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Inventory System (VMI) Benefits Business

# LEAN INVENTORY

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It was reported in 2011 that Tim Cook, CEO of Apple, called inventory “fundamentally evil.” How can inventory be evil? Isn’t raw material inventory necessary to manufacture products? Shouldn’t there be some finished product on the shelf to fulfill orders? Perhaps what he meant was excess inventory or inventory that is not being converted to cash in a very short amount of time can be toxic or evil. When a manufacturer has excess inventory not adding value to the process, the inventory is hurting the company’s balance sheet, and is by definition wasteful. Having excess physical inventory on hand increases the need for expensive warehousing space, not to mention the risk of obsolescence. All of these carrying costs put the enterprise at a financial risk. Instead of the inventory being an investment, its value depreciates upon receipt from the supplier. Having the bare minimum amount of inventory to sustain production is the delicate balance of supply chain management. Procuring and managing the exact amount of inventory needed for a flexible and ever-changing production schedule is a complicated and labor intensive process. If you consider for example, the bill of materials for a large OEM of tractor equipment, this is multiplied times thousands of items down to the smallest nut or bolt.

## Vendor Managed Inventory

To combat this evil form of inventory, many modern manufacturers, distributors and retailers utilize some form of a Vendor Managed Inventory system (VMI) as a lean supply chain solution. A typical VMI system operates like this: A buyer of an item (customer) provides a forecast to a supplier of that item, and the supplier takes the responsibility for maintaining an agreed upon inventory of the item. This is a shared risk system and often referred to as Integrated Supply. VMI is commonly used with OEMs for low-cost, class “C” items such as fasteners and hardware. Military & Commercial Fasteners Corp. (MCF), headquartered in York, PA, has perfected this system for hardware and operates a VMI partnership program with many large manufacturers and calls their system SECURETRAK®. The key to their success has been working very closely with their partners to fully understand the requirements and

## How A Vendor Managed Inventory System (VMI) Benefits Business



developing a just-in-time delivery schedule. This is a Pull versus a Push system ensuring the customer only has the on hand inventory that is needed for production. The Pull signal is usually in the form of a “Kanban” bin or card. “Kanban” is a Japanese term used for a visual signal and often found in lean and just-in-time manufacturing systems. The kanban bin is one of at least two identical bins for that particular part. The pull process begins when one empty bin is returned to the supplier, while the second bin is being consumed. Before the second bin is depleted the first is replenished and returned to the customer. This cycle continues assuring the customer never has more than two full bins of inventory on hand at anytime. The amount of fasteners in a bin is calculated based on variables such as the value of the part, size of the part, inventory turn goals, and an overall risk assessment. Usually one bin of fasteners represents days or weeks worth of production. Implementing a VMI system can not only

reduce on hand inventory levels by an average of 80 percent, but will also eliminate many administrative burdens such as purchase order generation, receiving inspection, material handling and forecast management. When the customer and supplier work closely together in a VMI partnership, many other lean benefits surface – such as consolidated billing and stable long term contract pricing. Many manufacturers utilize VMI for fasteners because of the complex nature of the product. Allowing an industry expert like MCF to manage all the fastener needs allows the manufacturer to concentrate on their core competencies.

Achieving a lean inventory is an important part of maintaining a healthy business. VMI is not a one-size-fits-all system but highly adaptable for many different requirements. Utilizing a well-implemented VMI system will not only improve your balance sheet but will also cut many other wastes out of the overall process and put you on your way to having a lean inventory.

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*Headquartered in York County, PA since 1972, Military & Commercial Fasteners Corp. (MCF) is a manufacturer and distributor for fasteners and components. MCF maintains offices and regional distribution centers in York, PA, Athens, GA and Goshen, IN.*

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