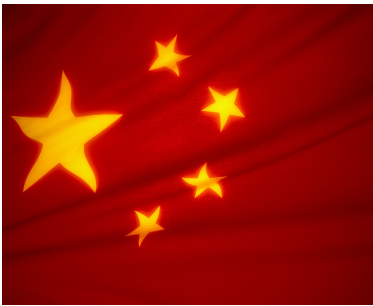

SPEED TO MARKET

***A Newsletter for
Job Shops–Niche Manufacturers–Focused Distribution Systems
Published by Delta Dynamics Incorporated
October 2006***

China's Impact on the U.S. Auto Industry



Laurie Moncrieff is a third-generation owner and President of Schmalz Tool and Die, Inc. in Burton, Michigan (near Flint). She recently testified before the *U.S.–China Economic & Security Review Commission on China's Impact on the U.S. Auto and Auto Parts Industries*. A main purpose of the *USCC* is to review the national security implications of trade and economic ties between the United States and the People's Republic of China.

Her testimony hits on a number of themes and issues in manufacturing, and the tool and die industry in particular: China's impact on the auto industry, the need for training and attracting younger workers to manufacturing; the security implications of a weakened tool and die industry; and the need for Government action to enable manufacturing to survive and prosper.

This is a cogent, well-written assessment of the industry, and the implications of current developments and policies. We felt it important enough to devote this issue of the *Speed to Market Newsletter* to provide broader distribution for this information among manufacturing professionals.

And For Our Canadian Friends, Don't Forget

Vincent Bozzone will present ***Lean for Tool Shops*** in **Windsor (October 17th) and Toronto, (October 18th)** sponsored by Export Development Canada (EDC) in partnership with PriceWaterhouseCoopers. EDC is Canada's official Export Credit Agency helping Canadian companies grow their exports by providing various financing and credit insurance programs. EDC and PricewaterhouseCoopers invite industry experts to present topics of interest to the Automotive Tool, Die, and Mold sector at this half-day seminar for Canadian companies. For more information on the agenda and to register, check here www.edc.ca/events



Testimony

of

**Laurie Schmald Moncrieff
President
Schmald Tool & Die, Inc.**

On

**China's Impact on the U.S. Auto and Auto
Parts Industries**

Before the

**U.S. – China Economic & Security Review
Commission
Dearborn, Michigan**

July 17, 2006

**Testimony
of
Laurie Schmald Moncrieff
President
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on
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U.S. China Economic & Security Review Commission
July 17, 2006**

Good afternoon. I am Laurie Moncrieff, third-generation owner of Schmald Tool & Die, Inc., located in Burton, Michigan. My grandfather established Schmald Tool & Die more than sixty years ago. Our initial operations were focused on General Motors (GM) tooling needs in Flint. Today, our employment is currently at 30, and our primary focus is the production of dies, molds and other precision tools utilized to produce parts, as well as machinery. We service the tooling and machining needs for such vital industries sectors as automotive, medical, electronics, and home products.

I serve on the boards of the Genesee Regional Chamber of Commerce, the Michigan Manufacturers Technology Center, the Michigan Chamber, the Mott Foundation, and the Mott Community College M-TEC Center, and am active in the National Tooling and Machining Association (NTMA).

As a supplier to the U.S. auto and auto transplant industry, I appreciate the opportunity to discuss China's impact on the U.S. automakers and the devastating effect it has had on the tool and die industry across the country and especially in Michigan.

Overview of Tool & Die Industry

In the face of intense global competition and rising costs, I am very concerned about the state of manufacturing in this country and particularly for the tool and die industry. Every product that is manufactured is formed by a tool, die, or mold made by our industry. Manufacturing companies like mine contribute more to the economy than just employment and spending. The self-sufficiency of the U.S. manufacturing sector rests squarely on the shoulders of a strong domestic tooling industry.

Our \$40 billion industry employs 200,000 workers in 11,000 companies across the nation (Bureau of Labor Statistics data - 2005). Tool and die makers are some of the best-paid workers in the country, making approximately \$47,000 per year. The majority of our operations are small, family-owned businesses with an average of 27 workers. In fact, ninety percent of all tool and die shops employ less than 50 people.

According to the International Trade Commission (ITC) report on the competitive conditions of tools, dies, and industrial molds, the largest single user for tooling products is the motor vehicle industry, which accounts for more than one-half of all tooling consumed in the United States

We are facing challenges as never before. Nearly three million manufacturing jobs have been lost since 2000. Nationwide, the National Tooling & Machining Association estimates that 28 percent of the country's toolmakers have shut their doors since 1998.

The estimate by Plane Moran is that by the end of the decade, China's expansion in tool and die could cause the loss of 900,000 industrial jobs in the U.S.

Michigan Tool & Die Industry

Because of its close ties to the U.S. auto industry, Michigan is still the largest tool and die state in the country with approximately 900 operations. Sixty out of Michigan's 83 counties have some tooling presence, with the majority of shops are located within the Grand Rapids and Detroit metropolitan areas.

As of January 2005, there were only 39,000 tool-and-die workers in Michigan compared to 2000, when there were more than 57,000 workers. (Michigan Labor Market Information Office). At this rate, foreign competition and technological change could eventually kill half of all Michigan tool-and-die jobs just as the state has lost half of its manufacturing operations since 1998.

Why this huge loss of tool and die jobs? There is a direct correlation to the loss of auto-related jobs in Michigan and the loss of tool and die employment. Critical industries supplying the auto industry -- tool and die shops, forging shops, foundries, and machine shops -- are all facing tremendous foreign competition. The original equipment manufacturers (OEMs) are purchasing parts, tools, dies, and molds at cost savings of at least 35 percent (or more) compared to domestic suppliers. Customers are paying tool and die companies somewhere in the range of \$55.00-\$65.00/hour for their services. Compare that to an auto repair shop or a computer tech charging \$100.00+/hour. Tool and die companies pay much higher wages and are very capital intensive. The squeeze is not just coming from the automotive manufacturers themselves, but is also being mimicked throughout the tiers creating a no-win situation for the entire supply chain.

Many parts suppliers expect the tool and die companies to supply a "Class A Tool" (a tool that is essentially built to enable them to stamp millions of parts and requires little maintenance), but demand to pay as much as 35% less, or the same price they would be charged for a tool from China. The problem is that with U.S. wages, administrative costs, the high investment in equipment and the exorbitant cost of doing business in the U.S., there is no margin for the U.S. supplier of the tool.

We have seen the tools that some of our customers are bringing in from overseas and we are certain that if we were allowed to build to the same standards, we could be competitive. However we are not given the opportunity. We have asked if we could change our standards to match that of our overseas competitors and were told "no way". The Chinese build tools that require more maintenance (as labor is not an issue in China), and in many instances do not utilize the robust steels that are used in U.S. tooling, thus they are selling a cheaper product, or a tool that could be built for significantly less.

Factor in the subsidization of the Chinese government paying for two-thirds of equipment used in their shops, no environmental standards, and low wages, it is clearly not a level playing field. Also in many instances, payment terms are different. Chinese companies require as much as 90%, if not 100% of the tool to be paid for before prior to shipment from China. In contrast, the U.S. tool shops are forced to wait months and in some instances years, if ever, to get paid on their tools. Bigger businesses are essentially forcing small businesses to carry their debt.

As component industries and design work follow assembly lines to China, key elements of the U.S. industrial base are beginning to erode. American plastic-molding and machine-tool industries have shrunk dramatically. When our industry companies go to make their sales calls, they find their traditional customers have gone out of business, moved to another country—most likely China—or are unwilling to make the new investment in sophisticated and productive equipment.

One small die shop in Portage, Michigan lost 30% of its business due to the recent outsourcing of the Big Three automakers to China. The owner estimates that labor costs in China are one-tenth as much as those in the United States.

This is a huge National Security risk as the tool and die industry is the same industry that provides the means to produce defense parts. The Department of Defense has been aware that there are production issues regarding obsolete components and subsystems. Only recently is there a growing realization that there is a problem with heavy manufacturing. The Defense Department is a relatively small buyer in the scheme of things and does not buy tools and dies every day, therefore it is only until they need to buy replacement parts do they realize they can no longer purchase critical components and tooling in the United States. The majority of metal castings needed in the U.S. come from China and other third world countries.

With the unrest we are seeing in the Middle East and problems with North Korea this does not lend for a good nights sleep in my opinion. As was pointed out in The commissions 2005 summary “The U.S. Treasury Department has identified a Chinese bank alleged to be involved in money laundering related to activities that could be financing North Korea’s nuclear weapons program”. In other words we are helping fund North Korea’s nuclear weapons program by growing China’s economy, and if we needed replacement parts for our tanks I’m sure China would be glad to oblige.

China and Impact on U.S. Auto Industry

Today, the largest investments made by the automotive industry have been by General Motors (GM). GM reports that it has approximately 13,000 employees in China and operates seven joint ventures and two wholly owned foreign enterprises. It has participated in investment of over \$2 billion in China. Last year, GM announced that it “expects to increase its original equipment parts purchases from China... from \$200 million in 2003 to \$4 billion in 2009.” By 2009, GM expects to spend around \$10 billion on sourcing for its China production.

While China’s economy continues to prosper with low cost exports and major foreign investment in its automotive sector, the U.S. assembly and auto parts industries have been hit hard. Earlier this year, GM and Ford announced that they would be eliminating 60,000 jobs and at least 28 plant shutdowns across the country. Flint, Michigan, once the epicenter of General Motors' manufacturing operations, is a mere shadow of the boomtown it used to be thirty years ago. In the early 1990s, over 50,000 Flint residents were employed in the manufacturing sector. Current government statistics peg the number of manufacturing jobs at 22,000 – a decrease of 50 percent in fifteen years.

China is now a major supplier of automotive parts in the United States. The majority of the nameplate automotive manufacturers and parts suppliers have set up operations in China, and parts from those operations are increasingly being exported to the U.S. for

assembly plants or for suppliers that integrate standard parts and components into customized modules for final assembly.

It is obvious that China's economic strategy over the past decade has been to keep the value of its currency low, boosting its exports and holding down imports. It is indisputable that there is no free market for the yuan. Despite rapid economic growth, rising productivity, soaring exports, and huge foreign investment inflows – all factors that would normally cause a currency to appreciate – China has kept its currency pegged at approximately 8.25 yuan to the dollar since 1994. This is a critical factor in the huge U.S. trade deficit with China, \$220.077 billion in 2005, and in the relocation of so many large domestic manufacturing enterprises overseas.

Companies relocating to China can benefit from the currency manipulation that is, in reality, a tremendous subsidy. When this subsidy is added to the very substantial differential in labor costs between our two nations, Chinese products become irresistible, and it makes investment in Chinese manufacturing extremely attractive. The very policies and practices that benefit large manufacturers are destroying small companies. It as if our government, and the multinational companies, view small companies as a rather expendable commodity.

It is interesting to note, by the way, that in India's "National Strategy for Manufacturing" published earlier this year, the Indian government speaks to the point that manufacturing is essential to growing their economy. The report states that by increasing manufacturing in India, it will also allow them to grow their service sector. In addition, the report highlights the fact that "the small and medium industries form the backbone of the Manufacturing Sector not only in their country but even developed countries, ensuring the competitiveness of the small scale sector is important as it would help in overall growth of the manufacturing sector and also the National Economy." Somehow our government has forgotten this important lesson that we learned during the boom times of our industrial revolution.

Although in the tool and die industry we have very few patented products, we have experienced Asian companies buying automotive instrument cluster molds from us, that were at one time a large portion of our business. In every instance these clients would purchase one mold. They would reverse engineer the mold and never buy another. We have lost all of that business today to overseas. Although this is not an example of truly stealing intellectual property from a legal stand point, they are no doubt draining our knowledge to develop their own market. The Commerce Department needs to stop trying to convince us that we will eventually export to these countries... they do not want to buy from us they want to make them in their country.

We also had a customer that decided to purchase tooling for a new product from China, and the Chinese tool source built a set of tools for their customer and set for them. When the new product was rolled out on the retail shelf there were two identical products side by side. One produced by the U.S. company that held the patent, and one by the Chinese tool source. I'll bet you can't guess which one was the cheapest! Both the USA Today study as well as the American Society for Industrial Security estimates that the cost of intellectual property and trade secret theft was in excess of \$59 billion in 2001, and will exceed \$250 billion by the end of the decade.

The domestic tool and die sector, as a subset of the auto industry, has felt the pain of China's manufacturing boom, low labor costs, and currency manipulation. In 2002,

China machine tool sales passed the United States in the process of becoming the largest consumer of machine tools in the world. China's machine tool consumption continues to be 60 percent above that of the United States. At my company, our sales to Delphi and GM have decreased from 95% of my business to 1%, in the last several years.

To combat the loss of work from the Big Three, many tool and die shops such as mine, have gotten a short-term boost by repairing work that was outsourced overseas. In many instances though, the cost to fix the problems went well beyond the original price the customer thought it would save. Many of us are traveling to Southern states to develop new clients to fill the void in automotive work, but this is extremely costly and time consuming. Companies that are still supplying the current U.S. Automotive Industry are being squeezed to the extent that there is virtually no margin. The new big business model in the U.S. is clearly pay Chinese wages and charge U.S. prices. That philosophy is destroying the supply chain. The multinationals are out to please Wall Street, while the silent majority is struggling to survive. This is very short term thinking.

Impact of Transplant Motor Vehicle Manufacturers

Since the early 1990's, we have seen a huge shift in the structure of the U.S. automotive industry. Foreign automakers, or "transplants," began to locate their production and assembly plants here in the United States. With the downsizing and closure of domestic assembly plants primarily in Michigan and Ohio, foreign plants are continuing to open in other locations, such as Kentucky, Tennessee, the Carolinas, and Alabama. Thankfully, our company has developed some contracts with the transplants and in fact, are now doing work for Toyota, Honda, BMW, Hyundai and Mercedes. However, this has not been the case for many of my competitors. They point to the fact that many of the Japanese transplants receive tooling from Japanese based companies, so U.S. companies don't receive the parts business or machining business. In fact, the ITC report on the competitive conditions of tool, dies, and molds noted that transplant motor vehicle manufacturers tend to import tools, dies and molds from their home country, displacing work from North American companies.

Survival: Importance of Training and Investment

A study by the National Association of Manufacturers (NAM) noted that 36 percent of companies have jobs that go unfilled due to the lack of qualified applicants. The problem will only get worse as a seasoned workforce of baby boomers retire with a relatively few workers in the pipeline to replace them. If the current trends continue, experts estimate that the U.S. will face a shortage of roughly 13 million qualified employees by 2020.

The massive closure of tool and die shops in the state of Michigan has been a real deterrent to younger workers entering this field. This shortage means that we are not able to train the next generation of the skilled workforce in order to compete and survive. Dave Martin of Accu-Mold Inc. in Portage, Michigan said the average age of his worker is now forty-five. Just five years ago, the average age was thirty. Many of the companies that have closed have not changed the way they do business, nor have they trained their employees in the new skill sets, thus the majority of employees we see apply for employment are not qualified.

We need employees who have years of experience in the industry, but also who possess a strong mechanical and mathematical aptitude, as well as computer skills to utilize simulation software, 3D design software, and are knowledgeable in CNC programming. It is a challenge. Unfortunately it is cost prohibitive for the majority of training institutions to have the types of equipment required in a high technologically advanced job shop and there are great challenges in finding those that possess the necessary skill sets to train. Unless you are working in the field and keeping up with the latest technology you are falling behind. We find a tremendous gap between what is being trained today and the skills that are required to survive.

Tool and Die companies years ago used to teach the trade in house but many companies found that as they trained apprentices large automotive companies would entice those employees to leave for better wages. It became too expensive for small shops to pay to train for their customers. Some estimates are that training costs in our trade have increased by as much as 30% from 1999-2001. Also, the highs and lows of the industry are unlike anything we've seen in the past. It has always been a feast and famine business. However, we are feeling peaks and valleys like never seen before, and coupled with the slim margins, companies are now forced to do more and frequent deep layoffs to survive.

When you add the current turnover experienced, and the costs of continually training and retraining new employees it has been devastating to many companies. Vocational schools and high schools that trained in machining in the past have dropped courses due to budgets cuts which leaves the new generation of employees much less prepared in core skills than their predecessors.

China has made a point of assisting in education and supporting the industry, according to the ITC report from 2002. In 1997 during the 9th Five-Year Plan, the Chinese Ministry of Light Industry and Yuyao Municipal People's Government, jointly established Mold City. Its purpose was to build a large industrial area for mold design, manufacturing, training and other activities related to industrial molds. The project began with a \$115 million investment and an additional \$48.9 million followed in 2000.

The Chinese tool and die industry benefits greatly from China's extensive state-run educational system. Many technical schools in China are well equipped with advanced machinery and computer systems. Universities focus on tool and die research and development and offer advanced training in design. The National Die and Mold CAD engineering research center at Shanghai Jiao Tong University is very well known.

The schools in China are training hundreds in the trade. China understands that it is imperative to grow and retain the industry that enables them to produce products. As a matter of fact due to the recent bid a U.S. firm made to purchase a large Chinese equipment manufacturer, which China is trying to block incidentally, a new policy document was published by the Chinese calling for special government protection and support for machinery and capital-equipment industries "that affect economic security and national defense".

If in fact our country is going to open the flood gates to trade we had better step up our game to compete and be willing to assist U.S. companies in training our employees to be the best in the world, just as China is doing. The United States, including our government has become complacent, and I have heard statements uttered from our government on how Americans are the best in the world, they'll find new jobs, invent

new products. Americans are resilient and will survive this economic transition. I do not agree if policies continue to be stacked against us. When is our government going to acknowledge the loss of jobs and lowering of the wages that are occurring in our country? We are the only industrialized country that does not have a "Manufacturing Policy" or plan of how to compete.

Conclusion

It's time to take steps to revitalize manufacturing. Congress and the Administration must take action against China's WTO violations and currency manipulation if we want manufacturing to survive in this country. It is obvious that with lopsided trade policies, surging prices for raw materials and relentless competition from China and other low-cost markets, small manufacturers have been squeezed.

The Bureau of Labor Statistics found that out of a net loss of 27,000 manufacturers' establishments from 2001-2204, 90% were companies or individual plants employing fewer than 250 employees. This whole issue boils down to the Chinese market that had 27 million cars on the road in 2004 and could reach 130 million in the next 15 years. But it is deplorable to develop markets at the expense of the rest of the supply chain and with virtually no plan how to preserve jobs in the United States. We are not asking for protectionist trade policies, but rather a level playing field and an honest look at the affects that trade policies are having on our country, not just the affect that it has on the stock market. Large manufacturers are benefiting from the very policies and practices that harm small companies. This phenomenon has divided U.S.-based manufacturers in an unprecedented way as is evidenced in the recent debate over China currency manipulation legislation at the National Association of Manufacturers.

Through my involvement in the United Tooling Coalition and a variety of local and national organizations, I am working with other tool and die shops on ways we can survive in this ever-changing global economy. Our industry is taking steps to revitalize manufacturing in this country, but we cannot succeed if the government turns a blind eye to China's unfair trade practices. Multinationals need to realize that someday if China shuts the doors on their products, they may have a tough time finding the skill sets that they need to manufacture in the U.S. Small and medium-sized manufacturers need help to compete. It is time to wake up in the U.S. and take a hard look at the realities of the impact that China is having on our country.

I appreciate the opportunity to testify before this committee and am happy to answer any questions. (You can contact Laurie Moncrieff at lmoncrieff@schmald.com or 810-743-1661 X 305.)

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