

**Section 232 National Security Investigation of Imports of Steel
Office of Technology Evaluation, Bureau of Industry and Security,
U.S. Department of Commerce**

**WRITTEN SUBMISSION OF
CHINA IRON AND STEEL ASSOCIATION**

The China Iron and Steel Association (“CISA”) files this written statement pursuant to the invitation of the Bureau of Industry and Security, U.S. Department of Commerce (“BIS”) in its *Notice Request for Public Comments and Public Hearing on Section 232 National Security Investigation of Imports of Steel*, 82 Fed. Reg. 19,205 (April 26, 2017).

CISA was established in 1991 as a nation-wide industrial organization of the Chinese steel industry. CISA provides services to member companies, the iron and steel industry, the Chinese government and the Chinese society. It is dedicated to maintaining the overall interests and legal rights of the member companies, functioning as a bridge between the government and enterprises and continuously improving the competitiveness of the Chinese steel industry in domestic and overseas markets.

**I. UNITED STATES NATIONAL DEFENSE AND OTHER CRITICAL SECTORS’
DEMAND FOR STEEL CAN BE, AND ARE, READILY SATISFIED BY U.S.
DOMESTIC PRODUCTION**

CISA believes there is no evidence that steel imports threaten to impair U.S. national security. United States national defense and other critical sectors’ need for steel can be, and are, readily satisfied by U.S. domestic production. United States defense requirements are plainly not dependent on imports of foreign-made steel. Nor does imported steel fundamentally threaten the ability of domestic producers to satisfy national security requirements, or threaten the security

and welfare of industries that are critical to the minimum operations of the economy and government.

A. The U.S. National Defense and National Security Requirements for Finished Steel are Very Low

The BIS, as well as the U.S. Department of Defense, have previously determined that U.S. national defense requirements for finished steel are very low.¹ Recent statistics confirm that the steel data is similar to that considered in the 2001 section 232 investigation of imports iron ore and semi-finished steel. According to the statistics released by the American Iron and Steel Institute (“AISI”), from 2010 through 2015, on average, just 3 percent of total U.S. domestic steel shipments went to national defense and homeland security, which range from 2.5 million–2 million tons.² In the same period of time, the steel shipments dedicated to national defense and security have amounted to only 2.4–2.8 percent of total U.S. apparent steel demand from 2010 to 2015.³

In particular, in 2015 total U.S. production of steel was 87 million tons, and total apparent steel demand was 108 million tons. During the same time period, the national defense and homeland security demand of steel was 2.61 million tons, accounting for just 3 percent of U.S. total production and only 2.4 percent of U.S. apparent steel demand. Similarly, in 2014, total U.S. production and total apparent demand were a bit higher, at 98 million tons and 120 million tons respectively. Steel shipments in 2014 that went to national defense and homeland

¹ See U.S. Department of Commerce Bureau of Export Administration Report on “The Effect of Imports of Iron Ore and Semi-finished Steel on the National Security” (October 2001) at 1.

² 2011- 2016 Profile of the American Iron and Steel Institute.

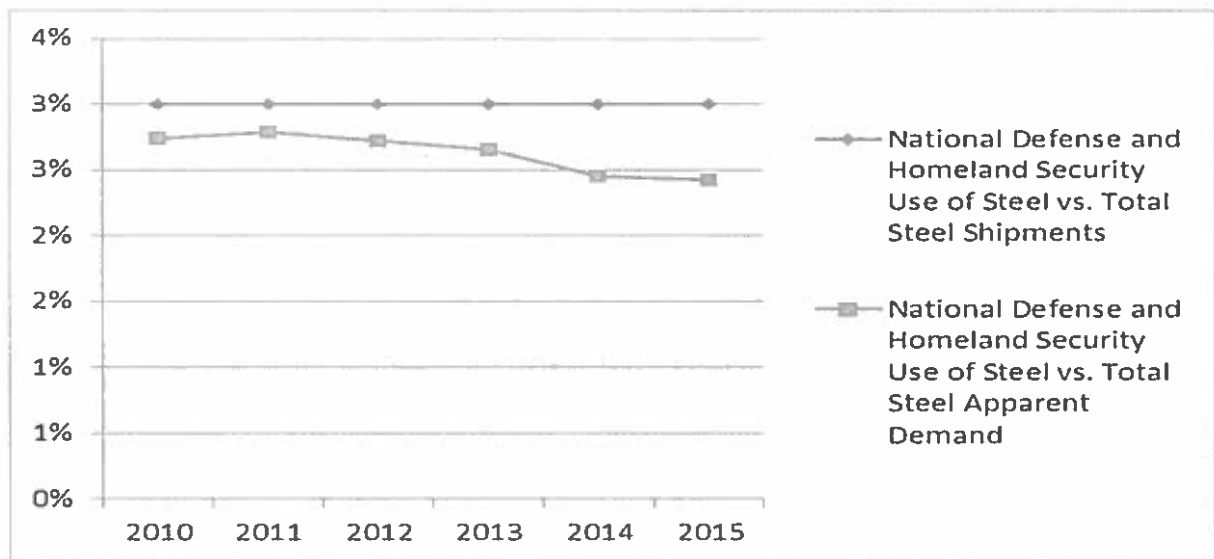
³ 2011- 2016 Profile of the American Iron and Steel Institute.

security amounted to a similar proportion of total domestic production and apparent demand, at 3.0 and 2.4 percent respectively. CISA provides the calculations of proportions of U.S. national defense and homeland security requirements of steel from 2010 through 2015. See Table 1. The information in Table 1 is explained further and confirmed by *U.S. Steel Shipments by Market Classification* (2010-2015). See Exhibit 1.

Table 1. 2010-2015 Proportions of U.S. National Defense and Homeland Security Demand of Steel (Unit: Million Ton)

Year	①Steel Shipments	②Apparent Steel Demand	③National Defense and Homeland Security Steel Demand (National Defense Demand) (③=①×④)	④Proportion of Total Steel Shipments (③/①)	⑤Proportion of Total Apparent Steel Demand (⑤=③/②)
2010	84	92	2.52	3%	2.74%
2011	91	98	2.73	3%	2.79%
2012	96	106	2.88	3%	2.72%
2013	95	107	2.85	3%	2.66%
2014	98	120	2.94	3%	2.45%
2015	87	108	2.61	3%	2.42%

Source: ①, ②, ④ are sourced from AISI annual data; ③ and ⑤ are based on calculations



B. Current and Projected U.S. National Defense and National Security Demand for Steel Can be Readily Satisfied by Domestic Production.

The vast majority of U.S. national defense and national security demand is supplied by U.S. domestic steel producers. Annual reports of U.S. domestic steel producers show that they cover the steel supply for national defense and national security applications, and the capacity and shipments of steel of these companies far exceed U.S. national defense and security requirements. The major sources include United States Steel Corporation (“U.S. Steel”), Oregon Steel Mills (part of EVRAZ North America), and ArcelorMittal USA.

In 2015, U.S. Steel was ranked as the twenty-fourth largest steel producer in the world, and was the third largest steel producer in the United States.⁴ In 2016, U.S. Steel had annual steel production capability of 22.0 million net tons (17.0 million tons in the United States and 5.0 million tons in Europe).⁵ U.S. Steel supplies customers throughout the world in the automotive,

⁴ See U.S. Steel 2016 Annual Report at 16.

⁵ See *id.*

consumer, industrial and oil country tubular goods (OCTG) markets. In particular, the “Federal and Defense Solutions” section of the U.S. Steel website states:

For over a century, United States Steel Corporation has played a critical role in supporting the federal government and the defense industrial base. From its origins at the turn of the 20th century, U.S. Steel helped to build America into a world economic and military power. From the railroads and bridges of the continental transportation system to the keels of the great battleships, aircraft carriers, and submarines to the wing spars and engine blades of fighter jets to the armor and armament of tanks, U.S. Steel’s integral contributions to the nation have been a constant over the decades.

See Exhibit 2.

ArcelorMittal USA is a part of the world’s largest multinational steel producer. In the United States alone, ArcelorMittal USA accounts for more than 20 percent of the nation’s steelmaking capacity, operating 27 facilities in 13 states.⁶ Among these production facilities, Burns Harbor, Indiana Harbor and Cleveland plants produce long process steel sheet. In 2016, these production plants produced 4.4 million tons, 4.5 million tons, and 3.2 million tons steel sheet respectively. CISA provides at **Exhibit 3** 2016 ArcelorMittal USA plant locations and production types.

According to the testimony provided by Mr. John Brett, President and CEO of ArcelorMittal USA at the May 24, 2017 public hearing on the Section 232 investigation of steel

⁶ <http://www.usa.arcelormittal.com/our-operations>.

imports, serving the needs of U.S. military has been a long-time, multi-generational priority of ArcelorMittal USA and its predecessor companies, in particular, Lukens Steel Company and Bethlehem Steel Corporation.⁷ Further, Mr. Brett's testimony confirmed that ArcelorMittal USA is currently the largest supplier of armor steel plate for the United States Armed Forces, and its armor products have applications in many defense vehicles used by the U.S. Army and Marine Corps.⁸ ArcelorMittal USA is also the major supplier for variety of United States Navy vessels.⁹

More importantly, Mr. Brett's testimony noted clearly that the steel tonnage directly used for defense applications is quite small compared to that of the broader commercial market for steel products. As large a supplier as ArcelorMittal USA is to the U.S. military, its sales into defense applications represent only 1 percent of its total production, and less than 5 percent of its steel plate production.¹⁰

Further, the current U.S. largest producer of steel plates, steel pipes and tubes, and steel rails, Oregon Steel Mills Inc., a subsidiary of EVRAZ, produced 570,000 tons of steel plate in 2015-2016. CISA provides product catalogues detailing certain steel plate specifications of Oregon Steel Mills Inc. at **Exhibit 4**.

⁷ See <http://www.usa.arcelormittal.com/news-and-media/announcements/2017/may/05-24-2017>

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

Moreover, in addition to above mentioned major steel producers, there are plenty of U.S. producers that manufacture various types of steel products that meet the national defense and national security requirements. ATI, Electralloy, a G.O. CARLSON Inc. Co., and Carpenter Technology Corporation, also produce specialty steel, e.g. specialty alloys for national defense.¹¹

In addition, the U.S. Defense Federal Acquisition Regulation Supplement (“DFARS”) specifically requires that the U.S. government’s acquisition of steel products for defense purposes to be restricted to steel that is made in the United States (and, in certain instances, Canada). For example, the DFARS requires that metals used for defense purposes, including steel or that contain steel items or components, must be melted or produced in the United States, including metals used for aircraft, missile or space systems, ships, tank or automotive items, weapon systems, and ammunition.¹² Further, defense related acquisitions require that any specialty metal procured as an end item (e.g., raw stock, including bar, billet, slabs, wire, plate, and sheet; castings; and forgings) must be melted or produced in the United States. This restriction applies to specialty metal acquired by a contractor for delivery to the Department of Defense as an end item, in addition to specialty metal acquired by Department of Defense directly from the entity that melted or produced the specialty metal.¹³

In addition, the DFARS restricts acquisition of the following types of carbon, alloy, or armor steel plate for use in a Government-owned facility or a facility under the control of (e.g.,

¹¹ See <http://electralloy.com/about/about>; see also, <https://www.atimetals.com/aboutati>; and, <https://www.carttech.com/en/about/business-segments>.

¹² See Section 225.7003-2 of Defense Federal Acquisition Regulation Supplement

¹³ *Id.*

leased by) Department of Defense, unless it is melted and rolled in the United States or Canada:¹⁴

- (1) Carbon, alloy, or armor steel plate in Federal Supply Class 9515.
- (2) Carbon, alloy, or armor steel plate described by specifications of the American Society for Testing Materials or the American Iron and Steel Institute.

Defense related acquisitions are also restricted to the following forging items, whether as end items or components, that are of domestic (United States or Canada) manufacture to the maximum extent practicable: ship propulsion shafts (excludes service and landing craft shafts), periscope tubes (all), ring forgings for bull gears (all greater than 120 inches in diameter).¹⁵

Clearly, current and projected U.S. national defense demand for steel can be readily satisfied by domestic production. Moreover, the U.S. Department of Defense has long-established domestic procurement requirements that apply to all steel used in critical national security systems. None of these systems are dependent upon foreign steel. Steel produced domestically in the United States remains in abundant supply relative to U.S. national defense requirements.

II. THE U.S. IMPORTS ITS STEEL FROM DIVERSE AND SAFE FOREIGN SUPPLIERS

The United States imports its steel from a diverse array of more than 100 countries and territories. And the vast majority of U.S. steel imports -- nearly 70 percent -- are from close U.S. allies. The top five suppliers are Canada, Brazil, South Korea, Mexico and Turkey. The portion

¹⁴ See Section 225.7011-1 of Defense Federal Acquisition Regulation Supplement.

¹⁵ See Section 225.7102-1 of Defense Federal Acquisition Regulation Supplement.

of imports from each individual country is relatively low compared to total imports. Canada, for example, the largest source of imported steel, accounts for only 17% of steel imports.

A. The United States Imports Its Steel From Diverse Sources.

Since 2001, the U.S. has imported steel and steel products from over 100 countries and territories. Specially, from 2001-2016, U.S. imports of iron and steel under Harmonized System Chapter 72 (HS-72) have been sourced from almost 100 countries, and U.S. imports of articles of iron or steel under Harmonized System Chapter 73 (HS-73) have been sourced more than 100 countries. See Table 2 and Table 3.

Table 2. 2001-2016 Number of Source Countries of U.S. HS-72 Steel Imports

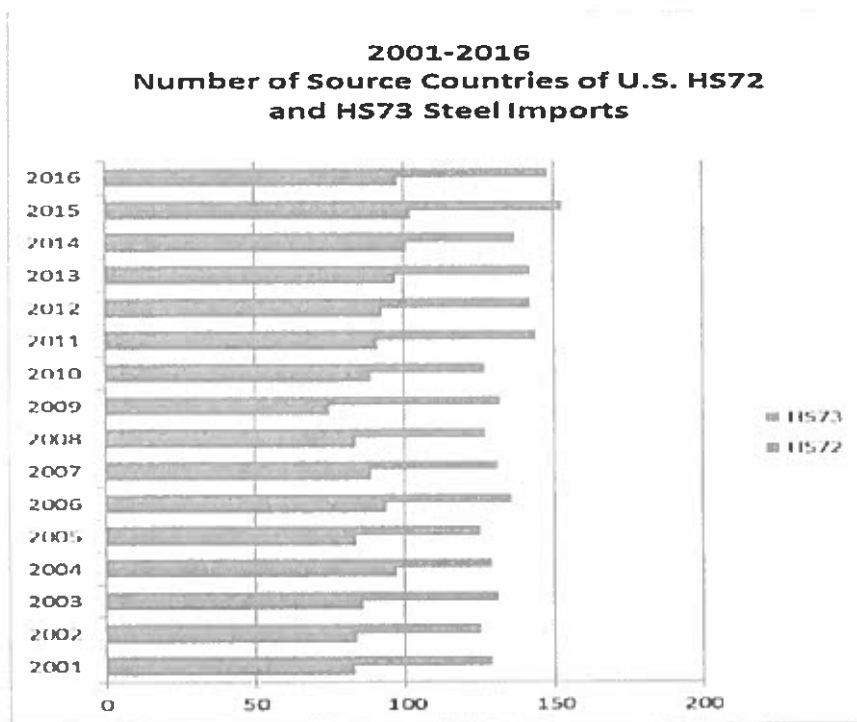
Year	2001	2002	2003	2004	2005	2006	2007	2008
No.	83	84	86	97	84	94	89	84
Year	2009	2010	2011	2012	2013	2014	2015	2016
No.	75	89	91	93	97	101	102	98

Source: data compiled by International Trade Centre

Table 3. 2001-2016 Number of Source Countries of U.S. HS- 73 Steel Products Imports

Year	2001	2002	2003	2004	2005	2006	2007	2008
No.	129	125	131	129	125	136	131	127
Year	2009	2010	2011	2012	2013	2014	2015	2016
No.	132	127	144	142	142	137	153	148

Source: data compiled by International Trade Centre

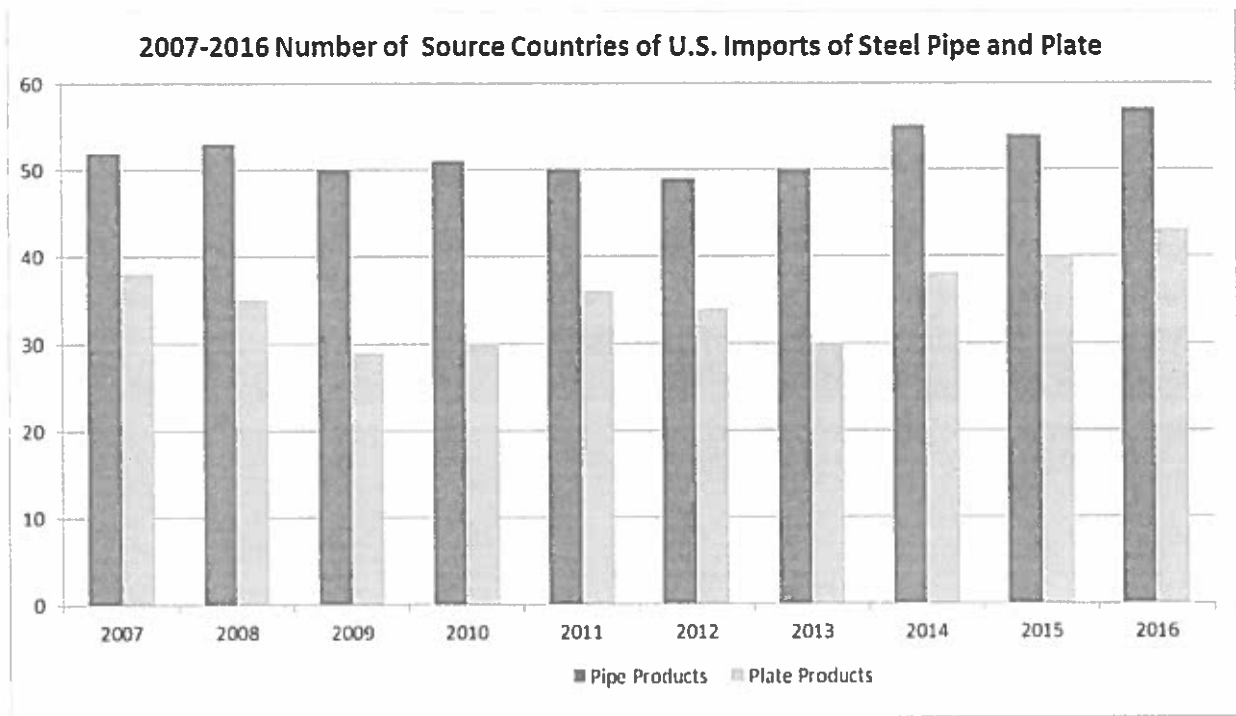


Further, imports of specific steel products also show strong diversity. For example, the number of source countries for steel pipe and tube products is always more than 50, and in 2016, there were 57 source countries for steel pipe and tube products. The number of source countries for steel plate is about 40. See Table 4.

Table 4. 2007 - 2016 Number of Source Countries of U.S. Imports of Steel Pipes and Tubes and Plate Products

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Steel Pipe Source Countries	52	53	50	51	50	49	50	55	54	57
Steel Plate Source Countries	38	35	29	30	36	34	30	38	40	43

Source: data compiled by International Trade Centre



Reports of the U.S. Department of Commerce itself confirm that U.S. steel imports are from a diverse array of sources. In 2015, the Department of Commerce reported that the United States imported steel from over 90 countries and territories. CISA provides below a map in which the U.S. Commerce Department, in its *Global Steel Monitor*, labels the 10 countries that represent top sources for U.S. imports of steel, with the U.S. receiving more than 1 million metric tons from each and together accounting for 81 percent of total U.S. steel imports in 2015.

U.S. Imports of Steel Mill Products - 2015

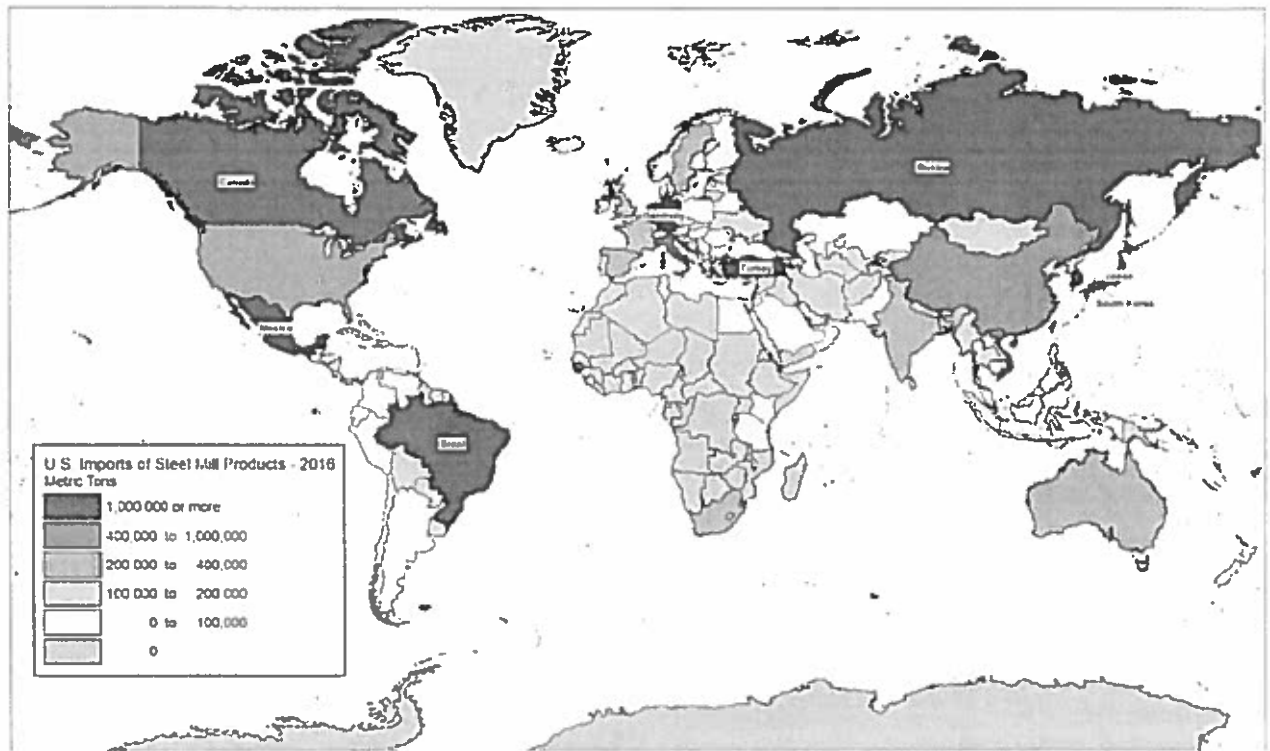


Data Source: Global Trade Atlas; Copyright © IHS Global Inc. 2016. All rights reserved.

Source: Global Steel Trade Monitor-Steel Imports Report: United States 2015.

In 2016, the United States imported steel from over 110 countries and territories. CISA provides below a map in which the U.S. Department of Commerce labels 8 countries that represent the top sources for U.S. imports of steel, with the U.S. receiving more than 1 million metric tons from each and together accounting for 75 percent of U.S. steel imports in 2016.

U.S. Imports of Steel Mill Products - 2016



Data Source: Global Trade Atlas; Copyright © IHS Global Inc. 2017. All rights reserved.

Source: Global Steel Trade Monitor - Steel Imports Report: United States 2016.

B. The Vast Majority of U.S. Steel Imports Are From Close U.S. Allies.

From 2009 through 2016, imports from U.S. allies have always been maintained above 60 percent of U.S. total imports of steel. In 2016, seven of the ten top source countries for U.S. steel imports were U.S. allies, with total steel imports amounting to 68%. The top five countries are Canada, Brazil, Korea, Mexico and Turkey, accounting for 59% of the total steel imports of the United States.

As to various types of imported steel products, major source countries are U.S. allies. In 2016, four of the top five source countries of plate products imports are U.S. allies. Among them,

steel plates from Canada and South Korea have amounted to 42 percent of U.S. total imports. As to imports of steel pipe and tube products, all of top five source countries are U.S. allies. South Korea represents the largest share of steel pipe and tube products at 23 percent. CISA further provides at Exhibit 5 the detailed data and information with respect to the layout of source countries of U.S. steel imports.

C. The United States Is Not Dependent on Steel Imports From Any Particular Source Country.

As the statistics show, the proportion of imported steel from any source country is relatively low compared to the total U.S. steel imports. Since 2008, steel imports from Canada have always represented the largest share of total U.S. imports. In 2015, Canadian imports amounted to 17 percent. Since 2011, Canadian imports have always been less than 18 percent of total U.S. imports of steel.

Currently, there are about 30 steel producers and processors in Canada that produce around 13 million tons of crude steel annually. CISA provides at Table 5, 2011-2015 crude steel production in Canada. Among them, Stelco (U.S. Steel Canada Inc.), ArcelorMittal Dofasco, and Algoma are the three largest Canadian steel producers and manufacturers.

Table 5. 2011-2015 Crude Steel Production in Canada (Unit: 10,000 Metric Ton)

	2011	2012	2013	2014	2015
Crude Steel Production	1289	1351	1242	1273	1247

Stelco (which was owned by U.S. Steel from 2007-2016) annually produces over 2 million tons of high-quality steel products, according to its website, and covers the customers

and sectors across North America.¹⁶ ArcelorMittal Dofasco, acquired by ArcelorMittal S.A. in 2006, has more than 5,000 employees in Canada producing 4.5 million tons of high quality flat carbon steel annually.¹⁷ In addition to ArcelorMittal Dofasco, ArcelorMittal Long Products Canada employs more than 1,700 workers in Quebec and Ontario, at steel facilities that produce long products, with an annual production of 2 million tons.¹⁸ Algoma Steel, a fully integrated steel producer based in Ontario, Canada, manufactures and sells hot and cold rolled steel products and has a raw steel production capacity of approximately 2.8 million tons per year.¹⁹

In addition to these large steel producers, in recent years many other small to middle size steel producers in Canada were also acquired by foreign companies, such as IPSCO Steel and Harris Steel Group Inc. IPSCO Steel, for example, was acquired by Swedish Iron and Steel Company (SSAB) in 2007. SSAB Americas is the largest producer and supplier of steel plate in the North America region, representing 20-25 percent of the North America market. Its modern steel mills, located in Alabama, Iowa, Texas, Minnesota and Toronto, Canada, have a combined annual production capacity of 2.4 million tons and employ over 1,200 workers. SSAB Americas' sales to the United States account for 85 percent of its total steel shipments.²⁰

¹⁶ <https://www.stelcocanada.com/about-us/our-facilities>

¹⁷ <http://dofasco.arcelormittal.com/who-we-are/at-a-glance/about-dofasco.aspx>

¹⁸ <http://long-canada.arcelormittal.com/en>

¹⁹ <https://www.algoma.com/about-algoma/corporate-profile/>

²⁰ <https://www.ssab.com/company/about-ssab/our-business/ssab-americas>

III. THE U.S. STEEL IS HEALTHY, ACTIVE AND COMPETITIVE

The U.S. steel industry is healthy and has the capacity to produce the steel needed to satisfy the country's national security requirements. In particular, the U.S. steel industry has been utilizing the most up-to-date technology to produce and sell high-end, high-value steel products. The top domestic U.S. steel producers are making significant new investments, both domestically and abroad, that increase the efficiency of domestic output and enhance their global strength and competitiveness. These investments are reflected in relatively stable levels of U.S.-based steel workers, as well as in the overall expansion of employment by U.S. steel producers in their global operations. Furthermore, given current capacity utilization rates of around 70%, the U.S. steel industry has significant expansion potential to continue providing ample supply for national security needs. Finally, the U.S. government already provides domestic producers with adequate trade protections.

A. The U.S. Steel Industry Is Very Competitive in the Global Market.

The U.S. steel exports has been stable by volume and value, despite demand fluctuations in global markets in recent years. In particular, the majority of U.S. exports of steel are high-end and high-value steel products. According to the statistics released by AISI, during the period of 2010 through 2015, the United States exported on average over 10 million tons of steel products per year. *See Table 6.*

Table 6. 2010-2015 U.S. Steel Industry Statistical Highlights (Unit: Million Ton)

	2010	2011	2012	2013	2014	2015
Total Steel Shipments	84	91	96	95	98	87
Imported Steel (Finished Products)	19	22	26	25	34	31
Exported Steel	11	13	14	13	12	10
Apparent Steel Demand	92	98	106	107	120	108

Source: 2011-2016 Profile of the American Iron and Steel Institute

The average unit price of U.S. exported steel products is significantly higher than the unit average price of U.S. imported steel products. Starting in 2009, the difference between the average unit prices of U.S. imported and exported steel products has increased. In 2016, the average unit price of U.S. exported steel products was 537 USD/Ton higher than the average unit price of U.S. imported steel products. This wide price difference shows that the United States exports high-value steel products, while steel imports are energy-intensive, low-premium and low-end products. In fact, the United States intentionally spares the domestic low-end steel markets for imported products, which contributes to a reduction of energy consumption, while providing abundant inputs for domestic producers to produce the high-end steel products. Moreover, low-end, low value steel imports also are used by U.S. steel manufactures for further steel processing. Thus, U.S. domestic producers are not willing to produce such low-end steel products, and in the meantime, many U.S. high-end steel producers have benefitted from importers of the low-end steel products imports. See Table 7.

Table 7. 2009-2016 Comparison of Average Unit Prices of U.S. Imported and Exported Products (Unit: Ton; USD)

		2009	2010	2011	2012	2013	2014	2015	2016
Import	Quantity	14,709,927	21,708,178	25,868,630	30,367,638	29,166,806	40,222,845	35,143,597	29,956,616
	Value	\$16,849,118	\$22,734,266	\$30,527,532	\$34,055,691	\$28,812,582	\$37,841,077	\$30,230,032	\$22,253,388
	Average Unit Price	\$1,145.42	\$1,047.27	\$1,180.10	\$1,121.45	\$987.86	\$940.79	\$860.19	\$742.85
		2009	2010	2011	2012	2013	2014	2015	2016
Export	Quantity	8,505,560	11,025,799	12,205,566	12,472,076	11,534,388	10,942,172	9,084,496	8,448,799
	Value	\$10,566,631	\$14,022,464	\$16,526,389	\$16,843,989	\$15,910,622	\$15,795,385	\$12,714,417	\$10,812,864
	Average Unit Price	\$1,242.32	\$1,271.79	\$1,354.00	\$1,350.54	\$1,379.41	\$1,443.53	\$1,399.57	\$1,279.81
Price Difference *		\$96.90	\$224.52	\$173.91	\$229.09	\$391.55	\$502.75	\$539.39	\$536.96

*Price Difference = Export Average Unit Price - Import Average Unit Price

Source: United States Department of Commerce,
http://enforcement.trade.gov/steel/license/SMP/Census/Annual/gdesc52/MMTSum_ALL_ALL_9Y.htm

B. Domestic U.S. Steel Producers are Actively Making Significant New Investments, Both Domestically and Abroad

U.S. steel companies have been making significant new investments domestically.

Further, top steel companies have invested in many large steel producers around Central Europe and North America. The U.S. steel industry is global, and the industry retains its vitality.

Currently, the domestic fixed-asset investments made by major U.S. steel companies are significant. Adjustments in fixed-asset investments are common due to fluctuations of the market and changes in companies' operational strategies. From 2006 through 2014, the total fixed-asset investments made by three large U.S. steel companies remained stable. See Table 8.

Table 8. 2006-2015 Equipment Investments Made by Major US Steel Companies (Unit: One Hundred Million Yuan)

Company	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
U.S. Steel Corporation	6.12	6.92	7.35	4.72	6.76	8.48	7.23	4.68	4.80	5.00
Nucor Corporation	3.38	5.20	10.19	3.91	3.45	4.51	10.19	12.30	5.69	3.65
AK Steel	0.76	1.04	1.67	1.10	1.17	1.01	0.46	0.60	0.81	0.99
Total	10.26	13.16	19.21	9.73	11.38	14.00	17.88	17.58	11.30	9.64

Source: Handbook for Iron and Steel Statistics (2007-2016), Committee on Iron and Steel Statistics, The Japan Iron and Steel Federation.

There are also large scale foreign investments made in U.S. domestic steel production. For example, ThyssenKrupp AC invested 4 billion euros to build a new steel plant in Calvert, Alabama, which was operational in 2010. In 2014, this steel plant was purchased by the joint venture formed by ArcelorMittal and Nippon Steel. Thus, the U.S. domestic steel industry remains strong and willing to increase its domestic production.

Top U.S. steel companies also invest significantly in overseas markets. The total overseas steel production capacity of U.S. Steel Corporation and Nucor Corporation is approximately 8.5 million tons.

For example, U.S. Steel Košice, in Slovakia, is the wholly owned European subsidiary of U.S. Steel and the largest integrated steel producer in Central Europe, producing slabs, rolled coils, cut deals, welded pipes, and other steel products. U.S. Steel Košice has an annual raw steel production capability of 4.5 million metric tons and employs almost 12,000 workers.²¹ U.S.

²¹ <http://www.usske.sk/en/about-us/corporate-info/company-profile>

Steel also has a 50 percent ownership interest in Apolo Tubulars S.A., a Brazilian supplier of welded casing, tubing, line pipe and other tubular products.²² U.S. Steel also owns 40 percent of the total equity of Acero Prime, which operates steel plants in Mexico. U.S. Steel is also a joint venture owner, with POSCO of South Korea, of USS-POSCO Industries (UPI), located in Pittsburg, California. UPI has an annual production capacity of approximately 1.5 million tons and produces cold-rolled sheets, galvanized sheets, tin plate and tin-free steel from hot bands principally provided by POSCO and U. S. Steel.²³

Another major U.S. steel company, Nucor Corporation, also conducts its business and operations in global markets. NuMit LLC is the joint venture invested equally by Nucor Corporation and Mitsui & Co. The first investment made by NuMit LLC was the purchase of all assets, operative steel plants and other business of Steel Technologies LLC owned by Mitsui & Co. Steel. Steel Technologies LLC has 23 rolled coil processing centers in the United States, Canada, and Mexico.²⁴ Nucor Corporation also owns 50 percent of its Italian subsidiary – Duferdofin Nucor S.r.l.²⁵ In its steel billets and steel blooms workshops in Brescia, Italy, Duferdofin Nucor S.r.l. produces value-added special bar quality semi-finished products with an annual production capacity of 1 million tons. It currently owns two rolling mills (total capacity of 950,000 tons) and one bar mill with a capacity of 350,000 tons.

Another subsidiary of Nucor Corporation, Harris Steel, processes and sells steel

²² <https://www.ussteel.com/locations/joint-ventures/apolo-tubulars-sa>

²³ <https://www.ussteel.com/locations/joint-ventures/uss-posco-industries>

²⁴ <http://steeltechnologies.com/index.php/mitsui-usa-to-form-joint-venture-with-nucor-corporation/>

²⁵ <http://www.duferdofin-nucor.com/en/struttura/>

reinforcing bar in the United States and Canada. In 2016, Harris Steel sold 1,115,000 tons of processed steel rebar. Nucor Corporation owns two mill plants that produce direct reduced iron (DRI), with total capacity of 4.5 million tons per year. The first plant was built in Trinidad and Tobago (Nu-Iron Unlimited). The DRI produced in this plant ships to the United States for use by Nucor's other steel plants. In addition, a joint venture galvanized sheet plant equally owned by Nucor Corporation and JFE Steel Corporation in Mexico, will become operational in late 2019. This new plant cost a total of 27 million USD, and is expected to have an annual capacity of 400,000 tons.²⁶

C. The Employment Rate of Steel Workers in the United States Has Remained Stable over Many Years

Investments made by U.S. steel producers are reflected in relatively stable levels of U.S.-steel workers, as well as in the overall expansion of U.S. steel producers in their global operations. Steel employment in the United States has remained stable over many years, and employment at U.S.-owned steel producers is in fact increasing. Since 2006, the number of U.S. steel workers has been steady at approximately 140,000-150,000. *See Table 9.*

²⁶ <http://nucor.com/investor/news/print/?rid=2176420>

Table 9. 2006-2015 Number of People Directly Employed in the US Steel Industry

Year	Numbers of US Workers
2006	157,000
2007	161,000
2008	160,000
2009	134,000
2010	139,000
2011	151,000
2012	154,000
2013	149,000
2014	152,000
2015	142,000

Source: Statistics compiled by China Iron and Steel Association. Original data released by the U.S. Department of Labor

D. U.S. Producers Have State-of-The-Art Technology to Produce High-End, High-Value Steel Products, and They Maintain Steady and Competitive Exports of Such Products in Global Markets.

U.S. producers have state-of-the-art technology to produce high-end steel products and maintain steady and competitive exports of such high-value products in global markets. For a long time, the U.S. steel producers have been pioneers in using advanced technologies to commercialize steel production. In 1875, Carnegie established the first converter steelmaking plant in Pennsylvania, representing application of emerging technologies into the development of the U.S. steel industry. Since then, the cost for smelting steel has significantly decreased.

During 1960s and 1970s, the ultra-high power furnace smelting technology was extensively used in U.S. steel industry. Such advanced technology led to commercial advances, including less investment costs, lower level of energy consumption and less environmental

pollution, higher efficiency for production and higher profits. The United States ranks as the one of the top countries that produces electric steel, and in 2015, electric steel accounted for 62.7 percent of the total steel production in U.S.

In 1989, Nucor Corporation built the world's first Thin Slab Continuous Casting and Rolling technology (CSP) production line, which improved the application and development of the CSP technology that was originally developed by German company SMS Siemag. In its operation, Nucor Corporation was able to increase the output of the CSP continuous casters from less than 1 million tons to more than 2 million tons thin strip steel and continued to improve the quality of slab, increase the thickness of slab, rolling thin strip steel with thickness of $\leq 1\text{mm}$. In 1995, U.S. company Steel Dynamics, Inc. adopted the technology of Thin Slab Continuous Casting with liquid core reduction for the first time, which further improved the CSP technology.

In the 1980s, Praxair developed a slag-splashing converter furnace protection technology that prolonged the furnace life, and reduced the consumption of refractory materials. This emerging technology was first applied by Republic Steel Corporation (Great Lake). In 1991, LTV Steel Corporation (Indiana Harbor) also began to use slag-splashing furnace protection technology. As of late 1994, the average usage life of furnace lining reached over 15,000 production runs. Slag-splashing furnace protection technology, which significantly prolongs furnace life and reduces the consumption of refractory materials, is a major progress in converter furnace technology, and has been adopted and applied by many countries in the world.

In 1988, Australian company BlueScope Steel Limited (BHP) and Japanese company Ishikawajima-Harima Heavy Industries(IHI) jointly developed the thin strip steel casting

technology (Castrip), and Nucor Corporation joined this research and development effort in March 2000. These three parties formed Castrip LLC, a twin-roll strip casting technology development and application company, which developed and promoted the thin strip steel casting technology. In 2002, Castrip LLC successfully built the world's first fully commercialized twin-roll strip casting steel to produce carbon steel and stainless steel, achieving the world's first commercial operation of Castrip process.

Currently, the U.S. steel industry is still the pioneer of steel production technology, and such up-to-date technology reflects high labor productivity, even if the U.S. labor cost for steel production is higher than China and many other countries. *See Table 10.*

Table 10. 2006-2015 U.S. Steel Workers Labor Productivity (Unit: Metric Ton/Per Person·Year)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
628	609	571	434	589	572	576	583	580	555

Source: data compiled by China Iron and Steel Association

E. The U.S. Steel Industry Has the Potential to Produce Sufficient Steel for National Security Requirements

Given that its current capacity utilization rate is around 70%, the U.S. steel industry has significant potential to expand to meet national security needs. In 2006, the U.S. steel industry had almost completed its reconstruction through mergers and acquisitions. As a result, the production capacity nationwide was reduced to 113.5 million tons, with a capacity utilization rate of 88.95 percent. Further, following the global financial crisis, in 2009 the U.S. steel capacity utilization rate dropped to a low of 51.05 percent. However, U.S. production has since rebounded and in 2014 capacity utilization reached 77.9 percent, which was caused by a reduction of production capacity and an increase in production. Although the capacity utilization

rate declined in 2016 to 63.3 percent, it has increased again to 73.69 percent in the first four months of 2017. Accordingly, the U.S. steel industry has a significant potential to expand to continue to meet U.S. national security needs.

Table 11. U.S. Steel Production Capacity Utilization (2006-April 2017) (Unit:%)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
88.95	86.19	81.29	51.05	70.00	75.47	75.92	77.19	77.90	76.09	63.33	73.69

Source: Federal Reserve Bank of St. Louis; *Until April 2017



F. The U.S. Government Already Provides Domestic Producers with Adequate Trade Protections.

Over the last 40 years the U.S. initiated more than 200 trade remedy investigations on imported steel products, including more than 60 cases against China. U.S. steel producers are currently the beneficiaries of more than 150 separate antidumping and countervailing duty orders that the Department of Commerce enforces on imported steel products from over 25 countries.

Since 1977, the total antidumping and countervailing duty orders on imported steel products amounted to 40 percent of such orders on all imported products. Most imported steel is subject to very high duty rates. In addition to generating revenue for the U.S. Treasury, due to high rates of duties, these orders provide the U.S. industry with WTO-sanctioned protection from steel imports alleged to be unfairly traded.

CISA provides below at Table 12 a summary of total current U.S. antidumping and countervailing duty orders in place. Please also refer to Table 13, which is a list of the current orders in place on steel products.

Table 12. U.S. Antidumping Duty and Countervailing Duty Orders in Place (as of May 24, 2017)

	AG	CH	ISM	ISO	ISP	MM	MSC	PRSG	TX	ME	PSRG	Total
AD/CVD Orders	24	48	107	44	51	24	68	19	5	3	1	394
Proportion (%)	6.1	12.2	27.2	11.2	12.9	6.1	17.3	4.8	1.3	0.8	0.3	100.0
AG = Agricultural, forest, and processed food products MM = Metals and minerals CH = Chemicals and pharmaceuticals MSC = Miscellaneous manufactured products ISM=Iron & steel: Mill products PRSG= Plastics, rubber, stone, and glass products ISO=Iron & steel: Other products & castings TR = Transportation ISP=Iron & steel: Pipe products TX = Textiles and apparel ME = Machinery and electronic/scientific equipment												

Source: United States International Trade Commission.

**Table 13. U.S. Anti-dumping Duty and Countervailing Duty Orders in Place on Steel Imports
(as of May 24, 2017)**

Iron & Steel Mill Products		Iron & Steel Pipe Products	
Country	No.	Country	No.
Australia	1	Brazil	1
Belarus	1	China	12
Belgium	1	Germany	1
Brazil	8	India	5
China	15	Japan	3
Germany	1	Korea	5
India	10	Malaysia	1
Indonesia	6	Mexico	3
Italy	2	Oman	1

Source: United States International Trade Commission

IV. CHINESE STEEL IMPORTS PLAINLY DO NOT IMPACT U.S. NATIONAL SECURITY

The volume of imports of steel from China has significantly declined in recent periods and represents a very minimal portion of total U.S. steel imports. Steel imports from China constitute less than one percent (1%) of U.S. domestic production. In fact, steel imports from China, which are primarily of low-end products sold to distributors and processing centers, have shown large volume decreases in recent periods, down 67.4 percent since September 2015. Thus, Chinese steel imports plainly do not impact U.S. national security.

A. The Volume of Imports of Steel from China Has Significantly Declined in Recent Periods and Represents A Very Minimal Portion of U.S. Steel Imports

Since 2007, imported steel from China has significantly declined by volume, value and proportion of U.S. total imports of steel. In 2016, the U.S. only imported 1,170,000 metric tons (valued at 1,700 million dollars) of steel from China, accounting for just 3.9 percent of U.S. total

imports by volume (7.6 percent of U.S. total imports by value). In fact, steel imports from China have declined by 67.4 percent since September 2015. CISA provides at Table 14 the status of U.S. imports of Chinese steel products since 2007.

Table 14. 2007-2016 The Status of U.S. Imports of Chinese Steel Products (Unit: Million Tons; 100 Million USD)

	U.S. Total Imports of Steel		U.S. Imports of Steel from China		Proportion of Imports of Steel from China (%)	
	Volume	Value	Volume	Value	By Volume	By Value
2007	30.37	308.80	4.24	43.22	13.95	14.00
2008	25.82	388.37	1.94	64.27	7.52	16.55
2009	14.79	177.75	1.35	21.16	9.12	11.90
2010	21.78	241.05	0.80	12.01	3.69	4.98
2011	26.00	323.18	1.15	18.91	4.41	5.85
2012	30.48	359.07	1.53	20.78	5.01	5.79
2013	29.27	307.64	1.77	19.39	6.03	6.30
2014	40.32	402.64	2.94	30.79	7.28	7.65
2015	35.40	321.94	2.20	23.75	6.22	7.38
2016	30.10	235.69	0.83	10.39	2.76	4.41

Source: U.S. Steel Import Monitor for HS classification; calculations based on UN COMTRADE statistics

This is also the case for many specific imported steel products from China. For example, in 2007 Chinese imports of flat products amounted to 800,000 tons representing 8.1 percent of total U.S. imports. However, in 2016 Chinese flat product imports only amounted to 200,000 tons, representing just 1.7 percent of U.S. total imports. U.S. imports of steel pipe and tube products from China show a similar pattern, declining from 2,300,000 tons (31.7 percent of total U.S. imports) in 2007 to 210,000 tons (5 percent of total U.S. imports) in 2016. See Table 15 and Table 16.

Table 15. 2007-2016 The Status U.S. Imports of Flat Products from China (Unit: Million Tons; 100 Million USD)

	U.S. Total Imports of Flat Products		U.S. Imports of Flat Products from China		Proportion of Imports of Flat Products from China (%)	
	Volume	Value	Volume	Value	By Volume	By Value
2007	9.88	102.33	0.80	10.91	8.12	10.66
2008	10.50	113.95	0.97	13.96	9.27	12.26
2009	5.66	54.79	0.22	2.65	3.86	4.83
2010	7.56	80.60	0.42	5.85	5.55	7.25
2011	8.77	104.51	0.64	9.26	7.25	8.86
2012	10.17	112.44	0.78	9.24	7.62	8.21
2013	9.82	100.81	0.77	8.10	7.79	8.04
2014	15.65	148.07	1.95	18.12	12.44	12.24
2015	14.81	126.05	1.49	13.33	10.07	10.58
2016	12.69	102.11	0.22	2.46	1.70	2.41

Source: U.S. Steel Import Monitor for HS classification; calculations based on UN COMTRADE statistics

Table 16. 2007-2016 The Status of U.S. Imports of Steel Pipe and Tube Products from China (Unit: Million Tons; 100 Million USD)

	U.S. Total Imports of Steel Pipe and Tube Products		U.S. Imports of Steel Pipe and Tube Products from China		Proportion of Steel Pipe and Tube Products Imports from China (%)	
	Volume	Value	Volume	Value	By Volume	By Value
2007	7.35	99.33	2.33	23.96	31.69	24.12
2008	1.69	149.26	0.08	40.62	4.94	27.21
2009	4.14	77.17	0.95	16.02	22.94	20.75
2010	5.11	78.87	0.17	3.01	3.39	3.81
2011	6.36	103.57	0.21	4.58	3.28	4.42
2012	7.88	128.97	0.22	4.91	2.80	3.81
2013	6.99	103.52	0.16	3.60	2.27	3.48
2014	8.01	118.45	0.22	4.63	2.73	3.91
2015	6.51	92.47	0.22	4.35	3.32	4.70
2016	4.22	51.53	0.21	3.61	4.96	7.01

Source: U.S. Steel Import Monitor for HS classification; calculations based on UN COMTRADE statistics.

B. The Product Types and Sales Channels of Chinese Imports of Steel Have No Direct Impact on U.S. National Security

Chinese imports primarily represent low-end steel products, and most of such imports were sold directly to U.S. distributors and processing centers. These importers and distributors then distribute or re-invoice the imported steel to the U.S. end users. Imported steel from China is not sold directly to end users directly, and therefore, Chinese imports have no impact on U.S. national security or the economy.

The U.S. International Trade Commission (“ITC”) has found many times that various steel products from China were purchased by the U.S. importers and then distributed to U.S. end users. In *Certain Circular Welded Carbon Quality Steel Line Pipe from China*, for example, the ITC concluded that U.S. importers shipped 100 percent of certain circular welded carbon quality steel line pipe imports from China to distributors in 2005, 2006 and 2007.²⁷ In *Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from China*, the ITC found “{q}uestionnaire responses were received from U.S. importers accounting for 90.6 percent of total Seamless SLP pipe imports from China in 2009.”²⁸ Again in 2009, the ITC reached a similar conclusion in *Certain Oil Country Tubular Goods from China*, where it found that U.S. importers shipped more than 90 percent of OCTG imports from China to distributors in 2006, 2007 and 2009, and 84 percent in 2008.²⁹

²⁷ See *Certain Circular Welded Carbon Quality Steel Line Pipe from China* (Inv. No. 701-TA-455), ITC final report (USITC Pub. 4055, Jan. 2009) at II-2, Table II-1.

²⁸ See *Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from China* (Inv. No. 701-TA-469), ITC Final Report (USITC Pub. 4190, Nov. 2010) at 3.

²⁹ See *Certain Oil Country Tubular Goods from China* (Inv. No. 701-TA-463), ITC preliminary report (USITC Pub. 4081, June 2009) at II-2, Table II-1.

C. China Is The Victim of U.S. Trade Remedy Measures

In history, the U.S. government has initiated over 60 trade remedy investigations against Chinese steel imports. Imported steel products from China are covered by the most number of trade remedy investigations and measures, and the duties are ranged from tens of percent through hundreds of percent.

As the above-cited statistics show, as of May 2017 there are over 150 antidumping and countervailing duty orders on U.S. imports of steel products in place. Among them, 27 orders cover imports of steel mill and steel pipe products from China, accounting for 18 percent of total U.S. orders on imported steel products. In particular, most of the orders on Chinese steel imports represent significantly high duty rates. *See Exhibit 6* (detailed listing of antidumping and countervailing duty orders in place against imports of steel from China).

V. CONCLUSION

In conclusion, CISA believes that this steel section 232 investigation serves no legitimate purpose in terms of addressing the global problems of steel overcapacity and global price declines. These are worldwide structural challenges, affecting many countries, including China. CISA and Chinese steel producers are willing to work together with other countries' steel industries to face these challenges, enhance communication, strengthen cooperation and remove barriers. Any steel import restrictions imposed as a result of this investigation will do nothing to enhance U.S. national security, but would only harm downstream U.S. manufacturers and the broader domestic economy. At the same time, in light of the lack of a unified definition of "national security" among WTO members, such action may trigger other countries to invoke similar national security interests to protect their own allegedly critical industries from imports.

PUBLIC DOCUMENT

We hope that as the world's largest economy, the United States will carefully assess the impact of this section 232 investigation and play a positive role in the global order of international trade.

Section 232 National Security Investigation of Imports of Steel
Office of Technology Evaluation, Bureau of Industry and Security,
U.S. Department of Commerce

WRITTEN SUBMISSION OF
CHINA IRON AND STEEL ASSOCIATION

EXHIBIT LIST

No.	Exhibit Name	Status
Exhibit 1	2010-2015 U.S. Steel Shipments by Market Classification	PUBLIC
Exhibit 2	U.S. Steel Federal and Defense Solutions	PUBLIC
Exhibit 3	2016 ArcelorMittal USA Plant Locations and Production Types	PUBLIC
Exhibit 4	Oregon Steel Mills Inc. Certain Steel Plate specifications	PUBLIC
Exhibit 5	Layout of Source Countries of U.S. Steel Imports	PUBLIC
Exhibit 6	U.S. Anti-Dumping and Countervailing Orders in Place on Imported Steel Products from China	PUBLIC

Exhibit 1

2010-2015 U.S. Steel Shipments by Market Classification

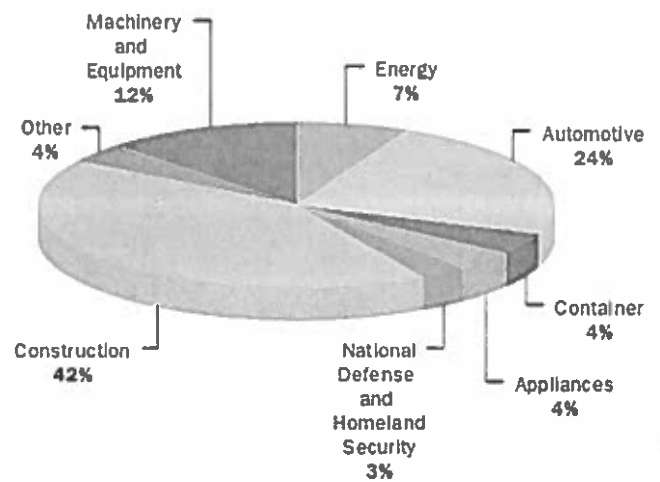
2010 U.S. Steel Industry STATISTICAL HIGHLIGHT

Steel shipments	84 million tons
Imports (finished)	19 million tons
Exports	11 million tons
Apparent steel demand	92 million tons
Direct employment	135,000
Total employment (direct and indirect)	1,080,000

Note: all data are estimates based on latest available data

Source: American Iron and Steel Institute

2010 Steel Shipments by Market Classification



Source: American Iron and Steel Institute

Source: 2011 Profile issued by the American Iron and Steel Institute

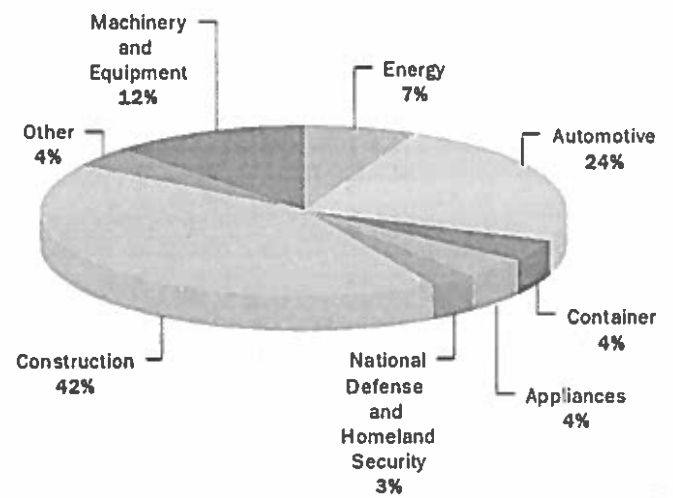
2011 U.S. Steel Industry STATISTICAL HIGHLIGHT

Steel shipments	91 million tons
Imports (finished)	22 million tons
Exports	13 million tons
Apparent steel demand	98 million tons
Direct employment	150,700
Direct & indirect total	1,022,009

Note: all data are estimates based on latest available data

Source: American Iron and Steel Institute

2011 Steel Shipments by Market Classification



Source: American Iron and Steel Institute

Source: 2012 Profile issued by the American Iron and Steel Institute

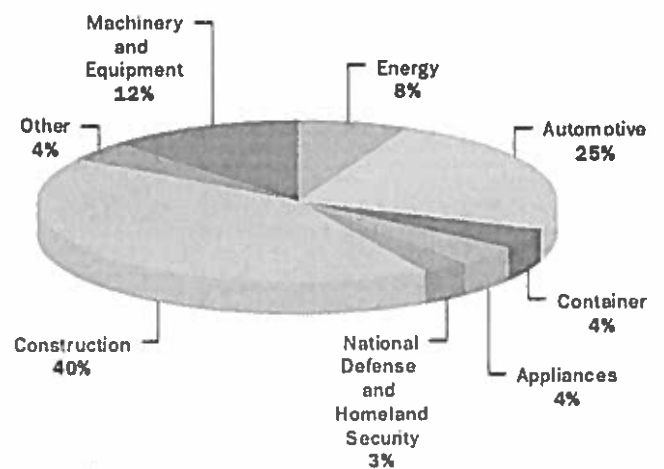
2012 U.S. Steel Industry STATISTICAL HIGHLIGHTS

Steel shipments	96 million tons
Imports (finished)	26 million tons
Exports	14 million tons
Apparent steel demand	106 million tons
Direct employment	161,900
Direct & indirect jobs supported	1,133,000

Note: all data are estimates based on latest available data

Source: American Iron and Steel Institute

2012 Steel Shipments* by Market Classification



Sources: American Iron and Steel Institute, IHS Global Insight
*Estimated percentages.

Source: 2013 Profile issued by the American Iron and Steel Institute

2013 U.S. Steel Industry STATISTICAL HIGHLIGHTS

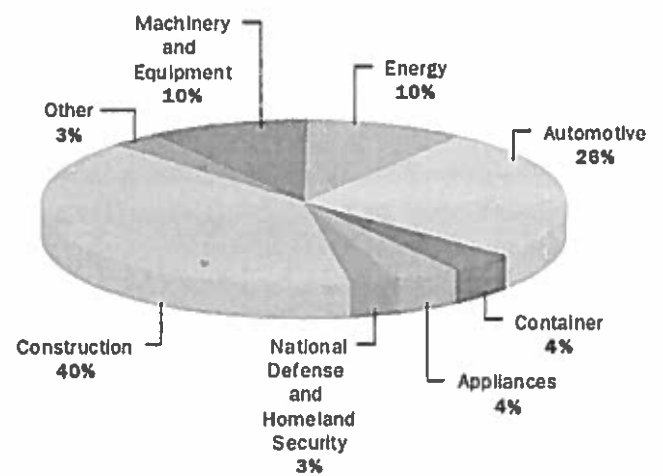
Steel shipments	95 million tons
Imports (finished)	25 million tons
Exports	13 million tons
Apparent steel demand	107 million tons
Direct employment	152,900*

Note: All data are estimates based on latest available data.

Source: American Iron and Steel Institute

*Based on most recently available U.S. Department of Labor data (October 2013)

2013 Steel Shipments* by Market Classification



Source: American Iron and Steel Institute

*Estimated percentages

Source: 2014 Profile issued by the American Iron and Steel Institute

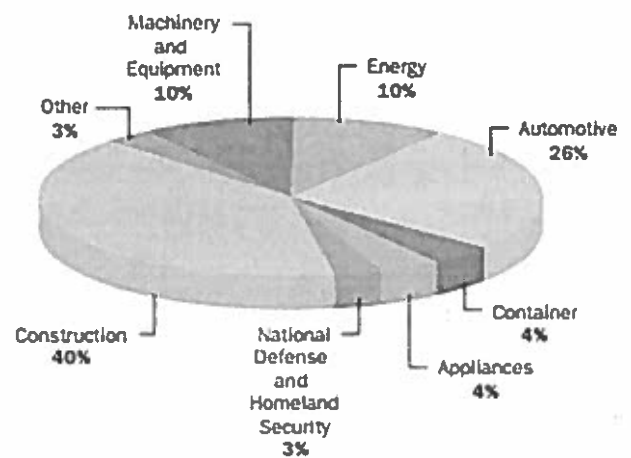
2014 U.S. Steel Industry STATISTICAL HIGHLIGHTS

Steel shipments	98 million tons
Imports (finished)	34 million tons
Exports	12 million tons
Apparent steel demand	120 million tons
Direct employment	151,600*

Source: American Iron and Steel Institute.

*Based on U.S. Department of Labor 2014 annual average monthly employment data.

2014 Steel Shipments* by Market Classification



Source: American Iron and Steel Institute.
*Estimated percentages

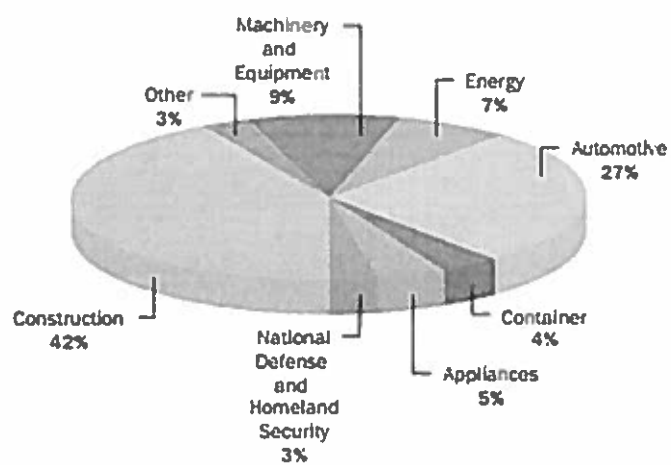
Source: 2015 Profile issued by the American Iron and Steel Institute

2015 U.S. Steel Industry STATISTICAL HIGHLIGHTS

Steel shipments	87 million tons
Imports (finished)	31 million tons
Exports	10 million tons
Apparent steel demand	108 million tons
Direct employment	141,900*

Source: American Iron and Steel Institute
 *Based on U.S. Department of Labor 2015
 December monthly employment data

2015 Steel Shipments* by Market Classification



Source: American Iron and Steel Institute
 *Estimated percentages

Source: 2016 Profile issued by the American Iron and Steel Institute

Exhibit 2

U.S. Steel Federal and Defense Solutions

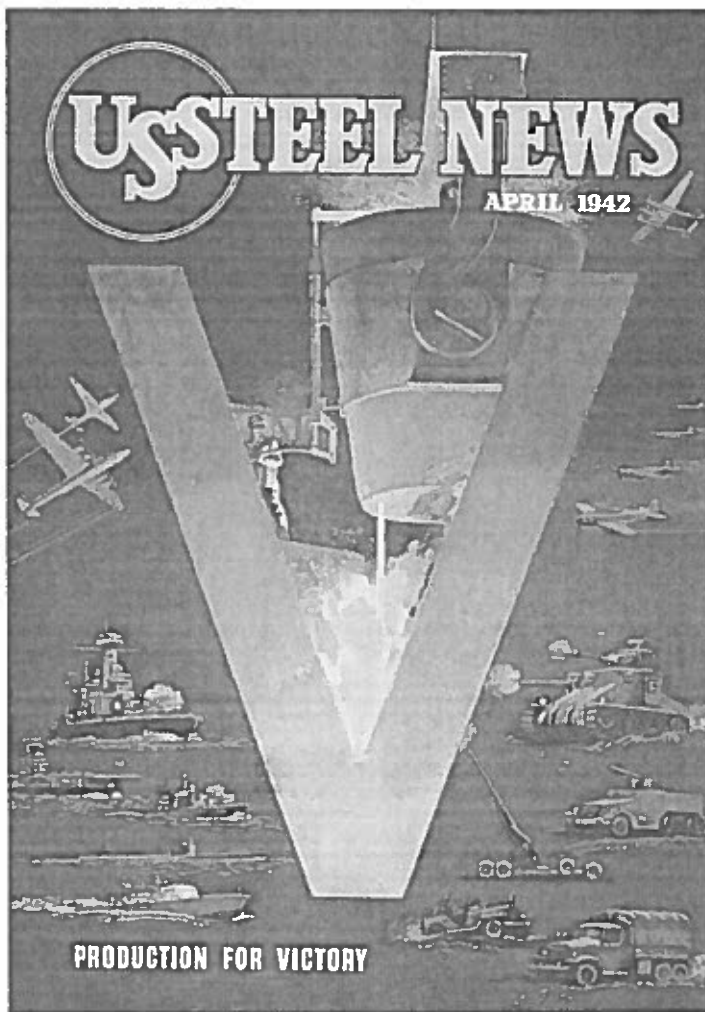


United States Steel Corporation

Federal and Defense Solutions

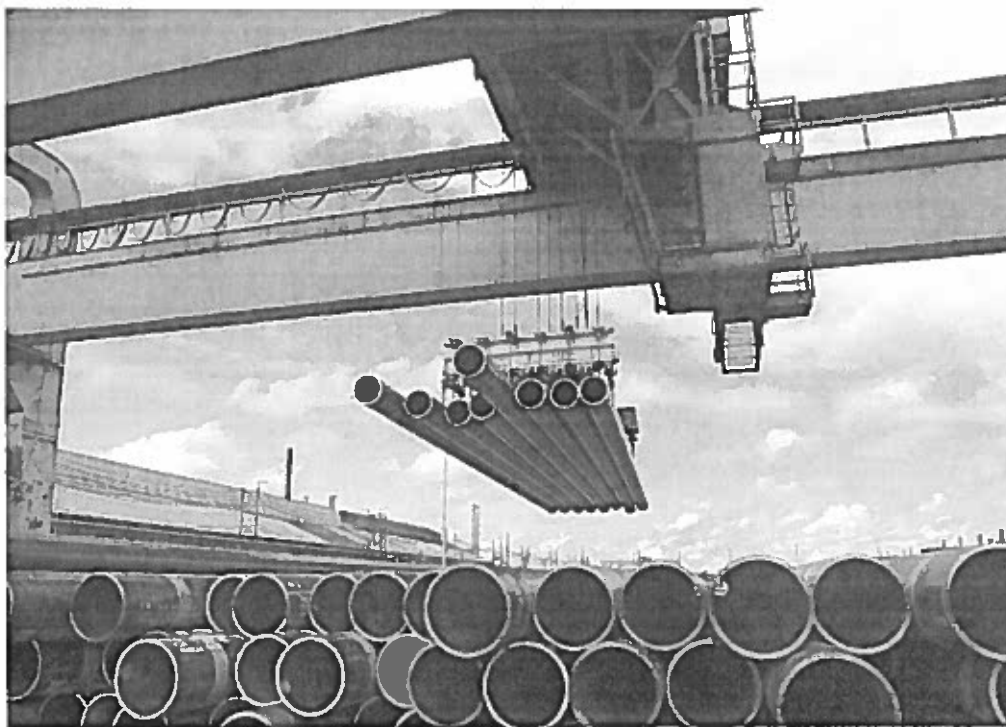
SOLUTION | AUGUST 13, 2016

U. S. Steel is more than just a steel producer and supplier. For over a century, United States Steel Corporation has played a critical role in supporting the federal government and the defense industrial base. From its origins at the turn of the 20th century, U. S. Steel helped to build America into a world economic and military power. From the railroads and bridges of the continental transportation system to the keels of the great battleships, aircraft carriers, and submarines to the wing spars and engine blades of fighter jets to the armor and armament of tanks, U. S. Steel's integral contributions to the nation have been a constant over the decades.



With a robust **Research and Development** division, expert metallurgists and engineers in **Product Application Engineering**, and a dedicated team of innovative, strategic thinkers, U. S. Steel's **Federal and Defense Solutions** team is dedicated to continuing its support of the federal government and the defense industrial base by **collaborating with customers to identify value-added products** that can help the United States and its allies and partners continue providing global leadership. Beyond steel sales, the Federal and Defense Solutions team works with its customers to solve the challenges of the 21st century by providing collaborative engagement and innovative options to address federal requirements and discover the most effective answers, not just reproducing historic specifications.

Energy: As federal support of energy projects contributes to American energy independence, U. S. Steel is there to support the domestic oil and gas industry with the highest quality tubular products and premium connections. And as the energy sector continues to expand into renewable energy sources, U. S. Steel continues to be an industry leader providing innovative light-weight steel alloys to support wind, solar, and nuclear energy development with fundamental structural steel products used in turbines, support racking and stanchions, and flawless, protective steel containers and barriers.



Transportation: As the transportation infrastructure undergoes critical modernization measures, U. S. Steel's advanced high-strength steels offer modernized products to support the revitalization efforts. From federal facilities to state and local projects, United States Steel Corporation's variety of grades enable builders to leverage a versatile product line.



Defense: As the armed forces continue to evolve, U. S. Steel is determined to meet and exceed military specifications. Absorbing the lessons learned of recent battlefields, U. S. Steel seeks to find the right balance between light-weight maneuverability with high-strength survivability. Through collaboration with federal entities and private manufacturers alike, the Federal and Defense Solutions team will enable the next generation of military hardware to perform beyond expectations by understanding the needs and requirements of the equipment and redefining the specifications.

U. S. Steel's Federal and Defense Solutions is available to provide expertise to help the federal government and defense industrial base determine the most advanced steel solutions to meet the most daunting challenges.

Exhibit 3

2016 ArcelorMittal USA Plant Locations and Production Types

2016 ArcelorMittal USA Plant Locations and Production Types

NAFTA			Crude Steel		
Unit	Country	Locations	Production in 2016 (in million tonnes) ²	Type of plant	Products
ArcelorMittal USA	USA	Warren, OH	n/a	Coke-Making	Coke
ArcelorMittal USA	USA	Monessen, PA	n/a	Coke-Making	Coke
ArcelorMittal USA ³	USA	East Chicago, IN	4.5	Integrated	Flat
ArcelorMittal USA	USA	Burns Harbor, IN	4.4	Integrated	Flat
ArcelorMittal USA	USA	Cleveland, OH	3.2	Integrated	Flat
ArcelorMittal USA	USA	Riverdale, IL	0.7	Integrated	Flat
ArcelorMittal USA	USA	Coatesville, PA	0.4	Mini-mill	Flat
ArcelorMittal USA	USA	Columbus, OH	n/a	Downstream	Flat
IN Tek	USA	New Carlisle, IN	n/a	Downstream	Flat
ArcelorMittal USA	USA	Conschocken, PA	n/a	Downstream	Flat
ArcelorMittal USA	USA	Weirton, WV	n/a	Downstream	Flat
ArcelorMittal USA	USA	Gary, IN	n/a	Downstream	Flat
Double G	USA	Jackson, MS	n/a	Downstream	Flat
ArcelorMittal Dofasco	Canada	Hamilton	3.5	Integrated, Mini-mill	Flat
ArcelorMittal Mexico	Mexico	Lázaro Cárdenas	1.8	Mini-mill	Flat
ArcelorMittal Long Products Canada	Canada	Contrecoeur East, West	2.0	Mini-mill	Long/ Wire Rod, Bars, Slabs
ArcelorMittal USA ⁴	USA	Steelton, PA	0.2	Mini-mill	Long/ Rail
ArcelorMittal USA ¹	USA	Vinton, TX	-	Mini-mill	Long/ Rebar
ArcelorMittal USA ¹	USA	LaPlace, LA	0.1	Mini-mill	Long/ Sections
ArcelorMittal USA ¹	USA	Harriman, TN	n/a	Downstream	Long/ Sections
ArcelorMittal Las Truchas	Mexico	Lázaro Cárdenas, Celaya	1.3	Integrated, and Downstream	Long/ Bar, Wire Rod
ArcelorMittal Tubular Products	Canada	Brampton	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	Canada	London	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	Canada	Woodstock	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	Canada	Hamilton	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	USA	Shelby	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	USA	Marion	n/a	Downstream	Pipes and Tubes
ArcelorMittal Tubular Products	Mexico	Monterrey	n/a	Downstream	Pipes and Tubes

¹ These U.S. long unit facilities were sold in 2016. See note 2.3 to the consolidated financial statements.

² Note: n/a = not applicable (no crude steel production).

³ Indiana Harbor (East and West).

⁴ As of December 31, 2016, Steelton remains classified as held for sale.

Source: 2016 ArcelorMittal Annual Report

Exhibit 4

Oregon Steel Mills Inc. Certain Steel Plate Specifications

Oregon Steel Mills Inc. Certain Steel Plate Specifications

Steel Plate Specifications

As-rolled Plate Grades	Heat Treated Grades	Military Armor Grades
ASTM A36	ASTM A514	MIL-A-12560
ASTM A285	ASTM A516	MIL-A-46177
ASTM A455	ASTM A517	MIL-A-46100
ASTM A514 ASTM A516	ASTM A633	Arm alloy
ASTM A572	ASTM A710	CG2001
ASTM A573	Oregon AR 350	CG2002
ASTM A588	Oregon AR 400	S-05-603
ASTM A656	Oregon AR425	S-05-605
ASTM A709	Oregon AR 450	
ASTM A871	Oregon AR 500	

Source: <http://www.evrzna.com/Products/SteelPlate/tabid/77/Default.asp>

Exhibit 5

Layout of Source Countries of U.S. Steel Imports

2008-2016 U.S. Steel Imports - Top 10 Sources (Unit: Metric Ton,%)

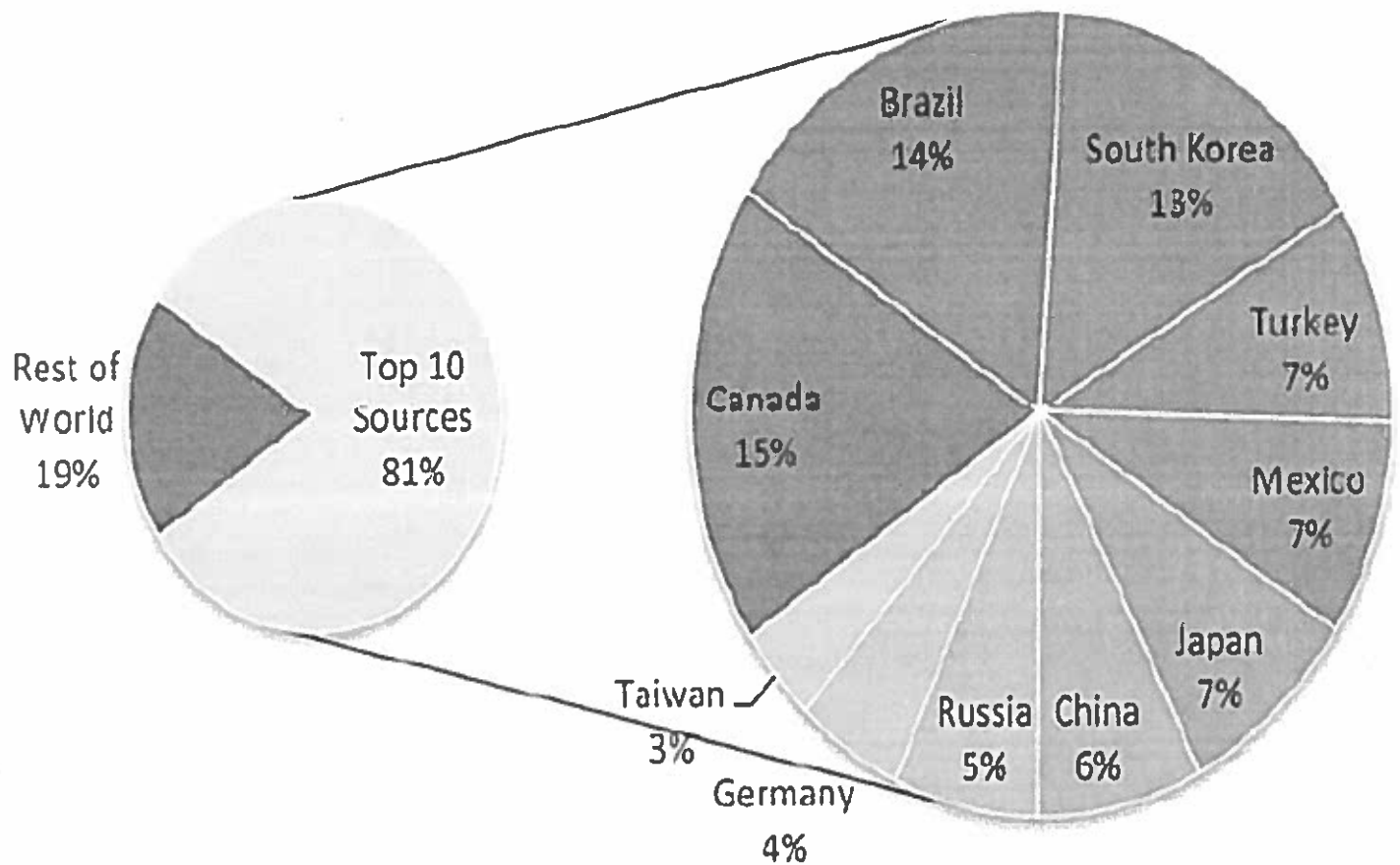
		WORLD	CANADA ▲	CHINA	MEXICO ▲	KOREA ▲	JAPAN ▲	UKRAINE ▲	INDIA	BRAZIL ▲	GERMANY ▲	RUSSIA	▲ Total	Total
2008	Quantity	28,963,723	6,427,963	4,376,533	2,898,796	2,091,277	1,602,788	1,262,485	1,248,219	1,197,935	1,079,303	1,018,347		
	Ratio		22.2	15.1	10	7.2	5.5	4.4	4.3	4.1	3.7	3.5	57.1	80.0
		WORLD	CANADA ▲	MEXICO ▲	CHINA	KOREA ▲	JAPAN ▲	BRAZIL ▲	INDIA	RUSSIA	GERMANY ▲	TURKEY ▲		
2009	Quantity	14,709,927	3,875,543	1,586,017	1,329,964	1,199,892	1,108,633	653,906	527,591	491,867	450,017	445,922		
	Ratio		26.3	10.8	9	8.2	7.5	4.4	3.6	3.3	3.1	3	63.3	79.2
		WORLD	CANADA ▲	MEXICO ▲	KOREA ▲	JAPAN ▲	RUSSIA	GERMANY ▲	BRAZIL ▲	CHINA	INDIA	TURKEY ▲		
2010	Quantity	21,708,178	6,026,020	2,559,925	1,851,620	1,344,720	1,247,673	1,085,563	902,980	780,995	704,318	527,563		
	Ratio		27.8	11.8	8.5	6.2	5.7	5	4.2	3.6	3.2	2.4	65.9	78.4
		WORLD	CANADA ▲	BRAZIL ▲	MEXICO ▲	KOREA ▲	JAPAN ▲	RUSSIA	CHINA	GERMANY ▲	AUSTRALIA ▲	INDIA		
2011	Quantity	25,868,630	5,471,712	2,820,402	2,622,173	2,574,186	1,824,282	1,253,694	1,124,355	974,729	738,712	725,215		
	Ratio		21.2	10.9	10.1	10	7.1	4.8	4.3	3.8	2.9	2.8	66.0	77.9
		WORLD	CANADA ▲	BRAZIL ▲	KOREA ▲	MEXICO ▲	JAPAN ▲	RUSSIA	CHINA	TURKEY ▲	GERMANY ▲	TAIWAN		
2012	Quantity	30,367,638	5,223,763	3,591,948	3,336,545	2,453,290	2,363,173	2,181,167	1,505,751	1,221,621	1,211,675	755,807		
	Ratio		17.2	11.8	11	8.1	7.8	7.2	5	4	4	2.5	63.9	78.6
		WORLD	CANADA ▲	BRAZIL ▲	KOREA ▲	MEXICO ▲	JAPAN ▲	CHINA	RUSSIA	TURKEY ▲	GERMANY ▲	TAIWAN		
2013	Quantity	29,166,806	4,971,465	3,777,443	3,457,683	2,895,500	2,268,524	1,729,412	1,683,539	1,092,424	1,016,777	691,083		
	Ratio		17	13	11.9	9.9	7.8	5.9	5.8	3.7	3.5	2.4	66.8	80.9
		WORLD	CANADA ▲	KOREA ▲	BRAZIL ▲	RUSSIA	MEXICO ▲	CHINA	JAPAN ▲	TURKEY ▲	UNITED KINGDOM▲	GERMANY ▲		
2014	Quantity	40,222,845	5,488,453	4,967,551	4,563,897	4,254,859	3,364,570	2,900,316	2,437,082	1,994,610	1,287,030	1,190,132		
	Ratio		13.6	12.4	11.3	10.6	8.4	7.2	6.1	5	3.2	3	63.0	80.8

		WORLD	CANADA ▲	BRAZIL ▲	KOREA ▲	TURKEY ▲	MEXICO ▲	JAPAN ▲	CHINA	RUSSIA	GERMANY ▲	TAIWAN		
2015	Quantity	35,143,597	5,244,973	4,829,544	4,402,159	2,560,647	2,502,939	2,406,688	2,161,101	1,922,042	1,415,879	1,091,339		
	Ratio		14.9	13.7	12.5	7.3	7.1	6.8	6.1	5.5	4	3.1	66.3	81.0
		WORLD	CANADA ▲	BRAZIL ▲	KOREA ▲	MEXICO ▲	TURKEY ▲	JAPAN ▲	RUSSIA	GERMANY ▲	TAIWAN	VIETNAM		
2016	Quantity	29,956,616	5,119,209	3,959,361	3,458,386	2,723,233	2,191,546	1,947,919	1,870,379	1,110,099	983,245	871,153		
	Ratio		17.1	13.2	11.5	9.1	7.3	6.5	6.2	3.7	3.3	2.9	68.4	80.8

Source: United States Department of Commerce; ▲ Indicates that the source country is the ally of the United States

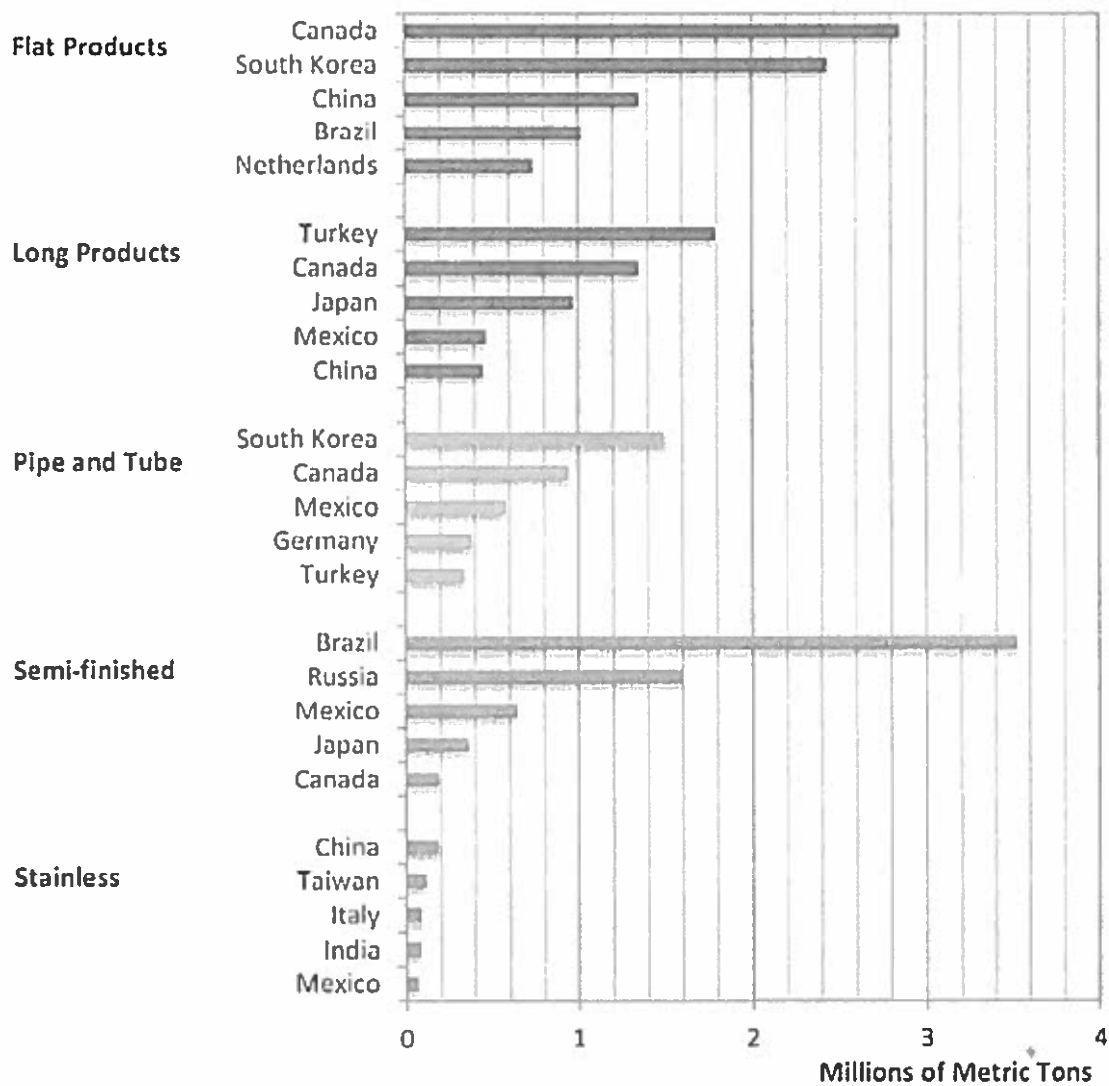
U.S. Steel Imports - Top 10 Sources

2015 - Millions of Metric Tons



Source: 2015 Global Steel Trade Monitor - Steel Imports Report: United States. International Trade Administration, Department of Commerce.

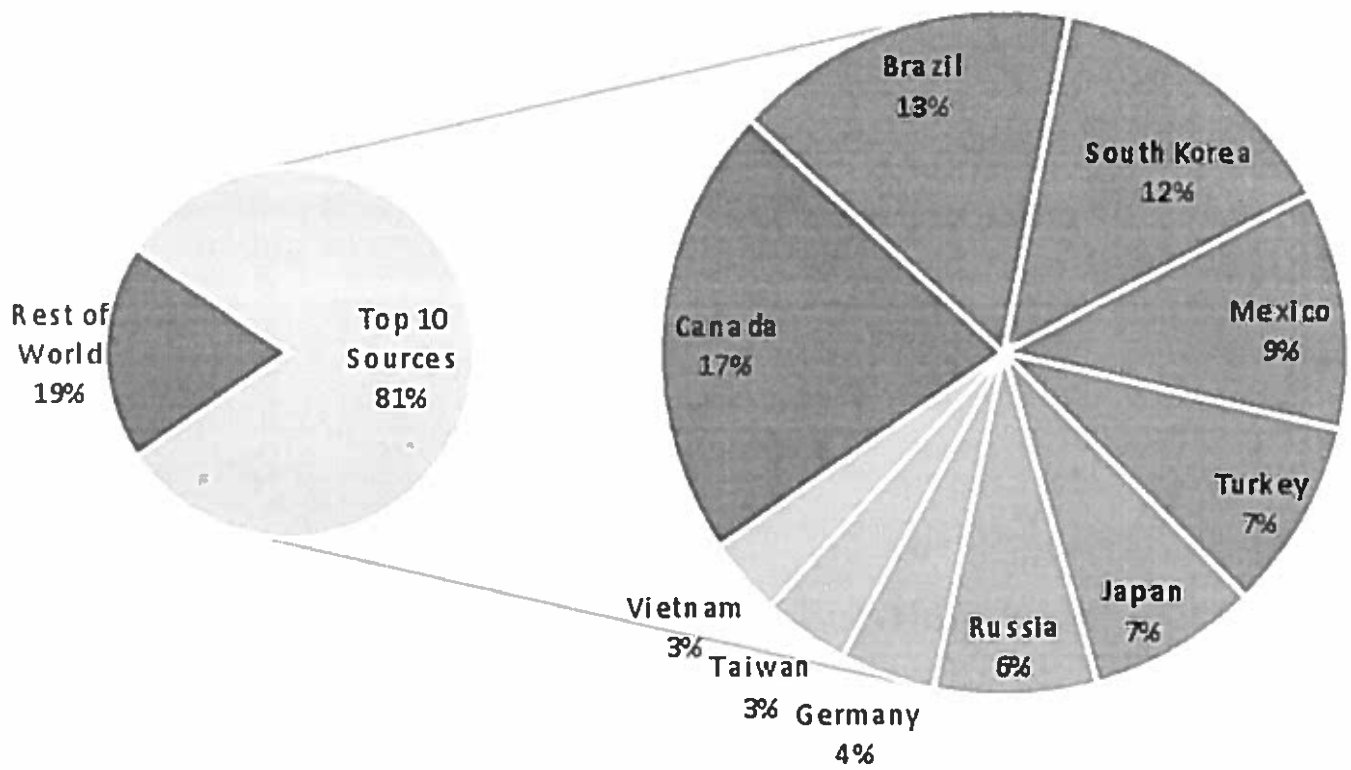
U.S. Top 5 Import Sources by Product - 2015



Source: IHS Global Trade Atlas

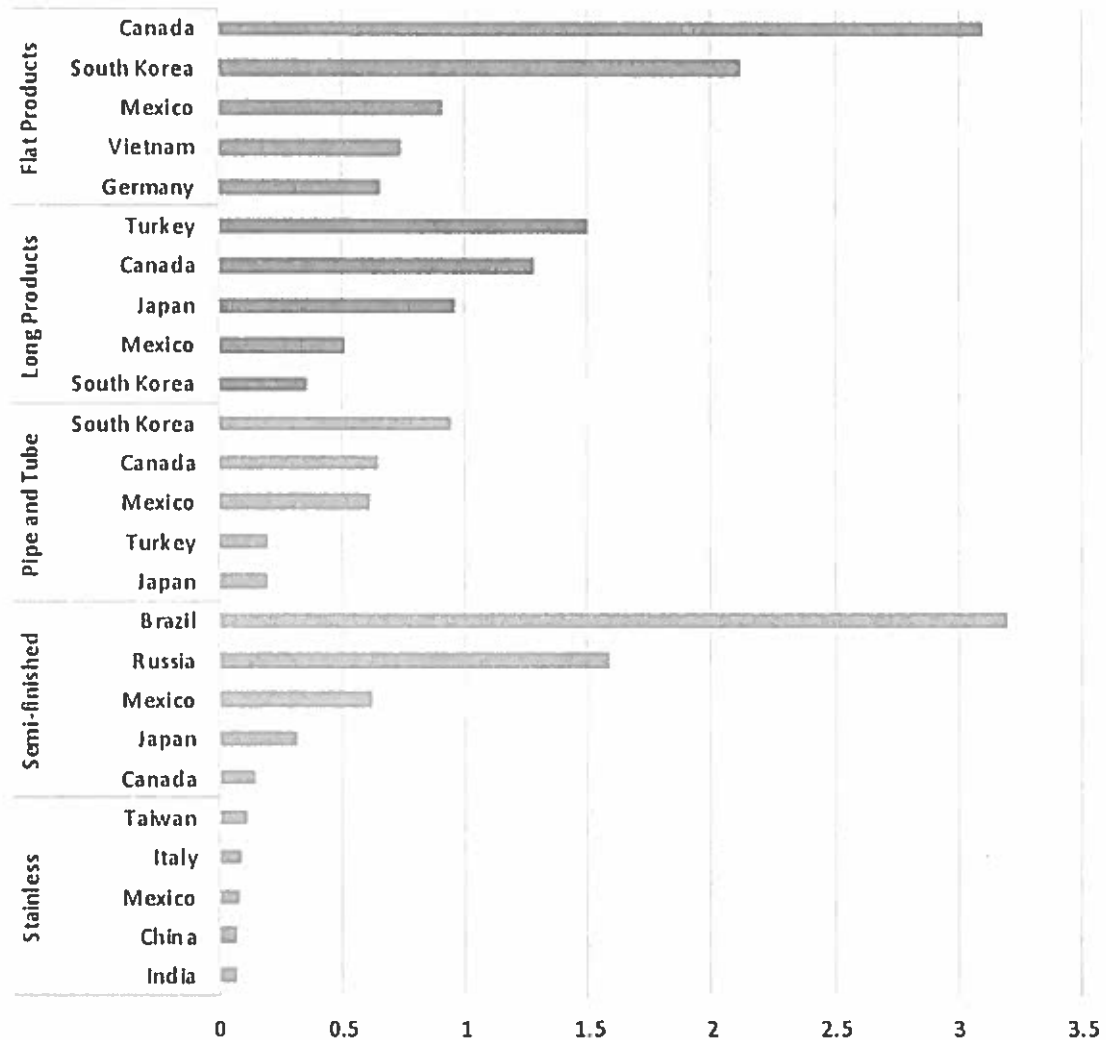
Source: 2015 Global Steel Trade Monitor - Steel Imports Report: United States. International Trade Administration, Department of Commerce.

U.S. Steel Imports - Top 10 Sources 2016 - Millions of Metric Tons



Source: 2016 Global Steel Trade Monitor - Steel Imports Report: United States. International Trade Administration, Department of Commerce

U.S. Top 5 Import Sources by Product - 2016



Source: IHS Global Trade Atlas

Millions of Metric Tons

Source: 2015 Global Steel Trade Monitor - Steel Imports Report: United States. International Trade Administration, Department of Commerce.

Exhibit 6

U.S. Anti-Dumping and Countervailing Orders in Place on Imported Steel Products from China



ANTIDUMPING AND COUNTERVALUING DUTY ORDERS IN PLACE

AS OF MAY 24, 2017

Key to ITC case number:	
AA	Antidumping Act of 1921
A	Section 731 of the Tariff Act of 1930 (antidumping)
C	Section 701 of the Tariff Act of 1930 (countervailing duty)
CA	Section 104 of the Trade Agreements Act of 1979 (countervailing duty)
C-None	No Commission investigation (countervailing duty)

Key to product group:	
AG	Agricultural, forest, and processed food products
CH	Chemicals and pharmaceuticals
ISM	Iron & steel: Mill products
ISO	Iron & steel: Other products & castings
ISP	Iron & steel: Pipe products
ME	Machinery and electronics/scientific equipment
MM	Metals and minerals
MSC	Miscellaneous manufactured products
PRSG	Plastics, rubber, stone, and glass products
TR	Transportation
TX	Textiles and apparel

Order date	Continued date	ITC case No.	DOC case No.	AD/CVD	Review Sequence Group No.	Product Group	Product	Country	Column2	Column3	End/Res
11/10/2010	3/16/2016	C-489	C-670-867	C	178	ISP	Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe	China			81 FR 14019
10/24/1997	12/12/2015	A-753	A-570-849	A	7	ISM	Carbon steel plate	China			80 FR 79306
09/07/2001	07/22/2013	A-874	A-570-860	A	92	ISM	Steel concrete reinforcing bar	China			78 FR 43858
11/29/2001	02/07/2014	A-899	A-570-865	A	93	ISM	Hot-rolled carbon steel flat products	China			79 FR 7425
11/10/2010	3/16/2016	A-1168	A-570-856	A	178	ISP	Seamless Carbon and Alloy Steel Standard Line and Pressure Pipe	China			81 FR 14069
07/22/2008	12/04/2013	A-1116	A-570-810	A	147	ISP	Circular welded carbon quality steel pipe	China			78 FR 72863
07/22/2008		C-447	A-570-811	C	147	ISP	Circular welded carbon quality steel pipe	China			78 FR 72863
08/05/2008	06/23/2014	A-1118	A-570-814	A	148	ISP	Light-weight rectangular pipe and tube	China			79 FR 35522
08/05/2008	06/23/2014	C-449	C-570-815	C	148	ISP	Light-weight rectangular pipe and tube	China			79 FR 35522
01/23/2009	05/20/2014	C-455	C-570-836	C	158	ISP	Circular welded carbon quality steel line pipe	China			79 FR 28894
03/17/2009	07/23/2014	A-1144	A-570-830	A	160	ISP	Circular welded austenitic stainless pressure pipe	China			79 FR 42760
3/19/2009	06/02/2014	C-454	C-570-831	C	160	ISP	Circular welded austenitic stainless pressure pipe	China			79 FR 42760
5/13/2009	6/20/2014	A-1149	A-570-835	A	158	ISP	Circular welded carbon quality steel line pipe	China			79 FR 28894
1/20/2010	5/18/2015	C-463	C-570-844	C	168	ISM	Oil Country Tubular Goods	China			80 FR 28224
5/21/2010	5/18/2015	A-1159	A-570-843	A	170	ISM	Oil Country Tubular Goods	China			80 FR 28224
12/03/2014		A-1238	A-570-898	A	202	ISM	Non-Oriented Electrical Steel	China			79 FR 71741
12/03/2014		C-506	C-507-897	C	202	ISM	Non-Oriented Electrical Steel	China			79 FR 71749
1/6/2015		A-1248	A-570-812	A	203	ISM	Carbon and Certain Alloy Steel Wire	China			80 FR 1015
1/6/2015		C-812	C-570-813	C	203	ISM	Carbon and Certain Alloy Steel Wire	China			80 FR 1016
07/14/2016		A-1284	A-570-829 A			ISM	Cold-Rolled Steel Flat Products	China			81 FR 45856
07/14/2016		C-641	C-570-830 C			ISM	Cold-Rolled Steel Flat Products	China			81 FR 45900
07/25/2016		C-634	C-580-879 C			ISM	Corrosion-Resistant Steel Products	China			81 FR 48367
07/25/2016		A-1274	A-570-828 A			ISM	Corrosion-Resistant Steel Products	China			81 FR 48390
03/20/2017		A-1320	A-570-847 A			ISM	Carbon and Alloy Steel Cut-to-Length Plate	China			82 FR 14340
03/20/2017		C-580	C-570-848 C			ISM	Carbon and Alloy Steel Cut-to-Length Plate	China			82 FR 14346
04/03/2017		C-857	C-570-843 C			ISM	Stainless Steel Sheet and Strip	China			82 FR 16166
04/03/2017		A-1312	A-570-842 A			ISM	Stainless Steel Sheet and Strip	China			82 FR 16160