

Innovating Soldering
Technology since 1921

REWORK *DynamicIR*

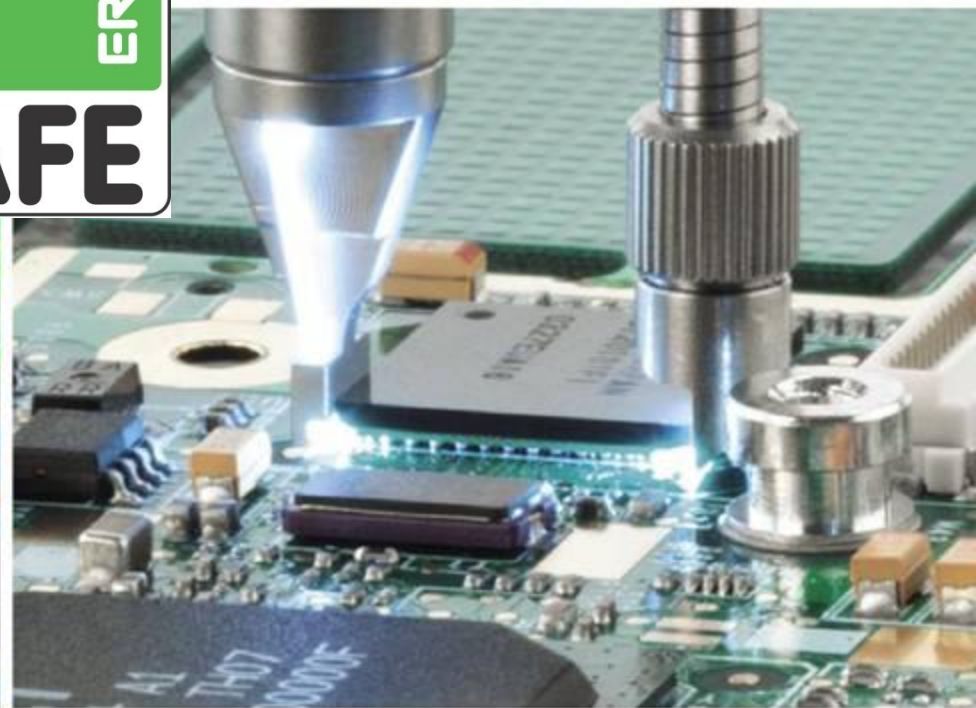
Offering **Lead free**
solutions since 1999
in the areas of:

Leadfree
Bleifrei

DESIGNED FOR

ERSA®

SAFE



왜 열풍방식이 아닌 ERSA의 Selective IR Technology for BGA Rework인가 ?



ERSA's IR Rework Message since 1998:
Safe, Uniform Heating at Low Temperatures!!

ERSA's IR/PL 550A *plus* Rework System



ERSA GmbH

A **Kurtz** Company

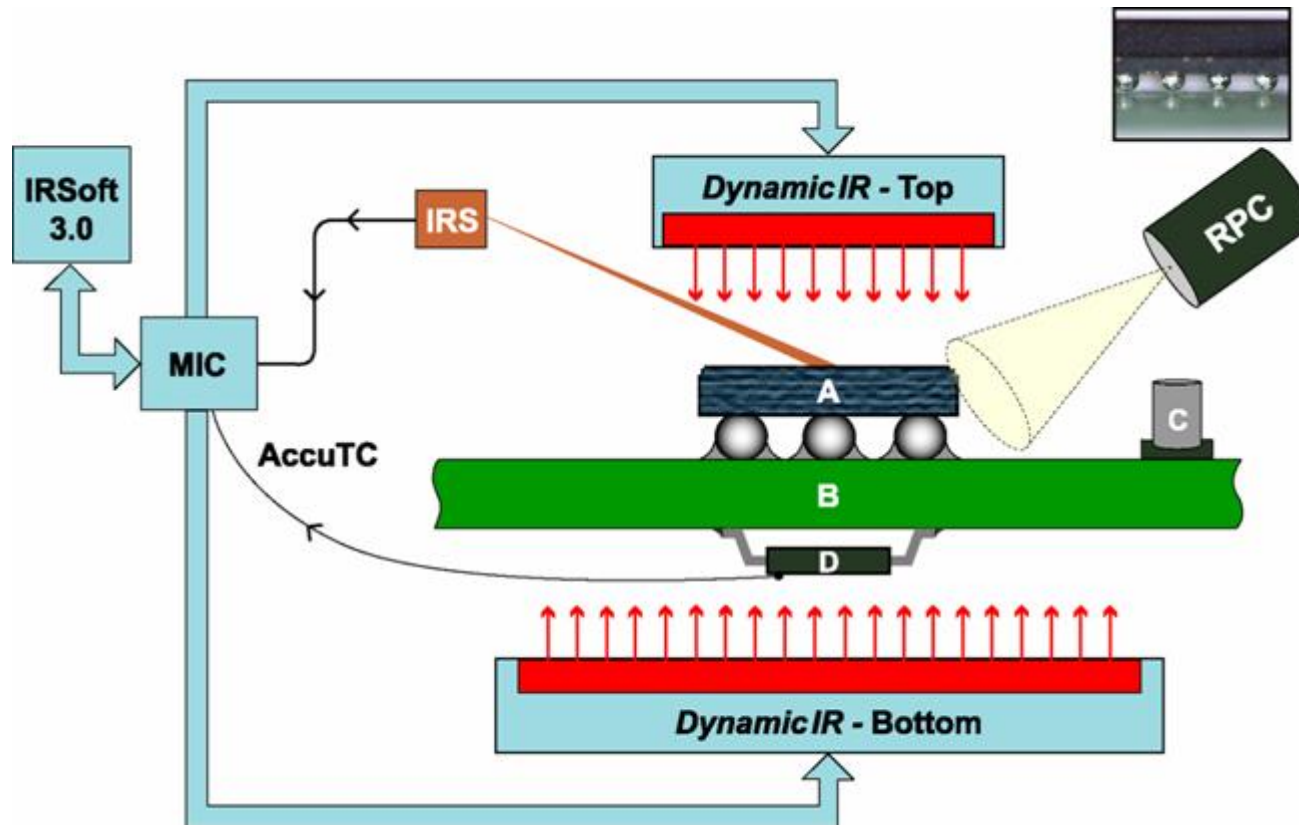
ERSA's IR/PL 550A *plus* Rework System



- 1 external keypad
- 2 bottom radiator (glass cover)
- 3 top radiator (aperture system)
- 4 component tray
- 5 vacuum pipette

- 6 display (LED)
- 7 infrared sensor
- 8 cooling fan and laser positioning device
- 9 DIGITAL 2000 A soldering station
- 10 Tech tool soldering iron and holder

Function Principle - IR 550A *plus*



A = Comp. for Rework

B = PCB

C = Comp. Top side

D = Comp. Bottom side

AccuTC = Thermal Couple

IRS = New Infrared Sensor

DynamicIR Top = top IR radiator (800W)

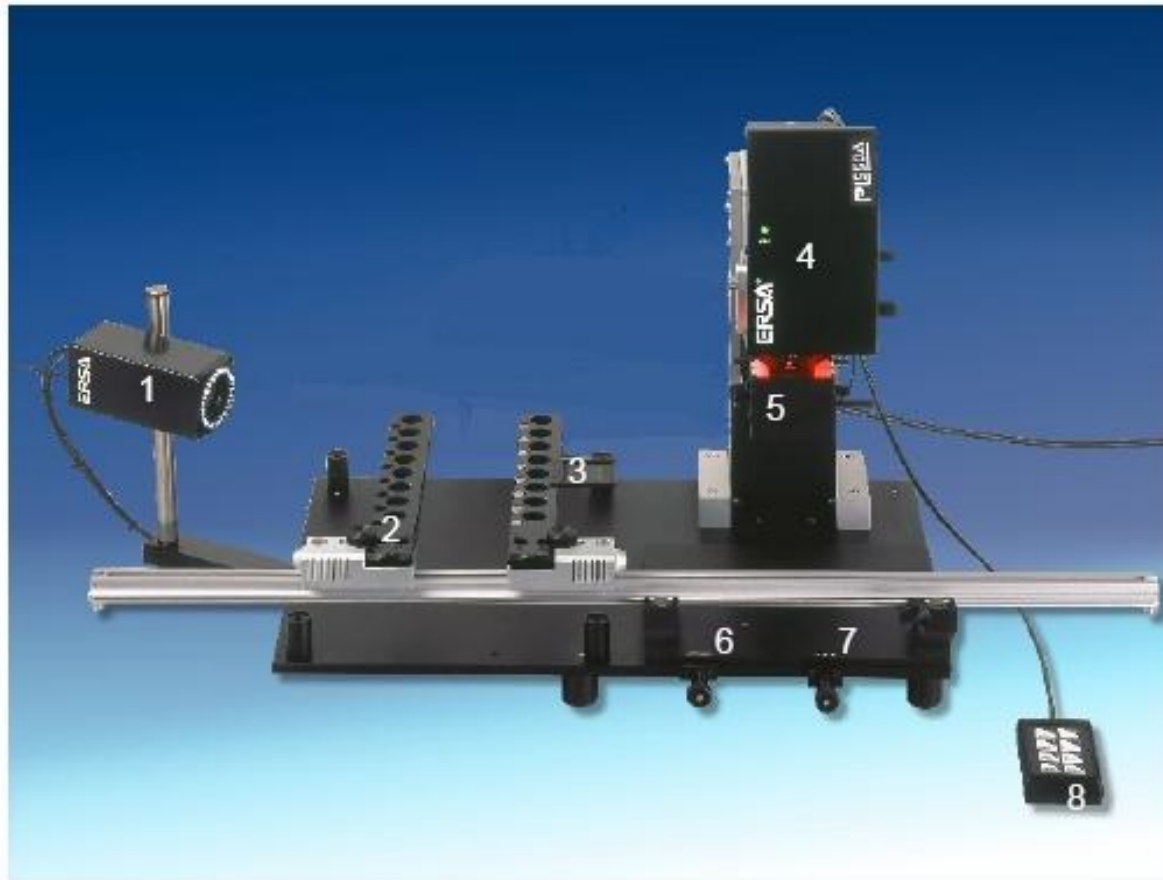
DynamicIR Bottom = bottom IR radiator (800W)

RPC = Reflow Process Camera

IRSoft 3.0 = Control & Documentation Software

Mic = Microprocessor uses actual temp. values to control the *DynamicIR* heating system

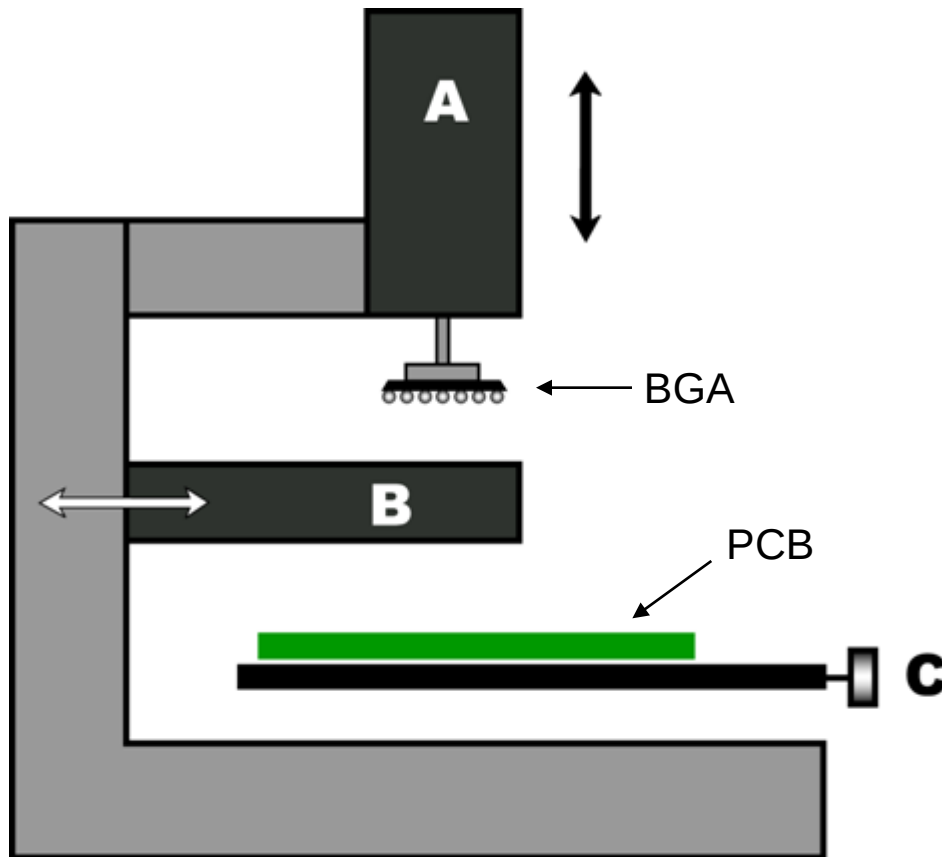
ERSA's PL 550A Placement System



1 RPC camera
2 PCB holder
3 component holder
4 placer unit

5 vision box
6 fine adjustment x-axis
7 fine adjustment y-axis
8 keypad

Function Principle - PL 550A

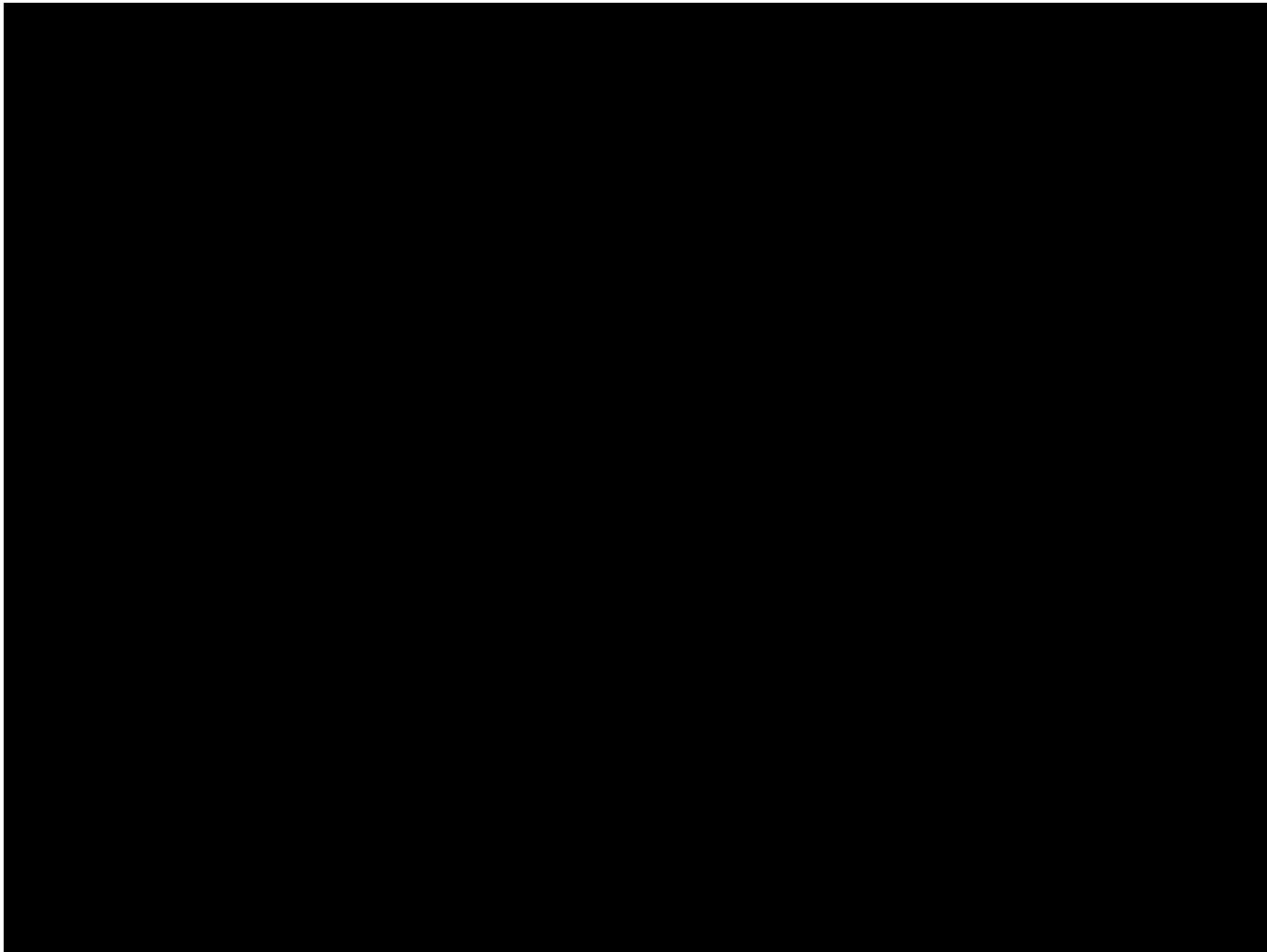


A = Motorized Z axis head with manual pressure sensor activated vacuum cup and theta adjust; motorized CCD camera

B = Split vision cassette with 2 side illumination and 2 color LED for PCB top side and component bottom side

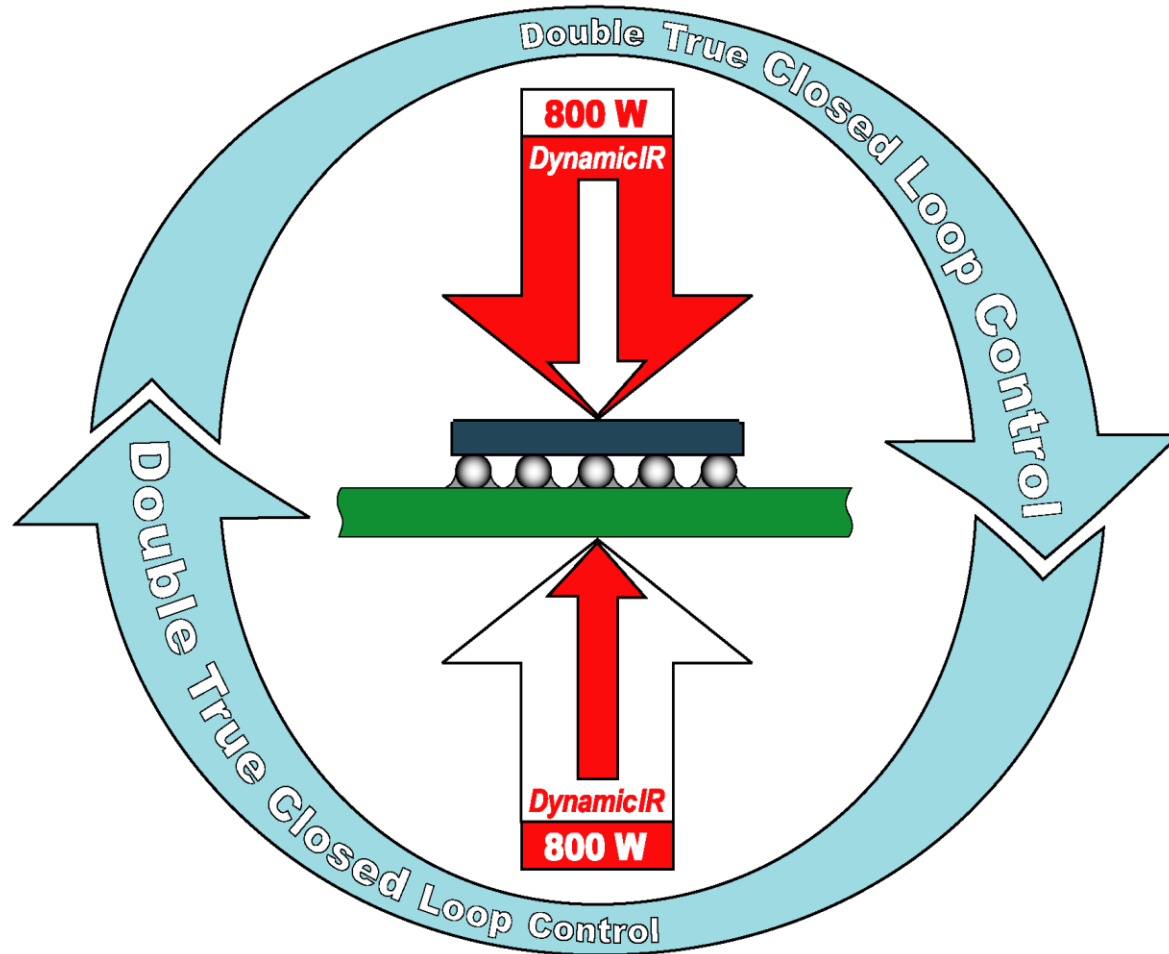
C = PCB holder with x-y micrometer adjust

IR/PL 550A *plus* – Component Removal Video Clip



Click above to start video 1

ERSA's Updated *DynamicIR* IR/PL 550A *plus*



 **Increased Performance**

 **Increased Flexibility**

 **Increased Safety!**

1. *DynamicIR* with Flat Peak

- **Top/Bottom** 자동 IR 에너지 분배 방식은 온도차이를 크게 줄 일 수 있으며 필요한 때와 위치에 맞춰 열에너지를 공급 할 수 있다.

2. *DoubleTrue Closed Loop Control*

- 과열 방지 및 지정된 작업구간에서의 정확한 동작을 보장한다

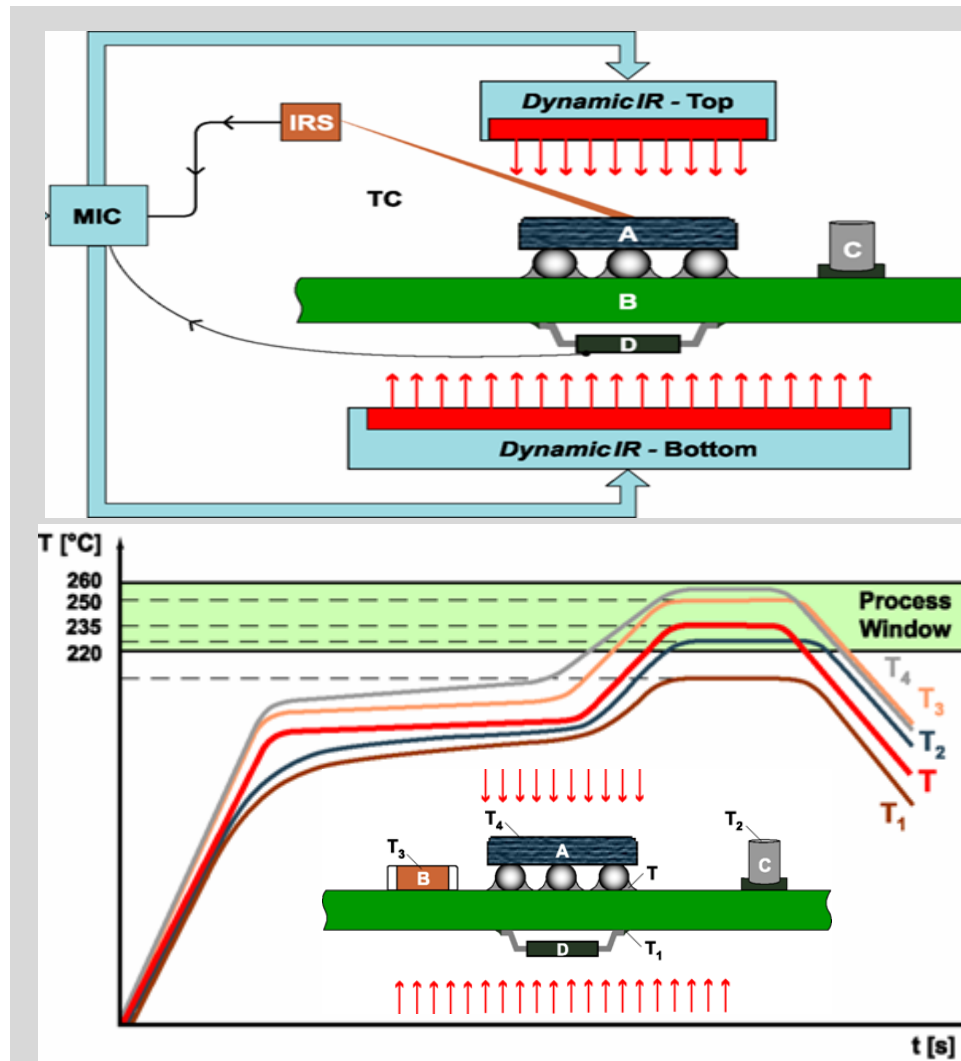
3. Energy Levels 11 thru 15 for Lead Free

- *Up to 100% more power from the bottom heater with DynamicIR control*

4. *IRSoft 4.0*

- *Completely new software platform; one software for both IR650 and IR550*

The ERSA *DoubleTrue Closed Loop* Principle



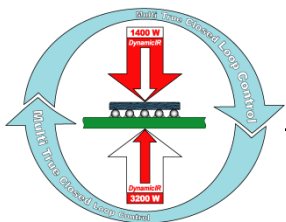
A = Component for rework
 T = Solder temp. for A
 T₄ = Max. allowable temp.
(monitored by IRS)

B = Adjacent component
 T₃ = Max. allowable temp.

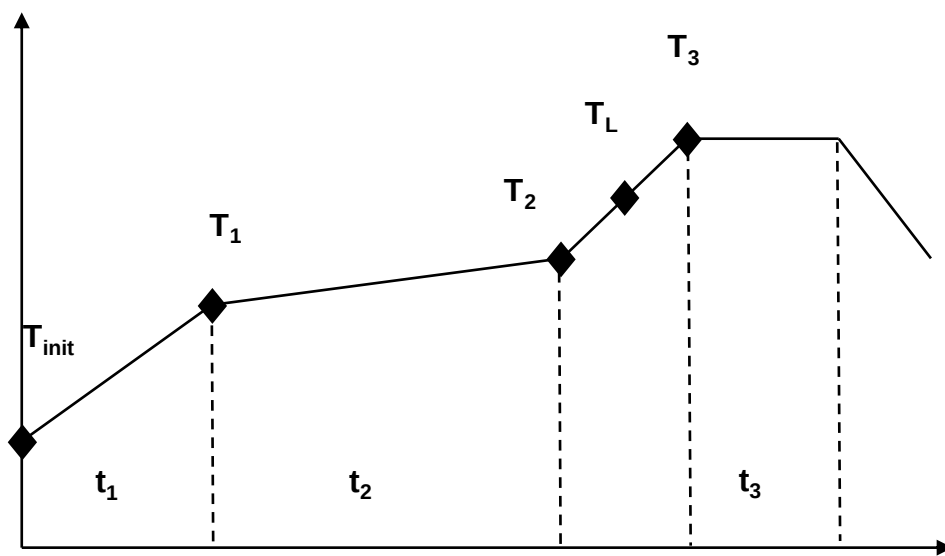
C = Temp. Sensitive comp.
 T₂ = Max. allowable temp.

D = Bottom side comp.
 T₁ = Below melting point

A second TC placed at any critical location (T₁ thru T₄) prevents heating above a specified temperature.



Programming the Flat Peak



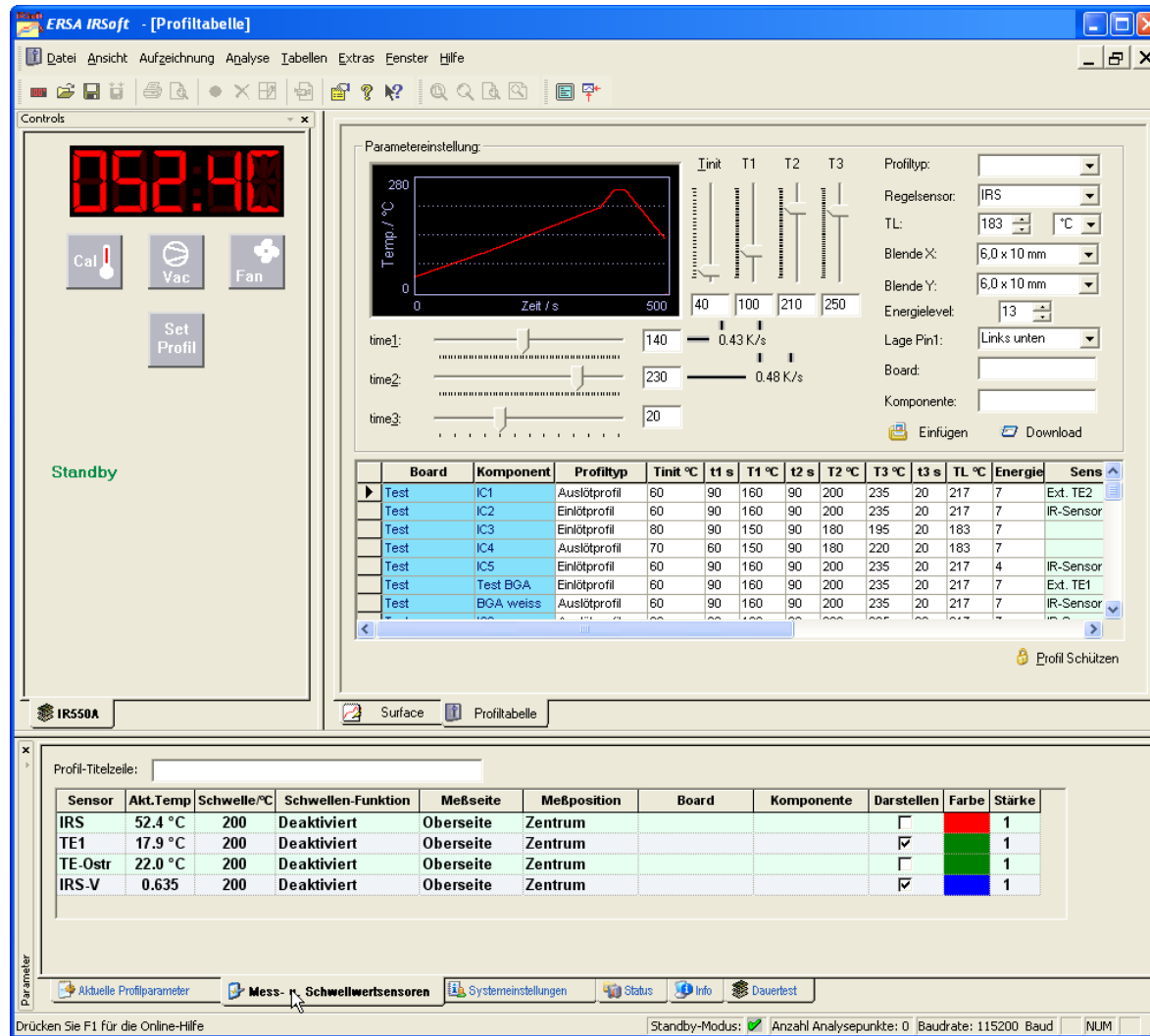
Flat peak programming parameters

Number	Parameter	Unit
-1-	T_{init}	°C / °F
-2-	t_1	s
-3-	T_1	°C / °F
-4-	t_2	s
-5-	T_2	°C / °F
-6-	T_L	°C / °F
-7-	T_3	°C / °F
-8-	t_3	s
-9-	Energy	-
-10	Alt. Sensor	-
-11	Unit	-
-12	Password	-

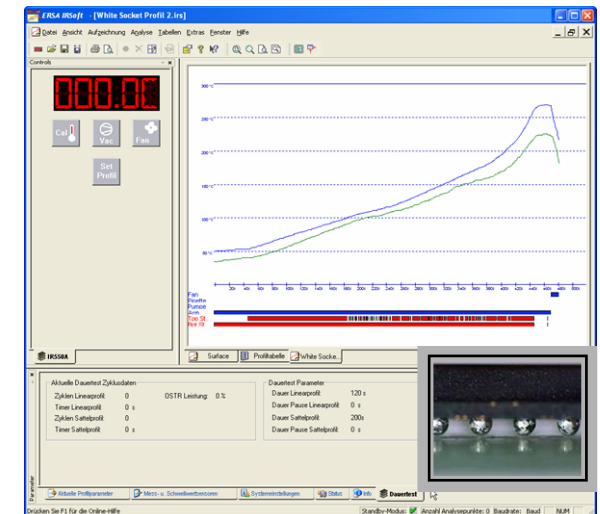
Programming Table sticker

All parameters are numbered 1 to 12 in display for easier programming. The table above is attached as sticker to the back of the mouse key pad.

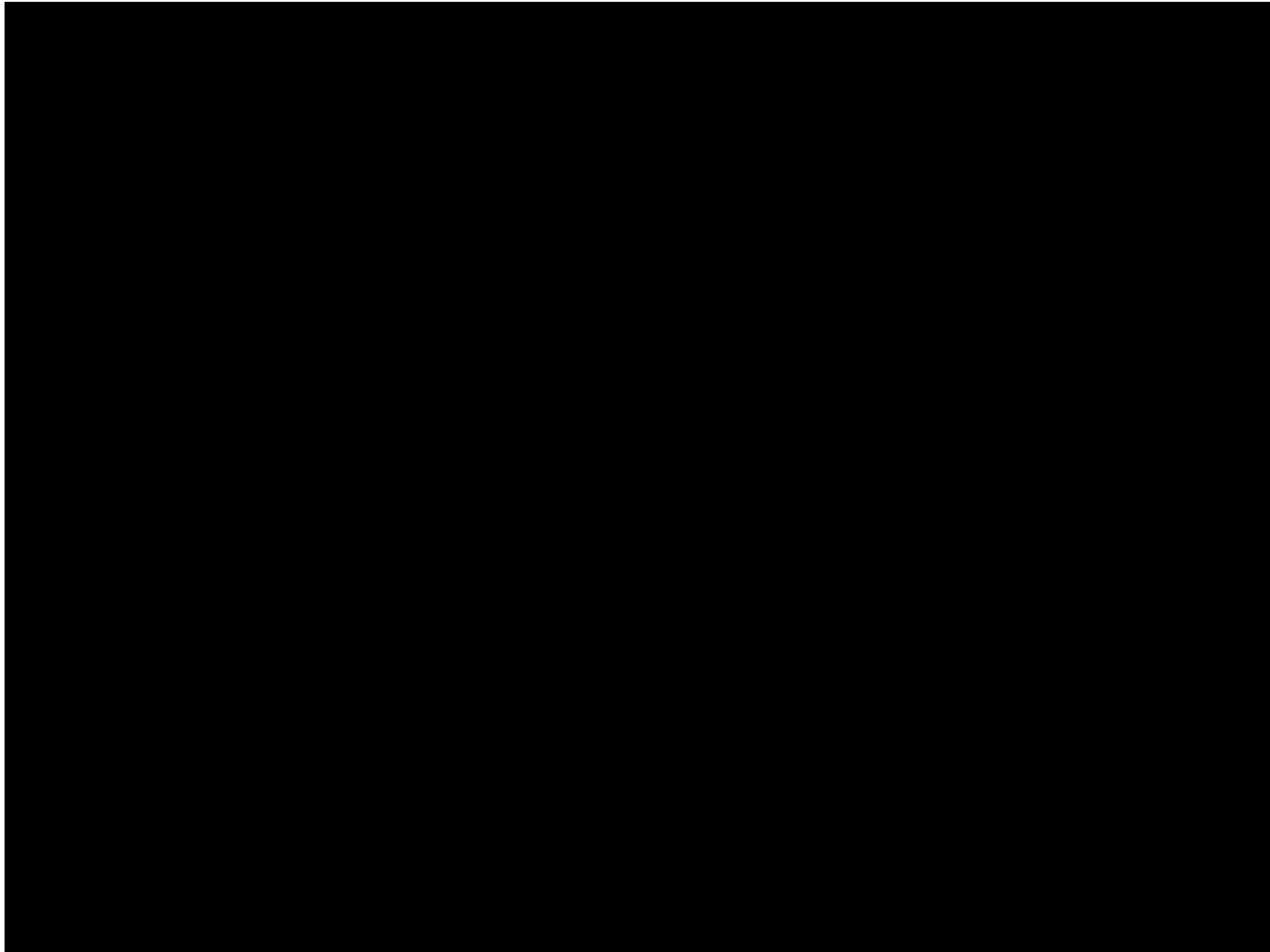
IRSoft 3.0 – The Next Generation Software



- Soldering profile creation & storage
- Visualization & documentation



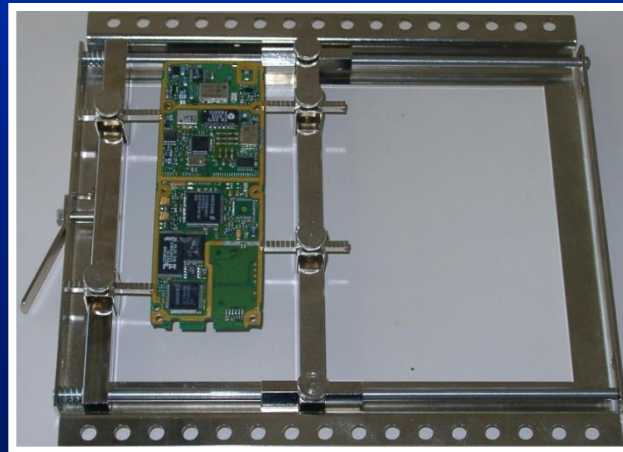
IR/PL 550A *plus* – Place and Reflow Video Clip



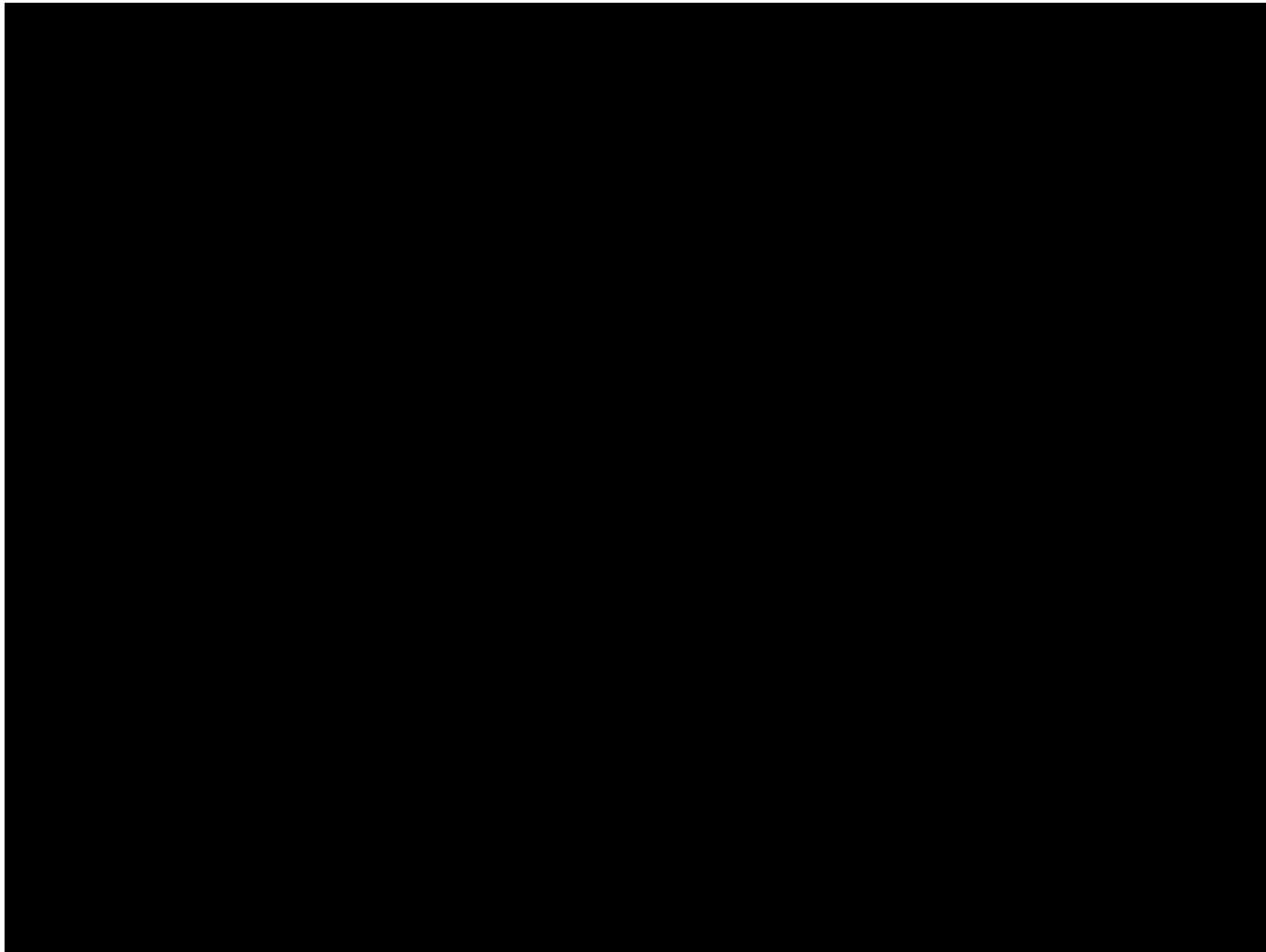
Click above to start video 2

Optional PH100: Quick Release Small PCB Holder

휴대전화용 PCB Holder!



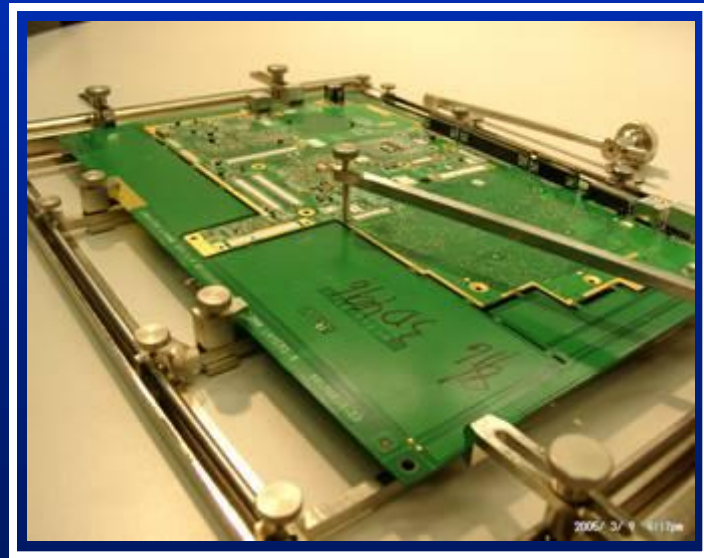
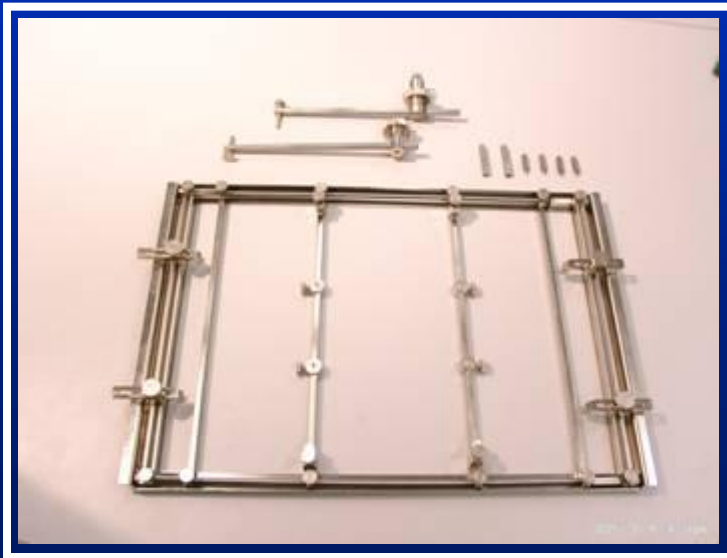
IR/PL 550A *plus* – Mobile Phone BGA Removal Video Clip



Click above to start video 3

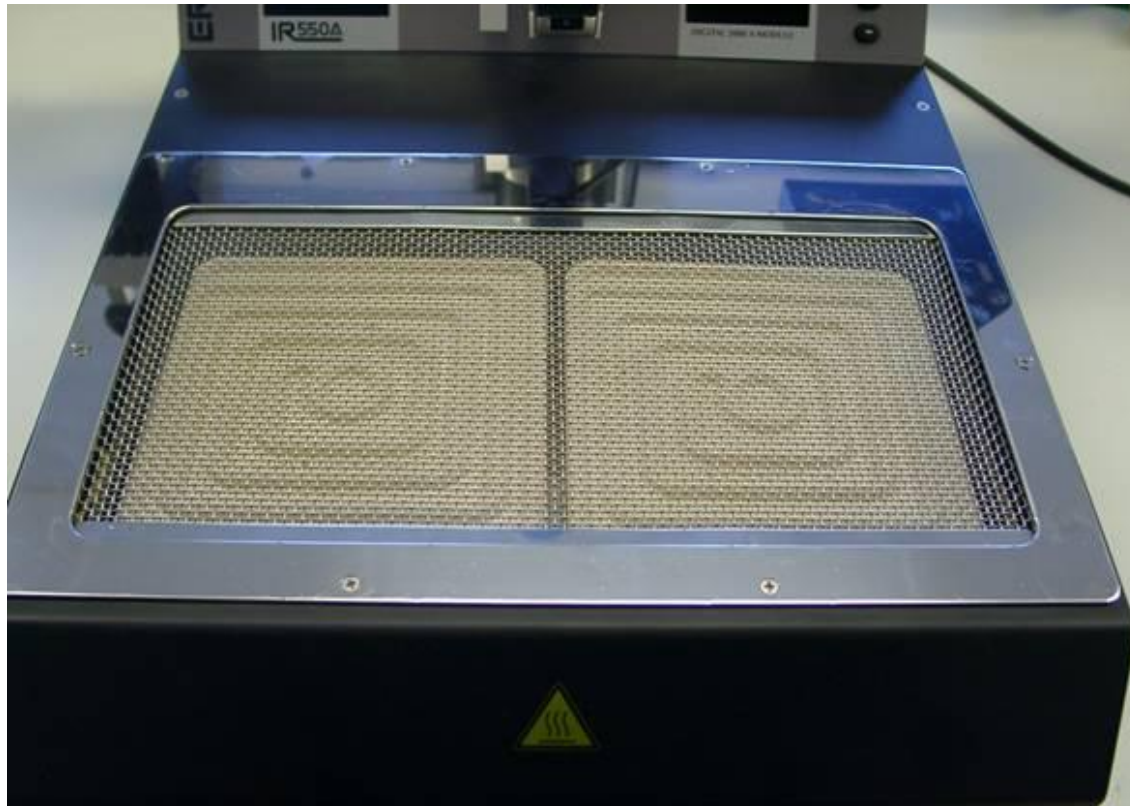
Optional PH360: The ultimate PCB Holder

The PH 360 offers tremendous flexibility in supporting the PCB during rework in order to prevent unwanted PCB warpage. Medium and small size boards (max PCB size: 365 mm x 230 mm) can be quickly and safely supported from numerous positions. Odd shape PCBs can be easily held in position for rework!

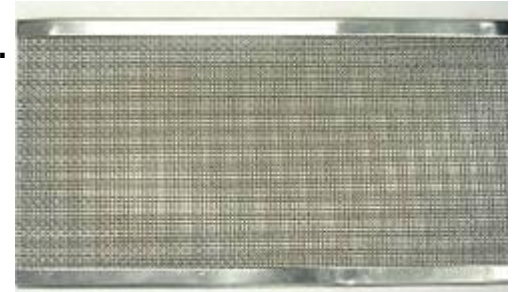


Dimensions: 430mm x 300mm - 4 moveable center supports, 8 perimeter PCB locks, 6 top side pressure pins

Bottom Heater Grid for Increased Heating Efficiency



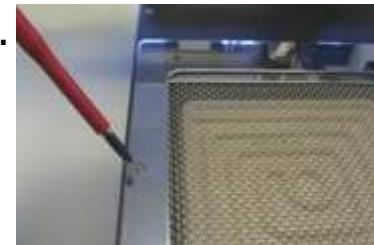
1.



2.

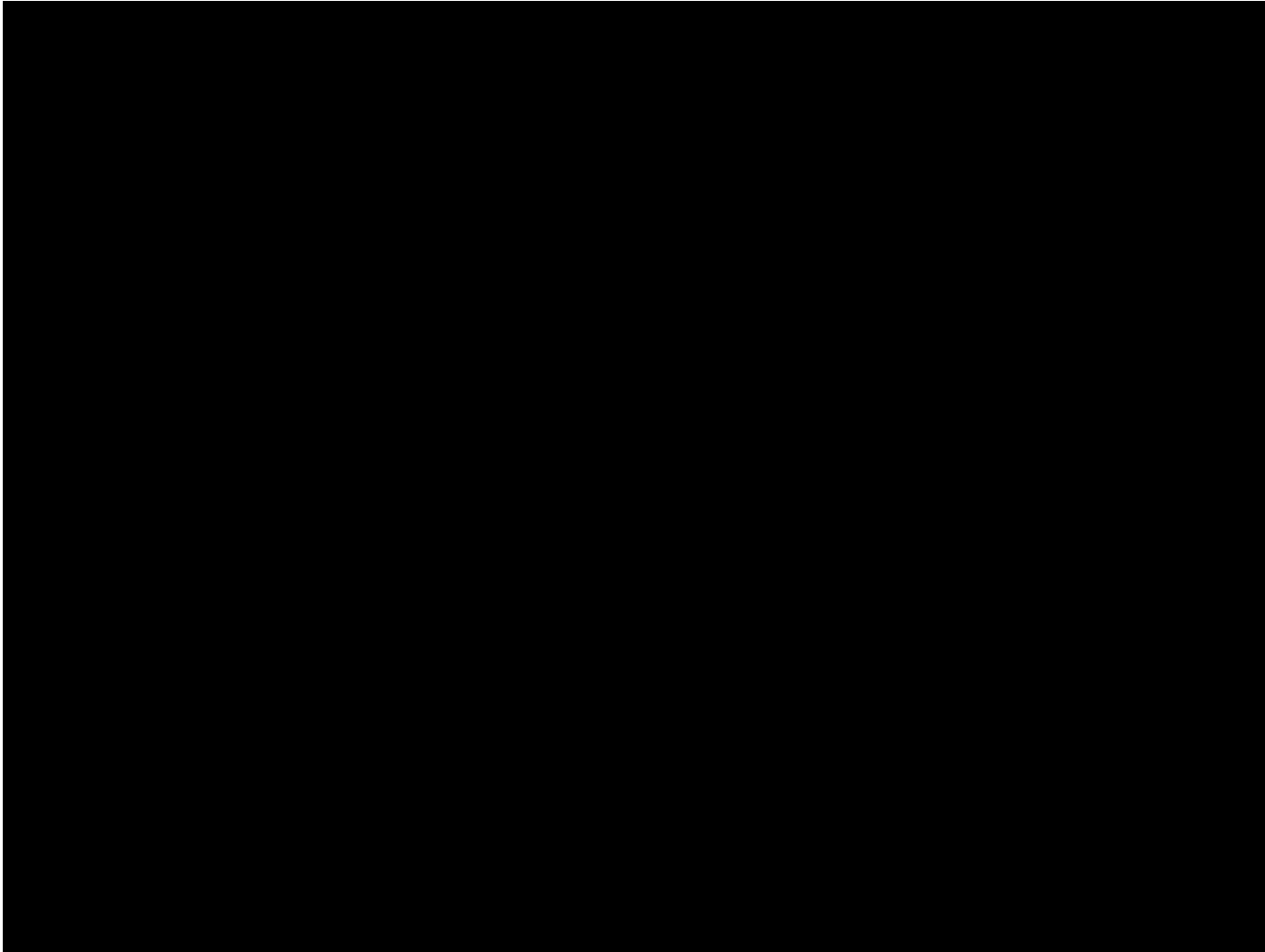


3.



밑면 히터 그리드는 유리 플레이트로 교체하여 좀 더 효율적인 가열이 가능하다. 그리드 방식은 무연납 작업 에너지 레벨 **11**에서 **15** 까지 사용시 특히 요구되어진다. 사용하지 않을시는 과열될 수도 있다.

IR/PL 550A *plus* – THT and Heavy Mass Removal Video Clip

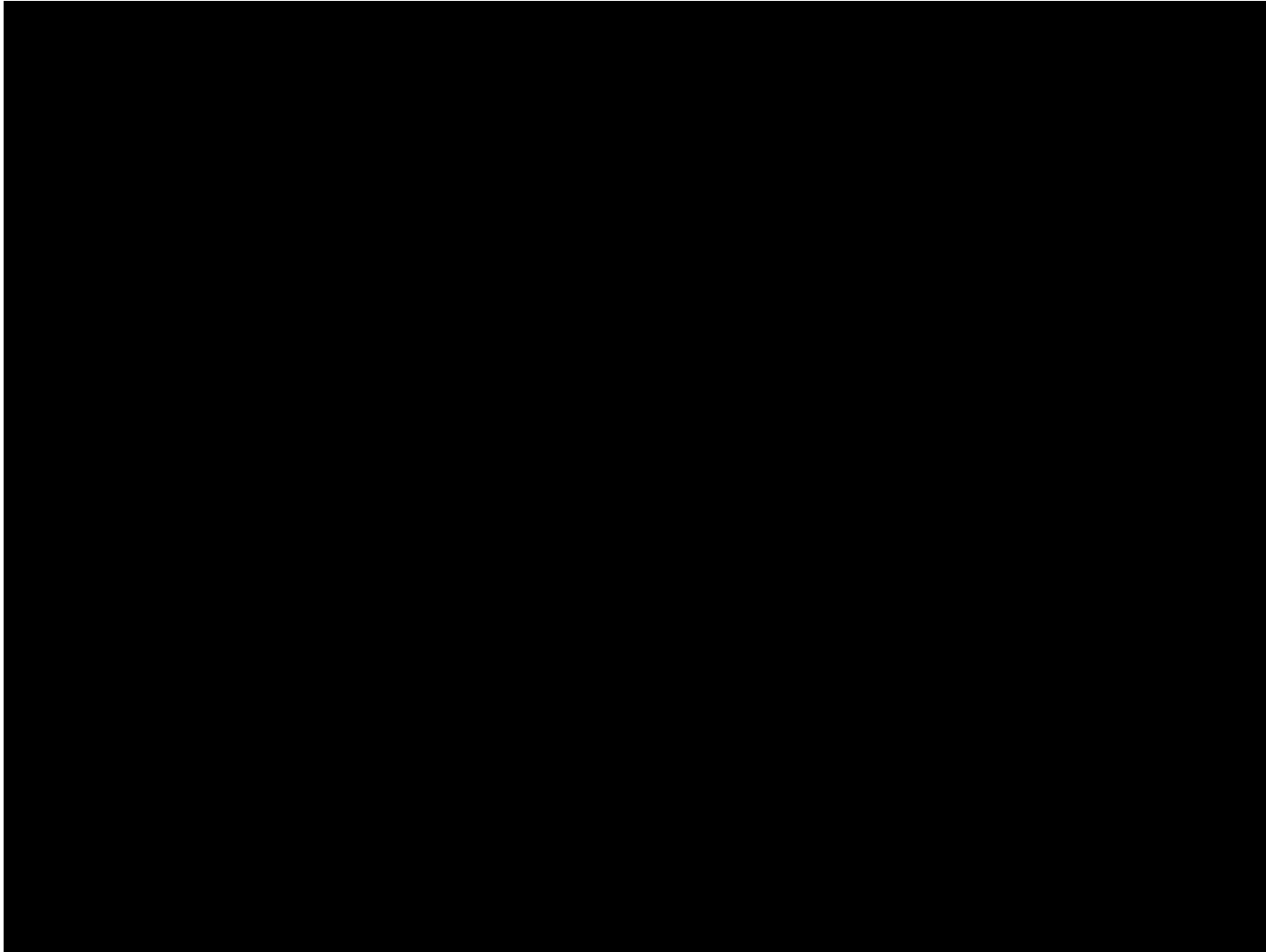


Click above to start video 4

FACT:

ERSA IR Rework
장비는 다양한 작업에
사용될 수 있습니다!

IR/PL 550A *plus* – Rework Applications Video Clip

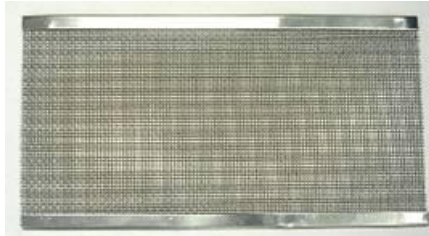


Click above to start video 5

IR 550A *plus* Upgrade Kit - for existing IR550A Units

Complete Upgrade Kit consists of the following:

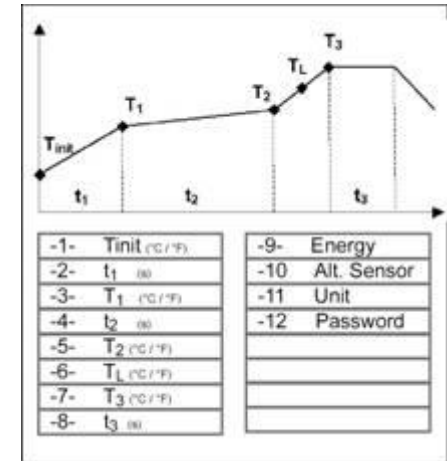
1. Bottom heater grid



2. AccuTC with contact block



3. Programming Table sticker



4. Control card with new firmware



5. CDRom with IRSoft 3.0



Note: Upgrade Kit is available for both versions of IR550A, RS 232 and USB.

ERSA's Updated *DynamicIR* IR/PL 550A *plus*



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