

# IRD - Welcome to Columbia, SC & CMC!



*Culture You Can Count On!*



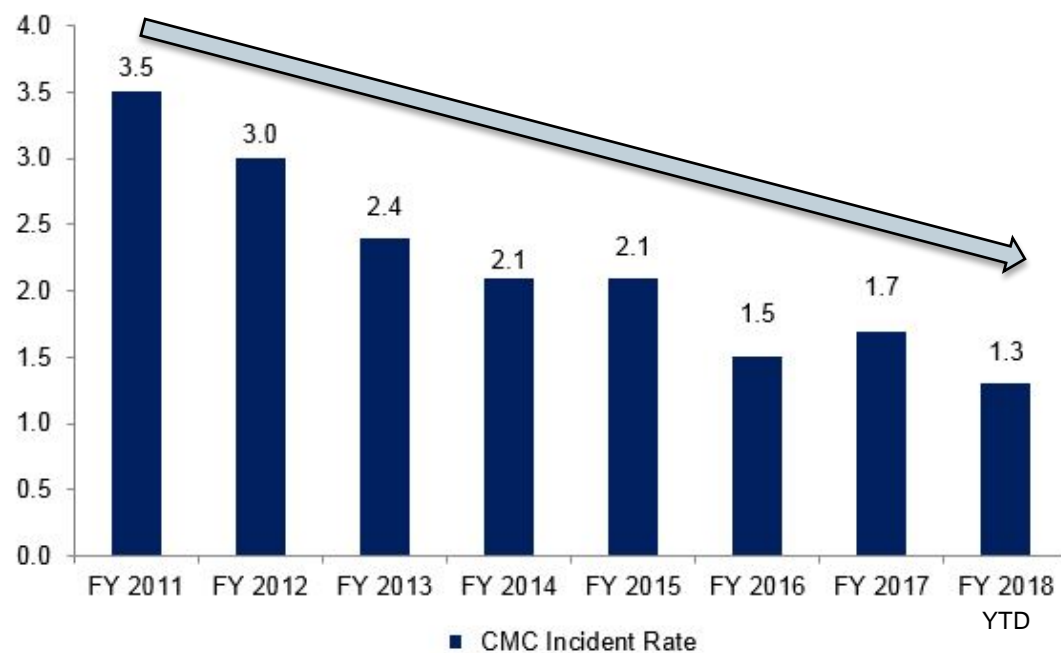
# Are you smarter than a 60 year old?

*THE ANSWERS WILL BE ON THE TIP OF YOUR TONGUE, BUT YOU JUST CAN'T QUITE REMEMBER THE ANSWER!*

- After the Lone Ranger saved the day and rode off into the sunset, the grateful citizens would ask, Who was that masked man?  
Invariably, someone would answer, I don't know, but he left this behind. What did he leave behind?\_\_\_\_\_.
- “Silver Bullet”

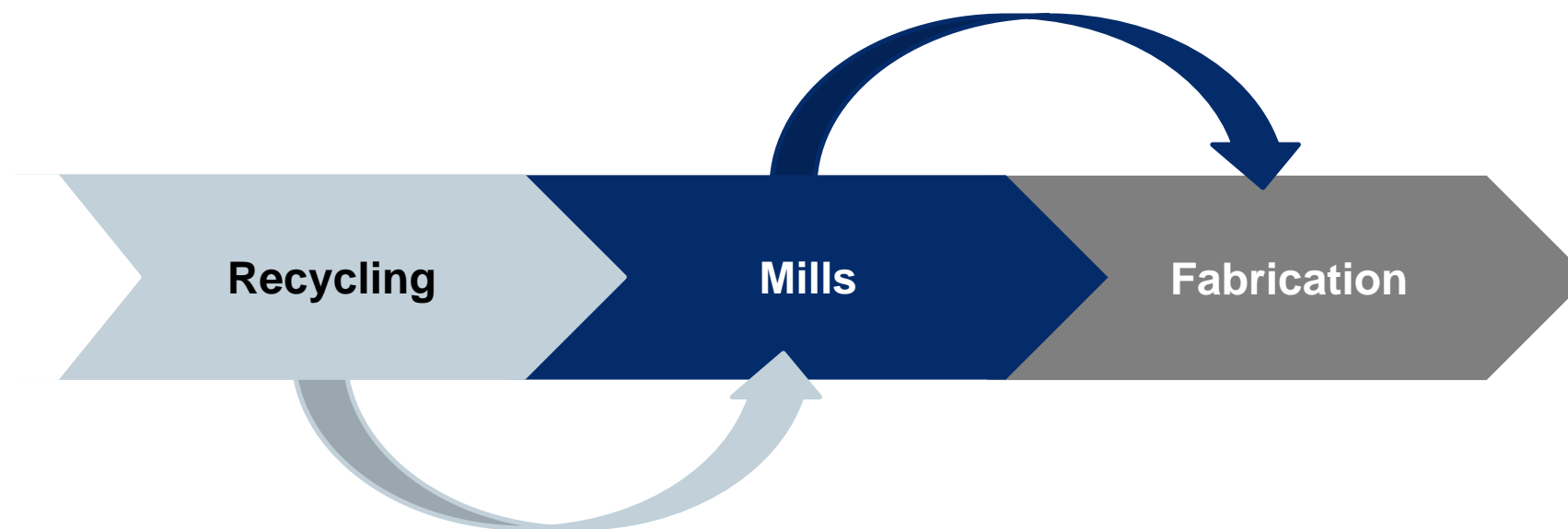
# What We Value: Safety

*CMC puts a huge emphasis on the safety of our employees. We are all committed to creating a safe and controlled working environment.*







# Our Business Model

*We are a vertically integrated business; we operate facilities throughout the steel value chain, with each link supporting the others.*



# Who We Are

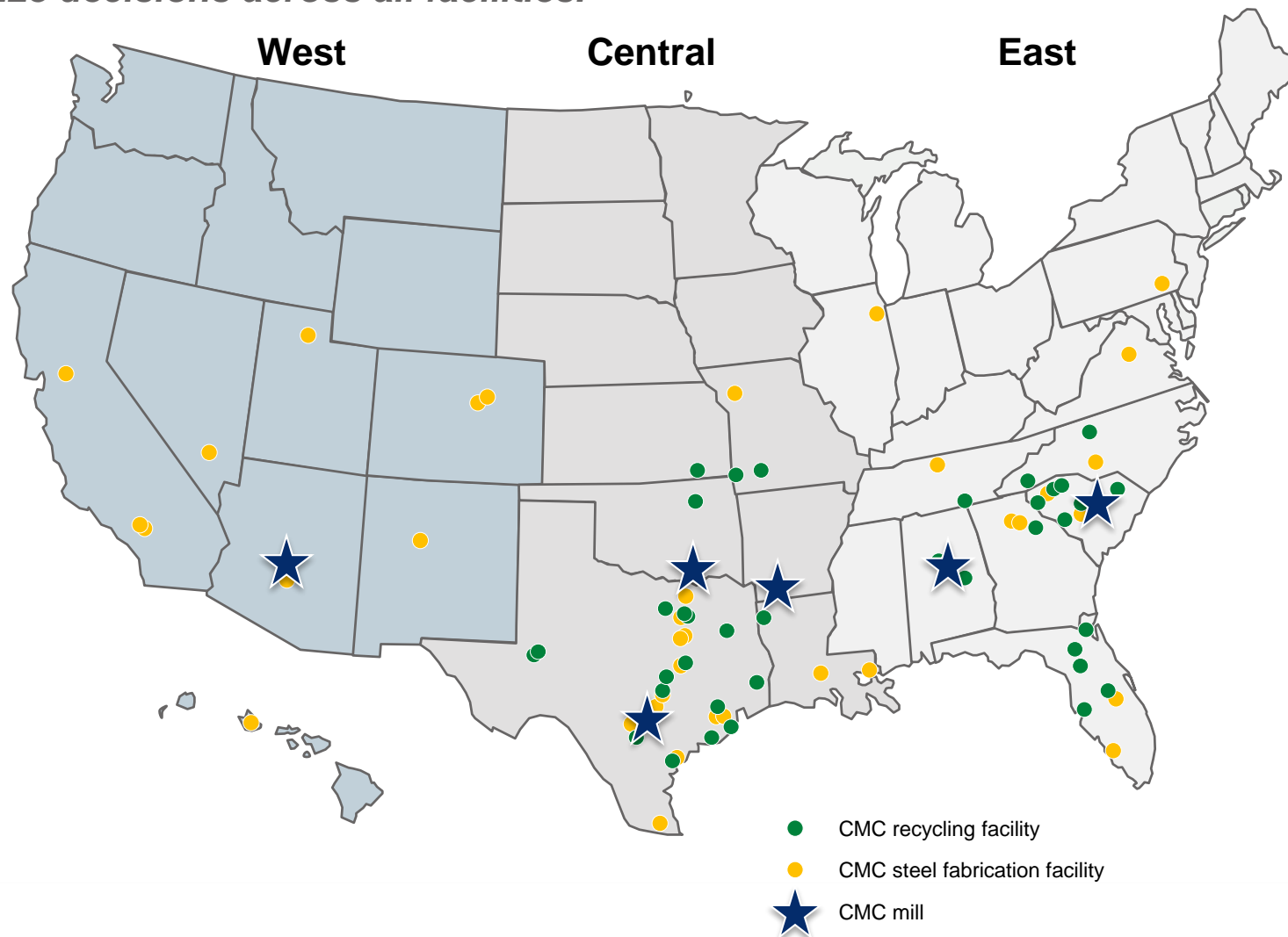
*CMC is a publicly traded steel manufacturing company. We have been in business for over 100 years, and operate facilities throughout the U.S. and Poland.*

Recycling	Mills	Fabrication	Poland
			
3.1 million tons / year	2.7 million tons / year	1.1 million tons / year	1.4 million tons / year
~1,200 employees	~1,900 employees	~3,200 employees	~1,800 employees
<ul style="list-style-type: none"> <li>• 38 facilities throughout the U.S., including 5 shredders</li> </ul>	<ul style="list-style-type: none"> <li>• 3 EAF mini mills (Alabama, South Carolina, and Texas)</li> <li>• 1 EAF micro mill (Arizona)</li> <li>• 1 EAF micro mill under construction in Oklahoma</li> <li>• 1 Rerolling mill in Arkansas</li> </ul>	<ul style="list-style-type: none"> <li>• 70+ facilities that fabricate steel throughout the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 EAF mini mill</li> <li>• 12 scrap facilities</li> <li>• 4 fabrication facilities</li> </ul>

Sources: Public filings  
Note: Figures based on FY'17

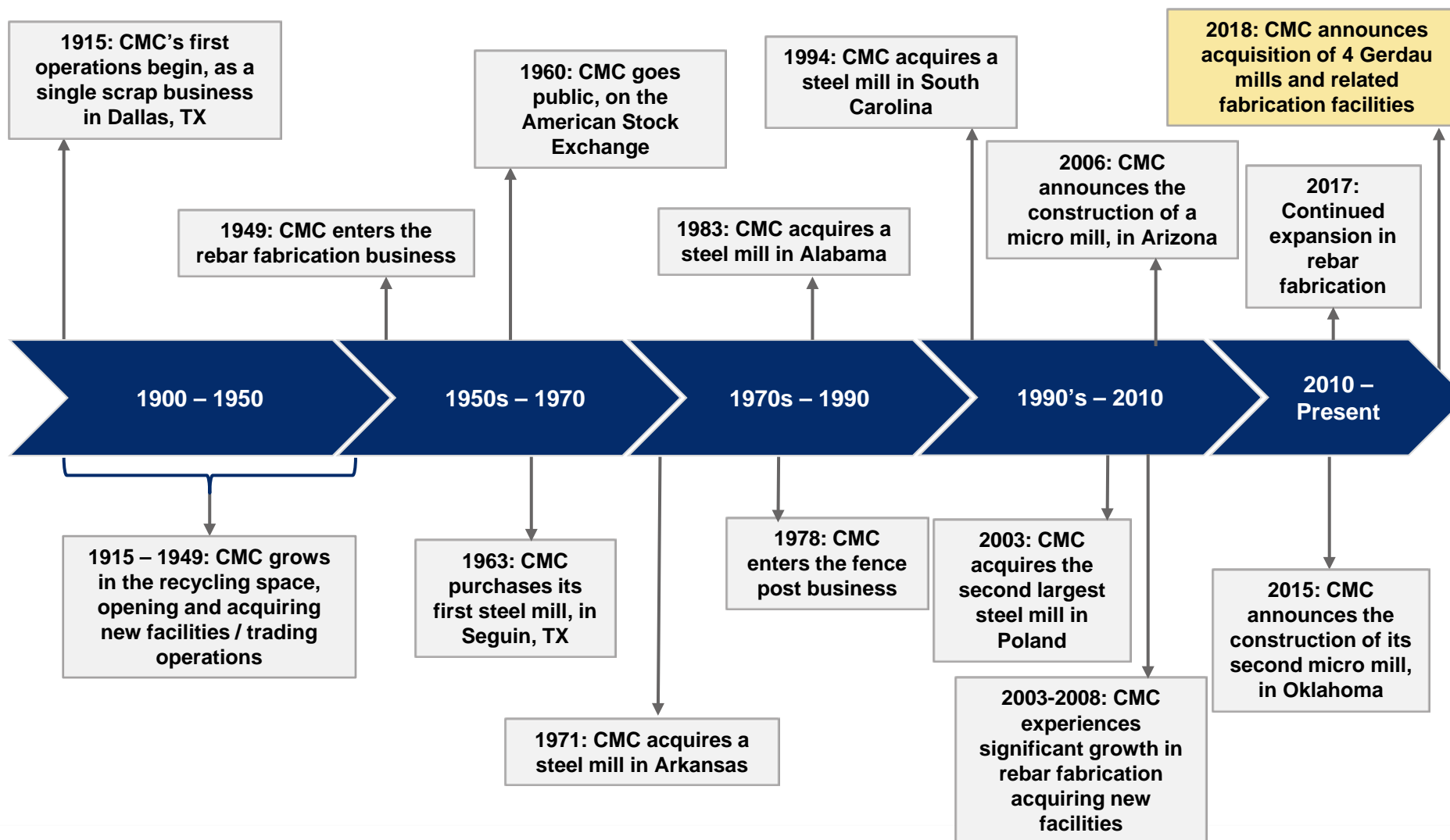
# How We're Organized

*Our operations are divided into three regions, each of which work as a unit to optimize decisions across all facilities.*





# How We Got Here



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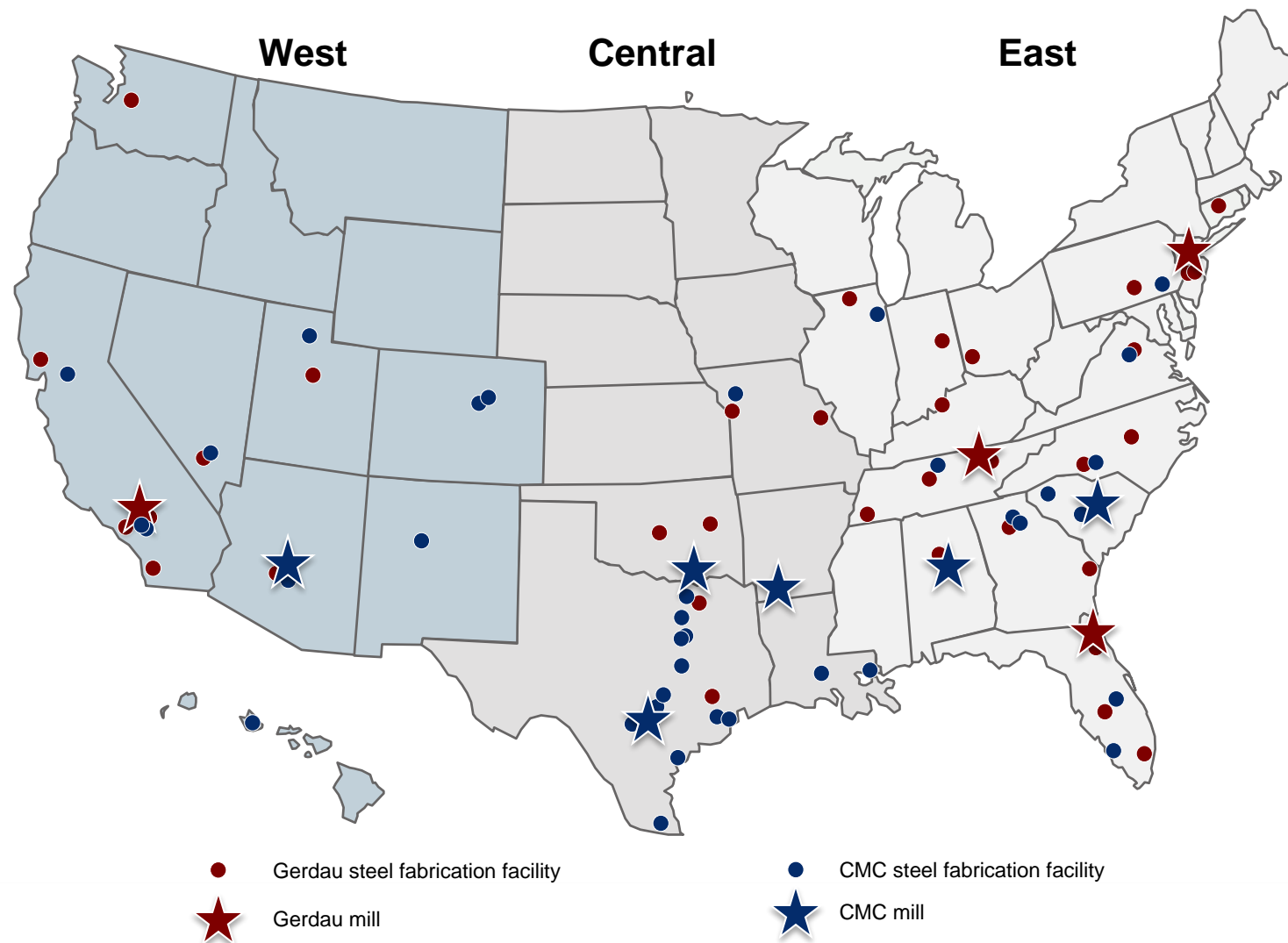
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- Some Americans who protested the Vietnam War did so by burning their \_\_\_\_\_.
- “Draft Card”
- (Bras were also burned. Not flags, as some have guessed)



# Why We Are Excited: Geographical Footprint

*The addition of Gerdau's U.S. rebar assets will help create a stronger, more competitive reinforced concrete solutions company.*



# Why We Are Excited: Stronger Together

	CMC Americas + Poland <sup>1</sup>	Gerdau Assets	Pro Forma Company
# Mills	7	4	11
FY'17 Mill Tons Shipped	4.1 million tons	1.7 million tons	5.8 million tons
Steel Fabrication Facilities	51	33	84
Employees	~8,500	~2,700	~11,200

1. Pro forma for CMC Steel Oklahoma (350k tons capacity, 1 mill, 1 steel fabrication facility)

# Interesting time to be in the steel business!

- Section 232
- Rising Cost
- New capacity/consolidation

## Section 232

- Despite the implementation of a 25% tariff on steel imports, import penetration remains high. Finished steel import market share was at about 26% in March and is estimated at 25% year to date, the American Iron and Steel Institute said on Tuesday April 24.

This trend could be a result of country exemptions to the Section 232 tariff that were announced in March, with certain countries – Argentina, Australia, Brazil, Canada, Mexico and the European Union – [receiving temporary exclusions](#) and South Korea landing a [permanent exemption](#) and instead will be subject to a quota.

Indeed, [about 65% of US steel imports](#) have been at least temporarily relieved of tariffs, Seth Rosenfeld, an equity analyst at Jefferies LLC, said last month.

# Section 232

## US IMPORTS OF STEEL MILL PRODUCTS

(in tonnes)

	March 2018 (p)	February 2018	% change	March 2017	% change
<b>Total</b>	<b>3,018,581</b>	<b>2,247,978</b>	<b>▲ 34.3</b>	<b>3,101,652</b>	<b>▼ 2.7</b>
<b>Carbon and alloy</b>	<b>2,921,247</b>	<b>2,144,127</b>	<b>▲ 36.2</b>	<b>3,011,437</b>	<b>▼ 3.0</b>
Blooms, billets and slabs	750,924	384,913	▲ 95.1	782,078	▼ 4.0
Oil country goods	275,030	216,272	▲ 27.2	238,738	▲ 15.2
Hot-dipped galvanized sheet/strip	253,793	195,666	▲ 29.7	243,248	▲ 4.3
Hot-rolled sheet	223,087	157,162	▲ 41.9	155,015	▲ 43.9
Cold-rolled sheet	196,519	136,656	▲ 43.8	188,850	▲ 4.1
Coiled plate	135,484	84,611	▲ 60.1	82,633	▲ 64.0
Line pipe	132,901	133,592	▼ 0.5	166,194	▼ 20.0
Reinforcing bar	114,240	36,298	▲ 214.7	221,727	▼ 48.5
Hot-rolled bar	87,803	97,256	▼ 9.7	96,597	▼ 9.1
<b>Stainless</b>	<b>97,334</b>	<b>103,851</b>	<b>▼ 6.3</b>	<b>90,214</b>	<b>▲ 7.9</b>

(p) - preliminary

Source: Compiled by AMM from data gathered by the U.S. Commerce Department's Enforcement and Compliance division.

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- 'The story you are about to see is true. The names have been changed to \_\_\_\_\_ \_ \_\_\_\_\_.'
- “Protect the Innocent”

# Rising Cost

- Electrodes
- Scrap
- Alloys
- Transportation



# “Synthetic Graphite”

- Graphite is another form of Carbon
- A Graphite Electrode is Synthetic Graphite
  - Made artificially from different forms of carbon (Coke, Pitch, etc)
- Not to be confused with Naturally Occurring Graphite which is typically MINED
  - Geologic forces turned it into graphite a long time ago.
  - This is what goes into refractories and other bulk applications
  - Also used in Li-Ion Batteries, but now shifting towards Synthetic..... (More on this later)

## Key points of Graphite Electrode Manufacturing

- They take a long time to make!
  - 4-6 months from raw materials to delivery at your plant
  - Long manufacturing time=long cash cycle
  - Small Diameters = lower productivity
  - Supersize (28"+) and pins take longer to make!
- There aren't very many companies that make Electrodes!
  - Only 7 major players
  - Top 3 control 60% of world UHP Capacity
- Needle Coke is required to make good electrodes for EAF's
  - Not many companies that make NC either!

## Capacity Reductions:

- In 2012 there was over 2 Million Metric Tons of global GE Capacity
  - Most were unprofitable!!
- 300K MT of capacity was shut down in Americas, EU, EMEA (SGL, Graftech, Tokai, Superior)
- 690K MT of GE capacity had been shut down since 2015 in China
  - 230k MT (21% of China Capacity) -during financial crises from 2013 -2015
  - 460k MT (42% of China Capacity)-New environmental regulations enforcement in 2017
- Almost 50% of Global GE Capacity has been eliminated in the last 5 years!
- Good rule of thumb – it takes 1 lb. of electrode for every 1 ton of steel!

## EAF Replacement in China\*\* More pressure on GE Supply\*\*

- China policies are now favoring EAF's
- Some IF's were allowed to replace their IF with an EAF..... but this is now changing
- China has a goal to shut down smaller BF's
- 150MM tons of EAF capacity will be allowed to replace other capacity-goal is to reduce BF
  - If you shut down a “small” BF (500-1000M<sup>3</sup>), you can replace it with an EAF at a factor of 1.2-1.5 x BF capacity
  - 30MM tons of EAF capacity coming online in H1 2018
  - 150MM Tons will be the total allowed (many EAF's are under engineering or construction now)
  - Will require 300,000 MT of EAF Electrodes!

# Scrap – AMM Chicago Shred

- 2013 \$400/ton
- 2014 \$325/ton
- 2015 \$170/ton
- 2016 \$275/ton
- 2017 \$295/ton
- 2018 YTD \$380/ton

# Transportation

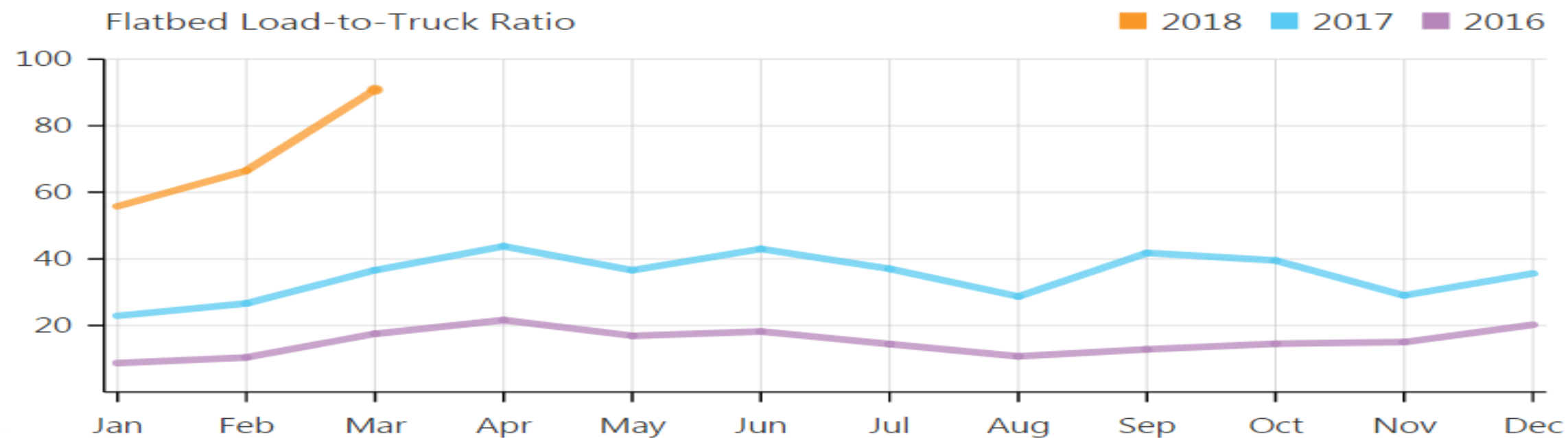
- .....through multiple freight market updates over the course of the last 6 months, trucking capacity, especially flatbed, is facing an **unprecedented capacity crunch**. There are not enough drivers to fill trucks & with unemployment at 4%, many drivers have options where they can make more money or the same & be home every night. We have been anticipating this situation for many years.
- Steel Mill said that customers they service who had their own trucks to pick up coils were now **relying more on the producer** to move the freight. This is because the customer is now having to use their internal trucks to deliver product to their customers. As a result of this change and the tight transportation market storage space is a concern. They have coils to move and no trucks to move the product.
- Recent response to our Impact Metals plant on delivery of material, "I believe **you have a rail option** or at least one that can be resurrected. If this is the case I would appreciate your consideration on that front. The trucking demand is increasing seriously, nationally, and putting a strain on pricing and availability. If there is anything you can do to expedite the rail readiness in Pell City it will benefit all. Not only do we see the demand impacting availability the pricing is starting to accelerate upwards. We have not even begun the high volume summer flatbed trucking season and we are seeing these problems. I believe we will see a capacity and price issues for the foreseeable future unlike what we have experienced in the past. Please let us know your thoughts. Thank you for your business and your help with this challenge."
- A steel Transportation Manager called their top carriers & said they are 1200 truckloads behind for the month of April; we have to move freight; **throw out a number & we will pay it.**
- Two major steel shippers in the state of Indiana are over **500 loads each behind on truckload shipments** as of Friday.

# Transportation

## Flatbed Load-to-Truck Ratio Remains Above 100:1

**8 - 14** - Flatbed load posts increased 1%, and truck posts increased 8%. That caused the load-to-truck ratio to decline to 103.3 loads per truck — slightly below the previous week's record level of 111 loads per truck. The **national average** **load rate** was unchanged.

**Market Maps** and **Hot State Maps** (above) in **DAT RateView** depict geographic trends in the load-to-truck ratio.





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- In 1971, singer Don MacLean sang a song about, 'the day the music died.' This was a tribute to \_\_\_\_\_.
- “Buddy Holly”

## New Capacity/Expansion of products/Consolidation

- CMC Steel Oklahoma (Durant) – new micro-mini mill; currently in commissioning
- Nucor – announced plans to open two micro-mini mills; \$240M in Frostproof, FL; \$250M near Kansas City, Missouri
- Big River Steel – announced this week an option on land to build new mill in Brownsville, TX. \$1.6B. 1.6M tons of capacity
- Nucor – purchase of tube mills
- CMC – purchase of assets from Gerdau

# Economic Overview

- The underlying economic picture remains encouraging, with employment gains, increasing wage growth, with the economy averaging 200k jobs in 2018, a pace that has held relatively steady for the past two years.
- U.S. construction spending remained flat month-over-month in February, but grew by 3.0% over the same period last year.
- Manufacturing expanded for the 19<sup>th</sup> consecutive month in March, as the Purchasing Managers' Index (PMI) registered 59.3%, a decrease of 1.5% points from February.
- The Architecture Billings Index (ABI) slowed a bit in February for a score of 52.0. Billings remained strong at firms located in the West and Midwest, and in the multifamily residential and institutional segments. Remember – anything over 50.0 shows positive growth.
- Rebar import licenses increased significantly for the month of March, to 157k tons. Turkey accounted for 75% of the licenses.

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- Red Skeleton's hobo character was named \_\_\_\_\_ and Red always ended his television show by saying, 'Good Night, and ' \_\_\_\_\_
- “Freddy the Freeloader” – “Good Night and God Bless”

- QUESTIONS?