



Kaizen – A frequently used term that refers to continual incremental improvement. A kaizen event is a short-term project aimed at making an immediate improvement in a specific area of a process to eliminate identified waste. Traditionally, Kaizen is a daily improvement activity empowering associates to reduce non-value add steps in processes.

- **Vendor Managed Inventory (VMI)** – An MSC VMI specialist will visit your facility to ID product, apply bar code labels to MSC type items and establish min./max. levels based on your unique needs. This specialist will then routinely return to scan your items below the minimum levels you establish to provide a suggested replenishment order. Choose what works best for you: approve the order by fax, e-mail, shopping cart on mscdirect.com, blanket PO or eProcurement system. Contact your local branch for qualifications.
- **Customer Managed Inventory (CMI)** – CMI is an easy-to-use replenishment system utilizing a pocket-sized scanner. An MSC associate will visit your facility to ID product, apply bar code labels to MSC type items and establish min./max. levels based on your unique needs. To reorder items, scan each item with the scanner and attach the scanner to the supplied cable connected to your computer. All items are transferred to your shopping cart on mscdirect.com ready for your review and approval.

MSC Solutions can help!

- **Lean Benefits** – MSC’s Managed Inventory Solutions have numerous Lean benefits. Reduce waiting through streamlined, paperless order processing. Avoid over-processing by bypassing traditional purchase order processing and consolidating invoicing and payment. Reduce inventory by identifying and labeling what you have and reordering to preset levels automatically. Simplify transportation by streamlining material flow to POU locations.

Cost Savings Documentation

- **Metrics** – An essential element of any Lean initiative is the development and use of metrics to measure progress and make adjustments for continual improvement. MSC can help with Cost Savings Documentation (CSD), an easy-to-use template for documenting the cost savings associated with various MSC solutions.
- **Documenting Savings** – The CSD template can help you to document your efforts to implement MSC solutions and reduce waste. Document the reduction in waiting by calculating time saved, expressed in labor dollars, by using mscdirect.com. Document the reduction in over-processing by calculating reduced PO processing costs realized from the implementation of CAP, VMI or CMI.

*See mscdirect.com for most up-to-date terms and conditions

solutions for your lean environment

MSC Solutions – At a Glance

MSC Solution	How It Helps
99% fill rate on over 500,000 items from over 2,000 vendors	Save time when you place one call to MSC and find everything you need in stock. Our Metalworking Technical Support Team is ready to answer all your technical questions.
Get it Next Day*	Save time and money when you need it next day. Order by 8PM ET – get it Next Day* at no additional cost.
mscdirect.com	Save time by using the industry’s leading website. Reduce PO costs and control access and spending. Buy what you need when you need it and get it Next Day*.
Competitive Advantage Program (CAP) Vending and Specialized Point-of-Use	State-of-the-art vending solutions. Reduced tool consumption , improved inventory turns and a comprehensive array of reports.
Vendor Managed Inventory (VMI)	MSC scans your items , building a recommended Replenishment Order. You choose your approval method: fax, e-mail, mscdirect.com shopping cart, blanket PO or compatible eProcurement platform.
Customer Managed Inventory (CMI)	Scan the items you need and upload them instantly. No more trips to the Purchasing department for follow-up.
Cost Savings Documentation (CSD)	CSD helps to document the results of implementing MSC solutions so it’s easy to make the case for your organization’s support of ongoing improvements.

Our solutions eliminate waste in several ways:

- Errors & Rework: Receives the correct product the first time
- Inventory: Reduces supply down to days instead of weeks
- Over-producing: Picks product before needed
- Over-processing: Eliminates several order and receipt tasks
- Transportation: Streamlines material flow to POU locations
- Motion: Pulls information from various sources
- Waiting: Provides next-day delivery, 99% fill rate
- Costs: Reduces spend and consumption, increases productivity



800.645.7270
 MONDAY-FRIDAY 7AM-11PM, ET SATURDAY 8AM-5PM, ET
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Origins of Lean – Most experts credit Toyota with the development of Lean, based on the 7 principles of the Toyota Production System (TPS). TPS was developed as an alternative to mass production methods, focusing instead on the economic production of a variety of high quality models in numbers sufficient to meet market demand.

Waste – In Japan, waste, or non-value, is referred to as muda. Although originally referred to in a factory or production setting, muda can be identified and reduced in transactional settings as well, such as in an office, service center or hospital. In fact, muda is present in virtually every workplace activity.

Seeing Waste – One way to identify waste is through the use of Value Stream Mapping (VSM). The goal of VSM is to map a process to see where value is added and where non-value (or waste) is present. The non-value can then be attacked and reduced.

The Basics of Lean

What is Lean?

Lean is a continual improvement process focused on eliminating waste and delivering quality products and services at the lowest cost to the provider and consumer. Regardless of whether your company is just beginning to implement Lean or Lean is an integral part of everything you do, MSC can support your Lean efforts with a good, better, best product offering, competitive pricing and solutions that reduce waste and save you money.

MSC is the most dependable, trusted supply chain partner in the business. Our commitment to provide our customers with the best in quality, value, service and solutions allows you to focus on driving waste out of your business and providing greater value to your customer. This continual improvement pursuit is the essence of Lean.

What are the Key Lean Principles?

- Drive Out Waste – Eliminate all activities that don't add value to the product or service provided.
- 1st Time Quality – Identify and solve problems at their source to eliminate defects and rework.
- Continual Improvement – Strive continually to improve quality and lower costs by producing only the products and services your customers want.
- Superior Supply Chain Management – Develop long-term relationships with trusted supply partners by sharing information, costs and problem solving.
- Metrics – Measure the results of all improvements.

What are the Seven Wastes?

Waste has a huge impact on most companies' bottom line. According to some experts, Seven Wastes cost the average company 20% to 30% of their gross revenues.

1. **Errors & Rework** – Work that was not performed correctly the first time requiring correction.
2. **Inventory or Information** – Products or services in excess of customer requirements.
3. **Over-producing** – Production or acquisition of items faster than they are needed.
4. **Over-processing** – Work in excess of what is required to add value to a product or service.
5. **Transportation** – Moving product or material more than is needed to complete a task.
6. **Motion** – Moving a resource (people or equipment) more than is needed to complete a task.
7. **Waiting** – Idle time spent by workers or other resources when two processes are not in sync.

The Key to Eliminating Waste is Seeing Waste.

- Many companies operate in a current or "as is" state in which waste is commonplace, unseen or accepted as the status quo.
- Seeing the Seven Wastes allows your company to question the status quo and begin to lay the groundwork for a future of less waste, lower costs and satisfied customers.
- Waste that can be seen can be eliminated by implementing solutions that help to produce first time quality.
- MSC is your Solutions Partner.

MSC Solutions

In the pursuit of Lean, partnering with a supplier who can support your initiative and drive a Lean Supply Chain is key to your success. MSC provides a number of customized solutions to address all of the Seven Wastes.

The MSC Value Basket

- **One Call Does It All** – MSC answers all of your questions, including sourcing and quoting, in one call. No wasted time waiting on hold for another department.
- **Metalworking Technical Support** – Our knowledgeable and skilled professionals are organized to assist with all your technical application and product challenges, so your projects are done right the first time.

- **99% Fill Rate** – Consolidating an existing vendor base is often a key objective in Lean and Cost Reduction initiatives. We make it easy because we have it all—over 500,000 different Metalworking and Maintenance SKUs. So you save the time wasted (waiting) on researching products, calling multiple vendors, processing and paying for orders.
- **Get it NEXT DAY*** – Eliminate the expense of ordering items and supplies (over-producing) you don't need yet. There's no need to order until you need it and there's no need to order more inventory than you need. Order today and it's on its way. 8PM ET cut-off time. Same day shipping guarantee. Next day delivery.

mscdirect.com

Save Time and Money with mscdirect.com

Our website, mscdirect.com, is your one-stop shop for all your Metalworking and MRO needs. In addition to basic features such as real-time inventory, order tracking and history, mscdirect.com offers advanced time- and money-saving features such as:

- **World Class Search** – Easily navigate our vast selection of products using advanced search capabilities such as:
 - **Search Assistant** – Type ahead feature that offers suggestions to speed up your search for products.
 - **Visual Browse** – Navigate through our vast offering of products using our Visual Browse navigation featuring category images and intuitive product categorization.
 - **Quick Ordering from the homepage** – Quickly add items to your cart from the homepage using our easily accessible Quick Order Pad.
 - **Enhanced Virtual Catalog Navigation** – Browse our online Virtual Big Book Catalog using our menu of product category tabs to quickly jump to the area of the catalog you want to view.
- **Order Approval System** – Streamline your procurement processes using our Order Approval System. Easily assign spending limits, monitor the approval process and avoid unnecessary "bottlenecks" that affect efficiency.
- **Cost Allocation Tool** – Allows you to code line items in order to allocate spending to departments, cost centers, people or job numbers.
- **Express Checkout** – Save time using our Express Checkout feature. Simply set up preferences such as billing and shipping, and start checking out in just two clicks.
- **Advanced Tools** – MSC offers a number of time-saving solutions designed to drive down costs and increase productivity. Our website, mscdirect.com, is designed to help you manage inventory solutions such as CAP, VMI and CMI from one convenient and easy-to-use interface.
- **Integration with eProcurement Platform** – To help our customers cut costs and become more productive, we have incorporated a number of ways to conduct business using an eProcurement system.

Managed Inventory Solutions

We Can Help You Find a Solution – Trying to determine what the RIGHT solution is can be a difficult task. MSC can provide the Business Needs Analysis (BNA) as an assessment of your Indirect Supply Chain process. The BNA will provide a qualifiable and quantifiable solution proposal that will uniquely address your needs.

- **Competitive Advantage Program (CAP)** – Continuous process improvement is our commitment. For metalworking customers this means working with your team to optimize tooling for greater throughput, lower tooling costs and greater accountability on the shop floor. As a component of the Competitive Advantage Program, our state-of-the-art dispensing solutions provide benefits that far exceed simple candy machine type vending. Reduced tool consumption, improved inventory turns and a comprehensive array of reports are just a few of the ways CAP will enhance your Lean initiatives.
- **Vending and Specialized Point-of-Use** – Depending on your application MSC has a vending solution to meet your specific need. Whether for general use or for metalworking applications using round tool and carbide inserts, our point-of-use equipment will reduce consumption, inventory and transactions, as well as increase operator efficiency.

Walking the Process – Lean is a visual technique that provides the opportunity for empowered participants to make immediate improvements. Walking the process allows everyone to visualize the actual process, see areas of non-value and make suggestions for improvement. "Better By Friday" is the immediate goal of a week-long Lean kaizen event.

The Hidden Factory – Is the process "built-in" to non-Lean production operations for managing waste, for example, a rework process for fixing defects. Driving waste out and striving for perfect first time quality helps to eliminate "the hidden factory."

5S – To reduce defects, companies follow 5S to develop an organized, safe workplace arrangement. 5S is Sort, Simplify, Shine, Standardize and Sustain. CAP/VMI/CMI are good examples of the workplace organization called for in 5S. Additionally, MSC offers many of the safety, signage and organizational products needed to implement 5S.

