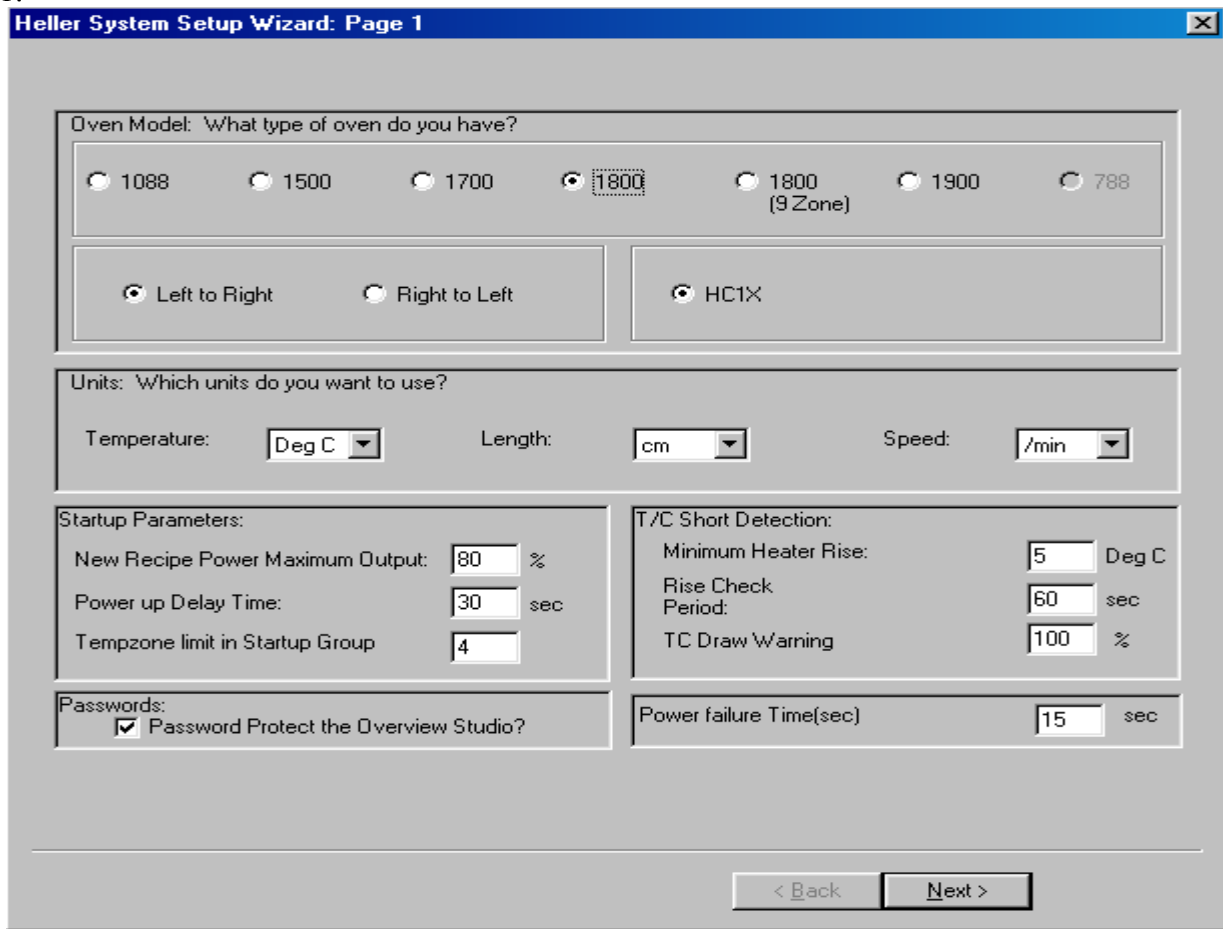


Page1:



Oven Model: Select from 1088, 1500, 1700, 1800, 1800(9 Zones), 1900

Oven Direction: Left to Right or Right to Left

Units:

Temperature:- Deg C or Deg F

Length: cm or inch

Speed: /min

New Recipe Power Maximum Output: 80%

Power up Delay Time: 30 sec

During startup, next group of heater channels will turn on after all channels in current startup group drop below “..Maximum Output %” and then “Power up Delay Time” is countdown.

Tempzone limit in Startup Group: 4 default, (maximum number of zones can run at 100% power)

T/C Short Detection:

Minimum Heater Rise: 5 DegC or 9 DegF (1 Deg C for IR-Panels)

Rise Check: 60sec

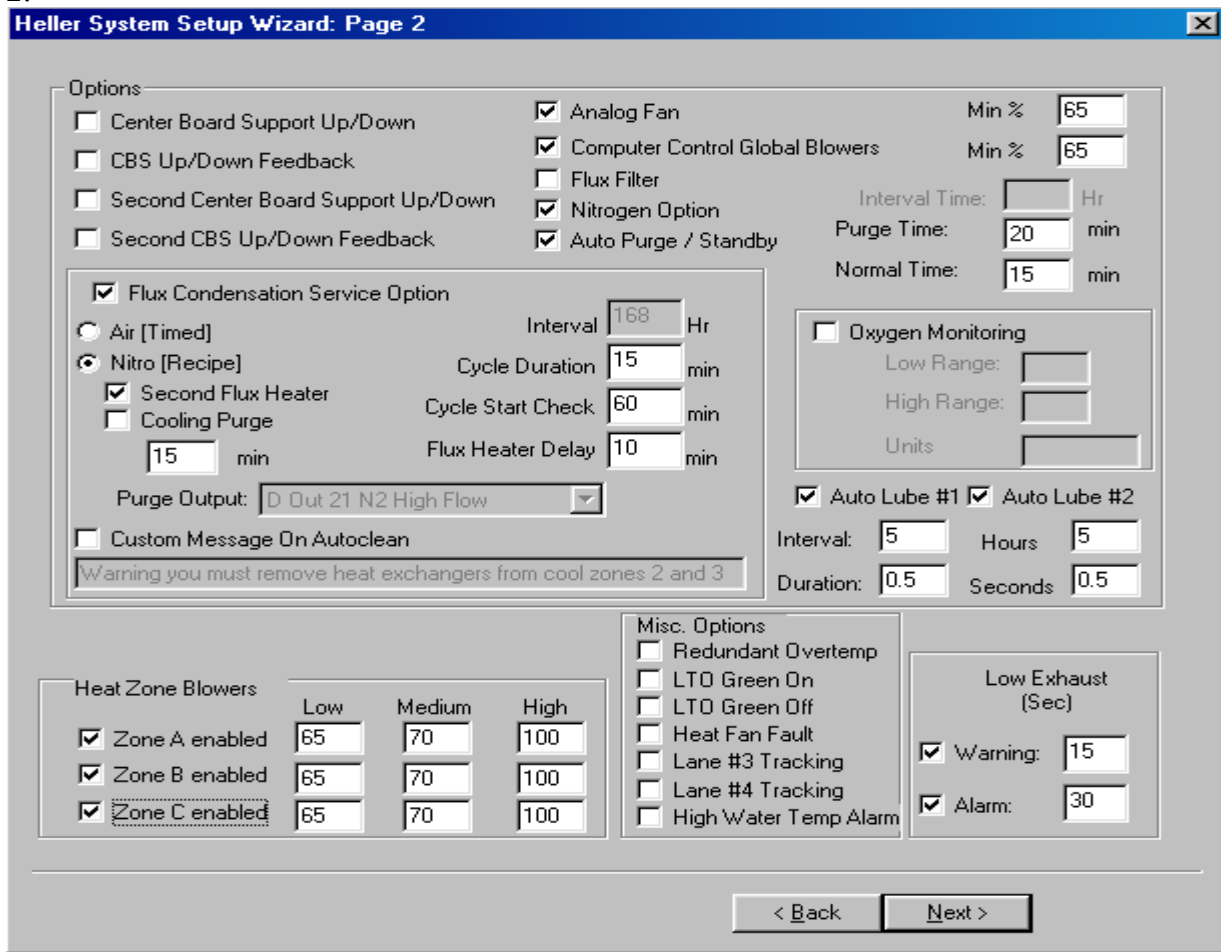
TC Draw Warning: 100%

After startup sequence is finished and oven is in OK condition if any heater zone reaches to “TC Draw Warning %” oven gives warning.

Power failure Time: 15sec

Select “Password Protect the Overview Studio”.

Page 2:



Center Board Support Up/Down: this option is used to move CBS Up or Down.

CBS Up/Down Feedback: this option is used to display the proper CBS Up/Down position depending on the actual CBS position feedback.

Analog Fan: to control the blower speed usually for cooling zone. Minimum% is set to not allow the blower speed below certain limit.

Computer Control Global Blowers: to control the blower speed. Minimum% is set to not allow the blower speed below certain limit.

Flux Filter: this option is used for Gen-4 flux system with service indicator option.

Nitrogen Option: to turn main N2 solenoid On/Off from overview screen.

Auto Purge / Standby: option is used for nitrogen purge/standby (high, normal and low flow).

Flux Condensation Service Option (Gen-5.1): Timed or Recipe mode.

Air[Timed] mode: after interval time flux-box cool blowers will turn off for cycle duration time. Interval time is counted only when oven is in OK state.

Nitro[Recipe] mode: a recipe named "autoclean" need to create with proper temperature settings.

Cycle Duration: 60min default

Cycle Start Check: 90min default

Flux Heater Delay: 40min default

When "autoclean" recipe is loaded, "Cycle Start Check" and "Flux Heater Delay" timers starts countdown and flux-box cool blowers turn off. At the end of delay timer exhaust blowers turn off and flux heater turns on if they are ready in startup group. After heater channels goes in OK state flux condensation "Cycle Duration" timer starts countdown. If cycle duration timer does not start within cycle start check timer expires oven loads cooldown with alarm message.

At the end of autoclean recipe one of the following can be selected in operate mode

- a. Load Cooldown (default)
- b. Load Cooldown w/Nitrogen w/Timer for N2 on time
- c. Load selectable existing recipe

Cooling Purge: if enabled selectable output turns on for set time at the end of autoclean recipe.

Second Flux heater: select proper T/C input and TPO output for second flux heater channel from pop-up window.

Custom Message On Autoclean: select this option if pop-up message should appear before loading autoclean.job which will allow to continue or cancel the recipe load.

Auto Lube: used for edge hold or CBS rail lube option.

After interval time countdown auto lube solenoids will turn on for duration time. Timers are active only during operate mode.

Heat Zone Blowers: (Low, Medium or High control setting saved in recipe, default is High)

Low: 65% default, change if necessary

Medium: 70% default, change if necessary

High: 100% default, change if necessary

Redundant Overtemp: option is used with Bi-Metallic switch. Oven loads cooldown with over temperature alarm message.

LTO Green On / LTO Green Off - for special light tower operation

New job –flashing Green, OK –Green light On or Off, Warning –Yellow, Alarm, board drop / stop warning –flashing Red.

Light tower display shows Green, Red and Yellow from top to bottom.

Heat Fan Fault: option is used for blower failure alarm.

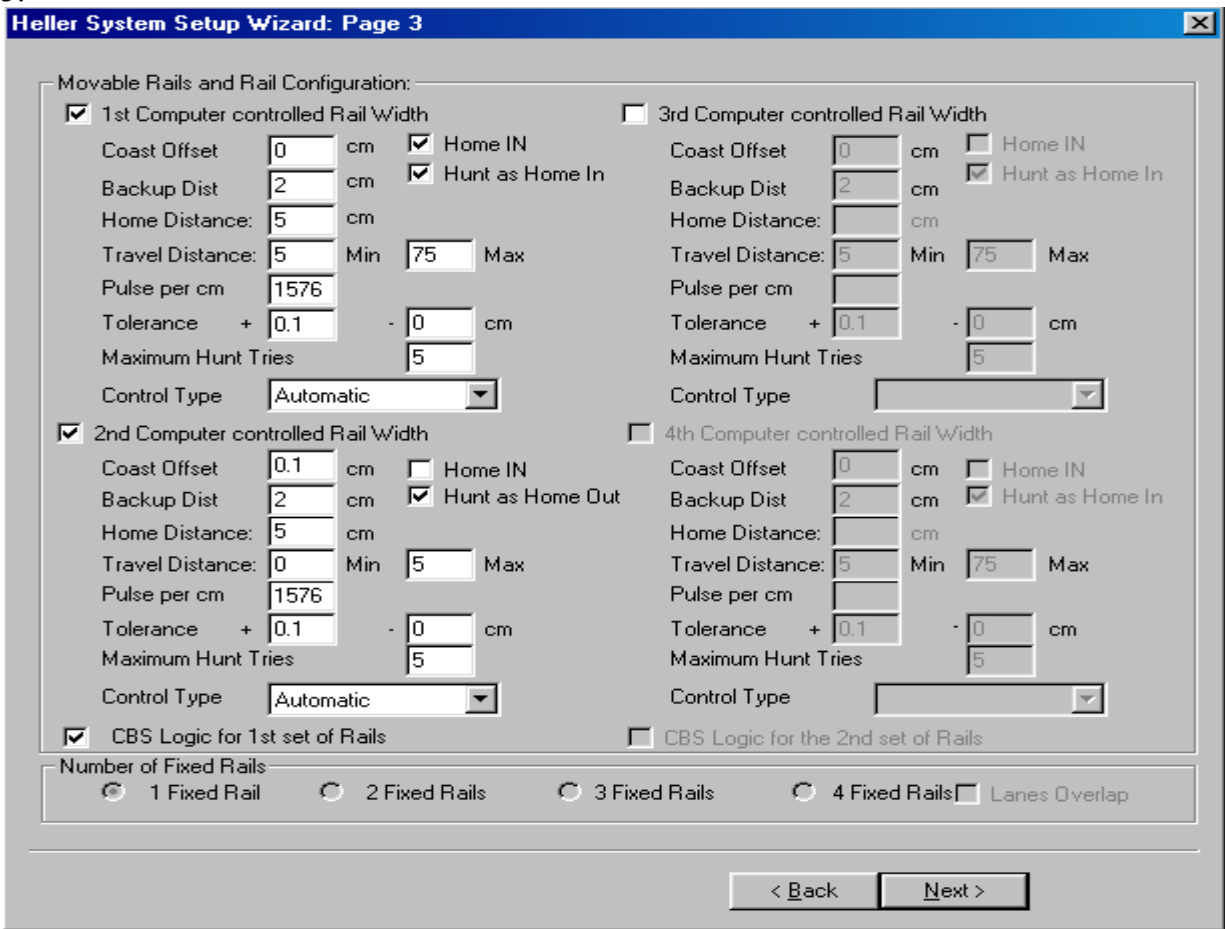
Lane #3 and #4 tracking: option is for lane 3 and 4 board animation.

High Water Temp Alarm: option for water cool zone.

Low Exhaust:

Warning: 15sec default, selectable

Alarm: 30sec default, selectable, loads cooldown.



Movable Rails and Rail Configuration:

Home IN: select if home switch is towards fixed rail.

Rail final position direction: “Hunt as HomeIn” or “Hunt as HomeOut”.

Keep the default setting which is hunt from the home direction for standard ovens.

Coast Offset: use this distance to stop the rail enable signal before the final position.

Backup Distance: rail always moves for “Backup” distance in home direction when new set point is entered or if it is out of tolerance band and retrying for final position.

Home Distance: Board width distance when rail is on home switch.

Travel Distance: is a minimum and maximum distance that user can enter for the rail position.

Pulse per cm: 1576 (for 200 pulse encoder)

Tolerance: allowed + and – distance from the set point.

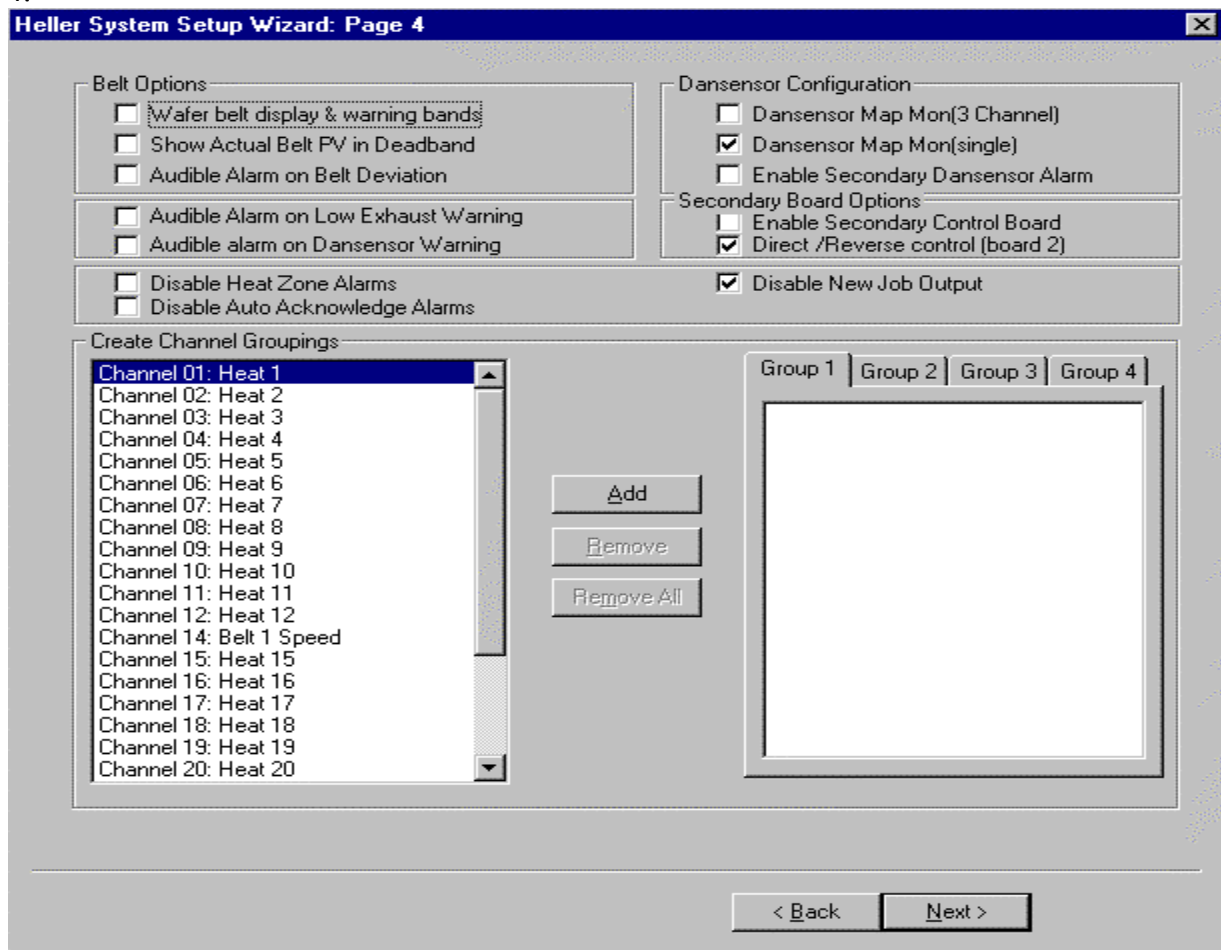
Maximum Hunt Tries: 5 default. If rail falls out of tolerance band while trying to go to its final position, it retries to achieve the final position.

Control Type:

Automatic: enter set point

Manual: left or right arrow buttons to move the rail.

Page 4:



Belt Options:

Wafer belt display & warning bands: select for low belt speed and 0.1” minimum warning band. Need 1000 pulse encoder for better resolution.

Show Actual Belt PV in Deadband:

Audible Alarm on Belt Deviation: secondary audible alarm by default on belt warning

Audible Alarm on Low exhaust warning: secondary audible alarm by default

Audible alarm on Dansensor Warning: secondary audible alarm by default

Disable Heat Zone Alarms: with this option selected oven does not load cooldown for heat zone alarm deviation. Usually select this option with redundant secondary control board.

Disable Auto Acknowledge Alarms: select this option if auto acknowledge on heat and belt channel warnings are not needed.

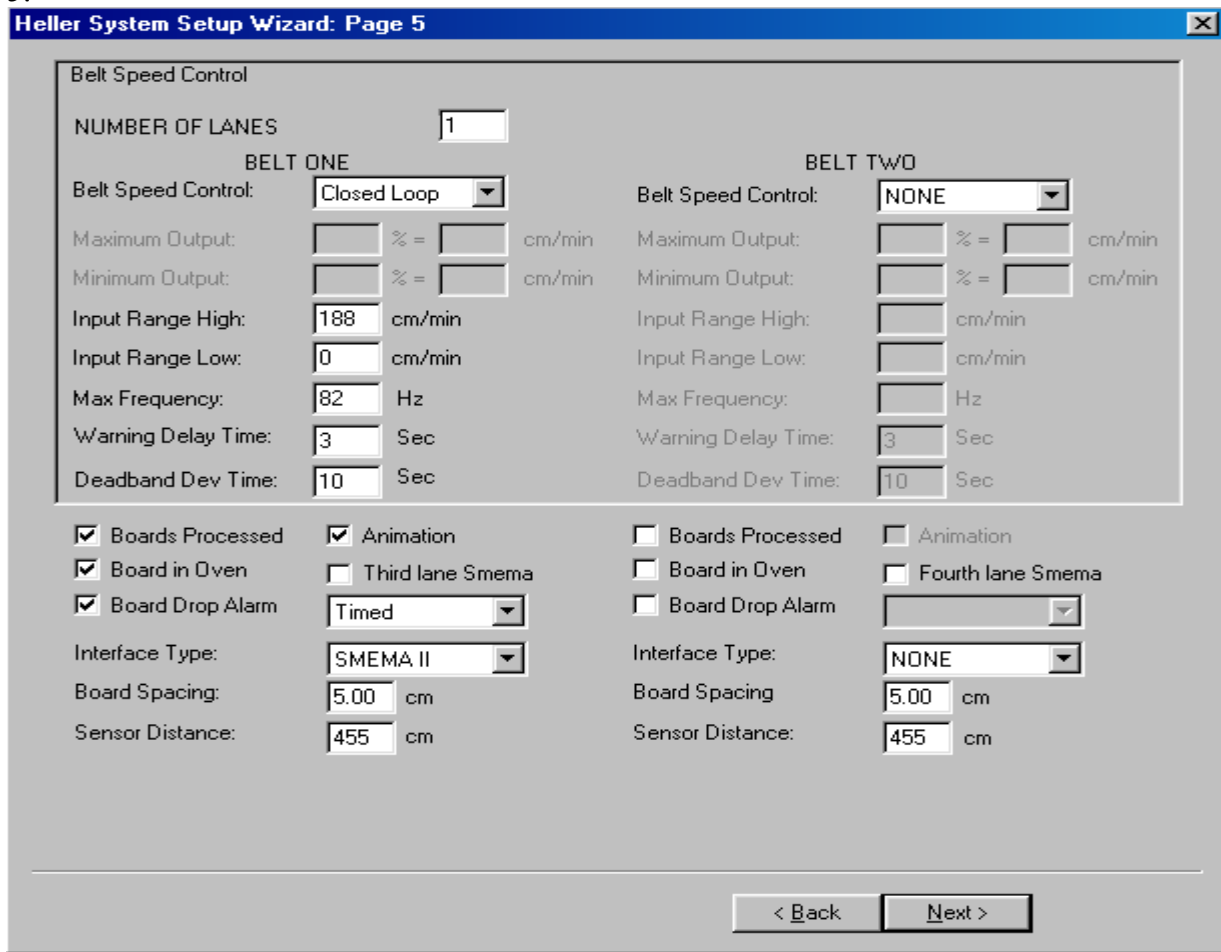
Dansensor Configuration: select single or three channel Dansensor accordingly to display PPM level from Dansensor Map Mon software. To display secondary alarm on overview screen enable it. Warning message gets displayed when PPM level exceeds Alarm level set in Map Mon software.

Secondary Control Board options are for redundant alarm control option.

Disable New Job Output: Digital Output 25 is shared between three options- Flux exhaust blower, secondary audible alarm and new job 5sec output. Only one option can be used at a time, flux exhaust blower has the priority. Secondary alarm output will move to main audible alarm if DOUT25 is used for other option.

Create Channel Groupings: Four groups can be formed by selecting channels and adding to a group. Heater and belt channel cannot be mixed. Changes in any one channel parameter in a group applies to all other channels in a group.

Page 5:



Belt Speed control:

Number of Lanes: number of animation lanes, maximum four lanes.

Belt Speed Control:

Closed Loop:

Input Range High: 188 cm/min

Input Range Low: 0 cm/min

Max Frequency: 82 Hz (encoder mounted on Square Drive shaft)

89 Hz for oven w/o edge hold (encoder mounted on Belt Drive shaft)

78 Hz for SX model oven (w/edge hold)

Warning Delay Time: 3sec (1-30sec), if PV value stays outside warning band for more than set time

Deadband Dev Time: 10sec (0-30sec), if encoder belt value stays outside deadband correct PV displays

Open Loop (1088):

Maximum Output: 100% = 100 cm/min

Minimum Output: 0% = 0 cm/min

Option Boards Processed and Board in Oven should be selected together. Select Animation to display board animation on the overview screen.

Board drop alarm: select for board drop or stop warning, select Timed.

Interface Type: select proper interface type from the drop down box, ex. SMEMA II.

Board Spacing: 5cm default

Sensor Distance: used for board drop option, animation.

For 3rd and 4th lane SMEMA select it, lane 1 settings are applied for lane 3 and lane 2 to lane 4.

Page 6:

Channel #	Enabled State	Channel Name	Low Limit	High Limit	Limit Units	Startup Group #
1	ON	Heat 1	-1	300	Deg C	1
2	ON	Heat 2	-1	300	Deg C	1
3	ON	Heat 3	-1	300	Deg C	2
4	ON	Heat 4	-1	300	Deg C	2
5	ON	Heat 5	-1	300	Deg C	3
6	ON	Heat 6	-1	300	Deg C	3
7	ON	Heat 7	-1	300	Deg C	4
8	ON	Heat 8	-1	300	Deg C	4
9	ON	Heat 9	-1	300	Deg C	5
10	ON	Heat 10	-1	300	Deg C	5
11	ON	Heat 11	-1	300	Deg C	6
12	ON	Heat 12	-1	300	Deg C	6
13	ON	Cool 1 Flux Heater	-1	430	Deg C	12
14	ON	Belt 1 Speed	-1.00	188.00	cm/min	N/A
15	ON	Heat 15	-1	300	Deg C	7
16	ON	Heat 16	-1	300	Deg C	7
17	ON	Heat 17	-1	300	Deg C	TH
18	ON	Heat 18	-1	300	Deg C	TH

On this page Heat channels will be enabled as per Oven Model selected on Page 1.

High Limit: 350 Deg C for standard oven heat channel

(In Heat channel setup Hi Process: 400 Deg C, (50 + High Limit))

Cool1 Flux Heater (channel # 13) – OFF state (ON for heated cool zone1)

Belt 1 Speed (channel # 14) – ON state

Profile Ports (channel # 27,28,29,30,31) – OFF state

Belt 2 Speed (channel # 32) – OFF state (- ON only for Dual Belt Speed)

Cool2 Flux Heater (channel # 56) – OFF state (ON for heated cool zone2)

Start Group # - enter Heat Zone Startup sequence according to oven model and oven operating voltage (Low Voltage: 208-240V, High Voltage: 380-480V). Put flux heater channels last in a startup group.

* If “TH” is set as startup group#, channel will not be part of startup sequence. This Heat channel will start as soon as job is loaded. Following are properties for this channel

- no heat rise rate alarm
- this channel is not considered for features like “more than 5 zones running at 100% output power” and “heat#: is drawing output power beyond threshold”.
- Flux heater channels, cool1 & cool2, cannot set as “TH”
- can be used for closed loop tunnel heater