# SFSA CASTEEL REPORTER

**Steel Founders' Society of America**

**a monthly publication**
**serving SFSA steel casting industry Members**

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## ***September — 2008***

**Casteel Commentary Highlights:**

This month's Commentary considers the current financial crisis. It is likely to dampen demand for the near term, perhaps for as long as a year. On the other hand the injection of liquidity and the tightening of credit will stimulate demand in the medium term supporting higher commodity prices and limiting investment in new capacity.

**Annual Meeting**

The SFSA Annual Meeting presentations are available here, http://www.sfsa.org/sfsa/annmtg

**Technical & Operating Conference**

Have you registered for the 2008 T&O Conference? Two important dates are coming up – November 10 is the cutoff date for our special rate at the Drake Hotel, and reduced Conference registration fees are only available up to November 5.

This year's Conference program consists of 39 papers to be presented at this year's Conference to be held December 11-13 at the Drake Hotel in Chicago. Lively discussions with the authors take place on each day of the Conference. On the afternoon of Wednesday December 10, a member Workshop will be held.

Complete Conference registration information and forms are available on the SFSA website at http://www.sfsa.org/sfsa/toconf/index.html

Register today – you will not want to miss out on those new developments or aplications that could solve a perplexing operational problem, help open a new market segment or make your operation more efficient.

**Americans with Disabilities Act**

Both the House and Senate have passed the ADA Amendments Act of 2008 (the "Act"). President Bush intends to sign it. The Act will take effect on January 1, 2009. The Act expressly overrules several Supreme
Court decisions which narrowed the scope and application of the ADA. Congress also has directed courts and the EEOC to construe the Act in favor of the broadest possible coverage.

**Major Life Activities:**

The ADA defines a disability as a physical or mental impairment that substantially limits one or more major life activities; a record of such an impairment; or being wrongly regarded as having such an impairment. When it first enacted the ADA, Congress did not define "major life activities." Many courts have questioned the list of major life activities developed by the EEOC. In the Act, Congress has provided an illustrative list of major life activities under the ADA:

- Caring for oneself
- Performing manual tasks
- Seeing
- Hearing
- Eating
- Sleeping
- Walking
- Standing
- Lifting

- Bending
- Speaking
- Breathing
- Learning
- Reading
- Concentrating
- Thinking
- Communicating
- Working
- The operation of any major bodily function including the functions of the immune systems, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine and reproductive functions

**Substantially Limits:**

Federal courts, and the EEOC, have taken the position that an impairment must make a major life activity extremely difficult, if not impossible, before it is substantially limiting. Congress has determined this approach is too restrictive. The Act states that a condition is a disability if it causes only episodic limitations, or is in remission, provided the condition is substantially limiting when it is active.

Under the Act, employers should ignore the benefits of medicine, treatment, or medical devices when determining if an impairment creates substantial limitations for a particular individual. The only exception to this rule is corrective eyewear. If glasses or contacts correct a person's vision, that person is not substantially limited in the major life activity of seeing. Congress recognizes that some jobs may require perfect vision. The Act states that if a person is disqualified from a job because he/she needs glasses or contacts, the employer must prove that its vision requirement is job-related and consistent with business necessity.

**New EEOC Regulations:**

Congress has directed the EEOC to issue new regulations which are consistent with a more expansive definition of "disability." The new regulations must address which activities are major life activities, and when an impairment substantially limits those activities. No deadline has been set for these regulations.

**Recommendations:**

Based on the ADA's amendments, we believe employers should assume that an employee with an impairment, which affects him/her at work, is disabled. Employers should focus on whether these conditions require an accommodation; and whether those accommodations place an undue hardship on the business.

SFSA members will want to make sure that storage shelves in their facilities are marked with load limits. This is common for floors and now is applicable to shelving as well.

## Welder Productivity

SFSA did a survey of welder productivity and had over 20 responses. A typical deposition for stick welding was 2 lbs per hour. These short surveys are compiled and respondents get to see all the survey results. If you are interested in the full survey and have not yet responded, email me at monroe@sfsa.org.

## Market News

SFSA trend cards for July indicate that the market remained healthy through this period. Backlogs and orders for high alloy castings increased substantially. This trend was also noted in the DoC report on orders and shipments for iron and steel castings. Steel shipments of long products remained strong. Orders for capital goods excluding aircraft showed a strong increase for July. Additional market information is found in the SteelGuru document on the Casteel Reporter web page.

## Foundry Photo Book

Mike Schultz's book "Foundry Work", with foreword by Raymond Monroe features approximately 150 spectacular images of the work within foundries. Information is attached on a following page. Visit www.michaelschultzphotography.com.

**Casteel Commentary**

Turmoil in financial markets suggests that an economic contraction and recession are likely outcomes. Our market forecast was prepared prior to the market meltdown and assumes that the economy will slow but not severely. Unfortunately, the severe financial contraction is continuing and will lead to some reduction in market demand, especially in construction. This crisis led the Fed's to lower rates and provides more money to shift from financial to asset investments. Medium term I would expect the trouble in financial instruments to make assets and capital equipment producers attractive.

In many ways, this is a continuation of the trend for the last 5 years. The capital bust of 2001-2003 liquidated the excess capacity in our and other industries. In order to stimulate the economy and push money, interest rates were held low. Liquidity was increased but there was also little interest in extending credit to capital intensive industries. This excess money was used to fuel the sub prime housing bubble. With the unraveling of this bubble, the response has been more of the same, increase liquidity and tighten credit. This will slow the investment in added capacity while providing the funds to support high commodity prices. Smaller castings more tied to the broader economy could be hurt but larger >5000 lbs and high alloy casting demand should be strong.

Our markets are really a play on commodities and the best indexes are price of oil and copper. The current slowdown may hit us if the consumer pulls way back. If the consumer hurts because of high oil prices, that will be money shifted over to support our capital equipment purchases. Any drop in oil prices below say $75 a barrel or copper less than $1.5 a pound is worrisome.

In the larger picture this is the continued reversal of market conditions that have prevailed for decades. In the 1970’s financial investments were undesirable because of inflation. Assets were preferred. Interest rates were rising making securities less attractive. After this for over twenty years, inflation was low and interest rates were falling. This made financial investments attractive. Excess capacity pressured producers to lower costs and assets were unattractive. With the current financial crisis and the likelihood of future increases in interest rates and inflation, we are likely to see assets become attractive. The need for more energy and infrastructure will stimulate demand for steel castings. Our biggest challenge is probably the lack of capacity to meet these market needs.

*Raymond*

## Forgemasters to repeat engineering history - 15 Sep 2008

Sheffield Forgemasters is to repeat engineering history by creating two of the largest castings ever made in Europe. The engineering division will cast components weighing a staggering 340 tonnes each for established client SMS Meer, which will be used in some of the world's largest mechanical forging presses.

Forgemasters made engineering history in 2005 with the casting of a forging press traverse for SMS Meer, on behalf of Austrian company Böhler Schmiedetechnik GmbH & Co, which weighed 340 tonnes and was the largest steel casting made in Europe. The company then went on to equal this feat in 2006 when it cast the foundation platen for the Korea Iron & Steel Company open die forging press in South Korea, also weighing in at 340 tonnes, and on behalf of SMS Meer.

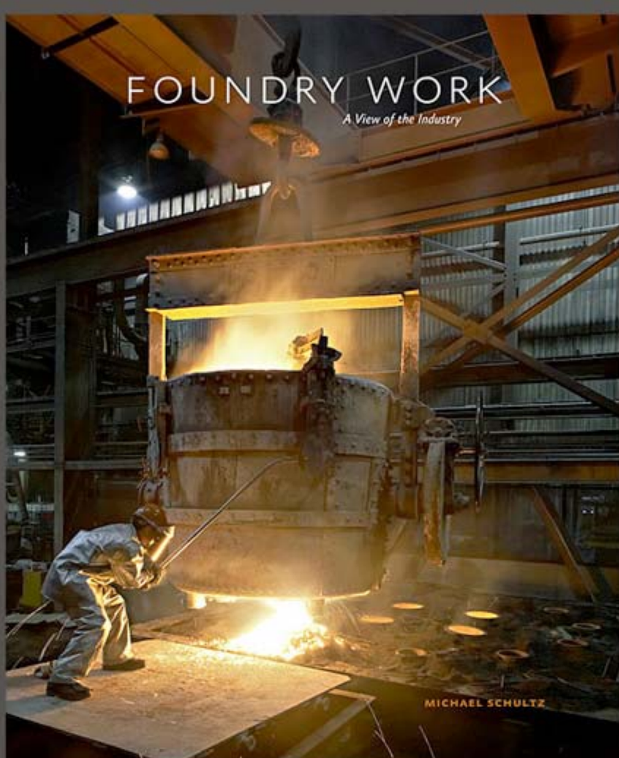
Forgemasters is now set to repeat both of these castings, with a combined value of almost GBP 10 million and destined for presses in China and Germany to service the automotive and power generation industries.

Casting of the vast pieces is set to start early in 2009 when foundry technicians will begin preparing the sand and resin mould to replicate the Böhler press traverse, which will form part of a 20 meter high clutch operated screw press located at Wuxi in the Jiangsu province of China, and will be used to manufacture aero engine turbine blades.

The other huge casting will make up the foundation platen or table for a 10,000 tonne open die press for German forgings company Buderus. Forgemasters will also supply additional forged and cast components to complete both orders.

Mr Mick Holloway senior sales manager for Engineering Limited said that "Both of these orders were taken on the strength of Forgemasters expertise in making large scale castings. We have tried and tested the technology to get these products right as proven with the Böhler and KISCO presses. To cast components on this scale takes an enormous amount of preparation, much of which has already been done in creating the patterns for both original castings. This reduces the lead-in time for the projects, but we still need to prepare more than 550 tonnes of molten steel for each casting, which then has to be poured in a continuous, controlled stream."

Mr Mick added that "Although there are other foundries across the world that can handle this size of casting process, there are few with our proven track record and even less with the capacity and assurances that Forgemasters can offer to complete such an order."


Michael Schultz Photography

*Announcing a New Book by*
*Michael Schultz*

*"None has produced a volume of images of casting so creative and vivid."* from the forward by Raymond Monroe, Exec. V.P. Steel Founders Society of America.

This book contains more than 150 full page color images of the spectacular work within large foundries in the U.S. and Europe. The book covers molding/pattern work, melting, casting, and finishing. The book is available in soft cover and a very limited edition hard cover.

Size is 10"x12"

Release date October 15, 2008

Orders accepted September 1, 2008 by going to:

www.michaelschultzphotography.com

# STEEL FOUNDERS' SOCIETY OF AMERICA

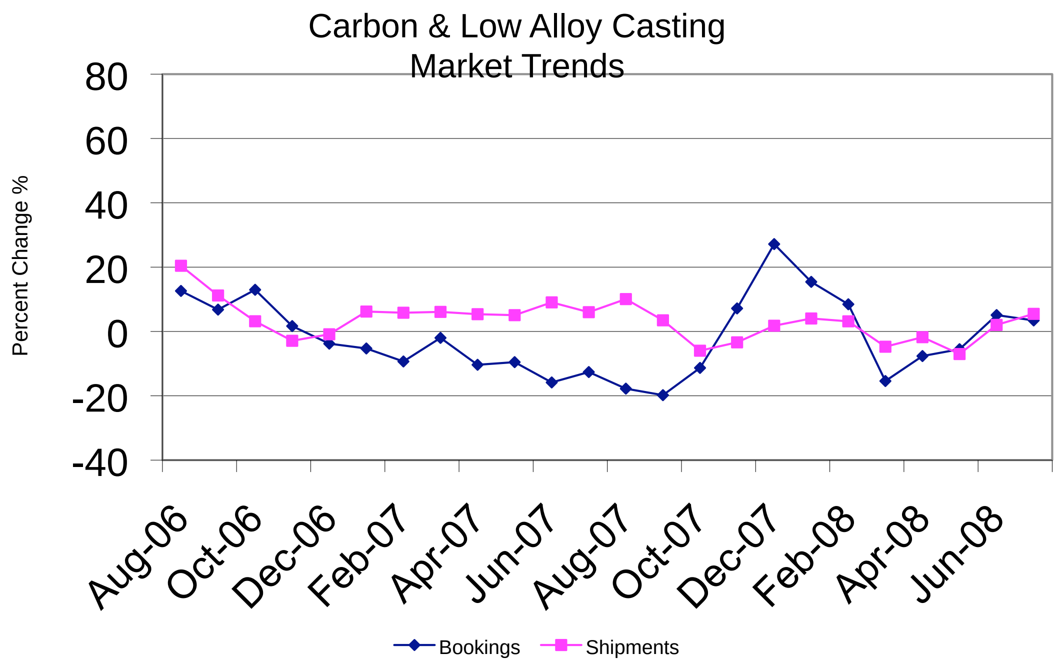
## MEETINGS CALENDAR

**2008**

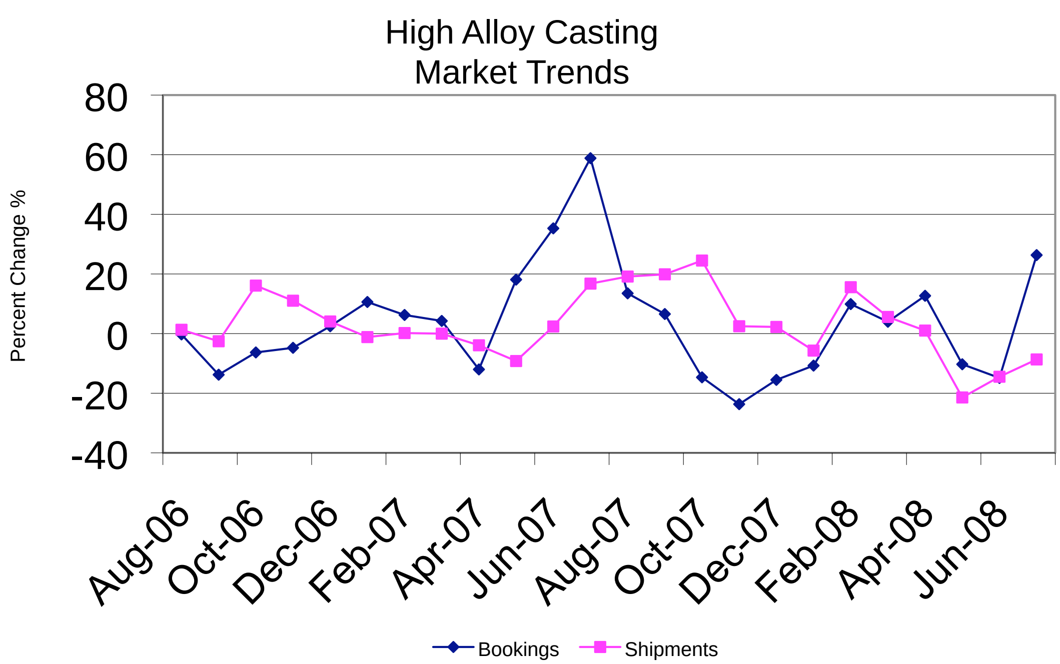
| | | |
|---|---|---|
| October | | |
| 28-29 | High Alloy Product Group Meeting | Marshalltown, IA |
| December | | |
| 10-13 | National T&O Conference | Chicago, IL |

**STEEL FOUNDERS' SOCIETY OF AMERICA**
**BUSINESS REPORT**

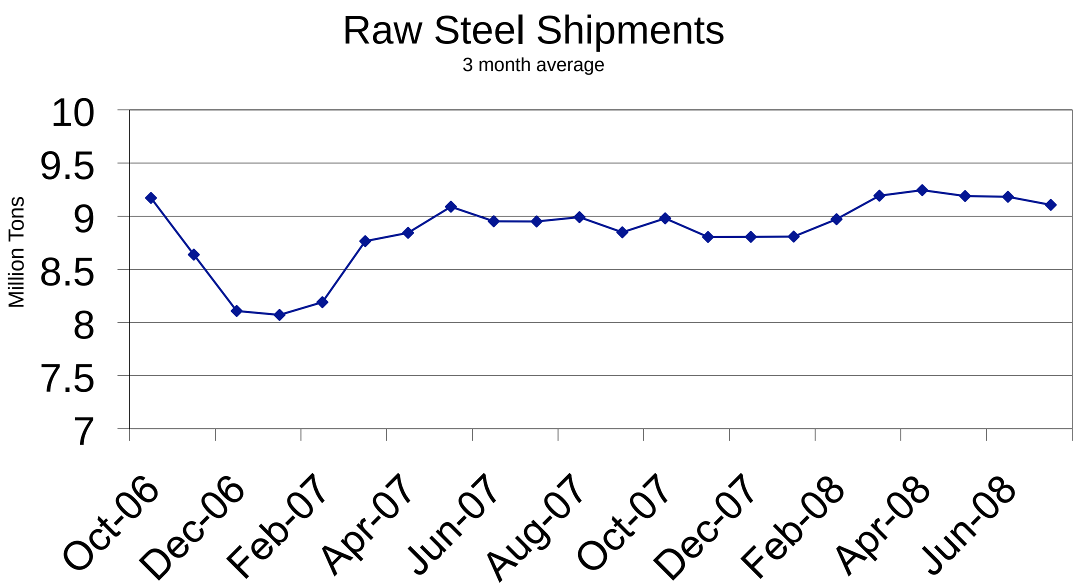
| **SFSA Trend Cards** (%-12 mos. Ago) | 12 Mo Avg | 3 Mo Avg | Jul | Jun |
|---|---|---|---|---|
| **Carbon & Low Alloy** | | | | |
| Shipments | 0.4 | 5.5 | 9.3 | 12.5 |
| Bookings | 0.0 | 3.4 | 0.0 | 5.2 |
| Backlog (wks) | 10.6 | 12.0 | 12.0 | 12.0 |
| **High Alloy** | | | | |
| Shipments | 2.8 | -8.7 | 32.5 | 3.0 |
| Bookings | 3.4 | 26.3 | 136.0 | 0.0 |
| Backlog (wks) | 11.2 | 12.5 | 13.0 | 12.0 |
| **Department of Commerce Census Data** | | | | |
| **Iron & Steel Foundries (million $)** | | | | |
| Shipments | 1,699.0 | 1,859 | 1,902 | 1,820 |
| New Orders | 1,697.3 | 1,850 | 1,951 | 1,795 |
| Inventories | 2,570.7 | 2,617 | 2,686 | 2,602 |
| **Nondefense Capital Goods (billion $)** | | | | |
| Shipments | 67.8 | 68.3 | 69.0 | 68.0 |
| New Orders | 74.5 | 73.1 | 74.5 | 71.2 |
| Inventories | 129.9 | 136.7 | 138.5 | 136.2 |
| **Nondefense Capital Goods less Aircraft (billion $)** | | | | |
| Shipments | 62.6 | 63.6 | 63.9 | 63.7 |
| New Orders | 64.3 | 67.6 | 72.0 | 65.8 |
| Inventories | 103.0 | 107.2 | 107.8 | 107.0 |
| Inventory/Orders | | 1.59 | 1.50 | 1.63 |
| Inventory/Shipments | | 1.69 | 1.69 | 1.68 |
| Orders/Shipments | | 1.06 | 1.13 | 1.03 |
| **American Iron and Steel Institute** | | | | |
| Raw Steel Shipments (million net tons) | 9.0 | 9.1 | 9.2 | 9.1 |




SFSA Postcards




SFSA Postcards

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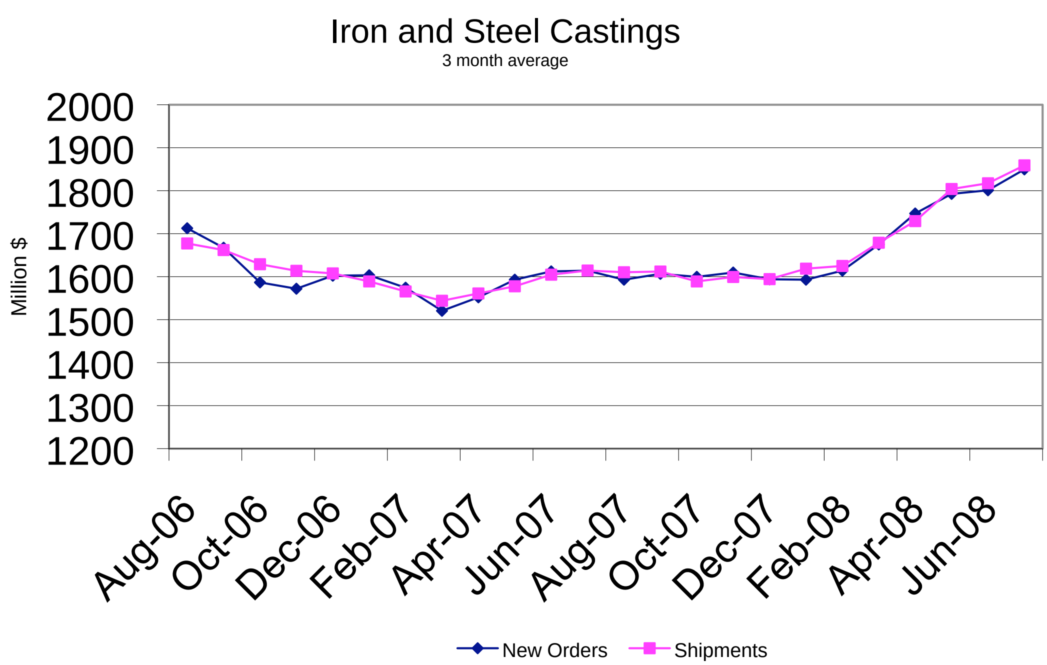


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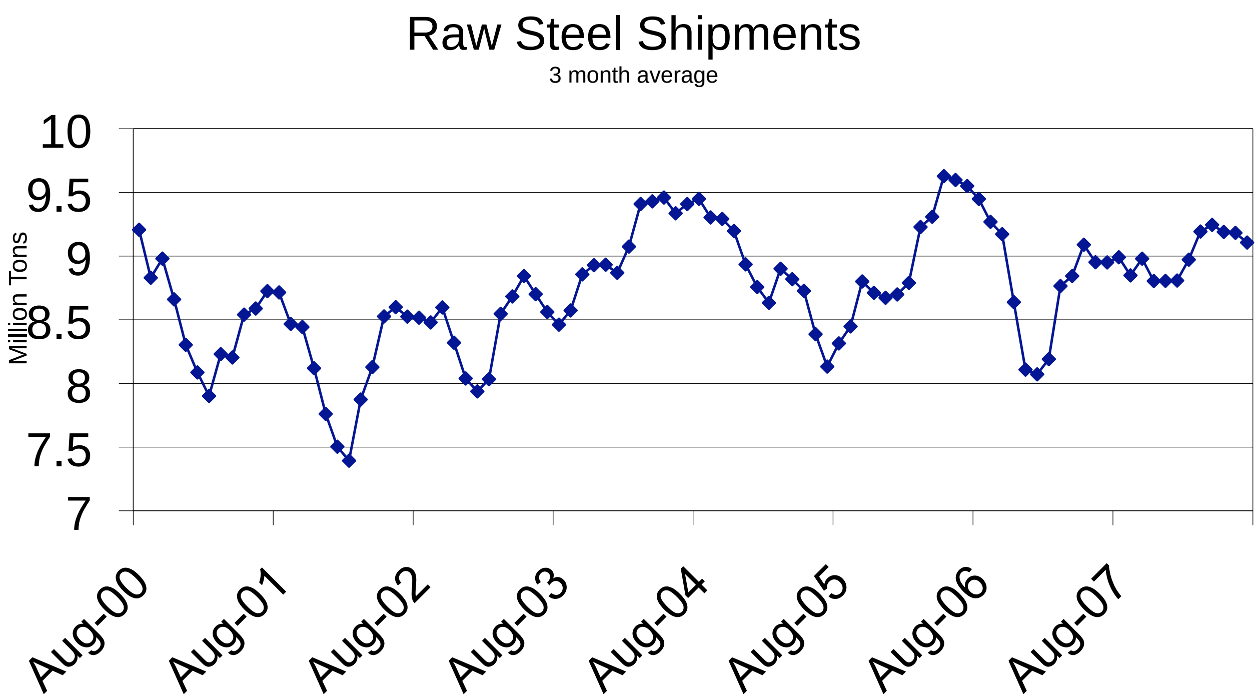
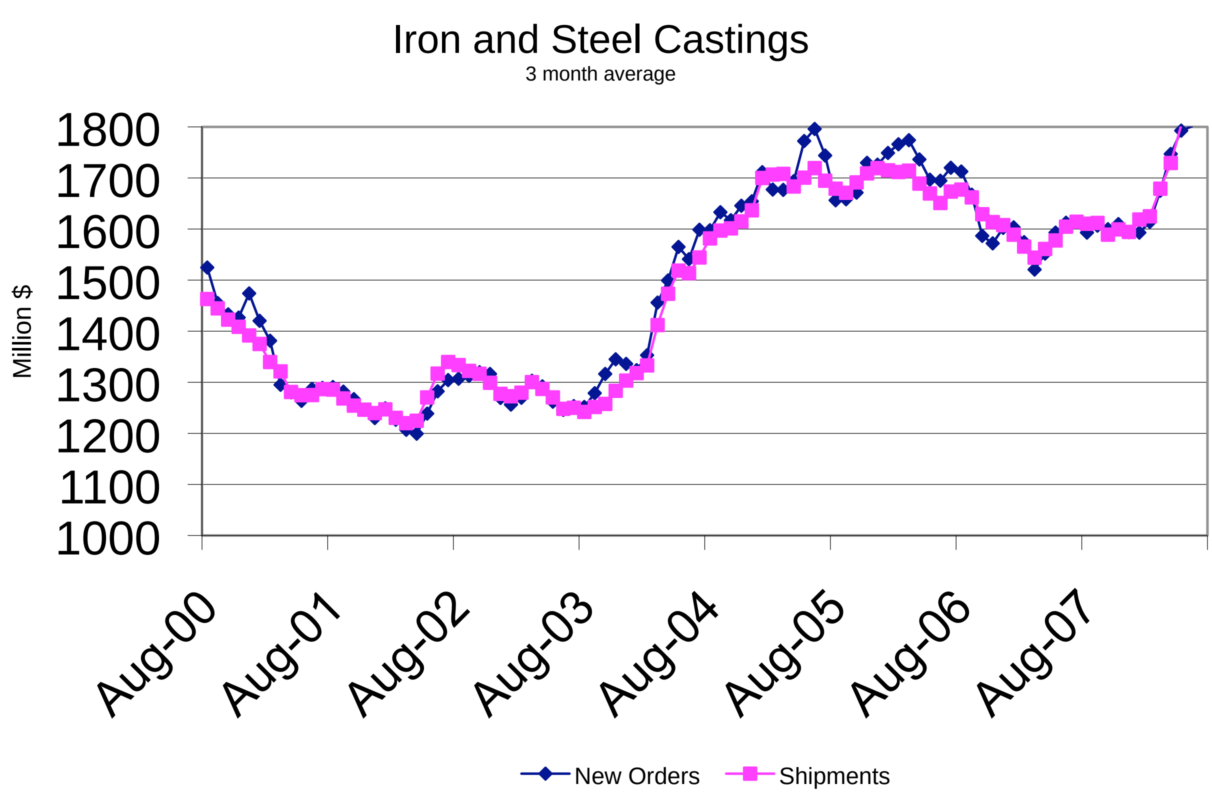



AISI Data

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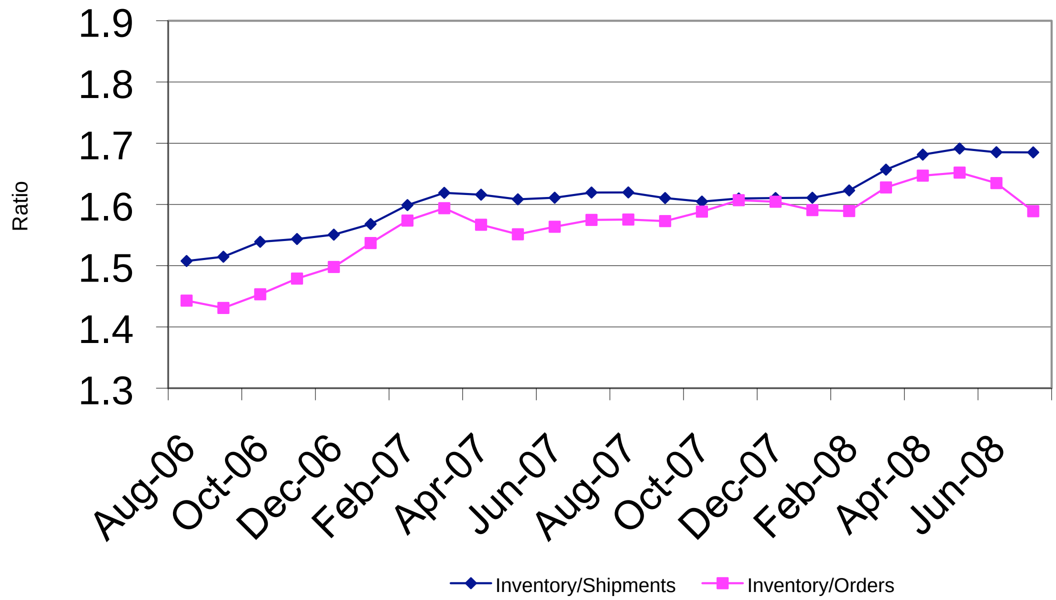
## Nondefense Capital Goods less Aircraft

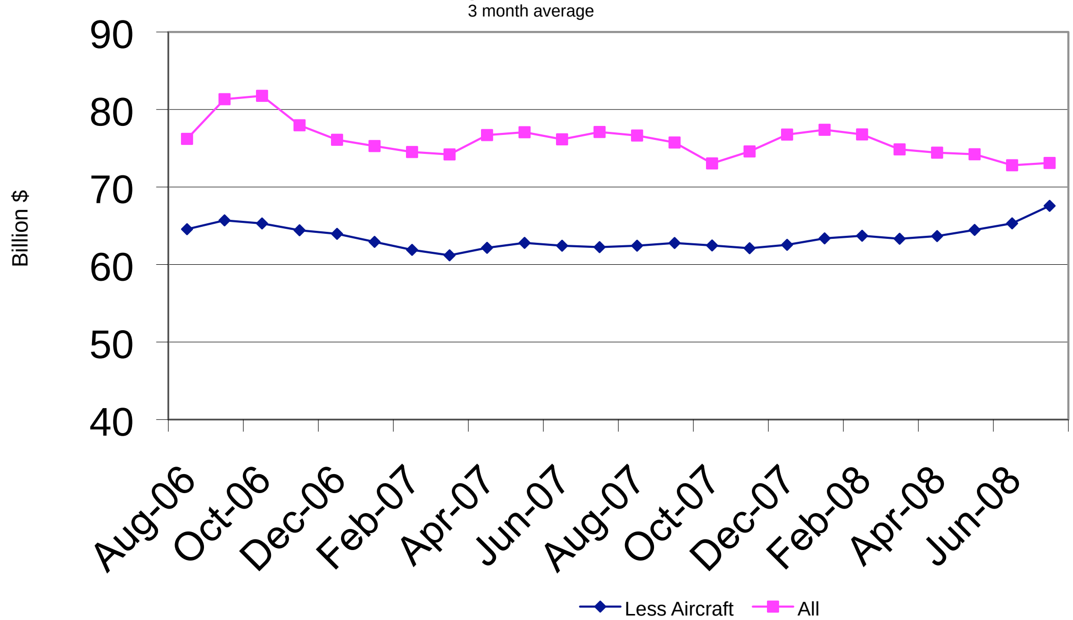
3 month average




Department of Commerce

## Nondefense Capital Goods New Orders

3 month average




Department of Commerce