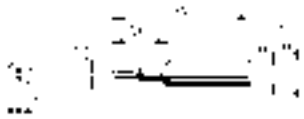
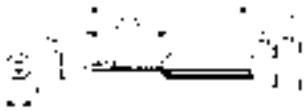
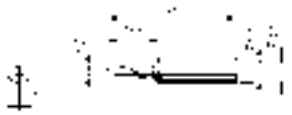
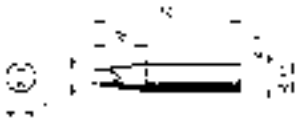
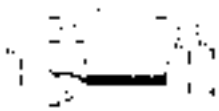
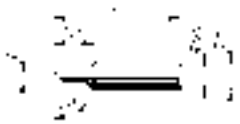
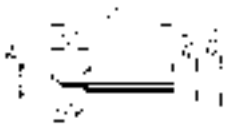
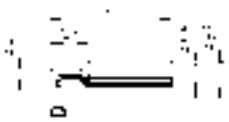
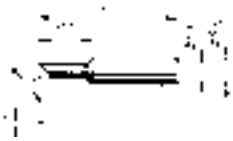
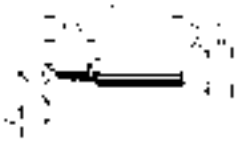
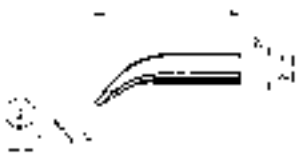
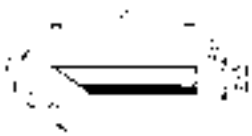
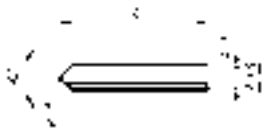


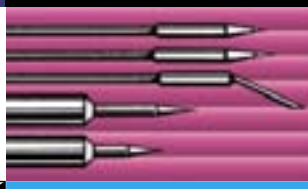
pencil point, bent, 0.4 mm ø

For:

- **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

832 ERSADUR Long-Life Soldering Tip Series

0832 UD/UDLF  *pencil point, extended 0.4 mm ø*	***0832 SD/SDLF***  *pencil point, extended, 0.8 mm ø*	***0832 BD/BDLF***  *pencil point, 1.0 mm ø*
0832 YD/YDLF  *chisel-shaped, 1.6 mm*	***0832 CD/CDLF***  *chisel-shaped, 2,2 mm*	***0832 KD/KDLF***  *chisel-shaped, extended, 2.2 mm*
0832 ED/EDLF  *chisel-shaped, 3.2 mm*	***0832 VD/VDLF***  *chisel-shaped, 5.0 mm*	***0832FDLF***  *angled face, 2.0 mm ø*
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, bent, 2.5 mm*	***0832RD*** *chisel-shaped, bent, 5.0 mm*	***0832GDLF*** *angled face, 14 mm, 35°*
0832LDLF  *angled face, 17 mm, 35°*	***0832MDLF***  *angled face on both sides, 8 mm*	



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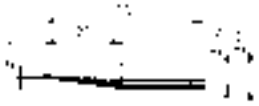
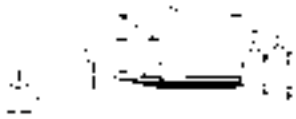
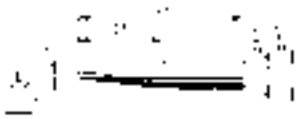
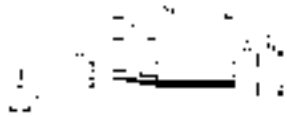
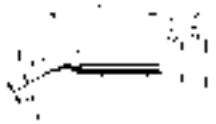
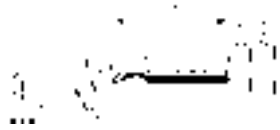
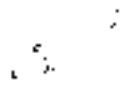
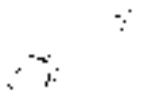
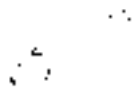
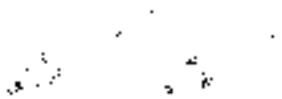
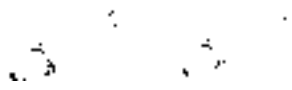
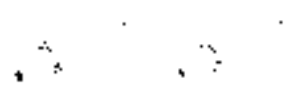
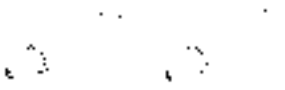
0842UD / UDLF *pencil point, extenced, 0.4 mm ø*	***0842SD / SDLF***  *pencil point, extended, 0.8 mm ø*	***0842BD / BDLF*** *pencil point, 1.0 mm ø*
0842YD / YDLF *chisel-shaped, 1.6 mm*	***0842CD / CDLF***  *chisel-shaped, 2.2 mm*	***0842KD / KDLF***  *chisel-shaped, extended, 2.2 mm*
0842ED / EDLF  *chisel-shaped, 3.2 mm*	***0842ID***  *pencil point, bent, 0.4 mm ø*	***0842JD***  *chisel-shaped, bent, 2.2 mm*

For:

- **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

722 Desoldering Tip Series, ERSADUR / nickel-plated

0722ED1023  ***ERSADUR,*** *ID 1.0 mm, OD 2.3 mm*	***0722EN0615S***  *nickel-plated, ID 0.6 mm , OD 1.5 mm*	***0722EN1018S***  *nickel-plated, ID 1.0 mm , OD 1.8 mm*
0722ED0821 ***ERSADUR,*** *ID 0.8 mm, OD 2.1 mm*  ***0722ED1529*** ***ERSADUR,*** *ID 1.5 mm, OD 2.9 mm*	***0722EN0818*** *nickel-plated, ID 0.8 mm, OD 1.8 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*  ***0722ED1226*** ***ERSADUR,*** *ID 1.2 mm, OD 2.6 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*

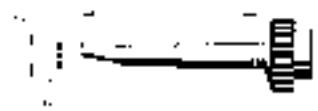
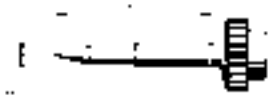
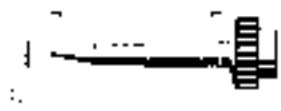
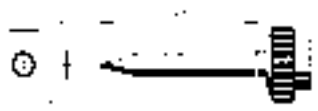
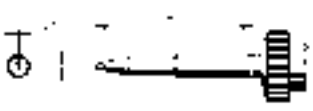
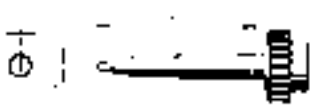
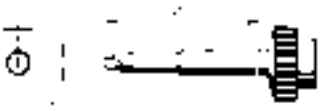
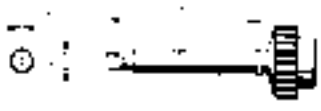
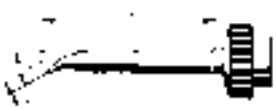
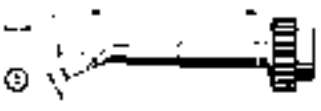
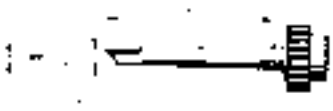
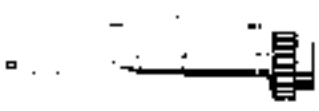
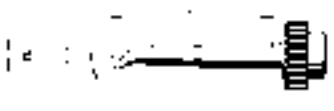
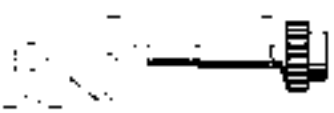
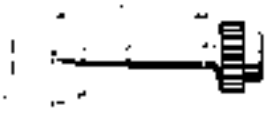
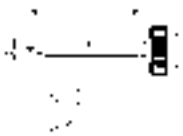
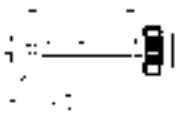
For:

- **DIGITAL 2000 A**
  with X-Tool desoldering iron
- **XTOOLKIT1**
- ***i*-CON**
- ***i*-CON2**
  with X-Tool desoldering iron

For:

- **CPS 60.10**
- **DIGITAL 60 A**
- **DIGITAL 2000 A**
  with Tech Tool soldering iron
- **MICRO-CON 60 iA**
  with Tech Tool soldering iron
- ***i*-CON**
- ***i*-CON2**
  with Chip Tool desoldering pincette

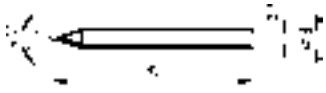
612 ERSADUR Long-Life Soldering Tip Series

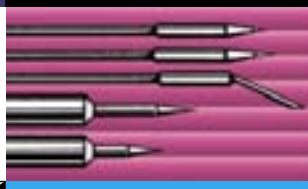
0612SDLF  *pencil point, 0.4 mm ø*	***0612UDLF***  *pencil point, 0.8 mm ø*	***0612BDLF***  *pencil point, 1.0 mm ø*
0612CDLF  *chisel-shaped, 1.0 mm*	***0612ADLF***  *chisel-shaped, 1.6 mm*	***0612KDLF***  *chisel-shaped, 2.4 mm*
0612EDLF  *chisel-shaped, 3.2 mm*	***0612GDLF***  *chisel-shaped, 5.0 mm*	***0612ID***  *pencil point, 4.0 mm ø, bent 30°*
0612JD  *chisel-shaped, 1.6 mm, 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, bent 30°*	***0612ZD***  *WickTip 10.5 x 3.6 mm*	***0612ND***  *3.0 mm, bent 45°*
0612FDLF  *2.0 mm, bent 45°*	***0612WDLF***  *4.0 mm, bent 45°*	

For:

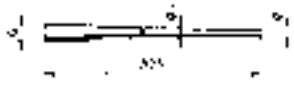
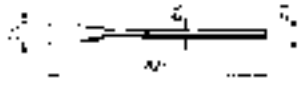
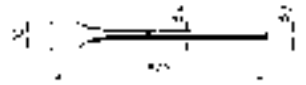
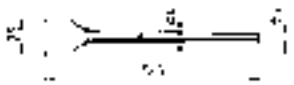
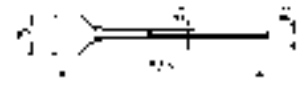
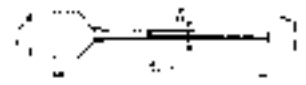
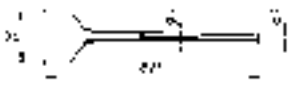
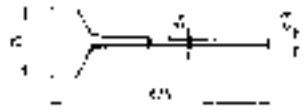
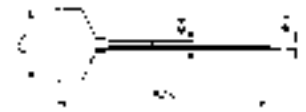
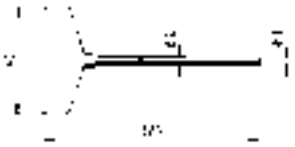
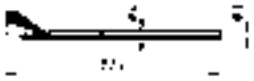
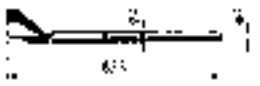
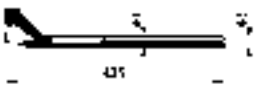
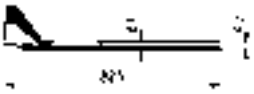
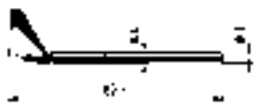
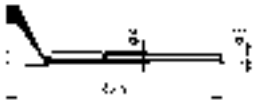
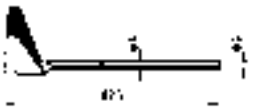
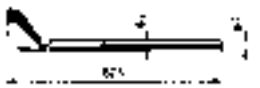
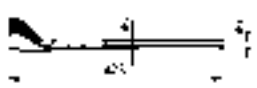
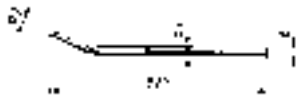
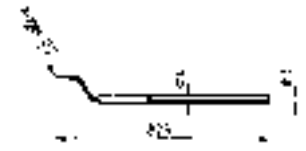
- **Minor S (042 series)**
- **Minityp S (tip 0012BD)**

042 and 012 ERSADUR Long-Life Soldering Tip Series

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



422 ERSADUR Desoldering Tip Series

0422FD10 *4 mm, for e.g. SO 8 GT/14 GT/16GT*	**0422ED**  *6 mm, for e.g. SOIC 8*	**0422FD3**  *7,5 mm, for e.g. SOIC 12 / SOT 23*
0422FD1  *10 mm, for e.g. SOIC 16*	**0422FD4**  *12.5 mm, for e.g. SOIC 20*	**0422FD2**  *15 mm, for e.g. SOIC 24*
0422FD5  *17.5 mm, for e.g. SOIC 28*	**0422FD6**  *20 mm, for e.g. SOIC 32*	**0422FD7**  *25 mm, for e.g. SOIC 40*
0422FD8  *27.5 mm, for components of 27.5 mm side length*	**0422FD9**  *40 mm, for components of 40 mm side length*	**0422QD5**  *90°, length 10 mm, for e.g. PLCC 20*
0422QD1  *90°, length 12.5 mm, for e.g. PLCC 28*	**0422QD6**  *90°, length 15 mm, for e.g. QFP, TQFP and TQFP 0T25*	**0422QD3**  *90°, length 17.5 mm, for e.g. PLCC 44*
0422QD4  *90°, length 20 mm, for e.g. PLCC 52*	**0422QD2**  *90°, length 25 mm, for e.g. PLCC 68*	**0422QD7**  *90°, length 30 mm, for e.g. PLCC 84*
0422RD1  *length 22.5 x 16.5 mm, for e.g. QFP 100*	**0422RD2**  *length 15 x 12.5 mm, for e.g. PLCC 32*	**0422MD**  *ellipse, for MELF and MINIMELF*
0422SD*  *for MICROMELF*	***Please note:** The desoldering 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 pincette and desoldering pincette 40 on request.	

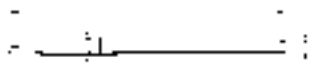
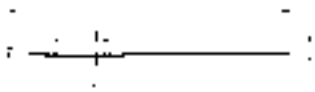
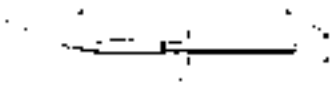
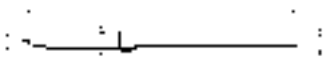
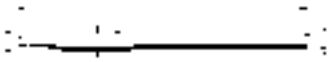
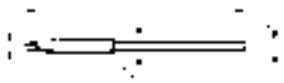
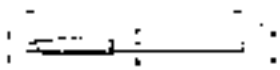
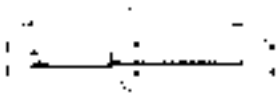
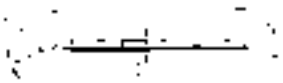
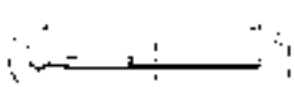
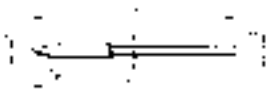
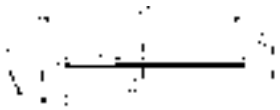
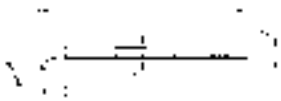
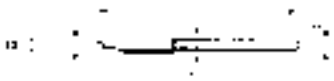
For:

- **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**
- ***i*-CON2**
  with Chip Tool desoldering pincette

For:

- **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

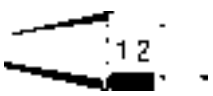
212 ERSADUR Long-Life Soldering Tip Series

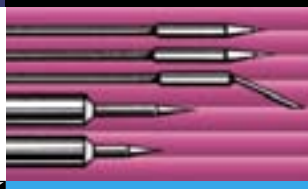
0212SDLF  *pencil point, 0.2 mm ø*	***0212BDLF***  *pencil point, 0.4 mm ø*	***0212ADLF***  *pencil point, 1.0 mm ø, reinforced*
0212CDLF  *chisel-shaped, 1.0 mm*	***0212EDLF*** *chisel-shaped, 1.8 mm*	***0212KDLF***  *chisel-shaped, extended, 1,8 mm*
0212FDLF  *chisel-shaped, reinforced, 2.2 mm*	***0212GD***  *chisel-shaped, reinforced, 3.2 mm*	***0212VD***  *chisel-shaped, reinforced, 5.0 mm*
0212RD  *pencil point, bent, 0.2 mm*	***0212ID***  *bent, reinforced, 0.6 mm*	***0212ND***  *angled face, reinforced, 2.0 mm*
0212WD  *MiniMicroWell, 1.6 mm*	***0212MS***  *MicroWell, 2.3 mm*	***0212OD***  *SolderWell, 3.0 mm*

For:

- **ELS 8000 / M / D**
- **ELS 8100**

662 Desoldering Tip Series

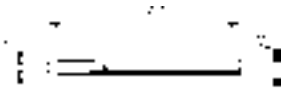
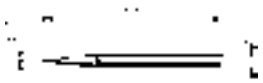
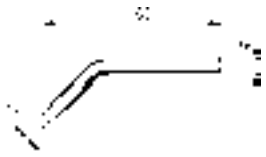
0662AE  *ERSADUR, 1.2 mm ø (solder joints w. medium heat requiremets)*	***0662BE*** *ERSADUR, 1.0 mm ø (solder joints w. medium heat requiremets)*	***0662CE*** *ERSADUR, 0.8 mm ø (solder joints w. medium heat requiremets)*



032 ERSADUR Long-Life Soldering Tip Series

For:

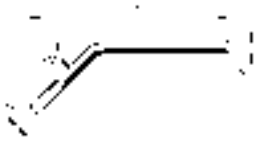
- **ERSA 30 S**

0032KD	0032BD	0032JD
		
ERSADUR, chisel-shaped, 3.1 mm	*ERSADUR, pencil point, 1,1 mm ø*	*ERSADUR, chisel-shaped, bent, 3.1 mm*

052 ERSADUR Long-Life Soldering Tip Series

For:

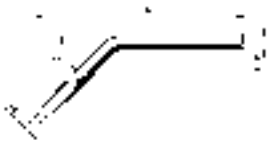
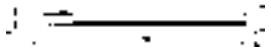
- **ERSA 50 S**

0052JD		
		
ERSADUR, chisel-shaped, bent, 3.1 mm		

082 ERSADUR Long-Life Soldering Tip Series

For:

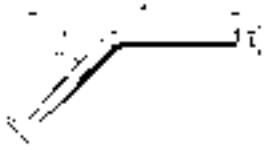
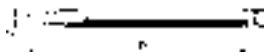
- **ERSA 80 S**

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

152 ERSADUR Long-Life Soldering Tip Series

For:

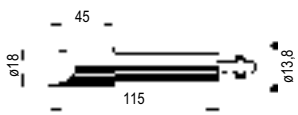
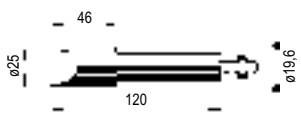
- **ERSA 150 S**

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

202, 302 and 552 Soldering Tip Series, ERSADUR / nickel-plated

For:

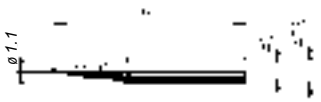
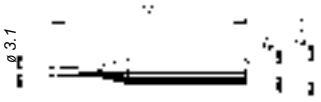
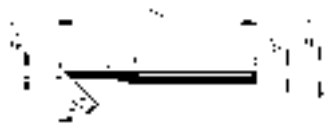
- **ERSA 200 (202 series)**
- **ERSA 300 (302 series)**
- **ERSA 550 (552 series)**

0202MZ / 0202MD	0302MZ / 0302 MD	0552MZ / 0552 MD
		
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*

For:

- **Multitip 25**

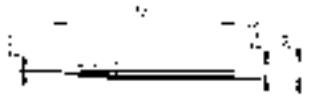
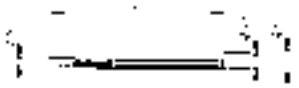
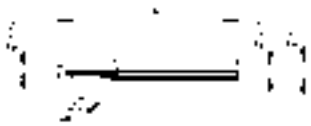
172 ERSADUR Long-Life Soldering Tip Series

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

For:

- **Multitip 15**
- **Tip 260**

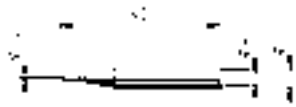
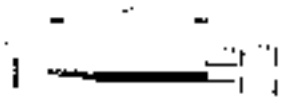
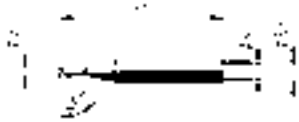
162 ERSADUR Long-Life Soldering Tip Series

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

For:

- **Multitip 08**

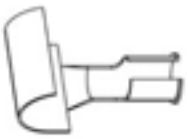
132 ERSADUR Long-Life Soldering Tip Series

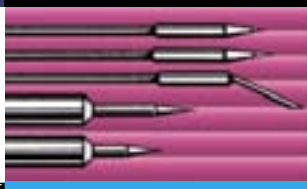
0132BD	0132KD	0132LD
		
ERSADUR, pencil point, 1.0 mm ø	*ERSADUR, chisel-shaped, 1.6 mm*	*ERSADUR, angled face 45°, 2.6 mm*

For:

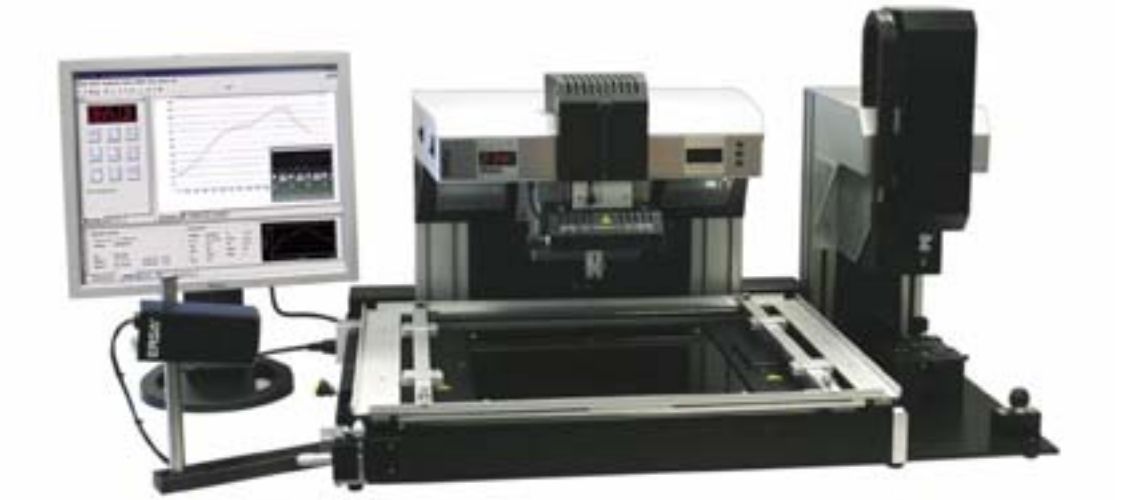
- **Independent 75 gas soldering iron (G 072 series)**
- **Independent 130 gas soldering iron (G 132 series)**

G 072 and G 132 Soldering Tip Series

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**
angled face, 4,8 mm	*flame nozzle*	*hot gas nozzle*
0G072RE / 0G132RE	**0G072MN / 0G132MN**	
		
deflector for hot gas nozzle G 072 HE / G 132 HE to shrink heat shrinkable sleeves	*hot blade*	



ERSA IR Rework Systems



ERSA IR / PL 650 A Rework System

The new ERSA IR / PL 650 A and IR 550 A *plus* rework systems are the latest additions to ERSA's world renowned and tremendously successful IR rework platform.

This third generation IR rework systems top their award-winning and patented predecessors by offering three new technological innovations: ***DynamicIR, Multi-True-Closed-Loop-Control*** und ***IntelligentIRS.*** Benefitting from an installed base worldwide of more than 5,000 IR rework systems, ERSA's newest system was specifically designed to handle the most difficult rework applications on heavy-mass PCBs and large-format SMT assemblies (18 x 20 inch / 460 x 560 mm) in a lead-free environment. Ease of use, rapid rework cycle times, widest variety of rework applications and lowest operational costs - these are the well-known user advantages of ERSA's IR rework systems.

Complete solutions for rework made by ERSA.
Ask for our free catalogue.

ERSA Inspection Systems

ERSASCOPE 2 plus

ERSASCOPE Visual Inspection Systems

In 1999, the patented ERSASCOPE was the first visual inspection system which finally made destruction-free inspection of soldering joints beneath a BGA a reality. Under the motto ***"To See is to Survive"*** this revolutionary technology not only won all of the industry's most significant innovation awards around the globe, but also allowed previously undetected problems to be discovered, analyzed and corrected at nearly 2,000 of the world's leading manufacturers.

Lead-free implementation will require manufacturers to seriously re-examine their QA procedures, because getting the lead-free process under control in the initial stages will simply be more difficult.

The bottom line is that higher process temperatures and smaller process windows associated with lead-free will require a much more thorough first article inspection. Manual optical inspection systems will require higher magnification and a flexible viewing angle from 0° to 90°. ERSASCOPE inspection is no longer an option, but rather a lead-free requirement!

ERSASCOPE inspection of components

Complete solutions for visual solder joint inspection made by ERSA.
Ask for our free catalogue.

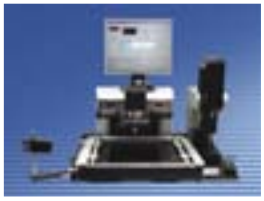
The Complete ERSA Line.
Professional Solutions for State-of-the-Art Electronics Production

Selective soldering

Visual inspection

Wave soldering

SMT/BGA Rework



Reflow soldering

Process software

Lead-free soldering, inspection or rework: ERSA solutions for a safe process.

Ask for the latest issue of the ERSA multimedia Demo DVD!

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