

# POLCA: The Production Control System for High-Mix, Low-Volume and Custom Products

written by Lauri Moon | December 19, 2018

CLASS IS FULL - REGISTRATION IS CLOSED

This half-day workshop will explain POLCA (**P**aired-cell **O**verlapping **L**oops of **C**ards with **A**uthorization), an alternative to Kanban for material control on the shop floor. POLCA is a card-based visual control system that manages the flow of jobs through the shop floor: at each operation, it controls which job should be worked on next to meet delivery targets. POLCA ensures that upstream operations use their capacity effectively by working on jobs that are needed downstream, while at the same time preventing excessive work-in-process (WIP) build-ups when bottlenecks appear unexpectedly.

POLCA is particularly suited to companies manufacturing high-mix, low-volume and customized products, for which Kanban systems do not work well. Such companies struggle with long lead times, late deliveries and daily expediting to meet delivery dates. POLCA has delivered impressive results in such environments.

The crowning aspect of POLCA is that it is simple. It does not require any complex software implementation: it can be used without an ERP system or it can seamlessly complement an existing ERP system.

The workshop will begin with a tutorial on POLCA, followed by a computer simulation demonstration of POLCA. The class will include several case studies of industry applications, as well as an overview of Suri's new book on POLCA (see below).

The workshop includes:

- **The Need for a New Material Control Strategy:** Why MRP systems can result in an increasing spiral of long lead times and late deliveries and why

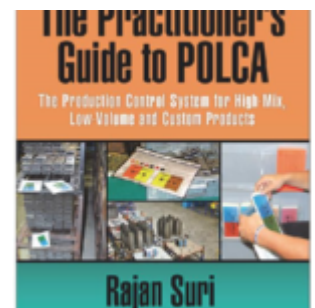
concepts such as takt time and Kanban do not work well in low-volume or custom environments.

- **Detailed Explanation of POLCA:** POLCA stands for **P**aired-cell **O**verlapping **L**oops of **C**ards with **A**uthorization. This hybrid push/pull system combines the best features of card-based pull (Kanban) systems and push (MRP) systems while overcoming their drawbacks for low-volume and custom production.
- **Computer Simulation of POLCA:** A computer simulation will be used to demonstrate how POLCA works for a company making low-volume and custom-engineered products.
- **Overview of new book on POLCA:** Attendees will get a “walk-through” of Suri’s new book to provide them with an overview of the contents and tips on how to best use the book.
- **Industry Case Studies of POLCA Application:** Several industry case studies will be presented to show the effectiveness of POLCA for companies in many different industries, including applications in USA, Canada and Europe.

In summary, through the theory and examples in this workshop, attendees will see the impact of POLCA on product lead times and on-time delivery and learn how POLCA can provide companies with a powerful competitive advantage.

**\*\* Bonus \*\***

Attendees will receive a copy of Suri’s newly published book:



*The Practitioner’s Guide to POLCA: The Production Control System for High-Mix, Low-Volume and Custom Products* By Rajan Suri, Productivity Press, 2018.

**Instructor:**

**Rajan Suri** is Emeritus Professor of Industrial Engineering at the University of Wisconsin-Madison. He received his Bachelors degree from Cambridge University (England) and his M.S. and Ph.D. from Harvard University. Professor Suri is the Founding Director of the Center for Quick Response Manufacturing (QRM) at the University of Wisconsin-Madison, through which around 300 companies have worked with the University on developing and implementing QRM strategies. [Click here to learn more about Professor Suri.](#)



**\*\*Currently only accepting registrations for a minimum of three, maximum of five attendees per company.\*\*** This training qualifies for WEDnetPA funding as **Essential Skills Training.**