Ideas At Work
PMPA
Precision Machined Products Association

Looking Back – Lessons We Learned From 2007

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The beginning of a new year is a time to anticipate. It's also the time that most writers trot out their expectations for the year ahead. But it is the *end* of the year that gives us a genuine opportunity to reflect on the lessons learned – and those avoided – in the year gone by.

Record Oil Prices Are Not A Showstopper. "Soaring oil prices have been causing anxiety among businesses and people alike. For a nation that depends entirely on oil imports, high prices have a far-reaching impact upon the country's economy and the livelihood of ordinary citizens, as they will lead to a drastic rise in commodity prices."

In This Issue...

Sound familiar? Actually this is from a report in the *Korean Times*.

While record prices for crude oil have made headlines and are a mainstay of the news programs, these high prices have not had a serious negative impact on the precision machining industry. Our industry has been under such competitive pressures that we have already addressed our shops' energy issues with better lighting, more efficient compressed air systems and reduction of waste in all areas.

With energy costs seldom in the double-digit range as a percentage of sales, our shops continue to make adjustments to conserve and to reduce usage. But our managers aren't losing sleep over energy prices. And with no local advantage to be had around the globe for energy prices, our savviest managers are addressing those issues where they can make a difference—non-value-added time (for example, set-up reduction), operational efficiencies and the relentless elimination of waste.

Housing Collapse Did Affect The Machined Parts Markets. The housing bubble burst in 2007 because of problems in the sub-prime mortgage industry. This caused stress in financial markets and a slowdown in consumer spending.

These developments had more impact on our industry than the rise in oil prices. At the heart of the United States' economy is the consumer. The drop in consumer confidence brought about by the sub-prime mortgage crisis worked its way into the industries we serve.

Material Prices Will Not Rise Forever. While the prices of raw materials used by the precision machining industry have risen by significant multiples of their value in 2003, most of the items we track in our Materials Impacts Reports actually started to decline in late 2007. (Go to www.pmpa.org and click on the link for "Breaking News: Material Impacts Report.")

Of the seven commodities that we track—aluminum, brass, copper, nickel, stainless steel, steel and Chinese coke—only the steel bundles category was above its July price when we prepared our October 2007 report. Nickel prices, especially, have appreciated substantially as global supply and demand were in close balance. The International Nickel Study Group recently predicted surplus metals available at the end of 2007 and supplies appear to be growing on the markets we watch.

There are several lessons that 2007 teaches us about raw materials pricing:

1) The general trend doesn't break you; it's the variation from the trend. While the average price might appear to be moving up at a relatively constant rate, if the price spikes up or down dramatically on the day that you purchase, the average trend is meaningless. This is the reason that no one is putting in speculative inventories in the metal service center industry.

   Knowing an average trend without understanding the standard deviation is useless knowledge. In June, the average London Metal Exchange (LME) closing price for nickel was $41,690.95; the high in June was $50,445; the low, $35,845. Just how good is the average for your business purposes?

2) What goes up does come down, but only over the long term. Nickel has risen steadily since January 2006, but the price volatility throughout 2007 has been dramatic: $34,583 per metric ton in January, rising to

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over $54,100 in May, dropping to $24,750 in August and back up to $31,600 as I write this.

3) None of your competitors can get materials any less expensively than you can, so work on knowing where to source quickly. We have assisted some of our member companies in trying to get global lowest prices by looking at foreign materials. We did this in order to maintain jobs against the threatened "China price" only to find that the imported material was significantly more expensive than the domestic material *before* adding ocean freight.

   Materials are not substantially cheaper anywhere else. The lesson we learned was to look at those costs we could control and effectively control them.

China Is Not The Perfect Competitor. Headlines in the news on products ranging from cosmetics, pharmaceuticals, tires and toys graphically testify that China is not a perfect competitor. Lost in all of the pressure to get to the lowest possible price is the understanding of the risk that such a low price entails. Deaths of pets, loved ones and injuries from defective and out-of-specification goods are possible consequences of blindly purchasing at the lowest price.

In contrast, our industry did not make headlines this year for deaths due to shoddy workmanship, adulterated materials or failure to follow standard procedures. Our experience with modern quality systems, process control planning and statistical validation of our processes makes our industry the lowest risk, high value provider of critical engineered high-precision products. The low dollar also makes us extremely competitive to export our quality to Europe.

Government Impotence. The elected officials and unelected bureaucrats in Washington, D.C. continue to demonstrate their impotence to substantively engage the Chinese on their predatory currency practices. Anyone expecting help from Washington should expect to need plenty of patience and see no significant results anytime soon.

While lobbying and keeping elected officials informed as to the consequences of the unfair currency peg is important work, the realists should understand that success in Washington is usually defined as forging effective compromises. The lobbying clout of large multinational assemblers will certainly outweigh the impact of the smaller manufacturing enterprises.

Savvy shops will be working on eliminating waste from their operations, looking at opportunities to export while the dollar is low compared to the Euro, and invest as much as possible in best practices to ensure that they are world-class in what they choose to do.

When It's All Said And Done. My father used to tell me, "Son, when you're looking for some helping hands, a great place to start is at the ends of your own two arms." That timeless piece of Dad wisdom is just as applicable today as it was when I was a surly teen.

We can address the way we employ energy in our shops to help us machine the safety-critical parts that keep our automobiles, airplanes and medical devices functioning reliably. We can be good stewards of the materials needed. We can be responsible managers that don't over-promise fixed prices to our demanding customers in today's highly variable materials cost environment. We can compete on the world stage with anyone as long as "apples to apples" means "not poisonous and not defective" and everyone is held to the same high standards for product and process integrity.

We will compete, regardless of when, if ever, the folks in Washington figure out that what they do (or fail to do) in the area of currency and trade has consequences for the citizens of the United States.