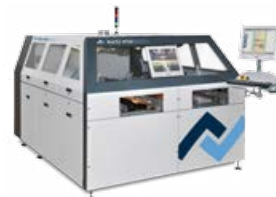
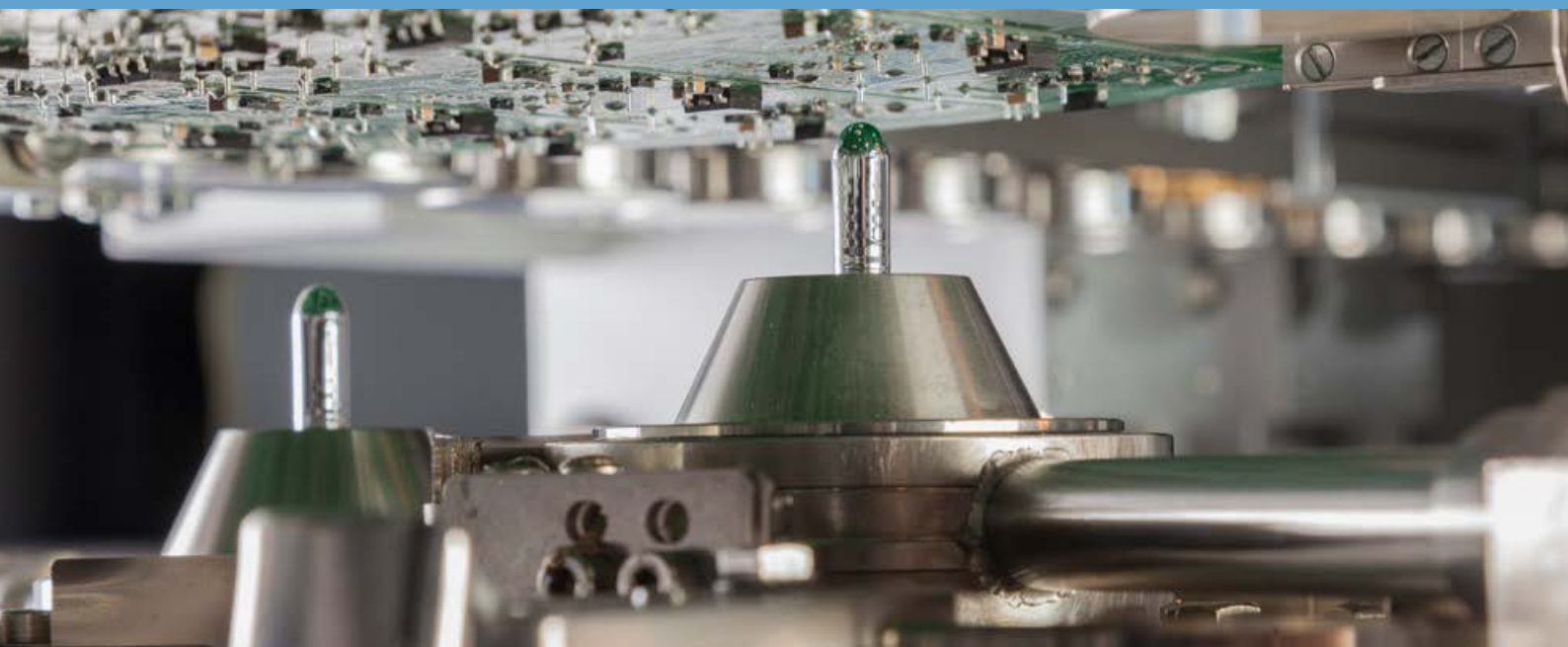


# Kurtz Ersä Selective Soldering Systems

In a class of its own!



# SMARTFLOW 2020 and ECOSELECT

Compact systems with high-end technology.  
No compromises in quality.



Kurtz Ersä SMARTFLOW 2020

## The perfect start-up solution

Compact without compromises, extremely smart!

### Highlights SMARTFLOW 2020

- VERSAFLOW technology on small footprint
- Award-winning user interface ERSASOFT 5
- Extremely maintenance-friendly
- Full-area upper/lower IR preheating (adjustable)



Kurtz Ersä ECOSELECT 1

## Small footprint – high-end technology

Selective soldering for small series and prototypes.

### Highlights ECOSELECT 1

- Compact batch system with small footprint
- Up to two solder pots and two flux heads to increase throughput
- Full-area lower IR preheating (adjustable)
- Upper convection heating

## Inline and batch system

For highest selective soldering quality



Kurtz Ersä ECOSELECT 4

### Highlights ECOSELECT 4

- Compact selective soldering system with small footprint
- Batch or inline production
- Up to two flux heads and solder pots to increase throughput
- Full-area lower IR-preheating (adjustable)
- Upper convection preheating/power convection
- Upper convection heater in the solder module
- Award-winning user interface ERSASOFT 5
- VERSACAM
- PCB size 508 x 508 mm

# VERSAFLOW 4 and VERSAFLOW 3

The best made even better.  
The next generation with new features.

**The world's leading inline selective soldering system**  
The modular platform offers always the right combination.



Kurtz Ersä VERSAFLOW 3

## Highlights Ersä VERSAFLOW 3

- Working area:  
VERSAFLOW 3/45: 16" x 20" (option 20" x 20")  
VERSAFLOW 3/66: 24" x 24"
- Single-wave soldering for higher flexibility or multiwave soldering for high-volume processes
- Product changes without downtime even in multiwave processes
- Parallel process due to the separation of fluxing, preheating and soldering
- Operation of up to four spray heads
- Up to five lower preheatings with optional upper convection heating
- Perfect for the connection to assembly stands and periphery
- Connection to traceability systems for process control

**VERSAFLOW 4 – The next generation**  
The best made even better!



Kurtz Ersä VERSAFLOW 4

## additional Highlights VERSAFLOW 4

- Working area:  
VERSAFLOW 4/55: 20" x 20"  
VERSAFLOW 4 XL: 24" x 48"
- Fluxer y-variable
- Solder module y-/z-variable
- Continuous roller conveyor
- Award-winning user interface ERSASOFT 5
- Power convection
- VERSACAM ■ VERSAFLEX ■ VERSAFLUX



# VERSAFLUX & VERSAFLEX

## The new freedom for fluxing and soldering



*Parallel processes in certain modules for highest throughput*

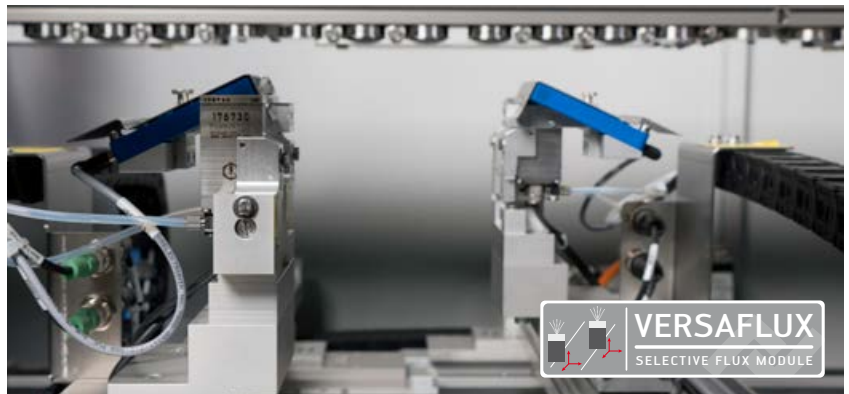


*VERSAFLEX module – 2 solder pots mounted on 2 independent axis systems*

With the all-new VERSAFLUX and VERSAFLEX modules, Erska is setting benchmarks in quality, flexibility and throughput. As the name suggests, there is a flux (VERSAFLUX) and a solder module (VERSAFLEX).

Both modules work with two mutually independent axis systems, allowing the pots and spray heads to be adjusted and moved individually in x-, y- and z-direction. Assemblies can thus be fluxed or soldered synchronously or asynchronously. In synchronous mode, the two axes with the flux heads or pots move in parallel at a predetermined fixed distance to one another – ideal for panel processing.

In asynchronous mode, each axis follows its own travel path. This means an assembly can be processed with two different nozzle diameters at the same time, for example. Through this, and through operation with different solder alloys and/or fluxes without changeover necessary, they also create a tremendous added value for production and offer maximum flexibility.



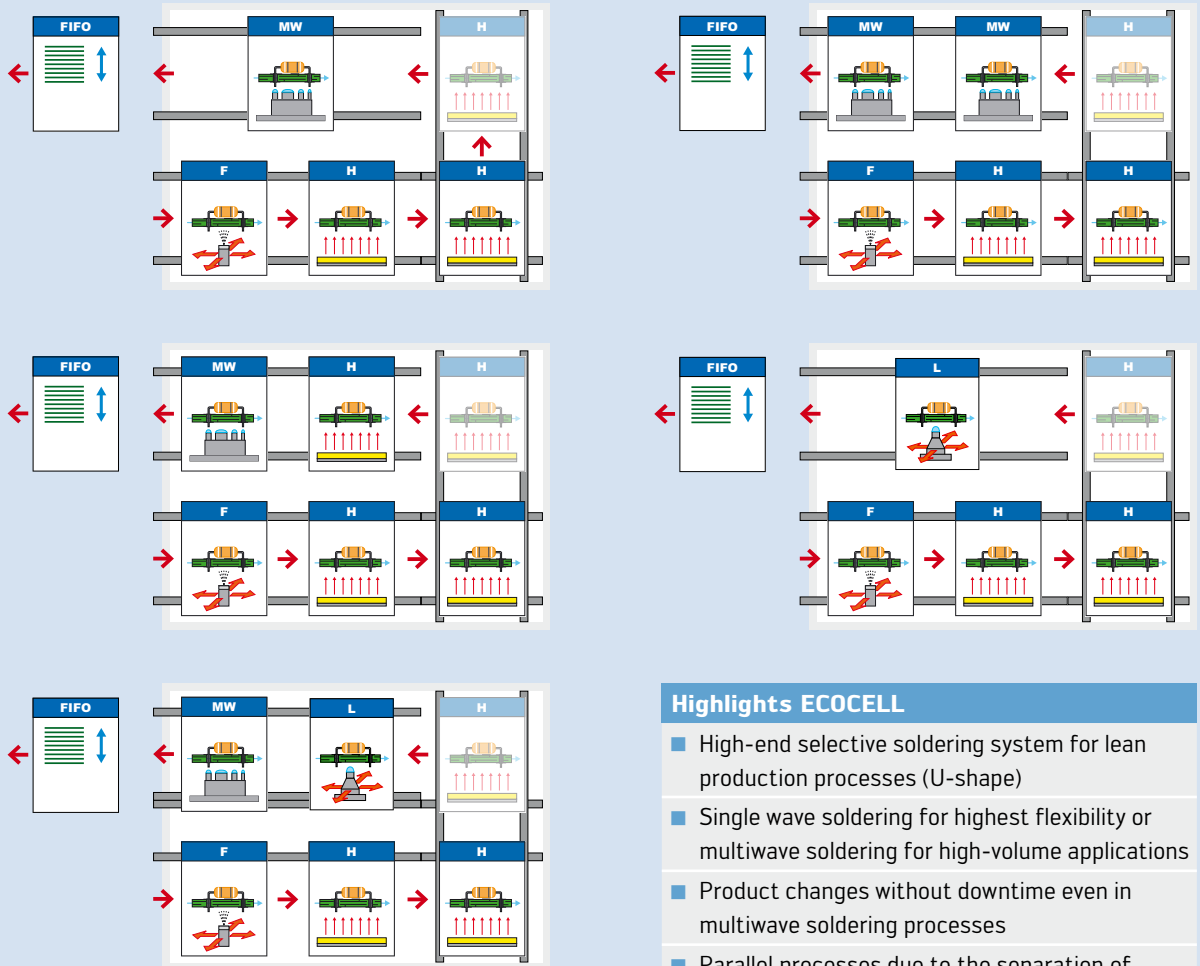
*VERSAFLUX module – 2 fluxers mounted on 2 independent axis systems*



*CAD-Assistent 4 – fast, intuitive and comfortable*

# ECOCELL

Uncompromising in throughput and quality –  
Flexible in production layout



## Inline and batch system

Highest flexibility in production layout



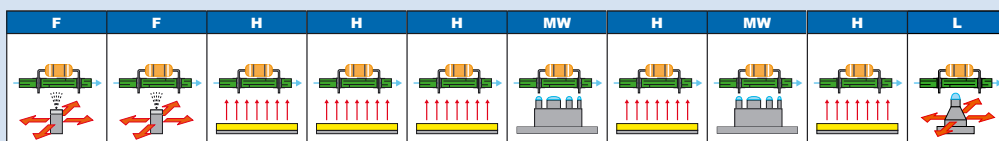
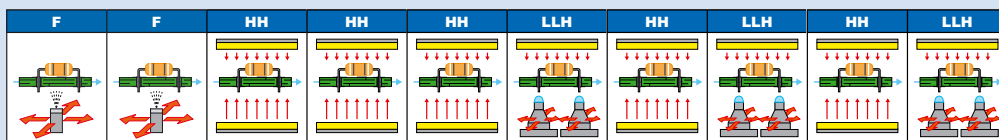
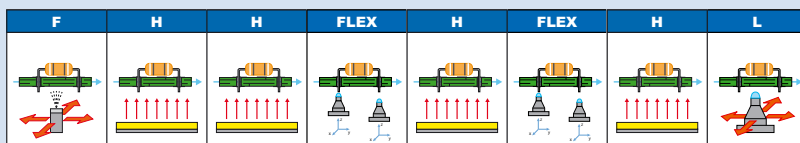
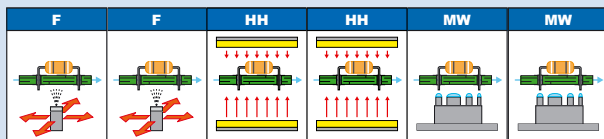
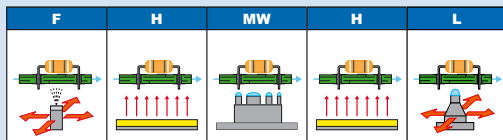
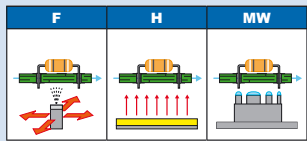
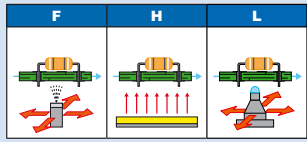
### Highlights ECOCELL

- High-end selective soldering system for lean production processes (U-shape)
- Single wave soldering for highest flexibility or multiwave soldering for high-volume applications
- Product changes without downtime even in multiwave soldering processes
- Parallel processes due to the separation of fluxing, preheating and soldering
- Operation of up to four spray heads
- Up to two lower preheatings and optional upper convection heating
- Perfect for the connection to assembly stands and periphery

Kurtz Ersä ECOCELL with FIFO-TOWER

# The Kurtz Ersa Modular System

## Always the right combination for your needs and your budget



### Configuration examples

The combinations of the arrangement of different modules show only some of the possibilities of the extremely flexible Kurtz Ersa modular system concept.

Depending on a customer's request, with the addition of the optional dual pot feature and/or the dual track feature, throughput could be substantially enhanced without increasing floor space requirements.

### Legend:



Flux module  
with spray fluxer



Preheat module  
with bottom-side  
preheating



Solder module  
with single pot



Solder module  
with multiwave solder  
bath



Preheat module  
with bottom- and  
top-side preheating



Solder module with  
single wave unit and  
top-side preheating



Solder module  
with dual pot and  
top-side preheating



Solder module  
with VERSAFLEX unit



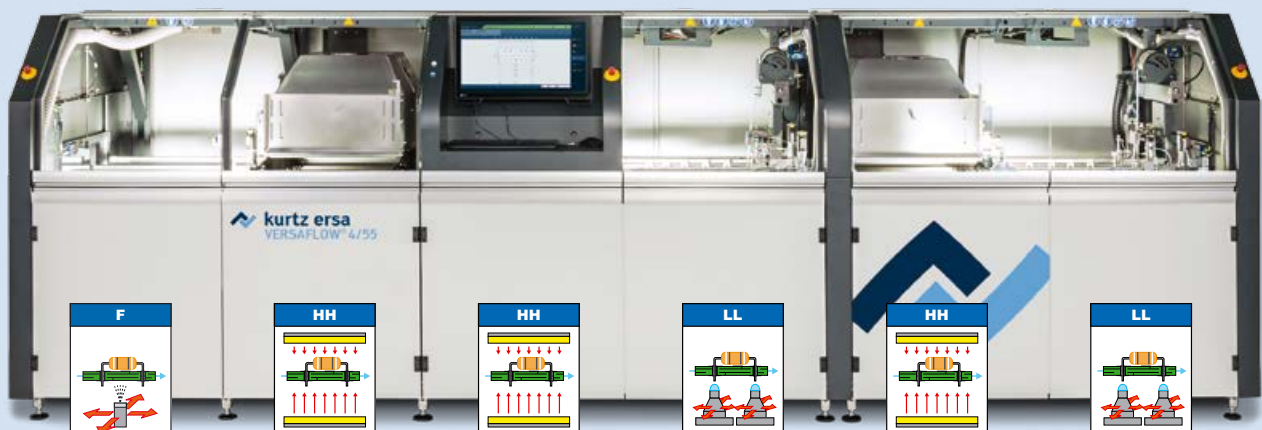
Dual track feature  
with two parallel  
single wave units



Flux module  
with VERSAFLEX unit



Preheat module with  
power convection



# Equipment configuration

SMARTFLOW 2020

ECOSELECT 1

ECOSELECT 4

ECOCCELL

VERSAFLOW 3/4/5

VERSAFLOW 3/6/6

VERSAFLOW 4/5/5

VERSAFLOW 4 XL

Modules								
Flux module	1	1	1	1	2	1	2	1
Max. number of spray heads per flux module	1	1 – 2	1 – 2	1 – 4	1 – 4	1 – 2	1 – 4	2 – 4
Number of spray heads per flux module	1	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2
Preheating module	1	1	1	1 – 3	1 – 5	1 – 5	1 – 5	2
Solder module	1	1	1	1 – 2	1 – 3	1 – 3	1 – 3	1 – 2
Number of solder pots per module	1	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2	2
VERSASCAN					■		■	
VERSAEYE					■		■	

Conveyor system								
Autom. conveyor width adjustment			■	■	■	■	■	■
Dual track conveyor system					■	■		
Center support			■		■	■		
Heavy-load conveyor system			■	■	■	■	■	■
Conveyor extension			■		■			

Fluxer								
1 fluxer 1 tank	■	■	■	■	■	■	■	
2 fluxers 1 tank		■	■	■	■	■	■	■
2 fluxers 2 tanks		■	■	■	■	■	■	■
3 fluxers 1 tank				■	■		■	
4 fluxers 1 tank				■	■		■	
4 fluxers 2 tanks					■		■	■
VERSAFLUX: x-z-/y-z-variable								■
VERSAFLUX ultra: x-y-z-variable + optimization of process time								■
Additional area spray head				■	■	■	■	■
Spray test function	■	■	■	■	■	■	■	■
Fiducial recognition		■	■	■	■	■	■	
PCB clamping in flux module			■	■	■	■	■	■
Flux pressure control		■	■	■	■	■	■	■

Preheating								
Segmented heating				■	■	■	■	■
Temperature monitoring, pyrometer			■		■	■	■	■
Top-side heating with IR emitters	■							
Upper convection heating		■	■	■	■	■	■	■
Upper heating in soldering module		■		■	■	■	■	■
Failure monitoring emitter heating	■	■	■	■	■	■	■	■
Top-side heating with power convection			■				■	

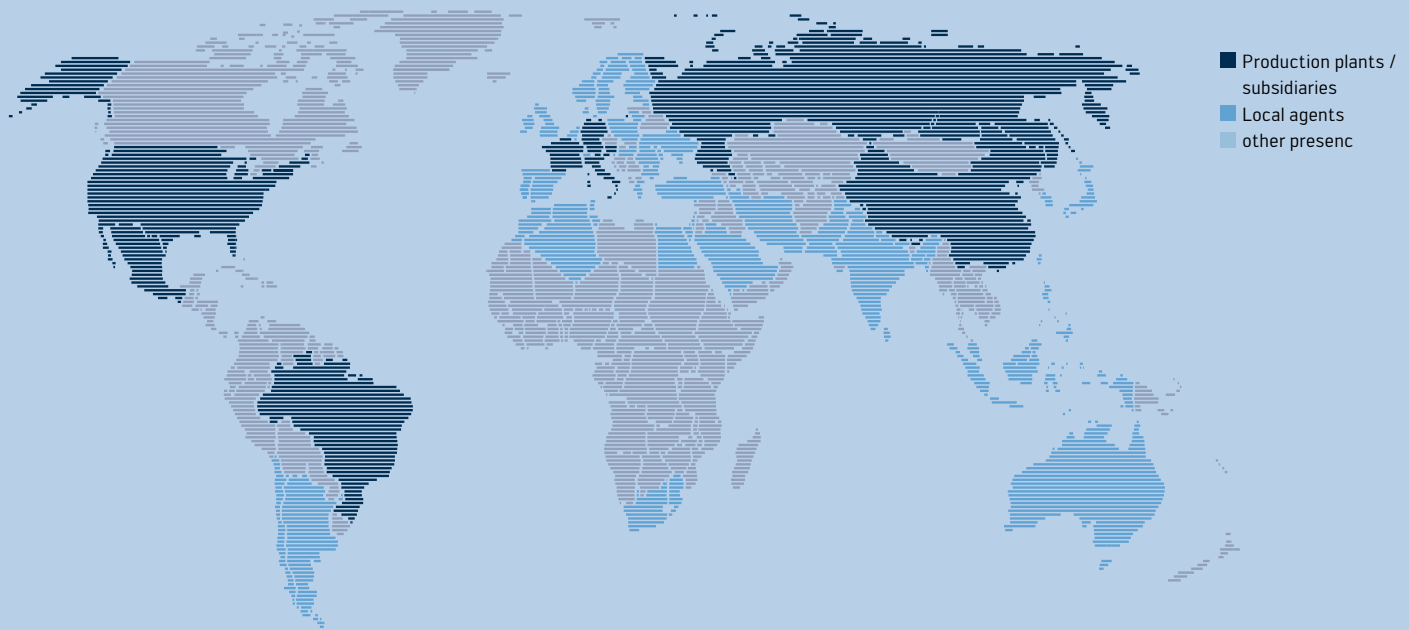
Solder module								
Second solder pot in the solder module		■	■	■	■	■	■	■
y-variable		■		■	■	■		
z-variable		■		■	■	■		
y/z fix		■		■	■	■		
y/z variable			■				■	
VERSAFLEX: x-z-/y-z-variable							■	■
VERSAFLEX ultra: x-y-z-variable + optimization of process time							■	■
MINI-VARIO-WAVE	■	■	■	■	■	■	■	■
MINI-DIP	■	■	■	■	■	■	■	■
Multiwave mechanic solder pump					■			
Multiwave inductive solder pump				■				
Multiwave inductive solder pump, XL					■		■	
Automatic solder wire feeder	■	■	■	■	■	■	■	■
Automatic nozzle cleaning		■	■	■	■	■	■	■
Roller conveyor in solder module			■	■	■	■	■	■
Fiducial recognition		■	■	■	■	■	■	
Recognition of PCB deflection		■	■	■	■	■	■	
Process control camera	■	■	■	■	■	■	■	■
VERSACAM solder wave height control „on the fly“			■				■	■
N <sub>2</sub> heating	■	■	■	■	■	■	■	■
PCB downholder system			■	■	■	■	■	
Residual O <sub>2</sub> measurement dip module				■	■		■	

Interface								
SMEMA			■	■	■	■	■	■
Scanner	■	■	■	■	■	■	■	■
Traceability	■	■	■	■	■	■	■	■
Transponder reading device	■	■	■	■	■	■	■	■

Additional								
Touchscreen	■	■	■	■	■	■	■	■
CAD-Assistant	■	■	■	■	■	■	■	■
Peripherals/inlet/outlet	■		■	■	■	■	■	■
Upper sensors			■	■	■	■	■	■
Locking for viewing panels			■		■	■	■	■
Glass panes, ESD-fit		■	■	■	■	■	■	■
“On the fly” maintenance				■	■		■	■

# Electronics Production Equipment

## Worldwide Presence



### America

Ersa North America  
1779 Pilgrim Road  
Plymouth, WI 53073  
USA  
Phone +1 920 893 3772  
from the US: 800 363 3772  
Fax +1 920 893 3322  
info-ena@kurtzersa.com  
www.ersa.com

### Mexico

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

### Asia

Ersa Asia Pacific  
Unit 03-05, 8th Floor  
One Island South  
No. 2 Heung Yip Road  
Wong Chuk Hang  
Hongkong  
Phone +852 2331 2232  
Fax +852 2758 7749  
info-eap@kurtzersa.com  
www.ersa.com

Ersa Shanghai  
Room 720, Tian Xiang Building  
No. 1068 Mao Tai Rd.,  
Shanghai 200336  
China  
Phone +86 21 3126 0818  
Fax +86 21 5239 2001  
info-eap@kurtzersa.com  
www.ersa.com

### France

Ersa France  
Division de  
Kurtz France S.A.R.L.  
15 rue de la Sucharde  
21800 Chevigny Saint Sauveur  
France  
Phone +33 3 80 56 66 10  
Fax +33 3 80 56 66 16  
info-efr@kurtzersa.com  
www.ersa.com



**The Hermes Standard**  
for "M-to-M" in SMT Assembly

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

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

 **kurtz ersa**