

The background of the top half of the page is a complex, blue-tinted collage of financial data. It includes various line charts, bar graphs, and tables of numbers. Some of the visible text in the background includes "Foreign Large Blend", "Foreign Large Growth", "Foreign Large Value", "Foreign Small/Mid Growth", "Intermediate-Term Bond", and "Value (inflation)".

MONTHLY MARKET REPORT

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MARKET INTELLIGENCE POWERED BY
RYERSON

May 2019

Market View

What’s the current pulse on manufacturing? According to the Institute for Supply Management (ISM), economic activity in the sector expanded over the past month, with the April PMI (Purchasing Manager's Index) registering at 52.8 percent. The overall economy grew for the 120th consecutive month, according to ISM.

Now here's the real news: The manufacturing sector is indeed expanding, but purchasing manager sentiment around manufacturing growth reached its lowest level since Q4 2016.

In the report, Timothy R. Fiore, CPSM, C.P.M., Chair of the ISM Manufacturing Business Survey Committee, notes export orders contracted for the first time since February 2016 and the PMI trade elements are in contraction territory. While the April PMI does reflect continued business strength (a reading above 50 indicates growth), the number is 2.5 percentage points lower than the prior month and has been inching down since November 2018 (59.3 percent).

However, it is important to note that when painting a broader picture of the economy, PMI is a just single data point. In fact, three of the five economic indicators that we track on a monthly basis in this report are trending in a positive direction. Durable goods orders, U.S. auto sales, and crude oil all experienced growth month-over-month. Furthermore, durable goods orders and U.S. auto sales experienced growth year-over-year.

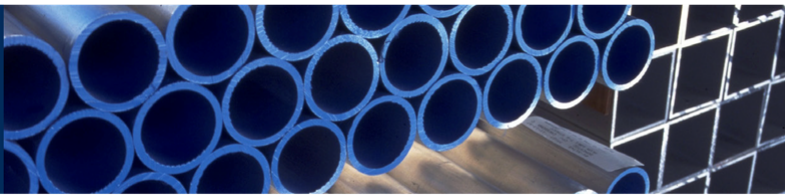
The manufacturing sector is expanding, but purchasing manager sentiment around manufacturing growth reached its lowest level since Q4 2016, according to ISM.

How will it all ultimately play out over the long term? In this month's report we look into some recent pricing trends and news that could impact capacity and surcharges, among others. Taking it all into consideration could help you distinguish the headlines from the real story going forward.

Macro Indicators

	Latest Period	Prior Period	MoM Change	Prior Year	YoY Change
U.S. GDP	1.25	1.71	↓	4.07	↓
Durable Goods Orders	258,524	251,757	↑	252,760	↑
ISM Manufacturing Index	52.8	55.3	↓	58.7	↓
Crude Oil	63.91	60.14	↑	68.57	↓
U.S. Auto Sales	17.5	16.6	↑	17.4	↑

- Atlanta Fed gross domestic product Now is a running estimate of real GDP growth based on available data for the current measured quarter. This model provides a "nowcast" of the official estimate prior to its release by estimating GDP growth using a methodology similar to the one used by the U.S. Bureau of Economic Analysis.(Source: Atlanta Fed)
- Durable goods orders, measured in billions of USD, reflects new orders placed with domestic manufacturers for delivery of factory hard goods in the near term or future. (Source: U.S. Census Bureau)
- The ISM Manufacturing Index is based on surveys of more than 300 manufacturing firms, monitoring employment, production, inventories, new orders, and supplier deliveries. A data point above 50 typically reflects growth. (Source: The Institute for Supply Management)
- Crude oil, measured in USD per barrel of oil, is a raw input into metals production. (Source: Bloomberg)
- U.S. auto sales, measured in millions of vehicles sold, represents a major consumer of metal and is an important indicator of the strength of the U.S. economy. (Source: Bloomberg)



From Sanctioned to Supplier

It’s been a little more than a year since the U.S. Dept. of Commerce imposed sanctions on Rusal, one of the largest alumina and aluminum suppliers. Upon announcement in April 2018, LME aluminum ingot prices rose by 13 percent, increasing the cost of aluminum products, before falling throughout the year as the risk of primary aluminum supply shortages eased.

Sanctions against Rusal were fully lifted in January. This has opened the door for Rusal to participate in new opportunities in the U.S., such as a \$200 million investment in a new aluminum rolling mill being constructed by aluminum alloy manufacturer Braid Industries.



This will be the first direct chill cast mill constructed in the U.S. in 37 years. When fully operational in 2021, the mill is expected to produce over 650 million pounds of 3xxx, 5xxx and 6xxx alloy sheet, with Rusal being the sole supplier of primary aluminum.

What does this mean for the market? As demand for aluminum sheet products increases, additional domestic mill capacity could be used to support that growth.

Aluminum Indicators

Our monthly dashboard of market indicators driving the price of aluminum.

Lead Times

- Domestic sheet: 10-18 weeks
- Domestic plate: 13-18 weeks
- Off-shore sheet/plate: 15-22 weeks
- Extrusions: 3-20 weeks (varies by press)

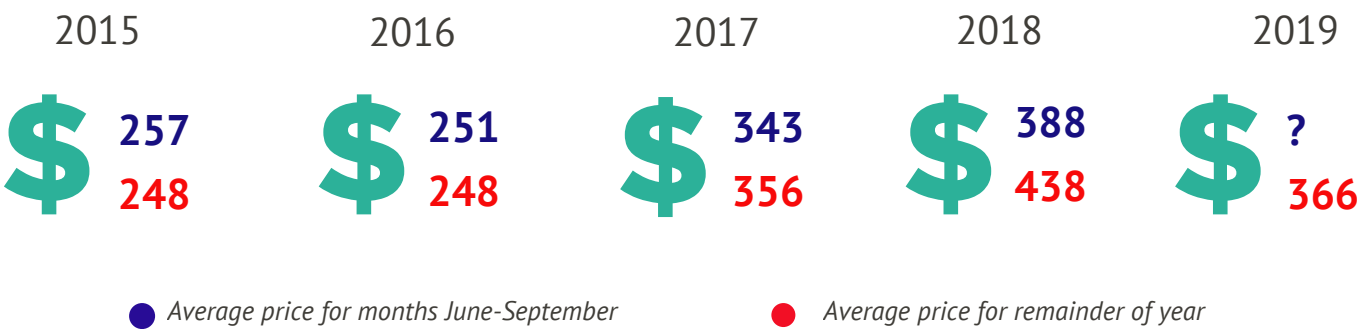
	Latest Period	Prior Period	Change	Prior Year	YoY change
LME Aluminum	0.8151	0.8673	↓	1.0229	↓
Midwest Aluminum Premium	0.1895	0.1920	↓	0.2144	↓
Midwest Aluminum Ingot	1.0046	1.0593	↓	1.2372	↓



The Season of Scrap?

Does the kick-off of summer mean that scrap is officially in-season? Many factors influence the price of busheling scrap, one being the different seasons of the year. Some experts believe summer is typically the time of year when prices for busheling scrap can soften due to easier transport of metal from scrap yards to mills.

However, the past four years have painted somewhat uneven support to that theory, with summer prices being higher two of the past four years.



Thus far in 2019, the price of busheling scrap has averaged \$366, but what's in store for the summer? Conventional wisdom would suggest that as the price of busheling scrap goes down, so too does the price of carbon—although that is not always the case.

Want another way to look at scrap? Calculate your scrap and see if you can limit your cost with a custom cut-to-size sheet. Ryerson offers a scrap calculator: <https://www.ryerson.com/resource/sheetscrapcalculator>



Carbon Indicators

Our monthly dashboard of market indicators driving the price of carbon.

Lead Times

Hot rolled: 3-5 weeks Coated: 6-8 weeks
Cold rolled: 5-6 weeks Plate: 8-10 weeks

	Latest Period	Prior Period	Change	Prior Year	YoY change
Busheling Scrap	324	367	↓	380	↓
Iron Ore	86.9	82.1	↑	63.3	↑
Capacity Utilization	81.4	83.1	↓	76.0	↑

Busheling Scrap and Iron Ore measured in dollars per metric ton.
Sources; Bloomberg, CME, American Iron and Steel Institute.

Surcharge Strategies

What's in a surcharge? These additional charges that are added to the base price per pound of an alloy typically vary by mill. However, the base price for each is established by the following:

Alloy content

+

Production Cost
(varies by size/form)

+

Yield Factor

+

Supply/demand
Fundamentals

Two surcharges track each month in this report are 304 and 316. Looking at one part of the equation, alloy content, we see that nickel is a primary alloy for both 304 and 316, which contain roughly 8% and 10%, respectively. However, nickel represents approximately 45-60% of the total cost of the stainless steel surcharge. Therefore, supply/demand fundamentals related to nickel can impact the price of each surcharge--some even in an indirect manner.

Take the use of nickel sulfate for batteries in electric vehicles (EVs) as one example. While these batteries represent a small part of the usage profile for nickel (roughly 4 percent of global demand, according to the International Nickel Study Group), as demand for EVs goes up so too does demand for nickel.

In 2017, global sales of new EVs passed a million units, according to McKinsey's Electric Vehicle Index. Under the current growth trajectory, McKinsey believes EV producers could nearly quadruple that mark by 2020, producing 4.5 million units.

While a projected influx in EV production doesn't directly equate to a spike in the price of stainless steel surcharges, it does highlight another part of the surcharge equation, supply/demand fundamentals. Knowing that the price of 304 and 316 surcharges is influenced by the price of nickel, it can be good practice to stay in tune with the cost of this commodity.

Given the multiple factors that weigh into the surcharge equation, the ability to accurately project cost can be difficult. This is an example where risk-management strategies like hedging can play a role. Hedging takes a variable price and makes it fixed over a specified amount of time, either several months or several years, based on the needs of your business. For instance, a hedging contract for LME Nickel can help lock the nickel surcharge on stainless purchases.

Contact your Ryerson sales representative to discuss a hedging various products.

Stainless Steel Indicators

Our monthly dashboard of market indicators driving the price of stainless steel.

Lead Times

CR: 4-6 weeks

PMP: 4-12 weeks

CMP: 3-5 weeks

Long: 5-9 weeks

	Latest Period	Prior Period	Change	Prior Year	YoY change
LME Nickel	5.5343	5.8894	↓	6.1915	↓
304 Surcharge	0.6280	0.6371	↓	0.7134	↓
316 Surcharge	0.9187	0.9336	↓	1.0129	↓

All data measured in dollars per pound.
Sources: LME, NAS.