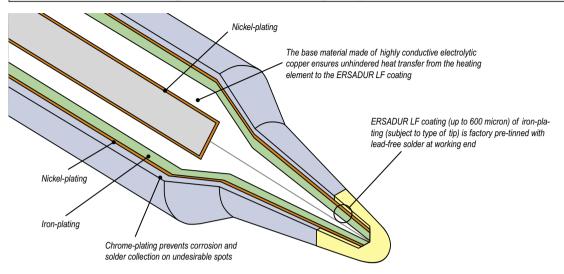


# **ERSADUR Long-Life Soldering Tips**



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

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

# **Special Care for Soldering Tips**



### **ERSA Dry Sponge**

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

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

### Important Facts:

- 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 tip life.
- 4. The oxidation of the tip will be very rapid if the tip is left "cooking" without molten solder covering the tip end. It happens, for example, if the tip is not wetted with solder right after cleaning it.
- 5. Excessive mechanical force during soldering will shorten the tip life.
- 6. Proper care of the tip will greatly increase tip life.

 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.

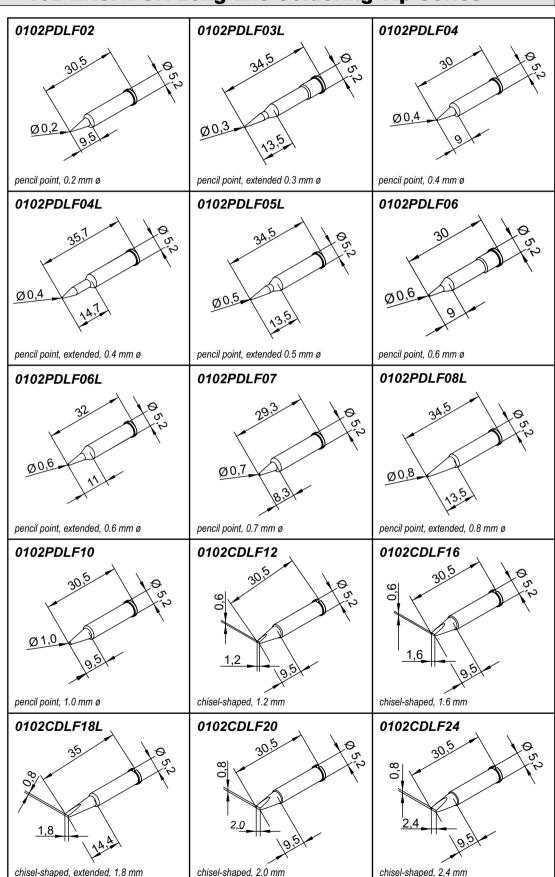
Dry cleaning of soldering tips offers substantial advantages. The soldering tips are not cooled abruptly and contaminated tips resulting from dirty sponges are avoided. Due to the slightly abrasive properties of the special wire mesh, passive layers that accumulated on the tip can easily be removed.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





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

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



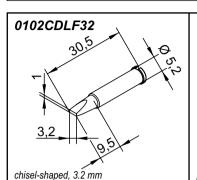


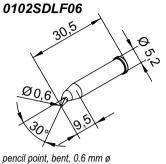


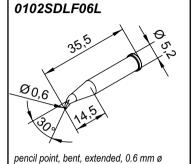
# 102 ERSADUR Long-Life Soldering Tip Series

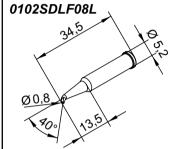
### For:

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

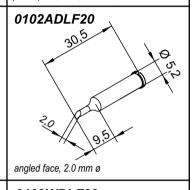


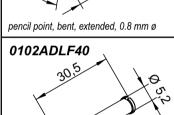


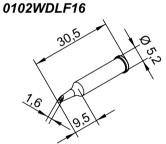


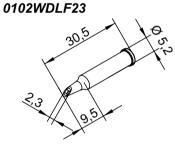




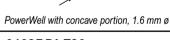




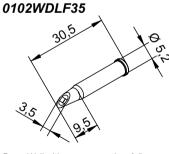


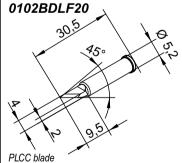


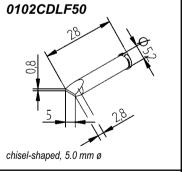




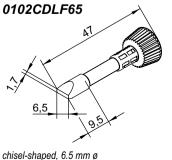


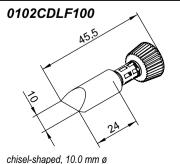


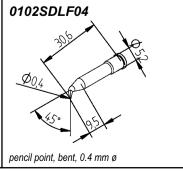




PowerWell with concave portion, 3.5 mm ø



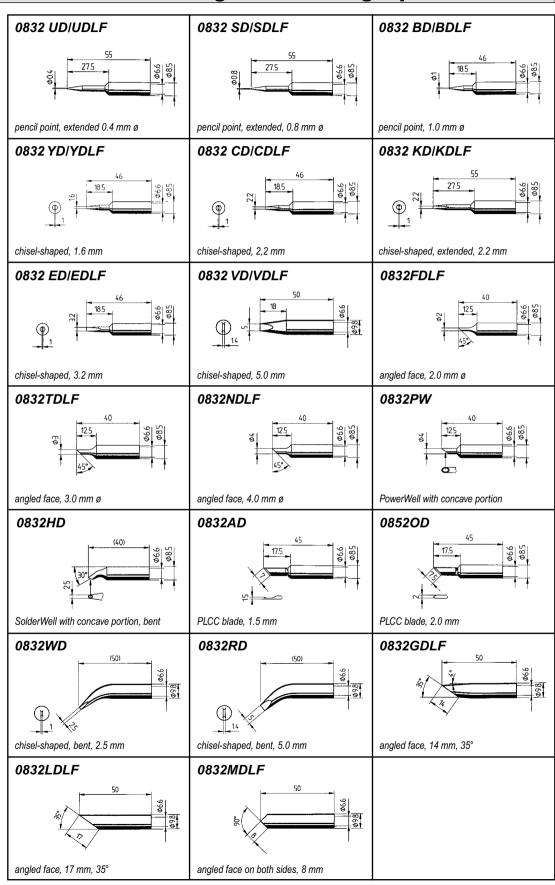






# 832 ERSADUR Long-Life Soldering Tip Series

- ANALOG 60 / 60 A
- ANALOG 80 / 80 A
- DIGITAL 80 A
- DIGITAL 2000 A with Power Tool soldering
- 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







# 842 ERSADUR Long-Life Soldering Tip Series

# 0842UD / UDLF 0842SD / SDLF 0842BD / BDLF pencil point, extenced, 0.4 mm ø pencil point, extended, 0.8 mm ø pencil point, 1.0 mm ø 0842YD / YDLF 0842CD / CDLF 0842KD / KDLF 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
- MS 6000
- MS 8000 / D
- Multi-Pro
- **Multi-Sprint**
- Multi-TC
- RDS 80
- TWIN 80 A
   with Ergo Tool soldering
  iron



# 722 Desoldering Tip Series, ERSADUR / nickel-plated

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

0722ED1226

ERSADUR, ID 1.2 mm, OD 2.6 mm

### For:

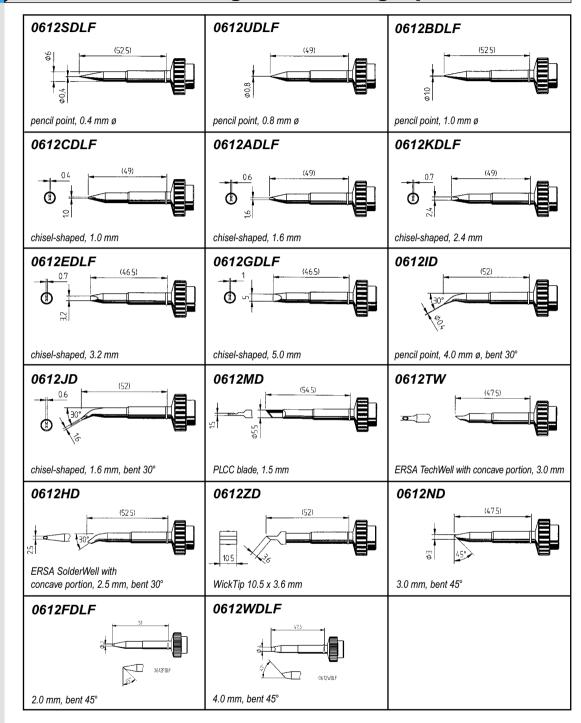
- DIGITAL 2000 A with X-Tool desoldering
- XTOOLKIT1
- · i-CON
- i-CON2 with X-Tool desoldering iron





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

# 612 ERSADUR Long-Life Soldering Tip Series



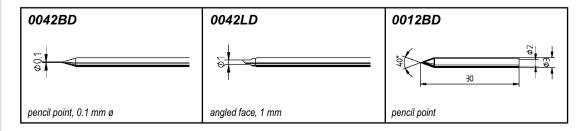


# For:

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



# 042 and 012 ERSADUR Long-Life Soldering Tip Series





# **422 ERSADUR Desoldering Tip Series**

# 0422FD10 0422ED 0422FD3 4 mm, for e.g. SO 8 GT/14 GT/16GT 6 mm, for e.g. SOIC 8 7,5 mm, for e.g. SOIC 12 / SOT 23 0422FD4 0422FD1 0422FD2 15 mm, for e.g. SOIC 24 10 mm, for e.g. SOIC 16 12.5 mm, for e.g. SOIC 20 0422FD5 0422FD6 0422FD7 17.5 mm, for e.g. SOIC 28 20 mm, for e.g. SOIC 32 25 mm, for e.g. SOIC 40 0422FD8 0422FD9 0422QD5 27.5 mm, for components of 27.5 mm 40 mm, for components of 40 mm side length side length 90°, length 10 mm, for e.g. PLCC 20 0422QD1 0422QD6 0422QD3 90°, length 15 mm, for e.g. QFP, TQFP and 90°, length 12.5 mm, for e.g. PLCC 28 TQFP 0T25 90°, length 17.5 mm, for e.g. PLCC 44 0422QD4 0422QD2 0422QD7 90°, length 20 mm, for e.g. PLCC 52 90°, length 25 mm, for e.g. PLCC 68 90°, length 30 mm, for e.g. PLCC 84 0422RD1 0422RD2 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 0422SD\* \*Please note: The desoldering tips 0422SD must be used in combination with the tip turn protection set to ensure good results. Tip turn protection set for TC 40 desoldering pincette and desoldering

pincette 40 on request.

for MICROMELF

# For:

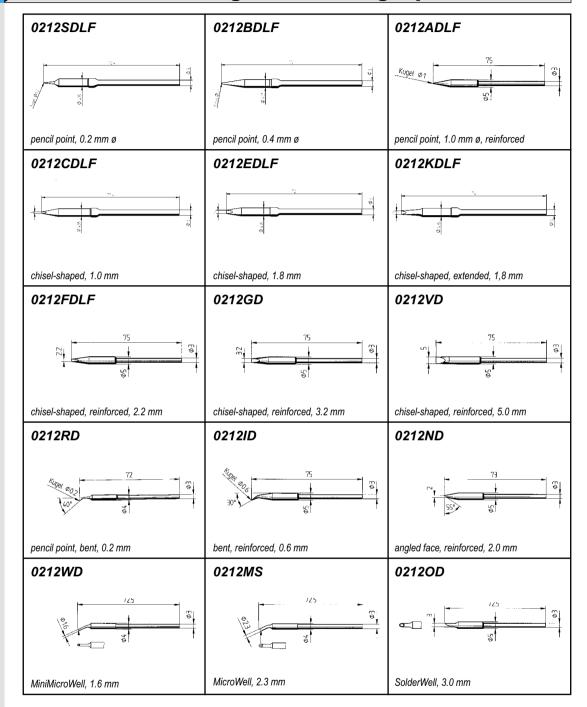
- DIGITAL 2000 A
   with Chip Tool
- MICRO-CON 60 iA SMD Desoldering Pincette 40
- REWORK 80
- SMD 8000
- SMT UNIT 60 AC / A with Chip Tool / SMD Desoldering Pincette 40
- · i-CON
- i-CON2 with Chip Tool desoldering pincette





- 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





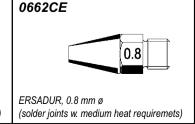
### For:

- ELS 8000 / M / D
- ELS 8100



# **662 Desoldering Tip Series**

# 0662AE 1.2 1.0 ERSADUR, 1.2 mm ø (solder joints w. medium heat requiremets) (solder joints w. medium heat requiremets) (solder joints w. medium heat requiremets)





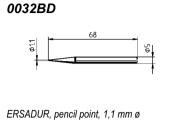
# **032 ERSADUR Long-Life Soldering Tip Series**

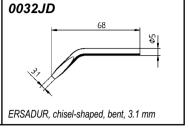
# For:

• ERSA 30 S



# 67 ERSADUR, chisel-shaped, 3.1 mm





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

# For:

• ERSA 50 S

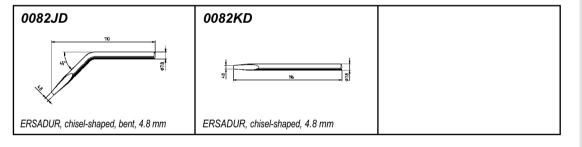




# **082 ERSADUR Long-Life Soldering Tip Series**

### For:

• ERSA 80 S

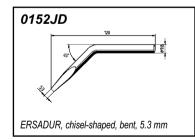


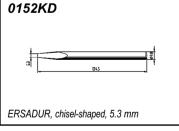


# 152 ERSADUR Long-Life Soldering Tip Series

# For:

• ERSA 150 S







# Leadfree Bleifrei

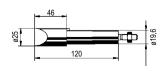
# 202, 302 and 552 Soldering Tip Series, ERSADUR / nickel-plated

0302MZ / 0302 MD

### For:

# 0202MZ | 0202MD

chisel-shaped, reinforced, 18 mm



MZ: nickel-plated, MD: ERSADUR chisel-shaped, reinforced, 25 mm MZ: nickel-plated, MD: ERSADU chisel-shaped, reinforced, 35 mm

# MZ: nickel-plated, MD: ERSADUR

0552MZ / 0552 MD

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

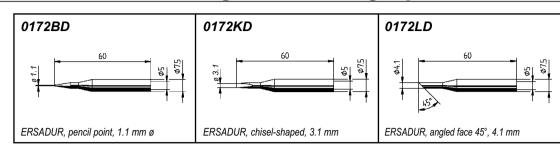




Multitip 25



# 172 ERSADUR Long-Life Soldering Tip Series

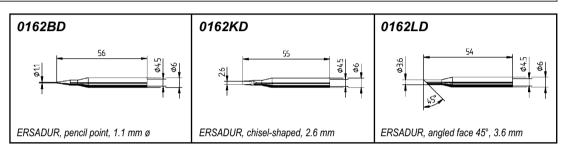


## For:

- Multitip 15
- Tip 260



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

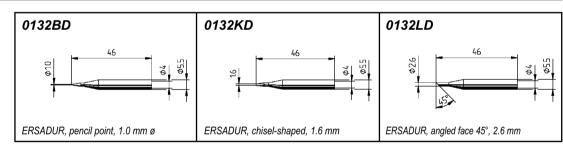


### For:

• Multitip 08



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

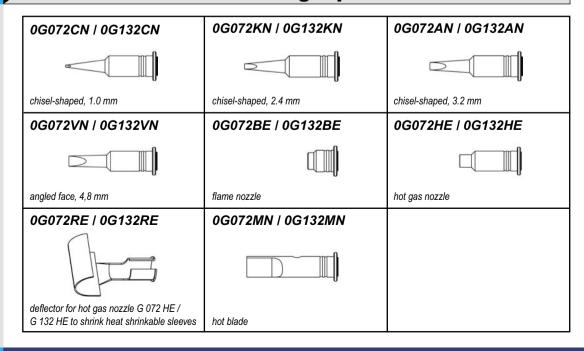


### For:

### Independent 75 gas soldering iron (G 072 series)

 Independent 130 gas soldering iron (G 132 series)

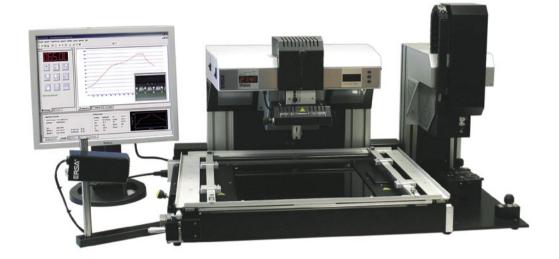
# G 072 and G 132 Soldering Tip Series







# **ERSA IR Rework Systems**



### ERSA IR | PL 650 A Rework System

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

This third generation IR rework systems top their award-winning and patented predecessors by offering three new technological innovations: *DynamicIR*, *Multi-True*-

Closed-Loop-Control und IntelligentIRS. Benefitting from an installed base worldwide of more than 5,000 IR rework systems, ERSA's newest system was specifically designed to handle the most difficult rework applications on heavy-mass PCBs and large-format SMT assemblies (18 x 20 inch / 460 x 560 mm) in a lead-free environment. Ease of use, rapid rework cycle times,

widest variety of rework applications and lowest operational costs - these are the well-known user advantages of ERSA's IR rework systems.



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

# **ERSA Inspection Systems**



ERSASCOPE 2 plus

### **ERSASCOPE Visual Inspection Systems**

In 1999, the patented ERSASCOPE was the first visual inspection system which finally made destruction-free inspection of soldering joints beneath a BGA a reality. Under the motto "To See is to Survive" this revolutionary technology not only won all of the industry's most significant innovation awards around the globe, but also

allowed previously undetected problems to be discovered, analyzed and corrected at nearly 2,000 of the world's leading manufacturers.

Lead-free implementation will require manufacturers to seriously re-examine their QA procedures, because getting the lead-free

process under control in the initial stages will simply be more difficult.

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



ERSASCOPE inspection of components



Complete solutions for visual solder joint inspection made by ERSA.

Ask for our free catalogue.

# The Complete ERSA Line. **Professional Solutions for State-of-the-Art**

# **Electronics Production**

# Selective soldering



# **Wave soldering**



### Reflow soldering



### **Visual inspection**



### SMT/BGA Rework



### **Process software**





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

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

# www.ersa.com



Over 70 ERSA agencies are located in more than 65 countries.

# Headquarters

## **ERSA GmbH**

Leonhard-Karl-Str. 24 97877 Wertheim / Germany Phone: +49 (0) 9342 / 800-0 Fax: +49 (0) 9342 / 800-127 e-mail: info@ersa.de www.ersa.de

### America Kurtz North America, Inc.

1779 Pilgrim Road Plymouth, WI 53073

UŠA Phone: 800 363 3772 Fax: +1 920 893 3322 e-mail: infoersa@kna.net

www.ersa.com

### Asia

## Kurtz Far East Ltd.

Suite 3505, 35/F., China Resources Building 26 Harbour Road, Wan Chai Hong Kong

Tel.: +852 2331 2232 Fax: +852 2758 7749 e-mail: kurtz@kfe.com.hk

www.ersa.com

Room 601, 6th Fl. Beethoven Plaza No. 1158, Chang Ning Road Shanghai 200051

China

Tel.: +86 (21) 5241 6000 Fax: +86 (21) 5241 9918 e-mail: kurtz@kurtz.com.cn

www.ersa.com