



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication

serving SFSA steel casting industry Members

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Casteel Commentary Highlights:

The Casteel Commentary reflects on the shortage of skill people available for the industry. Without concrete actions and investment, we will be limited in future opportunities by the lack of available workers and leaders. Now is the time to plan for succession and replacement. We need to pay above market rates to attract and retain talented leaders and workers to succeed.

High Alloy Research Review

This is your opportunity to interact and direct the progress of the research projects currently under the direction of the High Alloy Research Committee. As usual there is not a registration fee for attendance at this meeting. The meeting will be held at the Spring Hill Suites Chicago, August 25. Please contact SFSA for more information

SFSA Annual Meeting

SFSA Members should have received their Annual Meeting registration packages. If you need additional registration information, please contact Sandra.



Performance Benchmarking

SFSA has arranged for members to participate at no charge in a performance benchmarking study sponsored and conducted by the Michigan Manufacturing

Technology Center. We will be sending out a notice and forms this month. Participants will receive a personalized report comparing their operation to other steel foundries in the study. I would suggest you take advantage of this service.

China Visit

Several members have expressed an interest in organizing a study tour to visit steel foundries in China. SFSA is organizing a tour for April 14-22, 2006 to coincide with a trade show in metalworking in China. If you are interested, mark these dates and let me know of your intent.

Innovation

Each month Malcolm and I are planning to include a research or technical idea that would allow innovation in our members' plants. This month I am including a link to a paper presented to the World Foundry Organization describing the main innovations from the past twenty years of SFSA research. The innovation for this month is the reduction of head height in pouring steel castings. The total drop of liquid metal from the top of the metal in the ladle to the lowest point in the casting is the head height of the pouring system. We have shown dramatically that the larger the head height the more inclusions are formed in the casting. Reducing the height by inches helps. Pouring small castings from large bottom pour ladles is always problematic. The suggested innovative area for this month is to engineer the pouring, gating, and practices to minimize the head height in the pouring system.

Question of the Month

This month I would like to try out a new item on the newsletter in the form of a question. Members often ask a general question that we do not have any information to answer. Often the question would be of general interest. I would like to ask one of these questions each month and solicit responses. If at least 10 members answer, I will be able to summarize their responses in the following month.

This month the question is: What is the ratio of maintenance hours to production hours?

A member wanted to know how many maintenance staff he should have based on the number of production employees. In thinking about the question it seemed easiest to take the total maintenance hours and divide by the total direct labor hours to get the proportion. If you could report this ratio to me by email in the next week for the past month or year, whichever is more convenient, I will summarize the results next month and pose another question. You might also suggest a question yourself.

Trade Events

The Department of Commerce routinely organizes trade events and a list of upcoming opportunities is at this website: <http://www.buyusa.gov/uppermidwest/events.html>

Market News

A slight softening in demand for manufactured goods probably the result of escalating prices for raw materials, shortages of supply, and energy costs is evident in the latest market data. The three-month average for shipments and bookings is still high but the latest month's numbers show some lowering of increase in demand. Orders and shipments for iron and steel castings based on the Census show strong continued demand. Steel shipments fell in April. New orders for capital goods suggest resumption of strong demand and continued growth in the marketplace. A short period of pull back is expected after an extended period of extraordinary demand.

Specification Note

SFSA and members participating in ASTM have recently revised the ferroalloy standards of ASTM. We need to know if these standards are adequate, if they usefully describe the requirements needed by our member, and if supplier provide company data sheet instead of following the ASTM requirements. We need your feedback. Please have someone in purchasing take a moment and drop Malcolm an email on your purchase of ferroalloys and use of the ASTM requirements. Thanks.

Ohio Technology Showcase

The Showcase is a three-day event, combining technical sessions, plenary addresses by business, political and government leaders, special forums on selected topics, BestPractices training and tours of Showcase plants. Hear from industry leaders, technology experts, government agency staff and suppliers about the latest in managing energy in your facility and technology developments that can improve productivity and reduce energy in your operations. The Showcase will provide specialized breakout sessions in the following industry sectors: Aluminum and Forging, Polymers and Plastics, Glass, Metal Casting, and Steel. More information is available online at <http://www.ohioshowcase.org>

Casteel Commentary

WHAT ARE THE MOST IMPORTANT CHALLENGES THE INDUSTRY FACES FOR THE NEXT THREE YEARS?

#	%	
20	67%	Skilled Labor
16	53%	Raw Materials Cost/Availability
14	47%	Foreign Imports
10	33%	MACT/ Governmental Compliance Costs
7	23%	Facility Modernization
5	17%	Limited Production Capacity
3	10%	Energy Costs
3	10%	Healthcare/ Insurance costs
2	7%	Market Share loss due to Alt. Materials/Construction

As you can see from the survey of the industry, skilled labor is the number one issue facing the industry. It was identified by two thirds of the industry in an open-ended question about the issues that challenge us. We must begin to develop the leaders critical to our future. What are some of the steps necessary?

First, stealing from our competitors or other businesses will not be the answer. This was the method of filling vacancies for the past 20 years. That pool of willing and trained workers is drying up rapidly. Like our industry, we in manufacturing have not recruited during the time of excess capacity. Like the purchase of used equipment, the recruitment of skilled employees that worked well. Now however, the liquidation of obsolete capacity and the lack of investment and recruitment will limit the supply of trained workers and even when they are available, they are likely to be late in their career and their skills will become dated.

Hiring, retaining and training will be essential to future success. Hiring will require that we recruit the best available talent. We will need to raise our salary rates if we expect to succeed. Some plants have already seen the need to pay above the average market to hire and retain the skilled trades needed for maintenance. We will need to hire and retain manufacturing engineers to succeed. An intern program that allows students to work in the plant and you to decide to hire after graduation may be required. We must become willing to add new staff that can improve our throughput and quality if we are to meet the needs of our customers. New engineers bring new skills and energy to the problems we face. They are able to use computers and information technology to solve longstanding manufacturing problems. Hiring manufacturing engineers should help us develop the leadership talent needed for the next generation. Many of our management tools are an effort to fill this staffing need with procedural solutions. 5S, 6 sigma, TQM, etc. all point to our need for manufacturing staffing.

We will also need to train. Many of our needs are unique and the elimination of plant training programs has eliminated the key resource of supervisors, quality inspectors, skilled operators, etc. Training welders, inspectors, and supervisors allows the foundry to home grow needed talent. This will require that we become involved with high schools and community colleges to find the talented young people that are local and would be interested in this opportunity. We also need to look inside for trainable employees that would benefit from added training.

Like a capital equipment investment plan, we need a staffing development plan. How will we replace key people? How will we adjust to the absence of senior staff? How will we replace ourselves?

Raymond

STEEL FOUNDERS' SOCIETY OF AMERICA

MEETINGS CALENDAR

2005

August
25

High Alloy Research Review, Rosemont, IL

September
10/14

SFSA Annual Meeting, Incline Village, NV

November
2/5

National Technical & Operating Conference, Chicago, IL

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

SFSA Trend Cards 3 Mo Avg Apr Mar
(%-12 mos. Ago)

Carbon & Low Alloy

Shipments	31.3	-4.0	54.0
Bookings	31.4	14.0	41.5

High Alloy

Shipments	50.7	26.0	104.0
Bookings	45.3	89.0	9.0

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

Shipments	1,683	1,732	1,661
New Orders	1,694	1,838	1,657
Inventories	2,105	2,148	2,114

Nondefense Capital Goods (billion \$)

Shipments	67.6	69.1	67.0
New Orders	68.9	70.5	66.1
Inventories	113.2	112.9	113.5

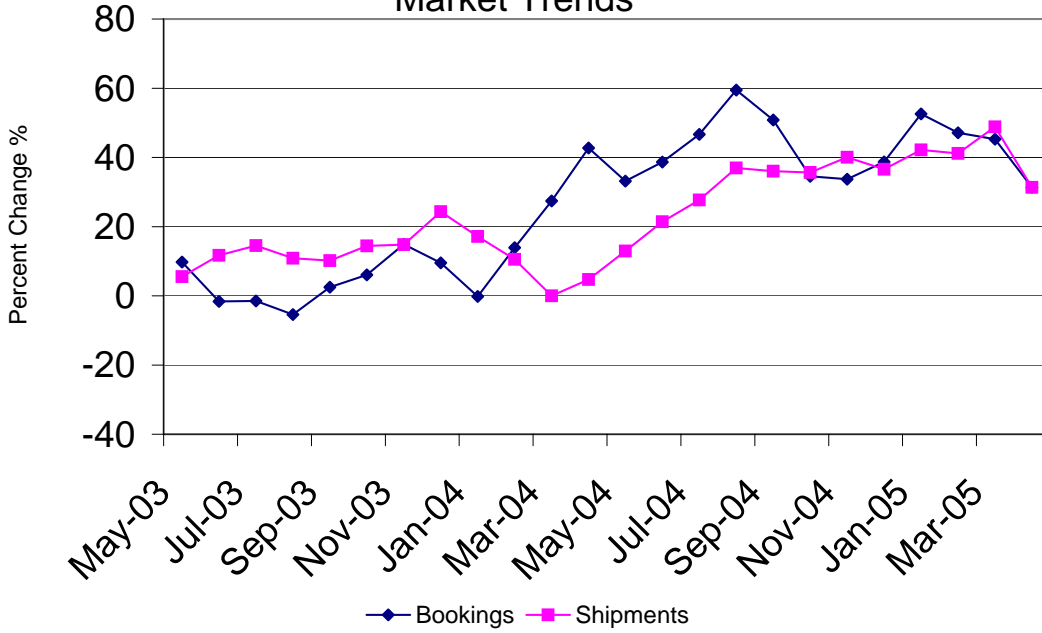
**Nondefense Capital Goods
less Aircraft (billion \$)**

Shipments	64.8	65.6	64.2
New Orders	65.9	66.8	64.1
Inventories	95.9	96.1	95.9
Inventory/Orders	1.46	1.44	1.50
Inventory/Shipments	1.48	1.47	1.49
Orders/Shipments	1.02	1.02	1.00

American Iron and Steel Institute

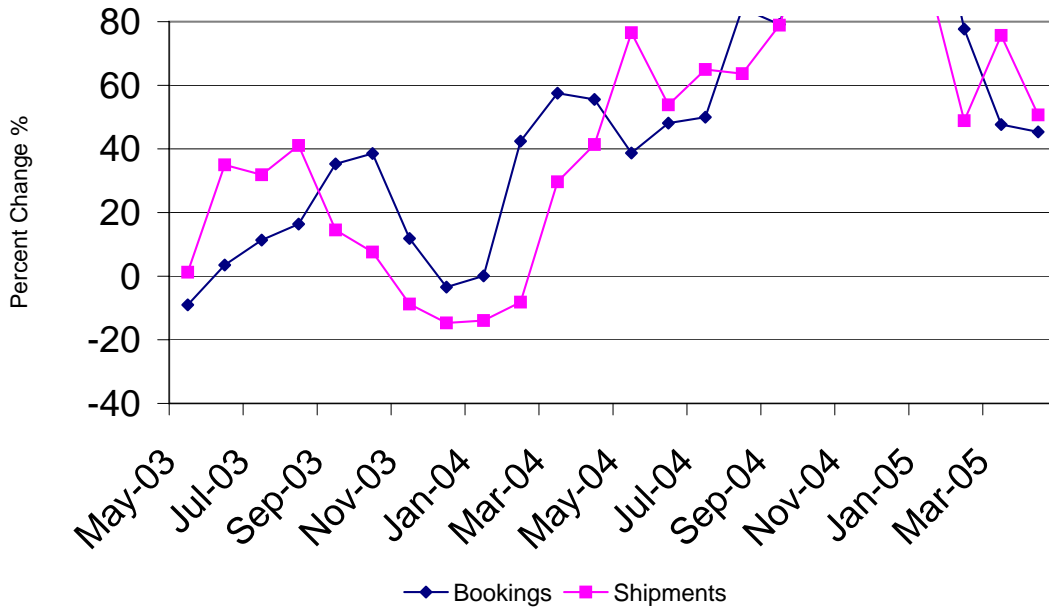
Raw Steel Shipments (million net tons)	8.8	8.5	9.2
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Carbon & Low Alloy Casting Market Trends



SFSA Postcards

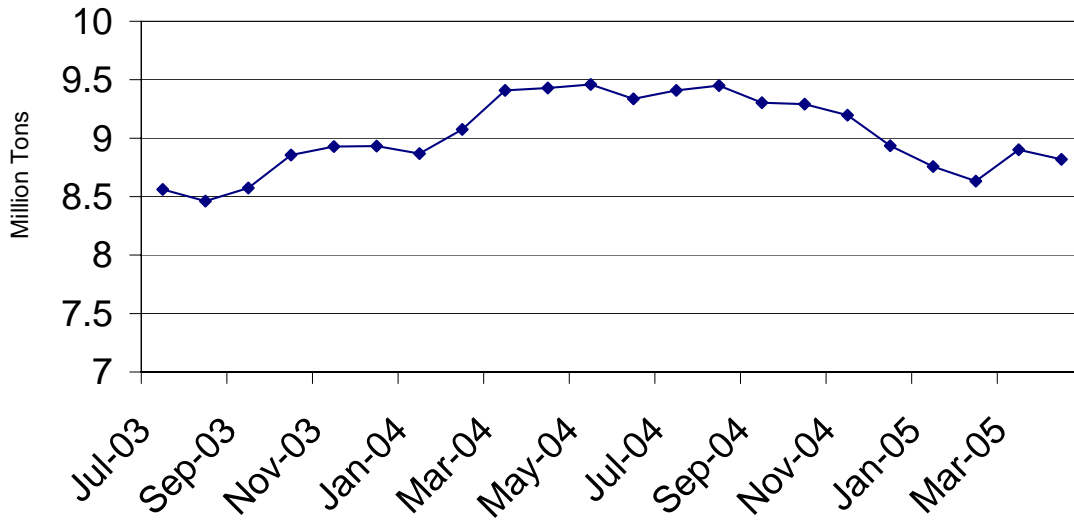
High Alloy Casting Market Trends



SFSA Postcards

Raw Steel Shipments

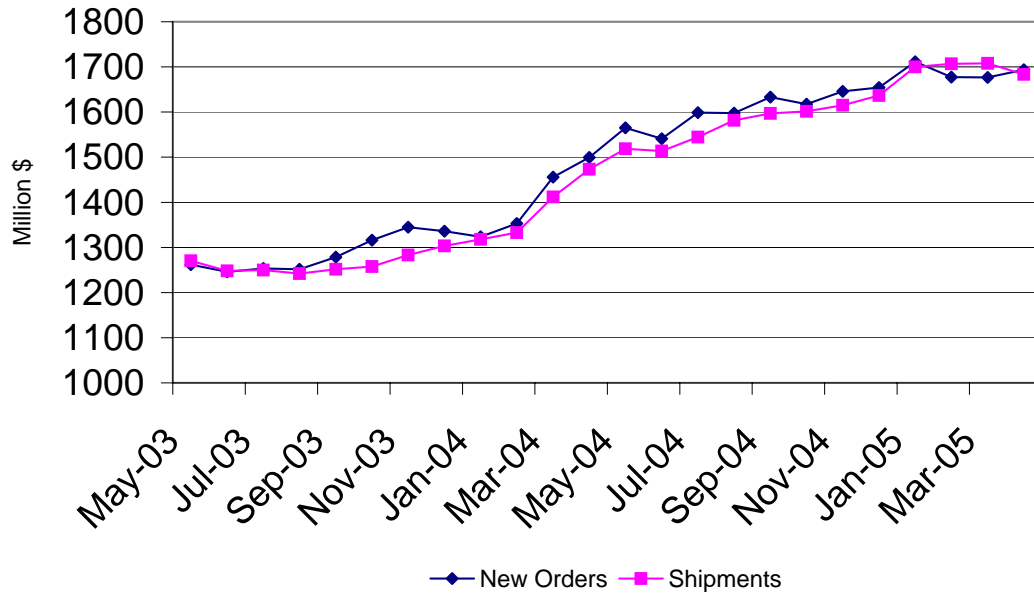
3 month average



AISI Data

Iron and Steel Castings

3 month average

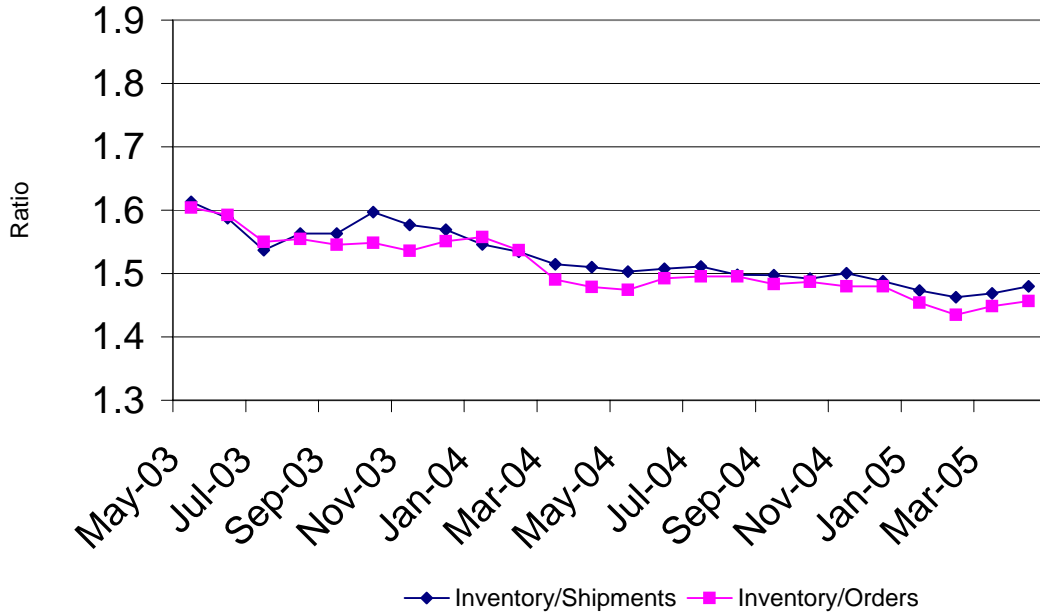


◆ New Orders ■ Shipments

SFSA

Nondefense Capital Goods less Aircraft

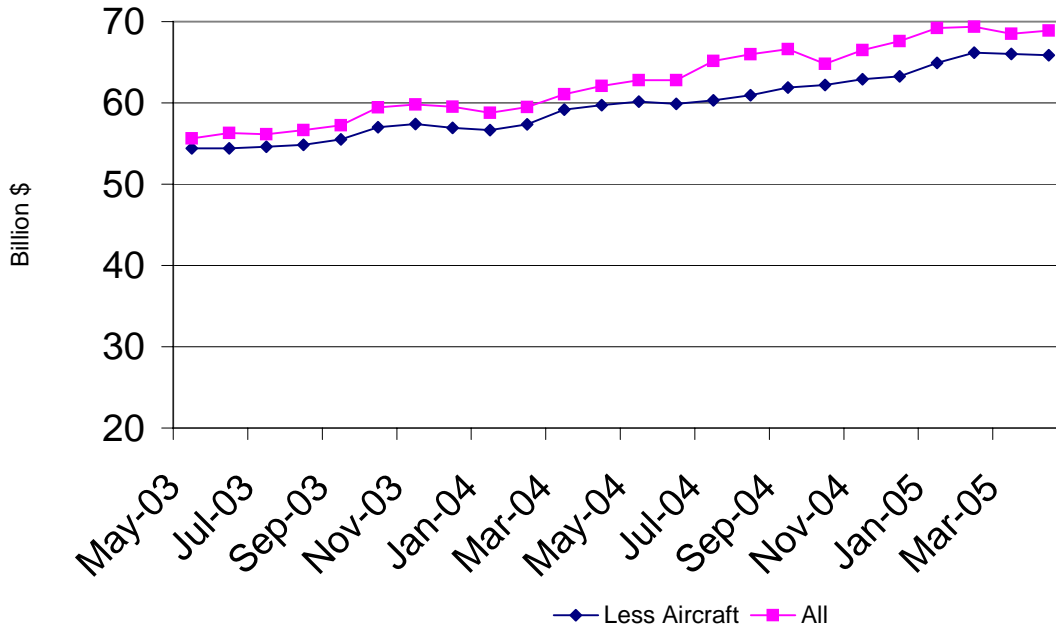
3 month average



Department of Commerce

Nondefense Capital Goods New Orders

3 month average



Department of Commerce

HOW DO YOU STACK UP TO THE COMPETITION?

If you could find out how your business ranks next to other in your industry, would you do it? What if a well-respected manufacturing institute provided this confidential service at no cost to you?

There is good news for manufacturers, your organization and the Michigan Manufacturing Technology Center (MMTC) are partnering to you a chance to find out just how good your business is – at NO COST to you!

MMTC's Performance Benchmarking (PBS) reports are based on a wealth of industry-specific performance data, comparing companies on more than 80 metrics. Each report has a unique, custom-selected comparison group, which compares data collected from more than 4,500 manufacturing plants across North America.

PBS compares your company to similar companies in your industry or, if you prefer, companies in other industries who make parts on the same basis (e.g., cross-industry,

supplying automotive customers, high-volume, low-piece price, build-to-print).

For a copy of MMTC's PBS questionnaire visit our website at www.mmtc.org/pbs. Click on "Benchmarking Questionnaires & Reports", scroll down the page, and download the questionnaire that best fits your company's industry. If you feel your company is not a close fit to one of the nine PBS industry-specific questionnaires, that's no problem. Just use the Discrete Parts questionnaire, which applies to nearly any manufacturer.

Within one week, the MMTC will provide you with a customized report detailing how your company compares in key areas, such as sales growth, productivity, inventory turns, quality, and dozens of other metrics.

The data you submit is handled with the highest regard to your confidentiality and privacy. Each response is assigned a unique number and stored in a secure database accessible only to the three staff members that operate MMTC's PBS service.

Under this partnership, you can receive a PBS reports free of charge. Normally, non-Michigan plants are charged from \$495 to \$795.

Take advantage of this opportunity to find out how your company REALLY compares to the competition. MMTC's Performance Benchmarking Service will help you understand your strengths, weaknesses, and opportunities for improvement. Your management team will be able to use this qualified data to make solid decisions about your company's future.

Find Out How Your Business Stacks Up Against Others in your Industry. Some Key Areas Include:

- Waste
- Value Added per FTE
- Sales Growth
- Productivity
- Inventory Turns
- Quality
- And Many More

Call today! 888-414-6682 x 11450, or visit

<http://www.mmtc.org/pbs>