



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication
serving SFSA steel casting industry Members

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Casteel Commentary

The Casteel Commentary considers the opportunity to eliminate a significant competitive barrier to using steel castings, the divorce of machining from the casting operation. If the foundry supplies the finished machined component, they have assumed most of the quality risk and that is of value to the customer. By integrating machining and casting the foundry is capable of creating a more efficient and higher quality process. With the loss of expertise in our customer's organizations, taking the casting design and machining as a core part of the business will make us more competitive.

Spring Management Meeting

The SFSA Spring Management Meeting had good attendance and a strong program. The presentations are available here: <http://www.sfsa.org/meetings/spring12.php>.

SFSA Annual Meeting

The Board of Directors of the Steel Founders' Society of America cordially invites you to attend the 110th Annual Meeting, which will be held in Park City, UT, September 8-11, 2012. The Board of Directors looks forward to your attendance and participation in this valuable educational and networking meeting and welcomes the opportunity to share new knowledge of the steel casting industry with you. Park City is easily accessible, located just 40 minutes from Salt Lake City International Airport. <http://www.sfsa.org/meetings/annmtg12>

SFSA Awards Committee

The SFSA Awards Committee is still taking nominations for SFSA Awards. You can submit your candidates to Raymond Monroe.

Future Leaders Group

The April meeting of the Future Leaders committee enjoyed its highest attendance to date of nearly 40 individuals. Attendees learned about Clean Steel and inclusions from Raymond Monroe, shared manufacturing and technology experiences at the round table, enjoyed a presentation on the manufacturing of the Pentagon benches, and toured MetalTek's Carondelet facility. The next meeting will be held in August at Spokane Steel Foundry. This meeting will feature a one-day seminar open to all SFSA members that will cover a range of topics on steel castings, quality, defects, and specifications. For more information on the upcoming Future Leaders meeting or the one-day seminar, please contact David Poweleit at poweleit@sfsa.org.

Persons Available

A1253 is studying mechanical engineering and seeks an internship in that field. Relevant coursework and skills include machine component design, CAD, thermodynamics, heat transfer, fluid mechanics and instrumentation.

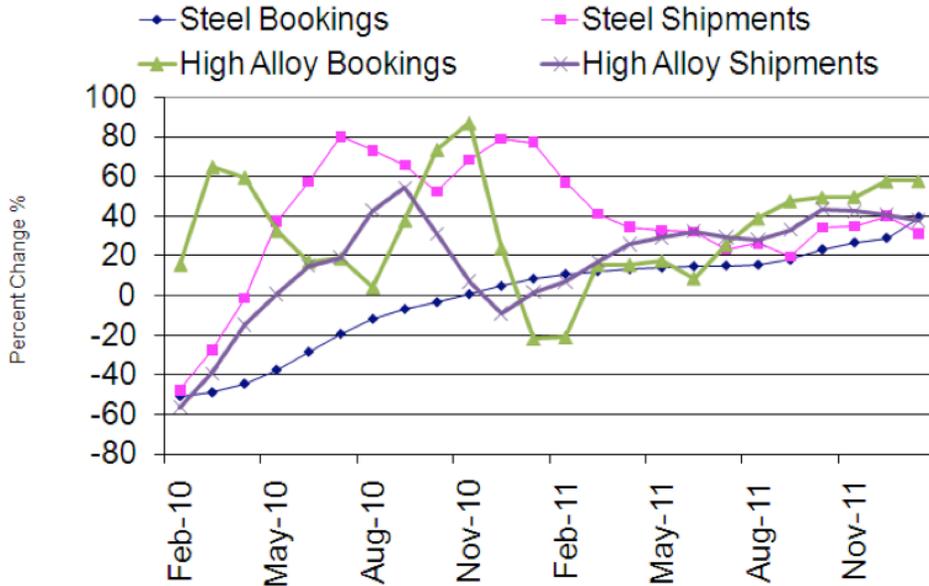
A1254 seeks a position as a metallurgical engineer in the casting industry. Holds both a BS and PhD in Metallurgical Engineering and has significant metallurgical experience including alloy development, casting, thermomechanical processing and heat treatment.

Market News

SFSA Trend Cards show continued strong markets through January. Both steel and stainless steel casting bookings show stronger than shipments suggesting continued growth. Booking have been lagging shipments indicating that demand was short delivery requirements and expedited. Bookings

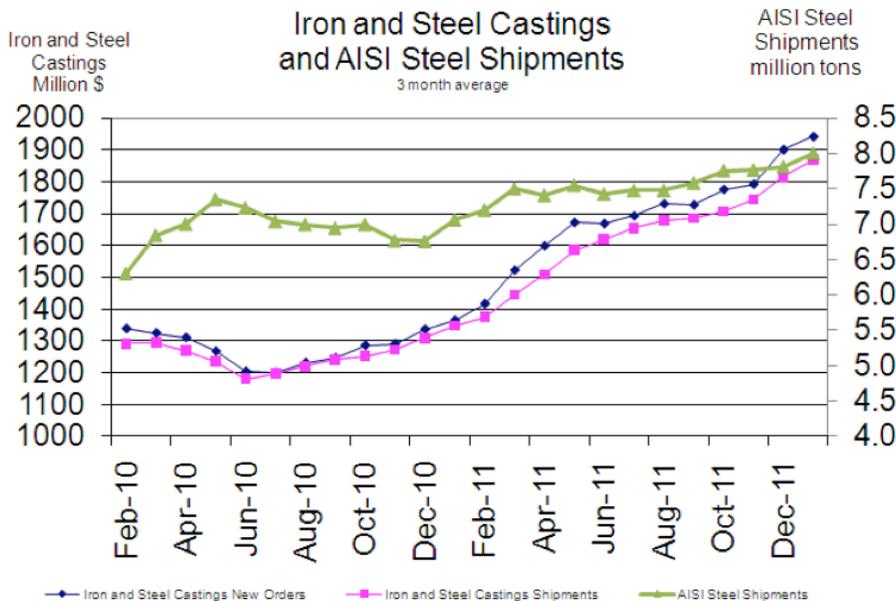
and shipments are up over 30%. Most plants are solidly booked and producing near their current capability.

The strong continued growth in a tepid economy demonstrates the key role capital investment and commodity prices play in our demand. This strong market is also seen in the report from Commerce on iron and steel castings.



Iron and steel castings new orders and shipment have exhibited a strong growth trend since mid 2010, rising from just under \$1.2 billion to over \$1.9 billion, an increase of over 50% in 18 months. Iron casting demand is more closely tied to the consumer economy and tends to lead steel casting demand. In this case however untypically, steel castings led. Steel long products like bars and plate were depressed in 2008 and recovered earlier than steel castings but not to their normal production levels. Many sectors of the steel making economy are still not at the levels experienced in 2004 to 2007.

Nondefense Capital goods



Non-defense Capital Goods New Orders-excluding Aircraft have also seen continued increases confirming that demand for steel castings should remain strong.

Backlog for steel casting and stainless castings have been relatively longer, showing that demand is up and the industry has not been able to match demand with production.

Most economists see slow growth for the coming year. Recent indicators have been slightly positive supporting the view that the recession is over and while growth is slow, we are unlikely to see any downturn for the balance of the year. This was certainly the view of B. Lashinsky at our SFSA Spring Management meeting.

I remain skeptical that we will see slow and steady growth. The looming fiscal crisis with the expiration of the lower tax rates, need to raise the debt ceiling and sequestration or spending cuts will slow the economy. The instability in Europe and potential for further trouble in the Middle East may trigger an adjustment in the economy. The stock market valuations that are predicated in sustained record profits suggest that a major adjustment and economic slowdown is possible even probable. I think we need to anticipate a slowdown with some reduction in commodity prices and slowing demand for steel castings in the second half of the year. However, even a significant slowdown should not have a major impact on our industry given the global demand for capital goods and commodities.

Casteel Commentary

We have considered before the lack of skilled workers and the possibility of establishing an apprenticeship program for our industry. Another compelling problem that we face is the erosion of subject matter expertise in industry. This is a systemic problem that is a challenge and an opportunity.

When we as an economy overinvested in capital infrastructure in the late 1970s, we faced a systemic oversupply of capacity including in the steel casting industry. Our customers, especially OEMs, decided that they could reduce their costs and staff and rely on their supply base to provide the up to date technology needed to be globally competitive. Throughout the economy, staffs of knowledgeable experts retired without replacement as designers and producers using steel castings lost expertise.

At the same time, the supply base had over capacity and could only remain profitable through maintaining the lowest possible cost. As our customers became expert at squeezing their suppliers (us) for lower costs, we responded by minimizing our staff. We retained just enough technical subject matter experts to maintain our current production levels. As our industry went through a series of market cycles, experts were retired or left the industry.

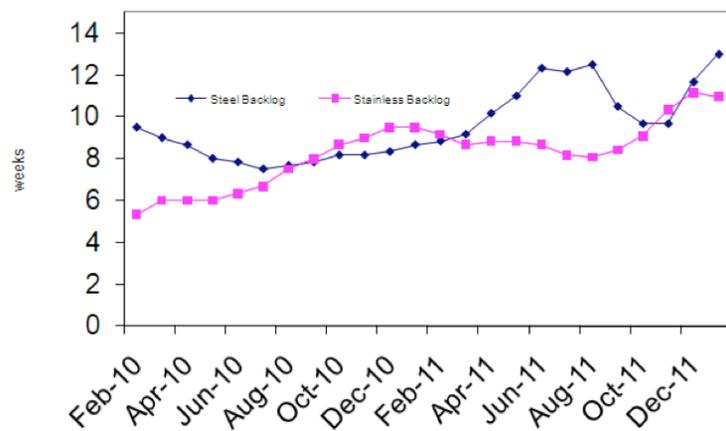
The result is that we are short as suppliers of subject matter experts and our customers are in worse shape. We could see this vividly in the mid 2000s when alloy prices spiked. In the past the technical staffs of our customers would confer with our staff to substitute alloy formulations to reduce cost. There was very little of that activity this time. In fact as you dig into the situation, customer specs and alloys are legacy decisions and the customer is unable to modernize or modify the practices because no one left knows why they are what they are.

Some of the modern tools, like 6 sigma, are an attempt to find a process or system that obviates the need to actually know the technical subject. The tools are extremely useful and capable in managing production but require subject matter expertise to be efficient and avoid unintended consequences.

This is an opportunity for our industry. Developing the subject matter expertise that is state of the technology will allow us to develop products that lock our customers in. Without their own capacity to make nuanced and complex technical assessments, they are hostage to a supplier that has demonstrated success. They become reliant on our capability.

To exploit this opportunity however, we need a plan of succession and a staffing philosophy that nurtures and supports knowledgeable subject matter experts in our organization.

Casting Backlog



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

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

Shipments	37.7	34.9	40.9	49.2
Bookings	16.7	26.7	26.2	30.7
Backlog (wks)	10.5	9.7	12.0	9.0

High Alloy

Shipments	26.6	42.3	23.7	48.3
Bookings	21.3	49.7	50.9	56.3
Backlog (wks)	9.1	10.3	12.0	10.0

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

Shipments	1,595.7	1,744.3	1,797	1,744
New Orders	1,652.9	1,792.7	1,838	1,868
Inventories	1,969.8	2,075.0	2,093	2,085

Nondefense Capital Goods (billion \$)

Shipments	68.4	70.7	69.7	71.3
New Orders	72.0	75.9	79.5	72.7
Inventories	156.5	168.3	169.5	168.1

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

Shipments	64.0	65.8	65.2	65.7
New Orders	66.3	67.7	66.8	67.8
Inventories	110.5	115.0	115.5	115.0
Inventory/Orders		1.70	1.73	1.70
Inventory/Shipments		1.75	1.77	1.75
Orders/Shipments		1.03	1.03	1.03

American Iron and Steel Institute

Raw Steel Shipments (million net tons)	7.5	7.8	7.4	7.9
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