



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 Commentary suggests three competitive approaches to growth: efficiency, networking, and knowledge. Each member company should use these perspectives to review marketing, management and pricing strategies to obtain the best growth in the strong markets of today.

SFSA Annual Meeting

Howard Fineman (see bio attached to this newsletter) has been secured as our keynote speaker for the SFSA 2007 Annual Meeting, August 19-22 outside Anchorage, Alaska. He will give us an update on the political landscape and its implications for our industry. Complementing Fineman's presentation will be a public policy and steel update by Tom Danczyk of SMA. A taste of the approach he takes can be found in the SBB presentation available on the Casteel Reporter web page. We also have a panel on raw materials including scrap, ferroalloys, and binders covering availability and pricing. We will have the SFSA Forecast and others as well. Plus of course we will have time to mix and mingle, play golf and see the sights. This is a great opportunity for you to learn, network, and relax. Details on the meeting and registration are being mailed out to SFSA members.

Safety and Human Resources Meeting

The Safety and HR meeting will be held on Wednesday September 18 at Atchison Steel Casting and Machining in Atchison, KS, with a plant tour on Thursday September 19.

Research Review

The Carbon and Low Alloy Research Review will be held July 18 and 19 at the Wyndham O'Hare in Rosemont, IL. This meeting provides an opportunity for SFSA members to hear from the researchers the progress of their work. Most importantly it gives members an opportunity to provide input into the direction of the work enabling the greatest value to be achieved by the member foundries.

Presentations will be made on Lost Foam Steel Castings, Development of High Strength Steels, Triplex Steels, Melting Efficiency Improvements, Surface Indications, Niyama Gage R&R, Rapid Patternmaking, Laser data capture of 3D part data, Pressurized Risers, Hot Tears, the effect of indications on performance, heat treatment distortion, and inclusion formation. Details have been emailed out to SFSA members. Please contact SFSA for more information.

Specification Note

ISO and European standards have a different approach to specifications of materials than do US suppliers. While I am unaware of any examples, you should be aware of the implications. In the US any property required is tested for each heat. The supplier is only responsible for the properties specified and tested. As an example, creep testing is not normally required. In the US practice, the casting supplier is required to meet the composition and room temperature properties and then engineering judgments and commercial arrangements establish the design properties that are used. In the ASME Code, properties for design are given but they are established by consensus based on representative test data for the grade of material. In ISO and Europe, the supplier guarantees the creep or elevated temperature properties. The foundry then is required to certify that the castings will have certain minimum elevated temperature properties without necessarily testing each heat of material. The language in the ISO steel casting specifications does not read this way because of the active participation of SFSA and members. This certification of properties not tested for is the latest issue that is being used by Europe to hamper the use of North American materials in components that must comply with the pressure equipment directive.

Innovation

In stainless steel and other high alloy casting that are austenitic or duplex, heat treatment does not change the hardness and may only have a slight effect on elongation or reduction of area in tensile tests. Heat treatment is intended to improve the corrosion performance of these materials and to make the material tougher and more weldable. Improper heat treatment can significantly reduce the performance of the material and may be difficult to detect. Corrosion tests are expensive and not very sensitive. Several projects at SFSA have demonstrated that

Charpy impact tests can often detect improper heat treatments. Charpy tests are not common since the materials are typically very tough, and their use is often at slightly elevated temperature where toughness is not an issue. It is probably useful to consider qualifying typical processed material with a Charpy impact test for new more complex materials or using it as a composition and processing route are developed.

Market News

The market continued to slower growth in February as indicated by the SFSA Trend cards for shipments and bookings. Backlog has been reduced slightly. While growth has slowed there is little indication to date of any significant downturn. The continued high prices for energy and materials such as oil and copper argue for continued strong markets for capital equipment. Steel shipments and iron and steel casting shipments show a slowdown for the end of last year and steel show a slight stabilization in the first of this year. This tracks with interest rates and moderating commodity prices. Since this period, these indicators have risen suggesting strengthening markets and improved market conditions. More economic news of interest can be found in the SteelGuru document on the Casteel Reporter web page.

Casteel Commentary

A month ago in the WSJ was an article on corporate strategy on corporate growth. It was remarkably consistent with the experience of our industry in trying to survive in a global marketplace with customers shopping to replace us as suppliers. The article identified three successful strategies for growth: industrial efficiency, network services, and knowledge intensity.

Industrial efficiency strategies depend on world class quality and productivity to make the company a low cost reliable supplier. Focusing on “lean” approaches, the company pursues waste elimination as a conscious strategy. It is able to take labor, energy, materials, capital, etc.; and make efficiency the paradigm of successful management. For example, Dow has reduced its energy per sales dollar by 20% in the past ten years and has the goal of 25% reduction in the next ten years. Minimills have reduced the typical manhours per ton of steel from over ten to sometimes less than one. Industrial efficiency companies can double down by continued focus on their efficiency or they can seek to add value with the complementary strategy of network services and knowledge intensity.

Network services exploit the erosion of the technical and industrial infrastructure by offering turnkey solutions with assured performance to customers. They perceive the business not as producing pounds but as assembling the team and network that can meet the customers’ requirements. Removing risk and delivering complex products to customers who are losing their ability to manage and purchase technical products allows the steel foundry to sell more than castings, they can sell a network of services. By providing unique product solutions, a steel foundry can achieve a market price because there are no direct competitors.

Knowledge intensive technology is a great way of describing steel casting production. Unfortunately we have been unable to capitalize on this attribute in the marketplace. This will change as our knowledgeable managers become increasingly in short supply. We know every time our production fails because we failed to “remember” or to “check” that our product is knowledge intensive. As fewer suppliers are capable of managing the information required for quality production and computer tools allows more elegant and valuable castings, we will need to recruit the capable workforce needed.

Each plant should do an internal review of their competitive position in the marketplace and seek to find the best fit strategy to ensure their future profitable growth.

Raymond

STEEL FOUNDERS' SOCIETY OF AMERICA

MEETINGS CALENDAR

2007

July

18-19 C&LA Research Review, Rosemont, IL

August

18/22 SFSA Annual Report, Alyeska Resort, AK

September

TBD High Alloy Product Group Meeting, Houston, TX

18-19 Safety Committee & Human Resources Meeting, Atchison, KS

November

13 Specifications Committee Meeting, Tampa, FL

December

12/15 National Technical & Operating Conference, The Drake Hotel, Chicago, IL

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

| SFSA Trend Cards (%-12 mos. Ago) | 12 Mo Avg | 3 Mo Avg | Feb | Jan |
|--|-----------|----------|-----|-----|
|--|-----------|----------|-----|-----|

Carbon & Low Alloy

| | | | | |
|---------------|------|------|-------|------|
| Shipments | 9.4 | 4.7 | -7.7 | 21.1 |
| Bookings | 13.1 | 1.5 | -23.0 | 39.5 |
| Backlog (wks) | 11.4 | 11.7 | 12.1 | 11.4 |

High Alloy

| | | | | |
|---------------|------|------|------|------|
| Shipments | 11.9 | -4.8 | 4.3 | 5.0 |
| Bookings | 10.5 | 12.1 | 31.0 | 22.9 |
| Backlog (wks) | 11.4 | 12.4 | 13.3 | 13.3 |

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

| | | | | |
|-------------|---------|-------|-------|-------|
| Shipments | 1,631.6 | 1,566 | 1,543 | 1,542 |
| New Orders | 1,638.9 | 1,574 | 1,513 | 1,514 |
| Inventories | 2,188.8 | 2,321 | 2,325 | 2,329 |

Nondefense Capital Goods (billion \$)

| | | | | |
|-------------|-------|-------|-------|-------|
| Shipments | 67.0 | 65.9 | 64.9 | 65.5 |
| New Orders | 76.0 | 74.5 | 71.7 | 70.8 |
| Inventories | 112.9 | 116.3 | 116.5 | 116.5 |

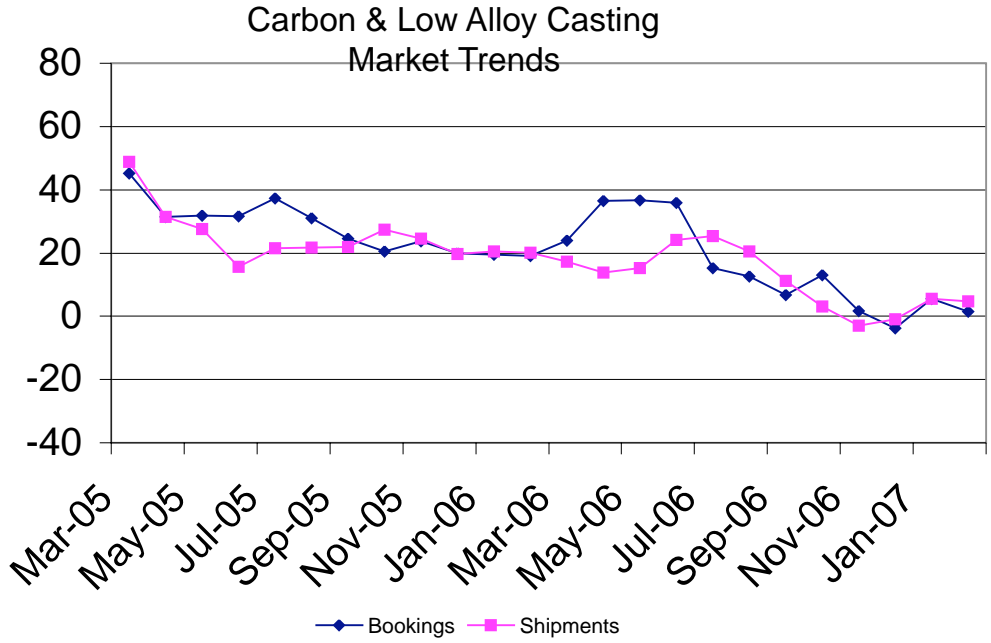
**Nondefense Capital Goods
less Aircraft (billion \$)**

| | | | | |
|-------------|------|------|------|------|
| Shipments | 61.8 | 60.8 | 59.9 | 60.4 |
| New Orders | 63.8 | 61.9 | 60.2 | 60.2 |
| Inventories | 94.7 | 97.2 | 97.5 | 97.6 |

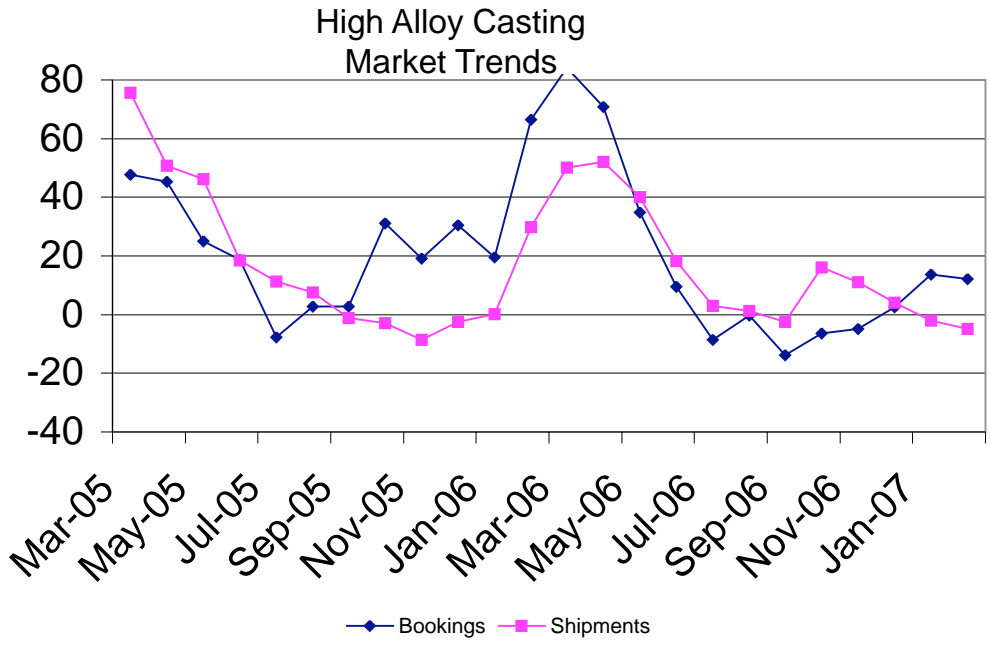
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|---------------------|--|------|------|------|
| Inventory/Orders | | 1.57 | 1.62 | 1.62 |
| Inventory/Shipments | | 1.60 | 1.63 | 1.62 |
| Orders/Shipments | | 1.02 | 1.00 | 1.00 |

American Iron and Steel Institute

| | | | | |
|---|-----|-----|-----|-----|
| Raw Steel Shipments (million net tons) | 9.0 | 8.2 | 8.4 | 8.6 |
|---|-----|-----|-----|-----|



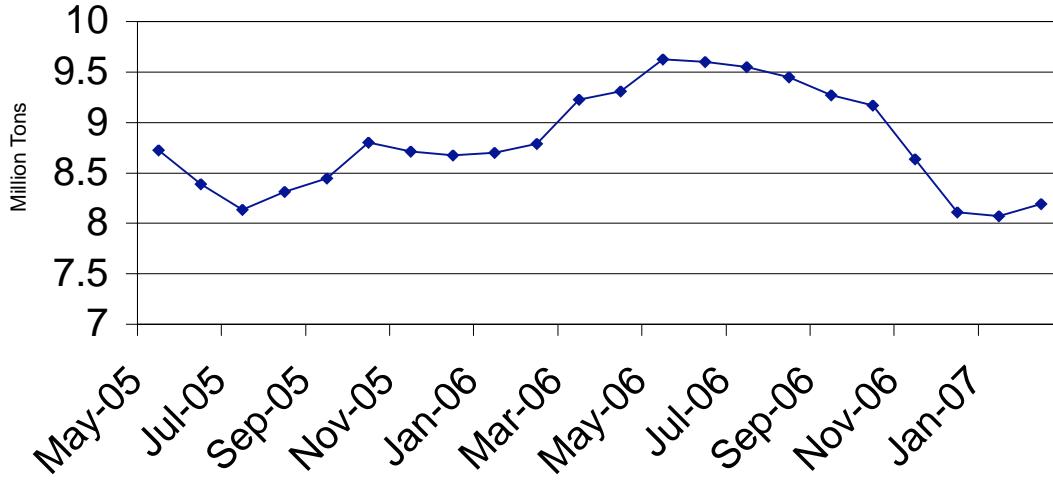
SFSA Postcards



SFSA Postcards

Raw Steel Shipments

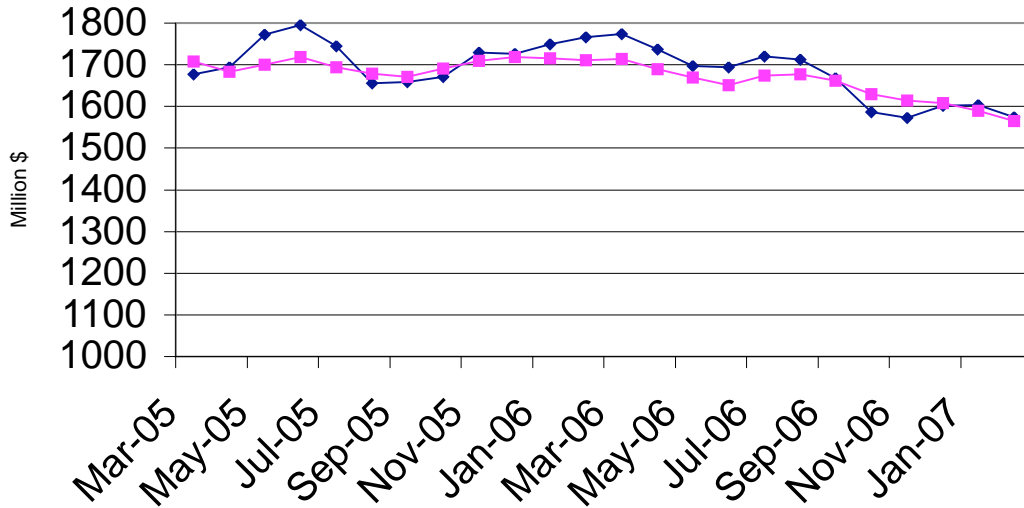
3 month average



AISI Data

Iron and Steel Castings

3 month average

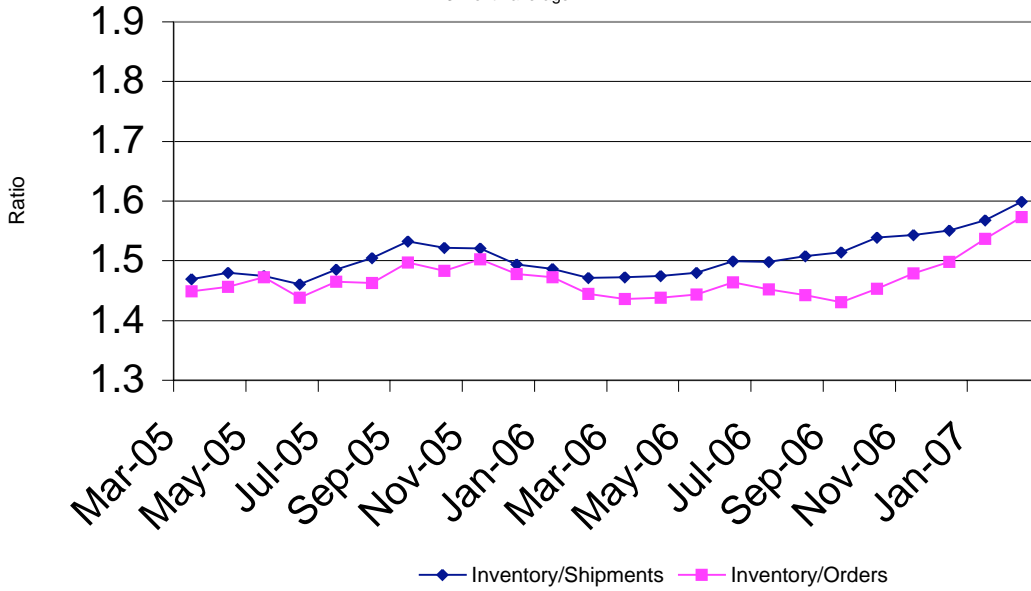


—◆— New Orders —■— Shipments

SFSA

Nondefense Capital Goods less Aircraft

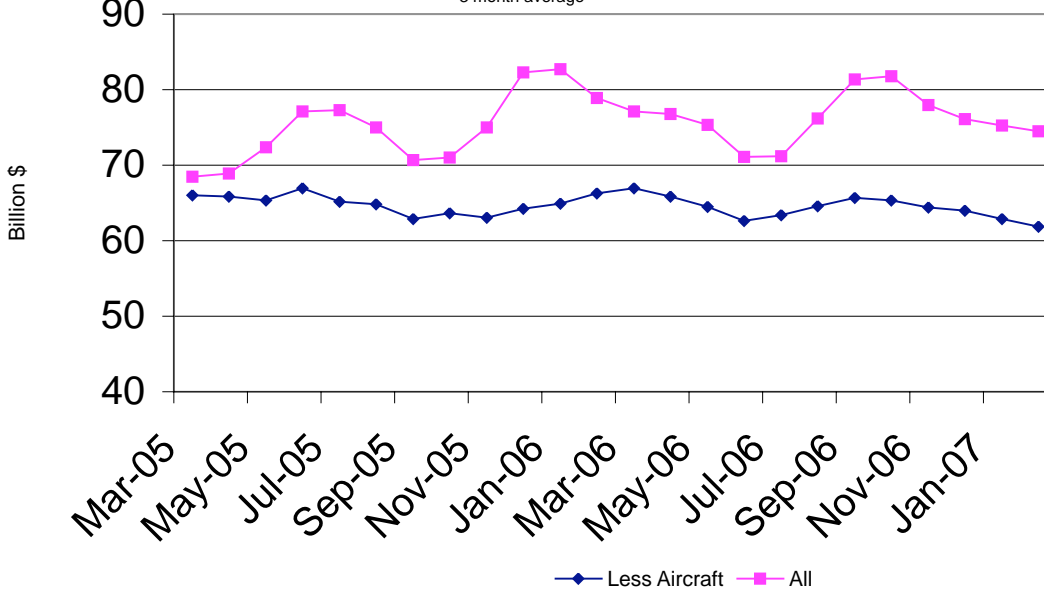
3 month average



Department of Commerce

Nondefense Capital Goods New Orders

3 month average



Department of Commerce



Exclusively Representing

HOWARD FINEMAN

Newsweek's Senior Washington Correspondent and Columnist

Howard Fineman is *Newsweek's* Senior Washington correspondent and columnist. An award-winning writer and commentator, Fineman also is an NBC News Analyst, contributing reports to NBC, MSNBC and CNBC, and is a regular guest on the *Imus in the Morning* radio show. The author of scores of *Newsweek* cover stories, he has also published articles in the *New York Times*, the *Washington Post*, and the *New*

Republic. His "Living Politics" column appears each week on the MSNBC.com and Newsweek.com Web sites.

As *Newsweek's* lead political reporter, Fineman has interviewed and written about every major presidential candidate since 1984, focusing in recent years on the roots, rise, and presidency of George W. Bush. A cover story Fineman wrote in late November 2001 featured the president's first extensive post-9/11 interview--an interview in which Bush first hinted that he would target Saddam Hussein. Another Fineman cover story, *Bush and God*, was the top-selling issue of 2003 and part of a *Newsweek* entry that won the National Magazine Award for "general excellence" that year. His work on the 2004 presidential campaign helped the magazine win another nomination in that category.

As a reporter and writer, Fineman ranges widely. While he has written dozens of campaign cover stories, his other covers have included: the rise of the religious right; the power of talk radio; race and politics; the Pledge of Allegiance controversy; the impact of digital technology on society; and the influence of Hollywood on American politics. He has interviewed many business leaders— among them Bill Gates, Steve Case, Steve Ballmer, Robert Rubin and Ted Turner—and entertainment personalities such as Warren Beatty, Jane Fonda, Michael Douglas, Jay Leno, and Rush Limbaugh. Overseas, Fineman has reported for the magazine or MSNBC from China, Vietnam, and the U.K.

Although Fineman now reports exclusively on television for NBC, he has appeared on most major news and public affairs programs, including *Nightline*, *Face the Nation*, *Larry King Live*, *Fox News Sunday*, *Charlie Rose*, and *The NewsHour with Jim Lehrer*. He was a regular panelist on PBS's *Washington Week in Review* from 1983-95, and CNN's *Capital Gang Sunday* from 1995-98. He also worked with Ted Koppel on *Nightline* special reports on Ross Perot and Pat Robertson.

A native of Pittsburgh, Fineman began his journalism career in 1973 at *The Louisville Courier Journal*, covering the environment, the coal industry, and Kentucky politics before joining the newspaper's Washington bureau in 1978. He joined *Newsweek* in 1980 and was named chief political correspondent in 1984, deputy Washington Bureau chief in 1993 and senior editor in 1995.

Fineman holds an AB, Phi Beta Kappa, from Colgate, an MS in journalism from Columbia, and a JD from the University of Louisville. His legal education included a year at the Georgetown University Law Center. He received Watson and Pulitzer Traveling Fellowships for study in Europe, Russia, and the Middle East. He lives in Washington with his wife, Amy L. Nathan, an attorney, and their two children.