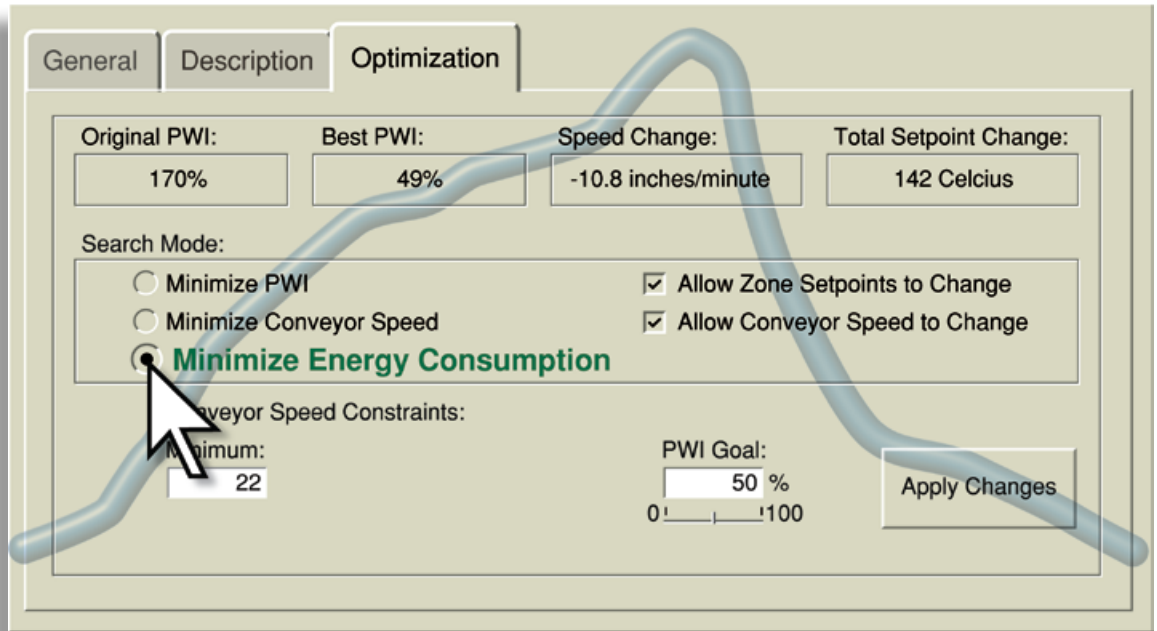




Reflow Oven Set Up Lower Electricity Use – Improve Production Quality

- ◆ Reduce energy costs
- ◆ Enable deep in spec profile
- ◆ Maximize product throughput
- ◆ 24 Hour customer support



Technology for Lower Electricity Use

Navigator Power selects the best oven recipe based on user selected criteria:

- Minimum electricity use
- Deep in spec profile
- Maximized throughput
- Minimized oven changeover time

Where do the energy savings come from?

- Most reflow ovens are set up without considerations of electricity use
- Reflow ovens tend to run too hot and too fast
- Software simulation identifies the oven recipe that will yield the lowest electricity use based on the above criteria

When will the electricity savings be realized?

- Instantly

Case Studies

Several case studies reveal a typical electricity saving of approximately 15%

Go to www.kicthermal.com to read the actual case studies

What is required to achieve the electricity savings?

- Knowledge of the appropriate process window
- One initial profile run with TCs on the product
- Knowledge of minimum allowable reflow oven conveyor speed
- KIC Navigator Power and a KIC Profiler (works with SlimKIC 2000 and KIC Explorer profilers)
- Nothing else

Ease of Use Software

- Most profiling tasks are automated and run invisibly in the background
- The user interface enables the responsible engineer to select the higher level criteria such as process window and minimum conveyor speed
- Everything else can be delegated
- The ease of use software means faster oven set up and lower production downtime



THE PROCESS WINDOW INDEX™



Profiling Reduced to a Single Number

The PWI measures the profile's fit to the process window in a mathematical and objective manner by using a single number. This aids in optimizing the process by comparing and ranking alternative profiles in terms of their fit to the available process window. The lower the PWI, the more efficient and stable the process! (See the PWI data sheet for a detailed explanation)

Solder Paste: SYSTEM DEFAULT

Maximum Slope Over the Profile

Maximum Rising Slope (Ramp Rate) Target: 2.0 High: 3.0 Celsius/Second(s)

Maximum Falling Slope (Cooling Rate) Range: -4.0 -> -2.0 Celsius/Second(s)
(i.e. -5 -> -1)

Number of Seconds to Calculate Slope Over: 40

Maximum Slope Between Temperatures:

Temperature Range: Slope 1 Slope 2 Slope 3

Celsius: 30 -> 175

Slope Range: Celsius/Second(s) 0.5 -> 1

Number of Seconds to Calculate Slope Over: 90

Time between/above and Peak Temperatures

Temperature Range: Preheat Soak Reflow

Celsius: 175 -> 185 183

Time: Second 35 -> 45 30 -> 90

Temperature Range: Total Time Above Peak Maximum Exit Temperature

Celsius: 208 -> 228

Time: Second

Edit the Process Window Screenshot

COMPUTER CONFIGURATION

Minimum System Requirements

- 800 MHz Processor / 256 MB RAM¹
- 2 GB available storage (for product history)
- Video 1024 x 768 resolution / 16-bit
- 1 available USB port (for data download)
- 1 available parallel port or USB port (for software key options)
- Microsoft® Windows® 2000, XP or Vista²

1 When KIC Software is running on a computer with other applications, a faster CPU and more RAM may be required.
2 Contact KIC for issues with operating systems other than those listed.

KIC 2000 PLATFORM

KIC Navigator Power™ expands the capability and potential of the KIC Software Platform by automatically optimizing your process set up.

KIC Navigator Power™ is a stand-alone software option and is also included with the KIC Auto-Focus Power™ software option.

Note: The KIC Software Platform can interface directly with the oven controller, eliminating the need for manual setpoint data entry. Please consult your oven supplier for availability.



* KIC Explorer RF kit pictured above is not included in Navigator Power product.

RISK-FREE GUARANTEE

All KIC products are designed to give maximum value and fast payback by streamlining your thermal process. Investment in a KIC product is a step toward total process control and quality management. All KIC products come with a no questions asked, 30-day money back guarantee.

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