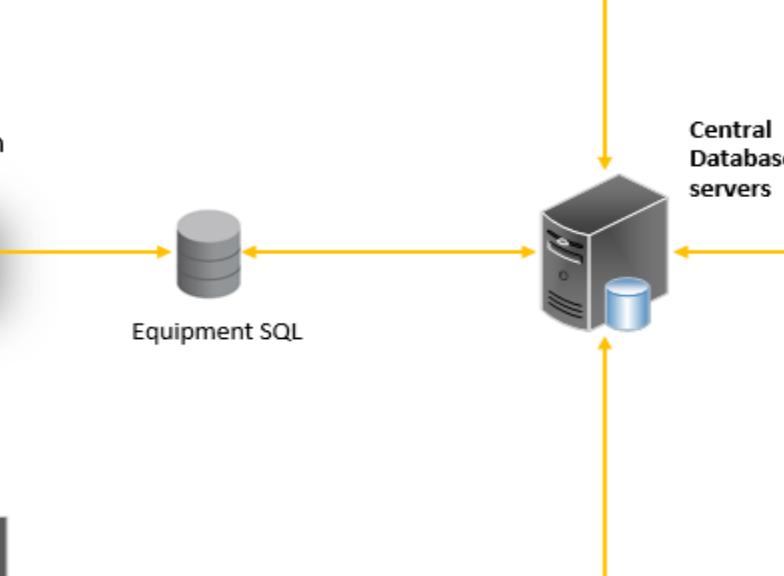


MANUFACTURING EXECUTION SYSTEMS (MES)

AS - IS System Architecture

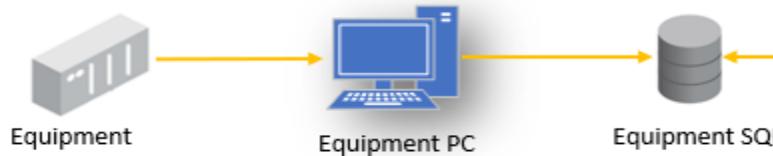
Scenario 1: Excel Manual Input



**Application + Web servers
+ Reporting + Execution
(1 SERVER)**



Scenario 2: Equipment Connection



Scenario 3: Web client MES



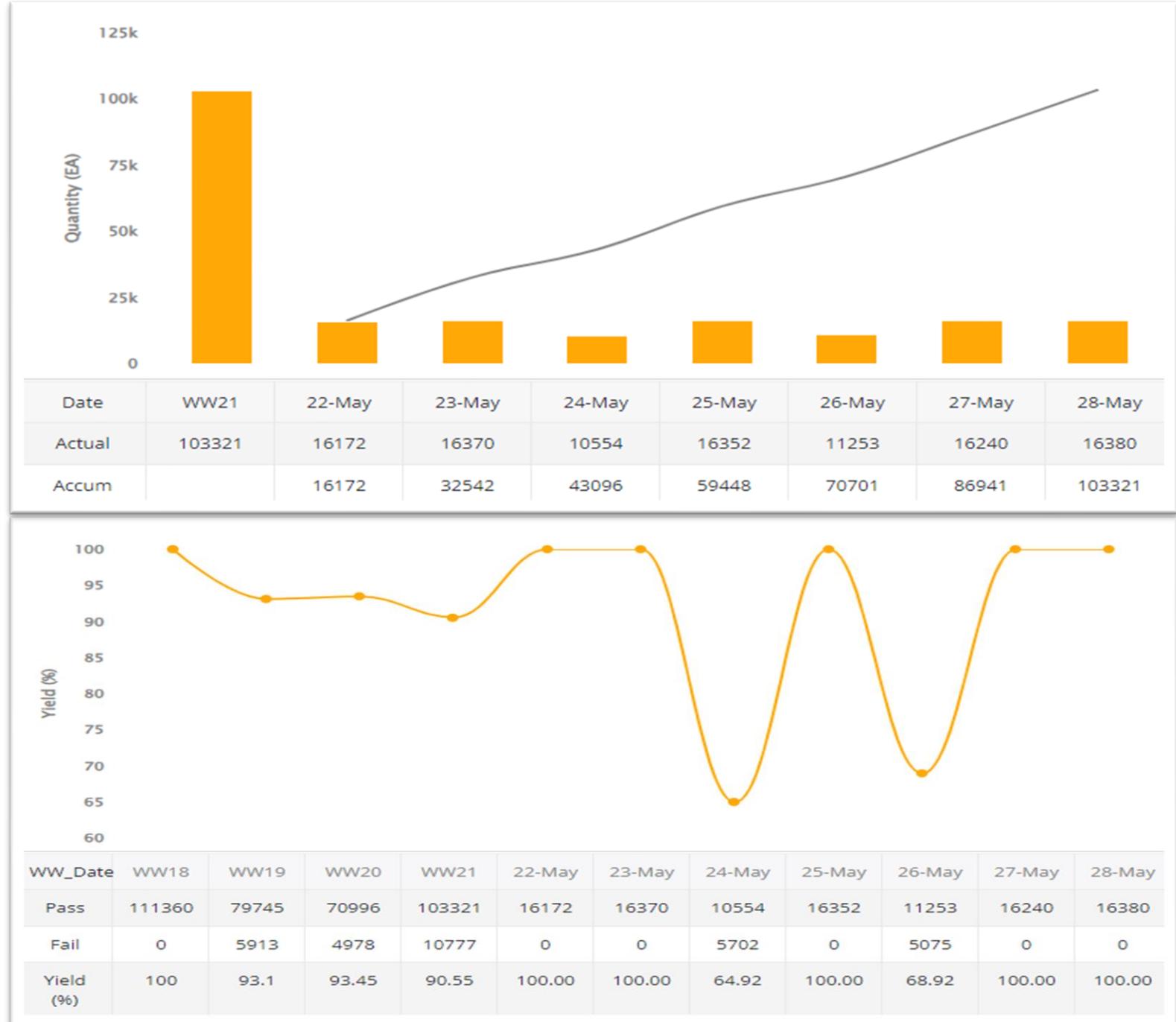
Legend:

- - Data flow is one way
- ↔ - Data flow is two way

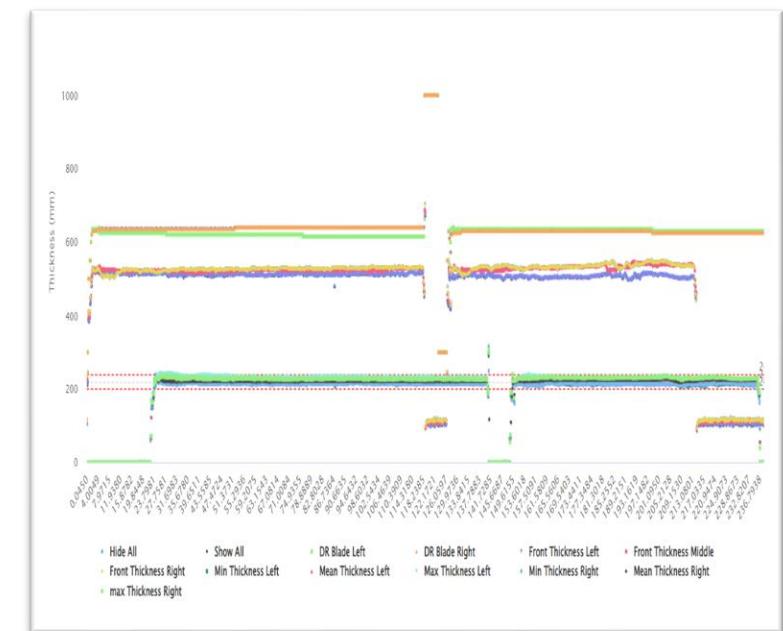
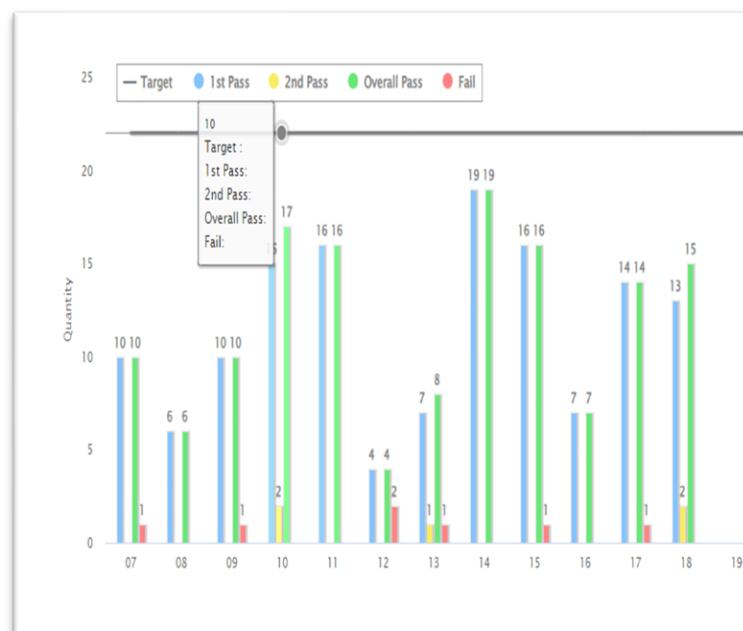
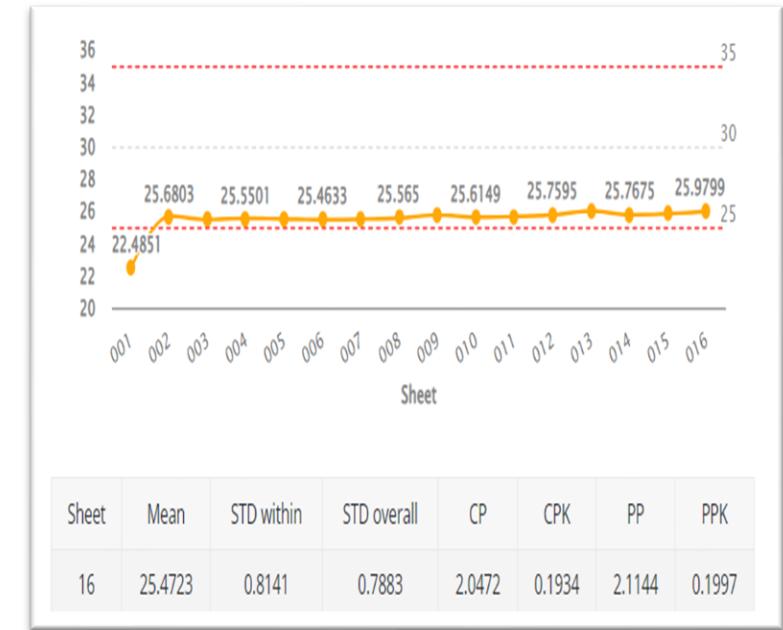
Hourly Output Dashboard



Daily Output & Yield Dashboard



Equipment/ Product Performance Monitoring



Visual Inspection & Shipment Form

| Post FA Rework | Please Input Part Serial No : | | | | | | | | | | | |
|---|---|--|---|---|--|--------------------|----------|-------------|-----------|-----------|-------------|--------|
| Defects | | | | | | | | | | | | |
| <input type="checkbox"/> Mica_Tape_Damage | <input type="checkbox"/> Ceramic_Not_Datum | <input type="checkbox"/> Front_Stopper_Tilt | <input type="checkbox"/> Enclosure_Tab_Damage | <input type="checkbox"/> Front_Stopper_Loose | | | | | | | | |
| <input type="checkbox"/> Front_Stopper_Welding_Offset | <input type="checkbox"/> Enclosure_Welding_Offset | <input type="checkbox"/> Front_Stopper_Not_Datum | <input type="checkbox"/> Fin_B_Interference | <input type="checkbox"/> Illegible_Laser_Mark | | | | | | | | |
| <input type="checkbox"/> Ceramic_Chip_Off/Crack | <input type="checkbox"/> Fin_Damage/Broken | <input type="checkbox"/> Other | <input type="checkbox"/> No_Data_In_MES | <input type="checkbox"/> Enclosure_Gap | | | | | | | | |
| <input type="checkbox"/> 3kV_HIPOT_Fail | <input type="checkbox"/> 1.5kV_HIPOT_Fail | <input type="checkbox"/> Resistance_Fail | | | | | | | | | | |
| Remark_Appearance | | | Save | | | | | | | | | |
| | | | | | | | | | | | | |
| Start Date : <input type="text" value="2024-07-31"/> | | End Date : <input type="text" value="2024-09-29"/> | | | | | | | | | | |
| Show <input type="button" value="10"/> entries <input type="button" value="Copy"/> <input type="button" value="CSV"/> <input type="button" value="Excel"/> <input type="button" value="Print"/> Search: <input type="text"/> | | | | | | | | | | | | |
| ID | WO Number | Batch Number | Serial Number | Status | Fault Name | Remarks_Appearance | Input By | Verify Date | ME Remark | Verify By | Verify Date | Action |
| No data available in table | | | | | | | | | | | | |
| Showing 0 to 0 of 0 entries | | | | | Previous <input type="button" value="Next"/> | | | | | | | |

Process Digitalization

| PROCESS RECORD SHEET | | | | |
|---|----------------------------------|---------------------|-----------------|-------------------|
| INK BATCHING - TUNGSTEN POWDER PREPARATION (WP03) | | | | |
| X597 | Area | INK BATCHING ROOM | | Material |
| WP03 | Ink Type | W03Q85 | | Operator 1 |
| WP03-0005 | Batching Date | | | Operator 2 |
| Material Input | | | | |
| Colour Code | Required Quantity (g) | Actual Quantity (g) | | |
| | | Jar #1 | Jar #2 | Jar #3 |
| n / a | 8410 ~ 8420 | | | |
| Color Input | | | | |
| Gold | 3.11 ~ 3.21 | | | |
| Purple | 0.25 ~ 0.35 | | | |
| Blue | 0.58 ~ 0.68 | | | |
| Measurement Summary | | | | |
| Material: DIA & VILING MEDIA | Required Quantity (g): 8410-8420 | Jar 1: 841 | Measurement: 81 | |
| Material: TUNGSTEN POWDER | Required Quantity (g): 3.11-3.21 | Batch No: 20200004 | Jar 1: 3.11 | Measurement: 3.2 |
| Material: POWDER | Required Quantity (g): 0.25-0.35 | Batch No: | Jar 1: 0.25 | Measurement: 0.35 |
| Material: ISOPROPYL ALCOHOL | Required Quantity (g): 0.05-0.08 | Batch No: | Jar 1: 0.05 | Measurement: 0.08 |
| Material: TTBK | Required Quantity (g): 400-420 | Batch No: | Jar 1: 400 | Measurement: 420 |
| Material: PROPYLENE ACETATE | Required Quantity (g): 18.9-20.5 | Batch No: | Jar 1: 18.9 | Measurement: 20.5 |
| Material: ACETONE | Required Quantity (g): 400-420 | Batch No: | Jar 1: 400 | Measurement: 420 |
| Material: DIA & VILING MEDIA | Required Quantity (g): 8410-8420 | Jar 1: 841 | Measurement: 81 | |
| Measurement Below LSL Spec Limit | | | | |
| <input type="button" value="OK"/> | | | | |

Design Finish
Good Label

