



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication
serving SFSA steel casting industry Members

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Casteel Commentary Highlights:

This month's Casteel Commentary reviews the rule of three 5's. A successful plant need at least 5% profit, 5% growth and 5% reinvestment to succeed.

SFSA Annual Meeting

The SFSA Annual Meeting in Santa Fe was a great success. We had a strong business session getting a political update from Charlie Cooke, an economic review by Martin Regalia, a market forecast from Martin Stap, an energy report by Neal Elliot, and customer expectations by Todd Wyman. Their presentation slides are located here, <http://www.sfsa.org/sfsa/annmtg>. Our next Annual Meeting will be in Alaska with a shift in dates to August 19-22.

Energy

SFSA is conducting a mini-survey of members of energy required to make a ton of steel castings. We have had a good response but if you have not responded the please send me the kwh of electricity and scf of gas used per ton shipped for some reasonable length of time. My email is monroe@sfsa.org.

Strategic Issues

SFSA has posted our mission and vision statement along with our analysis of the strategic issues facing the industry here, <http://www.sfsa.org/sfsa/stratplan.html>. You may wish to use these as a check list for a self evaluation.

Technical & Operating Conference

The SFSA Technical and Operating Conference for 2006 is at the Drake Hotel in Chicago, December 13-16. Registration materials and preliminary programs are located here, <http://www.sfsa.org/sfsa/toconf>. As we recruit new people, this conference becomes an excellent training opportunity for these new supervisors and technical people.

Technical Innovation

Short cycle heat treatment allows more throughput in the furnaces, less scaling and oxidation, and does not reduce the mechanical properties. The typical rules are overly conservative to compensate for lack of control, poor furnace design, and incomplete information. All the metallurgical reactions for carbon and alloy steels in normalizing or quenching temperatures occur in minutes. Tempering or solution annealing takes more time. One proposed rule for short cycle heat treatment is one hour for all sections plus 15 minutes for each inch over 2 inches. SFSA has some articles and reports on short cycle heat treatment.

Specification Note

Specification requirements are not permanent restrictions on components but apply only at the point of certification. For example, castings made to ASTM A 744 require post weld heat treatment in the foundry. Many of these castings are valve bodies that have weld ends. Clearly after the valve is assembled, it is welded into a

pipng system and not post weld heat-treated. This is fine since the requirements of A744 only apply when the foundry supplied the casting and are not a restriction on the customer. In fact, the customer could make a machining error. Repair it by welding, and supply it with no post weld heat treating.

Safety

As recognition of safe plants the SFSA is going again to recognize members with good records at this year's T&O in December. If you have a total incident rate less than the national average in manufacturing for 2004 of 6.6, in 2005, you are eligible for recognition. The forms to apply are here, <http://www.sfsa.org/safety>. The average for steel foundries for 2004 was 15.8, exceeded only by hog farming at 16.5, we have a long way to go.

Casteel Commentary

The European Foundry Group made a presentation last week advocating that successful foundries would meet the test of the three 5's. They explained that while performance was related to the business cycle and the goal was not always attainable, foundries that succeeded were able to routinely meet this test.

The first "5:" was the achievement of at least a 5% profit. Unless an operation routinely exceeds this target, it will be unable to invest or grow. It will find it hard to retain value in the business or weather unexpected setbacks.

The second "5" was the ability to grow the top line, the volume of business by 5%. The demand for castings varies with the business cycle and for steel foundries can be quite volatile. Long-term steady growth requires a sustainable market development with a enduring competitive advantage. Without systemic growth, it is difficult to remain profitable.

The third "5" is a reinvestment in the business of at least 5% of sales. Foundries are capital-intensive enterprises. It typically requires about twice this level of investment to maintain the capability of the facility. Foundries that fail to reinvest at least at this level are exploiting the prior investment but not operating a sustained and growing business.

I am not sure how these numbers stack up in our industry, steel casting, or in our market, North America. It is clear though that we should pay attention to these three 5's. Profit, growth, and investment are essential to prosperity.

Raymond

Market News

Growth has slowed in many markets. This has led some plants to see a reduction in backlog and erratic levels of incoming orders. Other plants remain quite busy and continue to see strong growth rates. The SFSA trend cards show continued strong growth in shipments with a weaker level of booking. Steel shipments and ferrous foundries show continued strong activity. In capital goods orders remain strong but growing slowly and inventories remain low. The forecast for 2007 and the economic outlook are posted with the presentations from the Annual Meeting. Business is projected to remain strong next year. The current slowdown in consumer activity should clear up in the second half of 2007..

STEEL FOUNDERS' SOCIETY OF AMERICA

MEETINGS CALENDAR

2006

December

13/16

National Technical & Operating Conference, The Drake Hotel, Chicago, IL

2007

December

12/15

National Technical & Operating Conference, The Drake Hotel, Chicago, I

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

SFSA Trend Cards (%-12 mos. Ago)	3 Mo Avg	July	June
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Carbon & Low Alloy

Shipments	25.4	25.9	22.2
Bookings	15.2	-7.0	21.8
Backlog (wks)	10.6	12.0	8.7

High Alloy

Shipments	40.8	-33.0	122.2
Bookings	-8.5	-33.0	1.2
Backlog (wks)	11.3	11.1	11.0

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

Shipments	1,673	1,697	1,676
New Orders	1,720	1,753	1,741
Inventories	2,109	2,108	2,117

Nondefense Capital Goods (billion \$)

Shipments	66.5	66.9	66.3
New Orders	71.1	71.9	71.3
Inventories	109.8	110.9	110.1

**Nondefense Capital Goods
less Aircraft (billion \$)**

Shipments	61.5	62.2	61.0
New Orders	63.4	64.5	63.2
Inventories	92.1	92.7	92.3
Inventory/Orders	1.45	1.44	1.46
Inventory/Shipments	1.50	1.49	1.51
Orders/Shipments	1.03	1.04	1.04

American Iron and Steel Institute

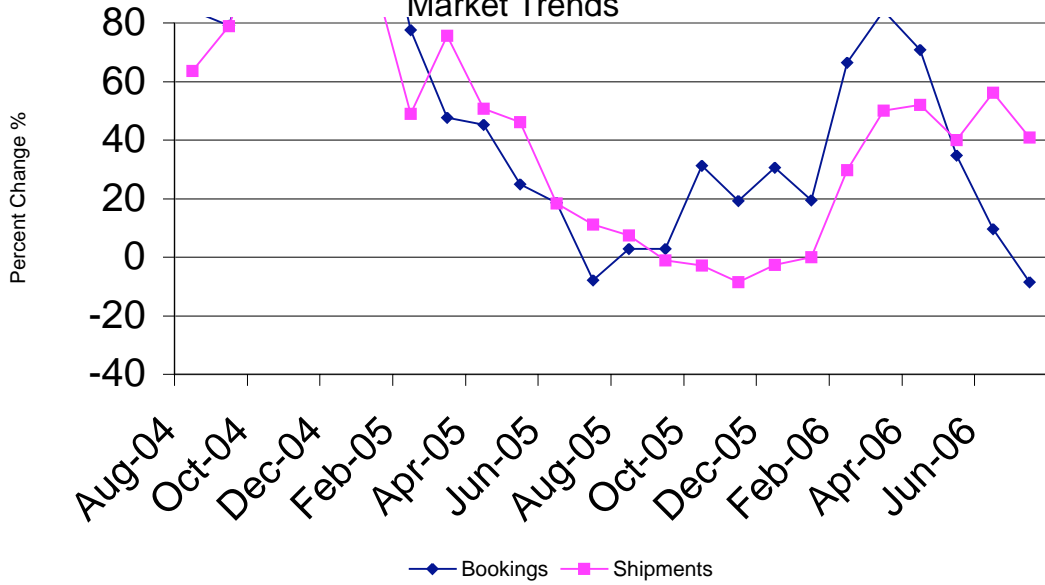
Raw Steel Shipments (million net tons)	9.6	9.0	9.7
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Carbon & Low Alloy Casting Market Trends



SFSA Postcards

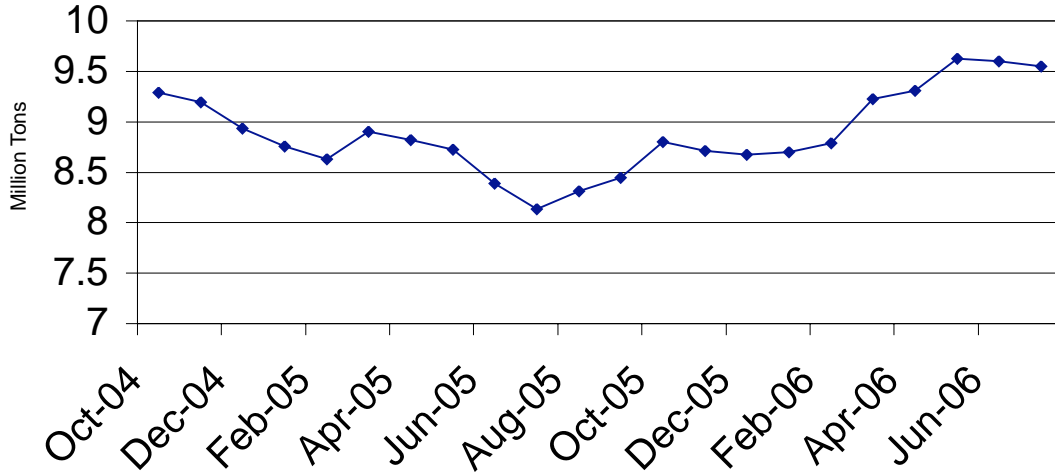
High Alloy Casting Market Trends



SFSA Postcards

Raw Steel Shipments

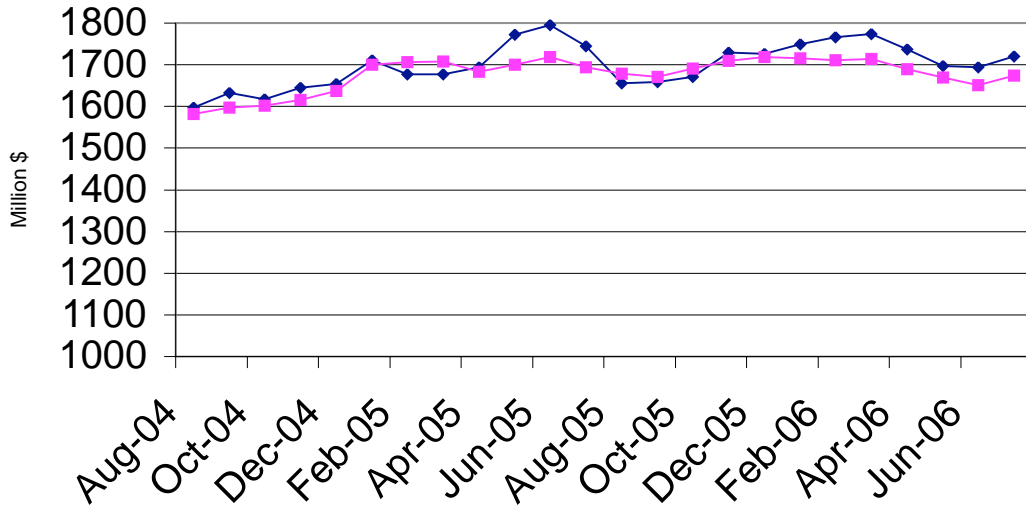
3 month average



AISI Data

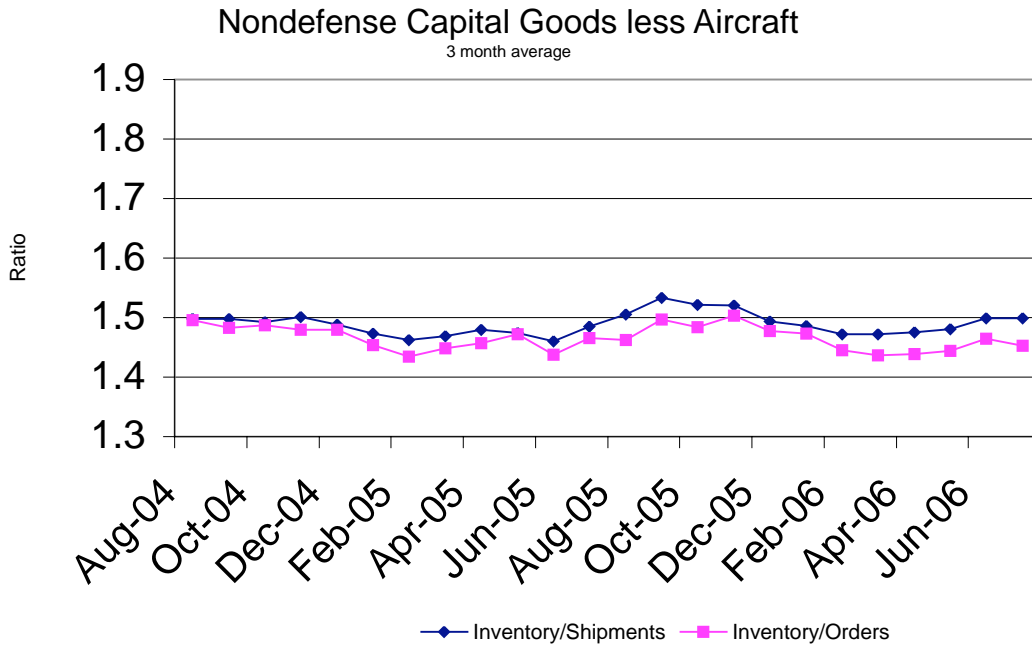
Iron and Steel Castings

3 month average

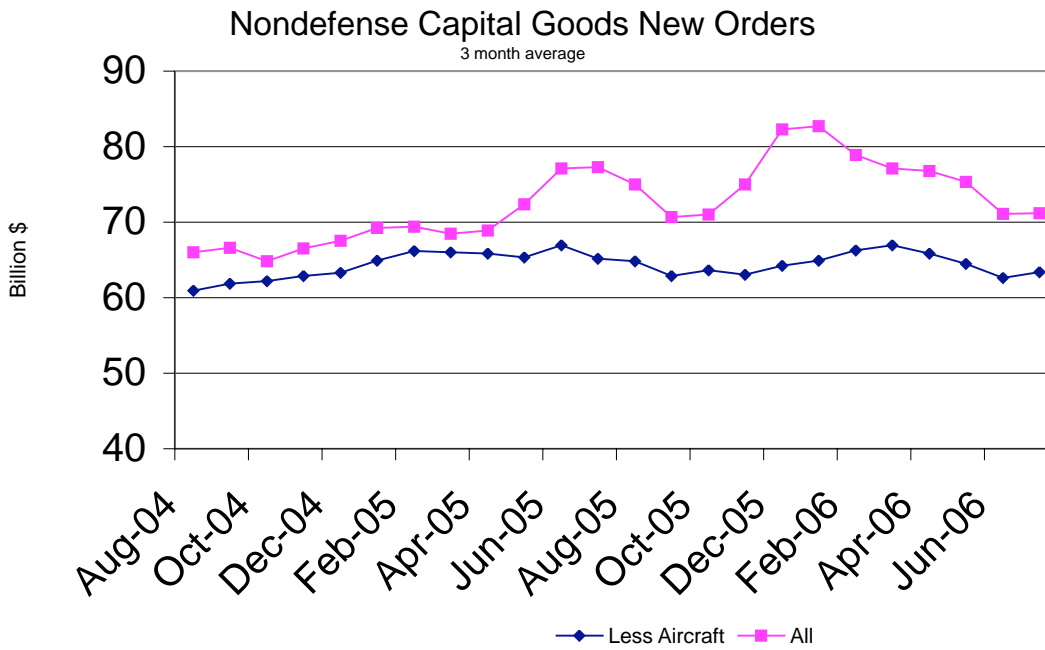


—◆— New Orders —■— Shipments

SFSA



Department of Commerce



Department of Commerce