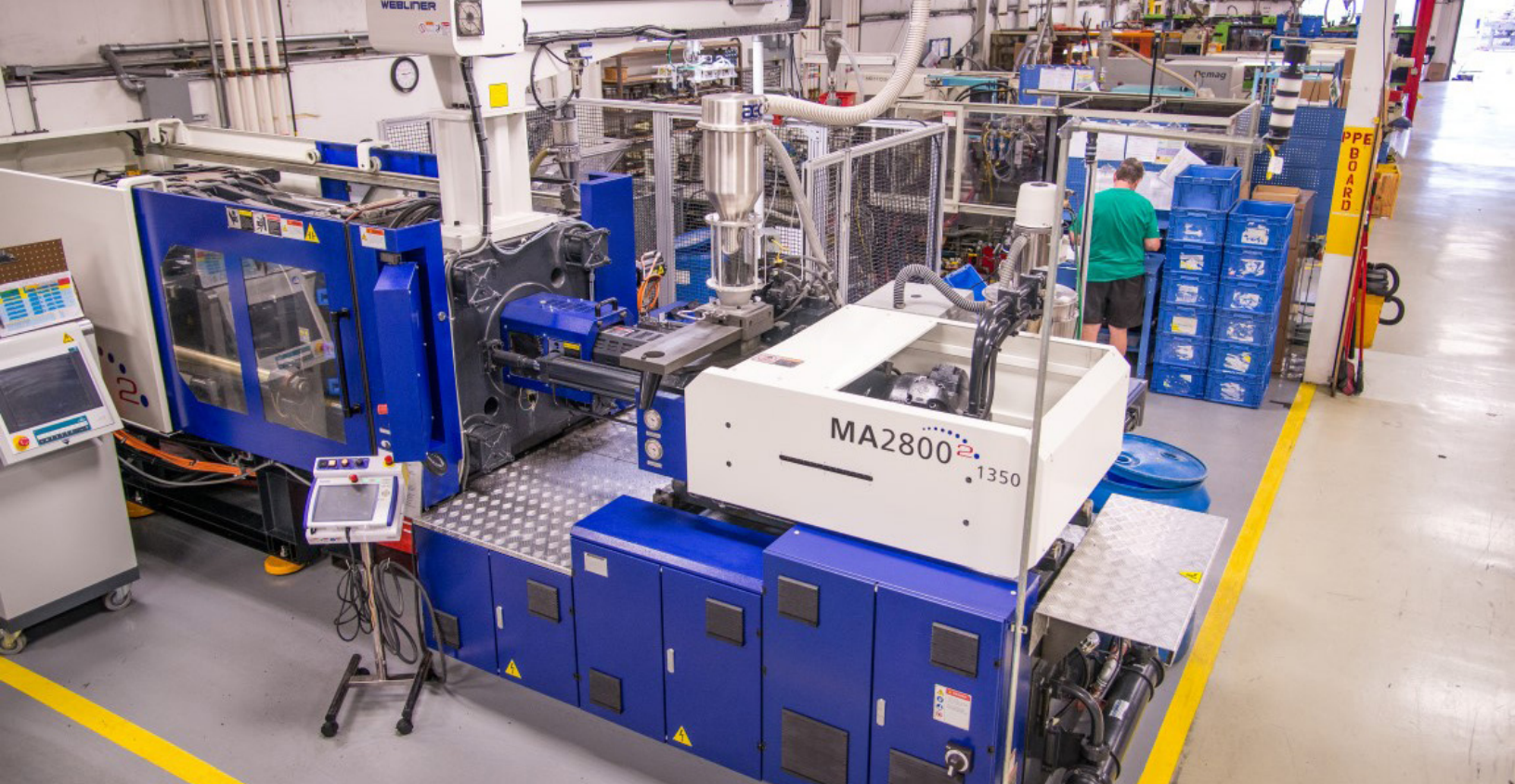




# WHY LEAN PLASTIC INJECTION MOLDING COMPANIES ARE BETTER SUPPLIERS



## WHY LEAN PLASTIC INJECTION MOLDING COMPANIES ARE BETTER SUPPLIERS

Working smarter has been a goal of manufacturers throughout history. Businesses continue to improve upon the ideas of innovators such as Henry Ford and post-World War II Japanese automakers to find ways to do more in less time and with fewer resources. Today's lean organizations constantly look for ways to provide their customers with greater value by operating more efficiently. Lean companies work to refine processes, reduce waste, improve quality, and build a culture of continuous improvement.

Plastic injection molding companies that adopt a lean philosophy enjoy benefits including higher product quality, lower defective PPM rate, and lower operating costs, and also find that a lean culture means they have a more pleasant and productive work environment.

The benefits of lean aren't limited to the company itself, however. Choosing to work with a plastic injection molding company that embraces lean will also result in a number of benefits for your company — that can all be traced back to the concept of eliminating waste.



## THE 8 WASTES

The lean philosophy defines eight specific sources of waste, and a lean company trains its entire workforce to recognize and eliminate them. The “8 Wastes” are:

### Transport

Moving inventory, products — and even information — takes time and resources. Although transporting materials and sharing data is necessary in plastic injection molding operations, transporting products or data more often than necessary brings no value to the customer. Reducing transportation with strategies like an optimized floor plan, workspace organization, and data integration help eliminate this waste.

### Inventory

Storing excess inventory ties up capital, takes up space, and makes accommodating change orders harder. Of course inventory is necessary at a plastic injection molding plant, but lean companies optimize inventory so just the right amount is on hand, which helps them to stay liquid and agile.

### Motion

Watching a worker on a line, you can see them perform the same motions over and over. What if a company could minimize the motions it takes to complete tasks? Lean companies encourage each employee to ask “Why?” and to make sure every motion is necessary. When an unnecessary motion is eliminated, even one that [takes 2 seconds](#), it can add up to a significant time savings over a year and a big gain to productivity. Lean companies also consider motions of equipment and eliminate what’s not necessary to maximize equipment investments and to save energy.

### Waiting

When workers, materials, or finished products are idle, they aren’t providing any value to the customer. It’s also a sign something is wrong with the progression of workflow. It’s highly unlikely a plastic injection molding company will develop a “perpetual motion machine” in its operation that never stops, but companies that can minimize waiting and keep processes moving are generally more productive.

## Over Production

There is no value in manufacturing products or providing services that the customer doesn't need at a specific time. It's tempting to try to "work ahead" when there is time in the schedule, but this creates excess inventory that must be managed and stored, rather than directly shipped to a customer. Over production may also create excessive waste if a defect is discovered or if specifications change.

## Over Processing

In an attempt to differentiate themselves from the competition, some companies will add steps to various stages of production such as design, assembly, or packaging. But if these added steps aren't something that adds value to the product for the customer, they aren't necessary and lead to wasted resources and time. Lean plastic injection molding companies define exactly what their customers want and deliver it — not more or less.

## Defects

Products that don't meet the customer's quality standard lead to extra time and materials to correct or replace defective parts. Product defects can also mean damaging a customer relationship that will take time and resources to rebuild. Minimizing defects is necessary to create the most efficient, productive environment.

## Undeveloped Talent

Each company's workforce is made up of people with diverse skills and talents. To not take advantage of human capital to its fullest potential is a waste. Lean plastic injection molding companies encourage all employees — from hourly workers to upper management — to use their unique skills to enhance the workplace.



## EXAMPLES OF HOW A LEAN PLASTIC INJECTION MOLDING COMPANY REDUCES WASTE

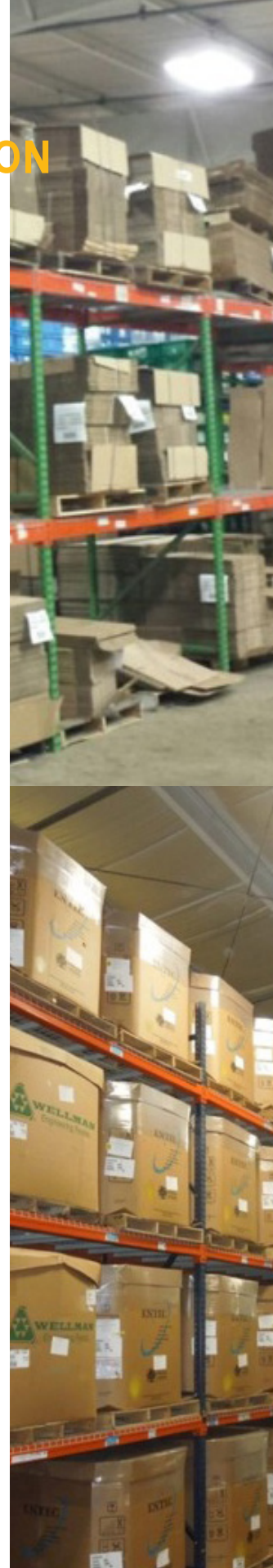
Lean plastic injection molding companies reduce waste in a number of distinct ways. A prime example is improving quality control measures and reducing the number of defective parts. Lean companies will evaluate their entire processes — from material selection to mold design and processing — and establish “poka-yoke” (Japanese for mistake-proofing) measures to ensure their [defective PPM rate](#) is an absolute minimum. Plastic injection molding companies with a lean culture may also have zero tolerance for resin pellets that fall to the shop floor, making them unusable and bound for a recycling facility. Another metric that lean plastic injection molding companies monitor is on time delivery (OTD). This is an indicator that processes are running smoothly, employees are optimizing their performance, and waste is minimized.

Depending on the services the company provides, a plastic injection molding company may also arrange its post-production assembly operation to minimize steps and motions workers have to take to accomplish quality work. They can also optimize packaging and kitting areas by keeping the 8 Wastes in mind, positioning them close to production and shipping areas to minimize transport, scheduling work to eliminate idle time, and not over processing jobs. Employees at a lean plastic injection molding company may also develop systems of organizing their tools to make them easy to find and always within reach.

To support the constant search for and elimination of waste, lean companies empower all employees to think like process engineers. Daily drumbeat meetings can keep employees informed of the company's performance, changes that their peers are implementing, and news and information they can use to do their jobs more efficiently, drawing on the 5S principles of

***“Sort, Straighten, Shine, Standardize, and Sustain.”***

Most importantly, lean plastic injection molding companies realize the task of eliminating waste never ends. Processes can always be faster, more efficient, and more profitable. A lean plastic injection molding company builds a culture of continuous improvement and supports their team to work toward the goal of perfectly optimized processes.



# THE VALUE LEAN CREATES FOR PLASTIC INJECTION MOLDING CUSTOMERS

Choosing a lean plastic injection molding company as your supplier will greatly increase the value you receive from the relationship compared to working with a non-lean organization.

Advantages include:

## **Quality**

A lean plastic injection molding company is constantly making improvements to maintain a low defective PPM rate. In addition, the culture of a lean organization fosters an environment where all employees at all levels are invested in the quality of the products they produce. As a result, you will receive parts that are consistently of high quality.

## **On-Time Delivery**

With efficient production, your order is produced within the specified timeframe and there is less opportunity for delays or problems that lead to downtime. You can count on the fact you will receive your order, within specs, when it is scheduled to arrive.

## **Faster Launches**

Businesses that use lean plastic injection molding companies can count on products ready to go for launch day. Lean companies partner with you to develop your own lean processes, conforming to your timeline and providing products designed to help you optimize workflows so you are ready to go to market as planned.

## **Innovation**

A lean plastic injection molding company is positioned for innovation. As they find improvements in their processes, they can develop new, better products to bring to market. This means your supplier can offer you products on the leading edge of the industry.

## **Overall Customer Satisfaction**

Everything about a lean culture is based on providing value to customers, so when you work with a lean plastic injection molding company, you can be assured your satisfaction is a priority. A lean supplier will communicate with you, help you plan your project to get the best results, and deliver products and services to your specifications.



## FORMING SMART PARTNERSHIPS

As you consider potential suppliers for your next plastic injection molding order, it is wise to ask if companies are lean. The answer to that question will provide you with immediate insight into the company's practices and standards — as well as its commitment to its customers.

As a lean plastic injection molding company, Viking Plastics is proud of its long history of quality products and customer satisfaction. We're happy to provide information on our lean culture and how we work to provide the most value to our customers. Contact us at:

 1 Viking Street, Corry, PA 16407 – Phone: (814) 664-8671

 4601 Commerce Crossing Dr. Suite 300, Louisville, KY 40229 – Phone: (502) 969-2305

## ABOUT VIKING PLASTICS

Viking Plastics is a leading injection molding and value-added assembly service provider, delivering innovative products including sealing solutions, custom injection molding, assembly, and post-molding secondary services. Our multiple plants house more than 60 global molding machines, with capabilities spanning the range from 50- to 720-ton injection molding, as well as 2 shot, insert molding, and automated assembly cells.

From our headquarters in Corry, Pennsylvania, just five hours from Detroit and our plant in Louisville, Kentucky, we serve customers throughout North America in industries including automotive, HVAC, specialty packaging, lawn & garden, appliance, energy & battery cases, and filtration. Leveraging our partnerships with Poly-Cast in Suzhou China, and Injequaly in Sao Paulo Brazil, we serve customers throughout the world.

Our [lean manufacturing](#) culture focuses our entire team on eliminating waste and continuously improving and refining processes. We take pride in delivering high-quality products to our customers while maximizing productivity and efficiency and controlling costs.