AMSOsram ICC Software Manual

Spikes Casting Dispensing Machine

Date: R1, 29Mar2025

Introduction

The core principle of ICC is to dispense randomly selected units for an initial test, analyse the results, and adjust the dispensing volume for the remaining units to achieve the desired test outcome.

In **Pass 1**, a predefined set of units from the Panel is dispensed with an initial volume. The Panel is then tested, and the ICC Server processes the test data to compute the necessary volume adjustments.

In **Pass 2**, the remaining units are dispensed using the newly determined volume to optimize the test results.

Definitions

Input File	Input file in xml format to retrieve from **Input Folder** to obtain initial volume. The file sample as in Appendix.
Output File	Output file in text file format located in **Output Folder** to retrieve new volume. The file sample as in Appendix.
Input Folder	Configurable Directory The location to retrieve **Input File**.
Output Folder	Configurable Directory The location to retrieve **Output File**.
Panel ID	The ID for the Panel, scanned or manual entry by **READ_ID** command.
Pass 1 Panel ID list	A collection of **Panel ID**s stored locally that has been dispense as Pass 1.
Pass 2 Panel ID list	A collection of **Panel ID**s stored locally that has been dispense as Pass 2.

Normal Run Condition

Process/Condition	Description
Lot Entry.	Select **Lot Entry**. *Refer to Lot Entry*. Scan in lot information. Select **Start Lot**. *Recipe name of {11 SERIES} will be automatically loaded.*
If Recipe load fail.	Prompt error “Recipe not found or load fail.”. *User needs to manually dispose the Panel.*
Load magazine.	Load magazine.
Start operation.	Select **Start**.

Run Panel

Process/Condition	Description
Panel loading.	Load Panel to **Pro Station**.
	Scan **Panel ID**.
	Cross check local **Pass 2 Panel ID list**. If Panel ID exist,
Pass 2 Panel ID exists	Prompt error “Panel ID has completed Pass 2”. *User needs to manually dispose the Panel.*

Pass 2 Panel ID do not exist.	Cross check local **Pass 1 Panel ID list**.
Pass 1 Panel ID exists	Goto **Run Pass 2**.
Pass 1 Panel ID do not exist.	Goto **Run Pass 1**.

Run Pass 1

Process/Condition	**Description**
Input File check.	Check for **Input File**.
Input File do not exist.	Prompt error "Input File is not found." *User needs to manually dispose the Panel.*
Input File exist.	Retrieve **Input File**. Decode the initial volume by element *InitialDispenserSetting="0.8"*. Update the volume as **Current Dispense Volume**.
Unit selection.	Select PreMap 1. *PreMap 1 is the selected Pass 1 units to be dispensed.*
Dispense.	Run dispense.
Complete.	Unload Panel.

Run Pass 2

Process/Condition	**Description**
Output File check.	Check for **Output File**.
Output File do not exist.	Prompt error "Output File is not found." *User needs to manually dispose the Panel.*
Output File exist.	Retrieve **Output File**. Check for **PanelID**.
PanelID do not exist.	Prompt error "PanelID is not found." *User needs to manually dispose the Panel.*
PanelID exist. Update new volume.	Decode the new volume of **PanelID**. Update the new volume as **Current Dispense Volume**. *If multiple similar **PanelID** exist, the last **PanelID** of the list will be applied.*
Unit selection.	Select PreMap 2. *PreMap 2 is the selected Pass 2 units to be dispensed.*
Dispense.	Run dispense.
Complete.	Unload Panel.

Run Condition – No Lot Entry

When a panel is loaded without Lot Entry, it will be processed manually. The following differences apply compared to standard processing:

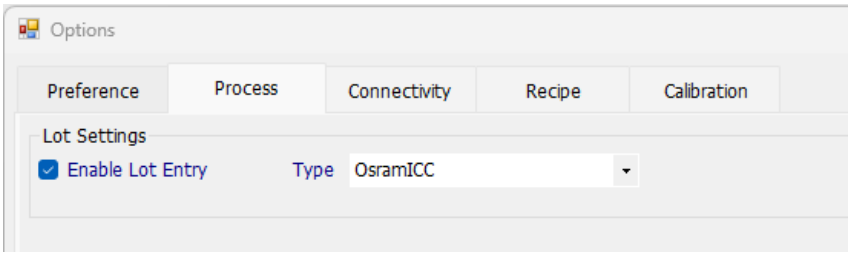
1. The initial volume will be based on the Z_PATH default Nett Volume setting.
2. No Input File or Output File checking or updates of dispense value.

Process	**Lot Entry**	**No Lot**
READ_ID	✓ (when enabled) Panel ID is used for volume feedback.	✓ (when enabled) Panel ID is not used.
OSRAM_ICC	✓ Checking of Input File and Output File.	✗
DOT_ZPATH	✓ Volume from Input File and Output File are updated.	✓ Default Nett Volume will be used.

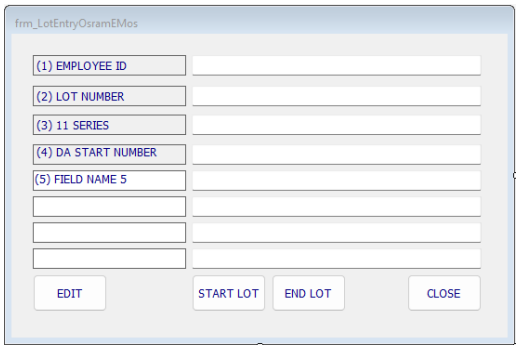
Execution Comparison

Lot Entry

Lot Entry feature needs to be enabled at Options-Process. Select type **OsramICC**.

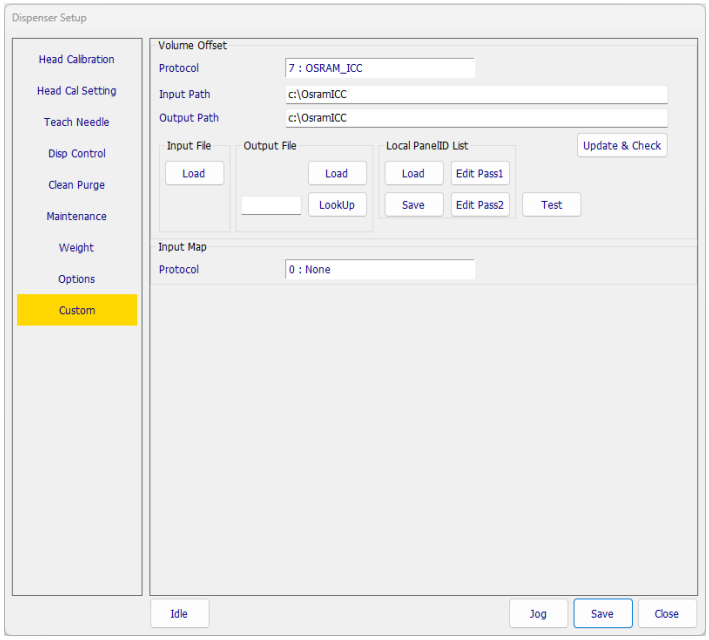


User Interface to enter Lot Data. The first 4 fields, **EMPLOYEE ID**, **LOT NUMBER**, **11 SERIES** and **DA START NUMBER** are compulsory while 4 fields are user definable.



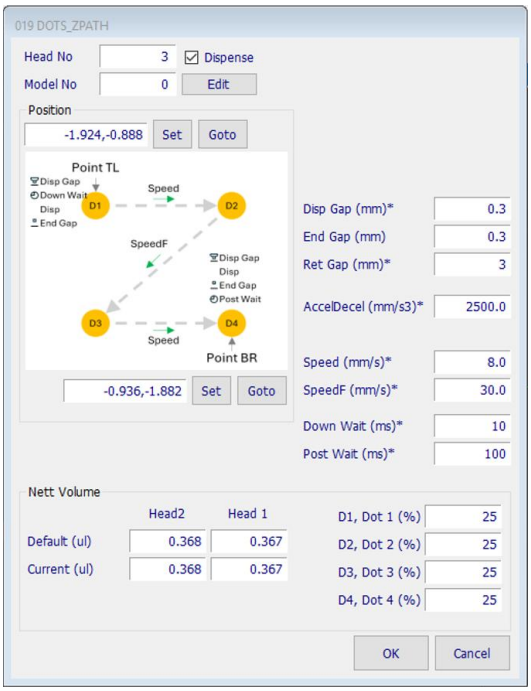
Field	Desription	Usage
EMPLOYEE ID	Enter Employee ID	Record purposes only.
LOT NUMBER	Lot Number on traveller	Filename of **Output File**.
11 SERIES	11 Series on traveller	Used to Auto Load Device. Filename of **Input File**.
DA START NUMBER	DA Start Number on traveller	Filename of **Input File**.
Field5 (optional)	User configurable field.	Record purposes only.
Field6 (optional)	User configurable field.	Record purposes only.
Field7 (optional)	User configurable field.	Record purposes only.
Field8 (optional)	User configurable field.	Record purposes only.

File Logistics

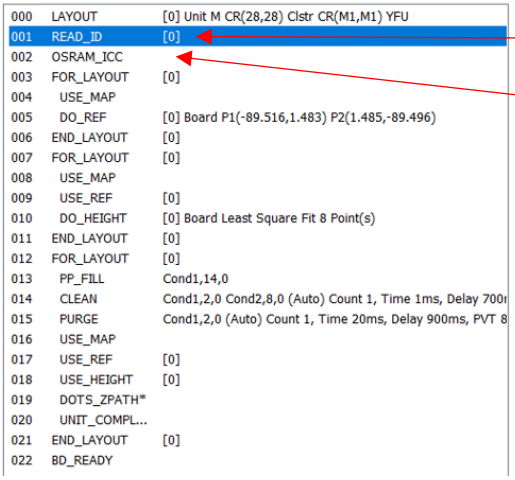


Item	Desription	Usage
Protocol	Select Volume adjustment Protocol.	Applies Osram ICC volume adjustment.
Input Path	Define the Input Path of Input Files.	Location to retrieve the Input Files.
Output Path	Define the Output Path of Output Files.	Location to retrieve the Output Files.
Update & Check	Update and check Input Path and Output File.	Verify the path validity. Brief colour indicators.
Input File – Load	Load the current Input File.	Test load the current input file and display the volume information. The Lot Entry must be entered prior to the test.
Output File – Load	Load the Panel ID Output file.	Test load the Panel ID Output File to memory.
Output File – Lookup	Lookup the Panel ID volume information.	Test lookup of the Panel ID and display the volume information.
Local PanelID - Load	Load Pass1 and Pass2 local Panel ID list.	Test load the local Panel ID list. The list will store up to 100 last processes Panel ID.
Local PanelID - Save	Save Pass1 and Pass2 local Panel ID list.	Test save the local Panel ID list. The list will store up to 100 last processes Panel ID.
Edit Pass1, Edit Pass2	Open the local Pass1 or Pass2 text file.	Edit the local Panel ID list.
Test	Test OsramICC function.	Test OSRAM_ICC function for volume settings.

DOT_ZPATH Command



Item	Description
Head No	Select Head Execution 0 – none 1: Head 1 only (Single Head) 2: (not support) 3: Head 1 and Head 2.
Model No	Select Model No to applies.
Edit	Edit Model.
Dispense	Options to enable Dispense
TL Set/Goto	Set and Goto Top Left corner of the pattern path.
BR Set/Goto	Set and Goto Bottom Right corner of the pattern path.
Disp Gap	Define the Needle distance from the detect height for dispense.
End Gap	Define the Needle distance from the detect height after dispensing of each dot.
Ret Gap	Define the Needle distance from the detect height after completing of the unit dispensing.
Accel/Decel	Define acceleration and deceleration of the path.
Speed	Define speed.
SpeedF	Define diagonal speed.
Down Wait	Time to wait before path dispensing.
Post Wait	Time to wait after path dispensing.
Nett Volume **Default** **Current**	Display the default Nett Volume. Display current Nett Volume. $Nett\ Volume = Disp\ Volume - Backsuck\ Volume$
D1-D4	Define the percentage distribution of each dot.



Place READ_ID after LAYOUT to execute ID Read.

Place OSRAM_ICC after READ_ID to execute OsramICC flow.

Sample for Program for ICC

Appendix

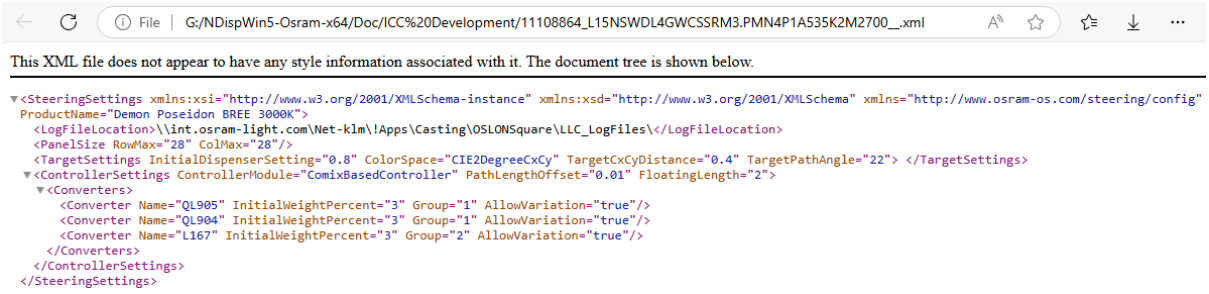
Sample Input File

Filename: {**Input Folder**}\{**11 SERIES**}_{**DA START NUMBER**}__.xml
Note:

- underscore between {**11 SERIES**} and {**DA START NUMBER**}
- ends with 2 underscores.

Example: {**Input Folder**}\11108864_L15NSWDL4GWCSSRM3.PMN4P1A535K2M2700__.xml

Example content:



<SteeringSettings xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://www.osram-os.com/steering/config" ProductName="Demon Poseidon BREE 3000K">
<LogFileLocation>\\int.osram-light.com\Net-klm\!Apps\Casting\OSLONSquare\LLC_LogFiles\</LogFileLocation>
<PanelSize RowMax="28" ColMax="28"/>
<TargetSettings InitialDispenserSetting="0.8" ColorSpace="CIE2DegreeCxCy" TargetCxCyDistance="0.4" TargetPathAngle="22"> </TargetSettings>
<ControllerSettings ControllerModule="ComixBasedController" PathLengthOffset="0.01" FloatingLength="2">
<Converters>
<Converter Name="QL905" InitialWeightPercent="3" Group="1" AllowVariation="true"/>
<Converter Name="QL904" InitialWeightPercent="3" Group="1" AllowVariation="true"/>
<Converter Name="L167" InitialWeightPercent="3" Group="2" AllowVariation="true"/>
</Converters>
</ControllerSettings>
</SteeringSettings>

Sample Output File

Filename: {**Output Folder**}\{Lot Number}.txt
Example: {**Output Folder**}\LOTABCD.txt

Content:
The file contains list of lines of Panel ID, Dispense 1 and Dispense 2 volume semi-colon (;) delimited.
Panel;Dispenser1;Dispenser2
{Panel ID 1};{Head 1 Volume 1};{Head 2 Volume 2}
{Panel ID 2};{Head 1 Volume 2};{Head 2 Volume.2}
…
{Panel ID n};{Head 1 Volume n};{Head 2 Volume.n}

Example content:
Panel;Dispenser1;Dispenser2
JMC1234;1.1112;1.1016
JMC1235;1.1242;1.0735
JMC1236;1.1034;1.1143
JMC1237;1.1143;1.1023
JMC1234;1.1200;1.1200

Revision

Rev	Author	Description
0	NSW KN	Initial Version
1	NSW KN	Change PanelID to PanelID Added DOT_ZPATH Command, File Logistics

End of document.