



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication
serving SFSA steel casting industry Members

780 McArdle Drive Unit G, Crystal Lake IL 60014

Tel: 815-455-8240 Fax: 815-455-8241

<http://www.sfsa.org>

April — 2009

Casteel Commentary

Economists are making distinctions now between uncertainty and risk. Risk is the possibility of market changes or poor performance. The normal investment strategy is to demand a higher return on investments that carry higher levels of risk. In today's economic crisis, this is not working as expected. Investors are reluctant to make any longer term investments. The explanation given is that beyond risk, investors are faced with uncertainty. Risk can be estimated based on stable business conditions. When conditions become unstable, the uncertainty makes investment decisions difficult. This month's Casteel Commentary tries again to make sense of our economic situation.

Innovation

A new alloy is being developed at Missouri University of Science and Technology with aluminum and manganese. This alloy has good strength, 150 ksi UTS and impact properties, more than 50 ft lbs at -40. The aluminum makes it roughly 15% lighter than steel. It is an austenitic structure so it work-hardens in impact wear environments. We are exploring the possibility of using this material for track to save weight and improve performance. You may have other applications of interest.

Congratulations

Foundry Management & Technology has recognized Metalcasting's Next Generation in their April 2009 issue. Tudor Dixon of Michigan Steel was characterized by her boundless energy for the industry. Mike May of May Foundry and Machine was cited for his insatiable need to learn. And Billy Newman of Spokane Industries was recognized for his leadership and team-building. All three of these honorees are active members of the SFSA future leaders group. Congratulations to all!

Spring Management Meeting

Our Spring Management Meeting was well attended and informative. The presentations are available online at <http://www.sfsa.org/meetings/spring09.php>. One of the presentations was on the R&D tax credit. The presenters will provide examples for the next few months of activities that would qualify for this credit. You are normally able to go back three years and claim the credit. Given current market conditions, it might be a good time.

R&D Tax Credit

...Have you ever gone through a product re-design, special material research or an automation project followed by sample runs and quality checks or product testing to verify your findings but the project never came to fruition?

Have you ever been through a long sales cycle involving a design followed by programming machines, pattern manufacturing, casting process development, sample production and first part quality inspections and then just when you think you have the business, the customer backs out to another vendor or just cancels the program.

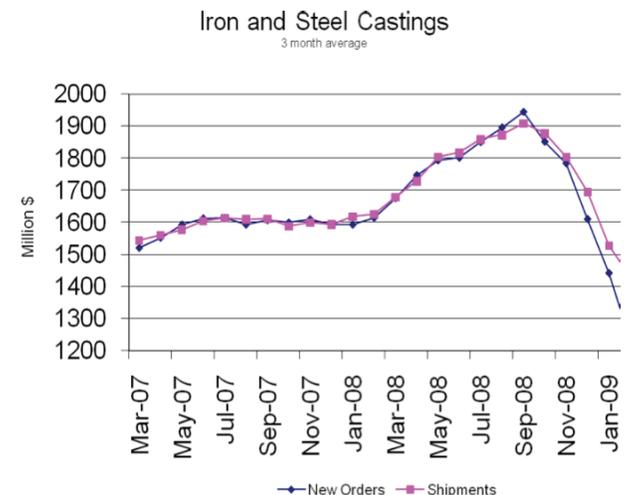
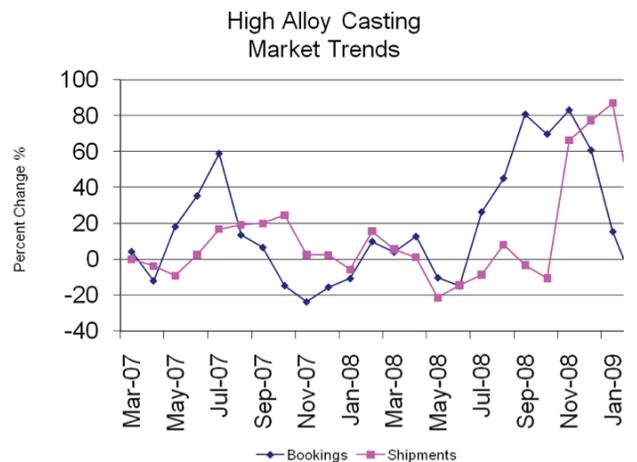
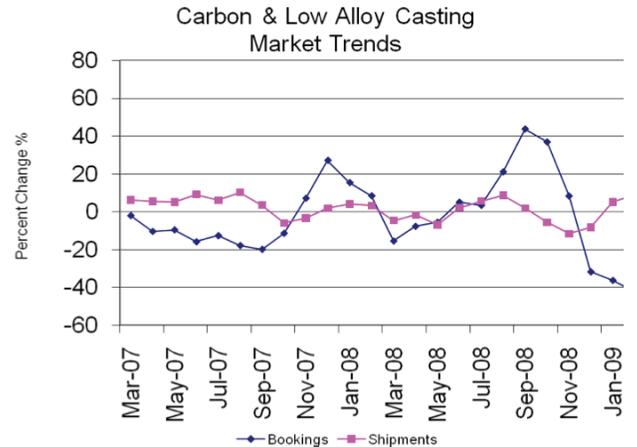
In either of these scenarios, there is a large cash outlay in employee wages for design, programming and quality inspections, tooling, casting material and production time (either in your facility or in an outside contractor's shop).

If you were not aware already, you should know that your federal government and many state governments will help you pay for those projects and activities as described above. Yes, money back on your taxes even if the project failed. They do this through the Research and Development Tax Credits. These credits are designed to incentivize U.S. businesses to continue development of new products and processes and you should be investigating your utilization of the credits if you have these types of activities in your business.

Randy Crabtree, CPA, is a partner with Tri-Merit, LLC. He has over 20 years of public accounting experience and has focused solely on the R&D Tax Credit for the past 3 years. Tri-Merit is a unique conglomerate of engineers and CPAs who have evaluated hundreds of businesses, including steel casters, for qualified R&D Tax Credit activities. He can be contacted at rcrabtree@tri-merit.net for more information.

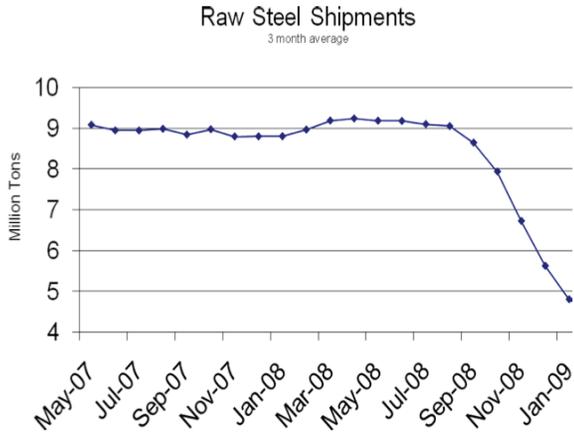
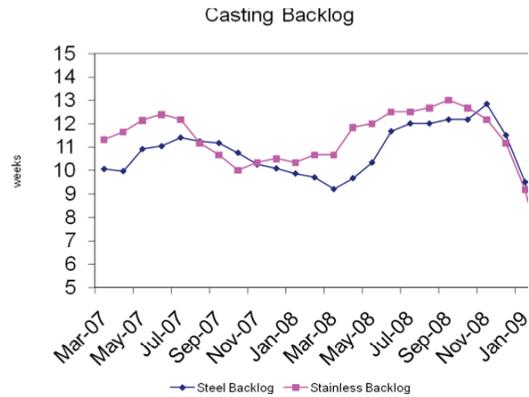
Market News

As true in all manufacturing, steel casting bookings and shipments are off dramatically since the beginning of 2009. Median bookings for carbon and low alloy products are down more than 45% and high alloy casting bookings are off more than 50%. The Department of Commerce Census numbers for iron and steel castings



shows orders of from the high point in September 2008 by over 35% in February.

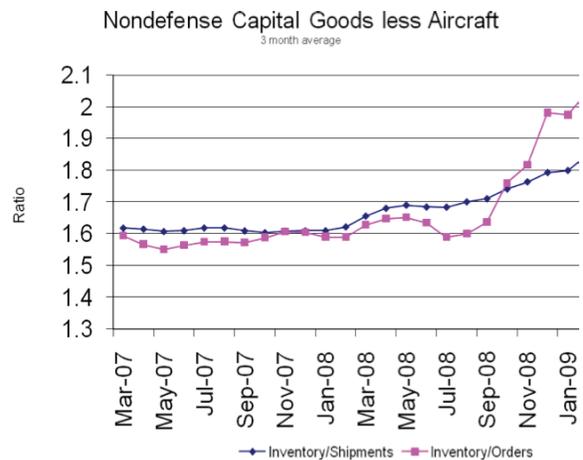
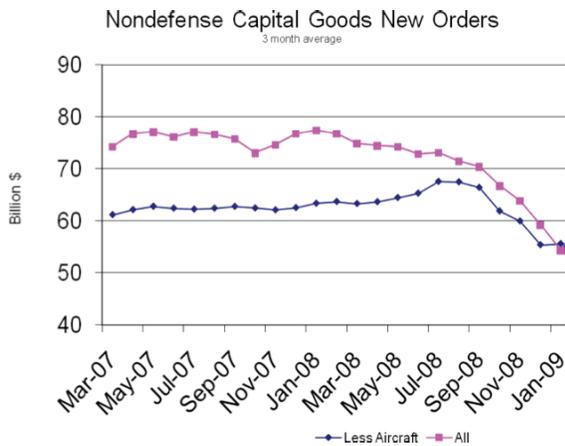
As you might expect, the fall in orders has resulted in a dramatic drop in weeks of backlog. The rolling averages show a fall from 11 to 12 weeks from last year til now. The median number for castings in February is 6 weeks.



Steel production has been hard hit. Production levels have collapsed with many facilities shut down. The output of steel in the US has fallen by more than 50% in the first quarter of 2009.

Nondefense Capital Goods new orders excluding aircraft have fallen about 6%. Inventories are up sharply for these products.

While there have been some signs that we are at the bottom, until commodity prices firm and uncertainty drops, conditions will remain poor.



Persons Available

A1234 seeks a summer internship in a foundry and is studying for a BS in Manufacturing Engineering Technology.

A1235 possesses degrees in Mechanical Engineering and has a deep understanding of simulation. Skilled MAGMASoft operator.

Casteel Commentary

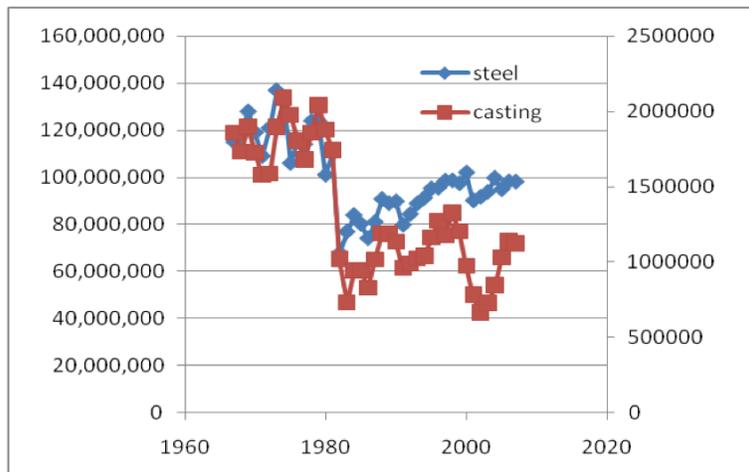
Uncertainty makes risk indeterminate. Without any way to quantify risk, investment decisions become problematic. This has resulted in a cycle of declining economic activity.

Politically, the failure of policymakers of both parties to impose regulatory disciplines to large financial institutions while maintaining their implicit guarantee of solvency allowed the creation of securities and assets that had indeterminate value. To create these securities, real estate loans were needed so credit and financial standards were discarded. Instead of lenders being concerned since they only profited from performing loans, lenders received a brokers fee at closing and the loan was sold as a package without anyone directly concerned with the likely performance. When these loans began to fail, this bubble was burst. The subsequent financial damage has not only hit financial institutions and government; it has created uncertainty that has severely impacted industry.

Pragmatism as a political philosophy has been dominant in North America for a century. What works is the key test of any policy or program. Unfortunately in these uncertain times it is no guide. No one knows what the consequences of the current and dramatic policy changes are likely to be. In fact the pragmatic willingness to reconsider and change course adds to the very uncertainty that makes the current crisis so difficult. All forecasts are limited by the lack of stable policy and uncertain economic conditions.

We can however expect that human needs and aspirations will remain. We can expect that technology and productivity will cause a continued improvement in the global standard of living. We can anticipate that energy and materials will be needed to fulfill these needs. These growing needs will not be met with today's production capability so we can expect a surge in capital investment when economic and political stability is achieved.

What does this mean for us (Steel Casting Producers)? One of the strongest historical correlations of steel casting activity is with US steel production. The production of steel and steel castings for the past thirty years is highly correlated, with a linear regression value for $r^2=0.72$. The slope is 0.02 so for every 1,000,000 tons of steel produced in the US, we make 20,000 tons of steel castings.



Steel production in the US for February was 3,760,000 for a correlated value of 900,000 tons of steel castings annualized. This would be a drop of about 35% from 2008. B. Lashinsky at our management meeting estimated production of steel in the US would be off 25% YoY for 2009.

So, my best estimate of what happens is that we are at the bottom of the market cycle and typically off more than 40%. But this is likely to be near the bottom for many markets. Large castings may get their bottom later in the year, as new projects for large castings do not start.

I expect we will see clear but modest improvement by the end of 2009. Sometime in 2010 we should see a strong surge of demand as commodity prices adjust to more normal financial conditions and global demand for energy and materials exceeds supply.

Inventories will draw down quickly and production will be unlikely to keep up. I think overall as an industry we will be off around 30% for 2009 and see some improvement in 2010.

Raymond Monroe

STEEL FOUNDERS' SOCIETY OF AMERICA MEETINGS CALENDAR

2009

| | | |
|--------------------|------------------------------------|--------------------|
| July 15-16 | Carbon & Low Alloy Research Review | Schiller Park, IK |
| August 13-14 | Western Division T&O Meeting | Salt Lake City, UT |
| September 19-22 | SFSA Annual Meeting | Sunriver, OR |
| November 10 | Specifications Committee | Atlanta, GA |
| December 9-12 | National T&O Conference | Chicago, IL |



Casting Solutions for Affordable Warfighter Capabilities

AMC

AMERICAN METALCASTING
CONSORTIUM



Technology Review

June 24-25, 2009

Sheraton Gateway Suites
Chicago - O'Hare, Illinois

Register Online at
amc.aticorp.org/techreview.html



AMC

Industry, government *and* academia developing and deploying metalcasting technologies that support U.S. warfighters