



Pocket-E Platform

Production Event Gateway - Overview



What is the Production Event Gateway?

Your factory makes amazing products but you need to reliably record Production Events from your manufacturing and workflow processes into your ERP.

*The problem is that real-world factories present a **multitude** of different Production Events that all need to be captured and recorded in **different ways**.*

Production Events can be:

- triggered via PLC integration
- captured from API communication
- manually reported by user interaction
- derived from secondary system states
- or anything in between!

The Pocket-E: Production Event Gateway allows you to reliably capture Production Events from ANY source and report them to ANY destination.

But that sounds too good to be true. How can Pocket-E claim to handle events from any source to any destination?

The Pocket-E platform is a proven solution that is currently being used to report Production 24/7 across the manufacturing space in a myriad of different ways.

The following examples show what Pocket-E can do for your business.



Use Case 1: PLC to ERP Backflush

Our customer makes widgets for Honda. Each time a widget is built, a PLC counter is incremented. Their solution requirements were:

- Generate a Honda Container Label as full containers of widgets are produced.
- Scan and Validate that the container label printed properly.
- Report production into the ERP in standard pack units of production.


Our Pocket-E solution:

1. Watches PLC counters in real-time.
2. Automatically prints a Honda Container Label for each “standard pack” unit of production.
3. Creates and validates a ERP Production Reporting transaction once each label has been scanned and verified.
4. Stores a permanent record of the ERP transaction history number cross-referenced to Honda container lot number along with the date, time, user, and other critical data to support auditing.

Status	Last Update	Part	Qty	Reference	Transaction
+	2/14/2019 6:17:22 AM	5.0 J	27		
✓	2/14/2019 6:04:47 AM	5.0 J	30	18510135	1796694
✓	2/14/2019 5:50:52 AM	5.0 J	30	18510131	1796694
✓	2/14/2019 5:07:22 AM	5.0 J	30	18510121	1796694
✓	2/14/2019 4:57:37 AM	5.0 J	30	18510122	1796694
✓	2/14/2019 4:33:12 AM	5.0 J	30	18510121	1796694

Machine Values

Producing Part



Good Count

933

Reject Count

0

Last Update
2/14/2019 12:30:05 PM

0178

Use Case 2: Job Card Scan to existing Kanban Application

Our customer wants to leverage an existing shop floor barcoding solution in tandem with Pocket-E to provide a more modern and streamlined user interface and also provide a way to monitor finished goods retrieval at each Line in real time. They want to pre-print job cards and scan them to produce Kanban units of production via standard backend logic.

Our Pocket-E solution:

1. Allows sign-in to a specific Production Line that displays all current and previous production in real-time.
2. Supports periodic scan of kanban cards to report production in one-out, double-out, or quad-out production line formats.
3. Validates that sufficient reasonable time has passed since last kanban entry before submitting the transaction to backend systems.
4. Stores a permanent record of the ERP transaction history number cross-referenced to serialized container lot number along with the date, time, user and other critical data to support auditing.
5. Shows finished Production at the Line until it is physically picked up and transferred to a finished goods storage area.

The screenshot displays the Pocket-E Production Event Gateway interface for a specific production line. The main window is titled "ProdLine: TCF60C (M...)" and contains a table with the following data:

Status	Part	Kanban	Reference	Qty	Prod Time
	...	K0009481	10062835	73	2/14/2018 12:55:11 PM
	...	K0009482	10062835	36	2/14/2018 12:55:08 PM
	...	K0009487	10062834	36	2/14/2018 12:55:04 PM
	...	K0009485	10062847	73	2/14/2018 11:55:22 AM

Below the table is a navigation bar with "Retry", "Print Error", and a settings gear icon. To the right of the table are four Kanban card displays, each showing a Kanban number (K0009487, K0020952, K0009485, K0009491), a quantity (36 or 72), and a "Flush" button. Each card also displays a barcode and technical details like "MPC" and "MPC - GUNNING SET".

Use Case 3: Timed Production Performance and Scheduling

Our customer wants to schedule discrete work orders for their employees. They want to give their employees a single source to retrieve their daily schedules and report Production as it happens throughout the day. They also want to accurately measure employee production performance time so they can improve internal processes and increase productivity.

Our Pocket-E solution:

1. Retrieves confirmed Work Orders from the ERP and allow management to sequence and allocate orders to employees.
2. Allows employees to view their sequenced production plan in real-time.
3. Allows employees to click a 'start' and 'finish' button as they produce widgets in order to capture accurate production timing and automatically report production to the ERP as it happens.
4. Generates real-time graphs and metrics to track production performance over time.

The screenshot displays the 'WO Scheduler' interface. It features a main grid for employee scheduling and a sidebar for 'Unassigned' work orders and 'WO Detail'.

WO Scheduler Grid:

Employee	Planned Hours	SWP Planned	Capacity Required	Work Order	Part	Capacity Required
Bill Whitehead	6.3	90.0%	6.3	01090014	2P3	6.3
Craig Rice	8.9	127.0%	8.9	01090014	2P3	8.9
Felicia Avila	5.5	79.0%	4.5	01090014	2P3	4.5
Jane Smith	0.7	10.0%	0.7	drb1	1P3	0.7

Unassigned Work Orders:

Work Order	Part	Capacity Required
drb1	1P3	0.0
drb2	10-10000	10.0
drb2	10-10000	10.0
drb3		

WO Detail:

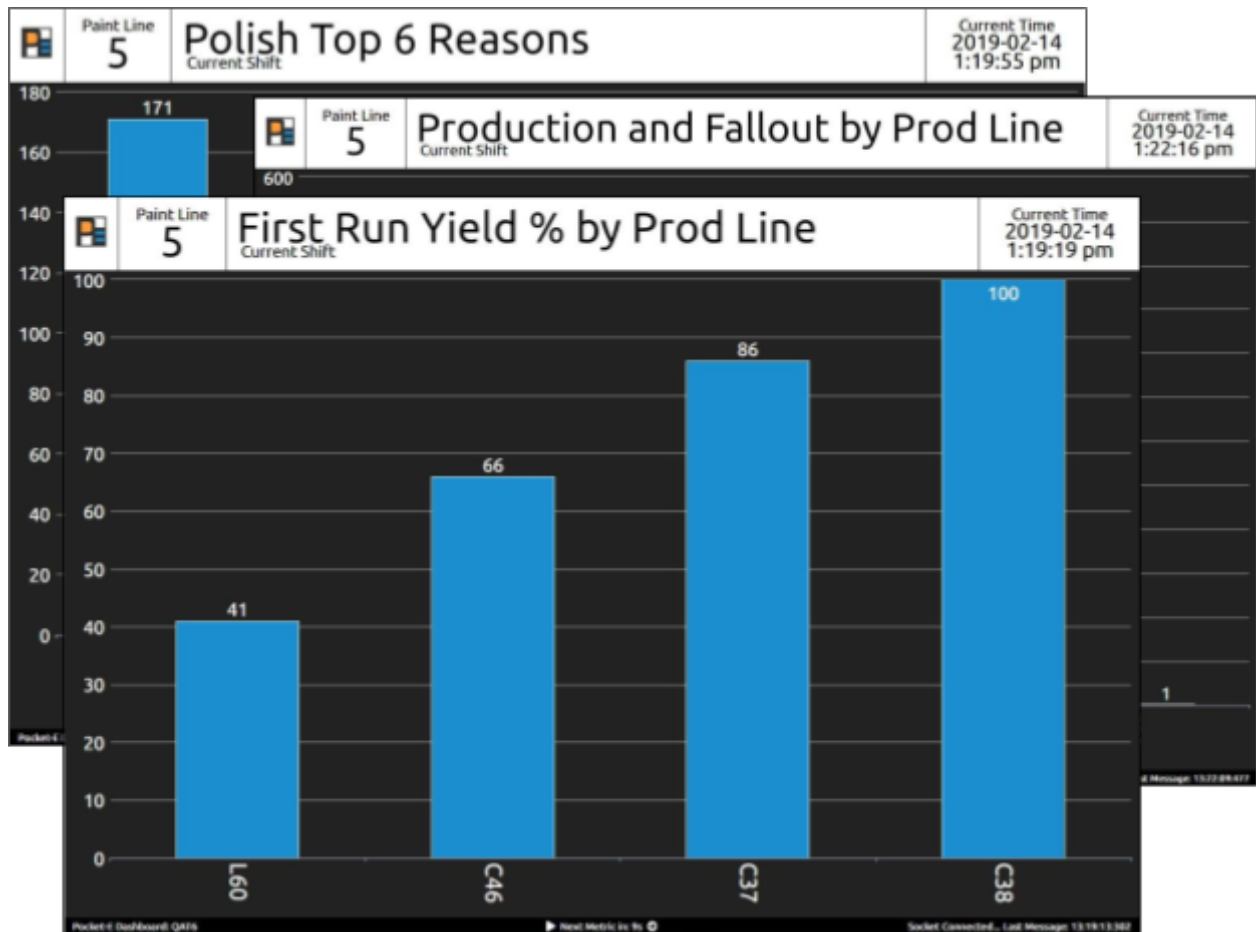
WO Nbr:	01090014
WO Lot:	402279
Operation:	10
Part:	2P3
Order Qty:	1600.0
Workcenter:	FAB1
Due Date:	11/30/2012
Capacity Req:	4.5

Bottom Controls:

- Show Due By: 01/01/2018
- Hide Complete
- Save Plan
- Refresh Plan

Conclusion

In addition to all the features outlined in the previous use-cases, Pocket-E supports data visualizations for OOE, OEE, Andon-style alerts, and any production metric you require.



Over the years Pocket-E has solved many common production reporting challenges in many different environments using many different solutions. Pocket-E can leverage that experience to solve your challenges quickly and reliably.

Contact sales@pocket-e.com to get started with Pocket-E today!