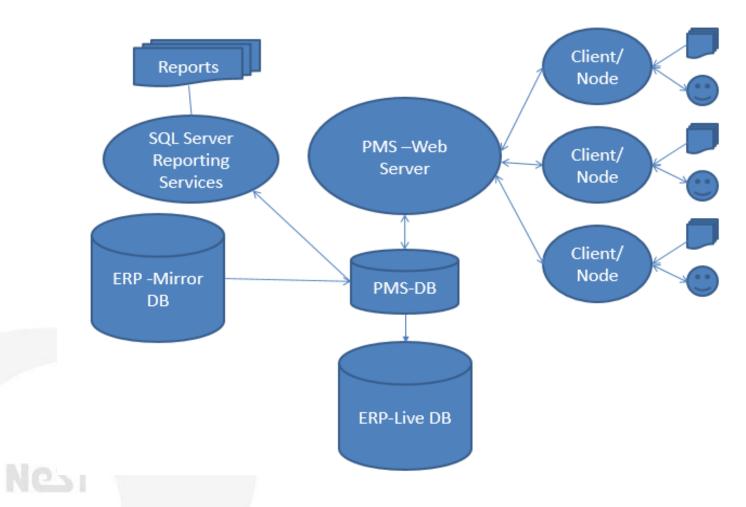
Production Management System (PMS)

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PMS System setup



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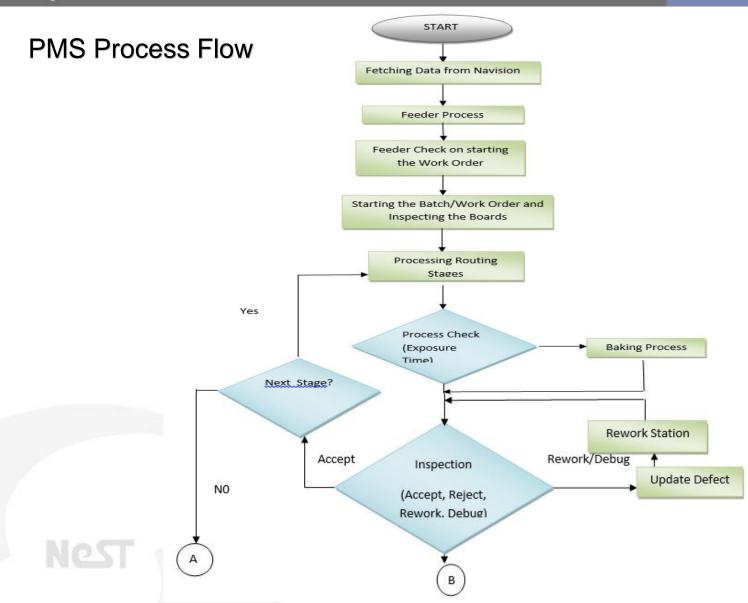
PMS FEATURES AND FUNCTIONALITY

- Verification of components as and when they are loaded on to work centers as defined in Routing (ERP)
- MSD verification: expiry & floor life
- Refrigerated Consumables Verification: Thawing time, Floor Life & Expiry
- Bay changing If needed from one defined in ERP (conditional)
- Feeder Controls:
 - Offline component loading with Feeder ID & Confirmation with Program file, with IDS compliance verification
 - II. Feeder Position cross checking with Feeder ID
 - III. Feeder reloading verification
- Equipment scanning for record keeping (Stencil information, Squgee, etc)
- Starting and stopping operational stages, Documenting reasons for delay
- Capture of Start time, Operation time, idle time, delay time, end time.



- Scanning of boards at each stage as per routing defined in ERP
- Inspection of output at each defined stage and tracking each board
 - I. Accept
 - a) Check ECN
 - b) Check QA sampling
 - c) Check previous stage/s acceptance
 - d) Check entry point for reworked boards
 - II. Reject
 - a) Set approval levels
 - b) Notification for approval requests
 - c) Multiple reject for same reason- automatic rejection
 - III. Rework (local)
 - IV. Rework Station (If not local)
 - V. Debug
- Board revision change verification & validation
- ICT rerouting
- Exposure time verification for Baking

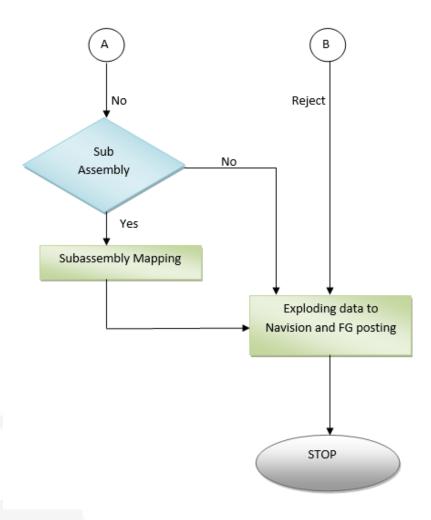




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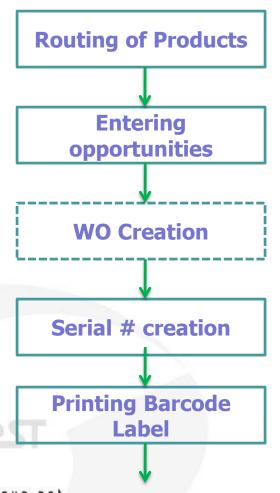


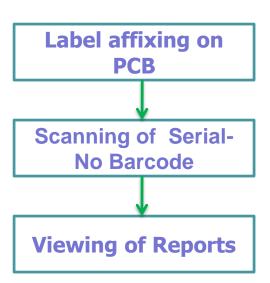
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Work Instruction - Routing

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ROUTING PROCESS FLOW





Web Based WIP Tracking System

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Company Selection Page

11:46:42



Production Management System-PMS_{4.2.1}

Select Division



Click on the company

Home Page



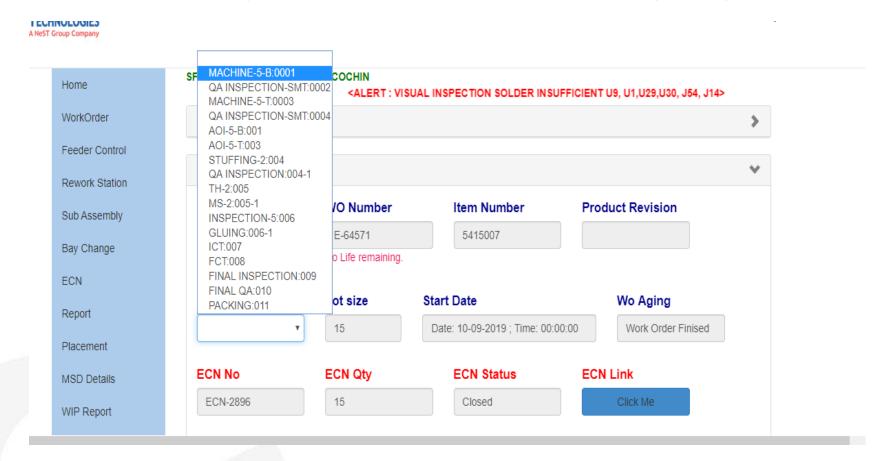
Production Management System-PMS_{4.2.1}



Home	SFO-ELECTRONICS DIVISI	ON - COCHIN					<alert: th="" vis<=""></alert:>
							ALEKT: VIC
WorkOrder	Search Tab						>
Feeder Control							
	Batch Details						~
Rework Station							
Sub Assembly	Batch Number	WO Number		Item Number	Pro	duct Revision	
	E-64571	E-64571		5415007			
Bay Change		No Life remaining.					
ECN	Show MSD						
	Routing Stage	Lot size	Start	Date		Wo Aging	
Report	MACHINE-5-B:00 ▼	15	Dat	e: 10-09-2019 ; Time: 00:0	00.00	Work Order Finis	sed
Placement	Witter live o bloc		Dat	c. 10 03 2013 , Time. 00.0	30.00	Work Order Fillio	, cu
	Show Equipment						
MSD Details	ECN No	ECN Of		ECN Status	ECN	l Link	
WIP Report	ECIA IAO	ECN Qty		ECIN Status	ECI	LIIIK	
Will Report	ECN-2896	15		Closed		Click Me	

Enter Batch id in Batch Number column – all the data will be pulled from Nav

Selecting the Work Order and Routing stage

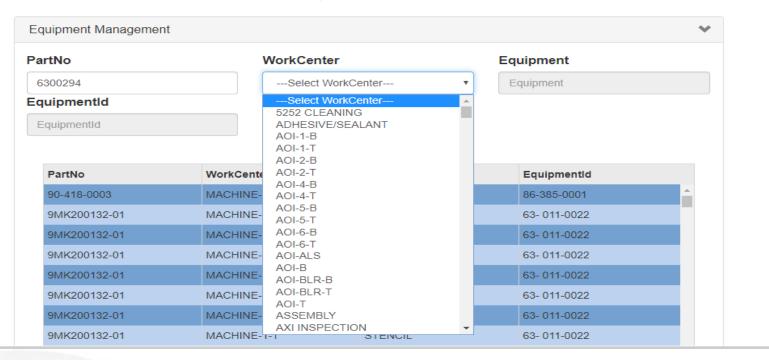


Enter the Work Order in Batch Number and then select the routing stage as shown

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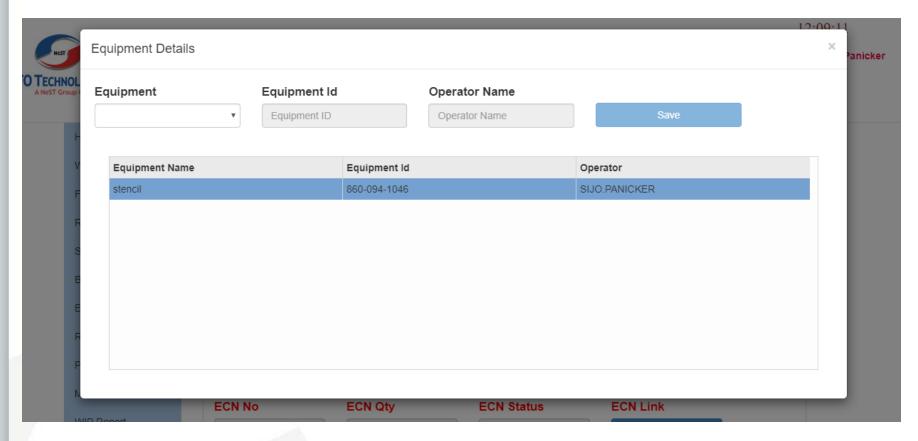
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Setting Asset Master



- Admin Privilege- go to settings page and navigate to Equipment Management Tab
- Enter Product part number, Select the work center, equipment
 Name, Equipment id and click Save
- Asset is locked for stage

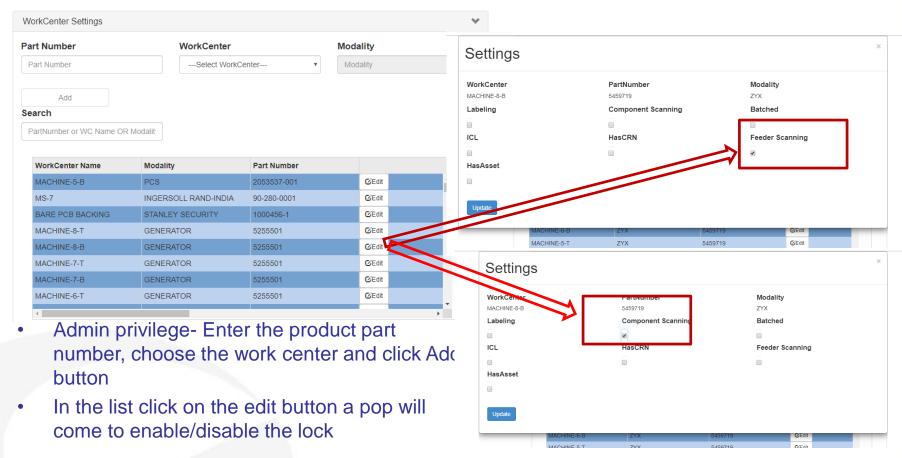
Equipment Scanning



- When stage is selected automatically pop up to scan Asset will block the home page from moving further
- Choose the equipment from dropdown, enter equipment id, operator name and click save button

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Locking Component Scanning



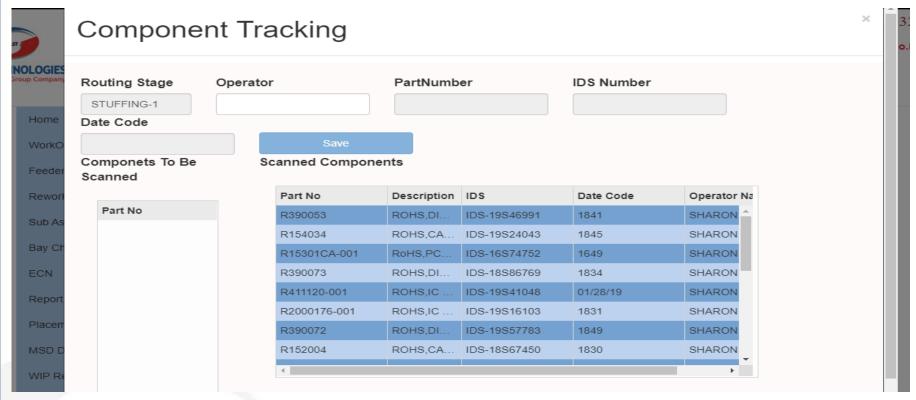
 For SMT- make IsFeederScanning is marked and for other stages Component scanning and click Update button

Components is lock for the stage

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Component Scanning



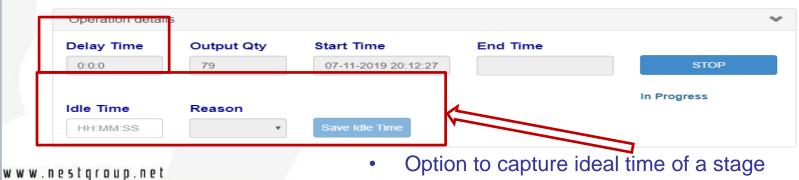
- When stage is selected automatically pop up to scan components will block the home page from moving further
- Components list will be shown in the component to scanned list view
- Enter the operator name, component part number, ids number and date code and click save button
- Scanned components will be listed in the scanned components list view

Starting the Routing stage

After selecting the stage click on the Stat button to start the Stage Note- if equipment and components for a particular stage is not scanned then PMs will not allow the stage to start



- After clicking the Start button Start time will be locked status will be changed to In progress
- Output quantity is the total output for the stage and if quantity is completed the status will be updated to Finished

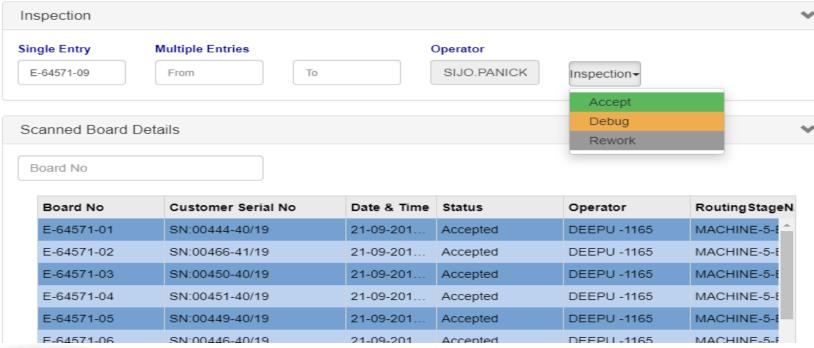


Option to capture ideal time of a stage

Board Scanning

- With Online Inspection
- Without Online Inspection

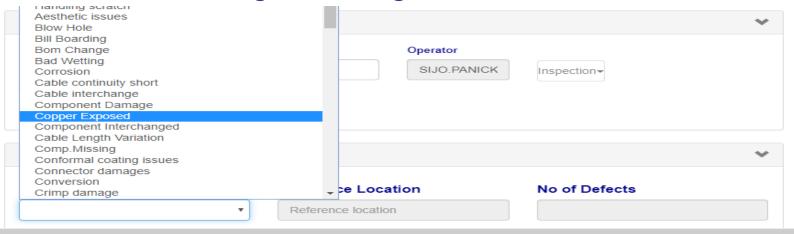
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- Enter the Board serial no in single entry or in Multiple entries, operator name and click the inspection menu to select the operation
- ACCEPT pass the board to next stage
- DEBUG- if the board has to be re-inspected
- REWORK- option move the board to rework or rework station, system will automatically move the board to rework or rework station based on the reason selected

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Boards moving to Debug/Rework/Rework station



- Scan the board serial no in single entry ,operator name choose the debug/ rework option from inspection dropdown
- In the rework details popup below choose the reason for the change, reference location, number of defects and click add button



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Rework Station



- Scan the board in the board to rework tab, details will be displayed
- Enter the operator name, ids number and comments if any and click the done button to move the board back to the production line

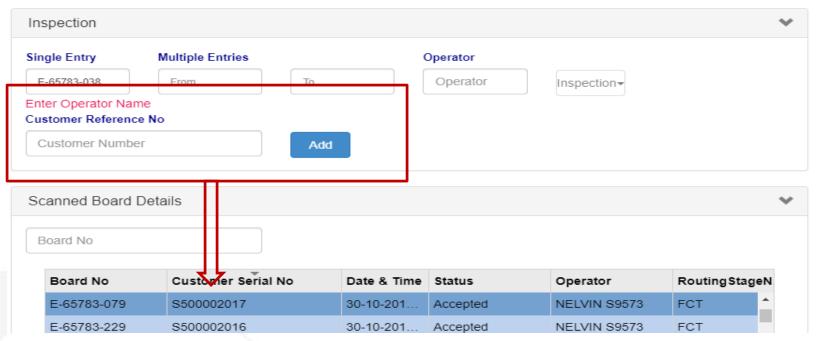
Board No	Customer Serial No	Date & Time	Status	Operator	RoutingStageN
E-65783-038		08-11-201	ReworkCompleted	subash	FCT
E 05700 400	0500004545				FOT

 Scan the board again in the single entry and choose accept to pass the board to the next stage

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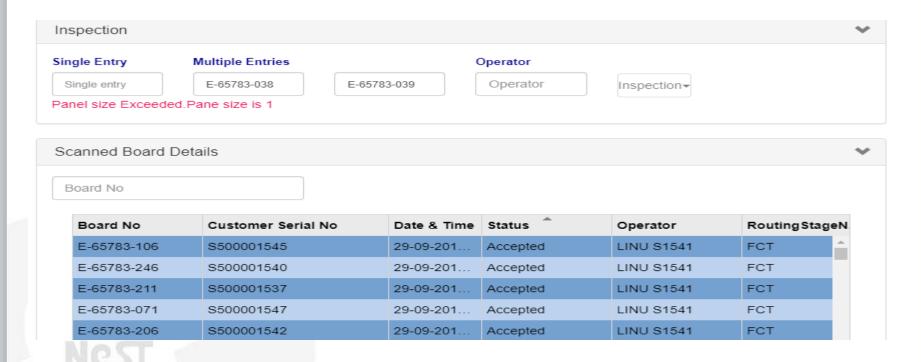
Board No

Adding customer serial number

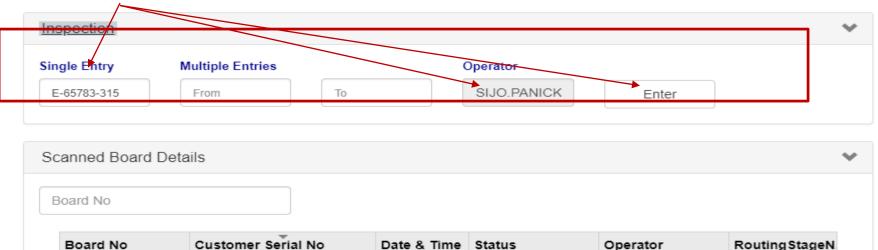


- Scan the board in single entry ,option to add customer serial no will be shown
- Scan the serial number in the column and click the add button

- Scan the board serial no in multiple entries, operator name click in enter button
- Multiple entry is locked based on panel size
- Boards cannot be moved to rework or debug when multiple entries is used







05-10-201...

05-10-201...

Accepted

Accepted

RIKIL R6256

RIKIL R6256

PACKING

PACKING

Nest

E-65783-134

E-65783-175

S500001757

S500001756

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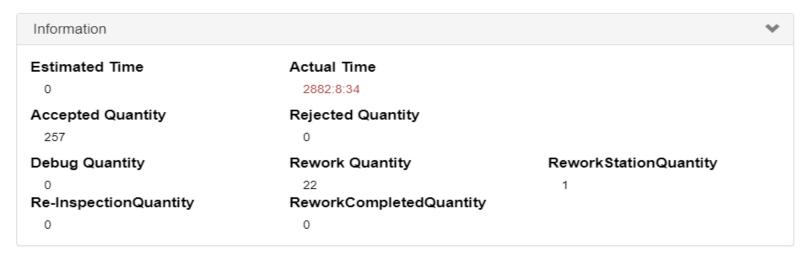
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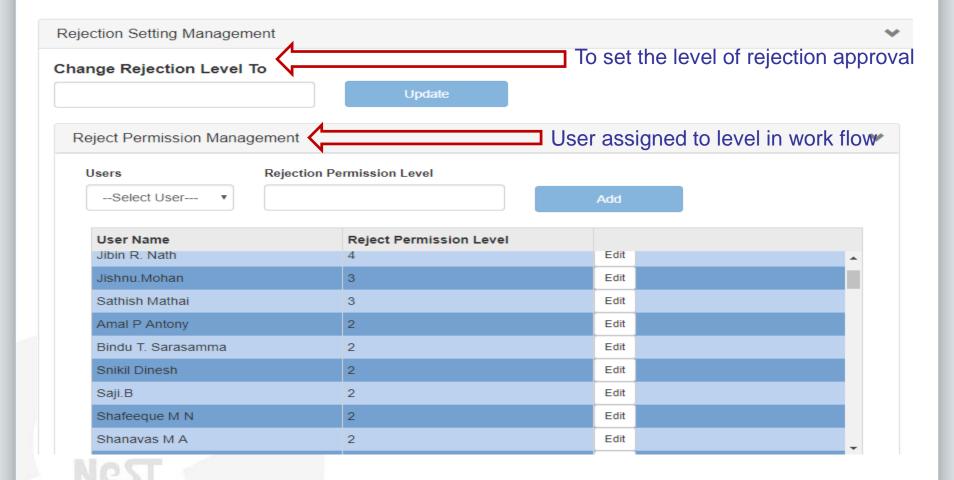


Information and DPMO Details-Home Page

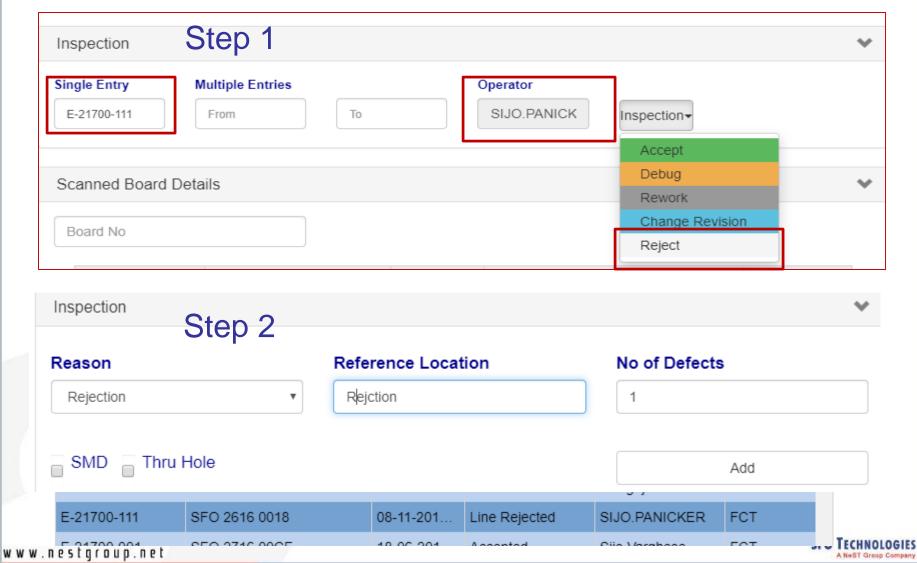


DPMO				~
Assembly Steps	Defects	Total opportunity	DPMO	
Assembly Defect	0	280	0	
Component Defect	1	243880	4.1	
Placement Defect	29	243600	119.05	
Termination Defect	2	1284920	1.56	
FPY%	91.79	Total DPMO	18.05	

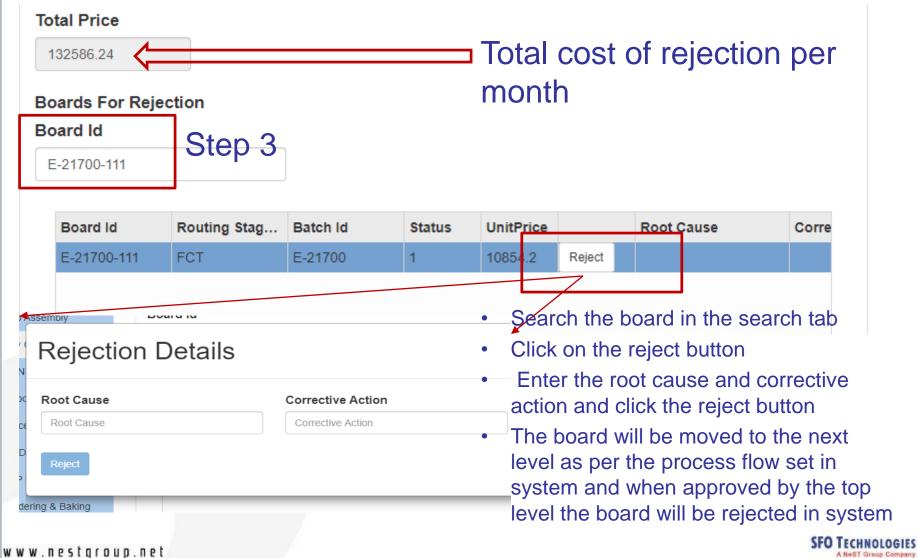
Rejection Set up - Admin privilege



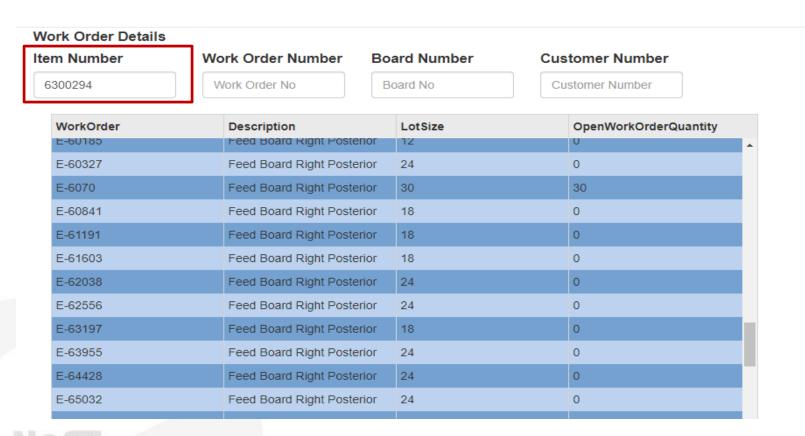
Rejection Process



Rejection Process



Work Order Page



Will list all the released work order for the item number

Work Order Page

Will show the accepted quantity, rejected quantity and open WIP in all stages

Work (Work Order Details								
Item Number		Work Order Number		Board Number		Customer Number			
Item N	lo	E-67339		Board No		Custom	er Number		
Woi	rkOrderOrBatch	RoutingStages	Acce	ptedQuantity	Rejected	Quantity	OpenWIP		
E-67	7339	MACHINE-1-B	60		0		0	Â	
E-67	7339	QA INSPECTION	12		0		0		
E-67	7339	MACHINE-1-T	60		0		0		
E-67	7339	QA INSPECTION	12		0		0		
E-67	7339	AOI-1-T	60		0		0		
E-67	7339	AOI-2-B	60		0		0		
E-67	7339	RFI-1-T	60		0		0		
E-67	7339	RFI-1-B	60		0		0		
E-67	7339	NPI QA SMT	60		0		0		
E-67	7339	FPT	48		0		12		
E-67	7339	FINAL INSPECTION	0		0		48		
E-67	7339	NPI FINAL QA	0		0		0		

Work Order Page



Will show the status of particular board in each stage

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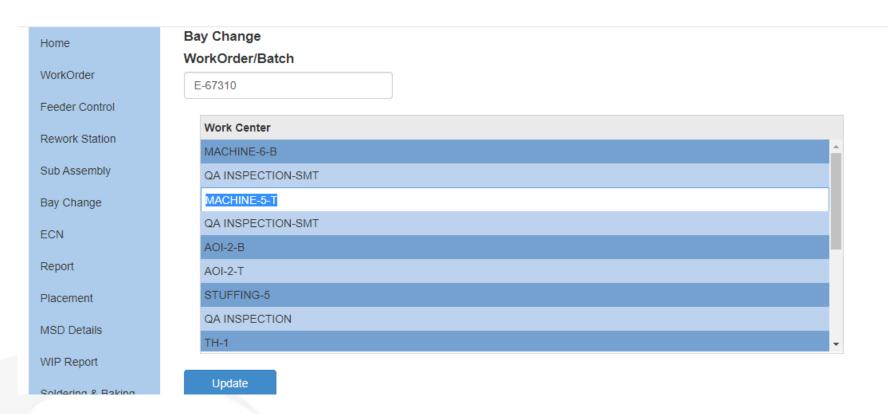
Work Order Page

ork Order Details em Number	Work Order Number	Board Number	Customer Number
Item No	Work Order No	Board No	ZSSNFK
WorkOrderOrBatch	RoutingStages	Status	Board Serial Number
E-39810	MACHINE-6-T	Accepted	E-39810-54
E-39810	QA INSPECTION-SMT		E-39810-54
E-39810	WATER CLEANING	Accepted	E-39810-54
E-39810	AOI-6-T	Accepted	E-39810-54
E-39810	STUFFING-5	Accepted	E-39810-54
E-39810	WAVE SOLDERING	Accepted	E-39810-54
E-39810	QA INSPECTION		E-39810-54
E-39810	WATER CLEANING	Accepted	E-39810-54
E-39810	TH-5	Accepted	E-39810-54
E-39810	INSPECTION-5	Accepted	E-39810-54
E-39810	QA INSPECTION-TH		E-39810-54
E-39810	ICT	Accepted	E-39810-54
E-39810	BURN IN START	Accepted	E-39810-54

tracking Customer serial number



Bay Change

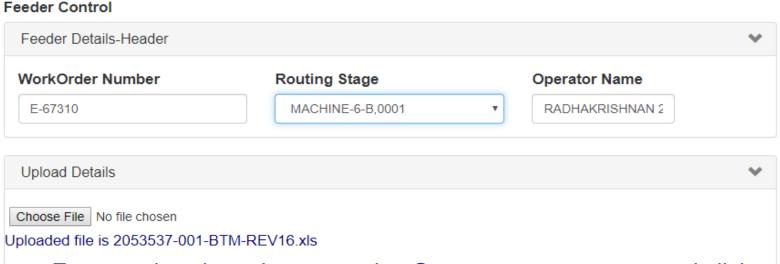


Select the Bay change option and then enter the WO. Double click on the work center and do the necessary changes and then press Update.



Feeder Control

Program file uploading



- Enter work order, choose routing Stage, operator name and click on file control to upload the program file
- Program file is pre defined- <u>product partnumber-top/btm-rev</u>
- If the product part number is not matched with the product part number of the work order given file cannot be uploaded



Feeder Control

Feeder Scanning

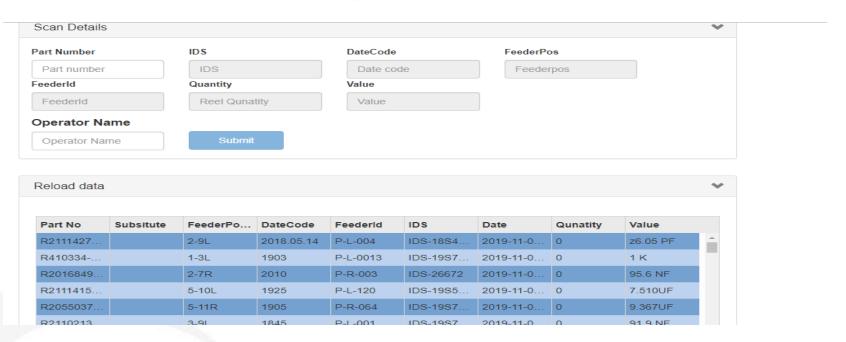


 Scan Item id, ids number, date code, feeder id, operator name and click submit button



Feeder Control

Feeder Reload Scanning



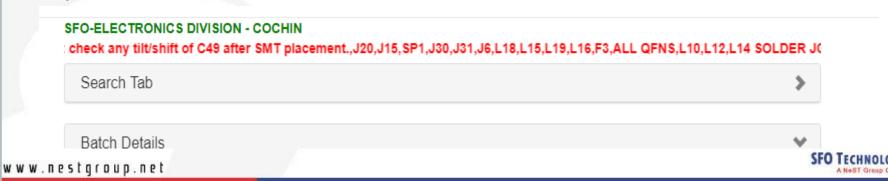
 Enter itemid, ids number, date code, feeder position, feeder id, quantity value, operator name and click submit button



Process Alert Entry



To enter new row press the Add New Row. After entering the data press Save button.

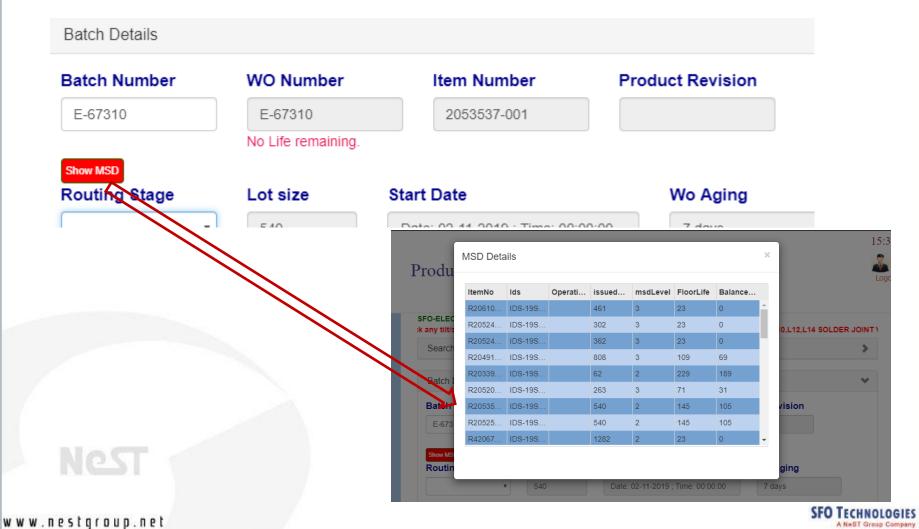


MSD Details

	isture Sensitive rkOrder	Device Details	Item No		IDS			
	WorkOrder		Item No		IDS			
Iss	ued Quantity		MSD Level		Floor Life			
Is	Issued Quantity		MSD Level		Floor Life			
					Add			
	E-67310							
	WorkOrder	Item No	IDS	Issued Quantity	MSD Level	Floor Life in h		
	E-67310	R2061044-001	IDS-19S62	461	3	23		
	E-67310	R2052425-001	IDS-19S61	302	3	23		
	E-67310	R2052424-001	IDS-19S70	362	3	23		
	E-67310	R2049147-001	IDS-19S73	808	3	109		
	E-67310	R2033905-001	IDS-19S61	62	2	229		
	E-67310	R2052033-001	IDS-19S61	263	3	71		
	E-67310	R2053527-001	IDS-19S67	540	2	145		
	E 67310	P2052592 001	IDS 19861	540	2	1.45		

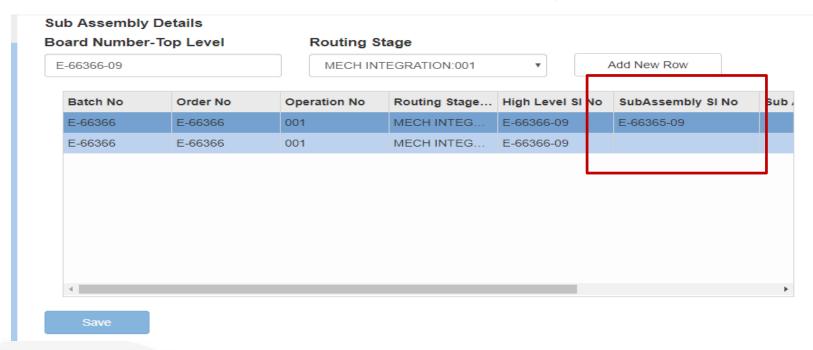
• Enter work order, item number ,ids number, issued quantity, MSD level, floor life and click add button

MSD Details- Home page



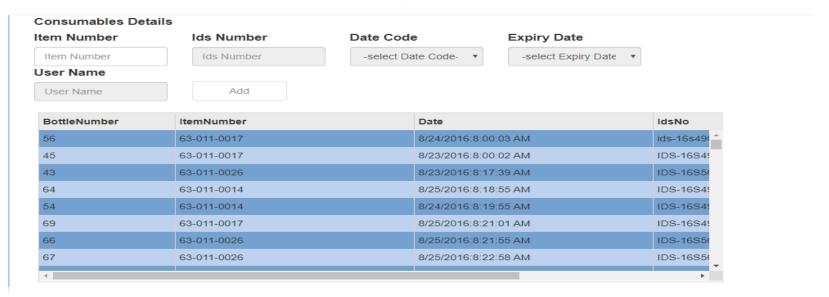
1020 23

Sub Assembly Mapping



- Enter the top level board and choose routing stage and click add row according to the number of sub assembly to be mapped
- Double click on the subassembly sl no column and scan the sub level board number and click the save button

Consumable Issuing to production line

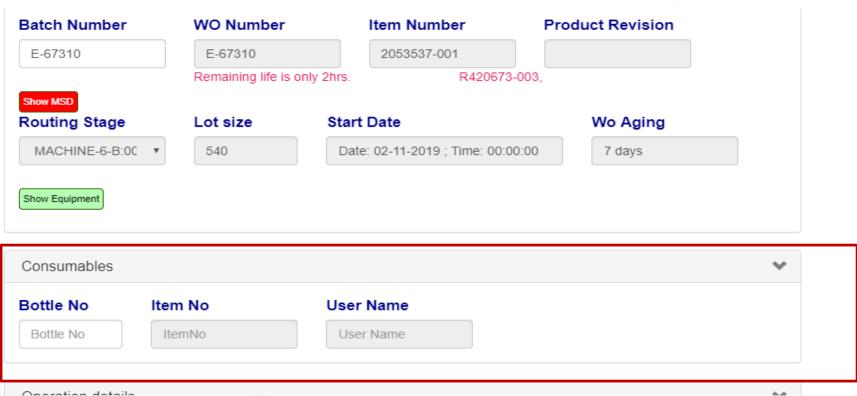


- Enter item number, ids number, chose date code, expiry date, user name and click add button
- Item will be issues to the screen and a level with bottle number will be issued from the system and must be pasted on the consumable





Consumable Verification -Home Page



- Enter the bottle number, item number from label print out and user name
- System will validate the towing time and expiry date of the item scanned
- If validation successfully the consumable is accepted

Available Reports

Report Report Report Name View Report Defect Comparison with Pie chart StageWiseLatency report NCMR Report TH Traceablity Report Actual and Defect Count Stage Wise WorkOrder Number Routing Stage **ECN Details Baking Details** Enter WorkOrder No WIP Summary Machine To Date Scanned Board Details WO Trace Report du-mm-yyyy dd-mm-yyyy

- 1. WIP report
- 2. DPMO report
- 3. Defect report
- 4. Feeder Report
- 5. Delay report

Thank You

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