

# Catalog

Soldering Irons, Soldering / Desoldering Stations, Solder Fume Extractions, Hybrid Rework, Workbench Accessories

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



# Our Vision

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

# **Our Mission**

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





N.100Y.COM.TW

### **Product Range**

### **Soldering Irons & Sets**



1. "		
page	Workshop & Hammer Sold. Irons	page
6	ERSA 200 - ERSA 550	7
rons	High-Speed & Power Soldering Iro	ns
6	Multi-Sprint, Multi-TC	8
6	Gas Soldering Irons	
	Independent 75 / 130	9
7	ERSA 185 PZ	28
page		
	6 6 6 7	rons 6 ERSA 200 - ERSA 550 High-Speed & Power Soldering Iro 6 Multi-Sprint, Multi-TC 6 Gas Soldering Irons Independent 75 / 130 7 ERSA 185 PZ

### **Solder Baths**



Solder Baths	page
Static solder baths	00 11
RA 4500 D temperature regulator	11 CONTRACTOR
Temperature sensors	1011

WWW.100X.COM.TV WWW.100Y.COM.TW



Soldering Stations	page	Hybrid Rework System	page
RDS 80	13	HR 100 A	22-23
ANALOG 60	14	IRHP 100 A	23
		IRSoft rework software	23

### **Antistatic Soldering & Desoldering Stations**



Antistatic Soldering Stations	page		page
ANALOG 60 A	14	DIGITAL 2000 A	20
		SMD 8014	21
SMT & Multifunctional Soldering	ng Stations		
i-CON nano	15/16	<b>Antistatic Desoldering Stations</b>	
i-CON1/2	15/17-18	DIGITAL 2000 A	21
i-CON1 C/2 C	15/17/19	i-CON2/2 C	18-19
Extractions for the Workbench	4		
EASY ARM EXTRACTION EA 5	55 <i>i</i> 25		
EAST ANN EXTRACTION EAST	0.1 20		

### "CLEAN-AIR"-**Solder Fume Extractions**



**Extractions for the Workbench** page EASY ARM EXTRACTION EA 55 i 25 EASY ARM EXTRACTION EA 110 plus i 26 Accessories and spare parts for WWW.100Y.COM. CLEAN-AIR WWW.

### **Accessories & Process Material**



CLEAN-AIR COM			
	age	Process Material	page
IRHP 200/IRHP 100 A heating plate	28	Solder wires, solder bars	32
DTM temperature measurement device	29	Fluxes, desoldering wicks	33
Vacuum pipette	29	Flux Pen, Flux Remover & Tip Read	ctivator 33
Desoldering tools	29		
Stacking racks, solder wire dispenser	30		
Tip exchanger	30		

### **Soldering & Desoldering Tips**



Tip exchanger	30		
Tool holders and cleaning sponges	31		
Soldering & Desoldering Tips	page	ON1.	age
102 series	36/37	032, 052, 082, 152, 202, 302, 552 series	43
832 series	38	172, 162, 132, G 072, G 132 series	44
842, 722 series	39	References	
612, 042, 012 series	40	ERSADUR tip structure	35
422, 452 series	41	Soldering tip care	35
212, 622 series	42	Rework and inspection solutions	45



# **Alpha-Numerical Product Index**

Order No.:	page:	Order No.:	page:	Order No.:	page:
<b>00</b> 03B - 0008M	31	0960ED	008	0IRHR100A-HP	23
0012 tip	40	<b>0A</b> 04 - 0A50	100x.	0IRHR-ST050	22
0015BDH	6 C	0A08MSET	31	<b>0L</b> S197	29
0032 tips	43	0ANA60	31 14	<b>UL</b> 5197	29
0042 tips	40	0ANA60A	15	<b>0R</b> A4500D	11 / 28
0045BDG	6	0AS196	29	0RDS80	13
0055JD	<1 CO7		TWO Z	<b>0S</b> H03	
0052 tips	43	<b>0C</b> LEAN-AIR	25 / 26		31
0085JD	1001.07	0CU103A	18 / 21	0SMD8014	21
0082 tips	43	0D:000.00	TWW.	0SR100	30
<b>01</b> 00CDJ	N.100 3.	<b>0D</b> IG20A27	20	0SR101	30
0102 tips	36 / 37	0DIG20A45	20	0STR100	30
0120CDK	16	0DIG20A64	20	0STR200	30
0132 tips	44	0DIG20A84	20	0SVP100	29
0155JD	7	0DIG20AXT	21	0SVP12K	29
		0DTM100	29	0SVP13A	29
0152 tips	43 44	0DTM100P	29	<b>0T</b> 02 - 0T56	11
0162 tips		<b>0F</b> <sub>007</sub>	11	0TR01/SB	33
0172 tips	44		11		55
0185PZ	28	0F008	11	<b>OV</b> ACX	29
0182PZ004	28	0FMIF2005-002	33	0VACX2	29
<b>02</b> 00MZ / MD	7	0FMIF6000-001	33	0VP020	22 / 23
0202MZ / MD	43	0FMIF8001-001	33	OW/same is the first	
0212 tips	42	0FMKANC32-005	33	<b>0W</b> ICKNC desoldering wicks	33
0260BD	6	0FMKANC32-200	33	3CLEAN-AIR	25 - 26
0270BDJ	20	0FMPEN 0FR200	33		
	20	0FR200 0FR202	33 33	<b>3</b> IRHR100A-01	22 / 23
<b>03</b> 00MZ / MD	7	0FR203	33	<b>3N</b> <sub>194</sub>	
0302MZ / 0302 MD	43		1.1		31
0330KD	6	<b>0G</b> 072 tips	44	3ZT00164	30
0330KD0028	6	0G07400041	9	4FMJF6000-PEN	33
0340KD	6	0G07400141	9	4FMJF8001-PEN	33
0400	W	0G132 tips	44	4FMJF8300-005	33
<b>04</b> 22 tips	41	0G13400041	9	TIN W. I	
0452 tips	41	0G13400141	9	<b>4L</b> OT solder bars/solder wire	32
0450MDJ	18 / 20	0G156	31		
<b>05</b> 50MZ / MD	7	01			
0552MZ / MD	43	<b>0</b> Ic128	16		
	OH TW	0IC1100A	17		
<b>06</b> <sub>12</sub> tips	40	0IC1100A0C	17 / 19		
0640ADJ	20	0IC1200A	16		
0662 tips	42	0IC2000A	17 / 18		
0670CDJ	14	0IC2000A0C	17 / 19		
0680CDJ	15	0IC2000AC	18		
<b>07</b> <sub>20EDJ</sub>	V.CU	0IC2000AXT	18		
	18 / 21	0IR5500-13	22		
0722 tips	39	0IR5500-35	22		
0760CD	CC8	0IR6500-01	22		
<b>08</b> 832 tips	38	0IRHP100A	23		
0840CDJ 0842 tips	20	0IRHP100A-03	28		
0842 tips	39	0IRHP200	28		
0000001	10	0IRHR100A	22		
00	100X	0IRHR100A-14	22 / 23		
IIII	6	0IRHR100A-15	22 / 23		
0920BD		0IRHR100A-16	22 / 23		
0930CD	6	0IRHR100A-24	22 / 23		

WWW.100Y.COM.TW



# **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.



The Minor S (5 W) and Minityp S (6 W) miniature soldering irons with ERSA-DUR 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.

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.

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 heatresistant 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.

# **ERSA Miniature Soldering Irons**

# Minor S 042 soldering tip series see page 40 C € Minityp S 012 soldering tip see page 40 C €

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**



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**



\*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**



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

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

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

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

# **ERSA Workshop Soldering Irons**



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



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.

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

# **ERSA High-Speed Soldering Irons**



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. 15 s	subject to how long the button is pressed	100 g

# **ERSA Power Soldering Iron with Temperature Control**







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, ERSADUR	75 W at 350 °C / 230 V, 50 - 60 Hz	approx. 34 s	250 °C - 450 °C	60 g

system can then immediately react to the heat loss and reheat 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.



Mobile power – wherever you want! Powerful, with comprehensive and top-quality equip-

# **ERSA Independent 75 Gas Soldering Sets**





CE #65

### 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 OG072MN and deflector OG072RE 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

ment, 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 filtered butane gas. Operating time per gas filling is about 60 min. Both sets come with a practical carrying case. Besides the standard "Basic Set" equipment, the "Profi Set" contains two additional soldering tips, a hot blade for cutting highresistance foam, a hot-gas nozzle, a deflector for heatshrinkable sleeves and a flame nozzle for micro-welding.

# **ERSA Independent 130 Gas Soldering Sets**





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

OG132HE, hot blade OG132MN and deflector OG132RE 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 filtered butane gas 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 <sup>2</sup>	360 W / 230 V	430 °C	100 x 30/151 x 55	approx. 1,000 g	2,300 g	2 pcs. 05X100
0T04	Solder bath T 04	400 W / 230 V	410 °C	52 x 52 x 84	approx. 1,900 g	3,900 g	4 pcs. 05X100A1
0T05	Solder bath T 05	500 W / 230 V	440 °C	86 x 68/20 <sup>1</sup> x 90	approx. 2,850 g	3,400 g	2 pcs. 08X800
0T06	Solder bath T 06	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

<sup>&</sup>lt;sup>1</sup> tapered solder pot; <sup>2</sup> 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. 4HMFARBE¹) can be applied to the crucible as a proctection against corrosion and wetting.



1) = Xi Irritating

# **ERSA RA 4500 D Temperature Regulator**



### 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	1001	1.1		
0F008	Long-life temperature sensor, 3 mm ø	AMM. WATCH			

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 guarantees safe lead-free soldering at low temperatures. The high capacity of ERSA soldering stations ensures superior reheating. Even high-mass soldering can be carried out without problems.



# **ERSA RDS 80 Soldering Station**







### **RDS 80**

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

0842CD and tool holder 0A39

Description	Rating / Voltage	Heating time	Temperature range	Weight (with cable)
RDS 80 soldering station complete	80 W / 230 V, 50 - 60 Hz /24 V	10 (000 00)	150 °C - 450 °C	approx 130 g
	CMM-Ing COM-	RDS 80 soldering station complete 80 W / 230 V, 50 - 60 Hz /24 V	RDS 80 soldering station complete 80 W / 230 V, 50 - 60 Hz /24 V	RDS 80 soldering station complete         80 W / 230 V, 50 - 60 Hz /24 V         150 °C - 450 °C



Potential equalization socket



Application example



Superb price-performan

ratio

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 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 do not leave much to be desired.

Besides the arbitrary temperature selection between 150 °C and 450 °C, three fixed temperatures or two fixed temperatures and one 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 k $\Omega$  resistor) allows the soldering tip to be equalized with the workplace potential.

The RT 80 soldering iron has a sprayed-on, flexible PVC connecting cable; for changing the tips we recommend tip changing tool 3ZT00164 (see page 30).



# **ERSA ANALOG 60 & 60 A 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 RESIS-TRONIC 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, highimpedance allows potential equalization between the soldering tip and the workplace.

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

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

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

The ANALOG 60 A soldering station is especially suitable for producing small and medium-sized solder joints. For tip changing we recommend the tip exchanger 3ZT00164 with an additional flat nose pliers and side cutter (see page 30).



vith Ergo Too	ol soldering iron, ERSA RESISTRONIC control	system			
332 and 842	soldering tip series see page 38 / 39	WW.100			
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	00.	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				
0ANA60A	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 soldering tip 0832CDLF and tool holder 0A42	60 W (at 350 °C)	approx. 60 s (280 °C)		60 g



# ERSA i-CON: Innovative Lead-Free Hand Soldering

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

Mission accomplished: ERSA's 150 W *i*-Tool clearly exceeds the market's expectations for a high-powered, micro soldering iron with low-cost tips. The *i*-Tool "Silver Bullet" heating element represents the most significant heating element design accomplishment in ERSA's over 80 year history.

With its rapid recovery and ultra low weight *i*-Tool (approx. 30 gr.), the extensive *i*-Tip soldering tip range, as well as the Process Window Alarm, Energy Levels and Motion

Sensor for Auto-Sleep functions, *i*-CON users worldwide are benefiting from the highest level of process control ever seen in the industry.

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

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



Wide range of soldering tips, series 102

The latest addition to the *i*-CON family is the *i*-CON nano. This station satisfies all needs of today's industrial manufacturing requirements combined with lowest space requirement. It is predestined for the continuous operation in electronic production as well as for special applications in laboratories and development.

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

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

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

### Power level settings:

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

# Process window and alarm:

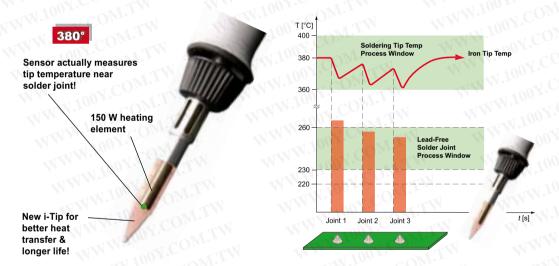
Signals the operator if the temperature leaves the pre-set process window.

### Automatic stand-by:

Recognizes when the iron is not being used and automatically reduces the temperature to a stand-by temperature after expiration of a pre-determined stand-by time.

### i-Tool calibration:

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



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

i-CON I for Solder & Auxillary	ing Tools	-		·				山
		<i>i-</i> Tool nano	<i>i-</i> Tool	Chip-Tool	X-Tool	IR heating plate	EasyArm 110 i	EasyArm 55 i
i-CON nano	1	•WW	N.100X	$CO_{M,T}^{M,T}$	N	WWW.10	ON.COM	CLM
i-CON 1	•	W	M.N.•100	V.COM		MMM	100X.CO	M.TW
i-CON 2			M.M.To.	OX.CON	1.TV	WWW	W.100Y.C	OM.TW
i-CON 1C	5		M.IM.	100X.Co	MITW	• 111	AN-100 x	•
i-CON 2C			MANA	N.100 V.C	CONS.TW	•	•	•



The latest model of the i-CON product family, the i-CON nano, satisfies all needs of today's industrial manufacturing requirements combined with lowest space requirement. It is predestined for the continuous operation in the electronic production as well as for special applications in laboratories and development.

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

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

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







Micro SD card with SD card and USB adapter

*i*-CON nano software download: **www.ersa.com/nano** 

# ERSA i-CON nano Soldering Station



with i-Tool nano soldering iron

102 soldering tip series see page 36 / 37

Order no.	Description	Rating/ Voltage	Heating time	Temperature range	Weight (w/o cable )
0IC1200A	i-CON nano soldering station complete	max. 80 W / 230 V / 50 Hz,	1, 21,10	150 °C - 450 °C	. T
Y.CON	with i-Tool nano soldering iron 0120CDK, with soldering tip 0102CDLF16 and holder 0A50 with dry sponge 0008M	max. 80 W (350 °C)	approx. 9 s (350 °C)	ov.cop	approx. 30 g
0IC128	Micro SD card with <i>i</i> -CON nano software and card reader	N.COM.	WWW.	TOO Y.CO	M. TV

### Small, strong & intelligent: the ERSA i-CON nano packs a punch!

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

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

### Features and Options:

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











# ERSA i-CON1 and i-CON2 / C Soldering Stations



Order no.	Description	Rating/ Voltage	Heating time	Temperature range	Weight (w/o cable )
0IC1100A	<i>i</i> -CON1 electronic station complete with <i>i</i> -Tool soldering iron - 0100CDJ, soldering tip	80 W / 230 V / 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
	0102CDLF16, holder 0A50 and dry sponge 0008M	N V 100Y	арргол. 3 3 (000 °С)		арргох. оо у
0IC2000A	i-CON2 electronic station complete with i-Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W / 230 V / 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
0IC2000AIT	i-CON2 electronic station complete with 2 i-Tool soldering irons - 0100CDJ with soldering tip 0102CDLF16, 2 holders 0A50 and dry sponge 0008M	80 W / 230 V / 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
0IC1100A0C	¿CON1 C electronic station with D-Sub connector complete with ¿Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W / 230 V / 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g
0IC2000A0C	i-CON2 C electronic station with D-Sub connector complete with i-Tool soldering iron - 0100CDJ, soldering tip 0102CDLF16, holder 0A50 and dry sponge 0008M	80 W / 230 V / 50 Hz, max. 150 W	approx. 9 s (350 °C)	150 °C - 450 °C	approx. 30 g



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.

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

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

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

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



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



Further information is also available online at:

www.ersa.com



# 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 valueadded 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 100 A/ 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.





Chip Tool application

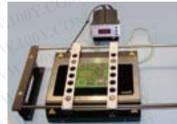
### i-CON2

with i-Tool soldering iron with innovative heating technology and Chip Tool; order no. 0IC2000AC

102 soldering tip series see page 36 / 37, 452/422 desoldering tip series see page 41



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



IRHP 200 (optional item)
Infrared rework heating plate see page 28





with i-Tool soldering iron with innovative heating technology and X-Tool; order no. 0lC2000AXT 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 C & Workbench Solutions



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

### ERSA i-CON C - one control unit for preheating, soldering, fume extraction

The most exciting aspect of the *i*-CON C is the capability to control the two most important workbench periphery systems – the ERSA IR heating plate and the ERSA EasyArm fume extraction systems. All hand soldering tasks can be handled more rapidly & more safely when the assembly is preheated during the touch-up.

The proven IR heating plate technology which comes directly out of ERSA's world renowned IR rework product line offers bottom-side preheating for hand soldering, desoldering and touch-up applications. The safe yet powerful medium wavelength IR

pre-heating system offers a tremendous benefit to today's workbench.

Working temperatures of the soldering iron, heated SMD tweezer and/or desoldering iron can be greatly reduced. Lower tip temperatures decrease the risk of PCB damage while at the same time greatly increasing the lifetime of the tips!

Finally, the intelligent fume extraction units ERSA Easy Arm Extraction EA 110 *plus i* and EA 55 *i* are compact and powerful systems to efficiently clean soldering process air at the workbench. Combined with up

to two *i*-CON1 C or *i*-CON2 C soldering stations, connected with an interface cable, these filter systems open up a completely new dimension of intelligent solder fume filtration. The extraction unit is only working while at least one of the attached soldering stations is in operation. When both *i*-CON units rest in the "standby" mode, the EA 110 plus *i* or EA 55 *i* will automatically switch off.

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

ing & touch-up workbench must meet the specific requirements of a demanding operator. The two fundamental rules remain all important: 1. Having the right tool and

Todav's modern hand solder-

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

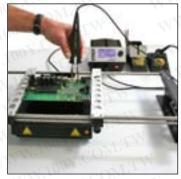
The *i*-CON C family of professional soldering stations are setting a new standard for today's workbench. Whether for TH or for SMT applications, the *i*-CON C offers the perfect tool for the job.

The 150 W i-Tool has one of the largest ranges of standard and special tips and clearly outperforms the competition for high-mass applications. The 120 W X-Tool is a high-powered desoldering iron for the toughest TH applications. The 60 W Chip Tool is an ergonomically designed heated tweezer for safe and rapid removal of small to medium sized SMTs as well as for small TH Dip packages.

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



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



SMD desoldering with Chip Tool desoldering pincette. Bottom-side preheating with heating plate provides for gentle processes.



Fully equipped i-CON2 C workplace with i-CON2 C station, i-Tool, Chip Tool, IR heating plate and solder fume extraction



### The FRSA DIGITAL 2000 A

is a top-class microprocessorcontrolled 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 microsoldering 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.

# **ERSA DIGITAL 2000 A Soldering Station**





### **ERSA DIGITAL 2000 A Desoldering Station with Vacuum Unit**





X-Tool with vacuum unit

with electronic station 0DIG203A and ERSA SENSOTRONIC control system 722 desoldering tip series see page 39

\* 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.		N N N S T
	X-Tool desoldering iron 0720EDJ, tip 0722ED1226, holder 0A44	2 x 60 W (350 °C)	$OM_{LLM}$		approx. 240 g*

This desoldering station is suitable for removing residual solder and for desoldering wired components, even from multilayer PCBs. The station consists of the ERSA DIGITAL 2000 A described on page 20, 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 delayfree 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.

# **ERSA SMD 8014 Tip Holder**



Order no. 0SMD8014

Description

SMD 8014 tip holder, complete

Equipped with ERSADUR soldering tips

0102PDLF04, ...PDLF10, ...CDLF12, ...CDLF16, ...WDLF16, ...WDLF23, ...BDLF20 and tip fixing for i-Tool (green version) 3IT1045-00

Equipped with desoldering tip pairs

0422SD,

0452EDLF060, ...FDLF100, ...FDLF150, ...MDLF020, ...QDLF100, ...QDLF175

### Flux Cream

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



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

The range of soldering tips and desoldering tip pairs, with the component-specific dimensions, can be found on pages 36, 37 and 41.

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



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

component.

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

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

# **ERSA HR 100 A Hybrid Rework System**





with Hybrid Tool rework iron with patent pending heating technology and VacPen vacuum pipette





Rapid, simple and safe hand-held component removal



Temperature-controlled SMD soldering

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

### Technical Highlights:

- Hybrid Tool with 200 W heating element; positioning laser in the Hybrid Tool handle
- Three exchangeable Hybrid Adaptors (6 x 6 mm, 10 x 10 mm and 20 x 20 mm)
- Low Noise Rework Blower (below 40dB)
- Integrated vacuum pump & VacPen, tool holder and K-type TC input socket, USB interface, LED display, "Turn & Push" control
- 2 Channel Temperature Recording: TC & IRS; AccuTC and Flexpoint TC holder
- Hybrid tool holder with axis height adjust & lock
- X-Y PCB board holder (290 mm x 250 mm)

- 800 W IR heating plate with glass cover: 125 mm x 125 mm high-performance IR heating element
- Closed Loop Profiles with ERSA IRSoft rework documentation software, User Level Access

### Recommended Accessories

It is highly recommended to purchase the complete system (1IRHR100A-HP) with an optional process cooling fan. When using the HR 100 A alone, it is highly recommended to purchase an AccuTC and Flexpoint TC holder for maximum rework safety. For a complete listing of all rework accessories, please refer to our Rework Catalog.



Powerful bottom-side process cooling fan (0IR5500-13) for rapid PCB cooling



AccuTC thermocouple (0IR6500-01) and Flexpoint TC holder (0IR5500-35)



ERSA Hybrid Tool with 200 W heating power and positioning laser (class II) in the handle, weight 300 g



# **Added Value at Your Finger Tips**



### HR 100 A and IRHP 100 A

with Hybrid Tool rework iron with patent pending heating technology, hybrid adapters, IRHP 100 A IR heating plate, Z-axis tool stand, X-Y PCB holder and VacPen vacuum pipette

Order no.	Description	Rating / Voltage	Heated area	Weight (w/o. cable)
0IRHR100A-HP	HR 100 A hybrid rework system complete	200 W / 230 V / 50-60 Hz	W.I	
	with Hybrid Tool - 3IRHR100A-01, VacPen - 0VP020,		6 x 6 mm up to	300 g
	hybrid adaptors 0IRHR100A-14, -15, -16,	M. 100 r.	20 x 20 mm	
	adaptor changer 0IRHR100A-24,			
	IRHP 100 A heating plate, item no. 0IRHP100A complete with	800 W / 230 V / 50-60 Hz	125 x 125 mm	
	tool holder for Hybrid Tool and PCB holder, Flexpoint TC holder,			
	AccuTC thermocouple, USB connection cable and IRSoft 4 software and drivers	M. 100 1	COMIL	J

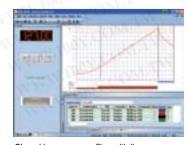
### ERSA IRSoft - Unparalleled System Control & Process Documentation for Rework

The new IRSoft is a universal system control, process documentation and process visualization software platform designed for use with all ERSA rework systems, from the smallest to the largest. In this manner, ERSA ensures operators an easy move between systems with hardly any learning curve required.

### User Friendly Software designed by Users!

Probably the greatest advantage of the IRSoft rework software platform is that is was literally co-designed by our customers in the field.

Today, with almost 10 years experience and over 5,000 systems installed, we have continually added those features and functions demanded by the market and have provided free updates to the existing user base.



Closed loop ramp profiles with live temperature recording

Via the Mini-USB port, the HR 100 A can be connected to ERSA's top of the line and well-established rework software, ERSA IRSoft. IRSoft provides multiple functions to operate the system, set and store process parameters and document all soldering or desoldering results.

The HR 100 A has been designed to be used with the IRHP 100 A, an 800 W IR heating plate. This complete set provides powerful and safe IR bottom-side heating as well as a Z-axis tool stand for the Hybrid Tool and an X-Y PCB board holder. The K-type thermocouple included monitors PCB temperature and even allows for closed loop soldering processes with ramp profiles.

The hybrid rework system together with the IR heating plate fulfils all needs of a modern rework system providing highest flexibility at the lowest cost!



### **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 duly be discarded.







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.









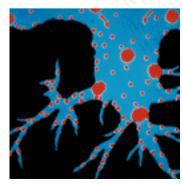
### ERSA EA 55 i Solder Fume Extraction



EA 55 i

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

Order no.	Description	Dimensions (L x W x H)	Rating / Voltage	Volume flow / vacuum	Noise level	Filter
0CA09-001	ERSA EASY ARM EXTRACTION EA 55 <i>i</i> filter unit complete	290 x 270 x 410 mm	75 W / 100 - 250 V 50 - 60 Hz	105 m³/h max. / 1.400 Pa	56 dB (A)	HEPA activated carbon



Activated carbon absorbs dangerous gas molecules



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



Table clamp, order no. 3CA09-4005

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

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

The variable and easy to change mounting of the unit allows usage in any industrial environment.

The solder fume filtration occurs in three stages:
First a pre-filter to capture the large particles which results in a longer filter life for the more expensive second stage HEPA particulate filter which removes all the remaining hazardous particles. Thirdly the activated carbon gas filter adsorbs any harmful gas molecules.

A powerful blower guarantees an adequate airflow throughout the filter life. When the filter needs changing an optical alarm is triggered.

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



### 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

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

and economically.

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.

# ERSA EA 110 plus i Solder Fume Extraction





Table clamp, order no. 3CA06-9001



EA110 plus i is controllable either by an optional interface cable set via one or two i-CON1 C /i-CON2 C stations, or it is manually controllable by a stand-by switch (see page 19).

### 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.

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

# Accessories for the EA 110 plus i



hose, table mounting and quick coupling



Extraction arm 1,000 mm flexible hose (to be installed directly at the EA 110 plus filter unit) with 2 quick couplings



3CA06-5001 Metallic nozzle, 50 mm ø



3CA06-5002 Antistatic nozzle, plastic, transparent, 190 x 100 mm



3CA06-5004 Nozzle "Plus", plastic, ESD, 215 x 90 mm



A



Stop valve for extraction arm



OCA08-3005



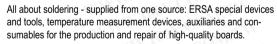
Standby switch



Interface cable set

# **Accessories & Process Material**











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

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

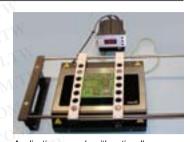
The control station can be placed independently from the heating plate on the workbench in an ergonomically favourable way.

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

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

# **ERSA IRHP 200 Infrared Heating Plate**





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

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

# **ERSA IRHP 100 A Heating Plate**



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

# **ERSA Special Tools**



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



### **DTM 100 Temperature Measuring Device**



# WWW.100Y.COM DTM 100

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

Order no.	Description	Measuring range	Operating temperature	Power supply	Dimensions (mm) without sensor unit	Weight
0DTM100	DTM 100 temperature measuring device, packed in a plastic case	-50 °C to +1,150 °C	0 °C to +45 °C	9 V flat battery 6F22	100 x 60 x 26 mm	approx. 134 g
0DTM100P	DTM 100 temperature measuring device with calibration certificate, packed in a plastic case		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 100 temperature measuring device and corrected easily and fast on nearly all ERSA soldering stations. The measurement is practi-

cally 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 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

The device can be used to handle nearly all components, except MELFs and MiniMELFs.

This tool consists of a nickelplated aluminum handle, sealed at the rear end by a plug.

When opened, replacement tips and suction cups can be stored here.

# **ERSA Desoldering Devices**



### Soldapullt AS 196

Proven desoldering device with plastic housing and extremely good recoil damping

Order no.	Description	Desoldering tips	Suction capacity
0VACX	VAC X antistatic desoldering device	0VACX2 (2 pcs.)	11.3 cm <sup>3</sup>
0AS196	Soldapullt AS 196 antistatic desoldering device	0LS197	34 cm <sup>3</sup>

The VAC X desoldering device is distinguished by its high suction power and low-recoil desoldering. The antistatic design allows desoldering work on electrostatically endangered assemblies. 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.



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.

# **ERSA STR 100 and STR 200 Stacking Racks**

### STR 100 | STR 200

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



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

# **ERSA SR 100 Solder Wire Dispenser**

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

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

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

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



SR 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

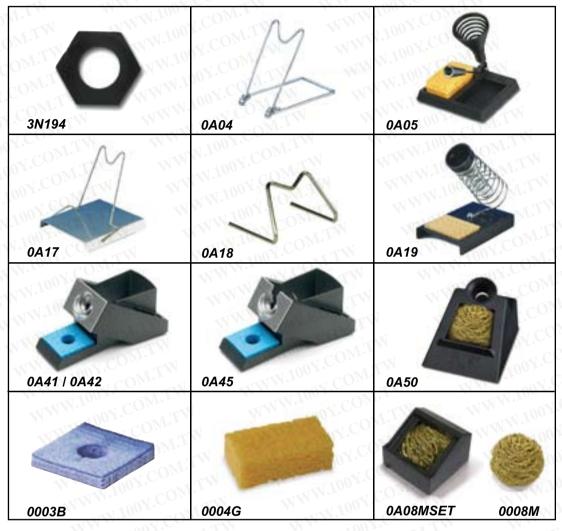
# **ERSA Tip Exchanger**

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.





# **ERSA Tool Holders and Cleaning Sponges**



Order no.	Description	for
0A04	Tool holder A 04	Soldering irons from 50 W - 150 W output; Isotyp and 0185PZ soldering irons
0A05	Tool holder A 05	Medium-sized and small soldering irons
0A08MSET	Dry sponge 0008M with container	Dry cleaning of soldering tips (especially for lead-free)
0A17	Tool holder A 17	Soldering irons with an output ranging from 200 W - 550 W
0A18	Tool holder A 18	Soldering irons of the Multitip series; Tip 260 soldering iron
0A19	Tool holder A 19	Soldering irons of the Multitip series
0A39	Tool holder A39	RT 80 soldering iron (fig. see page 13)
0A41	Tool holder A 41	Irons of the Multitip series; Multi-Pro, Multi-TC, Basic Tool 60 / 80 soldering irons
0A42	Tool holder A 42, antistatic	Tip Tool, Power Tool, Ergo Tool, Micro Tool and Tech Tool soldering irons
0A43	Tool holder A 43, antistatic	Chip Tool (fig. see page 18)
0A44	Tool holder A 44, antistatic	X-Tool desoldering iron (fig. see page 18/21)
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, i-Tool nano soldering iron (fig. see page 16)
0A50	Tool holder A 50, antistatic	i-Tool, i-Tool nano 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, 422 and 452 series
0G156	Sponge container G156	Independent 75 and Independent 130 gas soldering irons
0003B	Blue viscose sponge, 55 x 55 mm	Tool holders 0A09, 10, 13, 16, 24, 25, 28, 29, 30, 34, 35, 36, 39, 41 - 45, 48
0004G	Viscose sponge, 34 x 65 mm	Tool holders 0A05, 0A21 and 0A26
0006G	Sponge, ø 36 mm	Sponge container 0G156 for the Independent 75 / 130 gas soldering irons
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, 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.

# **ERSA Bar Solder**



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

### **ERSA Solder Wire**

ERSA **solder wire** consists exclusively of high-quality raw materials. Manufactured on state-of-the-art machines, the wire meets all quality requirements.

It is manufactured in different dimensions and with different alloys, to meet all practical requirements.

Different types of "flux cores" allow individual adaptation to all soldering needs, especially in electronics and the electronics industry.



### Solder wire

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





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

Solder alloy according to DIN EN 29453	Flux according to DIN EN % flux share	Melting temperature (°C)
Sn96.5Ag3.0Cu0.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	217
Sn96.5Ag3.0Cu0.5	29454, type 1.2.3., J-STD-004 RE/LO 1.6 %, halogen-free	217 - 219
Sn96.5Ag3.0Cu0.5	29454, type 1.2.3., J-STD-004 RE/LO 2.2 %, halogen-free	217 - 219
Sn99.3CuNiGe0.7 (based on Sn99.3Cu0.7)	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	227
Sn99.3Cu0.7	29454, type 1.2.3., J-STD-004 RE/LO, 1.6 %, halogen-free	227
Sn96.5Ag3.5	29454 art. 1, type 1.1.3.B, or DIN EN 61190-1-3, ROL 0 3.5 %, halogen-free	221
Sn96.5Ag3.5	29454, type 1.2.3., J-STD-004 RE/LO, 1.6 %, halogen-free	221

Low-residue, halogen-free No-Clean solder wire. Especially adapted to the requirements in electronics production. The flux stands out by high temperature resistance, and it does not spray while melting. The light, solid flux residues are neither corrosive nor electrically conductive. Consequently it is not necessary to remove them from the solder joint.

Sn60Pb40	29454/1.1.2, 2.2 %	183 - 190
Sn60Pb40	29454/1.2.3, 1.4 %	183 - 190
Sn60Pb39Cu1	29454/1.1.2, 2.2 %	183 - 190
Sn63Pb37	29454/1.1.3, 2,2 %, halogen-free, eutectic	183
Sn63Pb37	29454, type 1.2.3, J-STD-004 RE/LO, 0.9 %, halogen-free	183
Sn63Pb37	29454, type 1.2.3, J-STD-004 RE/LO, 0.6 %, halogen-free	183
Sn62Pb36Ag2	29454, type 1.2.3, J-STD-004 RE/LO, 0.6 %, halogen-free	178 - 188

subject to changes



# **ERSA Desoldering Wicks**



### 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
0WICKNC4.9/10	No-Clean wicks, length 1.5 m, width 4.9 mm	10 pcs.
0WICKNC4.9/SB	No-Clean wicks, length 1.5 m, width 4.9 mm	single-piece package

ERSA desoldering wicks are saturated with halogenfree 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**





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)
0FMPEN	Flux-Pen without flux	TW	1/1/1/
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**





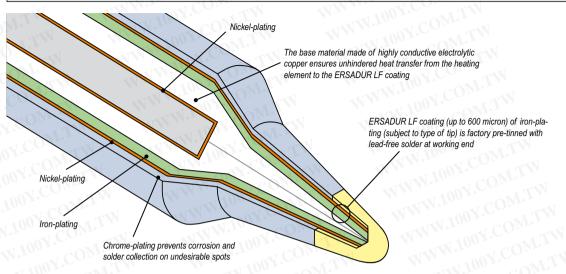








# **ERSADUR Soldering Tips**



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 an alternative to the wet sponge and can be beneficial, especially in lead-free soldering.

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:

- 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
- Soldering irons that automatically go into a lower "stand-by" temperature increase tin 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:

- 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.
- 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.
- 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.
- 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.

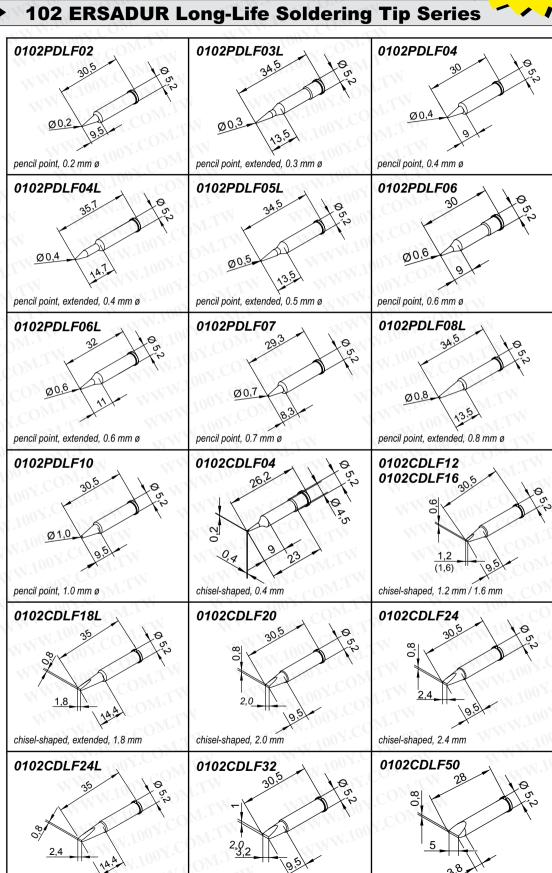




# From 0.2 mm up to over 25 mm!!

### For:

- i-CON nano
- i-CON with i-Tool soldering iron
- · i-CON1
- i-CON2 with i-Tool soldering iron
- · i-CON1 C
- i-CON2 C with i-Tool soldering iron



chisel-shaped, 3.2 mm

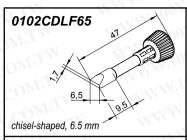
chisel-shaped, 5.0 mm

chisel-shaped, extended, 2.4 mm

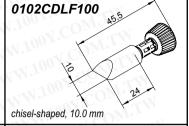


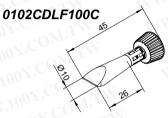
### For:

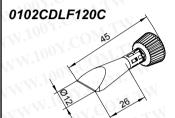
- i-CON nano
- · i-CON with i-Tool soldering iron
- *i*-CON1
- i-CON2 with i-Tool soldering iron
- *i*-CON1 C
- · i-CON2 C with i-Tool soldering iron

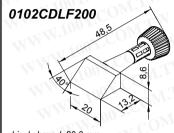










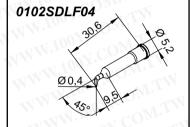


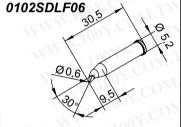


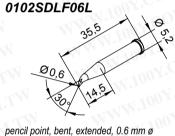
chisel-shaped, 10.0 mm

chisel-shaped, 12.0 mm

chisel-shaped, 20.0 mm







List of special tips available online @ www.ersa.com!!

pencil point, bent, 0.4 mm ø

0102SDLF08L

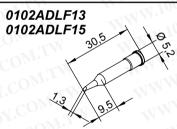
Ø0,8

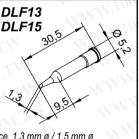
40°

pencil point, bent, extended, 0.8 mm ø

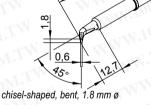
pencil point, bent, 0.6 mm ø

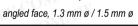




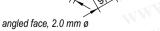




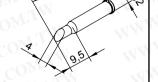




0102ZDLF200 Wick-Tip, 20.0 mm





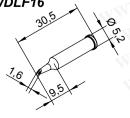


Wick-Tip, 15.0 mm

0102ZDLF150



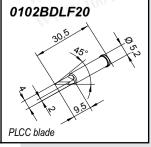
0102WDLF16



PowerWell with concave portion, 2.3 mm ø PowerWell with concave portion, 1.6 mm ø



0102WDLF35 PowerWell with concave portion, 3.5 mm ø



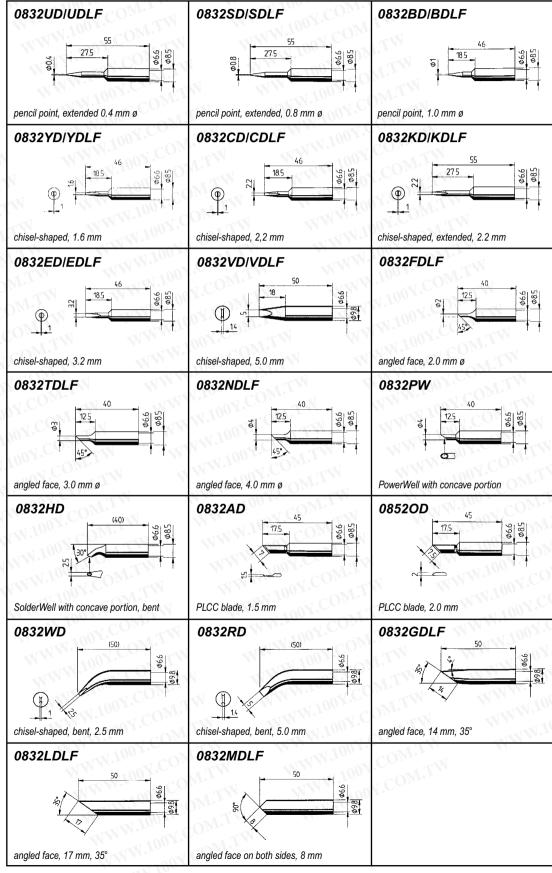


### For:

### ANN ON COMME

- · 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







# 842 ERSADUR Long-Life Soldering Tip Series

# 0842UD / UDLF 0842SD / SDLF 0842BD / BDLF pencil point, extended, 0.4 mm ø pencil point, extended, 0.8 mm ø pencil point, 1.0 mm ø 0842YD / YDLF 0842CD / CDLF 0842KD | KDLF 0.6 chisel-shaped, 1.6 mm chisel-shaped, 2.2 mm chisel-shaped, extended, 2.2 mm 0842ED | EDLF 0842ID 0842JD chisel-shaped, 3.2 mm pencil point, bent, 0.4 mm ø 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

### 0722ED0821 0722ED1023 0722ED1529 ERSADUR, ID 1.0 mm, OD 2.3 mm ERSADUR, ID 1.5 mm, OD 2.9 mm 0722ED1226 0722ED2438 ERSADUR, ID 0.8 mm, OD 2.1 mm ERSADUR, ID 1.2 mm, OD 2.6 mm ERSADUR, ID 2.4 mm, OD 3.8 mm 0722EN0615S 0722EN0818 0722EN1020 nickel-plated, ID 0.6 mm, OD 1.5 mm nickel-plated, ID 0.8 mm, OD 1.8 mm nickel-plated, ID 1.0 mm, OD 2.0 mm 0722EN0823 0722EN1023 0722EN1018S nickel-plated, ID 0.8 mm, OD 2.3 mm nickel-plated, ID 1.0 mm, OD 2.3 mm nickel-plated, ID 1.0 mm, OD 1.8 mm 0722EN1223 0722EN1529 0722EN2332 nickel-plated, ID 1.5 mm, OD 2.9 mm nickel-plated, ID 2.3 mm, OD 3.2 mm

0722EN2348

nickel-plated, ID 2.3 mm, OD 4.8 mm

0722EN1548

nickel-plated, ID 1.5 mm, OD 4.8 mm

nickel-plated, ID 1.2 mm, OD 2.3 mm

### For:

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

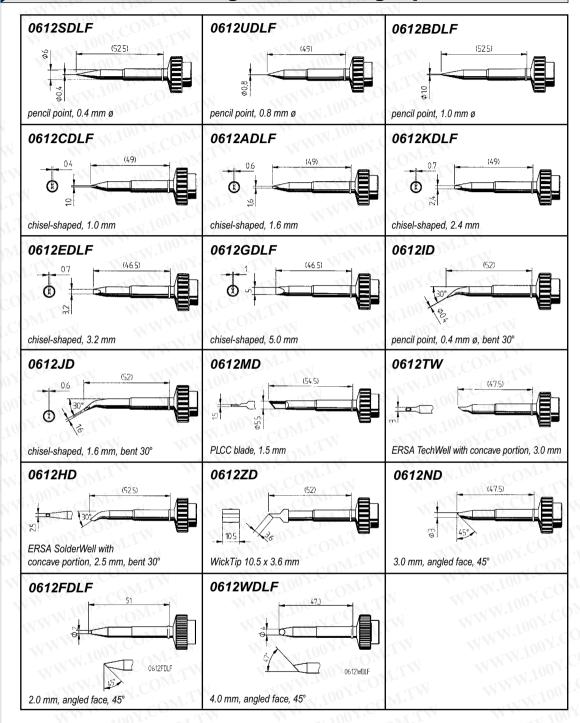




### For:

- · CPS 60.10
- · DIGITAL 60 A
- DIGITAL 2000 A
   with Tech Tool soldering
  iron
- MICRO-CON 60 iA with Tech Tool soldering iron

# 612 ERSADUR Long-Life Soldering Tip Series



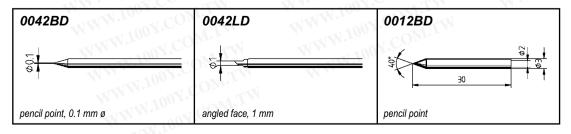


### For:

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



# 042 and 012 ERSADUR Long-Life Soldering Tip Series





# 422/452 ERSADUR Desoldering Tip Series

		100 - 11 TH - 12 -
0452FDLF 040	0422ED	0452EDLF 060
4 mm, for e.g. SO 8 GT/14 GT/16 GT	825 6 mm, for e.g. SOIC 8	6 mm, for e.g. SOIC 8
0452FDLF 075	0452FDLF 100	0452FDLF 125
7,5 mm, for e.g. SOIC 12/SOT23	10 mm, for e.g. SOIC 16	12.5 mm, for e.g. SOIC 20
0452FDLF 150	0452FDLF 175	0452FDLF 200
15 mm, for e.g. SOIC 24	17.5 mm, for e.g. SOIC 28	20 mm, for e.g. SOIC 32
0452FDLF 250	0452FDLF 275	0452FDLF 400
25 mm, for e.g. SOIC 40	27.5 mm, for components of 27.5 mm side length	40 mm, for components of 40 mm side length
0452QDLF 100	0452QDLF 125	0452QDLF 150
90°, length 10 mm, for e.g. PLCC 20	90°, length 12.5 mm, for e.g. PLCC28	90°, length 15 mm, for e.g. QFP, TQFP and TTQFP 80T25
0452QDLF 175	0452QDLF 200	0452QDLF 250
90°, length 17.5 mm, for e.g. PLCC 44	90°, length 20 mm, for e.g. PLCC 52	90°, length 25 mm, for e.g. PLCC 68
0452RDLF 225	0452RDLF 150	0422MD
length 22.5 x 16.5 mm, for e.g. QFP 100	length 15 x 12.5 mm, for e.g. PLCC 32	ellipse, for MELF and MINIMELF
0452MDLF 020	0422SD	*Please note: The desoldering tips 0422SD must be used in combination with the tip turn
ellipse, for MELF and MINIMELF	for MICROMELF	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 with Chip Tool desoldering pincette
- i-CON2 with Chip Tool desoldering pincette
- i-CON2 C with Chip Tool desoldering pincette

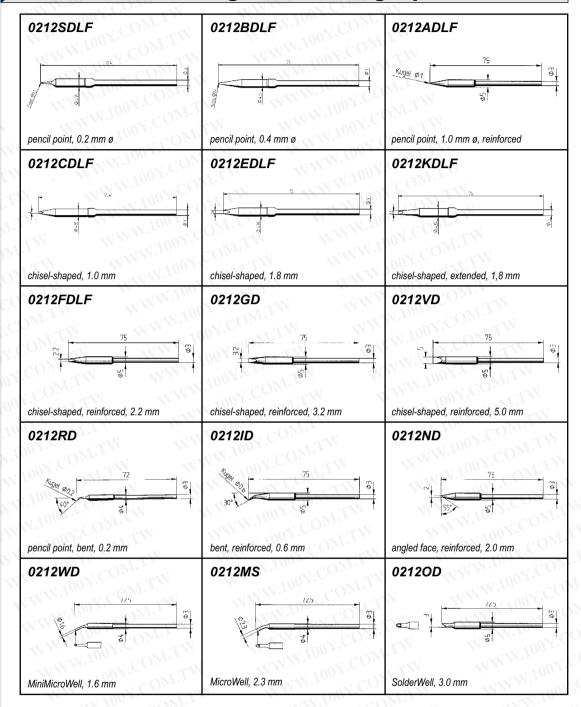




### For:

- 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



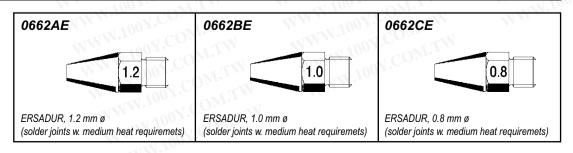


### For:

- ELS 8000 / M / D
- ELS 8100



# **662 Desoldering Tip Series**



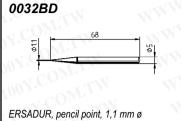
# 032 ERSADUR Long-Life Soldering Tip Series

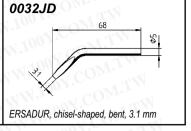
### For:

ERSA 30 S



# 67 ERSADUR, chisel-shaped, 3.1 mm





# **052 ERSADUR Long-Life Soldering Tip Series**

### For:

• ERSA 50 S

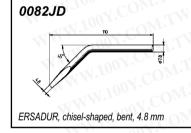




# **082 ERSADUR Long-Life Soldering Tip Series**

### For:

• ERSA 80 S



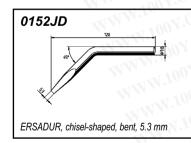


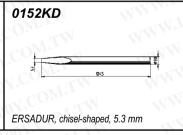


# 152 ERSADUR Long-Life Soldering Tip Series

# For:

• ERSA 150 S







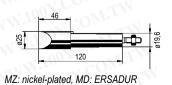
# Leadfree Bleifrei Landburger SAFE

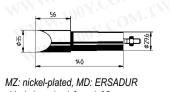
# 202, 302 and 552 Soldering Tip Series, ERSADUR $\!\!\!/$ nickel-plated

0302MZ / 0302 MD

### For:

# 0202MZ | 0202MD





0552MZ / 0552 MD

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



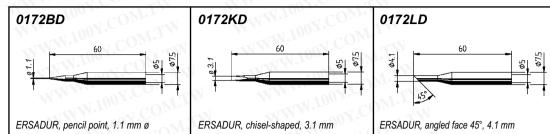


### For:

• Multitip 25



# 172 ERSADUR Long-Life Soldering Tip Series

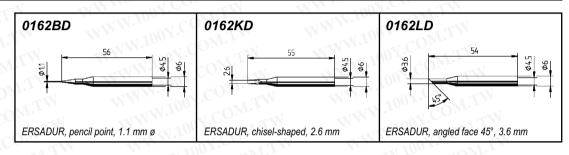


### For:

- Multitip 15
- Tip 260



# 162 ERSADUR Long-Life Soldering Tip Series

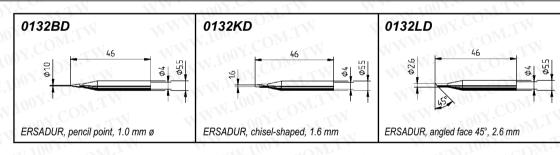


### For:

• Multitip 08



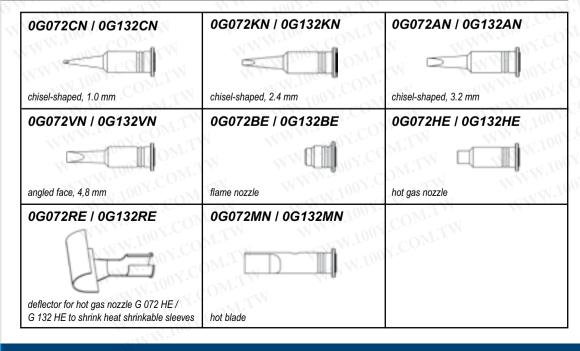
# **132 ERSADUR Long-Life Soldering Tip Series**



### 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





勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787

Http://www.100y.com.tw



# **ERSA IR Rework Systems**



Real time rework process visualization



IR/PL 550

Top-selling rework system based on cost/ performance ratio; 1,600 W, DynamicIR heating technology; plastic, metal, high or low mass SMT or PTH – IR 550 does it all!



IR/PL 650

DynamicIR heating technology for large (460 mm x 560 mm) PCBs; 4,600 W, 9 zone programmable top & bottom heating zones; precise, easy-to-use motorized Auto "Pick & Place"

Order no.	Description	Voltage
0IR650A	IR 650 dynamic IR rework system	230 V
0PL650A	PL 650 precision placement system	230 V
0IR550A	IR 550 dynamic IR rework system	230 V
0PL550A	PL 550 precision placement system	230 V



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

# **ERSA Inspection Systems**



ERSASCOPE 1 - Original

90° viewing capability with high magnification for general inspection of PCBs with all component types





### **ERSASCOPE 2**

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

Order no.	Description	Voltage
0VSSC600*	ERSASCOPE 2 inspection system	230 V
0VSSC070	ERSASCOPE 1 - Original with ImageDoc Basic software	230 V

<sup>\*</sup>Software available as an option



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