



NAVIGATOR ^{POWER}™

Reflow Oven Set Up Lower Electricity Use – Improve Production Quality

Navigator Power Advantages

- Reduce Energy Costs
- Enable Deep in Spec Profiler
- Maximize Product Throughput
- 24 Hour Customer Service

General Description Optimization

Original PWI: 170% Best PWI: 49% Speed Change: -10.8 inches/minute Total Setpoint Change: 142 Celcius

Search Mode:

☐ Minimize PWI ☒ Allow Zone Setpoints to Change

☐ Maximize Conveyor Speed ☒ Allow Conveyor Speed to Change

☒ **Minimize Energy Consumption**

Conveyor Speed Constraints: Minimum: 22

PWI Goal: 50% (0 to 100)

Apply Changes

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
- 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



Thermal Process Set Up Tool for Lower Electricity Use

NAVIGATOR^{POWER}™

KIC Navigator Power™ expands the capability and potential of the KIC software 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 may interface directly with some oven controllers, eliminating the need for manual setpoint data entry. Please consult your oven supplier for availability.

KIC software is dongle protected.

Process Window Name: System Default

Solder Paste: SYSTEM DEFAULT

Statistic Name	Low Limit	High Limit	Units
Max Rising Slope (Target=2.0) (Calculate Slope over 20 Seconds)	0.0	3.0	Degrees/Second
Soak Time 140-170C	50	90	Seconds
Time Above Reflow - 183C	40	75	Seconds
Peak Temperature	205	255	Degrees Celsius

☐ Wave ☒ Same Specs for all TCs

Select TC to view:

Process Window Description

Icons: [Pencil] [Eraser] [Trash] [Checkmark] [X]

Edit the Process Window Screenshot

COMPUTER CONFIGURATION

Minimum System Requirements

Dual Core / 1 GHz Processor PC with 2 GB RAM
2 GB available storage

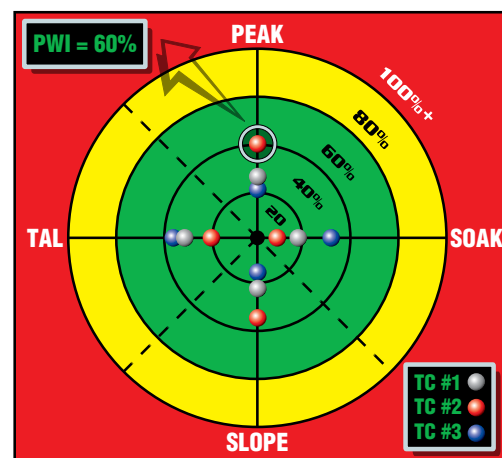
Video 1024 x 768 resolution / 16-bit
1 available USB port (for software key)

Visit our website at <http://kicthermal.com/support-download/os-compatibility-chart> for product compatibility with Windows operating systems.



When KIC Software is running on a computer with other applications, a faster CPU and more RAM may be required.

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)

Technical Support

24 Hours Every Day

Everywhere

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.

For more information on any of our products or service please visit us on the Web at: www.kicthermal.com or www.kic.cn.

Service Available

Technical Support
Installation and Setup
Application Support
Hardware Support
Guaranteed Warranty

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