TRENDS IN METAL FABRICATION FOR 2017 AND BEYOND

The metal fabrication industry may not change as rapidly as others, but never the less, change is definitely still a major consideration for those of us in the manufacturing sector. We simply must be ready to handle whatever the future throws at us. It is with that in mind that we at EVS Metal decided to take a closer look at the metal fabrication trends that are affecting the fabrication market now and will continue to make an impact over the next decade.

Industry Outlook

The global metal fabrication market was valued at $16.35 billion in 2015 and is expected to grow at a rate of 3.0%, reaching $21.38 billion by 2024. The “market” in this case covers all different forms of fabrication, including metal cutting, machining, welding, punching and forming. This is a solid if not stellar growth rate, and is about what we would have expected before starting our research. However, there are those businesses that are experiencing growth that is far outside of the average. Companies that fabricate aluminum, for instance, are seeing greater demand due to rising consumption, as are those that fabricate parts for the (quickly reshoring) automotive industry, commercial construction and the aerospace sector. Essentially, there are still a number of incredible opportunities for growth; it’s simply a matter of staying nimble enough to adapt to what the market wants at any given time.
Reshoring

We mentioned this briefly above, but it's worth further exploration. Over the last decade, but in particular the last five years, many American companies have started to bring their foreign operations back home. Of course, it’s not patriotism driving this change; in reality, it’s being driven by increases in foreign wages in countries such as China and India, combined with market volatility and the rising costs of overseas freight transportation by both air and water. For fabricators willing to adopt new technologies such as automation and IoT -- along with other aspects of Industry 4.0 -- reshoring can mean a major boost to revenue as manufacturing jobs make their way back to the U.S. However, those who refuse to invest in the systems required to stay relevant are likely to quickly go the way of the dinosaur.

Automation

The consistent gain in popularity of automated manufacturing systems is something that simply cannot be ignored by any company that wants to be in business ten years from now. Automatic controls are getting cheaper, faster and more consistent, able to take on more complex and varied tasks than they could even just a few years ago.

Automation has been a key focus at EVS Metal and we’ve integrated it into multiple metal fabrication operations within our four facilities across the U.S. It allows us to ensure high-quality outputs, consistent productivity and process stability that results in satisfied customers who are more likely to return. Automation allows us to meet our goal of maintaining the flexibility to produce items of almost any type, in a wide range of lot sizes, while delivering an exceptional customer experience, at the lowest possible cost.
Integration of Industry 4.0 Technologies

We’ve talked about this multiple times already, but it bears repeating. Industry 4.0 is the trend that just keeps on, well...trending. At this point, it’s now made such strong headway into the metal fabrication and manufacturing industries that some aspects are now simply part of how things are done, in particular as it applies to automation. However, the “trend” aspects now pertain to “soft” automation, rather than “hard” automation.

Hard automation is the automation of physical machines, like welding or material-handling robots, and these have become more common over the last decade. However, soft automation -- the type

that tracks data -- is still less common in many manufacturing environments, even though most researchers and analysts agree we’re reaching a tipping point in its use. Why? Sensors. As they become increasingly inexpensive, sensors -- the basis of IoT, otherwise known as the Internet of Things -- will soon be integrated into everything. Those sensors will allow manufacturers to track just about any aspect of their production, creating incredible opportunities for both micro-customization of products, and to wirelessly monitor productivity via RFID in order to optimize production and workflow without any manual data inputting.

Additive Fabrication & Manufacturing (3D Printing)

While this type of fabrication is less common today, in the future, there’s no doubt that it will absolutely be considered part of the normal offerings available by many manufacturers. While additive fabrication technology can still be cost-prohibitive to deploy on a large scale, it is still an incredibly flexible, useful tool to add to a line up of capabilities as the machines become less expensive to purchase and maintain. This is especially true for companies like EVS Metal that specialize in high-mix, low volume production where customization and personalization are often paramount, but must be balanced with efficiency and waste reduction as much as possible.
Data-Based Decision Making

Enterprise resource planning (ERP) systems are now so rich and complex that they are able to easily gather data from throughout organizations and house everything in one secure place, whether cloud-based or on-premise. There it can be accessed by a variety of different applications and departments, enabling the system to support multiple individuals and workflows.

At EVS, we have found our ERP to be an invaluable tool in streamlining processes and improving information flow throughout the company. The ability to share data from all different areas of EVS in real time has given us the opportunity to optimize productivity and create efficiencies across the board, in all four of our U.S. locations, from shop floors to our warehouses and on to our corporate office in New Jersey. Using data-driven intelligence to drive business insights and translate them into actionable items via an ERP is just one way EVS stays ahead in a constantly-changing industry.

Raw Materials Pricing

Overall, the prices for most raw materials have been falling, with iron ore has recently falling to a six-month low. On the other hand, scrap steel prices have mainly remained stable in that demand has largely kept up with U.S. steel mill production. In fact, it’s not only keeping up, but there is a chance that rising U.S. steel scrap production could lead to a disproportionate increase in demand, especially overseas. However, the reduction in the cost of iron ore could ultimately lead to a drop in scrap prices, even with high demand. In that case, steel prices could still see pressure to decrease in tandem with ore as 2017 continues.

Steel prices for the remainder of 2017 will also likely depend heavily on President Trump’s well-publicized but as-yet-unannounced plans to revitalize infrastructure and invest in non-renewable energy sources across the U.S. Even if specific plans are only detailed and not officially rolled out, they could very well impact steel prices as the expectation would be that demand would soon rise and with it, cost.
**Strategic Acquisitions**

Every business eventually hits a plateau where growth slows. There are many ways to outsmart stagnation, and one common way is via strategic acquisition. This can mean different things to different people, but gaining a complementary set of capabilities via acquisition is one way to accelerate growth.

At EVS, we've always had an eye toward the future. This is why, over the last two decades, we've acquired several companies, which has allowed us to expand our facilities, capacity and manufacturing offerings across the country. Our most recent acquisition was of an outstanding New Jersey precision machining shop, Jarco Industries, which immediately increased our machining capacity by 400% and expanded our ability to complete intricate mechanical assemblies.

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**EVS Metal: The Future of Fabrication**

The metal fabrication market may be less prone to wild fluctuations than other industries, but that doesn’t mean manufacturers don’t need to be prepared for change. EVS Metal’s consistent dedication to and investment in company growth over the last 23 years are the primary reasons we have stayed at the forefront of metal fabrication, in spite of the many changes the sector has undergone during that time.

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**About EVS Metal:**

As a leader in American precision metal fabrication, we utilize the latest technology to cut, bend, weld and finish stand-alone items as well as parts for integration or assembly into more complex products. Our four ISO 9001:2008-certified locations comprise over 250,000 square feet of vertically-integrated manufacturing space and feature the most modern equipment available, from welding robots and laser cutting solutions to automated powder coating lines. We serve a diverse customer base across North America, providing a range of services from ITAR-compliant, quick-turn prototypes to high-volume production runs. Request a personalized metal fabrication quote at http://www.evsmetal.com, or call (973) 839-4432 to speak with a specialist today.