



Additive Fabrication is a \$1.1 Billion Market

The market for additive fabrication (AF), consisting of all products and services globally, grew 16% to an estimated \$1.141 billion in 2007. This is up from an estimated \$983.7 million generated in 2006. Reaching the \$1 billion mark is a first for this industry.

Additive fabrication significantly reduces labor costs, making it much easier for organizations in the West to compete with companies in countries where labor rates are low. This will become especially important as companies apply AF technology to the manufacture of products.

Increasingly, companies are using AF systems for custom and replacement part manufacturing, special edition products, short-run production, and even series production. They are also being used to produce manufacturing aids, such as jigs, fixtures, and assembly guides, which are used to make products.

The industry is expected to grow substantially over the next several years. By 2012, annual sales of AF products and services will reach an estimated \$2.3 billion worldwide, with unit sales reaching 12,000 systems for the year, according to Wohlers Associates. By 2015, the company believes the industry will grow to an estimated \$3.5 billion for the year, with unit sales reaching 20,000 systems.

Note: The previous information was taken from Wohlers Report 2008, a 240-page global study that focuses on the advances in additive fabrication worldwide. A detailed overview of the report, as well as additional information on the market and industry, are available at <http://wohlersassociates.com>.

Wohlers Talk: Lack of Engineering Graduates?

A lot has been published over the past couple years on the suspected lack of engineering graduates in the U.S. Some articles suggest that countries, such as China, are producing many more engineers than the U.S. In determining whether it's true, one must know how these countries define an "engineer." Some information hints at the possibility that an individual in China trained to run a CNC milling machine is considered an engineer. Countries, such as the U.S., would count only those with a four-year engineering degree an engineer.

Leland Teschler, editor of Machine Design, said, "There is no shortage of scientists or engineers. In fact, there are 'substantially more' scientists and engineers graduating in the U.S. than there are jobs." His comments were published in the December 13, 2007 edition of the magazine. He went on to say that kids graduating from U.S. high schools do not lag far behind in science and math, compared to economically competitive countries. The Alfred P. Sloan Foundation, Rand Corp., Harvard University, the National Bureau of Economic Research, and Stanford University have all come to the same conclusion, according to Teschler.

Clearly, there is interest in increasing the number of engineers in the U.S. I'm in full support of strong engineering education and producing many good engineers across the country. Yet, the best way to increase the supply of engineers is to boost the demand for them. However, as more and more product development and engineering is outsourced to India and other countries, it becomes increasingly difficult to grow demand within U.S. borders. And, I don't see this trend disappearing any time soon.

Note: Wohlers Talk is a blog that offers views, perspective, and commentary related to rapid product development and a wide range of other topics. Nearly 150 commentaries have been published since February 2003. To view them, visit <http://wohlersassociates.com/blog>.