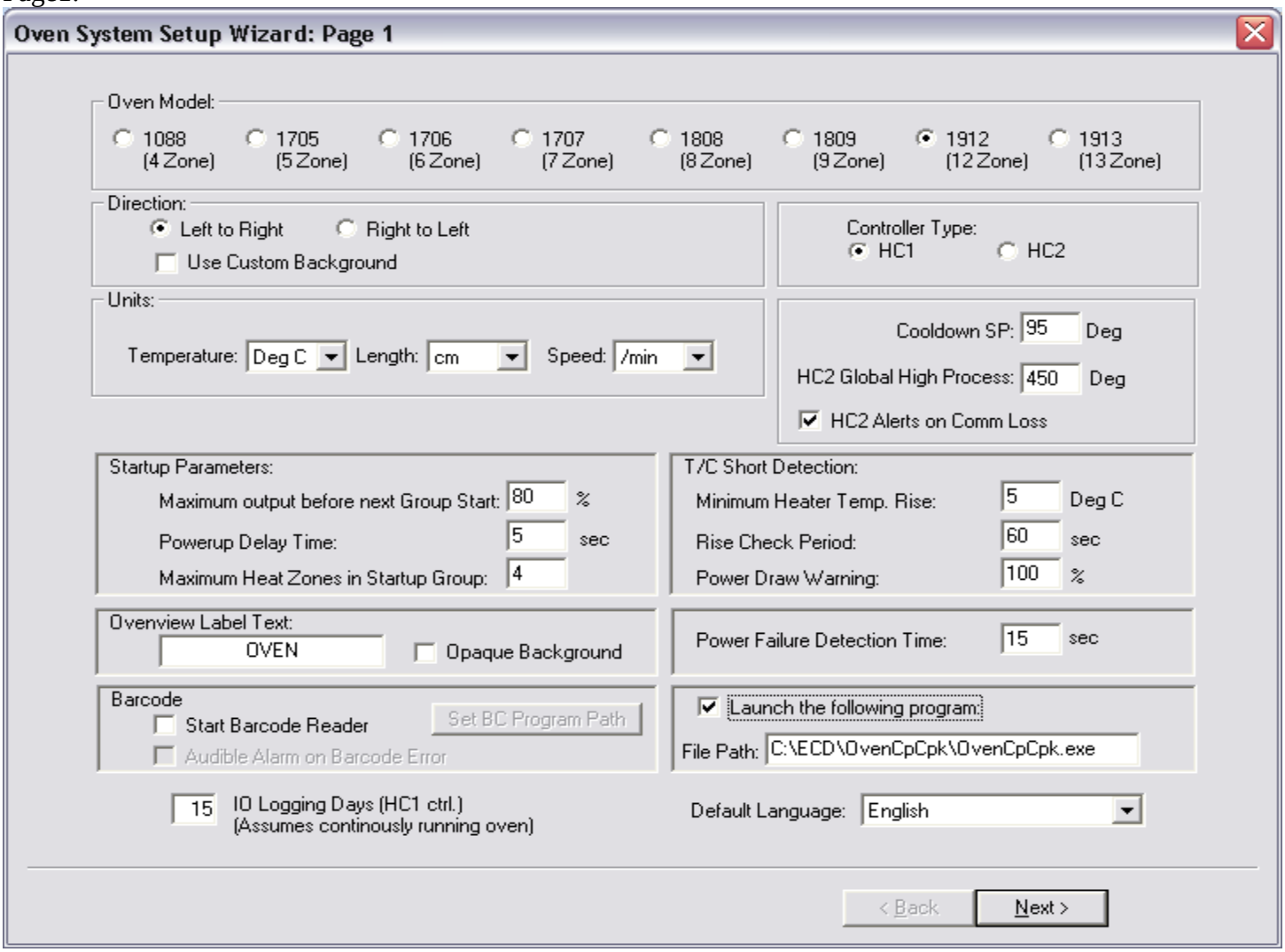
After installing the oven software the first step is to run the setup wizard program and configure the oven. Various options can be enabled and set in the setup wizard. Many options will need appropriate hardware before they can be enabled.
Run Start > All Programs > Oven Workstation > Oven Setup Wizard and setup the oven.

Page1:



Oven Model: Select from 1088, 1705, 1706, 1707, 1808, 1809, 1912, 1913
For the oven model not listed above select the higher zone model and then turn off unused channels.

Oven Direction: Left to Right or Right to Left

Use Custom Bitmap: select this if default background image on overview screen need to replace. Only bitmap file can be used as a background.

Controller Type: HC1 (default).
Do not use this version for HC2 controller oven except to use as DEMO mode.

Units:
Temperature: Deg C or Deg F
Length: cm or inch
Speed: /min
Cooldown SP: 95C (default). This is a global set-point for cooldown mode.
HC2 Global High Process: 450C (default). For HC2 controller this is a global high process alarm in case of temperature runaway and channel high process is turned off.
HC2 Alerts on Comm. Loss: With this selection, in case of comm. failure HC2 controller will turn on non-flashing yellow light on a signal light tower while HC2 is still in control.

New Recipe Power Maximum Output: 80%.
Power up Delay Time: 5 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" starts to countdown.
Tempzone limit in startup group: 4, (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
Power Draw Warning: 100%
After startup sequence is completed and oven is in OK condition if any heater zone reaches to "TC Draw Warning %" oven gives warning.

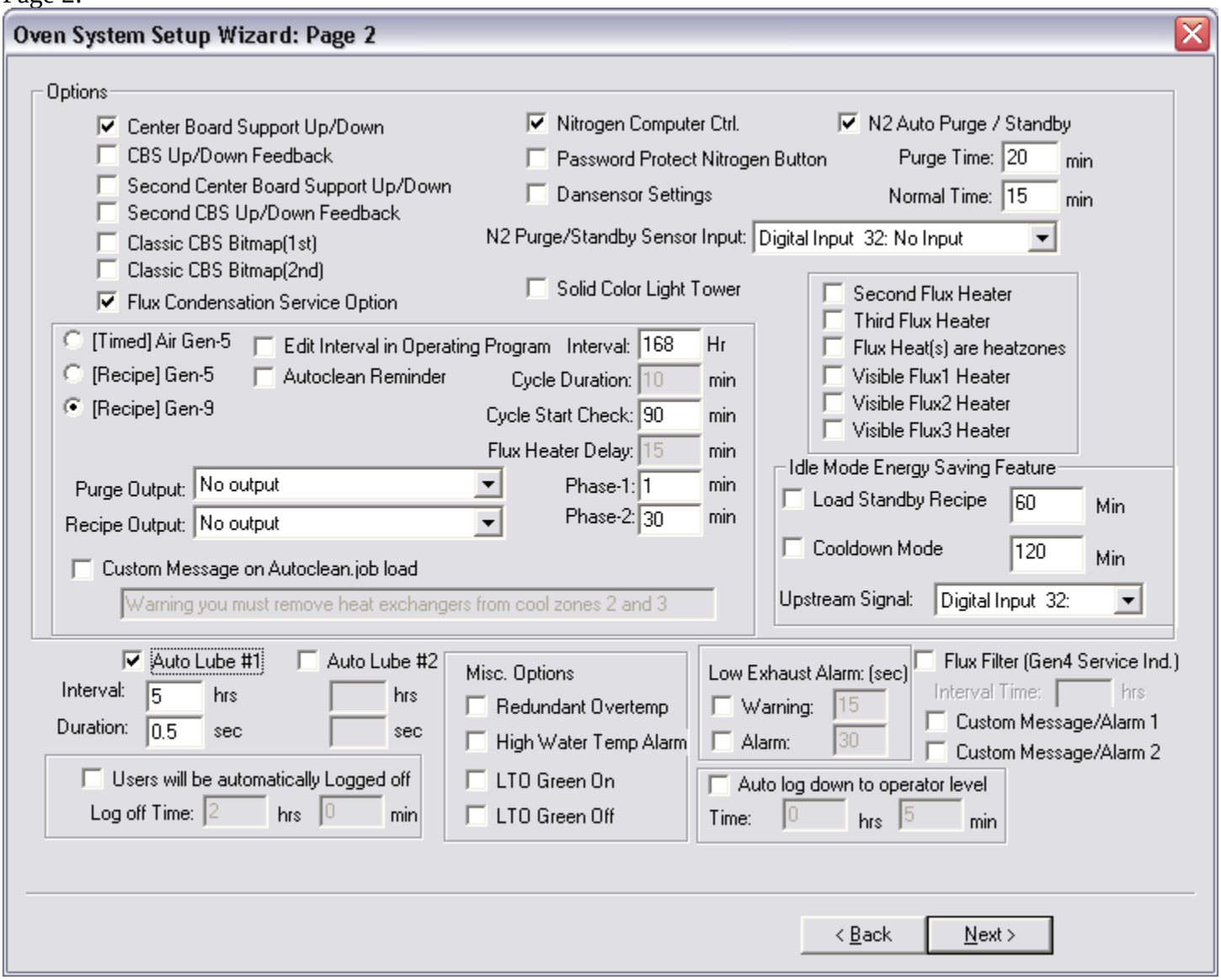
Power failure Time: 15sec (Range 1-900sec)

Start Barcode Reader: This option allows to interaction with Oven Barcode Software. Barcode reader option is available only for HC1 controller.

IO Logging Days: default 15; if IO logging option is enabled in main program, a log file will created every hour. Since this file is big in size, older files need to delete so hard drive do not get filled up. Software will keep 15days (default) worth files and delete rest; (HC1 controller only).

Launch the following program: by enabling this feature, oven program will launch an ECD-Cp-Cpk program link.

Page 2:



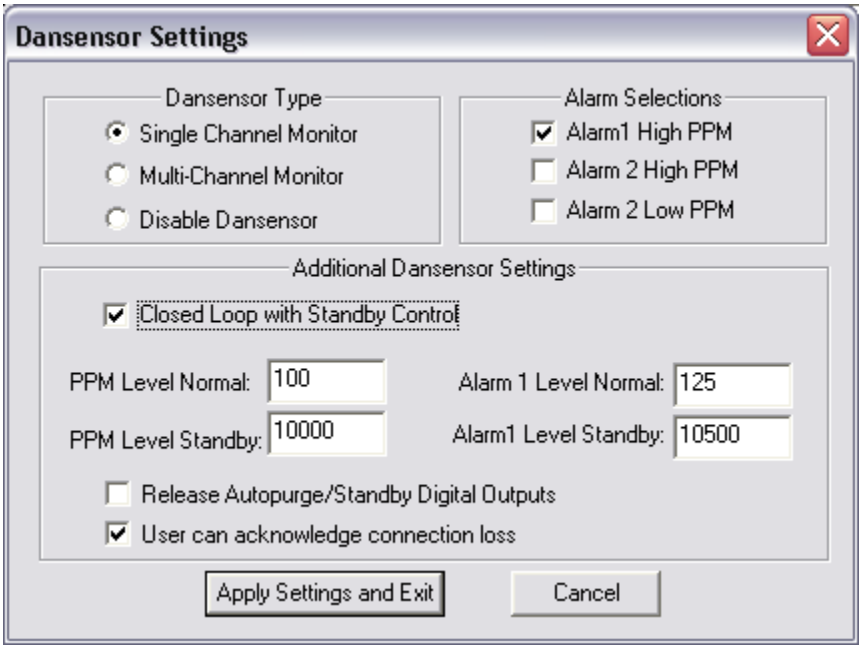
Center Board Support Up/Down: this option is used for CBS Up or Down movement.
CBS Up/Down Feedback: this option is used to display the proper CBS Up/Down position depending on the actual CBS position feedback.
Classic CBS Bitmap: selection allows to use original CBS Up/Down bitmap.

Nitrogen Option: is used for main N2 solenoid to turn On/Off from overview screen.
Password Protect Nitrogen Button: select this option to allow password window pop-up when turning N2 on or off.

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

Dansensor Settings: allows to setup a link to Dansensor MapMon software version 1.52a or later.

This link can be used to read PPM_O2, Alarm1, Alarm2 values; write PPM_level in closed loop with standby control.
Warning message gets displayed when PPM level exceeds alarm level set in Map Mon software. If closed loop with standby option is selected then Autopurge/Standby option also needs to select.



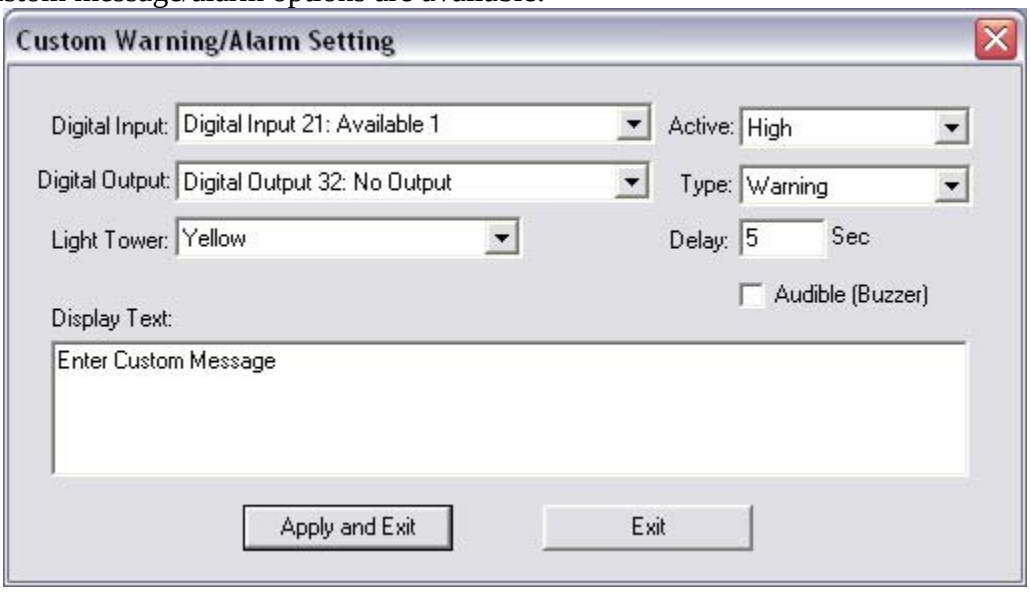
Alarm2 Low can be used to get a warning when PPM is below Alarm2 level.
Digital Outputs for High, Normal, Low flow solenoids can be released/freed for other use since with closed loop Dansensor these solenoids are not used.

User can chose to acknowledge or not to acknowledge capability for Dansensor connection loss display message. Connection loss message will close when Dansensor connection re-establishes.

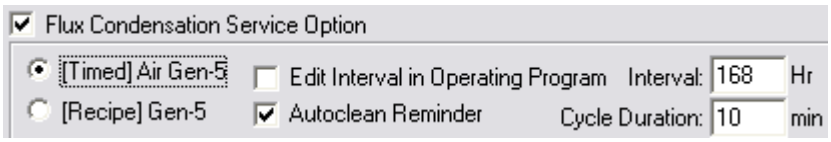
Solid Color Light Tower: Select this option to disable the flashing light tower mode.

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

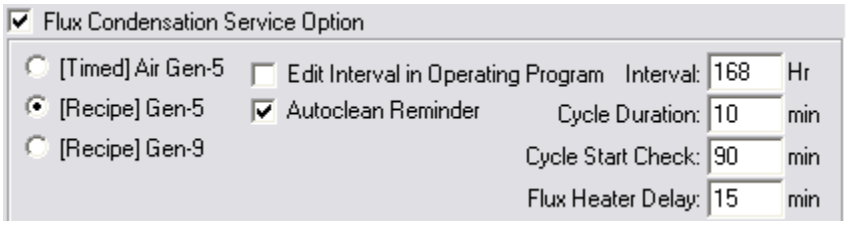
Custom Message/Alarm: a customizable warning/alarm, which gets activated when digital input signal is active. Two custom message/alarm options are available.



Flux Condensation Service Option: Timed or Recipe mode (Gen5 or Gen9).
[Timed] Air Gen-5 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.



[Recipe] Gen-5 mode: a recipe named "autoclean" needs to be created with proper temperature settings.

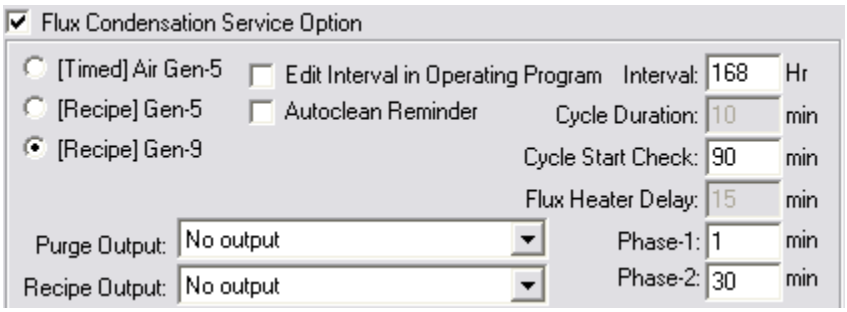


Optional interval timer is used as a reminder to load Autoclean recipe. During oven operate mode interval timer counts down and when reach 0 a message will pop-up. Interval can be edited from main oven program by selecting the option.

When "autoclean" recipe is loaded, "Cycle Start Check" timer starts countdown and flux-box cool blowers turn off. When all heater zones turn green, Flux Heater Delay timer starts. At the end of delay timer exhaust blowers turn off and flux (cool zone) heater turns on. After all heater channels goes in OK state flux condensation "Cycle Duration" timer starts countdown. At the end of cycle duration time, cooldown mode gets loaded. 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
d. Reload previous recipe

[Recipe] Gen-9 mode: a recipe named "autoclean" needs to be created with proper temperature settings.

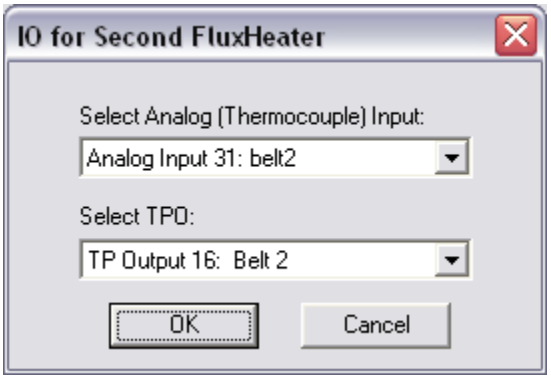


Optional interval timer is used as a reminder to load Autoclean recipe. During oven operate mode interval timer counts down and when reach 0 a message will pop-up. Interval can be edited from main oven program by selecting the option.

When "autoclean" recipe is loaded, "Cycle Start Check" timer starts countdown and Dout24 (water) turns off. When all heater zones including cool zone heater turns in green state, Phase1 timer starts countdown. At the end of Phase1 timer, Phase2 timer starts countdown and Dout25 turns on. At the end of Phase2, cooldown mode gets loaded. If Phase2 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 (Timer for N2 On time in main program)
c. Load selectable existing recipe
d. Reload previous recipe

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



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

[- While selecting 2nd or 3rd flux heaters make sure that inputs and outputs are not used by some other channels/options.
- Second flux heater channel is used for bottom 13th zone on 1913 model.]

Flux Heats as heat-zones: For 1913 model, oven flux heaters are used as 13th zone. By selecting this option 13th zone temperature will be displayed on ECD or KIC software.
Visible Flux Heater: Select only if cool zone flux heater channel need to display on main overview screen. If this option is not selected then channel can be accessed via channel setup screen, only it will not display on main overview screen.

Purge Output: select proper digital output for cooling purge after autoclean job. (Purge Timer can be set in Heller Operating Program, default is 15min)
Recipe Output: select proper digital output for low N2 flow during autoclean job.
(Note: special plumbing and wiring need to be done for Purge and Recipe output options)

Custom Message On Autoclean: select this option if pop-up message should appear before loading autoclean.job, which will allow continuing or canceling 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.

Redundant Overtemp: option is used with temperature sensing devices such as thermostat, Capillary or Bi-Metal switch. Oven loads cooldown on over temperature conditions with 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.

High Water Temp Alarm: option is used for water cool system. Thermostat is used to generate a high water temperature signal.

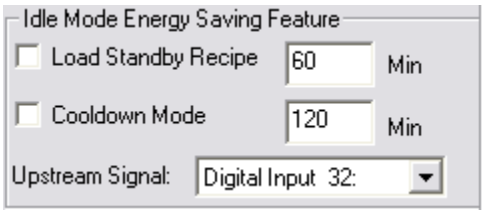
Low Exhaust:

Warning: 15sec default, selectable.
Alarm: 30sec default, selectable, loads cooldown.

Users will be automatically logged off: by enabling this option, user will log off after set time. This timer starts as soon as user log on.

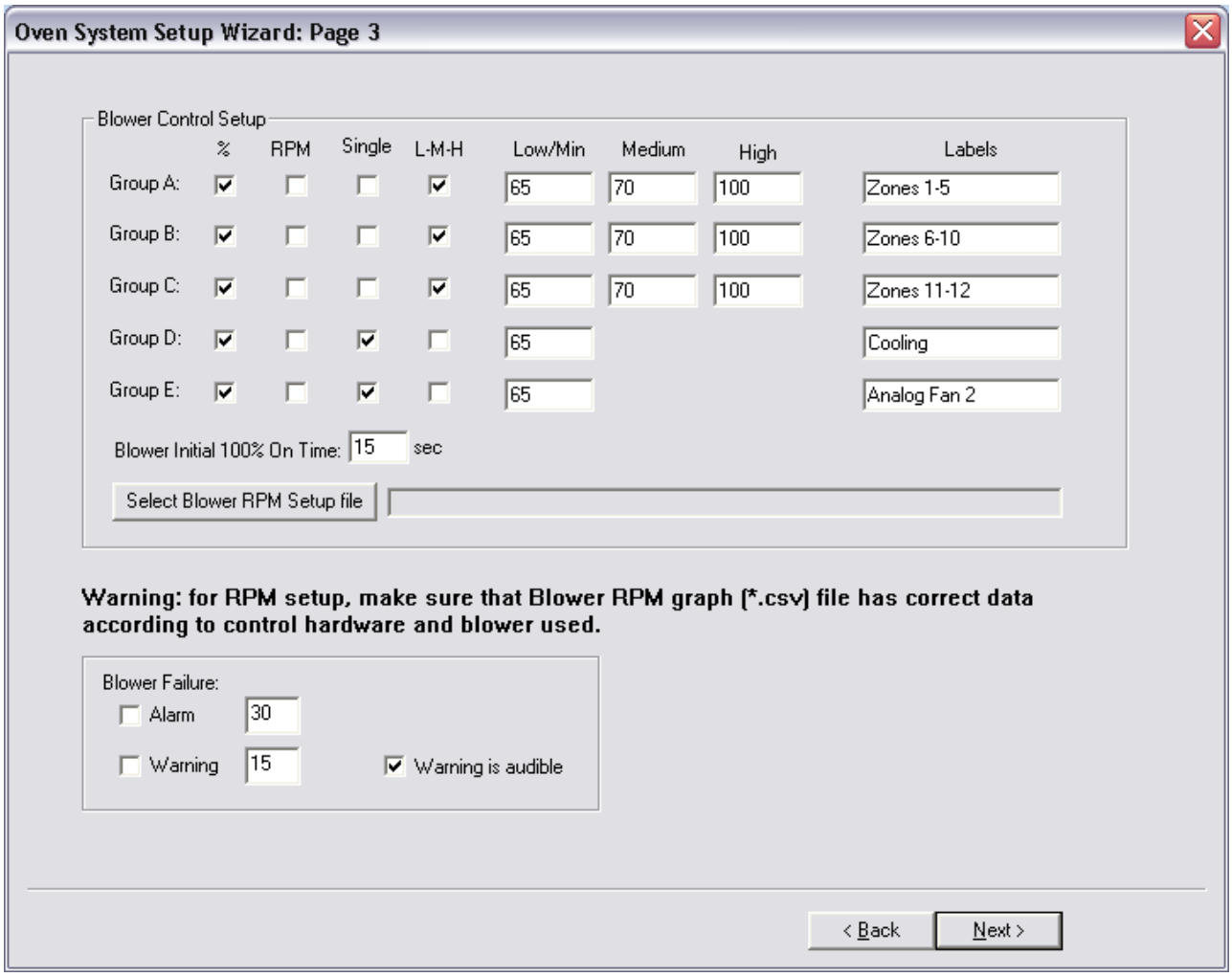
Auto log down to operator level: by enabling this option, user will be log down to operator level if there is no activity by current user. Any keyboard or mouse activity for oven program will reset the timer.

Idle Mode Energy Saving Feature: This option allows loading Standby recipe and/or cooldown mode when there are no boards in oven for set time. Timers for standby recipe and cooldown get reset after new recipe load or while oven is not empty. After a recipe load timer countdown starts after startup sequence is complete.



While in Standby or Cooldown mode, upstream signal can be used to display a message on screen to load proper recipe for new product.

Page 3:



Blower Control Setup: There are total five control channels (groups) available for blower control.
Each group can be set as (% or RPM) or (Low-Medium-High or Single control).

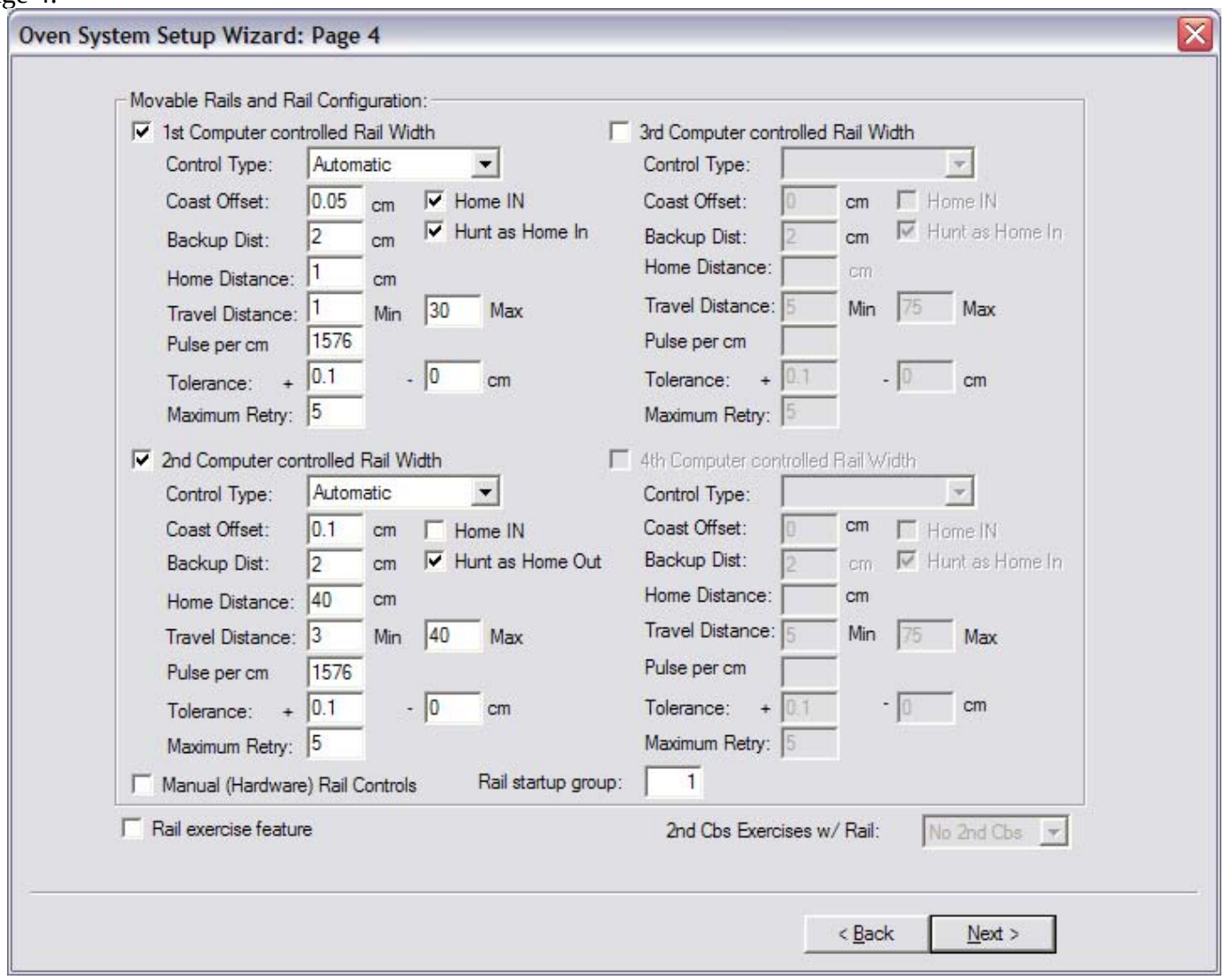
%: the blower speed control values are in the form of controller output percentage.
RPM: the blower speed control values are in the form of blower rpm. Software uses a look up file to set appropriate control output %.
(Warning: for RPM setup the look up file called BlowerRPMgraph.csv located in c:\oven folder should be updated as per blower and control hardware used.)

Single: blower speed control values can be changed during program run between minimum and maximum allowed limit, in % or rpm.
L-M-H: low-medium-high values are set in setup wizard and cannot be changed during program run. Only low, medium or high control level can be selected during program run.

The labels window can be used for labeling the control group.
Blower Initial 100% On Time: 15sec, at new recipe load

Blower Failure: Warning and/or Alarm selectable option with time delay; optional audible alarm on warning.
Warning: 15sec default, selectable.
Alarm: 30sec default, selectable, loads cooldown.

Page 4:



Movable Rails and Rail Configuration:

Control Type:
- Automatic: enter set point
- Jog: left or right arrow buttons to move the rail.

Home IN: select if home switch is towards fixed rail.
- If home switch is away from fixed rail then uncheck Home IN, this will make the rail as Home Out.

Rail final position direction: "Hunt as Home In" or "Hunt as Home Out".
- 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. (range 0-10cm)

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 (hunt) for final position. (range 0.5-3cm)

Home Distance: Board width distance when rail is on home switch. (range 0-100cm).

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

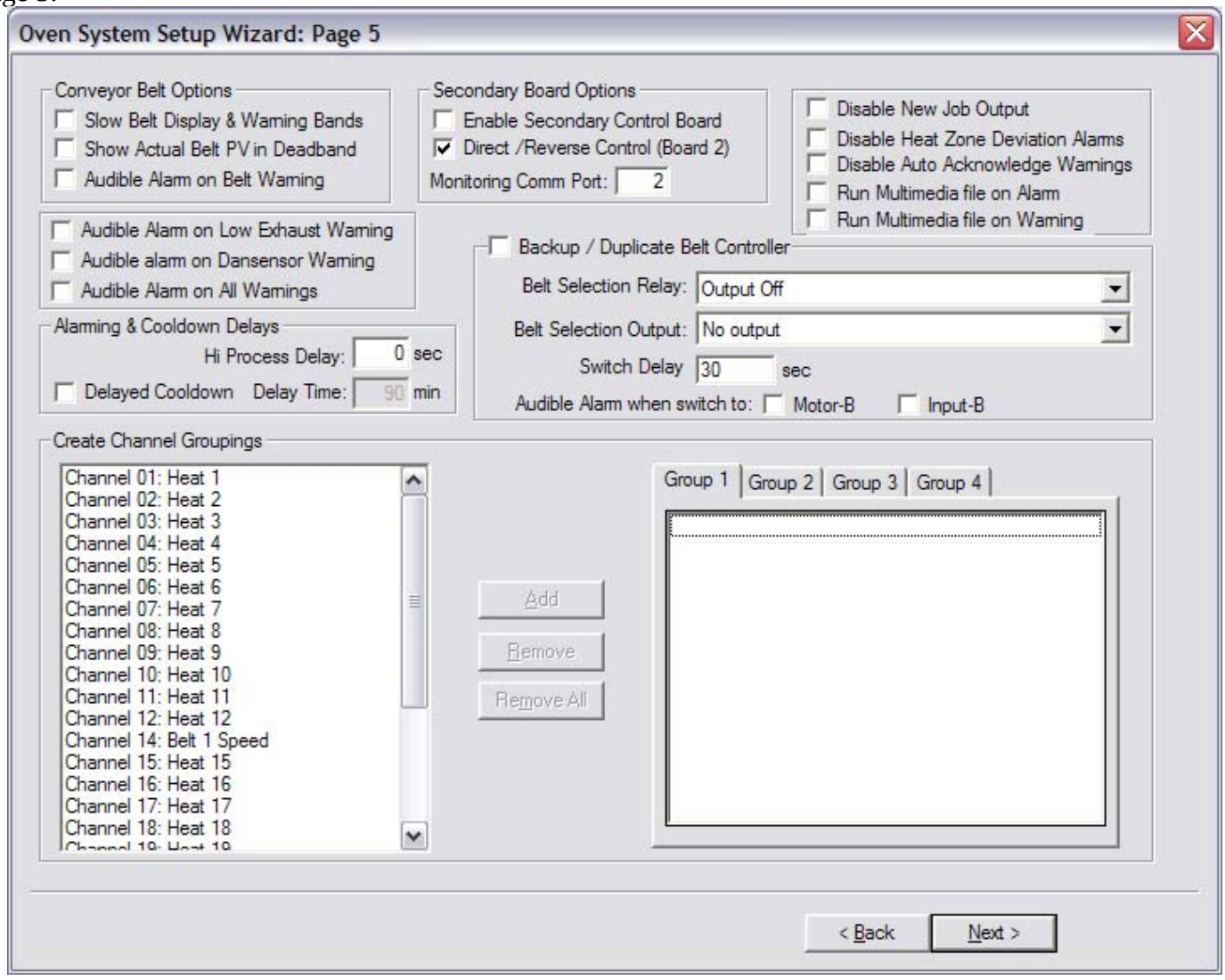
Pulse per cm: 1576 (for 200 pulse encoder); (range 0-9999)

Tolerance: allowed + and – distance from the set point; (default +0.1, -0; range 0-0.2cm).

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; (range 0-5)

Manual (Hardware) Rail Controls: enable this option if hardware key switch is installed for manual rail movement. Default manual/computer rail selection input signal is DIN-15.
Rail startup group: 1(default). This is to enable rail movement along with heat zone startup group.
Rail exercise feature: This feature will allow the rail exercise while loading cooldown or new recipe where rail moves to home then to set-point and then back to home.

Page 5:

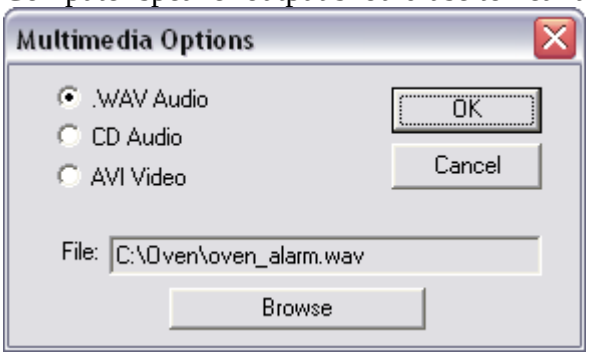


Belt Options:
Wafer belt display & warning bands: select for low belt speed and 0.1” minimum warning band. Need 1000 pulse encoder for better resolution.
Show Actual Belt PV in Deadband: to display the actual process value for belt when it is within deadband
Audible Alarm on Belt Deviation: secondary 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

Audible warnings: Buzzer output on all warning conditions except during recipe startup sequence
Alarming and cooldown Delays: High process alarm and cooldown can be delayed, usually use this option with secondary control board option.
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.

Secondary Control Board options are for redundant alarm control option. If equipped with hardware, secondary control board outputs can be used to cut power to heaters in case of heat deviation alarm.
Backup / Duplicate Belt Controller option is used as backup belt system. If equipped, belt system can be switched between System-A (MotorA, encoder InputA) and System-B (MotorB, encoder InputB).

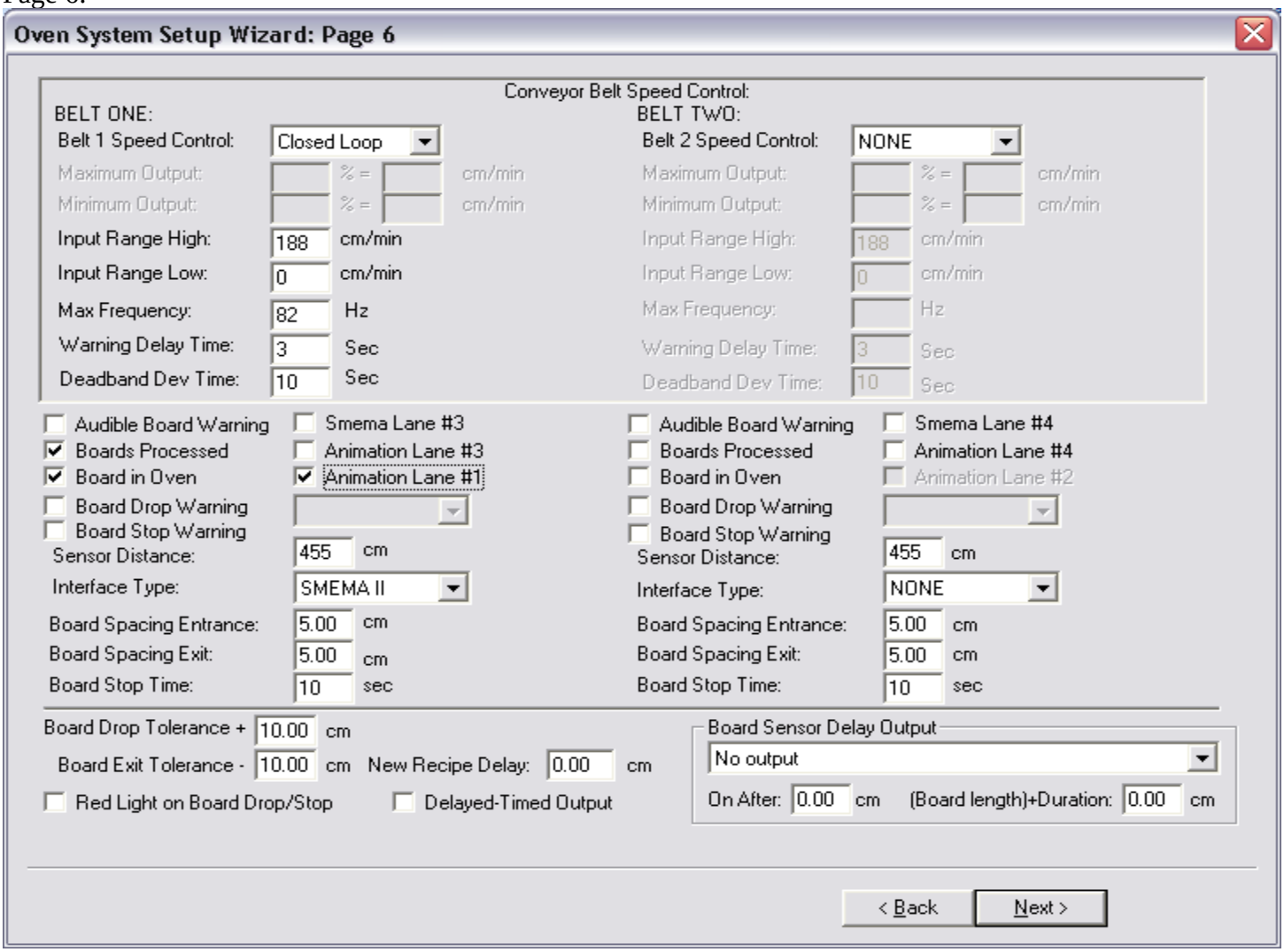
Run Multimedia file on Alarm or Warning: A multimedia file can be played in case of alarm or warning. Computer speaker output should use to hear alarm or warning sound.



Disable New Job Output: Digital Output25 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. Change made in any channel parameter in a group applies to all other channels in a group except channel set point.

Page 6:



Belt Speed control:

Closed Loop:

Input Range High: 188 cm/min (range 0-635cm/min)

Input Range Low: 0 cm/min

Max Frequency: (range 0-9999Hz)

200Pulse encoder: 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)

For 1000Pulse encoder: x5 Hz, (freq. for 200Pulse multiply by 5)

Warning Delay Time: default is 3sec, range 1-9999sec

Deadband Dev Time: default is 10sec, range 0-9999sec, (during this actual speed is not reported for display on main overview screen)

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.
Sensor Distance: used for board drop option, animation.

Board Drop Warning: to detect a board drop condition (a board which does not reach exit sensor on time).
Select Timed; make sure to enter proper sensor distance.
Board Drop Tolerance: is used to allow more time to detect board at exit before board drop warning. (Default= 10cm, range 0-9999cm)
Board Exit Tolerance: is used for early board detection at exit end sensor. (Default= 10cm, range 0-9999cm)

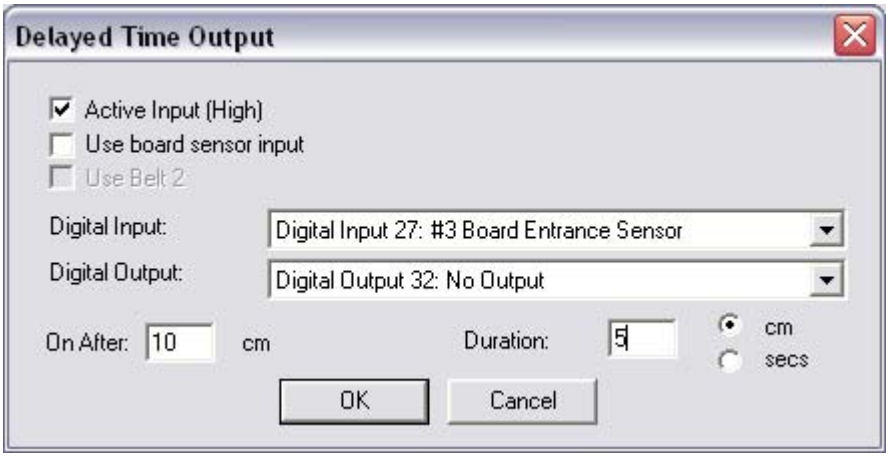
Board Stop Warning: to detect board stop at exit side. When board is removed from exit sensor the board stop warning will auto-acknowledge.
Board Stop Time: is used to allow more time for board to stay under exit sensor before board stop warning. (Default= 10sec, range 0-9999sec)

Audible Board Warning: select to activate buzzer output on board drop/stop warnings.
Red Light on Board Drop/Stop: select if flashing red light is required instead of flashing yellow light for board warnings.

Interface Type: select proper interface type from the drop down box; For ex. SMEMA II.
Board Spacing Entrance: 5cm default (range 0-9999cm); used by smema interface to delay oven ready signal to up stream after board passes entrance sensor. This allows board spacing when entering oven and also help to ignore cutouts on board.
Board Spacing Exit: 5cm default (range 0-9999c); used by smema interface to extend board available signal to down stream after board passes exit sensor.
For 3rd and 4th lane SMEMA, lane 1 settings are applied for lane 3 and lane 2 settings for lane 4.

New Recipe Delay: enter a distance to allow for board to completely exit the oven after "boards in" oven count becomes zero before new recipe can be loaded.

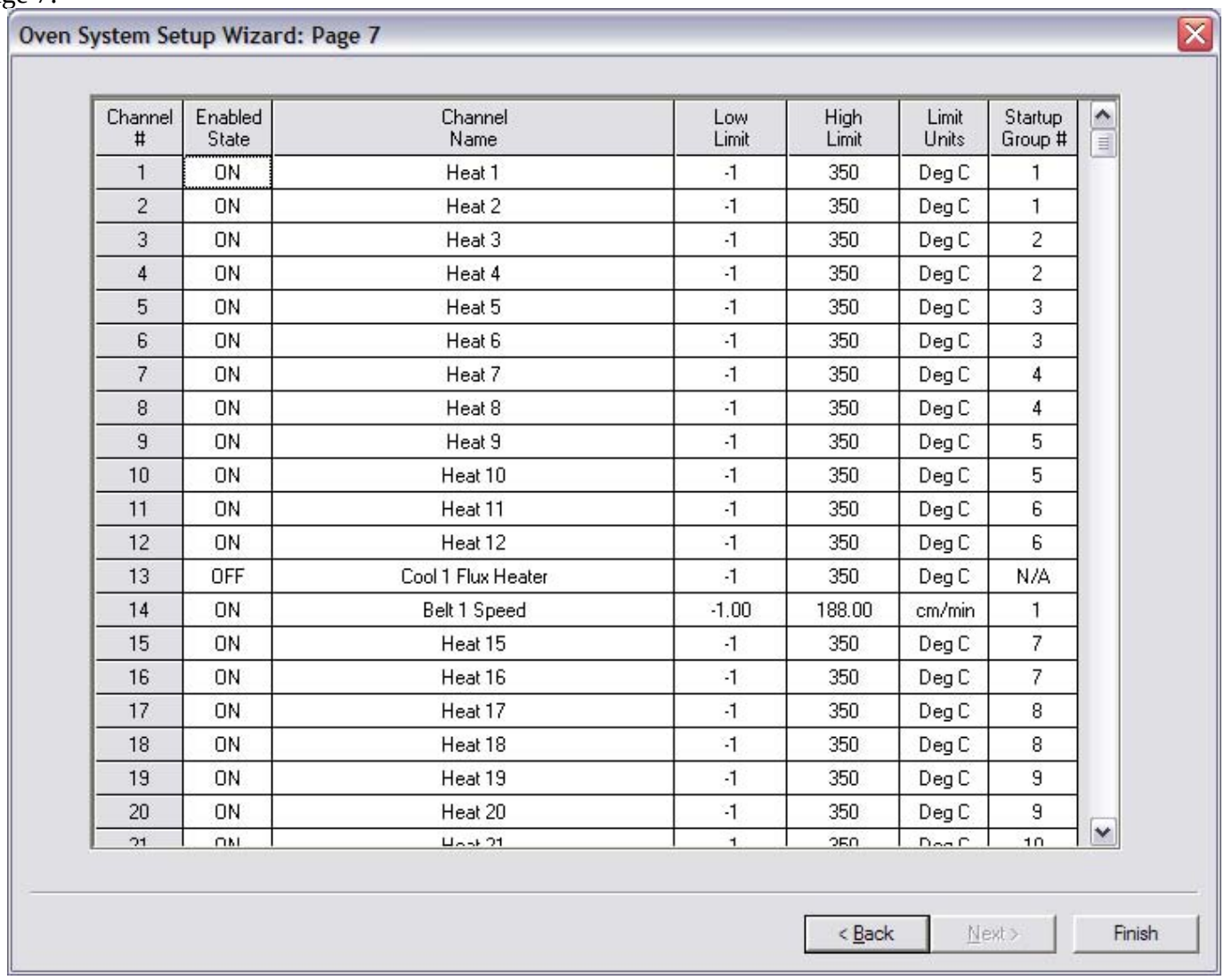
Delayed-Timed Output:



Optional digital output that can turn on after a delay for specified time when selected digital input is active. This output can be used for various options like special flagged CBS.

Board Sensor Delay Output: optional digital output that can turn on for specified time after a delay when board enters the oven. This output can be used for options like water spray cooling.

Page 7:



Channel #	Enabled State	Channel Name	Low Limit	High Limit	Limit Units	Startup Group #
1	ON	Heat 1	-1	350	Deg C	1
2	ON	Heat 2	-1	350	Deg C	1
3	ON	Heat 3	-1	350	Deg C	2
4	ON	Heat 4	-1	350	Deg C	2
5	ON	Heat 5	-1	350	Deg C	3
6	ON	Heat 6	-1	350	Deg C	3
7	ON	Heat 7	-1	350	Deg C	4
8	ON	Heat 8	-1	350	Deg C	4
9	ON	Heat 9	-1	350	Deg C	5
10	ON	Heat 10	-1	350	Deg C	5
11	ON	Heat 11	-1	350	Deg C	6
12	ON	Heat 12	-1	350	Deg C	6
13	OFF	Cool 1 Flux Heater	-1	350	Deg C	N/A
14	ON	Belt 1 Speed	-1.00	188.00	cm/min	1
15	ON	Heat 15	-1	350	Deg C	7
16	ON	Heat 16	-1	350	Deg C	7
17	ON	Heat 17	-1	350	Deg C	8
18	ON	Heat 18	-1	350	Deg C	8
19	ON	Heat 19	-1	350	Deg C	9
20	ON	Heat 20	-1	350	Deg C	9
21	ON	Heat 21	-1	350	Deg C	10

On this page Heat channels will be enabled as per Oven Model selected on Page1.

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, default as startup group1

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)

Cool3 Flux Heater (channel # 57) – OFF state (ON for heated cool zone3)

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 in a separate last startup group. Max startup group# is 12.

* 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

NOTE:

1. WHEN SELECTING OPTIONS MAKE SURE OVEN IS EQUIPED WITH PROPER HARDWARE
2. FOR HC1 CONTROLLER USE SERIAL COMMUNICATION PORT-1 OF COMPUTER (IRQ-04, I/O RANGE: 03F8-03FF)
3. FOR HC2 CONTROLLER USE ETHERNET RJ45 PORT (SET COMPUTER IP ADDRESS AS 192.168.10.1)
4. To Run the Oven Operating Program in DEMO mode –
   - Change the Target in “Oven Operating Program” desktop shortcut properties to add DEMO as "C:\oven\Oven Operating Program.exe" DEMO

Oven Setup Wizard checklist for HC1/HC2 Controller

MODEL:	CUSTOMER NAME:		
CO#	S/N:	SOFTWARE VER:	DATE:

Page 1

Oven Model:

❑ 1088 (4 Zone)	❑ 1705 (5 Zone)	❑ 1706 (6 Zone)	❑ 1707 (7 Zone)	❑ 1808 (8 Zone)	❑ 1809 (9 Zone)	❑ 1912 (12 Zone)	❑ 1913 (13 Zone)

Oven Direction:
❑ Left to Right ❑ Right to Left
❑ Use Custom Background

Control Type:
❑ HC1 ❑ HC2
HC2 IP Address:
____.____.____.____

Units: Which units do you want to use?

Temperature: ❑ Deg C or ❑ Deg F	Speed: /min	Cooldown SP: _95_ Deg
Length: ❑ Cm or ❑ inch		HC2 Global High Process: _450_ Deg
		❑ HC2 Alerts on Comm. Loss
Startup Parameters: Maximum Output before next Group Start: **80** % Power up Delay Time : 5 sec. Maximum Heat Zones in Startup Group : 4	T/C Short Detection: Minimum Heater Temp Rise : **5** ^{O}C or **9** ^{O}F (**1** ^{O}C for IR-panels) Rise Check Period : **60** sec Power Draw Warning : **100** %	
Oven Label Text: OVEN ❑ Opaque Background	Power Failure Detection Time: **15** sec	
Barcode: ❑ Start Barcode Reader Set BC Program Path ❑ Audible Alarm on Barcode Error	❑ Launch the following program: File Path: _____	
_15_ IO Logging Days (HC1 Ctrl.) (Assumes continuously running oven)	Default Language: _____	

Page 2

Options:

❑ Center Board Support Up/Down	❑ Nitrogen Computer Ctrl.	❑ N2 Auto Purge/Standby
❑ CBS Up/Down Feedback	❑ Password Protect Nitrogen Button	Purge Time: _____ min.
❑ Second Center Board Support Up/Down	❑ Dansensor Settings	Normal Time: _____ min.
❑ Second CBS Up/Down Feedback		
❑ Classic CBS Bitmap[1st]	N2 Purge/Standby Sensor Input:_____	
❑ Classic CBS Bitmap[2nd]		
❑ Flux Condensation Service Option	❑ Solid Color Light Tower	❑ Custom Message/Alarm1

○ [Timed] Air Gen-5
○ [Recipe] Gen-5
○ [Recipe] Gen-9

❑ Edit Interval in Operating Program
❑ Autoclean Reminder

Purge Output: _____
Recipe Output: _____

Interval: _____ Hrs.
Cycle Duration: _____ Min
Cycle Start Check: _____ Min
Flux Heater Delay: _____ Min
Phase-1: _____Min
Phase-2: _____Min

❑ Custom Message/Alarm2
❑ Flux Filter (Gen-4, service indicator)
Interval Time:_____Hr

❑ Second Flux Heater
❑ Third Flux Heater
❑ Flux Heat[s] are heatzones
❑ Visible Flux1 Heater
❑ Visible Flux2 Heater
Visible Flux3 Heater

❑ Custom Message on Autoclean.job load: _____

❑ Auto Lube # 1
Interval: _____Hrs.
Duration:_____ sec

❑ Auto Lube # 2
Interval: _____Hrs.
Duration:_____ sec

Misc. Options
❑ Redundant Overtemp
❑ High Water Temp Alarm
❑ LTO Green On
❑ LTO Green Off

Low Exhaust Alarm: (sec)
❑ Warning: **15**
❑ Alarm: **30**

Idle mode energy saving feature:
❑ Standby recipe_____min
❑ Cooldown _____min
Upstream signal: Digital i/p___

❑ Users will be automatically Logged off
Log off Time: _____hrs _____min

❑ Log down to operator level:
Time: _____hrs _____min

❑ Custom Message/Alarm Setting1:
Digital Input:_____
Output: _____
Light Tower:_____
Display Text: _____
(Note: Make sure proper hardware is installed)

Active: _____
Type: _____
Delay: _____ sec
❑ Audible (Buzzer)

❑ Custom Message/Alarm Setting2:
Digital Input:_____
Output: _____
Light Tower:_____
Display Text: _____
(Note: Make sure proper hardware is installed)

Active: _____
Type: _____
Delay: _____ sec
❑ Audible (Buzzer)

❑ Dansensor Settings:
❑ Single Channel Monitor
❑ Multi-Channel Monitor
❑ Disable Dansensor
❑ Closed Loop with Standby control
PPM Level Normal: _____
PPM Level Standby: _____
❑ Release Autopurge/Standby Digital Outputs
❑ User can acknowledge connection loss
(Note: for Closed loop with Standby control option select "Auto Purge / Standby" option also)

Alarm2 Selection:
❑ Alarm2 High
❑ Alarm2 Low
❑ Alarm1
Alarm1 Level Normal: _____
Alarm1 Level Standby: _____

Page 3

Blower Control Setup

	%	RPM	Single	L-M-H	Low/Min	Medium	High	Labels
Group A:	❑	❑	❑	❑	_____	_____	_____	_____
Group B:	❑	❑	❑	❑	_____	_____	_____	_____
Group C:	❑	❑	❑	❑	_____	_____	_____	_____
Group D:	❑	❑	❑	❑	_____	_____	_____	_____
Group E:	❑	❑	❑	❑	_____	_____	_____	_____

Blower Initial 100% On Time: _____ Sec.

Select Blower RPM Setup file: _____

Warning: For RPM setup, make sure that Blower RPM graph {*.csv} file has correct data according to control hardware and blower used.

Blower Failure:

❑ Alarm _____

❑ Warning _____ ❑ Warning is audible

Page 4

Movable Rails and Rail Configuration: (Computer controlled rails)

❑ 1st Computer controlled Rail Width
Control Type: Automatic
Coast Offset:____cm ❑ Home IN
Backup Dist:____cm ❑ Hunt as Home IN
Home Dist:_____cm
Travel Dist:_____Min _____Max
Pulse per cm: 1576
Tolerance +_____ - _____ cm
Maximum Retry: _____

❑ 3rd Computer controlled Rail Width
Control Type: Automatic
Coast Offset:____cm ❑ Home IN
Backup Dist:____cm ❑ Hunt as Home IN
Home Dist:_____cm
Travel Dist:_____Min _____Max
Pulse per cm: 1576
Tolerance +_____ - _____ cm
Maximum Retry: _____

❑ 2nd Computer controlled Rail Width
Control Type: Automatic
Coast Offset:____cm ❑ Home IN
Backup Dist:____cm ❑ Hunt as Home IN
Home Dist:_____cm
Travel Dist:_____Min _____Max
Pulse per cm: 1576
Tolerance +_____ - _____ cm
Maximum Retry: _____

❑ 4th Computer controlled Rail Width
Control Type: Automatic
Coast Offset:____cm ❑ Home IN
Backup Dist:____cm ❑ Hunt as Home IN
Home Dist:_____cm
Travel Dist:_____Min _____Max
Pulse per cm: 1576
Tolerance +_____ - _____ cm
Maximum Retry: _____

❑ Manual (Hardware) Rail Controls Rail startup group: _____

❑ Rail exercise feature 2nd Cbs Exercises w/Rail: _____

(Set rail drive motor voltage for EXL/MK3.5 Model between 48V to 53V, for SX Model set between 28V to 33V)
(For single edge hold select, 1st Computer Controlled Rail Width,
For dual edge hold select, 1st and 2nd Computer Controlled Rail Width,
For single edge hold w/ CBS select, 1st Rail Width for CBS and 2nd Rail Width for Edge Hold)

Page 5

Conveyor Belt Options ❑ Slow Belt Display & Warning Bands ❑ Show actual Belt PV in Deadband ❑ Audible Alarm on Belt Deviation	Secondary Board Options ❑ Enable Secondary Control Board ☑ Direct / Reverse control (board 2) Monitoring Comm Port: _2_	❑ Disable New Job Output ❑ Disable Heat Zone Deviation Alarms ❑ Disable Auto Acknowledge Warnings ❑ Run Multimedia file on Alarm ❑ Run Multimedia file on Warning

❑ Audible Alarm on Low Exhaust Warning ❑ Audible Alarm on Dansensor Warning ❑ Audible Alarm on All Warning Alarming & Cooldown Delays High Process Delay: ____ sec ❑ Delayed Cooldown, Delay Time: ____ min	❑ Backup / Duplicate Belt Controller Belt Selection Relay: _____ Belt Selection Output: _____ Switch Delay: _____ Sec. Audible Alarm when switch to: ❑ Motor-B ❑ Input-

Channel Groupings:

Group1	Group2	Group3	Group4

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Belt Speed Control

BELT ONE	BELT TWO
❑ Closed Loop Input range high : _____ /min Input range low : **0** cm/min or in/min Max Frequency : _____ Hz Warning Delay Time: _____ sec Deadband Dev Time: _____ sec	❑ Closed Loop Input range high : _____ /min Input range low : **0** cm/min or in/min Max Frequency : _____ Hz Warning Delay Time: _____ sec Deadband Dev Time: _____ sec
❑ Open Loop (for 1088) Maximum output : 100% = **100** cm/min Minimum output : 0% = **0** cm/min	

Board Tracking option:

❑ Audible Board Warning ❑ Smema Lane #3 ❑ Board processed ❑ Animation Lane #3 ❑ Board in Oven ❑ Animation Lane #1 ❑ Board Drop Warning – **Timed** ❑ Board Stop Warning Sensor distance : _____ cm or _____ inch Interface type : _____ Board spacing Entrance :_____ cm Board spacing Exit :_____ cm Board Stop Time :_____ Sec	❑ Audible Board Warning ❑ Smema Lane #4 ❑ Board processed ❑ Animation Lane #4 ❑ Board in Oven ❑ Animation Lane #2 ❑ Board drop alarm – **Timed** ❑ Board Stop Warning Sensor distance : _____ cm or _____ inch Interface type : _____ Board spacing Entrance : _____ cm Board spacing Exit : _____ cm Board Stop Time :_____ Sec
Board Drop Tolerance : _____ cm Board Exit Tolerance : _____ cm New Recipe Delay : _____ cm ❑ Red Light on board drop/stop ❑ Delayed-Timed Output	Board Sensor Delay Output _____ On After :_____cm (Board length) + Duration :_____cm

(Must enter a sensor distance value for all ovens with board count or board drop option)

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On this page heat channel will be enable as per oven model selected on page 1.
(In heat channel setup Hi process: 50 + High Limit)

Channel #	Enabled State	Channel Name	Low Limit	High Limit	Limit Units	Startup Group #
1	ON / OFF	Heat 1				
2	ON / OFF	Heat 2				
3	ON / OFF	Heat 3				
4	ON / OFF	Heat 4				
5	ON / OFF	Heat 5				
6	ON / OFF	Heat 6				
7	ON / OFF	Heat 7				
8	ON / OFF	Heat 8				
9	ON / OFF	Heat 9				
10	ON / OFF	Heat 10				
11	ON / OFF	Heat 11				
12	ON / OFF	Heat 12				
13	ON / OFF	Cool 1 Flux Heater				
14	ON / OFF	Belt 1 Speed				
15	ON / OFF	Heat 15				
16	ON / OFF	Heat 16				
17	ON / OFF	Heat 17				
18	ON / OFF	Heat 18				
19	ON / OFF	Heat 19				
20	ON / OFF	Heat 20				
21	ON / OFF	Heat 21				
22	ON / OFF	Heat 22				
23	ON / OFF	Heat 23				
24	ON / OFF	Heat 24				
25	ON / OFF	Heat 25				
26	ON / OFF	Heat 26				
27	ON / OFF	Profile 1				
28	ON / OFF	Profile 2				
29	ON / OFF	Profile 3				
30	ON / OFF	Profile 4				
31	ON / OFF	Profile 5				
32	ON / OFF	Belt 2 Speed				
56	ON / OFF	Cool 2 Flux Heater				
57	ON / OFF	Cool 3 Flux Heater				