

Synchrono® Reviews Strategies for Managing Manufacturing Bottlenecks and Constraints

New paper outlines variations from the Theory of Constraint's Drum-Buffer-Rope method and how it has evolved through synchronization technology.

ST. PAUL, Minn. – August 8, 2018 – Synchrono®, the leader in modern demand-driven manufacturing software and synchronization technologies today released a new thought-leadership paper for Lean Manufacturers researching current strategies for eliminating production bottlenecks and managing manufacturing constraints.

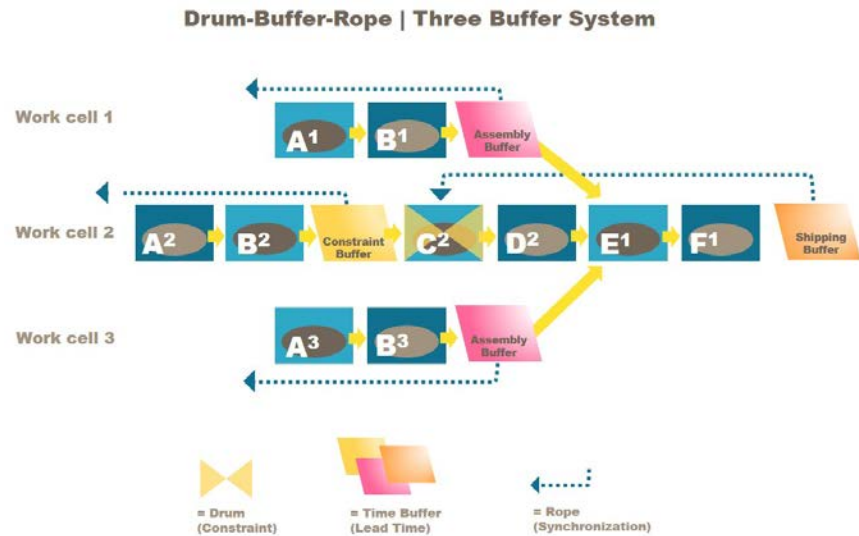
Bottlenecks and constraints are two key inhibitors to improving manufacturing production flow and driving key performance indicators in the right direction. In *Eliminate Production Bottlenecks; Manage Manufacturing Constraints*, Synchrono® explains how bottlenecks and constraints are different – and should be addressed differently.



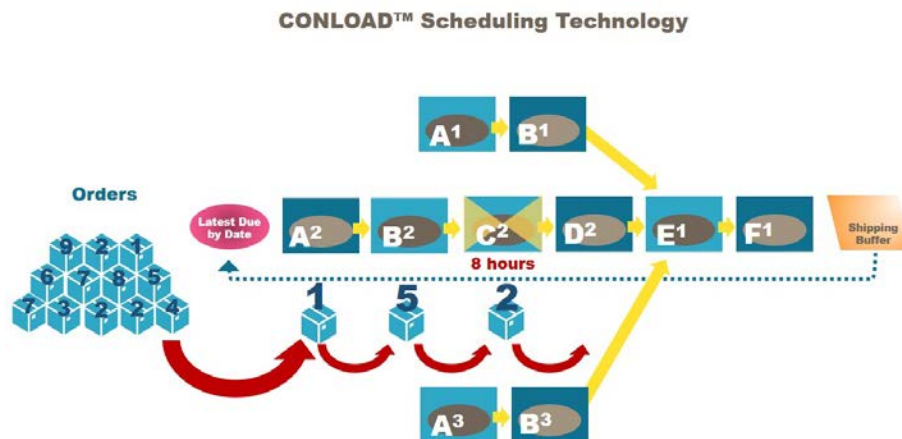
As temporary disruptions, bottlenecks can and should be fixed. Examples offered include an unexpected material shortage, an absent operator, or machine malfunction – all issues that, while temporary, can impact important metrics like on-time delivery. The paper offers suggestions, including how to enable real-time visibility to production status and performance indicators to help manufacturers flag bottlenecks early so they can be resolved with minimal

impact. Bottleneck concerns may also be addressed through a continuous improvement program.

In contrast, manufacturing constraints present longer-term, more persistent limitations to manufacturing production flow. A constraint could be a work center that cannot go any faster because the equipment is already operating at its maximum speed. It could also be a process that takes a set amount of time to complete or a complicated verification process or regulation. An alternative to investing in more capital equipment is constraints management.



Eliminate Production Bottlenecks; Manage Manufacturing Constraints reviews variations of the Drum-Buffer-Rope (DBR) method from the Theory of Constraints. At a high-level, the strategy is to use the rate of the manufacturing constraint(s) to set the pace for the production process, with buffering techniques to account for variability.



Technology has enabled the evolution of DBR and its variants into a more automated, holistic process. CONLOAD™ is a patented scheduling technology included in Synchrono® SyncManufacturing® planning, scheduling and execution software that allows manufacturers to manage and synchronize all the processes required to complete an order (value stream) to the pace of the constraint(s), creating an environment where work flows throughout the production process. Specifically, CONLOAD™ works to develop a production schedule based on the synchronization of the following:

- 1. The customer's desired delivery date.**
- 2. All elements required to complete the order (people, materials, equipment, processes and data).**
- 3. The capacity/pace of the constraint.**

Because CONLOAD™ technology synchronizes the entire value stream, it has the ability to make real-time adjustments for variability in demand, while keeping the end goal in mind: The customer's desired delivery date.

Eliminate Production Bottlenecks; Manage Manufacturing Constraints is available for download at www.synchrono.com.

About Synchrono

Synchrono® LLC enables the demand-driven visual factory of the future; synchronizing people, processes, machines, materials and data to drive production flow from order inception to delivery. The award winning Synchrono Demand-Driven Manufacturing Platform includes a production planning, scheduling and execution system; ekanban inventory replenishment and supply chain collaboration software; a data collection, historian and automated workflow engine; alert management and monitoring software; and a real-time visual factory information system. The Platform components may be implemented independently or collectively to enable the Internet of Things and an unprecedented foundation for communication, collaboration and continuous improvement. Synchrono helps clients manage constraints, improve flow and drive on-time delivery to maintain a competitive edge. Sync with us at www.synchrono.com and follow the Demand-Driven Matters blog at www.synchrono.com/blog.

###

Media Contact:

Pam Bednar

pbednar@synchrono.com

651.783.5145