SFSA CASTEEL REPORTER

a monthly publication
serving SFSA steel casting industry Members

Steel Founders' Society of America

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September — 2004

Casteel Commentary Highlights:

The Casteel Commentary talks about how our industry could move to a market driven allocation of capability through a schedule or lead time related pricing to maximize value for the industry and customers.

SFSA Annual Meeting

Not only is the Annual Meeting a great business information resource for SFSA members, with presentations on business topics such as the economy, export financing, industry capacity, and opportunities for R&D tax credits, but it is also a great forum for SFSA members to meet with others in the industry and discuss current business conditions.

Information about the meeting is available online here:
http://www.sfsa.org/sfsa/annmtg/2004

T&O Conference

This year's Technical & Operating Conference will again be held at the Hotel Inter-Continental located on Michigan Avenue in downtown Chicago.

A solid program of practical papers relating to most operating areas of your plant and operating issues, including raw materials, melting, molding, lean and rapid response manufacturing, pouring, quality, new markets, environmental and safety, will be presented by your peers in the industry. The T&O Conference is also the place to hear about SFSA research and to interact with the researchers.

A Members' T&O Workshop will be held on Wednesday afternoon, November 3, prior to the Conference and will tentatively feature the Pattern Allowance prediction software developed at Pennsylvania State University.

Details, and registration information will be posted on the SFSA website.

North Central Division Meeting

North Central Division is planning a tour of Eagle Alloy in Muskegon, MI on October 22, 2004. Details will follow when available.

Southern Division Meeting

A meeting will be held on September 30, 2004 in Houston, TX, with a number of presentations including construction of a large urethane pattern, construction of low cost manipulator, cleaning room operation improvement, an update on SFSA activities including MACT, the impact of SI (metric) certification requirements, and a demonstration of the Penn State Pattern Advisor software showing how you can more accurately predict pattern dimensions. The meeting will also feature a roundtable discussion where participants will discuss their worst casting technical or production problem. All SFSA members are welcome to attend any Divisional meeting.

Persons Available

A1204 has over 20 years experience working in the foundry industry and has been responsible for multi-million dollar sales growth in a wide variety of market segments. Experience in management and labor relations. BS in Industrial Engineering, MBA in Business.

A1205 has an BS in Engineering Physics and seeks an entry level position in an industrial or manufacturing setting to build engineering experience.

A1207 is a metallurgist with 25 years experience in foundry and steel mill operations from plant metallurgist to technical director. Plant and general management experience. Experienced in electric arc furnace design, control and operation. Also experienced in ferroalloy and refractory manufacture and use. Immediate availability.

Market News

SFSA Trend Cards show strong demand for those able to survive the past 5 years. Bookings and shipments exceed 20% up in all categories. Demand for iron and steel castings and steel shipments both showed a slight drop in June. Nondefense capital goods showed continued growth with orders exceeding shipments and both increasing over the prior month. Business remains strong in most segments and appears likely to remain strong through the balance of the year.

Casteel Commentary

Strong demand has been challenging our industry. The liquidation of capacity in the past 5 years has limited our industry's capability to meet the normal requirements of the economy. After twenty years of stable and declining prices, the erosion of capital investment in producing materials has led to a shortfall of supply. This is true not only of steel castings but broadly true of oil, steel, alloys, scrap, lumber, cement, etc. This shortage of supply has created active demand and higher pricing for most materials. These high prices have placed a premium on production. The profits in many segments depend on production because of short supply. Since steel castings are needed for production, steel casting availability limits these industry's profits.

The movement of pricing in short supply situations is a form of information exchange. The most valuable uses of the things when they are in short supply are communicated through a willingness to bear a higher price. The higher margins signal a need for new capacity to be added or existing capacity to be expanded. They allow the supplier to identify the strongest demand for their production.

One nonmarket practice of our industry is the use of lead time rather than price to allocate our limited capability. Instead of allowing the market to bid up prices, we schedule at a level price future production. This hurts everyone. The willing buyer is unable to acquire the casting he needs for profitable operation. The less valuable user gets neither expanded capability nor market prices. The foundry does not reap the profits needed for reinvestment.

It seems that our industry should embrace a market driven allocation of capability through a schedule or lead time related pricing. If we scheduled only the next 20 weeks with openings as soon as next week at a stiff premium and at 20 weeks as the standard price with openings in the schedule in between we could sell delivery as well as supply. The buyer who had a critical need could buy his expedited production and the regular customer would have no added burden.

In any case, scheduling long lead times reduces our competitiveness and limits our returns making our future less certain. In a production driven short supply market, we will not only not get the market premium, but we also force our best customers to create a timely and effective alternate to our product.

Raymond Monroe

STEEL FOUNDERS' SOCIETY OF AMERICA
MEETINGS CALENDAR

2004

September	
11/15	Annual Meeting - Ritz Carlton Hotel, Amelia Island, FL
30/Oct 1	Southern Division Meeting & Plant Tour, Houston, TX
October	
22	North Central Division Meeting, Muskegon, MI
November	
3/6	National T&O Conference - Hotel Inter-Continental, Chicago, IL
9	Specifications Committee, Washington, DC

STEEL FOUNDERS' SOCIETY OF AMERICA
BUSINESS REPORT

SFSA Trend Cards (%-12 mos. Ago)	3 Mo Avg	Jun	May
Carbon & Low Alloy			
Shipments	21.4	44.3	6.0
Bookings	38.7	58.0	19.0
High Alloy			
Shipments	53.8	37.9	108.0
Bookings	48.1	100.2	19.5

Department of Commerce
Census Data

Iron & Steel Foundries (million $)

Shipments	1,514	1,546	1,484
New Orders	1,541	1,527	1,606
Inventories	1,715	1,748	1,734

Nondefense Capital Goods (billion $)

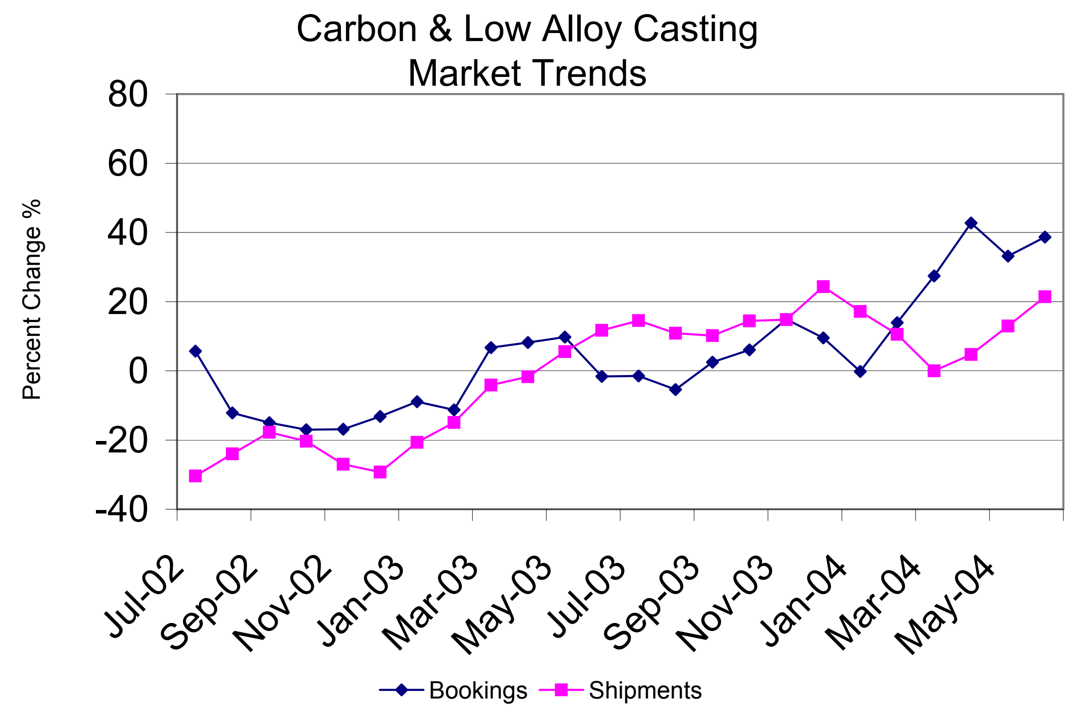
Shipments	61.8	62.1	61.2
New Orders	62.8	63.6	62.0
Inventories	106.3	107.3	106.1

Nondefense Capital Goods
less Aircraft (billion $)

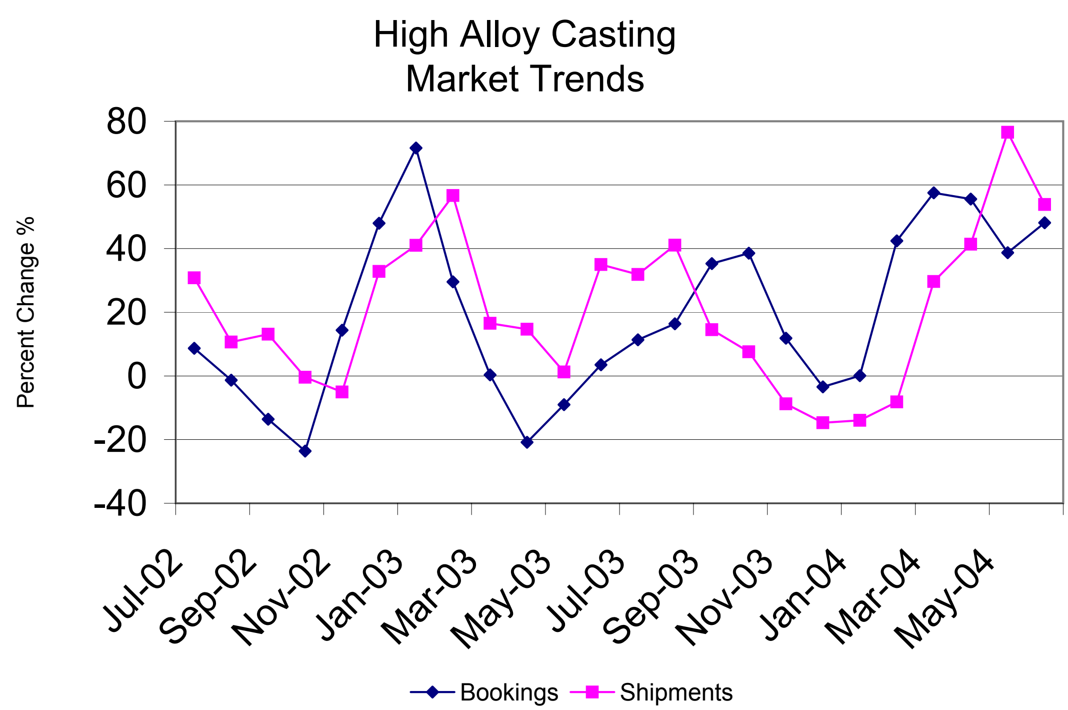
Shipments	59.3	59.7	58.5
New Orders	59.9	60.6	59.0
Inventories	89.4	90.5	89.1
Inventory/Orders	1.49	1.49	1.51
Inventory/Shipments	1.51	1.52	1.52
Orders/Shipments	1.01	1.01	1.01

American Iron and Steel Institute

Raw Steel Shipments (million net tons)	9.3	9.7	9.2



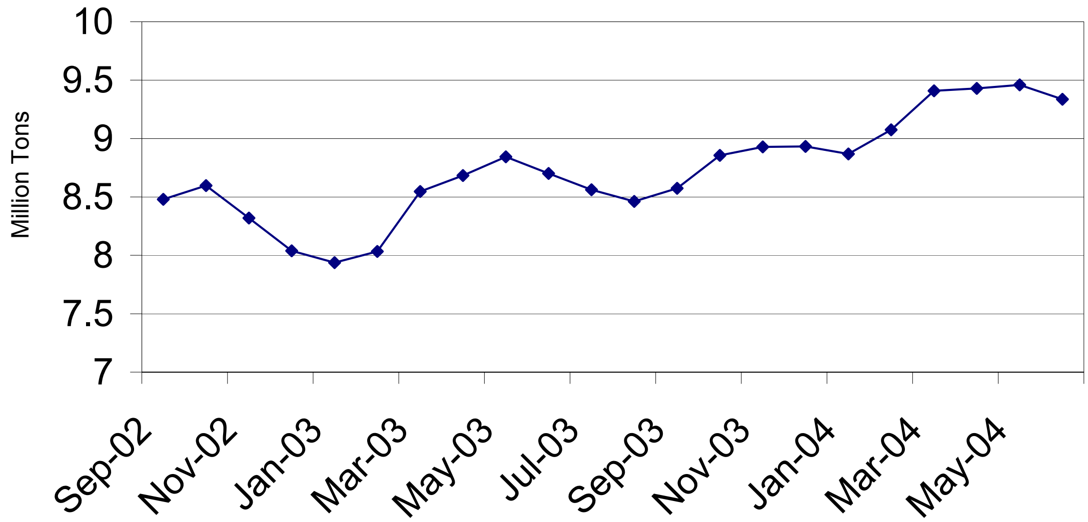
SFSA Postcards



SFSA Postcards

Raw Steel Shipments

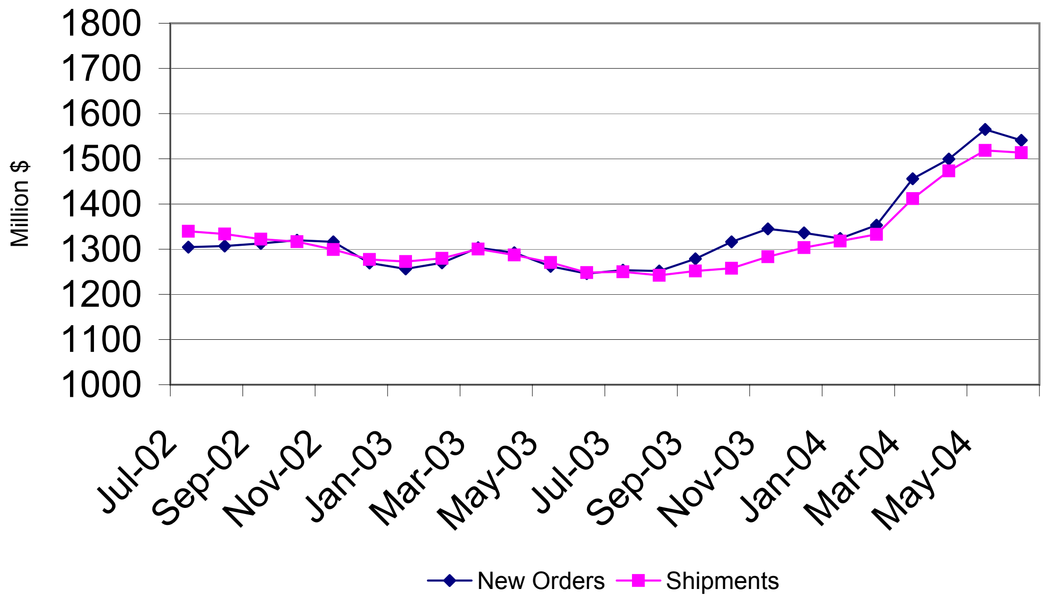
3 month average



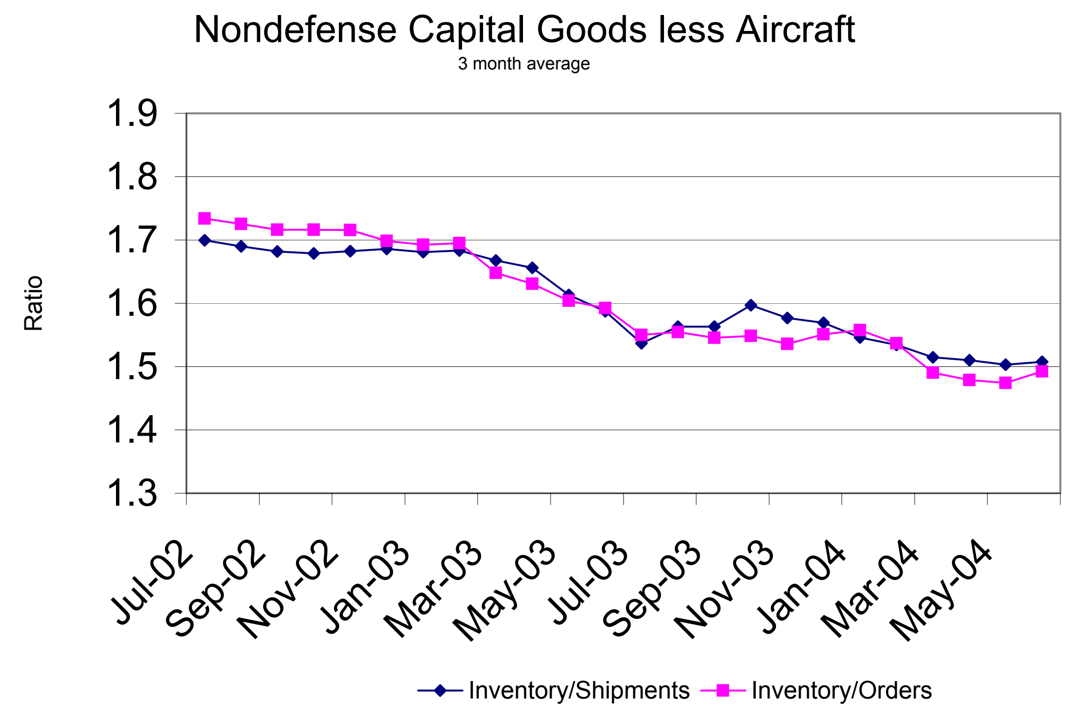
AISI Data

Iron and Steel Castings

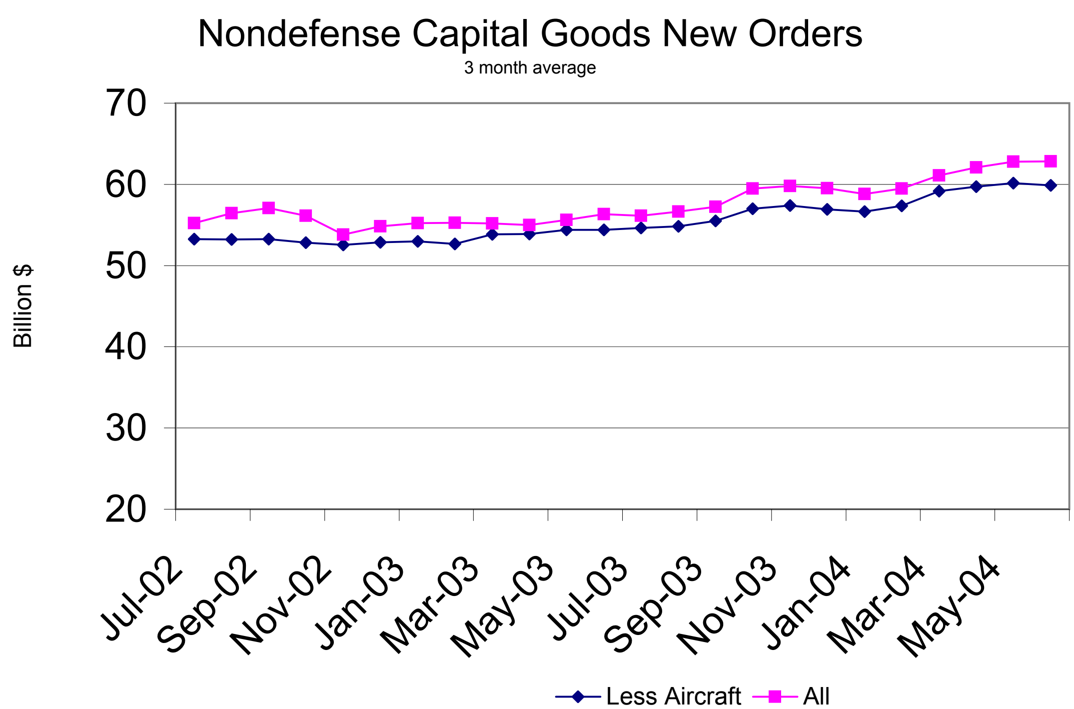
3 month average



SFSA



Department of Commerce



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The New & Improved Easier Steps Towards Completing the NAFTA Certificate of Origin Analysis
by Louisa Elder
Director, State of Illinois International Trade & NAFTA Opportunity Centers
at
NORBIC

Goods may only qualify for NAFTA if *manufactured* in North America and meet the following criteria. Generally there are two ways in which to qualify your goods for the NAFTA tariff reductions when shipping to Canada and Mexico. The two primary ways are with a **tariff shift**, meaning a transition from one harmonized number to another harmonized number in the manufacturing process, or a **regional value content (rvc)**, whereby you have to calculate a number according to specific rules. Both steps require significant analysis. As the producer or exporter you do not select which qualification, but instead find the appropriate rule for your product based on the harmonized trade number. *The following information is written to make this process understandable and as simple as possible.*

1) Determine harmonized number (HS) for export; this is like a social security number for product. The Harmonized Tariff Schedule consists of 99 chapters and it is essential that you correctly identify the HS number, for if this is wrong, the entire NAFTA analysis is incorrect. Start with the index of the U. S. Department of Commerce Schedule B Classification of Exports which is available from the U.S. government printing office at http://www.gpoaccess.gov/index.html and can also be purchased from the Census Bureau. Or you may wish to purchase the Harmonized Tariff Classification of the U.S. at the same government website. It consists of two volumes and is a more detailed 99 chapters then the Schedule B Classification of Exports. (Also found online at: www.usitc.gov, under Publications.) *Read through the section notes and chapter notes for your product to make sure that you are not excluded in that chapter.* You want the best description of your product in order to proceed with NAFTA. The Census Bureau has an on-line site at: www.census.gov/foreign-trade/www/; find the menu bar and select the Schedule B Search Engine from the tool bar and GO. On the next page select the most recent year, then Search and type in a key word or two. If you cannot find corresponding words to the product or do not have Internet access, call the U.S. Census Bureau at 301-763-3047 (fax: 301-457-1158). Nicely insist on speaking with a specialist within your industry to assist you. Take names and write the time and dates you spoke with anyone to show due diligence if later found incorrect. Remember, only the first 6 digits of the HS number are necessary for most NAFTA Certificates of Origin, with some exceptions. If you are having difficulty finding the exact HS number, you might also call Canada or US Customs and ask for an industry specialist in your field. Whether for export or import the first six digits are the same for both. After the first six digits the last two or four digits vary from country to country. The following information is essential in understanding the analysis of NAFTA origination:

a) The first two digits of your HS number refer to the chapter in which your product is classified: 84
b) The first four digits are referred to as the heading: 8454
c) The first six digits are referred to as the subheading: 8454.90 (in reference to tariff shift example ahead)

When classifying product it is useful to have an engineer, or someone who knows your product assist in its classification. Most outside service providers or distributors are not as versed in your product's make-up and essential characteristics as someone from the manufacturing plant. The correct HS classification is essential in the entire NAFTA process, as are the notes for the section of the Harmonized Tariff Schedule and the chapter notes for your product which are instrumental in identifying your product's correct HS code. Again, they can be found online at: www.usitc.gov, under Publications. Canada Customs offers HS training (since the first six digits are the same around the world, training in Canada works with identifying your HS number). Check for a schedule at www.cbsa-asfc.gc.ca/. Select English; select SME Information Center and then scroll to Information Seminars.

2) Once you have determined the Schedule B number, you may wish to find the tariff rates for the countries to which you are exporting. If the MFN rate is the same as the NAFTA rate, you do not need a NAFTA Certificate of Origin, *unless* what you produce or sell is a component of another manufacturer's good or will be re-exported to another NAFTA country. If your product is for final sale to an end-user and not for re-export or a component of further manufacturing you could type the HS number on the commercial invoice stating, "Due to the MFN rate of zero, no NAFTA Certificate of Origin is necessary." If however, the NAFTA rate is below the MFN rate or a NAFTA Certificate is requested for the customer's further manufacturing, you will want to try and submit a NAFTA Certificate of Origin so that the NAFTA-territory customer can benefit from the lower tariff rate. To find your product's tariff rate for Canada and Mexico call the U.S. Department of Commerce Trade Information Center at 1-800-USA-Trade (872-8723) or e-mail a trade specialist at tic@ita.doc.gov stating your HS number and that you are seeking the MFN vs NAFTA duty rates for Canada or Mexico. For tariff information you need to know the HS number and a description of the product. The TIC also has a web site at http://tradeinfo.doc.gov. Canada specific questions can be directed to Canada Customs at 204-983-3500 or 506-636-5064, or to their website at www.cbsa-asfc.gc.ca/. Select English; select SME Information Center; select Customs Tariff; find the most recent year; find your chapter and scroll to your HS number. For Mexican HS tariff and NOM information go to: www.economia.gob.mx/; Select Inteligencia Comercial; Select Estadisticas. Click onto SIAVI, then click on Informacion proporcianada por el SIAVI. Click on Listado de fracciones and scroll on the left side of the screen from within the HS classification numbers. This site gives you the MFN (NMF) rate and the NAFTA(TLCAN) duty rate for the US (EE.UU.) to Mexico and Canada to Mexico. It may also tell you if there is a required Mexican standard or NOM for your product.

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The following is how you determine if your product (based on the correct harmonized number classification) does or does not qualify for NAFTA, either through a tariff number shift or through a regional value content calculation. You do not choose the manner in which a product may or may not qualify. It is predetermined in the NAFTA rules of origin, based on the correct HS classification.

3) Assuming the NAFTA Certificate is necessary, you must first find the rules for your product. Analysis of these rules will determine whether or not your product is NAFTA qualifying. If you meet the NAFTA Rule of Origin and can prove it, you may use the NAFTA Certificate of Origin. Otherwise, you can simply ship your good under MFN duty rate with no NAFTA Certificate of Origin. Trying to qualify for NAFTA is accomplished through the U.S. Customs General Note 12/ 401 Annex NAFTA Rule of Origin and can be found on-line at: www.cbp.gov/, select export. Then scroll to NAFTA in the blue, "quick links" vertical column, select 401 Annex then select General Note 12(t) (year 2004 or latest year if available) and select by your HS chapter (the first two numbers of your harmonized code) beginning on page 40. Or go to the International Trade Commission at www.usitc.gov and select publications, then harmonized tariff schedule. Select 2004 HTSA Supplement 1 [PDF] (or most recent year) by chapter and then the line that says General Notes, general rules of interpretation, general statistical notes and scroll to page 42 where the actual, updates Rules of Origin are located. (This is the Harmonized Tariff Classification of the U.S. that also contains the NAFTA rules of origin.) This is organized by chapter headings (the first two digits of your product's HS code tell you which chapter.) It is important that you find the rule that encompasses your product's harmonized number up to the first 6 digits. *You must comply with the rule for your product in order to qualify for NAFTA.* If you cannot comply with these rules your product is not NAFTA qualifying and you cannot use a NAFTA Certificate of Origin for that particular product even if made in the NAFTA territory. Your customer will get no NAFTA tariff reduction. Just because you manufacture in a NAFTA territory does not mean your product is originating. There may be too many parts sourced from abroad even though you may purchase those parts from a US (or NAFTA-territory) company. If this is the case, you either need a NAFTA Certificate of Origin from each supplier, assuming they can supply one correctly, or, if Regional Value Content (RVC) calculation is required, you can calculate the worse case scenario and see if you qualify.

Now let's find the NAFTA rule of origin for parts for the die casting industry per the instructions above. We have determined the HS# is 8454.90.

Tariff Shift: An example of a tariff shift is if the rule states, "A change to subheading 8454.90 from any other heading." What does this really mean? Refer back to Step One and review the ABC's of the HS numbers. The harmonized number of your product for this example is subheading 8454.90, which are: parts of casting machines (die casting and other) or parts of ingot molds. If you looked at a bill of material (BOM) for the parts you produce, you would want to determine if the raw material going into the parts you produce come from a Schedule B Harmonized heading other than 8454. (You have determine the HS classification for the BOM parts.) This is because the General Note 12 rule (#125 within chapter 84) states that your product passes within NAFTA if the raw materials come from a heading other than 8454 and through your manufacturing process transform into subheading (six digit level) 8454.90….parts of die casting machines or ingot molds. If the raw material for your die cast part is an aluminum alloy it might be classified as 7601.20. This means the chapter of the aluminum is 76; the heading is 7601 and the subheading is 7601.20. Since there is a change to the die cast part of subheading 8454.90 from the aluminum heading of 7601, your die cast part qualifies for the NAFTA tariff reductions under preference criteria B because raw material heading 7601 is entirely different than 8454.90; it shifts from 7601 into 8454.90 during the manufacturing process in a NAFTA country. You cannot import the part from a non-NAFTA country and try to qualify it for NAFTA! However, if any one part of the raw material were classified within the subheading 8454.90 (as many do), it would only pass for NAFTA if you have proof from the supplier or manufacturer, of that non-shifting component, that it is NAFTA qualifying, i.e. a NAFTA Certificate of Origin for the input that shares the same HS number. Which means you must know it is made in Canada, Mexico or the U.S. Under the above scenario the Preference Criteria (field 7) is B, because it meets its NAFTA rule of origin. Field 9 is NO, because we did not use the net cost method, rather we performed a tariff shift analysis.

Regional Value Content: Now let's say we make an ultraviolet lamp, not for the automotive industry, that is classified as 8539.49. The NAFTA rule of origin found [per step three's instructions] is:

123.

(A) A change to subheadings 8539.10 through 8539.49 from any other heading; or *(Part A is a tariff shift)*

(B) A change to subheadings 8539.10 through 8539.49 from subheading 8539.90,
whether or not there is a change from any other heading, provided there is a regional value content of not less than:
(1) 60 percent where the transaction value method is used, or
(2) 50 percent where the net cost method is used.

Let's assume that there will be parts classified as parts under 8539.90 that will not undergo the tariff shift option of part A of the rule and that may even be non-originating from overseas, so we cannot qualify them as individual NAFTA components. The next option within the same rule, an **RVC (transaction value calculation)** NAFTA rule part B 1, states that your finished product must have 60% or more of NAFTA originating material using the transaction value method. This method includes the cost of labor and overhead by using the transaction value price (the price you sell the product for). The lamp is being sold to a Mexican or Canadian company for US$279. As the manufacturer your bill of material for that particular lamp shows that the cost of *total materials* is $128.88 regardless of where the parts are from, just materials, not labor, overhead and profit as those are included in the selling price.

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The formula for the transaction method is:

$$\frac{\text{Transaction value (TV)} - \text{Value of non-originating material (VNM)**}}{\text{TV}} \quad X \quad 100$$

Or $\frac{279-128.88}{279}$ x 100 = 53.8% (which does not exceed 60% so does not qualify for NAFTA)

***Remember, we are being conservative (and saving time) by assuming that all materials are non-originating.*

This does not meet the required 60% so we must now look at individual components on the bill of material and ask for NAFTA Certificates of Origin for the most expensive components we know are made in a NAFTA country and we think qualify as NAFTA originating on their own.

RVC ((transaction value calculation) second attempt: Since the lamp doesn't qualify using the short-cut method of treating the complete bill of material as non-originating, we have to break down the originating from the non-originating materials.

$$\frac{\text{Transaction value (TV)} - \text{Value of non-originating material (VNM)*}}{\text{TV}} \quad X \quad 100$$

According to calculations procured from the purchasing department and existing NAFTA Certificate of Origin documents starting with the highest value materials we *know and verified* are made in a NAFTA country and qualify as individual components for NAFTA on their own, we have determined that $43.32 worth of materials are NAFTA qualifying. Subtracting that from the total cost of materials gives us a value of $85.56 as non-originating material (128.88 – 43.32). Non-originating means that we cannot prove that the individual components qualify for NAFTA. They may come from Korea or Germany and not qualify because of this, or simply because the individual component does not meet its own rule of origin. Try the calculation with the new information of non-originating material:

$\frac{279 - 85.56}{279}$ x 100 = 69.33% which exceeds the 60% required RVC and qualifies under NAFTA

Now we can complete the NAFTA Certificate of Origin by reading the instructions, or by using the NAFTA Opportunity Center's PlainTalk booklet ($15). Under the above scenario the Preference Criteria (field 7) is B, because it meets its NAFTA rule of origin. Field 9 is NO, because we did not use the net cost method, rather we used the transaction value method of calculation. If you charge various selling prices to various buyers, take the lowest selling price and complete the calculation. If your product passes the 60% requirement with the lowest selling price, all will qualify. Otherwise, your product may qualify with some buyers and not with others. Certain industries, such as footwear, automotive, related-party transactions, etc…require the Net Cost method of calculation only and not the transaction value method. This is usually indicated with a subheading rule and the underscoring of the rule in that chapter, ex. Chapter 85, rule 123 indicates that if for the automotive industry, the Net Cost method of calculation is required. However, it is suggested that one asks for guidance with this method in determining NAFTA qualification.

Remember, the NAFTA Certificate of Origin is a legal and binding document and the signatory bears responsibility. While it is not a requirement to supply a NAFTA Certificate of Origin, a business that actually qualifies under NAFTA but refuses to perform the aforementioned steps and subsequently refuses to supply a certificate, jeopardizes its relationship with its domestic customer who is exporting, or may jeopardize its relationship with its NAFTA customer in Mexico or Canada. (Updated 3/31/04*)

An older version of this article published in the U.S. Commercial Library at www.stat-usa.gov as an International Marketing Insight report.

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