

New Thinking, and Making the Case for Reshoring

By Chip Owen, CEO & President, D&M Plastics

American politics and the recent election cycle focused a bright light onto companies that produce their products overseas. With that scrutiny came some perspective as many companies have begun to learn the hard way that the low unit price of doing business overseas isn't worth the time and aggravation it may cost them in the long run.

Business practices that worked in the 70s and 80s are now obsolete as the landscape has changed. Many companies are realizing that those saved pennies per piece result in higher unit costs when the overall price of production is examined. For that reason, companies are exploring the practice of reshoring – bringing production and manufacturing back to the United States. There are many advantages to reshoring, and a closer examination of the end-to-end production process can make it not only a smart decision, but a profitable one as well.

A brief history

Businesses have always looked for ways to reduce costs to remain competitive, but it was not until 1979 that the outsourcing trend really began. That was the year when manufacturing jobs in the U.S. peaked at 19.6 million, or 21.6 percent of all jobs. It was also the year that the U.S. began formal diplomatic relations with China.

In the 1980s, the globalization trend began as the U.S. and Britain, in particular, began to eliminate trade barriers. Global trade liberalization was accelerated by events such as NAFTA, the European Union and the formation of the World Trade Organization (WTO). In 1999, the U.S. and China signed an agreement reducing Chinese trade tariffs in exchange for U.S. support for China's admission to the WTO. China became a member of the WTO at the end of 2001, at which point offshoring -- particularly to China -- began in earnest.

Many U.S. companies were specifically looking at lower pricing for offshore component parts and assembly than could be obtained domestically. Lower prices were primarily driven by lower labor costs. U.S. companies believed they would not sacrifice quality given their offshore suppliers were typically ISO 9001 compliant or better.

What has changed?

Since the early 2000s, however, labor costs have increased dramatically elsewhere in the world, particularly in China, and the cost gap between offshore and domestic labor has begun to close. Boston Consulting Group (BCG) developed an index which allows us to compare direct manufacturing costs in other parts of the world to the U.S. The index takes into account manufacturing labor costs, productivity, energy costs and currency exchange rates. Based on that index, total direct manufacturing costs in the U.S. in 2004 were 13.5 percent higher than in China. Most of that difference was the result of labor costs, which were four times higher in the U.S. than in China in 2004. By 2014, total direct manufacturing costs in the U.S. were only 4.5 percent higher than in China.

The majority of the reduction in the total manufacturing cost differential was a result of a significant narrowing of the labor cost disparity. U.S. labor costs in 2014 were still 78.4 percent higher than China's, but that was down substantially from just 10 years earlier. BCG attributes that to the fact that wages in China have risen four times faster than productivity. The other major difference is that industrial electricity costs are up 65% in China since 2004. The strength of the dollar has mitigated some of these differentials recently, but the trend is still towards a reduction in the direct manufacturing cost gap between the two countries.

Hidden costs and the bottom line

Today, however, companies have started to look at their total end-to-end production costs rather than only direct manufacturing and transportation costs. When examined



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holistically, companies often find that even though part costs may be lower, total offshore production costs are actually higher. When a thorough and unbiased accounting of end-to-end production is done, significant additional hidden costs are uncovered, making the lower unit cost less important.

All things considered, reshoring provides many advantages, which translate into overall savings and improved quality. For an example, when quality issues arise in component parts produced overseas, it can mean 12 weeks of defective product in the pipeline if the parts are transported by ship. By the time the defect is discovered, time and materials have been expended that are often a total loss. Expediting component parts halfway around the world to solve a quality problem means higher transportation costs as well. With reshoring, increased control over end-to-end production reduces lead times and allows faster response to quality issues. Generally, reduced lead times increase inventory turns, decrease average inventory, and improve cash flow.

In addition, when parts are manufactured overseas and there are defects, it can lead to a difficult exchange about who is responsible. The answer may not always be clear. Different time zones, problematic communications, and a language barrier can make resolution very challenging. Even if the supplier is responsible, it may prove difficult for the company to be reimbursed, and without an easy way to navigate the legal system in a foreign country, there may be no legal recourse either.

When production is re-shored there are fewer communication issues, since typically both parties are speaking the same language. Nothing gets lost in translation, there are far fewer misunderstandings, and contracts are more easily enforced.

Quality concerns and specifications

Low-cost inputs will not miraculously produce and deliver a high-value output. Garbage in typically means garbage out, and having more expensive components is better than having no end products to ship. A one-cent offshore component part becomes very expensive when delivery and/or quality issues prevent a company from shipping a \$1.00 end product.

Another consideration is the fact that material certifications available in the U.S. are not necessarily available in offshore locations. Offshore suppliers may say that the materials meet specifications, but verifying the accuracy of those assurances much more difficult and costly than anticipated.

Finally, it is far easier and less expensive to audit domestic suppliers since typically onsite audits are the only way for a company to know their supplier is complying fully with all specifications and governmental regulations.

When companies source onshore production, there is no need for personnel to travel halfway around the world, thus minimizing travel time and costs and reducing business risks as well.

American manufacturers are beginning to think differently about the high cost of doing business when sourcing component parts. When production is viewed as an end-to-end process, the savings gained by manufacturing offshore generally isn't worth what might end up costing much more in the long run. Ultimately cheaper part costs may impact businesses' bottom lines in a negative way. New thinking will change how -- and where -- manufacturing is done, now and in the future, as reshoring gets a closer look. **PDD**



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