Made In The USA:

How Top OEMs Are Winning By Leaving China

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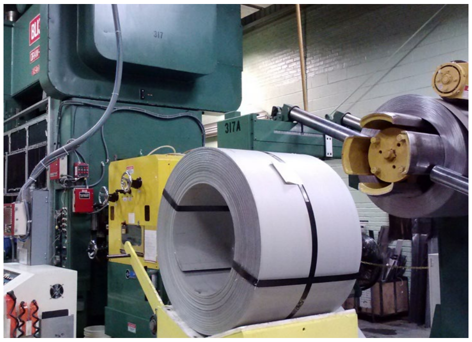
The State of the Metal Stamping Industry



2015 marked a year of growing demand for manufactured goods; this spike in demand will continue to increase throughout much of 2016, positively impacting the manufacturing sector. In an effort to reduce their vendor bases, cut costs, and achieve leaner supply chains, customers are looking for domestic manufacturers to expand their in-house machining capabilities. A major component of this change is re-shoring – bringing jobs from overseas back to the United States.

The Boston Consulting Group (BCG) recently found that large manufacturers such as Apple, Wal-Mart, Ford, and General Electric have already invested in re-shoring, and more than half of American corporations with over $1 million in sales are either currently planning or seriously considering moving jobs from China back to the United States.

Three major economic conditions have contributed to this change:

- **Narrowing pay gap** – As wages rise in China and other parts of Asia, it is no longer cost-effective to outsource production jobs.

- **Lower energy costs in the United States** – Natural gas prices have fallen by 50% in the U.S. since 2005, while remaining at least three times more expensive in China, France, and Germany. Natural gas also comprises only 2% of American manufacturing costs, compared to 6% in China.

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- **Shorter lead times** – As would be expected, products take longer to arrive at a destination when they are shipped from further away. Moving production back to the U.S. reduces shipping times. Additionally, having multiple teams under one roof fosters collaboration and improves time-to-market.

American-made manufacturing is on the rise and the metal stamping industry is no exception. In this eBook, we will explore the growing value behind products that are "Made in the U.S.A." and why local industry may be the right choice for your next custom stamping project.

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Moving a business to China used to be a no-brainer; it provided a seemingly endless supply of low-cost labor (less than $1 per hour), a low exchange rate, incentives from the government to attract foreign investment, and a rapidly developing domestic market. As Chinese wages rise, shipping and inventory costs increase, and American productivity expands, these advantages are quickly beginning to erode.

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BCG found that Chinese wages have been increasing rapidly, jumping 150% between 1999 and 2006, and then increasing 19% per year until 2010. Worker protests have forced major companies like Honda to increase wages by up to 47%. Though the exact values differ by region, many businesses are seeing the same trend in their Chinese factories.

To compound these losses, China's productivity is lagging behind the United States', growing at only 10% per year. While expected to increase 8.5% annually over the next five years, China's output per worker is increasing at only half the rate of the rise in wages. Contrary to popular belief, China's productivity levels will not be enough to compensate for the closing wage gap over time.

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Meanwhile, output in the United States is almost two and a half times the rate of productivity in 1972, despite a 33% drop in manufacturing employment over the same period. Technology and automation have enabled unprecedented levels of production, which will only continue increasing as customers choose vendors with more in-house capabilities.

While China's productivity is not necessarily declining, much of it will soon be devoted to serving the booming domestic market and rapidly growing middle class. As a result, labor-intensive mass production, from the U.S. and abroad, will likely need to move elsewhere.

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As a result of these factors, BCG projects that American manufacturing will actually be 2% to 3% cheaper than Chinese manufacturing by 2018, making the United States the premiere location for all manufacturing investment targeting North American markets. To stay ahead of the curve, companies are re-evaluating their outsourcing contracts in favor of re-shoring jobs.

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In addition to cost savings, re-shoring jobs also reinstates American control and security in a variety of ways:

- **Managerial jurisdiction** – Though outsourcing binds businesses through a contract, the other company maintains actual managerial control of employees, which could result in inconsistencies for company culture and standards.
- **Security and confidentiality** – Any exchange of confidential data presents the risk of a security breach. Keeping departments in-house can reduce or eliminate this risk.
- **Quality assurance** – Since an outsourcing contract operates with a fixed price, the outsourcing company can only increase its profit by decreasing expenses. In other words, to make more money, the outsourcing company may cut back on resources and subsequently compromise product quality.
- **Financial independence** – Outsourcing creates a co-dependent relationship, tying one company to the financial well-being of another. By working independently, a company does not need to rely on outside resources and can function self-sufficiently.
- **Shortened lead times** – American corporations constantly risk unexpected lead time changes and shipping delays when transporting goods overseas from China.

When American companies re-shore manufacturing jobs, they become better positioned to manage information, costs, and lead times autonomously.

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New Trends in the Metal Stamping Industry

Fracking is a huge factor in enhancing American production, specifically in high-energy industries like metal stamping. The process consists of drilling into the earth and shooting a high-pressure water mixture into the ground to release natural gas. According to Harvard Business School's Michael Porter, an abundance of fracked wells has given the United States a 15 year head start on the rest of the world at harnessing cheap, domestic energy.

Fracking has created an advantage for many American industries by drastically reducing the price of oil and gas required for production. Natural gas from overseas sources can be up to four times more expensive than supplies in the United States, largely because the U.S. maintains over 101,000 fracked wells compared to China's 258. For energy-intensive metal industries, such as deep drawn stamping, the choice is clear: re-shore jobs back to the U.S.

American industrial manufacturing already costs 10% to 20% less than European manufacturing — soon it will be even cheaper than China. The low cost of natural gas, combined with rising Chinese wages and increased American productivity, positions the U.S. to become the manufacturing leader in the coming years.

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Manor Tool & Manufacturing Company is proud to offer a wide range of secondary services that many offshoring companies simply cannot guarantee. In addition to in-house engineering and tooling, Manor provides secondary processes, such as machining, powder coating, painting, drilling, and deburring, at our Schiller Park, IL location.

Manor performs rigorous quality assurance testing throughout the manufacturing process. Unlike offshoring, where cost savings can often compromise quality, Manor's quality assurance testing follows each manufactured part through every step of the process to ensure that customers always receive the highest quality component.

For more information about reliable, trusted, American-made manufacturing, please **contact Manor Tool & Manufacturing Company today**.

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