Before the
UNITED STATES DEPARTMENT OF COMMERCE
Bureau of Industry and Security

Section 232 National Security Investigation of Imports of Titanium Sponge	**:**	**BIS-2018-0027** ***PUBLIC VERSION:*** **Business Proprietary Information Deleted on page 13, 18 and In Attachments 1, 7, 8, 9, 14, 16, 19 and 20**

REBUTTAL COMMENTS OF TITANIUM METALS CORPORATION

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I. INTRODUCTION

Titanium Metals Corporation ("TIMET") is the last American producer of titanium sponge and the petitioner in this Section 232 investigation into the impact that imported titanium sponge is having on the national security of the United States. TIMET requested a national security investigation of titanium sponge imports because low-priced imports of titanium sponge are displacing domestic production of titanium sponge and discouraging the capital investments needed to keep the last titanium sponge plant in the United States operational.

TIMET submits these rebuttal comments in response to comments filed by Allegheny Technologies Incorporated ("ATI"), Arconic Inc., the Aerospace Industries Association ("AIA"); The Boeing Company; the Government of Japan ("GOJ"); the Japan Titanium Society ("JTS"); the Government of Kazakhstan ("GOK"); Osaka Titanium technologies Co., Ltd. ("OTC"); the Perryman Company; Sumitomo Corporation of Americas ("SCOA"); Toho Titanium Company, Ltd. ("Toho"); and Ust-Kamenogorsk Titanium and Magnesium Plant JSC ("UKTMP") in opposition to granting the relief needed to maintain a secure domestic supply of titanium sponge.

Even in opposition, the commenters seem to agree with TIMET in important respects: 1) titanium metal production is an essential element of the defense industrial base; and 2) a reliable supply chain guaranteeing access to titanium metal is critical to the national security of the United States. See, *e.g.*, ATI at 2-3, 5; Boeing at 1, AIA at 1, TOHO at 12. Furthermore, all parties seem to be in agreement that Japan has been a reliable source of titanium sponge under ordinary business conditions. See, *e.g.*, ATI at 10: GOJ at 2-3. But the opposing

comments also contain misstatements of fact and flawed analysis that, if left uncorrected, will mislead the Department of Commerce, Bureau of Industry and Security ("BIS") as to the critical role of titanium sponge as a single point of failure in the titanium metal supply chain; as to the real impact of titanium sponge imports on domestic production of titanium sponge; and as to the unacceptable risk of total reliance on Japanese sponge supplies in *extraordinary* circumstances brought on by political, natural and/or military crises, which is the proper focus of a national security investigation.

II. DISCUSSION

A. Titanium Sponge Is a Critical Material

While the parties agree that titanium metal is a critical material, some parties suggest titanium sponge production is not a critically important stage of titanium metal production. Instead, Boeing, Perryman and UKTMP point to titanium ore (and presumably slag) as the critical material in the production of titanium metal. See Boeing at 4, 6; Perryman at 4-5, UKTMP at 26. Other parties emphasize the national security interest in maintaining a strong domestic titanium mill products sector, but dismiss the importance of titanium sponge production. See ATI at 3, 21-23, Boeing at 2-3, Arconic at 2, 4; Perryman at 7-8. Such reasoning is specious. Titanium ore and slag are only important in the production of titanium metal because they are used to produce titanium sponge. Without a viable domestic titanium sponge producer to extract titanium metal from the ore, the availability of domestic sources for titanium ore is a moot point. Moreover, titanium mill products cannot be produced directly from titanium ore. Titanium metal for titanium mill products can only be produced using

titanium sponge, which may be supplemented but not replaced by titanium metal scrap.

1. Titanium Ore is Available in North America

The suggestion that foreign sourcing of titanium ore creates the same risk as foreign sourcing of titanium sponge is false. See UKTMP at 25-26. Sources for titanium ore are far more diverse and strategically secure than sources for titanium sponge.[1]

ATI acknowledges that "there is no threat to national security posed by any potential future inability to source titanium ore from foreign suppliers in Australia, South Africa, or elsewhere." See ATI at 7. This is because there are sufficient titanium ore supplies in North America. Rio Tinto Fer et Titane (RTFT) has operated in Quebec, Canada for more than 65 years and is one of the leading manufacturers of raw materials for the titanium dioxide market.[2] Japan itself currently sources about $40,000,000 in titanium ores and concentrates from Canada annually.[3] TIMET could do the same if conditions required North American sourcing.

The production of titanium sponge accounts for only about 5% of worldwide consumption of titanium feedstocks.[4] The remaining 95% of titanium feedstocks is used almost entirely in the production of titanium pigments.[5] Given the relatively limited volume of titanium ore used in titanium sponge compared to the volume used in pigments, there is a vast amount of secure titanium feedstocks available throughout the world that could readily be

[1] See Attachment 10 at 6-8, Impact of Feedstock Supply on Sponge Markets 2019/20.
[2] https://www.riotinto.com/canada/rio-tinto-fer-et-titane-14778.aspx
[3] See Attachment 11: https://tradingeconomics.com/japan/imports/canada/titanium-ores-concentrates
[4] TZ Minerals International Pty, Ltd., Titanium Feedstock Market Dynamics 2010 at iv-v.
[5] See Attachment 10 at 12, Impact of Feedstock Supply on Sponge Markets 2019/20.

redirected to titanium metal production in a crisis.[6] Indeed North America alone could supply all of the titanium feedstocks needed to produce titanium metal worldwide.[7]

Additionally, TIMET's current sources for titanium ore in Australia and South Africa are more secure than Japan and Kazakhstan in strategic and geopolitical terms. These suppliers operate in countries that are politically stable and reliable; and they do not reside in the military shadow of China, Russia and/or North Korea.

2. Titanium Sponge Is a Critical Material

The suggestion that titanium sponge is not a critical material because it was not included in the Critical Minerals List[8] published by the Department of the Interior shows a fundamental misunderstanding of the nature of titanium sponge. See Boeing at 6. Titanium sponge is not eligible for inclusion on the critical minerals list because titanium sponge is not a mineral. It is a manufactured metal product.

Similarly, it would be a mistake to draw a negative inference from the fact that the interagency task force, which included the Department of Defense ("DoD") and BIS, did not make an explicit "finding" as to titanium sponge in the public version of its report on the defense industrial base issued pursuant to Executive Order 13806 (2017).[9] Boeing at 7. The EO 13806 Report does include a section on the materials sector and titanium is specifically included in the description of materials vital to national defense and economic security.[10] The

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[6] *Id.* at 35.
[7] See Attachment 1, TZMI Titanium Feedstock Market Dynamics, Selected pages re World Titanium Feedstock Production by Region.
[8] 83 Fed. Reg. 23295 (May 18, 2019).
[9] Report in Fulfillment of Executive Order 13806: Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain resiliency of the United States (September 2018) (hereinafter the "EO 13806 Report").
[10] Id. at 94.

risks associated with the materials sector include high U.S. import reliance and dependence on domestic single points of failure.[11] Additionally, Appendix Three to the report indicates that the Department of Commerce, Bureau of Industry and Security ("BIS") did conduct a U.S. Strategic Material Supply Chain Assessment of titanium.[12] Thus, the public version of the report indicates that the entire titanium supply chain was subject to analysis as a segment vital to national security even if the results of that analysis are not publicly disclosed. The absence of any specific public finding as to titanium sponge is meaningless, as the report does not make public "findings" as to any specific materials. The report only offers a few case studies that presumably reflect the risks identified with respect to many other strategic materials, including titanium sponge.

3. Titanium Scrap Cannot Replace Titanium Sponge

Commenters also suggest that titanium sponge is not a critical point of failure because titanium scrap is available as a substitute for sponge. See Boeing at 5. These commenters fail to acknowledge that current rising demand for titanium sponge already factors in the availability of scrap as a supplementary raw material for the manufacture of titanium mill products.

Titanium scrap is not a perfect substitute for titanium sponge. Variations in alloying requirements preclude the exclusive use of titanium scrap in all titanium metal applications. Some specifications for titanium mill products prohibit the use of titanium scrap in melted products. Additionally, the high oxidation levels of titanium scrap necessitate its use in combination with titanium sponge to achieve acceptable oxygen levels in titanium melted

[11] Id. at 95.
[12] Id. at 116.

products.

Specifications for many military aircraft engine parts require the exclusive use of titanium sponge rather than scrap for the production of such titanium parts. These specifications include parts for the F-100, F-119 and F-135.[13]

B. America's Titanium Sponge Manufacturing Base Is at Risk

Comments in opposition to granting relief under Section 232 attempt to downplay the risk of disruption in titanium sponge supplies by pointing to the political reliability of Japan and Kazakhstan (see, *e.g.*, GOJ at 2-3, UKTMP at 24-26), and Japan's record as a stable source of supply (see, *e.g.*, ATI at 10, GOJ at 4). On this basis, the commenters claim that the risk of disruption is small and TIMET's claims regarding the possibility of disruption are "speculative' and "far-fetched. See, *e.g.*, Boeing at 3, Arconic at 6, Perryman at 7, UKTMP at 24 ("far-fetched"); TOHO at 3 ("speculative"). Unfortunately, America's national security cannot depend on the wishful notion that nothing bad will ever happen.

The EO 13806 Report begins by stating: "To provide for our national security, America's manufacturing and defense industrial base must be secure, robust, resilient, and ready. … In the event of contingencies, the industrial base must possess sufficient surge capabilities."[14] With these goals in mind, a Section 232 national security investigation must necessarily focus on what may happen to the industrial base in the event of unfortunate "contingencies," like wars, natural disasters and political turmoil. With these goals in mind, a Section 232 investigation of the impact of titanium sponge imports on America's defense

[13] See Attachment 17, Military Engine Parts Requiring the Use of Titanium Sponge.
[14] Id. at 7.

industrial base must focus on whether the potential closure of America's last titanium sponge plant will make America's industrial base more or less "secure, robust, resilient, and ready."

The EO 13806 Report identifies ten risk archetypes that constitute threats to America's defense industrial base:

Risk Archetype	Definition
Sole source	Only one supplier is able to provide the required capability
Single source	Only one supplier is qualified to provide the required capability
Fragile supplier	A specific supplier is financially challenged / distressed
Fragile market	Structurally poor industry economics; potentially approaching domestic extinction
Capacity constrained supply market	Capacity is unavailable in required quantities or time due to competing market demands
Foreign dependency	Domestic industry does not produce the product, or does not produce it in sufficient quantities
Diminishing manufacturing sources & material shortages (DMSMS)	Product or material obsolescence resulting from decline in relevant suppliers
Gap in U.S.-based human capital	Industry is unable to hire or retain U.S. workers with the necessary skill sets
Erosion of U.S.-based infrastructure	Loss of specialized capital equipment needed to integrate, manufacture, or maintain capability
Product security	Lack of cyber and physical protection results in eroding integrity, confidence, and competitive advantage

Figure 23: Ten Risk Archetypes Threatening America's Manufacturing and Defense Industrial Base[15]

At a glance, it is clear that nearly all of these risk archetypes afflict America's titanium sponge industry. TIMET is the one and only domestic source capable of producing titanium sponge of the kind and quality needed to support America's military. America's titanium sponge industry is experiencing structurally poor economics due to the vast quantity of low-priced titanium sponge imports now entering the U.S. market. America is dependent on foreign sources for the vast majority of the titanium sponge it consumes. With the closure of ATI's Rowley plant, America has suffered a decline in suppliers, an erosion of U.S.-based

[15] Id. at 45.

infrastructure and a loss of skilled U.S. workers. Moreover, America is faced with the possibility that TIMET will close America's last titanium sponge plant, resulting in a total loss of productive capacity for titanium sponge if the structural economics for titanium sponge production do not improve.

1. Foreign Suppliers May Not be Reliable in An Emergency

Given Japan's domination of the U.S. import market, the possible closure of TIMET's Henderson, NV, sponge plant will eliminate nearly 400 jobs for highly-skilled American workers and effectively leave the United States military and critical civilian infrastructure, including the commercial aerospace industry, completely dependent on only one foreign source, Japan, for the titanium sponge it needs. That sole source will be thousands of miles from the United States, but in close proximity to Russia, China and North Korea.

Other foreign sources for titanium sponge have proven themselves unreliable. Kazakhstan exported more than $84 million worth of titanium sponge to the United States in 2012; but then curtailed its exports to the United States while it pursued a strategy of supplying downstream products to its worldwide customers.[16][17] By 2016, the value of titanium sponge exports from Kazakhstan to the United States dropped to less than half a million dollars. Lately, in a reversal of strategy, UKTMP has sought to recover its U.S. market share by selling low-priced titanium sponge for export to the United States.

China's exports of titanium sponge to the U.S. dropped from nearly $63 million in 2011 to less than $200 thousand in 2018. Ukraine's exports dropped from more than $20

[16] Source: USITC Dataweb. See Attachment 2, Titanium Sponge Imports 2010-2018.
[17] See Attachment 11, Gehler, World Titanium Sponge Supply Situation at 12.

million in 2011 to barely $300 thousand in 2018. Russia's exports of titanium sponge to the US dropped from more than $11 million in 2012 to barely $100 thousand in 2018.

China and Russia have chosen to use their titanium sponge in domestic production of downstream articles of titanium. Japan's titanium sponge producers could very well choose the same path now that Japan and the United States have signed a memorandum of understanding ("MOU") regarding defense procurement, making articles of titanium from Japan eligible for use in U.S. defense articles notwithstanding the strictures of the Specialty Metals Law, 10 U.S.C. § 2533b.

Most importantly, even formerly reliable suppliers can become unreliable suppliers when extraordinary events beyond their control intervene. It is the possibility of such contingencies that require the United States to maintain a *domestic* defense industrial base that is "secure, robust, resilient and ready."[18]

2. Domestic Titanium Sponge Manufacturing Cannot Be Restarted Easily in an Emergency

Amazingly, after spending half a billion dollars and taking six years to get titanium sponge from its Rowley plant certified for use in the rotating parts of jet engines, before giving up altogether, ATI now claims that manufacturing titanium sponge is "simple." See ATI at 20. Singing is simple; singing professionally requires talent and substantial investments of time and money to achieve success.

As ATI's experience demonstrates, building a titanium sponge plant capable of producing premium quality sponge takes lots of money and years of effort. Even the

[18] EO 13806 Report at 7.

Government of Japan recognizes that it takes "substantial investment and time (multiple years)" to be approved as a supplier of titanium sponge for aerospace and defense applications. GOJ at 6.

ATI now claims it will not resume titanium sponge production in the United States under any circumstances. See ATI at 17-18. ATI has said previously that Rowley was closed in a manner that will allow it to be restarted if a reopening is supported by market conditions.[19] Boeing apparently continues to believe that Rowley may be restarted. Boeing at 6.

If TIMET closes its Henderson sponge facility, it will take hundreds of millions of dollars and many years of time before TIMET can reopen the plant and regain approval of its titanium sponge for use in rotating parts for jet engines. Such costly and lengthy delays are unacceptable if America wants to have a "secure, robust, resilient, and ready" domestic supply of titanium sponge as called for in the EO 13806 Report.

C. Imports of Titanium Sponge Threaten to Impair National Security

1. The ITC Injury Determination is Not Pertinent to a 232 National Security Investigation

In reaching a determination as to whether imports of titanium sponge threaten to impair the national security, the opposing commenters strenuously urge BIS to defer to the negative injury determination of the United States International Trade Commission ("ITC") in the antidumping and countervailing duty ("AD/CVD") investigation of titanium sponge from

[19] See https://agmetalminer.com/2016/09/07/ati-idles-utah-titanium-sponge-facility/ .

Japan and Kazakhstan.[20] See, *e.g.*, ATI at 11, GOJ at 6-7, TOHO at 3-5; OTC at 11. This suggestion should be rejected because the ITC determined that TIMET's "make or buy" decision was not pertinent to its inquiry in the AD/CVD investigation.[21] The ITC candidly stated:

> …{A}mong the most relevant considerations for whether to produce titanium sponge domestically or choose to buy it from imported sources for the purpose of producing downstream titanium mill products are the requirements for production of downstream titanium mill products and the requirements of customers for those downstream products. Thus, TIMET's argument about its possible "make or buy" decision is based largely on the structure of its downstream production of titanium mill products and the requirements of its customers for those downstream products. But our analysis of the impact of subject imports is limited by law to their impact on the operations of the domestic industry producing the domestic like product, and the difficulties of domestic industries producing other products are beyond the purview of these investigations.[22]

In this investigation, BIS is not statutorily barred from taking into account TIMET's full make or buy analysis in determining whether the availability of low-priced imports may adversely influence TIMET's decision to invest in its domestic titanium sponge plant and thus threaten to impair the national security of the United States. While ATI claims the availability of low-priced imports did not influence its decision to close Rowley, TIMET has made it abundantly clear that the availability of low-priced imports is an important consideration in TIMET's pending decision whether or not to keep its titanium sponge plant alive. Since ATI has now clearly stated that it never intends to reopen Rowley, and no other party has expressed any interest in opening a titanium sponge plant in the United States, TIMET's investment decision, based in part on the availability of low-priced imported sponge, will determine whether or not the United States has any domestic capacity to produce titanium sponge.

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[20] *Titanium Sponge from Japan and Kazakhstan*, Inv. Nos. 701-TA-587, 731-TA-1385-1386 (Preliminary), USITC Pub. 4736 (October 2017) (hereinafter "ITC Report").
[21] ITC Report at 38, n. 216. See also ITC Report at 31-32.
[22] ITC Report at 32 (footnotes omitted).

The opposing commenters refer to the ITC's finding that there was no material injury because there is a lack of "head-to-head" competition for commercial sales of titanium sponge, suggesting that the same result should be reached here. See, *e.g.*, TOHO at 3-5. The record in this investigation demonstrates that the absence of commercial sales of titanium sponge will play absolutely no role in determining whether or not the United States has a domestic source for titanium sponge.[23] Consequently, the ITC's finding of no commercial competition for sales of titanium sponge is not relevant to the principal question presented in this investigation, *i.e.*, does the substitution of imports for domestic production of titanium sponge threaten to impair the national security of the United States.

On the question of whether imports of titanium sponge are being dumped and/or subsidized, TIMET has compiled ample evidence that such trade practices are occurring. The Department of Commerce found such evidence sufficiently credible to initiate AD/CVD investigations of imports of titanium sponge from Japan and Kazakhstan. Unfortunately, the ITC found that it was statutorily constrained by the AD/CVD law to an analysis of commercial sales of titanium sponge and, therefore, the AD/CVD law could offer no relief to an integrated titanium producer such as TIMET. This prevented the Department of Commerce from making a definitive determination of dumping and subsidization. Thus, the apparent dumping and subsidization of imports of titanium sponge has been allowed to continue unchecked despite the ample evidence of dumping and subsidization submitted to DOC by TIMET.

2. Import Substitution Threatens National Security

In 2018, after the conclusion of the AD/CVD investigation, TIMET updated its make

[23] See Attachment 14, TIMET Update to Make or Buy Analysis 2018 (*Business Proprietary*). See also TIMET 232 Petition at Exhibit 18 (TIMET White Paper re Modernization of Titanium Sponge Plant (Business Proprietary Information)).

or buy analysis based on new offers to sell titanium sponge proposed by foreign suppliers.[24] That analysis showed that [

.] With these low-priced offers from foreign producers on the table, it is difficult to justify economically a decision to invest more than $150,000,000 to update TIMET's existing sponge plant.

Without the substantial investment needed to replace TIMET's chlorination facility, TIMET will no longer be an integrated producer of titanium sponge. TIMET would have to buy titanium chloride (TiCl4) in order to produce titanium sponge; and TIMET would have no means to recycle chlorine, making the manufacturing process substantially more expensive. TIMET would be in the exact same position that ATI found itself in when ATI closed its non-integrated Rowley plant because imported sponge was available at a price that was more than 15% below ATI's cost to produce titanium sponge. See ATI at 16; TIMET Petition at 8-9. In such circumstances, TIMET would have to substitute imports of titanium sponge for domestically-produced titanium sponge in order to remain competitive. This eventuality will make the United States 100% dependent on distant foreign sources for titanium sponge, which is a "choke point" in the production of titanium metal. See UKTMP at 26.

On the question of import substitution, there can be no dispute. When ATI closed its

[24] See Attachment 14, TIMET Updated Make or Buy Analysis 2018. (*Business Proprietary*)

Rowley plant in 2016, ATI did, in fact, substitute imports of titanium sponge for all of its domestic production of titanium sponge. ATI itself admits that its decision to substitute imports for its domestic production was enabled by the fact that "significant global capacity to produce sponge had been added." See ATI at 17.

TIMET has, in fact, curtailed its domestic production of titanium sponge while continuing to import titanium sponge. Most importantly, TIMET has made it abundantly clear that substituting low-priced imports for domestic titanium sponge may be the most reasonable choice if the economics of domestic titanium sponge production do not improve. The impact of structurally poor industry economics that may lead to domestic extinction of a strategic industry is one of the risk factors specifically identified in the EO 13806 Report on the defense industrial base. In contrast to the ITC, in this investigation BIS must take into account the impact of imported titanium sponge on the underlying economics of domestic titanium sponge production, not just the impact of titanium sponge imports on commercial sales of titanium sponge.

3. Supply Chain Imbalance Threatens National Security

Contrary to suggestions made by opposing commenters, the national security of the United States cannot be left to depend on TIMET's willingness to invest in titanium sponge production when the underlying economics are unfavorable. See ATI at 19; Boeing at 6. The fallacy in such an approach is revealed by Boeing at page 13 of its comments when it states that American aerospace and defense companies "did not become - and will not stay - profitable by incurring expenses not borne by their … competitors." In the face of this

undeniable truth, no one can reasonably expect an integrated titanium producer like TIMET to continue to bear the costs of producing titanium sponge if lower-cost titanium sponge imports are being used by TIMET's non-integrated competitors in the commercial market for titanium mill products.

There is, undeniably, an imbalance in the profitability of companies participating in the titanium supply chain. Average airline profits were 58% in 2015-18 than they were in 2011-14.[25] Aerospace original equipment manufacturers have seen their profit grow by nearly 40% during 2015-18 compared to 2011-14. Meanwhile, Japanese sponge producer OTC saw its average loss increase by 84% from 2015 to 2018 compared to 2011-2014.[26]

Japanese sponge prices cannot be attributed to ore costs. Prices for Japanese titanium sponge declined at nearly twice the rate attributable to lower ore costs in the 2014-2016 time period.[27] Moreover, Japanese sponge producers have not increased their sponge prices to reflect significantly increased ore costs subsequent to 2016.[28] Every $100/ton increase in ore costs should translate into a $0.20 increase in sponge prices. Data from 2016 through 2019 indicates that Japanese sponge producers have not been passing these cost increases along, further illustrating the imbalance in the supply chain.

Today, it is TIMET that cannot justify investment in sponge operations. Soon it will be OTC and Toho that cannot justify these kinds of investment, opening the door for China.

[25] See Attachment 18, Financial Performance Comparison.
[26] *Id.*
[27] See Attachment 19, Feedstock Impact on Sponge Cost.
[28] See Attachment 20, Rutile Price History-Forecast.

China's vast recent expansion in its titanium production capabilities,[29] has left Japan with only one outlet for its excess titanium sponge capacity, *i.e.*, the United States. Japanese efforts to increase their capacity utilization by selling into a highly concentrated U.S. market, has allowed U.S. customers to use their leverage to drive prices to a dangerously low level, which will not permit titanium sponge producers outside of China to reinvest profitably in titanium sponge production. If the prevailing economic imbalance is not corrected, it will undermine titanium sponge production in the United States and, eventually, in Japan. When that happens, China will become the supplier of last resort for titanium sponge.

D. The Cost of Maintaining Domestic Production of Titanium Sponge Is Inconsequential for the U.S. Titanium Mill Products Industry

The opposing commenters clearly overstate the impact of Section 232 relief on downstream consumers when they refer to an increase in titanium sponge costs as potentially "disastrous" or "catastrophic." See Perryman at 2, Arconic at 4. While avoiding such hyperbole, other commenters fret that increased sponge costs will reduce their downstream competitiveness. See ATI at 21-23, Boeing at 2-3.

A goal of restoring titanium sponge prices to 2013 levels does not represent an unprecedented increase in costs. The requested relief would merely recreate conditions under which the United States titanium mill products industry has thrived. America's domestic titanium mill products industry has shown its ability to maintain world dominance despite significant fluctuations in costs for ore, scrap, vanadium and titanium sponge itself.

Average titanium scrap prices increased by more than 50% from December 2016 to December 2017 with no discernible adverse impact on America's titanium mill products

[29] See, *e.g.*, Attachment 21, Lomon Billions 30,000 MT Titanium Expansion

industry.[30] Vanadium pentoxide prices spiked in 2018 and still remain more than 100% higher than prices in 2016 without adverse consequences for the U.S. mill products industry.[3132] America's titanium mill products companies were thriving in 2013, when titanium sponge prices were 30% higher than they are now.

A possible difference in price between titanium sponge consumed in the U.S. and titanium sponge consumed elsewhere will not have a significant impact on the performance of America's titanium mill products industry. The domestic titanium mill products industry is comprised of four producers who concentrate on titanium mill products for use in defense and aerospace applications. According to TIMET's internal estimates, United States producers currently supply about 60% of all of the titanium sold for defense and aerospace applications worldwide, with TIMET's European operations accounting for another 10%, and Russia accounting for 24% of such shipments.[33] The remaining 6% is split among Japanese mill product producers, small European producers, POSCO (South Korea), UKAD (France) and Chinese exports to western markets. These estimates do not include domestic shipments in Russia and China.

America's dominance of the worldwide titanium mill products industry was not built on access to low-priced titanium sponge. That dominance will not change as a result of minimal additional costs for titanium sponge. As Boeing points out, 60-65% of the titanium metal used in the production of titanium mill products consists of titanium scrap. See Boeing at 12. Thus, the influence of titanium sponge prices on the costs of titanium mill products is significantly diluted by the fact that titanium sponge accounts for a minor portion of total

[30] See Attachment 7, Titanium Scrap Average prices per metalprices.com.
[31] See Attachment 8, Vanadium Pentoxide Prices per Metal Bulletin.
[32] See Attachment 12 at 14-15, Vanadium Price History per Ametek.
[33] See Attachment 9, TIMET Internal Estimates of Global Titanium Mill Products Shipments (Excluding Domestic Russian & Chinese Markets (essentially closed markets).

titanium metal costs. Moreover, as noted above, America's titanium mill products industry was able to absorb a more than 50% increase in titanium scrap prices from December 2016 to December 2017 with no discernible adverse impact on the industry. A smaller increase in titanium sponge prices on a smaller portion of the titanium metal used to produce titanium mill products, should, like the recent increase in scrap prices, will have no discernible impact on the fortunes of the titanium mill products industry.

Contrary to the assertions of some commenters, any relief provided under Section 232 will not confer an unfair advantage on TIMET's European titanium operations. See Boeing at 3, Arconic at 5, Perryman at 22. [

] A small difference in the costs of titanium sponge is simply not impactful enough to induce any titanium mill products producer or aerospace customer to make a major change to its current U.S.-centric titanium supply chain.

Switching to foreign sources for titanium metal used in defense products is even less likely. Boeing foreign partnerships on military projects will not be placed at risk due to a small cost increase in the cost for titanium metal. Foreign military partners are extremely unlikely to switch to titanium suppliers in potentially hostile foreign countries like Russia (VSMPO) and

China. In addition, it is not at all clear that a switch to foreign suppliers of titanium mill products for defense applications would be feasible in light of product compatibility issues which DoD would need to analyze.

Based on the comments filed in this matter, it appears that America's titanium mill products producers will be able to pass along any small price increases for titanium sponge that result from relief under Section 232. See, *e.g.*, Perryman at 9. On an April 23, 2019 earnings call, John Sims, ATI's Executive Vice President, High Performance Materials and Components Segment, explicitly stated that ATI could pass through any price increases resulting from Section 232 relief.[34]

Some commenters allege that the costs of a 30% tariff increase are somehow significantly greater than the $64 million annually forecast by TIMET. See, *e.g.*, Boeing at 2, 13. These assertions lack mathematical support. In 2018, the total value of titanium sponge imported into the United States was approximately $214 million. A 30% tariff on these imports would result in approximately $64 million in additional duties. This cost will not multiply as it spreads through the supply chain; it will be distributed over a broad range of products.

Boeing and Airbus delivered about 800 aircraft each in 2018, at prices exceeding $100 million per aircraft.[35] If these two companies alone absorbed the entire $64 million cost resulting from a tariff increase, it would amount to less than $40,000 per airplane, or 0.04% of the price of an airplane. This is not a "dramatic" cost increase, as characterized by Boeing. Defense markets and engine manufacturers would also absorb a share of the cost of titanium

[34] https://ir.atimetals.com/~/media/Files/A/ATIMetals-IR/events-and-presentations/Media/ATI_2019Q1_20190423_830AME.mp3

[35] http://investors.boeing.com/investors/investor-news/press-release-details/2019/Boeing-Sets-New-Airplane-Delivery-Records-Expands-Order-Backlog/default.aspx

sponge used in aerospace applications, so the actual cost increase would be even less than 0.04% of the price of an airplane.

Downstream consumers of titanium based products are well able to absorb any small cost increases associated with titanium sponge prices. The International Air Transport Association (IATA) projects that the global airline industry will enjoy net profits of $35.5 billion in 2019.[36] It will be the airlines' tenth consecutive profitable year. Likewise, Boeing and Airbus both enjoy substantial backlogs in orders for commercial airplanes, which combined amount to more than 13,000 aircraft.[37] [38]

The economic analysis proffered in Annex A of the submission by the Japan Titanium Society ("JTS) is based on faulty assumptions and thus inapposite to a reality-based assessment of the possible impact of Section 232 tariffs on imports of titanium sponge. The basic premises underlying the JTS analysis, *i.e.,* that domestic output and domestic employment are fixed, are incorrect in that they ignore both the possibility that TIMET exits the market and that ATI could be compelled to restart the Rowley Utah Plant closed in 2016. JTS uses extreme demand and supply inelasticity assumptions to support its desired conclusion and incorrectly fails to account for a lack of alternate demand or supply options.

The slope of the domestic demand (DD) for sponge in figures 1 and 2 assumes a significant reduction in demand would result from a tariff without any scientific basis assuming price elasticity for sponge. The assumptions that alternate materials would be used, that less airplanes or defense systems would be required, or that U.S. melters would lose

[36] https://airlines.iata.org/news/iata-forecasts-355bn-net-profit-for-airlines-in-2019
[37] https://dsm.forecastinternational.com/wordpress/2019/03/15/airbus-and-boeing-report-february-commercial-aircraft-orders-and-deliveries/
[38] See Attachment 11, Gehler, World Titanium Sponge Supply Situation at7- 8.

business to foreign suppliers as a result of a minor cost increase are clearly unreasonable. In fact, major consumers of titanium mill products are already questioning their exposure to Russian supply risks and there are few viable non-US mill product supply options available. The slope and shifts of domestic supply (DS1 and DS2) in figures 3 and 4 are incorrect for the same reasons, overstating the impact of ~$64 million in the global competitive environment for mill products. (See discussion above at 18, *supra*.) The JTS analysis also ignores the fact that, as discussed above, in many cases titanium melters can pass along changes in raw materials costs to their customers.

JTS's use of "free market" equilibrium on page 5 – note 12 is an attempt to apply a text-book economic theory to a practical application which does not exist here. There are only a limited number of producers of qualified rotating grade titanium sponge and of aerospace quality non-rotating grade sponge. A duopoly exists between Boeing and Airbus such that airlines will not simply turn away from buying planes as a result of the considered cost adjustment. Decisions on purchase and sourcing of military hardware will not be impacted by changes of the magnitude being proposed. Engine producers are even more restricted in modifications to supply patterns due to fixed practices and qualification requirements. Clearly the analysis performed by the JTS economist is not applicable to the matter under review in this investigation.

E. An Appropriate Remedy Will Insure a Secure Supply of Titanium Sponge for Military and Civilian Use

TIMET's preferred remedy for the national security risk posed by imports of titanium sponge is a collaborative solution with Japan (and Kazakhstan) rather than a punitive approach

relying on tariffs or quotas. Such an approach would guarantee that U.S. titanium melters continue to have access to adequate quantities of titanium sponge at reasonable prices while also insuring that the United States will have a secure supply of titanium sponge in a crisis. The only reasonable way to maintain a truly secure titanium supply chain is to make sure the United States has a domestic supplier of titanium sponge that can produce all types and qualities of titanium sponge that the United States needs. The principal alternatives suggested by the opposing commenters, *i.e.*, 1) stockpiling titanium sponge and/or ingots; and 2) using Defense Production Act ("DPA"), 50 U.S.C. App. 2061 et seq., funding to install a government-owned chlorination facility at TIMET's Henderson facility, fall short of these goals. See, *e.g.*, Boeing at 7-8, AIA at 1, Arconic at 7, OTC at 13-15.

While attempting to minimize its impact, OTC and UKTMP acknowledge that titanium sponge does degrade over time. See OTC at 13; UKTMP at 16, n 38. While old titanium sponge may still be useful for some applications, uncertainty about storage conditions and increased oxidation level will make such sponge unsuitable for the most demanding applications, which require properly certified, premium grade sponge.

Equally important is the fact that it would be prohibitively expensive to store enough titanium sponge to serve the military and civilian needs of the United States. Annual consumption of titanium sponge is about 35,000MT. UKTMP's counsel attempts to minimize the need for a secure source of qualified titanium sponge in the United States by misleadingly suggesting that titanium stocks in the United States average nearly 24,000MT. See UKTMP at 16. In fact, UKTMP's Chairman reported in May of 2019 that titanium sponge stocks in the United States were only 13,200MT in 2017 and had dropped to 10,700MT by the third quarter

of 2018.[39] Thus, the United States has on hand about a 90-day supply of titanium sponge based on the most recent data available.

Stockpiling titanium ingots rather than sponge does not make stockpiling an acceptable solution. This suggestion is based on the unspoken and inaccurate assumption that titanium ingots are all fungible products that can be used in any titanium application. TIMET sells ingots in 27 different industry standard grades and produces additional grades of ingots to meet unique customer specifications.[40] A stockpile of ingots could never accommodate all of the titanium metal needs of the U.S. titanium industry. Only an operational domestic titanium sponge producer can supply the titanium sponge needed to meet the diverse and evolving demands of the U.S. titanium metal industry in a time of crisis.

While funding under the DPA might ameliorate TIMET's capital needs in the short term, this approach would fail to address the underlying economic inequity resulting from low-priced imports. It would merely shift to the American taxpayer the economic burden on domestic titanium sponge production created by low-priced imports. It would do nothing to address the economic imbalance that is preventing titanium sponge producers from profitably reinvesting in their operations.

A more economic and equitable solution would be the imposition of a 30% tariff, which would add to the revenue of the United States while incidentally allowing an increase in prices for domestic titanium mill products. These circumstances would allow TIMET to privately fund a new chlorination facility at no cost to United States taxpayers. However, as

[39] See Attachment 11, Gehler, World Titanium Sponge Supply Situation at 18.
[40] See Attachment 14, TIMET Ingot Products.

TIMET has proposed in its initial petition, TIMET believes the best solution would be achieved by implementing bilateral agreements with titanium sponge producing nations establishing reference prices for titanium sponge. Reference prices for imports of titanium sponge that restored titanium sponge prices to 2013 levels would allow TIMET to operate its sponge plant profitably and preserve the know-how embodied in the nearly 400 skilled American workers employed at TIMET's Henderson sponge operations. It would also encourage TIMET and Japanese producers to make the capital investments necessary to sustain the production of titanium sponge in the United States and Japan, securing America's access to a fully capable and completely reliable source of titanium metal that can serve the diverse needs of the U.S defense and commercial markets.

F. Relief Under Section 232 Is Consistent With GATT Article XXI

In its comments, the Government of Japan advises that any relief granted under Section 232 must be consistent with United States obligations under the General Agreement on Tariffs and Trade ("GATT"). See GOJ at 9. TIMET agrees and notes that relief under Section 232 of the kind requested here would be consistent with GATT Article XXI(b((ii) which provides:

> GATT Article XXI *Security Exceptions*:
>
> Nothing in this Agreement shall be construed
>
> (a) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or
>
> (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
>
> > (i) relating to fissionable materials or the materials from which they are derived;
> >
> > (ii) relating to the traffic in arms, ammunition, and implements of war

> and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
>
> (iii) taken in time of war or other emergency in international relations; or
>
> (c) to prevent any contracting party from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

(Highlighting added.)

A recent GATT Panel ruling on Russia's invocation of the GATT Article XXI national security exception in support of its decision to prohibit the transit of goods from Ukraine through Russia to other parts of Europe and Asia during hostilities related to Russia's annexation of Crimea does not indicate otherwise.[41]

The GATT Panel Ruling on Russia action is inapposite to the present investigation for several reasons. The action under review in the Russia decision was a transit embargo, not a decision involving the provision of materials needed to supply a military establishment as is the case here. Thus, Russia invoked Article XXI(b)(iii) to justify its transit embargo as an act "taken in time of war or other emergency in international relations." Relief under Section 232 of the kind requested is authorized under a different provision, GATT Article XXI(b)(ii) respecting the provision of materials needed to supply a military establishment. The invocation of GATT Article XXI(b)(ii) does not require a state of emergency to justify a general transit embargo like that imposed by Russia against goods from Ukraine.

It is the position of the United States that the invocation of Article XXI is an issue of national security, and, as such, every member of the WTO retains the authority to determine for

[41] See RUSSIA - MEASURES CONCERNING TRAFFIC IN TRANSIT REPORT OF THE PANEL, WT/DS512/R/Add.1 (5 April 2019).

itself those matters that it considers necessary to the protection of its essential security interests.[42]

Moreover, even if the WTO had the authority to review invocations of Article XXI for national security reasons, the WTO would doubtless approve the invocation of Article XXI here as a reasonable measure needed to retain the United States' domestic capacity to provide its military establishment with secure access to a strategic material, *i.e.,* titanium sponge. The record compiled by BIS in this investigation demonstrates that the United States has used appropriate means to gather relevant facts, allow the participation of interested parties, and exercise its discretion to adopt reasonable measures calibrated to protecting the national security of the United States without imposing undue burdens on international trade.

CONCLUSION

Thank you for your careful consideration of TIMET's rebuttal comments. If you have any questions or require additional information, please contact me at your earliest convenient opportunity.

Very truly yours,

/s/

Henry Seiner
Vice President, Business Strategy
Titanium Metals Corporation
Warrensville Heights, OH

[42] See Attachment 6: *Russia: Measures Concerning Traffic in Transit* (DS512), US.3d.Pty.Sub.Re.GATT.XXI.fin. (public).

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

1. Worldwide Titanium Feedstock Production by Region. **(*Public Version*)**

EXHIBIT NOT SUSCEPTIBLE TO PUBLIC SUMMARY

2. Titanium Sponge Imports 2010-2018.

Country	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Percent
China	7659165.00	62878715.00	41993166.00	29467335.00	11802958.00	6688113.00	415115.00	192660.00	132365.00	-31.3
Japan	109741804.00	176357472.00	241431133.00	165876181.00	155281184.00	161125346.00	144794485.00	177679268.00	202339939.00	13.9
Kazakhstan	69738391.00	81828026.00	84296311.00	11311979.00	6644070.00	21371092.00	373974.00	15947027.00	13998684.00	-12.2
Russia	6626839.00	7706870.00	11206976.00	7893279.00	2410080.00	3737143.00	1950404.00	1088000.00	105880.00	-90.3
Ukraine	1709544.00	20446431.00	18212589.00	15689769.00	16168504.00	10305610.00	323057.00	11711858.00	311330.00	-97.3

Step 1: Trade Flow and Classification System

Trade Flow	Imports For Consumption
Classification System	HTS Items

Step 2: Data and Years

Data To Report	Customs Value
Data Format	1
Years	2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010
Timeframe Aggregation	Annual

Step 3: Countries

Select Type	Select Country Groups
User Groups	
System Groups	Titanium Sponge Producers
Country Aggregation	Break Out Countries

Step 4: Commodities

Select Type	Select Commodity Groups
User Groups	
System Groups	Titanium Sponge
Commodity Aggregation Level	10
Commodity Aggregation	Aggregate Commodities
Description Display	YES

Step 5: Programs

Select Type	Use All Programs
Import Program Aggregation	Aggregate CSC

Step 6: Rate Provision Codes

Select Type	Use All Provision Codes
Provision Code Aggregation	Aggregate RPCODE

Step 7: Districts

Select Type	Use All Districts
District Aggregation	Aggregate District

Step 8: Report Layout

Column Order	COUNTRY
Column Sort Order	
Percent Change Column	Checked
Show All	Checked
Enable Subtotals	Uncheked

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

3. AD Initiation Checklist: Titanium Sponge from Japan

A-588-877
Investigation
POI: July 1, 2016 – June 30, 2017
~~**Proprietary Document**~~
E&C IV: AN
PUBLIC VERSION

September 13, 2017

ENFORCEMENT AND COMPLIANCE
OFFICE OF AD/CVD OPERATIONS
ANTIDUMPING DUTY INVESTIGATION INITIATION CHECKLIST

SUBJECT: Titanium Sponge from Japan
CASE NUMBER: A-588-877

PETITIONER:

Titanium Metals Corporation (TIMET)
224 Valley Creek Blvd.
Suite 200
Exton, PA 19341
610-968-1300

COUNSEL TO PETITIONER:

J. Kevin Horgan
deKieffer & Horgan
1090 Vermont Avenue, NW
Suite 410
Washington DC 20005
202-783-6900

POTENTIAL RESPONDENTS:

A list of the producers of titanium sponge in Japan identified by TIMET (the petitioner) can be found in Titanium Sponge from Japan Petition for the Imposition of Antidumping Duties, dated August 24, 2017 (Petition).[1]

[1] *See* Volume I of the Petition, at 12-13.

SCOPE: *See* Attachment I – Scope of the Investigation, to this checklist.

IMPORT STATISTICS:

Japan	2014	2015	2016	Jan – Mar 2016	Jan – Mar 2017
Quantity (Kilograms)	13,320,789	15,487,583	15,848,926	3,393,581	4,672,660
Value (US$)	155,281,184	161,125,346	144,797,042	30,427,641	42,259,752

Source: U.S. International Trade Commission (ITC) Dataweb, available at http://dataweb.usitc.gov/. The petitioner reported the volume (in kilograms) and customs value for imports of titanium sponge from Japan using the Harmonized Tariff Schedule of the United States (HTSUS) subheading 8108.20.0010.[2]

APPROXIMATE CASE CALENDAR:

Event	No. of Days	Date of Action	Day of Week
	Antidumping Duty Investigation		
Petition Filed	0	August 24, 2017	Thursday
Initiation Date	20	September 13, 2017	Wednesday
ITC Preliminary Determination	45	October 10, 2017	Tuesday*
ITA Preliminary Determination†**	160	January 31, 2018	Wednesday
ITA Final Determination†	235	April 16, 2018	Monday
ITC Final Determination***	280	May 31, 2018	Thursday
Publication of Order****	287	June 7, 2018	Thursday

*Where the deadline falls on a weekend/holiday, the appropriate date is the next business day.
† These deadlines may be extended under the governing statute.
** This will take place only in the event of a preliminary affirmative determination from the ITC.
*** This will take place only in the event of a final affirmative determination from the International Trade Administration (ITA).
**** This will take place only in the event of a final affirmative determination from the ITA and the ITC.
Note: The ITC final determination will take place no later than 45 days after a final affirmative ITA determination.
Note: Publication of order will take place approximately seven days after an affirmative ITC final determination.

[2] *See* Volume I of the Petition, at 14 and Exhibits GEN-5 and GEN-10.

INDUSTRY SUPPORT:

Do the petitioner and those expressing support for the Petition account for more than 50% of production of the domestic like product?

☒	Yes
☐	No

If No, do those expressing support account for the majority of those expressing an opinion and at least 25% of domestic production?

☐	Yes
☐	No
☒	Not Applicable

Describe how industry support was established - specifically, describe the nature of any polling or other step undertaken to determine the level of domestic industry support.

See Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this checklist.

Was there opposition to the Petition?

☐	Yes
☒	No

Are any of the parties who have expressed opposition to the Petition either importers or domestic producers affiliated with foreign producers?

☐	Yes
☐	No
☒	Not Applicable

INJURY ALLEGATION:

We received a copy of the notice of institution of antidumping and countervailing duty investigations from the ITC, which was signed on August 24, 2017. The notice indicates that the ITC instituted an investigation to determine whether there is a reasonable indication that the domestic industry producing titanium sponge is materially injured, or threatened with material injury, by reason of imports of titanium sponge from Japan.[3]

[3] *See* Attachment IV to this checklist.

The relevant injury data can be found in Volume I of the Petition, at 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10 through GEN-15, GEN-19 through GEN-26, GEN-30, GEN-31, and GEN-33.[4]

Does the Petition contain evidence of causation? Specifically, does the Petition contain information relative to:

☒ volume and value of imports (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6 and GEN-10.).

☒ U.S. market share (*i.e.*, the ratio of imports to consumption) (*See* Volume I of the Petition, at 31-32, 42, and Exhibits GEN-5, GEN-6, GEN-19, GEN-23, and GEN-33.).

☒ actual pricing (*i.e.*, evidence of decreased pricing) (*See* Volume I of the Petition, at 35, 38-45 and Exhibits GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

☒ relative pricing (*i.e.*, evidence of imports underselling U.S. products) (*See* Volume I of the Petition, at 35, 37-45 and Exhibits GEN-1, GEN-5, GEN-10, GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

Does the Petition contain the following?

☒ the name, address, and telephone number of the petitioner (*See* Volume I of the Petition, at 4-5.).

☒ the names, addresses, and telephone numbers of all domestic producers of the domestic like product known to the petitioning company (*See* Volume I of the Petition, at 4-5.).

☒ the volume or value of the domestic like product produced by the petitioner and each domestic producer identified for the most recently completed 12-month period for which data are available (*See* Volume I of the Petition, at 6-7 and Exhibit GEN-20.).

Was the entire domestic industry identified in the Petition?

☒ Yes (*See* Volume I of the Petition, at 4-7 and Exhibit GEN-20.).
☐ No

[4] *See* Attachment III, Analysis of Allegations and Evidence of Material Injury and Causation for the Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this checklist.

☒ a clear and detailed description of the merchandise to be investigated, including the appropriate Harmonized Tariff Schedule numbers (*See* Volume I of the Petition, at 9-12; *see also* General Issues Supplement, at 2-3,[5] Second Supplement, at Exhibit 6,[6] and Second General Issues Supplement, at 1-6 and Exhibits A-D.[7]).

☒ the name of each country in which the merchandise originates or from which the merchandise is exported (*See* Volume I of the Petition, at 12.).

☒ the identity of each known exporter, foreign producer, and importer of the merchandise (*See* Volume I of the Petition, at 12-13, 15-17.).

☒ a statement indicating that the Petition was filed simultaneously with the Department of Commerce and the ITC (*See* cover letter to the Petition, at 1-2.).

☒ an adequate summary of the proprietary data (*See* public version of the Petition, public version of the Japan AD Supplement,[8] public version of the Second Supplement, and public version of the Second General Issues Supplement.).

☒ a statement regarding release under administrative protective order (*See* cover letter to the Petition; *see also* cover letter to the Japan AD Supplement, cover letter to the Second Supplement, and cover letter to the Second General Issues Supplement.).

☒ a certification of the facts contained in the Petition by an official of the petitioning firm(s) and its legal representative (if applicable) (*See* attachments to the cover letter to the Petition, attachments to the cover letter to the General Issues Supplement, attachments to the cover letter to the Japan AD Supplement, attachments to the cover letter to the Second Supplement, and attachments to the cover letter to the Second General Issues Supplement.).

☒ import volume and value information for the most recent two-year period (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.).

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[5] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions," (August 31, 2017) (General Issues Supplement).

[6] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 6, 2017 Supplemental Questions," (September 7, 2017) (Second Supplement).

[7] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 8, 2017 Supplemental Questions," (September 11, 2017) (Second General Issues Supplement).

[8] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping Duties on Titanium Sponge from Japan: TIMET Response Supplemental Questionnaire," (August 31, 2017) (Japan AD Supplement).

LESS THAN FAIR VALUE ALLEGATION:

In accordance with 19 CFR 351.204(b), because the Petition was filed on August 24, 2017, the period of investigation (POI) is July 1, 2016, through June 30, 2017.

On August 29, 2017, the Department of Commerce (the Department) issued a supplemental questionnaire to the petitioner regarding the allegation that titanium sponge produced in Japan was being sold in the United States at less than fair value. On August 31, 2017, the petitioner responded to the supplemental questionnaire in the Japan AD Supplement.[9] Additionally, on September 7, 2017, the petitioner responded to additional questions issued by the Department.[10]

U.S. Price

The Petition contains four different U.S. prices (export prices (EPs)). The petitioner based two of the U.S. prices on price quotes obtained from [ ] and based the other two U.S. prices on the average unit values (AUVs) of U.S. imports of titanium sponge from Japan during the POI under HTSUS subheading 8108.20.0010. The price quotes were offered by [ ] to [ ] on a delivered, duty unpaid basis. One price quote was for sales of titanium sponge and was effective for all of calendar year 2017 (which overlaps the POI).[11] The other price quote was for sales of titanium sponge as a scrap substitute during the first quarter of 2016. However, the petitioner stated that although the offer was for the first quarter of 2016, similar offers were available for the entirety of 2016, and the petitioner believed from its discussions with [ ] that other companies were accepting these offers for all of 2016.[12]

The petitioner calculated one AUV using U.S. Census Bureau data for imports of titanium sponge from Japan during the POI.[13] Specifically, the petitioner calculated the dollar per kilogram price of titanium sponge for the POI using imports under HTSUS 8108.20.0010 which covers "Titanium and articles thereof, including waste and scrap: unwrought titanium; powders: sponge." The petitioner calculated the second AUV (dollar per kilogram price) of titanium sponge using entries of titanium sponge from Japan under HTSUS 8108.20.0010 into the [ ] customs district during January 2017 through April 2017.[14] Specifically, the petitioner [ ] to calculate the AUV. The petitioner also used these data and [ ] available through [ ] to determine that the entries [ ].[15]

[9] *See* Japan AD Supplement.
[10] *See* Second Supplement.
[11] Volume II-A of the Petition at Exhibit GEN-13; *see also* Japan AD Supplement, at Exhibit 12.
[12] *See* Japan AD Supplement, at Exhibit GEN-20.
[13] *Id.*, at Exhibit 1.
[14] *Id.*, at Exhibit 14.
[15] *Id.*

The AUVs are based on free-on-board (FOB) prices (*i.e.*, the price of U.S. imports without U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States). The petitioner deducted foreign brokerage and handling and foreign inland freight expenses from the AUVs to calculate net U.S. EPs.[16] Because the price quotes were offered on a delivered, duty unpaid basis, the petitioner deducted foreign inland freight, foreign brokerage and handling expenses, cost, insurance and freight (CIF) charges, and U.S. inland freight expenses from the offered prices.[17]

The petitioner calculated foreign brokerage and handling expenses ($0.0225 per kg) by dividing border and documentary compliance fees reported in the World Bank's *Doing Business, Economy Profile 2017, Japan*, by the assumed shipment weight (*i.e.*, 15,000 kilograms).[18] The petitioner calculated the foreign inland freight expense rate ($0.000705 per kilogram per kilometer) by dividing the quotient obtained by dividing transportation costs per container by the assumed container weight (*i.e.*, 15,000 kilograms) by the average distance to the port. All of these figures are reported in the World Bank's *Doing Business, Economy Profile 2017, Japan.*[19]

The petitioner calculated cost, insurance, and freight (CIF) charges based on the difference between the CIF value and customs value for imports under HTSUS subheading 8108.20.0010.[20]

The petitioner calculated U.S. inland freight expenses by ($0.04 kg per km) by multiplying the distance between the Los Angeles port and the Las Vegas port, the closest to TIMET's Henderson plant (447.4 km) with the cost of kg per km ($0.000099) for importing into Los Angeles as reported in the World Bank's *Doing Business Economy Profile, United States,* by the assumed shipment weight (*i.e.*, 15,000 kg).[21]

Did the Petition contain the following?:

☒ support documentation for the alleged prices (*see* Volume II-a of the Petition, at 2-6 and Exhibit GEN-32, Exhibit ADJ-10, Exhibit GEN-13, and Exhibit GEN-20; *see also* Japan AD Supplement at 1-2 and Exhibits 1, Exhibit 12, and Exhibit 14, and Exhibit GEN-20).

N/A any market research reports including an affidavit referring to sources and how information was obtained

☒ current price data (*see* Volume II-a of the Petition, at 2-6 and Exhibit GEN-32, Exhibit ADJ-10, Exhibit GEN-13, and Exhibit GEN-20; *see also* Japan AD Supplement at 1-2 and Exhibit 1 and Exhibit 12, Exhibit 14 and Exhibit GEN-20; and Second Supplement, at Exhibit ADJ-10.)

[16] *See* Second Supplement, at Exhibit ADJ-10.
[17] *Id.*
[18] *See* Volume II-a of the Petition, at Exhibit ADJ-1; *see also* Japan AD Supplement, at Exhibit 2
[19] *Id.*
[20] *See* Japan AD Supplement, at 2 and Exhibit 13; *see also* Second Supplement, at Exhibit ADJ-10.
[21] *See* Volume II-a of the Petition, at 4 and Exhibit ADJ-4; *see also* Second Supplement, at Exhibit ADJ-10.

☒ price and cost data from contemporaneous time periods (*see* Volume II-a of the Petition, at 2-6 and Exhibit GEN-32, Exhibit ADJ-1, Exhibit ADJ-4, Exhibit ADJ-10, Exhibit GEN-13, and Exhibit GEN-20; *see also* Japan AD Supplement at 1-2 and Exhibit 1, Exhibit 12, Exhibit 13, Exhibit 14, Exhibit GEN-20; and Second Supplement, at Exhibit ADJ-10).

N/A correct currency rates used for all conversions to U.S. dollars.

N/A conversion factors for comparisons of differing units of measure.

Normal Value (NV)

The petitioner provided home-market pricing as published annually in the Nihon Keizai Shumbun publication.[22] However, the petitioner noted that it does not believe that the reported Japanese home market prices reflect arm's length transactions. The petitioner explained that there are only [ ] titanium sponge in Japan, [ ].[23] Furthermore, the petitioner noted that a number of these companies have either common owners or own shares in one of the titanium sponge producers. Therefore, the petitioner stated that there are limited, if any, sales of titanium sponge to unaffiliated customers in the Japanese domestic market. As a result, the petitioner argues that the home market prices published in Nihon Keizai Shimbun are not usable for calculating normal value. The petitioner also stated that it was unable to obtain usable third-country prices.[24]

As the petitioner asserted that it was unable to obtain usable pricing data for titanium sponge sold in the Japanese or third-country markets,[25] pursuant to sections 773(a)(1)(C) and 773(a)(4) of the Tariff Act of 1930, as amended (the Act), the petitioner relied on constructed value (CV) as the basis for NV.

Constructed Value

Pursuant to section 773(e) of the Act, CV consists of the cost of manufacture (COM); selling, general and administrative (SG&A) expenses; financial expenses; and profit.

The petitioner calculated COM based on its own factors of production using its own usage rates.[26] The petitioner stated that the process for producing titanium sponge in Japan is similar to its production process and uses the same raw materials.[27] The petitioner determined the COM of titanium sponge by adding together the costs of raw materials, labor, maintenance, electricity, other supplies, and factory overhead incurred by TIMET, adjusted for known differences from costs in Japan during a contemporaneous period to the POI.[28] The petitioner based raw materials, maintenance, other supplies, and factory overhead costs on its own experience as publically available information on these costs in Japan was not reasonably available to the

[22] *See* Volume II-a of the Petition, at Exhibit ADJ-9.
[23] *See* Second Supplement at Exhibit 1.
[24] *Id.* at 1-2.
[25] *See* Second Supplement, at 1
[26] *Id.*, at Exhibit ADJ-6 and Exhibit ADJ-7.
[27] *See* Volume I of the Petition, at Exhibit GEN-20.
[28] *See* Second Supplement, at Exhibit ADJ-6 and Exhibit ADJ-7.

petitioner.[29] The petitioner based the Japanese wage rate on data from the U.S. Bureau of Labor Statistics (BLS) for 2012 (adjusted for inflation).[30] The petitioner based electricity costs for Japan on the 2016 industrial tariff rates as reported by International Energy Agency (IEA).[31]

The petitioner calculated the SG&A, financial expense, and profit rates as the average percentage that SG&A expenses, net interest expenses, and profit, respectively, represents of cost of sales of OTC and Toho Titanium Company Ltd. (TOHO) for the fiscal year ending (FYE) March 31, 2017, (based on audited financial statements).[32] The petitioner multiplied these rates by the total COM calculated above to derive SG&A expenses, net interest expenses, and profit.[33]

CV	Source	Satisfactory
Raw Materials:	U.S. Producer's Input Quantities U.S. Producer's Costs	Yes
Labor:	U.S. Producer's Labor Usage Wage Rates from the BLS	Yes
Maintenance:	U.S. Producer's Maintenance Usage U.S. Producer's Costs	Yes
Energy: (electricity)	U.S. Producer's Electricity Usage Electricity Rates from IEA	Yes
Other Supplies:	U.S. Producer's Other Supplies Usage U.S. Producer's Costs	Yes
Factory Overhead:	U.S. Producer's Usage U.S. Producer's Costs	Yes
SG&A Expenses:	OTC and TOHO's March 31, 2017 Financial Statements	Yes
Interest Expenses:	OTC and TOHO's March 31, 2017 Financial Statements	Yes
Profit:	OTC and TOHO's March 31, 2017 Financial Statements	Yes

[29] *Id.*
[30] *See* Second Supplement, at Exhibit 5.
[31] *Id.*
[32] *See* Japan AD Supplement, at Exhibit 6 and Exhibit 7.
[33] *Id.*, at Exhibit ADJ-6 and Exhibit ADJ-7

ESTIMATED DUMPING MARGINS:

The estimated dumping margins for the U.S. price-to-CV comparisons range from 69.69% to 95.20% percent.[34]

RECOMMENDATION:

We examined the accuracy and adequacy of the evidence provided in the Petition as discussed in this checklist and attachments, and recommend determining that the evidence is sufficient to justify the initiation of an antidumping duty investigation with regard to Japan. We also recommend determining that the Petition has been filed by, or on behalf of, the domestic industry.

ATTACHMENTS:

I. Scope of the Investigation
II. Industry Support
III. Analysis of Allegations and Evidence of Material Injury and Causation
IV. Notice of Institution from the ITC

[34] *See* Second Supplement, at Exhibit ADJ-10. The petitioner also calculated margins based on a comparison of EP to normal value based on home market prices. Because the petitioner contends that the home market prices are not useable for purposes of determining normal value because they were not based on arm's-length transactions, we have relied on the estimated dumping margins based on EP-to-CV for purposes of initiation.

Attachment I

Scope of the Investigation

The product covered by this investigation is all forms and grades of titanium sponge, except as specified below. Titanium sponge is unwrought titanium metal that has not been melted. Expressly excluded from the scope of this investigation are:

1) Loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm);
2) alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis; and
3) ultra-high purity titanium sponge. In ultra-high purity titanium sponge, metallic impurities do not exceed any of these amounts:

	WT%
Aluminum	0.0005
Chromium	0.0001
Cobalt	0.0001
Copper	0.0002
Iron	0.0300
Manganese	0.0010
Nickel	0.0002
Vanadium	0.0002
Zirconium	0.0005
Carbon	0.0150
Hydrogen	0.0100
Nitrogen	0.0020
Oxygen	0.1000

Titanium sponge is currently classified under subheading 8108.20.0010 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheading is provided for convenience and customs purposes; the written description of the scope of this investigation is dispositive.

Attachment II

Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

Background

Sections 702(c)(4)(A) and 732(c)(4)(A) of the Tariff Act of 1930, as amended (the Act), state that the administering authority shall determine that a petition has been filed by or on behalf of the industry if the domestic producers or workers who support the petition account for: (1) at least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition.

Section 771(4)(A) of the Act defines the "industry" as the producers, as a whole, of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product. Thus, to determine whether a petition has the requisite industry support, the Act directs the Department of Commerce (the Department) to look to producers and workers who produce the domestic like product. The International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to a separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to law.[1]

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the Petitions.[2] While the Department is not bound by the criteria used by the ITC to determine the domestic like product in answering this question, we have reviewed the factors as presented by the petitioner in the Petitions and General Issues Supplement.[3] The criteria presented by the petitioner are: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4)

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[1] *See USEC, Inc. v. United States*, 132 F. Supp. 2d 1, 8 (CIT 2001) (citing *Algoma Steel Corp. Ltd. v. United States*, 688 F. Supp. 639, 644 (CIT 1988), *aff'd* 865 F.2d 240 (Fed. Cir. 1989)).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). Titanium Metals Corporation, or TIMET (the petitioner), filed the TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement), in response to the Department's request for additional information regarding the Petitions. The petitioner also filed a revision to the proposed scope of the investigations on September 11, 2017. *See* "TIMET Response to September 8, 2017 Supplemental Questions," dated September 11, 2017 (Scope Supplement).

[3] *See* Volume I of the Petitions, at 18-22; *see also* General Issues Supplement, at Attachment A-1.

customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and (6) price.[4] With regard to the domestic like product, the petitioner does not offer a definition of the domestic like product distinct from the proposed scope of the investigations.[5] In addition, the petitioner contends that there is a single domestic like product that is co-extensive with the product under the proposed scope of the investigations.[6]

Analysis of Domestic Like Product

To support its assertion that there is a single domestic like product (titanium sponge) that is co-extensive with the proposed scope of the investigations, the petitioner first notes that the ITC found titanium sponge to be a single like product in its most recent proceeding involving titanium sponge.[7] The petitioner also provided the following explanations:

- All forms of titanium sponge are manufactured using the Kroll Process.[8]
- Producers use common manufacturing facilities, equipment, and production workers to produce all grades of titanium sponge.[9]
- The cost of producing titanium sponge does not vary significantly from grade to grade.[10]
- All grades of titanium sponge consist of unwrought titanium metal which has not been melted or forged, and the required chemistries for different grades of titanium sponge vary in only limited respects.[11]
- Different grades of titanium sponge are frequently interchangeable because the cost of production is similar for different grades, and standard grades frequently meet the chemical requirements for premium grades.[12] Also, premium grades may readily be substituted for standard grades.[13]
- All forms and grades of subject titanium sponge are acquired through the same channels (*i.e.*, through internal production and/or pursuant to long-term contracts lasting a year or more).[14]
- Customers perceive that various grades of titanium sponge are frequently interchangeable because standard grades frequently meet the chemical requirements for premium grades.[15]

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[4] *See* Volume I of the Petitions, at 19; *see also Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394, 397-98 (CIT 1999); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (CIT 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also Antidumping and Countervailing Duty Handbook*, Fourteenth Edition, United States International Trade Commission, Publication 4540 (June 2015), at II-34.

[5] *See* Volume I of the Petitions, at 4; *see also* Scope Supplement, at Exhibit 6.

[6] *Id.*

[7] *See* Volume I of the Petitions, at 18; *see also* General Issues Supplement, at Attachment A-1 (*Titanium Sponge from Japan, Kazakhstan, Russia, and Ukraine*, USITC Pub. 3119 (August 1998), at 4).

[8] *See* Volume I of the Petitions, at 11 and 19.

[9] *Id.* at 19.

[10] *Id.*

[11] *Id.* at 20.

[12] *Id.* at 21.

[13] *Id.*

[14] *Id.*

[15] *Id.* at 22.

The petitioner provided the following explanations of why ultra-high purity titanium sponge, which it excluded from the proposed scope of the investigations, does not fall under the definition of the domestic like product:

- Ultra-high purity titanium sponge is manufactured using a sodium reduction process that is distinct from the Kroll Process used by companies that produce titanium sponge for the titanium mill products market.[16]
- Ultra-high purity titanium sponge is dedicated for use in the semiconductor business. It is not used to manufacture titanium mill products that are produced from titanium sponge.[17]
- The cost incurred to produce high purity titanium sponge makes it economically unsuitable for use in the production of titanium mill products.[18]

Department's Position:

We analyzed the information provided by the petitioner with regard to the ITC's like product factors. We agree with the petitioner that titanium sponge, as defined in the scope of the investigations, constitutes a single domestic like product.[19] As shown by the petitioner's explanation summarized above, titanium sponge has similar physical characteristics and uses, is interchangeable, is sold through the same channels of distribution, is perceived similarly by customers and producers, and is produced in common manufacturing facilities and under similar production processes. By contrast, as shown in the explanation summarized above, ultra-high purity titanium sponge has a different use, is not interchangeable with titanium sponge, is sold through a different channel of distribution, is perceived differently by customers and producers, and is produced in different production facilities under a different production process.

Furthermore, unless the Department finds the petitioner's definition of the domestic like product to be inaccurate, we will adopt the domestic like product definition set forth in the Petitions. This is consistent with the Department's broad discretion to define and clarify the scope of an antidumping or countervailing duty investigation in a manner that reflects the intent of the petition.[20] Consequently, the Department's discretion permits interpreting the Petitions in such a way as to best effectuate not only the intent of the Petitions, but the overall purpose of the

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[16] *Id.* at 19.
[17] *Id.* at 19-20.
[18] *Id.* at 20.
[19] The petitioner's proposed scope of the investigations defines titanium sponge as "unwrought titanium metal that has not been melted." *See* Scope Supplement at Attachment D. The petitioner excluded certain forms of unwrought titanium metal that has not been melted (*i.e.*, loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm) and alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis) from the proposed scope. *Id.* The petitioner explained that loose particles of unwrought titanium metal do not share the same physical characteristics as titanium sponge covered by the proposed scope because they are in the form of a powder. *Id.* at 1-3. The petitioner also explained that the briquettes identified above do not share the same chemistry as titanium sponge covered by the scope of the investigation. *Id.* at 3. Thus, we have not included these products as part of this domestic like product analysis.
[20] *See, e.g.*, *Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394 (CIT 1999) (citing *Kern-Liebers USA, Inc. v. United States*, 19 C.I.T. 393, 396, 881 F. Supp. 618, 621 (1995) (citation omitted)) and *Initiation of Antidumping Duty Investigations: Spring Table Grapes from Chile and Mexico*, 66 FR 26831 (May 15, 2001).

antidumping and countervailing duty laws as well.[21]

Industry Support Calculation

In determining whether the petitioner has standing (*i.e.*, those domestic workers and producers supporting the Petitions account for (1) at least 25 percent of the total production of the domestic like product and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions), in accordance with sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we conducted the following analysis.

We considered the industry support data contained in the Petition with reference to the domestic like product as defined in Attachment I, "Scope of the Investigation," to this Checklist, and as discussed above. The petitioner provided a written declaration from Mr. Henry Seiner, the petitioner's Vice President of Business Strategy.[22] In the declaration, Mr. Seiner states that the only companies that have produced titanium sponge in the United States over the past ten years are the petitioner and Allegheny Technologies Inc. (ATI).[23] The declaration also states that ATI announced in August 2016 that it was suspending production of titanium sponge at its only operating U.S. facility, and that Mr. Seiner believes ATI stopped producing titanium sponge at this U.S. facility near the end of 2016.[24] Finally, Mr. Seiner states that the petitioner produced approximately [ ] million pounds of titanium sponge at its U.S. plant in Henderson, Nevada, in 2016, and that ATI produced approximately [ ] million pounds of titanium sponge at its U.S. plant in 2016.[25]

To determine whether the petitioner has standing under sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we have relied on the production figures that the petitioner provided in Mr. Seiner's declaration. Based on the production figures in this declaration, the petitioner's share of domestic production of titanium sponge in 2016 is as follows:

Table 1
Calculation of Industry Support

U.S. Producers of Titanium Sponge	2016 Production of Titanium Sponge (Pounds)
The Petitioner	
TIMET	[ ]
Total 2016 U.S. Production of Titanium Sponge	[ ]

[21] *See Notice of Final Determination of Sales at Less Than Fair Value: Freshwater Crawfish Tail Meat from the People's Republic of China*, 62 FR 41347, 42357 (August 1, 1997).
[22] *See* Volume I of the Petitions, at Exhibit GEN-20.
[23] *Id.*
[24] *Id.*
[25] *Id.*

Total Industry Support	[ ]%

Challenge to Industry Support

None.

Findings

We relied on information provided by the petitioner, as described above, to establish total 2016 production of titanium sponge. Using these data, as demonstrated above, we find that the domestic producers and workers who support the Petitions account for at least 25 percent of total production of the domestic like product. We further find that domestic producers and workers who support the Petitions account for more than 50 percent of the total production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions. Therefore, we find that there is adequate industry support within the meaning of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

We conducted a search of the Internet and have been unable to locate information that contradicts the petitioner's assertions. We find that the petitioner has provided data that are reasonably available. For these reasons, we find that there is adequate industry support for initiating these investigations. Accordingly, we find that the Petitions have met the requirements of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

Attachment III

Analysis of Allegations and Evidence of Material Injury and Causation for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

I. Introduction

When making a determination regarding the initiation of antidumping and countervailing duty investigations, the Department of Commerce (the Department) examines, on the basis of sources readily available to the Department, the accuracy and adequacy of the evidence contained in the petitions, and determines whether the petitions allege the elements necessary for the imposition of antidumping and countervailing duties and contain information reasonably available to the petitioner that supports the allegations.[1] This attachment analyzes the sufficiency of the allegations and supporting evidence regarding material injury and causation.

II. Definition of Domestic Industry

The domestic industry is described with reference to producers of the domestic like product, as provided for in section 771(4)(A) of the Act. The Petitions[2] define the domestic industry as U.S. producers of titanium sponge.[3] The petitioner[4] identifies itself, as well as one other producer of the domestic like product, as the only companies constituting the domestic industry in the United States.[5] For a discussion of the domestic like product, *see* Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this Checklist.

III. Evidence of Injury and Threat of Injury

To determine injury, the statute requires an evaluation of the volume, price effects, and impact of imports on the domestic industry and permits consideration of other economic factors.[6] Specifically, in examining the impact of imports, section 771(7)(C)(iii) of the Act states that:

> In examining the impact {of imports on domestic producers} ..., the {International Trade} Commission {(ITC)} shall evaluate all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to–

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[1] *See* sections 702(c)(1)(A)(i) and 732(c)(1)(A)(i) of the Tariff Act of 1930, as amended (the Act).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). On August 31, 2017, in response to the Department's questions regarding the Petitions, the petitioner submitted the Petition for Imposition of Antidumping and Coutnervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement).

[3] *See* Volume I of the Petitions, at 23-24 and Exhibit GEN-20.

[4] The petitioner is Titanium Metals Corporation (TIMET or the petitioner).

[5] *See* Volume I of the Petitions, at 4-6. The petitioner notes that the other company, Allegheny Technologies, Inc. (ATI), suspended production operations in December 2016. *Id.*, at 1-2, 5-6 and 23.

[6] *See* sections 771(7)(B)(i) and (ii) of the Act.

> (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,
> (II) factors affecting domestic prices,
> (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment,
> (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry..., and
> (V) in {an antidumping proceeding} ..., the magnitude of the margin of dumping.

The Petitions allege that the domestic industry has experienced the following types of injury by reason of imports from Japan and Kazakhstan:

- The volume of imports is significant and increasing (Volume I of the Petitions, at 30-31 and Exhibit GEN-5);
- Reduced market share (Volume I of the Petitions, at 31-32 and Exhibits GEN-5, GEN-6, GEN-19, and GEN-33);
- Subject imports displaced U.S. production, resulting in plant idling, layoffs, and drop in capacity utilization for the domestic industry (34-37 and Exhibits GEN-1, GEN-2, and GEN-11);
- Decline in production, capacity utilization, hours worked, and earnings before interest and taxes (Volume I of the Petitions, at 37-38 and Exhibits GEN-19, GEN-22, GEN-24, and GEN-30);
- Underselling and price depression or suppression (Volume I of the Petitions, at 34-43 and Exhibits GEN-1, GEN-2, GEN-23, GEN-25, GEN-30, and GEN-31);
- Lost sales and revenues (Volume I of the Petitions, 38-43 and Exhibits GEN-15 and GEN-20); and
- Decline in pricing for downstream titanium products (Volume I of the Petitions, at 40-43 and Exhibits GEN-25, GEN-23, GEN-30, and GEN-31).

The Petitions also allege that the domestic industry could be threatened with further injury by reason of imports from Japan and Kazakhstan:

- Potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production with subject imports (Volume I of the Petitions, at 43-44);
- Jeopardized capital investment needed to sustain titanium sponge production in the United States (Volume I of the Petitions, at 45 and Exhibit GEN-21);
- Subject imports are rapidly increasing (Volume I of the Petitions, at 45);
- Significant excess production capacity to increase production in the subject countries (Volume I of the Petitions, at 45-46 and Exhibit GEN-6); and
- Export-orientation of subject producers (Volume I of the Petitions, at 46 and Exhibit GEN-14).

IV. Cumulation

Section 771(7)(G)(i) of the Act requires the ITC to cumulate imports from all countries for which petitions were filed on the same day if such imports compete with each other and with the domestic like product in the United States market. On August 24, 2017, the petitioner filed the Petitions against the two subject countries. The petitioner argues that a reasonable overlap of competition exists with subject imports and with the domestic like product in the United States, and as such, the criteria for cumulation have been satisfied.[7]

In determining whether cumulation is appropriate, the ITC generally uses a framework of four factors:[8]

- The degree of fungibility between imports from the two subject countries and between the imports and the domestic like product.
- The presence of sales or offers for sale of the imports and the domestic like product in the same geographic markets.
- Whether the imports and the domestic like product are handled in common or similar channels of distribution.
- Whether the imports are present in the U.S. market simultaneously.

The petitioner contends that subject imports from both countries are completely interchangeable and are produced using similar raw materials and processes, resulting in titanium sponge with nearly identical physical characteristics.[9] The petitioner notes that TIMET and ATI have used domestically-produced titanium sponge and subject imports on an interchangeable basis in the production of downstream titanium products.[10]

The petitioner notes that four companies consume virtually all the titanium sponge produced in or imported into the United States, because these are the only four companies that own U.S. facilities that can melt titanium sponge to produce titanium mill products.[11] As a result, the petitioner contends that subject imports from both countries are currently competing with one another throughout the U.S. market for sales to the limited number of U.S. consumers of titanium sponge.[12]

The petitioner notes that ATI has entered into long-term supply agreements with global producers of titanium sponge.[13] In addition, the petitioner notes that TIMET has also entered into long-term agreements with foreign producers for the purchase of subject titanium sponge and has received offers of long-term contracts to supply titanium sponge from all of the

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[7] *See* Volume I of the Petitions, at 25-28 and Exhibits GEN-1, GEN-2, GEN-15, GEN-20, and GEN-21.
[8] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986); *see also Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).
[9] *See* Volume I of the Petitions, at 26.
[10] *Id.*
[11] *See* Volume I of the Petitions, at 26-27 and Exhibit GEN-20.
[12] *Id.* at 26.
[13] *Id.* at 27.

producers in the subject countries.[14] Thus, the petitioner contends that subject imports are simultaneously available throughout the U.S. market through similar channels of trade and compete directly with one another.[15]

The petitioner also argues that it is clear that subject imports and the domestic like product compete with each other.[16] For support, the petitioner notes that ATI publicly stated that the decision to idle its Utah production facility was directly attributable to the availability of low-priced subject imports.[17] Thus, the petitioner contends that the subject imports displaced ATI's domestically-produced titanium sponge based on price.[18] The petitioner further notes that its own domestic production of titanium sponge faces the same kind of competition with low-priced imports.[19] Furthermore, the petitioner notes that its own recent efforts to sell its domestically-produced titanium sponge have been universally rejected in favor of subject imports.[20] As a result, the petitioner argues that subject imports from Japan and Kazakhstan should be cumulated.[21]

V. Negligibility

Section 771(24)(A)(i) of the Act states that "imports from a country of merchandise corresponding to a domestic like product identified by the {ITC} are 'negligible' if such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which the data are available . . . ."

The petitioner contends that imports from Japan and Kazakhstan are not negligible.[22] For support, the petitioner provided import data for the 12-month period of April 2016 through March 2017.[23] Based on the volume data provided by the petitioner, the import shares are as follows:[24]

Country	Share of Total Imports (%)
Japan	91.4
Kazakhstan	4.7

The data provided by the petitioner demonstrate that imports of titanium sponge from Japan and Kazakhstan each exceed the three percent negligibility threshold provided under section 771(24)(A)(i) of the Act.[25]

[14] *Id.* at 27 and Exhibit GEN-20.
[15] *Id.* at 27.
[16] *Id.*
[17] *Id.* at 27 and Exhibits GEN-1 and GEN-2.
[18] *Id.* at 27.
[19] *Id.* at 27-28 and Exhibit GEN-21.
[20] *Id.* at 28 and Exhibits GEN-15 and GEN-20.
[21] *Id.* at 28.
[22] *Id.* at 25-26.
[23] *See* Volume I of the Petitions, at 25-26 and Exhibits GEN-5 and GEN-6.
[24] *Id.* at Exhibit GEN-5.
[25] *Id.*

VI. Causation of Material Injury and Threat of Material Injury

The petitioner contends that the material injury and the threat of material injury to the domestic industry discussed in Section III above were caused by the impact of the allegedly dumped imports from Japan and the allegedly dumped and subsidized imports from Kazakhstan. In support of its argument, the petitioner provided information on the historical trend of the allegedly dumped and subsidized imports, focusing on the period beginning with 2014 and ending with June 2017, the most recently available data at the date of filing the Petitions.[26] In the Petitions, the petitioner demonstrates the effect of these import volumes, and their respective values, on domestic prices, market share, production, and the consequent impact on the domestic industry, specifically on sales and revenue.[27] The petitioner argues that this evidence reflects the injurious effects on the U.S. industry's performance caused by increasing imports of the subject titanium sponge at prices substantially lower than the prices offered by the petitioner, thereby resulting in significant incidents of lost sales and revenues.[28]

In making a determination regarding causation of material injury, the ITC is directed to evaluate the volume of subject imports (section 771(7)(B)(i)(I) of the Act), the effect of those imports on the prices of domestically produced products (section 771(7)(B)(i)(II) of the Act) and their impact on the domestic operations of U.S. producers (section 771(7)(B)(i)(III) of the Act). The petitioner bases its allegations of causation of current injury upon a significant and increasing volume of imports; reduced market share; displacement of U.S. production by subject imports; underselling and price depression or suppression; decline in production, capacity utilization, hours worked, and earnings before interest and taxes; lost sales and revenues; and decline in pricing for downstream titanium products.[29]

With regard to the threat of material injury, the petitioner bases its allegations upon the potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production; jeopardized capital investment needed to sustain U.S. production of titanium sponge; rapid increase of subject imports; significant excess capacity to increase production in subject countries; and export-orientation of subject producers.[30]

The allegations of causation of material injury and the threat of material injury are based upon the factors indicating current injury, as well as the factors indicating threat of material injury, as noted above. The factors related to causation presented in the injury section of the Petitions are the types of factors that the ITC is directed to consider for the purpose of evaluating causation under sections 771(7)(C) and 771(7)(F) of the Act.

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[26] *Id.* at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.
[27] *Id.* at 1-3, 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10, GEN-12 – GEN-15, GEN-19 – GEN-26, GEN-30, GEN-31, and GEN-33.
[28] *Id.*
[29] *See* Section III above.
[30] *Id.*

VII. Conclusion

In order to assess the accuracy and adequacy of the evidence relating to the allegations regarding material injury, threat of material injury, cumulation, negligibility, and causation, we examined the information presented in the Petitions and compared it with information that was reasonably available (*e.g.*, import data on the ITC website). We did not locate any information that contradicts the petitioner's assertions.

We analyzed the petitioner's evidence regarding material injury, threat of material injury, cumulation, negligibility, and causation and have found that the information in the Petitions demonstrates a sufficient showing of injury or threat of injury to the U.S. industry producing titanium sponge. Therefore, we find the overall evidence of injury included in the Petitions to be adequate to initiate the investigations of titanium sponge from Japan and Kazakhstan. Ultimately, the ITC will make the final determination with respect to material injury, or threat thereof, cumulation, negligibility, and causation.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary)

Titanium Sponge from Japan and Kazakhstan

Institution of antidumping and countervailing duty investigations and scheduling of preliminary phase investigations.

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping and countervailing duty investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary) pursuant to the Tariff Act of 1930 ("the Act") to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of titanium sponge from Japan and Kazakhstan, provided for in subheading 8108.20.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value and alleged to be subsidized by the Government of Kazakhstan. Unless the Department of Commerce extends the time for initiation, the Commission must reach a preliminary determination in antidumping and countervailing duty investigations in 45 days, or in this case by October 10, 2017. The Commission's views must be transmitted to Commerce within five business days thereafter, or by October 17, 2017.

DATE: August 24, 2017.

FOR FURTHER INFORMATION CONTACT: Jordan Harriman (202-205-2610), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (*https://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION:

Background.--These investigations are being instituted, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a) and 1673b(a)), in response to a petition filed on August 24, 2017, by Titanium Metals Corporation, Exton, PA.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A and B (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

Participation in the investigations and public service list.--Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the *Federal Register*. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping duty and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.--Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.--The Commission's Director of Investigations has scheduled a conference in connection with these investigations for 9:30 a.m. on Thursday, September 14, 2017, at the U.S. International Trade Commission Building, 500 E Street SW, Washington, DC. Requests to appear at the conference should be emailed to William.bishop@usitc.gov and Sharon.bellamy@usitc.gov (DO NOT FILE ON EDIS) on or before September 12, 2017. Parties in support of the imposition of countervailing and antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.--As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before September 19, 2017, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference. All written submissions must conform with the provisions of section 201.8 of the

Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's website at https://edis.usitc.gov, elaborates upon the Commission's rules with respect to electronic filing.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Certification.--Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these investigations must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that any information that it submits to the Commission during these investigations may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of these or related investigations or reviews, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

AUTHORITY: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.12 of the Commission's rules.

By order of the Commission.

Lisa R. Barton
Secretary to the Commission

Issued:

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

4. AD Initiation Checklist: Titanium Sponge from Kazakhstan

A-834-809
Investigation
POI: July 1, 2016 – June 30, 2017
Public Version
E&C IV: JDH

September 13, 2017

ENFORCEMENT AND COMPLIANCE
OFFICE OF AD/CVD OPERATIONS
ANTIDUMPING DUTY INVESTIGATION INITIATION CHECKLIST

SUBJECT: Titanium Sponge from Kazakhstan
CASE NUMBER: A-834-809

THE PETITIONER:

Titanium Metals Corporation (TIMET)
224 Valley Creek Blvd.
Suite 200
Exton, PA 19341
610-968-1300

COUNSEL TO THE PETITIONER:

J. Kevin Horgan
deKieffer & Horgan
1090 Vermont Avenue, NW
Suite 410
Washington DC 20005
202-783-6900

POTENTIAL RESPONDENTS:

A list of the producers of titanium sponge in Kazakhstan identified by TIMET (the petitioner) can be found in Titanium Sponge from Kazakhstan: Petition for the Imposition of Antidumping Duties, dated August 24, 2017 (Petition).[1]

SCOPE: *See* Attachment I – Scope of the Investigation, to this checklist.

[1] *See* Volume I of the Petition, at 12-13.

IMPORT STATISTICS:

Kazakhstan	2014	2015	2016	Jan – Mar 2016	Jan – Mar 2017
Quantity (Kilograms)	660,000	2,600,000	45,000	45,000	885,000
Value (US$)	6,644,070	21,371,092	373,974	373,974	7,079,829

Source: For value, the petitioner used the U.S. International Trade Commission (ITC) Dataweb, available at http://dataweb.usitc.gov/. The petitioner reported the customs value for imports of titanium sponge using the Harmonized Tariff Schedule of the United States (HTSUS) subheading 8108.20.0010.[2] For quantity, which was not available in the ITC Dataweb for Kazakhstan, the petitioner used estimates of the volume (in kilograms) from the U.S. Geological Survey.[3]

APPROXIMATE CASE CALENDAR:

Event	No. of Days	Date of Action	Day of Week
	Antidumping Duty Investigation		
Petition Filed	0	August 24, 2017	Thursday
Initiation Date	20	September 13, 2017	Wednesday
ITC Preliminary Determination	45	October 10, 2017	Tuesday*
ITA Preliminary Determination†**	160	January 31, 2018	Wednesday
ITA Final Determination†	235	April 16, 2018	Monday
ITC Final Determination***	280	May 31, 2018	Thursday
Publication of Order****	287	June 7, 2018	Thursday

*Where the deadline falls on a weekend/holiday, the appropriate date is the next business day.
† These deadlines may be extended under the governing statute.
** This will take place only in the event of a preliminary affirmative determination from the ITC.
*** This will take place only in the event of a final affirmative determination from the International Trade Administration (ITA).
**** This will take place only in the event of a final affirmative determination from the ITA and the ITC.
Note: The ITC final determination will take place no later than 45 days after a final affirmative ITA determination.
Note: Publication of order will take place approximately seven days after an affirmative ITC final determination.

[2] *See* Volume I of the Petition, at 14 and Exhibits GEN-5 and GEN-10.
[3] *Id.* at 14 and Exhibit GEN-6.

INDUSTRY SUPPORT:

Do the petitioner and those expressing support for the Petition account for more than 50% of production of the domestic like product?

☒	Yes
☐	No

If No, do those expressing support account for the majority of those expressing an opinion and at least 25% of domestic production?

☐	Yes
☐	No
☒	Not Applicable

Describe how industry support was established - specifically, describe the nature of any polling or other step undertaken to determine the level of domestic industry support.

See Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this checklist.

Was there opposition to the Petition?

☐	Yes
☒	No

Are any of the parties who have expressed opposition to the Petition either importers or domestic producers affiliated with foreign producers?

☐	Yes
☐	No
☒	Not Applicable

INJURY ALLEGATION:

We received a copy of the notice of institution of antidumping and countervailing duty investigations from the ITC, which was signed on August 24, 2017. The notice indicates that the ITC instituted an investigation to determine whether there is a reasonable indication that the

domestic industry producing titanium sponge is materially injured, or threatened with material injury, by reason of imports of titanium sponge from Kazakhstan.[4]

The relevant injury data can be found in Volume I of the Petition, at 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10 through GEN-15, GEN-19 through GEN-26, GEN-30, GEN-31, and GEN-33.[5]

Does the Petition contain evidence of causation? Specifically, does the Petition contain information relative to:

☒ volume and value of imports (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6 and GEN-10.).

☒ U.S. market share (*i.e.*, the ratio of imports to consumption) (*See* Volume I of the Petition, at 31-32, 42, and Exhibits GEN-5, GEN-6, GEN-19, GEN-23, and GEN-33.).

☒ actual pricing (*i.e.*, evidence of decreased pricing) (*See* Volume I of the Petition, at 35, 38-45 and Exhibits GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

☒ relative pricing (*i.e.*, evidence of imports underselling U.S. products) (*See* Volume I of the Petition, at 35, 37-45 and Exhibits GEN-1, GEN-5, GEN-10, GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

Does the Petition contain the following?

☒ the name, address, and telephone number of the petitioner (*See* Volume I of the Petition, at 4-5.).

☒ the names, addresses, and telephone numbers of all domestic producers of the domestic like product known to the petitioning company (*See* Volume I of the Petition, at 4-5.).

☒ the volume or value of the domestic like product produced by the petitioner and each domestic producer identified for the most recently completed 12-month period for which data is available (*See* Volume I of the Petition, at 6-7 and Exhibit GEN-20.)

[4] *See* Attachment IV to this checklist.

[5] *See* Attachment III, Analysis of Allegations and Evidence of Material Injury and Causation for the Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this checklist.

Was the entire domestic industry identified in the Petition?

☒ Yes (*See* Volume I of the Petition, at 4-7 and Exhibit GEN-20.).
☐ No

☒ a clear and detailed description of the merchandise to be investigated, including the appropriate Harmonized Tariff Schedule numbers (*See* Volume I of the Petition, at 9-12; *see also* General Issues Supplement, at 2-3[6]; Second Supplement, at Exhibit 6,[7] and Second General Issues Supplement, at 1-6 and Exhibits A-D.[8]).

☒ the name of each country in which the merchandise originates or from which the merchandise is exported (*See* Volume I of the Petition, at 12.).

☒ the identity of each known exporter, foreign producer, and importer of the merchandise (*See* Volume I of the Petition, at 12-13, 15-17.).

☒ a statement indicating that Petition was filed simultaneously with the Department of Commerce and the ITC (*See* cover letter to the Petition, at 1-2.).

☒ an adequate summary of the proprietary data (*See* public version of the Petition, public version of the Kazakhstan AD Supplement,[9] public version of the Second Supplement, and public version of the Second General Issues Supplement).

☒ a statement regarding release under administrative protective order (*See* cover letter to the Petition; *see also* cover letter to the Kazakhstan AD Supplement, cover letter to the Second Supplement, and cover letter to the Second General Issues Supplement).

☒ a certification of the facts contained in the Petition by an official of the petitioning firm(s) and its legal representative (if applicable) (*See* attachments to the cover letter to the Petition, attachments to the cover letter to the General Issues Supplement, attachments to the cover letter to the Kazakhstan AD Supplement, attachments to the Scope Supplement, attachments to the cover letter to the

[6] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions," (August 31, 2017) (General Issues Supplement).
[7] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 6, 2017 Supplemental Questions," (September 7, 2017) (Second Supplement).
[8] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 8, 2017 Supplemental Questions," (September 11, 2017) (Second General Issues Supplement).
[9] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping Duties on Titanium Sponge from Kazakhstan: TIMET Response to Supplemental Questionnaire," dated August 31, 2017 (Kazakhstan AD Supplement).

Second Supplement, and attachments to the cover letter to the Second General Issues Supplement.).

☒ import volume and value information for the most recent two-year period (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.).

LESS THAN FAIR VALUE ALLEGATION:

In accordance with 19 CFR 351.204(b), because the Petition was filed on August 24, 2017, the period of investigation (POI) is July 1, 2016, through June 30, 2017.

On August 29, 2017, the Department of Commerce (the Department) issued a supplemental questionnaire to the petitioner regarding the allegation that titanium sponge produced in Kazakhstan was being sold in the United States at less than fair value.[10] On August 31, 2017, the petitioner responded to the supplemental questionnaire in the Kazakhstan AD Supplement.[11] Additionally, on September 7, 2017, the petitioner responded to additional questions issued by the Department.[12]

U.S. Price

The petitioner based U.S. price (export price (EP)) on the average unit value (AUV (the dollar per kilogram)) of U.S. imports of titanium sponge from Kazakhstan during the POI under HTSUS subheading 8108.20.0010 which covers "Titanium and articles thereof, including waste and scrap: unwrought titanium; powders: sponge."[13] The petitioner calculated the AUV by dividing the total POI customs value obtained from the USITC Dataweb by the corresponding quantity from [ ].[14] As the AUV is based on customs value (*i.e.*, this value represents the price of the imports without the costs of U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States), the petitioner only deducted from the AUV the foreign brokerage and handling and foreign inland freight expense to Antwerp, Belgium to calculate the net U.S. EP, as discussed below.[15]

The petitioner calculated foreign brokerage and handling expenses ($0.0596 per kg) by dividing border and documentary compliance fees reported in the World Bank's *Doing Business,*

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[10] *See* Letter from Howard Smith. Program Manager, AD/CVD Operations, Office IV, Enforcement and Compliance "Petition for the Imposition of Antidumping Duties on Imports of Titanium Sponge from Kazakhstan: Supplemental Questionnaire," dated August 29, 2017.
[11] *See* Kazakhstan AD Supplement.
[12] *See* Second Supplement.
[13] *See* Volume II-b of the Petition, at Exhibit ADK-1.
[14] *See* Volume II-b of the Petition, at Exhibit ADK 1; *see also* Kazakhstan AD Supplement, at Exhibit F.
[15] *See* Volume II-b of the Petition, at Exhibit ADK-2; *see also* Kazakhstan AD Supplement, at Exhibit C.

Economy Profile 2017, Kazakhstan, by the assumed shipment weight (*i.e.*, 15,000 kilograms).[16] The petitioner calculated foreign inland freight expense rate ($0.00004141 per kilogram per kilometer) by dividing the average of the import and export domestic transportation costs per container by the assumed shipment weight (*i.e.*, 15,000 kilograms) and dividing the resulting quotient by the average of the import and export distances as reported in the World Bank's *Doing Business, Economy Profile 2017, Kazakhstan*.[17] The petitioner claims that it believes that Ust-Kamenogorsk Titanium Magnesium Plant JSC (UKTMP) transports subject merchandise to Antwerp, Belgium for shipment to the U.S.[18] Thus, the petitioner multiplied this freight rate by the distance from Almaty, Kazakhstan to Antwerp, Belgium (*i.e.*, 6,486 km using "Google Maps")[19] to calculate the foreign inland freight unit cost of $0.2686 per kilogram.[20]

Did the Petition contain the following?

☒ support documentation for the alleged prices (*See* Volume II of the Petition, at 2-3 and Exhibit ADK-1; *see also* Kazakhstan AD Supplement, at 1-2 and Exhibit F).

N/A any market research reports including an affidavit referring to sources and how information was obtained

☒ current price data (*See* Kazakhstan AD Supplement at Exhibit-F and Exhibit ADK-9; *see also* Second Supplement, at Exhibit ADK-9).

☒ price and cost data from contemporaneous time periods (*See* Volume II of the Petition at 2-4 and Exhibit ADK-2; *see also* Kazakhstan AD Supplement at Exhibit C, Exhibit F, and Exhibit ADK-9; and Second Supplement, at Exhibit ADK-9*)*

N/A correct currency rates used for all conversions to U.S. dollars.

N/A conversion factors for comparisons of differing units of measure.

Normal Value (NV)

The petitioner provided evidence showing that there is only one producer of titanium sponge in Kazakhstan, which exports all of its products, and thus the petitioner was unable to obtain pricing data for titanium sponge sold in Kazakhstan.[21] Furthermore, the petitioner was unable to obtain third country prices for titanium sponge.[22] Consequently, the petitioner, pursuant to

[16] *See* Volume II-b of the Petition, at Exhibit ADK-2.
[17] *See* Volume II-b of the Petition, at Exhibit ADK-2; *see also* Kazakhstan AD Supplement, at Exhibit C.
[18] *See* Volume II-b of the Petition, at Exhibit ADK-2.
[19] *Id.*
[20] *Id.*
[21] *See* Kazakhstan AD Supplement, at 3 and Exhibit B. The petitioner cited a newspaper article which quotes the President of Ust-Kamenogorsk Titanium Magnesium Plant JSC (UKTMP) (the sole producer of titanium sponge in Kazakhstan according to the petitioner) as saying "100% of UKTMP products are exported…" *See* Kazakhstan AD Supplement, at 2-3 and Exhibit B.
[22] *See* Second Supplement, at 2.

sections 773(a)(4) of the Tariff Act of 1930, as amended (the Act), relied on constructed value (CV) as the basis for NV.[23]

Constructed Value

Pursuant to section 773(e) of the Act, CV consists of the cost of manufacture (COM); selling, general and administrative (SG&A) expenses; financial expenses; and profit.

The petitioner calculated COM based on its own (TIMET) factors of production using its own usage rates.[24] The petitioner stated that the process for producing titanium sponge in Kazakhstan is similar to its production process and uses the same raw materials.[25] The petitioner determined the COM of titanium sponge by adding together the costs of raw materials, labor, maintenance, electricity, other supplies, and factory overhead incurred by TIMET, adjusted for known differences from costs in Kazakhstan during a contemporaneous period to the POI. The petitioner based raw materials, maintenance, other supplies, and factory overhead costs on its own experience as publicly available information on these costs in Kazakhstan was not reasonably available to the petitioner.[26] The petitioner based the Kazakhstan wage rate on data from the International Labor Organization (ILO) for 2015 (adjusted for inflation), which is the most recently available information.[27] The petitioner based electricity costs for Kazakhstan on the industrial tariff rates as reported by Shygysenergotrade (an electricity supplier in Kazakhstan) (January 1, 2017).[28]

The petitioner calculated the SG&A, financial expense, and profit rates as the percentage that SG&A expenses, net interest expenses, and profit, respectively, represent of UKTMP's cost of sales for the fiscal year ending December 31, 2016, (based on audited financial statements).[29] The petitioner multiplied these rates by the total COM calculated above to derive SG&A expenses, net interest expenses, and profit.[30]

CV	Source	Satisfactory
Raw Materials:	U.S. Producer's Input Quantities U.S. Producer's Costs	Yes
Labor:	U.S. Producer's Labor Usage Wage Rates from the ILO	Yes
Maintenance:	U.S. Producer's Maintenance Usage	Yes

[23] *See* Volume II-b of the Petition, at 4-5.
[24] *See* Second Supplement, at Exhibit ADK-7.
[25] *See* Volume I of the Petition at Exhibit GEN-20.
[26] *See* Volume II-b of the Petition, at 5 and Exhibit ADK-7; *see also* Kazakhstan AD Supplement, at 3-5 and Exhibit ADK-7.
[27] *See* Volume II-b of the Petition, at 4-5 and Exhibit ADK-7.
[28] *See* Volume II-b of the Petition, at 4-5 and Exhibit ADK-7; *see also* Second Supplement, at 3, Exhibit 5, and Exhibit ADK-7.
[29] *See* Second Supplement, at 4, Exhibit D, and Exhibit ADK-7.
[30] *See* Kazakhstan AD Supplement, at 4 and Exhibit ADK-7.

	U.S. Producer's Costs	
Energy: (electricity)	U.S. Producer's Electricity Usage Electricity Rates from Shygysenergotrade	Yes
Other Supplies:	U.S. Producer's Other Supplies Usage U.S. Producer's Costs	Yes
Factory Overhead:	U.S. Producer's Depreciation Usage U.S. Producer's Costs	Yes
SG&A Expenses:	[ ]'s December 31, 2016 Financial Statements	Yes
Interest Expenses:	[ ]'s December 31, 2016 Financial Statements	Yes
Profit:	[ ]'s December 31, 2016 Financial Statements	Yes

ESTIMATED MARGINS:

The estimated dumping margins for the U.S. price-to-CV comparison is 42.22 percent.[31]

RECOMMENDATION:

We examined the accuracy and adequacy of the evidence provided in the Petition as discussed in this checklist and attachments, and recommend determining that the evidence is sufficient to justify the initiation of an antidumping duty investigation with regard to Kazakhstan. We also recommend determining that the Petition has been filed by, or on behalf of, the domestic industry.

ATTACHMENTS:

I. Scope of the Investigation
II. Industry Support
III. Analysis of Allegations and Evidence of Material Injury and Causation
IV. Notice of Institution from the ITC

[31] *See* Second Supplement, at 4 and Exhibit ADK-9.

Attachment I

Scope of the Investigation

The product covered by this investigation is all forms and grades of titanium sponge, except as specified below. Titanium sponge is unwrought titanium metal that has not been melted. Expressly excluded from the scope of this investigation are:

1) Loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm);
2) alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis; and
3) ultra-high purity titanium sponge. In ultra-high purity titanium sponge, metallic impurities do not exceed any of these amounts:

WT%

Aluminum 0.0005
Chromium 0.0001
Cobalt 0.0001
Copper 0.0002
Iron 0.0300
Manganese 0.0010
Nickel 0.0002
Vanadium 0.0002
Zirconium 0.0005
Carbon 0.0150
Hydrogen 0.0100
Nitrogen 0.0020
Oxygen 0.1000

Titanium sponge is currently classified under subheading 8108.20.0010 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheading is provided for convenience and customs purposes; the written description of the scope of this investigation is dispositive.

Attachment II

Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

Background

Sections 702(c)(4)(A) and 732(c)(4)(A) of the Tariff Act of 1930, as amended (the Act), state that the administering authority shall determine that a petition has been filed by or on behalf of the industry if the domestic producers or workers who support the petition account for: (1) at least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition.

Section 771(4)(A) of the Act defines the "industry" as the producers, as a whole, of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product. Thus, to determine whether a petition has the requisite industry support, the Act directs the Department of Commerce (the Department) to look to producers and workers who produce the domestic like product. The International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to a separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to law.[1]

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the Petitions.[2] While the Department is not bound by the criteria used by the ITC to determine the domestic like product in answering this question, we have reviewed the factors as presented by the petitioner in the Petitions and General Issues Supplement.[3] The criteria presented by the petitioner are: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4)

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[1] *See USEC, Inc. v. United States*, 132 F. Supp. 2d 1, 8 (CIT 2001) (citing *Algoma Steel Corp. Ltd. v. United States*, 688 F. Supp. 639, 644 (CIT 1988), *aff'd* 865 F.2d 240 (Fed. Cir. 1989)).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). Titanium Metals Corporation, or TIMET (the petitioner), filed the TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement), in response to the Department's request for additional information regarding the Petitions. The petitioner also filed a revision to the proposed scope of the investigations on September 11, 2017. *See* "TIMET Response to September 8, 2017 Supplemental Questions," dated September 11, 2017 (Scope Supplement).

[3] *See* Volume I of the Petitions, at 18-22; *see also* General Issues Supplement, at Attachment A-1.

customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and (6) price.[4] With regard to the domestic like product, the petitioner does not offer a definition of the domestic like product distinct from the proposed scope of the investigations.[5] In addition, the petitioner contends that there is a single domestic like product that is co-extensive with the product under the proposed scope of the investigations.[6]

Analysis of Domestic Like Product

To support its assertion that there is a single domestic like product (titanium sponge) that is co-extensive with the proposed scope of the investigations, the petitioner first notes that the ITC found titanium sponge to be a single like product in its most recent proceeding involving titanium sponge.[7] The petitioner also provided the following explanations:

- All forms of titanium sponge are manufactured using the Kroll Process.[8]
- Producers use common manufacturing facilities, equipment, and production workers to produce all grades of titanium sponge.[9]
- The cost of producing titanium sponge does not vary significantly from grade to grade.[10]
- All grades of titanium sponge consist of unwrought titanium metal which has not been melted or forged, and the required chemistries for different grades of titanium sponge vary in only limited respects.[11]
- Different grades of titanium sponge are frequently interchangeable because the cost of production is similar for different grades, and standard grades frequently meet the chemical requirements for premium grades.[12] Also, premium grades may readily be substituted for standard grades.[13]
- All forms and grades of subject titanium sponge are acquired through the same channels (*i.e.*, through internal production and/or pursuant to long-term contracts lasting a year or more).[14]
- Customers perceive that various grades of titanium sponge are frequently interchangeable because standard grades frequently meet the chemical requirements for premium grades.[15]

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[4] *See* Volume I of the Petitions, at 19; *see also Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394, 397-98 (CIT 1999); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (CIT 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also Antidumping and Countervailing Duty Handbook*, Fourteenth Edition, United States International Trade Commission, Publication 4540 (June 2015), at II-34.

[5] *See* Volume I of the Petitions, at 4; *see also* Scope Supplement, at Exhibit 6.

[6] *Id.*

[7] *See* Volume I of the Petitions, at 18; *see also* General Issues Supplement, at Attachment A-1 (*Titanium Sponge from Japan, Kazakhstan, Russia, and Ukraine*, USITC Pub. 3119 (August 1998), at 4).

[8] *See* Volume I of the Petitions, at 11 and 19.

[9] *Id.* at 19.

[10] *Id.*

[11] *Id.* at 20.

[12] *Id.* at 21.

[13] *Id.*

[14] *Id.*

[15] *Id.* at 22.

The petitioner provided the following explanations of why ultra-high purity titanium sponge, which it excluded from the proposed scope of the investigations, does not fall under the definition of the domestic like product:

- Ultra-high purity titanium sponge is manufactured using a sodium reduction process that is distinct from the Kroll Process used by companies that produce titanium sponge for the titanium mill products market.[16]
- Ultra-high purity titanium sponge is dedicated for use in the semiconductor business. It is not used to manufacture titanium mill products that are produced from titanium sponge.[17]
- The cost incurred to produce high purity titanium sponge makes it economically unsuitable for use in the production of titanium mill products.[18]

Department's Position:

We analyzed the information provided by the petitioner with regard to the ITC's like product factors. We agree with the petitioner that titanium sponge, as defined in the scope of the investigations, constitutes a single domestic like product.[19] As shown by the petitioner's explanation summarized above, titanium sponge has similar physical characteristics and uses, is interchangeable, is sold through the same channels of distribution, is perceived similarly by customers and producers, and is produced in common manufacturing facilities and under similar production processes. By contrast, as shown in the explanation summarized above, ultra-high purity titanium sponge has a different use, is not interchangeable with titanium sponge, is sold through a different channel of distribution, is perceived differently by customers and producers, and is produced in different production facilities under a different production process.

Furthermore, unless the Department finds the petitioner's definition of the domestic like product to be inaccurate, we will adopt the domestic like product definition set forth in the Petitions. This is consistent with the Department's broad discretion to define and clarify the scope of an antidumping or countervailing duty investigation in a manner that reflects the intent of the petition.[20] Consequently, the Department's discretion permits interpreting the Petitions in such a way as to best effectuate not only the intent of the Petitions, but the overall purpose of the

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[16] *Id.* at 19.
[17] *Id.* at 19-20.
[18] *Id.* at 20.
[19] The petitioner's proposed scope of the investigations defines titanium sponge as "unwrought titanium metal that has not been melted." *See* Scope Supplement at Attachment D. The petitioner excluded certain forms of unwrought titanium metal that has not been melted (*i.e.*, loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm) and alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis) from the proposed scope. *Id.* The petitioner explained that loose particles of unwrought titanium metal do not share the same physical characteristics as titanium sponge covered by the proposed scope because they are in the form of a powder. *Id.* at 1-3. The petitioner also explained that the briquettes identified above do not share the same chemistry as titanium sponge covered by the scope of the investigation. *Id.* at 3. Thus, we have not included these products as part of this domestic like product analysis.
[20] *See, e.g.*, *Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394 (CIT 1999) (citing *Kern-Liebers USA, Inc. v. United States*, 19 C.I.T. 393, 396, 881 F. Supp. 618, 621 (1995) (citation omitted)) and *Initiation of Antidumping Duty Investigations: Spring Table Grapes from Chile and Mexico*, 66 FR 26831 (May 15, 2001).

antidumping and countervailing duty laws as well.[21]

Industry Support Calculation

In determining whether the petitioner has standing (*i.e.*, those domestic workers and producers supporting the Petitions account for (1) at least 25 percent of the total production of the domestic like product and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions), in accordance with sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we conducted the following analysis.

We considered the industry support data contained in the Petition with reference to the domestic like product as defined in Attachment I, "Scope of the Investigation," to this Checklist, and as discussed above. The petitioner provided a written declaration from Mr. Henry Seiner, the petitioner's Vice President of Business Strategy.[22] In the declaration, Mr. Seiner states that the only companies that have produced titanium sponge in the United States over the past ten years are the petitioner and Allegheny Technologies Inc. (ATI).[23] The declaration also states that ATI announced in August 2016 that it was suspending production of titanium sponge at its only operating U.S. facility, and that Mr. Seiner believes ATI stopped producing titanium sponge at this U.S. facility near the end of 2016.[24] Finally, Mr. Seiner states that the petitioner produced approximately [ ] million pounds of titanium sponge at its U.S. plant in Henderson, Nevada, in 2016, and that ATI produced approximately [ ] million pounds of titanium sponge at its U.S. plant in 2016.[25]

To determine whether the petitioner has standing under sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we have relied on the production figures that the petitioner provided in Mr. Seiner's declaration. Based on the production figures in this declaration, the petitioner's share of domestic production of titanium sponge in 2016 is as follows:

Table 1
Calculation of Industry Support

U.S. Producers of Titanium Sponge	2016 Production of Titanium Sponge (Pounds)
The Petitioner	
TIMET	[ ]
Total 2016 U.S. Production of Titanium Sponge	[ ]

[21] *See Notice of Final Determination of Sales at Less Than Fair Value: Freshwater Crawfish Tail Meat from the People's Republic of China*, 62 FR 41347, 42357 (August 1, 1997).
[22] *See* Volume I of the Petitions, at Exhibit GEN-20.
[23] *Id.*
[24] *Id.*
[25] *Id.*

Total Industry Support	[ ]%

Challenge to Industry Support

None.

Findings

We relied on information provided by the petitioner, as described above, to establish total 2016 production of titanium sponge. Using these data, as demonstrated above, we find that the domestic producers and workers who support the Petitions account for at least 25 percent of total production of the domestic like product. We further find that domestic producers and workers who support the Petitions account for more than 50 percent of the total production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions. Therefore, we find that there is adequate industry support within the meaning of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

We conducted a search of the Internet and have been unable to locate information that contradicts the petitioner's assertions. We find that the petitioner has provided data that are reasonably available. For these reasons, we find that there is adequate industry support for initiating these investigations. Accordingly, we find that the Petitions have met the requirements of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

Attachment III

Analysis of Allegations and Evidence of Material Injury and Causation for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

I. Introduction

When making a determination regarding the initiation of antidumping and countervailing duty investigations, the Department of Commerce (the Department) examines, on the basis of sources readily available to the Department, the accuracy and adequacy of the evidence contained in the petitions, and determines whether the petitions allege the elements necessary for the imposition of antidumping and countervailing duties and contain information reasonably available to the petitioner that supports the allegations.[1] This attachment analyzes the sufficiency of the allegations and supporting evidence regarding material injury and causation.

II. Definition of Domestic Industry

The domestic industry is described with reference to producers of the domestic like product, as provided for in section 771(4)(A) of the Act. The Petitions[2] define the domestic industry as U.S. producers of titanium sponge.[3] The petitioner[4] identifies itself, as well as one other producer of the domestic like product, as the only companies constituting the domestic industry in the United States.[5] For a discussion of the domestic like product, *see* Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this Checklist.

III. Evidence of Injury and Threat of Injury

To determine injury, the statute requires an evaluation of the volume, price effects, and impact of imports on the domestic industry and permits consideration of other economic factors.[6] Specifically, in examining the impact of imports, section 771(7)(C)(iii) of the Act states that:

> In examining the impact {of imports on domestic producers} ..., the {International Trade} Commission {(ITC)} shall evaluate all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to–

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[1] *See* sections 702(c)(1)(A)(i) and 732(c)(1)(A)(i) of the Tariff Act of 1930, as amended (the Act).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). On August 31, 2017, in response to the Department's questions regarding the Petitions, the petitioner submitted the Petition for Imposition of Antidumping and Coutnervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement).

[3] *See* Volume I of the Petitions, at 23-24 and Exhibit GEN-20.

[4] The petitioner is Titanium Metals Corporation (TIMET or the petitioner).

[5] *See* Volume I of the Petitions, at 4-6. The petitioner notes that the other company, Allegheny Technologies, Inc. (ATI), suspended production operations in December 2016. *Id.*, at 1-2, 5-6 and 23.

[6] *See* sections 771(7)(B)(i) and (ii) of the Act.

> (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,
> (II) factors affecting domestic prices,
> (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment,
> (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry..., and
> (V) in {an antidumping proceeding} ..., the magnitude of the margin of dumping.

The Petitions allege that the domestic industry has experienced the following types of injury by reason of imports from Japan and Kazakhstan:

- The volume of imports is significant and increasing (Volume I of the Petitions, at 30-31 and Exhibit GEN-5);
- Reduced market share (Volume I of the Petitions, at 31-32 and Exhibits GEN-5, GEN-6, GEN-19, and GEN-33);
- Subject imports displaced U.S. production, resulting in plant idling, layoffs, and drop in capacity utilization for the domestic industry (34-37 and Exhibits GEN-1, GEN-2, and GEN-11);
- Decline in production, capacity utilization, hours worked, and earnings before interest and taxes (Volume I of the Petitions, at 37-38 and Exhibits GEN-19, GEN-22, GEN-24, and GEN-30);
- Underselling and price depression or suppression (Volume I of the Petitions, at 34-43 and Exhibits GEN-1, GEN-2, GEN-23, GEN-25, GEN-30, and GEN-31);
- Lost sales and revenues (Volume I of the Petitions, 38-43 and Exhibits GEN-15 and GEN-20); and
- Decline in pricing for downstream titanium products (Volume I of the Petitions, at 40-43 and Exhibits GEN-25, GEN-23, GEN-30, and GEN-31).

The Petitions also allege that the domestic industry could be threatened with further injury by reason of imports from Japan and Kazakhstan:

- Potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production with subject imports (Volume I of the Petitions, at 43-44);
- Jeopardized capital investment needed to sustain titanium sponge production in the United States (Volume I of the Petitions, at 45 and Exhibit GEN-21);
- Subject imports are rapidly increasing (Volume I of the Petitions, at 45);
- Significant excess production capacity to increase production in the subject countries (Volume I of the Petitions, at 45-46 and Exhibit GEN-6); and
- Export-orientation of subject producers (Volume I of the Petitions, at 46 and Exhibit GEN-14).

IV. Cumulation

Section 771(7)(G)(i) of the Act requires the ITC to cumulate imports from all countries for which petitions were filed on the same day if such imports compete with each other and with the domestic like product in the United States market. On August 24, 2017, the petitioner filed the Petitions against the two subject countries. The petitioner argues that a reasonable overlap of competition exists with subject imports and with the domestic like product in the United States, and as such, the criteria for cumulation have been satisfied.[7]

In determining whether cumulation is appropriate, the ITC generally uses a framework of four factors:[8]

- The degree of fungibility between imports from the two subject countries and between the imports and the domestic like product.
- The presence of sales or offers for sale of the imports and the domestic like product in the same geographic markets.
- Whether the imports and the domestic like product are handled in common or similar channels of distribution.
- Whether the imports are present in the U.S. market simultaneously.

The petitioner contends that subject imports from both countries are completely interchangeable and are produced using similar raw materials and processes, resulting in titanium sponge with nearly identical physical characteristics.[9] The petitioner notes that TIMET and ATI have used domestically-produced titanium sponge and subject imports on an interchangeable basis in the production of downstream titanium products.[10]

The petitioner notes that four companies consume virtually all the titanium sponge produced in or imported into the United States, because these are the only four companies that own U.S. facilities that can melt titanium sponge to produce titanium mill products.[11] As a result, the petitioner contends that subject imports from both countries are currently competing with one another throughout the U.S. market for sales to the limited number of U.S. consumers of titanium sponge.[12]

The petitioner notes that ATI has entered into long-term supply agreements with global producers of titanium sponge.[13] In addition, the petitioner notes that TIMET has also entered into long-term agreements with foreign producers for the purchase of subject titanium sponge and has received offers of long-term contracts to supply titanium sponge from all of the

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[7] *See* Volume I of the Petitions, at 25-28 and Exhibits GEN-1, GEN-2, GEN-15, GEN-20, and GEN-21.
[8] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986); *see also Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).
[9] *See* Volume I of the Petitions, at 26.
[10] *Id.*
[11] *See* Volume I of the Petitions, at 26-27 and Exhibit GEN-20.
[12] *Id.* at 26.
[13] *Id.* at 27.

producers in the subject countries.[14] Thus, the petitioner contends that subject imports are simultaneously available throughout the U.S. market through similar channels of trade and compete directly with one another.[15]

The petitioner also argues that it is clear that subject imports and the domestic like product compete with each other.[16] For support, the petitioner notes that ATI publicly stated that the decision to idle its Utah production facility was directly attributable to the availability of low-priced subject imports.[17] Thus, the petitioner contends that the subject imports displaced ATI's domestically-produced titanium sponge based on price.[18] The petitioner further notes that its own domestic production of titanium sponge faces the same kind of competition with low-priced imports.[19] Furthermore, the petitioner notes that its own recent efforts to sell its domestically-produced titanium sponge have been universally rejected in favor of subject imports.[20] As a result, the petitioner argues that subject imports from Japan and Kazakhstan should be cumulated.[21]

V. Negligibility

Section 771(24)(A)(i) of the Act states that "imports from a country of merchandise corresponding to a domestic like product identified by the {ITC} are 'negligible' if such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which the data are available . . . ."

The petitioner contends that imports from Japan and Kazakhstan are not negligible.[22] For support, the petitioner provided import data for the 12-month period of April 2016 through March 2017.[23] Based on the volume data provided by the petitioner, the import shares are as follows:[24]

Country	Share of Total Imports (%)
Japan	91.4
Kazakhstan	4.7

The data provided by the petitioner demonstrate that imports of titanium sponge from Japan and Kazakhstan each exceed the three percent negligibility threshold provided under section 771(24)(A)(i) of the Act.[25]

[14] *Id.* at 27 and Exhibit GEN-20.
[15] *Id.* at 27.
[16] *Id.*
[17] *Id.* at 27 and Exhibits GEN-1 and GEN-2.
[18] *Id.* at 27.
[19] *Id.* at 27-28 and Exhibit GEN-21.
[20] *Id.* at 28 and Exhibits GEN-15 and GEN-20.
[21] *Id.* at 28.
[22] *Id.* at 25-26.
[23] *See* Volume I of the Petitions, at 25-26 and Exhibits GEN-5 and GEN-6.
[24] *Id.* at Exhibit GEN-5.
[25] *Id.*

VI. Causation of Material Injury and Threat of Material Injury

The petitioner contends that the material injury and the threat of material injury to the domestic industry discussed in Section III above were caused by the impact of the allegedly dumped imports from Japan and the allegedly dumped and subsidized imports from Kazakhstan. In support of its argument, the petitioner provided information on the historical trend of the allegedly dumped and subsidized imports, focusing on the period beginning with 2014 and ending with June 2017, the most recently available data at the date of filing the Petitions.[26] In the Petitions, the petitioner demonstrates the effect of these import volumes, and their respective values, on domestic prices, market share, production, and the consequent impact on the domestic industry, specifically on sales and revenue.[27] The petitioner argues that this evidence reflects the injurious effects on the U.S. industry's performance caused by increasing imports of the subject titanium sponge at prices substantially lower than the prices offered by the petitioner, thereby resulting in significant incidents of lost sales and revenues.[28]

In making a determination regarding causation of material injury, the ITC is directed to evaluate the volume of subject imports (section 771(7)(B)(i)(I) of the Act), the effect of those imports on the prices of domestically produced products (section 771(7)(B)(i)(II) of the Act) and their impact on the domestic operations of U.S. producers (section 771(7)(B)(i)(III) of the Act). The petitioner bases its allegations of causation of current injury upon a significant and increasing volume of imports; reduced market share; displacement of U.S. production by subject imports; underselling and price depression or suppression; decline in production, capacity utilization, hours worked, and earnings before interest and taxes; lost sales and revenues; and decline in pricing for downstream titanium products.[29]

With regard to the threat of material injury, the petitioner bases its allegations upon the potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production; jeopardized capital investment needed to sustain U.S. production of titanium sponge; rapid increase of subject imports; significant excess capacity to increase production in subject countries; and export-orientation of subject producers.[30]

The allegations of causation of material injury and the threat of material injury are based upon the factors indicating current injury, as well as the factors indicating threat of material injury, as noted above. The factors related to causation presented in the injury section of the Petitions are the types of factors that the ITC is directed to consider for the purpose of evaluating causation under sections 771(7)(C) and 771(7)(F) of the Act.

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[26] *Id.* at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.
[27] *Id.* at 1-3, 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10, GEN-12 – GEN-15, GEN-19 – GEN-26, GEN-30, GEN-31, and GEN-33.
[28] *Id.*
[29] *See* Section III above.
[30] *Id.*

VII. Conclusion

In order to assess the accuracy and adequacy of the evidence relating to the allegations regarding material injury, threat of material injury, cumulation, negligibility, and causation, we examined the information presented in the Petitions and compared it with information that was reasonably available (*e.g.*, import data on the ITC website). We did not locate any information that contradicts the petitioner's assertions.

We analyzed the petitioner's evidence regarding material injury, threat of material injury, cumulation, negligibility, and causation and have found that the information in the Petitions demonstrates a sufficient showing of injury or threat of injury to the U.S. industry producing titanium sponge. Therefore, we find the overall evidence of injury included in the Petitions to be adequate to initiate the investigations of titanium sponge from Japan and Kazakhstan. Ultimately, the ITC will make the final determination with respect to material injury, or threat thereof, cumulation, negligibility, and causation.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary)

Titanium Sponge from Japan and Kazakhstan

Institution of antidumping and countervailing duty investigations and scheduling of preliminary phase investigations.

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping and countervailing duty investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary) pursuant to the Tariff Act of 1930 ("the Act") to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of titanium sponge from Japan and Kazakhstan, provided for in subheading 8108.20.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value and alleged to be subsidized by the Government of Kazakhstan. Unless the Department of Commerce extends the time for initiation, the Commission must reach a preliminary determination in antidumping and countervailing duty investigations in 45 days, or in this case by October 10, 2017. The Commission's views must be transmitted to Commerce within five business days thereafter, or by October 17, 2017.

DATE: August 24, 2017.

FOR FURTHER INFORMATION CONTACT: Jordan Harriman (202-205-2610), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (*https://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION:

Background.--These investigations are being instituted, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a) and 1673b(a)), in response to a petition filed on August 24, 2017, by Titanium Metals Corporation, Exton, PA.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A and B (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

Participation in the investigations and public service list.--Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the *Federal Register*. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping duty and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.--Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.--The Commission's Director of Investigations has scheduled a conference in connection with these investigations for 9:30 a.m. on Thursday, September 14, 2017, at the U.S. International Trade Commission Building, 500 E Street SW, Washington, DC. Requests to appear at the conference should be emailed to William.bishop@usitc.gov and Sharon.bellamy@usitc.gov (DO NOT FILE ON EDIS) on or before September 12, 2017. Parties in support of the imposition of countervailing and antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.--As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before September 19, 2017, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference. All written submissions must conform with the provisions of section 201.8 of the

Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's website at https://edis.usitc.gov, elaborates upon the Commission's rules with respect to electronic filing.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Certification.--Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these investigations must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that any information that it submits to the Commission during these investigations may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of these or related investigations or reviews, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

AUTHORITY: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.12 of the Commission's rules.

By order of the Commission.

Lisa R. Barton
Secretary to the Commission

Issued:

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

5. CVD Initiation Checklist: Titanium Sponge from Kazakhstan

UNITED STATES DEPARTMENT OF COMMERCE
International Trade Administration
Washington, D.C. 20230

C-834-810
POI: 01/01/2016 – 12/31/2016
~~**Proprietary Document**~~
OF:IV:LA
Public Version

September 13, 2017

ENFORCEMENT AND COMPLIANCE
OFFICE OF AD/CVD OPERATIONS
COUNTERVAILING DUTY INVESTIGATION INITIATION CHECKLIST

SUBJECT: Titanium Sponge from Kazakhstan

CASE NUMBER: C-834-810

PETITIONER:

Titanium Metals Corporation (TIMET)
224 Valley Creek Blvd.
Suite 200
Exton, PA 19341
610-968-1300

COUNSEL TO PETITIONER:

J. Kevin Horgan
deKieffer & Horgan
1090 Vermont Avenue, NW
Suite 410
Washington DC 20005
Tel: (202) 783-6900

POTENTIAL RESPONDENTS:

A list of the producers of titanium sponge in Kazakhstan identified by TIMET (the petitioner) can be found in the Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petition).[1]

SCOPE: *See* Attachment I – Scope of the Investigation.

[1] *See* Volume I of the Petition, at 12-13.

IMPORT STATISTICS:

Kazakhstan	2014	2015	2016	Jan – Mar 2016	Jan – Mar 2017
Quantity (Kilograms)	660,000	2,600,000	45,000	45,000	885,000
Value (US$)	6,644,070	21,371,092	373,974	373,974	7,079,829

Source: For value, the petitioner used the U.S. International Trade Commission (ITC) Dataweb, available at http://dataweb.usitc.gov/. The petitioner reported the customs value for imports of titanium sponge using the Harmonized Tariff Schedule of the United States (HTSUS) subheading 8108.20.0010.[2] For quantity, which was not available in the ITC Dataweb for Kazakhstan, the petitioner used estimates of the volume (in kilograms) from the U.S. Geological Survey.[3]

APPROXIMATE CASE CALENDAR:

Event	No. of Days	Date of Action	Day of Week
	Countervailing Duty Investigation		
Petition Filed	0	August 24, 2017	Thursday
Initiation Date	20	September 13, 2017	Wednesday
ITC Preliminary Determination	45	October 10, 2017	Tuesday*
ITA Preliminary Determination†**	85	November 17, 2017	Friday
ITA Final Determination†	160	January 31, 2018	Wednesday
ITC Final Determination***	205	March 19, 2018	Monday*
Publication of Order****	212	March 26, 2018	Monday*

[2] *See* Volume I of the Petition, at 14 and Exhibit GEN-5.
[3] *Id.* at 14 and Exhibit GEN-6.

* Where the deadline falls on a weekend/holiday, the appropriate date is the next business day.
† These deadlines may be extended under the governing statute.
** This will take place only in the event of a preliminary affirmative determination from the U.S. International Trade Commission (ITC).
*** This will take place only in the event of a final affirmative determination from the International Trade Administration (ITA).
**** This will take place only in the event of a final affirmative determination from the ITA and the ITC.
Note: The ITC final determination will take place no later than 45 days after a final affirmative ITA determination.
Note: Publication of order will take place approximately 7 days after an affirmative ITC final determination.

INDUSTRY SUPPORT:

Does the petitioner and those expressing support for the Petition account for more than 50% of production of the domestic like product?

☒	Yes
☐	No

If No, do those expressing support account for the majority of those expressing an opinion and at least 25% of domestic production?

☐	Yes
☐	No
☒	Not Applicable

Describe how industry support was established - specifically, describe the nature of any polling or other step undertaken to determine the level of domestic industry support.

See Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this checklist.

Was there opposition to the Petition?

☐	Yes
☒	No

Are any of the parties who have expressed opposition to the Petition either importers or domestic producers affiliated with foreign producers?

☐	Yes
☐	No
☒	Not Applicable

INJURY TEST:

Because Kazakhstan is a "Subsidies Agreement Country" within the meaning of section 701(b) of the Tariff Act of 1930, as amended (the Act), section 701(a)(2) of the Act applies to this investigation. Accordingly, the ITC must determine whether imports of the subject merchandise from Kazakhstan materially injure, or threaten material injury to, a U.S. industry, by reason of imports of the subject merchandise from Kazakhstan.

INJURY ALLEGATION:

We received a copy of the notice of institution of antidumping and countervailing duty investigations from the ITC, which was signed on August 24, 2017. It indicates that the ITC instituted an investigation to determine whether there is a reasonable indication that the domestic industry producing titanium sponge is materially injured, or threatened with material injury, by reason of imports of titanium sponge from Kazakhstan.[4]

The relevant injury data can be found in Volume I of the Petition, at 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10 through GEN-15, GEN-19 through GEN-26, GEN-30, GEN-31, and GEN-33.[5]

Does the Petition contain evidence of causation? Specifically, does the Petition contain information relative to:

☒ volume and value of imports (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6 and GEN-10.).

☒ U.S. market share (*i.e.*, the ratio of imports to consumption) (*See* Volume I of the Petition, at 31-32, 42, and Exhibits GEN-5, GEN-6, GEN-19, and GEN-33.).

☒ actual pricing (*i.e.*, evidence of decreased pricing) (*See* Volume I of the Petition, at 35, 38-45 and Exhibits GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

☒ relative pricing (*i.e.*, evidence of imports underselling U.S. products) (*See* Volume I of the Petition, at 35, 37-45 and Exhibits GEN-1, GEN-5, GEN-10, GEN-12, GEN-13, GEN-15, GEN-23, GEN-25, GEN-26, GEN-30, and GEN-31.).

[4] *See* Attachment IV to this checklist.
[5] *See* Attachment III, Analysis of Allegations and Evidence of Material Injury and Causation for the Petitions Covering Titanium Sponge from Kazakhstan.

PETITION REQUIREMENTS:

Does the Petition contain the following?

☒ the name, address, and telephone number of the petitioner (*See* Volume I of the Petition, at 4-5.).

☒ the names, addresses, and telephone numbers of all domestic producers of the domestic like product known to the petitioning company (*See* Volume I of the Petition, at 4-5.).

☒ the volume or value of the domestic like product produced by the petitioner and each domestic producer identified for the most recently completed 12-month period for which data is available (*See* Volume I of the Petition, at 6-7 and Exhibit GEN-20.)

Was the entire domestic industry identified in the Petition?

☒ Yes (*See* Volume I of the Petition, at 4-7 and Exhibit GEN-20.).
☐ No

☒ a clear and detailed description of the merchandise to be investigated, including the appropriate Harmonized Tariff Schedule numbers (*See* Volume I of the Petition, at 9-12; *see also* General Issues Supplement, at 2-3,[6] Scope Supplement, at Exhibit 6,[7] and Second General Issues Supplement, at 1-6 and Exhibits A-D.[8]).

☒ the name of each country in which the merchandise originates or from which the merchandise is exported (*See* Volume I of the Petition, at 12.).

☒ the identity of each known exporter, foreign producer, and importer of the merchandise (*See* Volume I of the Petition, at 12-13, 15-17.).

☒ a statement indicating that Petition was filed simultaneously with the Department of Commerce and the ITC (*See* the cover letter to the Petition, at 1-2.).

☒ an adequate summary of the proprietary data (*See* public version of the Petition; *see also* public version of the Second General Issues Supplement.).

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[6] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions," (August 31, 2017) (General Issues Supplement).

[7] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 6, 2017 Supplemental Questions," (September 7, 2017) (Scope Supplement).

[8] *See* letter from the petitioner to the Department, "Petition for the Imposition of Antidumping and Countervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to September 8, 2017 Supplemental Questions," (September 11, 2017) (Second General Issues Supplement).

☒ a statement regarding release under administrative protective order (*See* cover letter to the Petition, at 2; *see also* cover letter to the Second General Issues Supplement.).

☒ a certification of the facts contained in the Petition by an official of the petitioning firm(s) and its legal representative (if applicable) (*See* attachments to the cover letter to the Petition, attachments to the cover letter to the General Issues Supplement, attachments to the cover letter to the CVD Supplement,[9] and attachments to the cover letter to the Second General Issues Supplement.).

☒ import volume and value information for the most recent two-year period (*See* Volume I of the Petition, at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.).

COUNTERVAILING DUTY ALLEGATIONS:

The proposed period of investigation (POI) is January 1, 2016, through December 31, 2016.

The petitioner filed the Petition on August 24, 2017. On August 29, 2017, the Department sought clarification on certain subsidy issues in the Petition.[10] The petitioner provided additional information in response to the Department's questionnaire on August 31, 2017.[11]

CONSULTATIONS:

Pursuant to section 702(b)(4)(A)(ii) of the Act, on August 28, 2017, we invited representatives of the Government of Kazakhstan (GOK) for consultations with respect to the countervailing duty (CVD) petition. We held the consultations with the GOK via a conference call at the Department on September 7, 2017.[12]

COUNTERVAILING DUTY INVESTIGATION INITIATION STANDARD:

Section 702(b) of the Act states that petitioners must allege the elements necessary for the imposition of a CVD under section 701(a) of the Act; *i.e.*, the existence of countervailable subsidies and material injury, or threat of material injury, by reason of the subsidized imports. Section 702(b)(1) of the Act requires that these allegations be supported by information reasonably available to petitioners.

[9] *See* letter from the petitioner to the Department, "Petition for the Imposition of Countervailing Duties on Titanium Sponge from Kazakhstan: TIMET Response to Supplemental Questionnaire," (August 31, 2017) (CVD Supplement).
[10] *See* letter from the Department to the petitioner, "Petition for the Imposition of Countervailing Duties on Imports of Titanium Sponge from Kazakhstan: Supplemental Questions," (August 29, 2017).
[11] *See* CVD Supplement.
[12] *See* Consultations with Officials from the Government of Kazakhstan (GOK) Regarding the Countervailing Duty (CVD) Petition on Titanium Sponge from Kazakhstan, dated September 7, 2017.

ALLEGED SUBSIDY PROGRAMS:

We recommend investigating the programs listed under "Programs on Which the Department is Initiating an Investigation." For each program, the petitioner alleged the elements of a subsidy, *i.e.*, financial contribution, benefit, and specificity. We find that the petitioner's allegations are supported by adequate and accurate information that was reasonably available to it. In those instances where the petitioner partially supported its allegation, *i.e.*, where the allegation is broader than the supporting evidence, we recommend limiting our inquiry as described under "Recommendation."

We do not recommend investigating the programs listed under "Programs on Which the Department is Not Initiating an Investigation," and discuss the Department's decision to not initiate under "Recommendation."

I. PROGRAMS ON WHICH THE DEPARTMENT IS INITIATING AN INVESTIGATION

A. PREFERENTIAL GOVERNMENT LOANS

Description: The petitioner alleges that the GOK has a program called State Program of Industrial Innovative Development (SPIID) implemented for attracting foreign investors by providing state support to preferred industries such as the titanium industry and specifically its sole member, UKTMP.[13] The petitioner alleges that UKTMP received long-term loans from DBK[14] to refinance: 1) foreign investment loan and production costs with grace periods of 24 and 18 months, respectively; and 2) purchase raw materials with a grace period of 24 months.[15] The petitioner claims that if UKTMP received these loans based on market rates from commercial banks, the subsidy rate would be 3.8 percent without a grace period and 13.2 percent with the grace period for loans with no maturity rate.[16] For loans with a maturity rate, the subsidy would have been equivalent to 7 percent without the grace period and 16.4 percent with the grace period.[17]

Financial Contribution: The petitioner contends that the loans provided by a government-controlled entity constitute financial contributions pursuant to section 771(5)(D)(i) of the Act.

Benefit: The petitioner states that the loans confer a benefit under section 771(5)(E) of the Act because there is a difference between the amount of interest the recipient of the loan pays on the

[13] *See* the Petition, at 2 and Exhibit CVD-1. The petitioner alleges that Ust-Kamenogorsk Titanium Magnesium Plant JSC LLP (UKTMP) is the only active producer in Kazakhstan.
[14] The petitioner states that the Development Bank of Kazakhstan (DBK) was incorporated by the President of Kazakhstan for the development of the national economy, and specifically – exports. *See* the Petition, at 2 and Exhibits CVD-1 and CVD-9.
[15] *See* the Petition, at 3-4 and Exhibit GEN-18.
[16] *Id.* at 4-5 and Exhibit CVD-7.
[17] *Id.* at 4-5 and Exhibits CVD-4 through CVD-7.

loan and the amount the recipient would pay on a comparable commercial loan that the recipient could actually obtain on the market.

Specificity: The petitioner contends that these loans are specific because they are contingent in fact upon export performance under section 771(5A)(B) of the Act. The loans are limited to priority industries which includes the titanium sponge industry, and to encourage exports by such industries. In addition, the actual recipients of the subsidies are limited in number within the meaning of section 771(5A)(D)(iii)(I) of the Act.

Support: We examined the evidence provided to support the allegation on pages 3-6 of the Petition and page 1 of the CVD Supplement, including all referenced exhibits therein. We relied on all information submitted.

Recommendation: The team recommends initiating on the allegation as described in the petition on the basis of the support provided therein as noted above.

B. PREFERENTIAL DUTY WAIVER ON TITANIUM OXIDESS

Description: The petitioner alleges the GOK has waived import duties on titanium oxides imported by Kazakh titanium companies, *i.e.* UKTMP.[18] The normal tariff rate for titanium oxides is 5 percent.[19] Preferential tariff rates are available with respect to titanium oxides intended for the production of titanium ingots and alloys used in the aerospace industry.[20] Additionally, according to a news report, the duty waiver is intended "support export-oriented manufacturers of titanium products."[21] UKTMP is the only Kazakhstan company capable of converting titanium oxide to produce titanium metal products.

Financial Contribution: The petitioner contends that the GOK foregoes revenue as a result of the duty waiver, which constitutes a financial contribution pursuant to section 771(5)(D)(ii) of the Act.

Benefit: The petitioner states that the duty waiver is conferred a benefit under section 771(5)(E) of the Act because UKTMP is relieved of a financial obligation to pay duties on imports of titanium oxides.

Specificity: The petitioner contends that the duty waiver is specific because it is contingent upon export performance under section 771(5A)(B) of the Act. Additionally, the duty waiver is specific because it is limited to imports of titanium oxide by or for the benefit of UKTMP, (*i.e.*, the only Kazakh company capable of converting titanium oxide to produce titanium metal products), making the actual recipient of the subsidy limited in number within the meaning of section 771(5A)(D) of the Act.

[18] *See* the Petition, at 6 and Exhibit CVD-8.
[19] *Id.*
[20] *Id.* at 6 and Exhibit CVD-3.
[21] *Id.* at 7 and Exhibit CVD-3.

Support: We examined the evidence provided to support the allegation on pages 6-8 of the Petition and page 1 of the CVD Supplement, including all referenced exhibits therein. We relied on all information submitted.

Recommendation: The team recommends initiating on the allegation as described in the petition on the basis of the support provided therein as noted above.

C. DISCOUNTED ELECTRICITY TARIFFS

Description: The petitioner alleges that UKTMP receives electricity for less than adequate remuneration (LTAR) from Kazakhstan Electricity Grid Operating Company (KEGOC), a government-controlled entity, at subsidized rates. The petitioner claims that the GOK, through KEGOC, maintains electricity tariffs below the cost of production.[22]

Financial Contribution: The petitioner asserts that the provision of electricity by KEGOC, a public entity, provides a financial contribution in the form of the provision of goods or services by the GOK, pursuant to section 771(5)(D)(iii) of the Act.

Benefit: The petitioner states that the program confers a benefit under section 771(5)(E)(iv) of the Act because electricity is provided to UKTMP for LTAR.

Specificity: The petitioner alleges that the program is specific under section 771(5A)(D)(iii) of the Act because UKTMP, as a significant consumer of electricity in Ust-Kamenogorsk, is a predominant user of the subsidy and receives a disproportionately large amount of the subsidy.

Support: We examined the evidence provided to support the allegation on pages 8-9 of the Petition, including all referenced exhibits therein. We relied on all information submitted.

Recommendation: The team recommends initiating on the allegation as described in the Petition on the basis of the support provided therein as noted above.

II. PROGRAMS ON WHICH THE DEPARTMENT IS NOT INITIATING AN INVESTIGATION

A. OTHER PROGRAMS

Description: The petitioner alleges that the SPIID lists government financed infrastructure projects to be undertaken between 2015 and 2019.[23] The petitioner identified a list of projects that will directly benefit UKTMP. The list includes the following projects benefitting UKTMP:

1) Construction of a second ore smelting furnace for the production of titanium slag;
2) Reconstruction of the forging press PA-1343 cutting layered titanium sponge;

[22] *See* the Petition, at 8 and Exhibits CVD-13 and 14.
[23] *See* the Petition, at 10 and Exhibit CVD-1 at Table 2.2.2.9.

3) Construction of the second concentrator plant for the production of titanium sponge;
4) Issue of titanium products for the oil and gas industry; and
5) Purchase and installation of a new VAR furnace No.6 to produce titanium ingots and a alloys.[24]

The petitioner alleges that SPIID offers to priority industry member, such as UKTMP, interest reimbursement on loans and leases, preferential loans, equity participation, loan guarantees, risk insurance reimbursement, grants and tax and customs preferences.[25]

Financial Contribution: The petitioner contend that the support measures provided by GOK to UKTMP constitute financial contributions pursuant to section 771(5)(D)(i) of the Act.

Benefit: The petitioner states that the program confers a benefit under section 771(5)(E) of the Act because in the case of loans there is a difference between the amount of interest the recipient of the loan pays on the loan and the amount the recipient would pay on a comparable commercial loan that the recipient could actually obtain on the market; in the case of tax and customs preferences, UKTMP is relieved of financial obligations; and in the case of grants and reimbursements, UKTMP is the beneficiary of direct financial contributions.

Specificity: The petitioner alleges that the support measures would be specific because they are in fact contingent upon export performance within the meaning of 771(5A)(B) of the Act, the loans are specifically limited to priority industries, including the titanium sponge industry, and the actual recipients of the subsidies are limited in number within the meaning of 771(5A)(D) of the Act.

Support: We examined the evidence provided to support the allegation on pages 9-11 of the Petition and pages 2-3 of the CVD Supplement, including all referenced exhibits therein. We relied on all information submitted.

Recommendation: We recommend not initiating an investigation because the petitioner did not provide evidence that the GOK pursued any of the prospective projects listed in Table 2.2.2.9 of the SPIID program with respect to UKTMP. The petitioner states that this list represents "prospective projects that could receive subsidies from the GOK under its SPIID Program," and that it was unable "to locate any more recent information to indicate whether the GOK has made a decision to subsidize the projects."[26] The petitioner does not cite to any evidence to support an allegation that these projects have proceeded, or that or that the GOK has provided funding. Thus, the petitioner did not provide any reference to financial contribution as defined by section 771(5)(D)(i) of the Act.

Further, the petitioner's discussion of specificity is limited to provision of loans to priority industries and the limited number of actual recipients. However, none of the aforementioned "Other Programs" references any provision of loans.

[24] *Id.* at Exhibit CVD-1 at Table 2.2.2.9.
[25] *See* CVD Supplement, at 3.
[26] *Id.*

With respect to the benefit aspect of the "Other Programs," the petitioner did not provide any evidence that UKTMP has benefitted from any of these programs. The petitioner, instead, discusses the benefit of loans, tax relief and grants without referencing the projects listed under "Other Programs," which do not contain loan, tax, or grant elements in them.

Finally, two of the five "Other Programs," namely "Issue of titanium products for the oil and gas industry" and "Purchase and installation of a new VAR furnace No.6 to produce titanium ingots and alloys," are listed to be commissioned in 2017 and 2019, respectively.[27] Therefore, these two "Other Programs," would not be covered by the POI, even it were otherwise appropriate to initiate an investigation. For these reasons, we recommend not initiating an investigation on "Other Programs," as currently alleged.

RECOMMENDATION:

We examined the accuracy and adequacy of the evidence provided in the Petition as discussed in this checklist and attachments, and recommend determining that the evidence is sufficient to justify the initiation of a CVD investigation with regard to Kazakhstan. We also recommend determining that the Petition was filed by, or on behalf of, the domestic industry.

ATTACHMENTS:

I. Scope of the Investigation
II. Analysis of Industry Support
III. Analysis of Allegations and Evidence of Material Injury and Causation
IV. Action Letter from the ITC

[27] *See* the Petition, at Exhibit CVD-1 at Table 2.2.2.9.

Attachment I

Scope of the Investigation

The product covered by this investigation is all forms and grades of titanium sponge, except as specified below. Titanium sponge is unwrought titanium metal that has not been melted. Expressly excluded from the scope of this investigation are:

1) Loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm);
2) alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis; and
3) ultra-high purity titanium sponge. In ultra-high purity titanium sponge, metallic impurities do not exceed any of these amounts:

WT%

Aluminum 0.0005
Chromium 0.0001
Cobalt 0.0001
Copper 0.0002
Iron 0.0300
Manganese 0.0010
Nickel 0.0002
Vanadium 0.0002
Zirconium 0.0005
Carbon 0.0150
Hydrogen 0.0100
Nitrogen 0.0020
Oxygen 0.1000

Titanium sponge is currently classified under subheading 8108.20.0010 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheading is provided for convenience and customs purposes; the written description of the scope of this investigation is dispositive.

Attachment II

Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

Background

Sections 702(c)(4)(A) and 732(c)(4)(A) of the Tariff Act of 1930, as amended (the Act), state that the administering authority shall determine that a petition has been filed by or on behalf of the industry if the domestic producers or workers who support the petition account for: (1) at least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition.

Section 771(4)(A) of the Act defines the "industry" as the producers, as a whole, of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product. Thus, to determine whether a petition has the requisite industry support, the Act directs the Department of Commerce (the Department) to look to producers and workers who produce the domestic like product. The International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to a separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to law.[1]

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the Petitions.[2] While the Department is not bound by the criteria used by the ITC to determine the domestic like product in answering this question, we have reviewed the factors as presented by the petitioner in the Petitions and General Issues Supplement.[3] The criteria presented by the petitioner are: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4)

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[1] *See USEC, Inc. v. United States*, 132 F. Supp. 2d 1, 8 (CIT 2001) (citing *Algoma Steel Corp. Ltd. v. United States*, 688 F. Supp. 639, 644 (CIT 1988), *aff'd* 865 F.2d 240 (Fed. Cir. 1989)).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). Titanium Metals Corporation, or TIMET (the petitioner), filed the TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement), in response to the Department's request for additional information regarding the Petitions. The petitioner also filed a revision to the proposed scope of the investigations on September 11, 2017. *See* "TIMET Response to September 8, 2017 Supplemental Questions," dated September 11, 2017 (Scope Supplement).

[3] *See* Volume I of the Petitions, at 18-22; *see also* General Issues Supplement, at Attachment A-1.

customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and (6) price.[4] With regard to the domestic like product, the petitioner does not offer a definition of the domestic like product distinct from the proposed scope of the investigations.[5] In addition, the petitioner contends that there is a single domestic like product that is co-extensive with the product under the proposed scope of the investigations.[6]

Analysis of Domestic Like Product

To support its assertion that there is a single domestic like product (titanium sponge) that is co-extensive with the proposed scope of the investigations, the petitioner first notes that the ITC found titanium sponge to be a single like product in its most recent proceeding involving titanium sponge.[7] The petitioner also provided the following explanations:

- All forms of titanium sponge are manufactured using the Kroll Process.[8]
- Producers use common manufacturing facilities, equipment, and production workers to produce all grades of titanium sponge.[9]
- The cost of producing titanium sponge does not vary significantly from grade to grade.[10]
- All grades of titanium sponge consist of unwrought titanium metal which has not been melted or forged, and the required chemistries for different grades of titanium sponge vary in only limited respects.[11]
- Different grades of titanium sponge are frequently interchangeable because the cost of production is similar for different grades, and standard grades frequently meet the chemical requirements for premium grades.[12] Also, premium grades may readily be substituted for standard grades.[13]
- All forms and grades of subject titanium sponge are acquired through the same channels (*i.e.*, through internal production and/or pursuant to long-term contracts lasting a year or more).[14]
- Customers perceive that various grades of titanium sponge are frequently interchangeable because standard grades frequently meet the chemical requirements for premium grades.[15]

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[4] *See* Volume I of the Petitions, at 19; *see also Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394, 397-98 (CIT 1999); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (CIT 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also Antidumping and Countervailing Duty Handbook*, Fourteenth Edition, United States International Trade Commission, Publication 4540 (June 2015), at II-34.

[5] *See* Volume I of the Petitions, at 4; *see also* Scope Supplement, at Exhibit 6.

[6] *Id.*

[7] *See* Volume I of the Petitions, at 18; *see also* General Issues Supplement, at Attachment A-1 (*Titanium Sponge from Japan, Kazakhstan, Russia, and Ukraine*, USITC Pub. 3119 (August 1998), at 4).

[8] *See* Volume I of the Petitions, at 11 and 19.

[9] *Id.* at 19.

[10] *Id.*

[11] *Id.* at 20.

[12] *Id.* at 21.

[13] *Id.*

[14] *Id.*

[15] *Id.* at 22.

The petitioner provided the following explanations of why ultra-high purity titanium sponge, which it excluded from the proposed scope of the investigations, does not fall under the definition of the domestic like product:

- Ultra-high purity titanium sponge is manufactured using a sodium reduction process that is distinct from the Kroll Process used by companies that produce titanium sponge for the titanium mill products market.[16]
- Ultra-high purity titanium sponge is dedicated for use in the semiconductor business. It is not used to manufacture titanium mill products that are produced from titanium sponge.[17]
- The cost incurred to produce high purity titanium sponge makes it economically unsuitable for use in the production of titanium mill products.[18]

Department's Position:

We analyzed the information provided by the petitioner with regard to the ITC's like product factors. We agree with the petitioner that titanium sponge, as defined in the scope of the investigations, constitutes a single domestic like product.[19] As shown by the petitioner's explanation summarized above, titanium sponge has similar physical characteristics and uses, is interchangeable, is sold through the same channels of distribution, is perceived similarly by customers and producers, and is produced in common manufacturing facilities and under similar production processes. By contrast, as shown in the explanation summarized above, ultra-high purity titanium sponge has a different use, is not interchangeable with titanium sponge, is sold through a different channel of distribution, is perceived differently by customers and producers, and is produced in different production facilities under a different production process.

Furthermore, unless the Department finds the petitioner's definition of the domestic like product to be inaccurate, we will adopt the domestic like product definition set forth in the Petitions. This is consistent with the Department's broad discretion to define and clarify the scope of an antidumping or countervailing duty investigation in a manner that reflects the intent of the petition.[20] Consequently, the Department's discretion permits interpreting the Petitions in such a way as to best effectuate not only the intent of the Petitions, but the overall purpose of the

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[16] *Id.* at 19.
[17] *Id.* at 19-20.
[18] *Id.* at 20.
[19] The petitioner's proposed scope of the investigations defines titanium sponge as "unwrought titanium metal that has not been melted." *See* Scope Supplement at Attachment D. The petitioner excluded certain forms of unwrought titanium metal that has not been melted (*i.e.*, loose particles of unwrought titanium metal having a particle size of less than 20 mesh (0.84mm) and alloyed or unalloyed briquettes of unwrought titanium metal that contain more than 0.2% oxygen on a dry weight basis) from the proposed scope. *Id.* The petitioner explained that loose particles of unwrought titanium metal do not share the same physical characteristics as titanium sponge covered by the proposed scope because they are in the form of a powder. *Id.* at 1-3. The petitioner also explained that the briquettes identified above do not share the same chemistry as titanium sponge covered by the scope of the investigation. *Id.* at 3. Thus, we have not included these products as part of this domestic like product analysis.
[20] *See, e.g., Fujitsu Ltd. v. United States*, 36 F. Supp. 2d 394 (CIT 1999) (citing *Kern-Liebers USA, Inc. v. United States*, 19 C.I.T. 393, 396, 881 F. Supp. 618, 621 (1995) (citation omitted)) and *Initiation of Antidumping Duty Investigations: Spring Table Grapes from Chile and Mexico*, 66 FR 26831 (May 15, 2001).

antidumping and countervailing duty laws as well.[21]

Industry Support Calculation

In determining whether the petitioner has standing (*i.e.*, those domestic workers and producers supporting the Petitions account for (1) at least 25 percent of the total production of the domestic like product and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions), in accordance with sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we conducted the following analysis.

We considered the industry support data contained in the Petition with reference to the domestic like product as defined in Attachment I, "Scope of the Investigation," to this Checklist, and as discussed above. The petitioner provided a written declaration from Mr. Henry Seiner, the petitioner's Vice President of Business Strategy.[22] In the declaration, Mr. Seiner states that the only companies that have produced titanium sponge in the United States over the past ten years are the petitioner and Allegheny Technologies Inc. (ATI).[23] The declaration also states that ATI announced in August 2016 that it was suspending production of titanium sponge at its only operating U.S. facility, and that Mr. Seiner believes ATI stopped producing titanium sponge at this U.S. facility near the end of 2016.[24] Finally, Mr. Seiner states that the petitioner produced approximately [ ] million pounds of titanium sponge at its U.S. plant in Henderson, Nevada, in 2016, and that ATI produced approximately [ ] million pounds of titanium sponge at its U.S. plant in 2016.[25]

To determine whether the petitioner has standing under sections 702(c)(4)(A) and 732(c)(4)(A) of the Act, we have relied on the production figures that the petitioner provided in Mr. Seiner's declaration. Based on the production figures in this declaration, the petitioner's share of domestic production of titanium sponge in 2016 is as follows:

Table 1
Calculation of Industry Support

U.S. Producers of Titanium Sponge	2016 Production of Titanium Sponge (Pounds)
The Petitioner	
TIMET	[ ]
Total 2016 U.S. Production of Titanium Sponge	[ ]

[21] *See Notice of Final Determination of Sales at Less Than Fair Value: Freshwater Crawfish Tail Meat from the People's Republic of China*, 62 FR 41347, 42357 (August 1, 1997).
[22] *See* Volume I of the Petitions, at Exhibit GEN-20.
[23] *Id.*
[24] *Id.*
[25] *Id.*

Total Industry Support	[ ]%

Challenge to Industry Support

None.

Findings

We relied on information provided by the petitioner, as described above, to establish total 2016 production of titanium sponge. Using these data, as demonstrated above, we find that the domestic producers and workers who support the Petitions account for at least 25 percent of total production of the domestic like product. We further find that domestic producers and workers who support the Petitions account for more than 50 percent of the total production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the Petitions. Therefore, we find that there is adequate industry support within the meaning of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

We conducted a search of the Internet and have been unable to locate information that contradicts the petitioner's assertions. We find that the petitioner has provided data that are reasonably available. For these reasons, we find that there is adequate industry support for initiating these investigations. Accordingly, we find that the Petitions have met the requirements of sections 702(c)(4)(A) and 732(c)(4)(A) of the Act.

Attachment III

Analysis of Allegations and Evidence of Material Injury and Causation for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan

I. Introduction

When making a determination regarding the initiation of antidumping and countervailing duty investigations, the Department of Commerce (the Department) examines, on the basis of sources readily available to the Department, the accuracy and adequacy of the evidence contained in the petitions, and determines whether the petitions allege the elements necessary for the imposition of antidumping and countervailing duties and contain information reasonably available to the petitioner that supports the allegations.[1] This attachment analyzes the sufficiency of the allegations and supporting evidence regarding material injury and causation.

II. Definition of Domestic Industry

The domestic industry is described with reference to producers of the domestic like product, as provided for in section 771(4)(A) of the Act. The Petitions[2] define the domestic industry as U.S. producers of titanium sponge.[3] The petitioner[4] identifies itself, as well as one other producer of the domestic like product, as the only companies constituting the domestic industry in the United States.[5] For a discussion of the domestic like product, *see* Attachment II, Analysis of Industry Support for the Antidumping and Countervailing Duty Petitions Covering Titanium Sponge from Japan and Kazakhstan, to this Checklist.

III. Evidence of Injury and Threat of Injury

To determine injury, the statute requires an evaluation of the volume, price effects, and impact of imports on the domestic industry and permits consideration of other economic factors.[6] Specifically, in examining the impact of imports, section 771(7)(C)(iii) of the Act states that:

> In examining the impact {of imports on domestic producers} ..., the {International Trade} Commission {(ITC)} shall evaluate all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to–

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[1] *See* sections 702(c)(1)(A)(i) and 732(c)(1)(A)(i) of the Tariff Act of 1930, as amended (the Act).

[2] *See* Titanium Sponge from Japan and Kazakhstan: Petition for the Imposition of Antidumping and Countervailing Duties, dated August 24, 2017 (the Petitions). On August 31, 2017, in response to the Department's questions regarding the Petitions, the petitioner submitted the Petition for Imposition of Antidumping and Coutnervailing Duties on Titanium Sponge from Japan and Kazakhstan: TIMET Response to Supplemental General Questions, dated August 31, 2017 (General Issues Supplement).

[3] *See* Volume I of the Petitions, at 23-24 and Exhibit GEN-20.

[4] The petitioner is Titanium Metals Corporation (TIMET or the petitioner).

[5] *See* Volume I of the Petitions, at 4-6. The petitioner notes that the other company, Allegheny Technologies, Inc. (ATI), suspended production operations in December 2016. *Id.*, at 1-2, 5-6 and 23.

[6] *See* sections 771(7)(B)(i) and (ii) of the Act.

> (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,
> (II) factors affecting domestic prices,
> (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment,
> (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry..., and
> (V) in {an antidumping proceeding} ..., the magnitude of the margin of dumping.

The Petitions allege that the domestic industry has experienced the following types of injury by reason of imports from Japan and Kazakhstan:

- The volume of imports is significant and increasing (Volume I of the Petitions, at 30-31 and Exhibit GEN-5);
- Reduced market share (Volume I of the Petitions, at 31-32 and Exhibits GEN-5, GEN-6, GEN-19, and GEN-33);
- Subject imports displaced U.S. production, resulting in plant idling, layoffs, and drop in capacity utilization for the domestic industry (34-37 and Exhibits GEN-1, GEN-2, and GEN-11);
- Decline in production, capacity utilization, hours worked, and earnings before interest and taxes (Volume I of the Petitions, at 37-38 and Exhibits GEN-19, GEN-22, GEN-24, and GEN-30);
- Underselling and price depression or suppression (Volume I of the Petitions, at 34-43 and Exhibits GEN-1, GEN-2, GEN-23, GEN-25, GEN-30, and GEN-31);
- Lost sales and revenues (Volume I of the Petitions, 38-43 and Exhibits GEN-15 and GEN-20); and
- Decline in pricing for downstream titanium products (Volume I of the Petitions, at 40-43 and Exhibits GEN-25, GEN-23, GEN-30, and GEN-31).

The Petitions also allege that the domestic industry could be threatened with further injury by reason of imports from Japan and Kazakhstan:

- Potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production with subject imports (Volume I of the Petitions, at 43-44);
- Jeopardized capital investment needed to sustain titanium sponge production in the United States (Volume I of the Petitions, at 45 and Exhibit GEN-21);
- Subject imports are rapidly increasing (Volume I of the Petitions, at 45);
- Significant excess production capacity to increase production in the subject countries (Volume I of the Petitions, at 45-46 and Exhibit GEN-6); and
- Export-orientation of subject producers (Volume I of the Petitions, at 46 and Exhibit GEN-14).

IV. Cumulation

Section 771(7)(G)(i) of the Act requires the ITC to cumulate imports from all countries for which petitions were filed on the same day if such imports compete with each other and with the domestic like product in the United States market. On August 24, 2017, the petitioner filed the Petitions against the two subject countries. The petitioner argues that a reasonable overlap of competition exists with subject imports and with the domestic like product in the United States, and as such, the criteria for cumulation have been satisfied.[7]

In determining whether cumulation is appropriate, the ITC generally uses a framework of four factors:[8]

- The degree of fungibility between imports from the two subject countries and between the imports and the domestic like product.
- The presence of sales or offers for sale of the imports and the domestic like product in the same geographic markets.
- Whether the imports and the domestic like product are handled in common or similar channels of distribution.
- Whether the imports are present in the U.S. market simultaneously.

The petitioner contends that subject imports from both countries are completely interchangeable and are produced using similar raw materials and processes, resulting in titanium sponge with nearly identical physical characteristics.[9] The petitioner notes that TIMET and ATI have used domestically-produced titanium sponge and subject imports on an interchangeable basis in the production of downstream titanium products.[10]

The petitioner notes that four companies consume virtually all the titanium sponge produced in or imported into the United States, because these are the only four companies that own U.S. facilities that can melt titanium sponge to produce titanium mill products.[11] As a result, the petitioner contends that subject imports from both countries are currently competing with one another throughout the U.S. market for sales to the limited number of U.S. consumers of titanium sponge.[12]

The petitioner notes that ATI has entered into long-term supply agreements with global producers of titanium sponge.[13] In addition, the petitioner notes that TIMET has also entered into long-term agreements with foreign producers for the purchase of subject titanium sponge and has received offers of long-term contracts to supply titanium sponge from all of the

[7] *See* Volume I of the Petitions, at 25-28 and Exhibits GEN-1, GEN-2, GEN-15, GEN-20, and GEN-21.
[8] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986); *see also Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).
[9] *See* Volume I of the Petitions, at 26.
[10] *Id.*
[11] *See* Volume I of the Petitions, at 26-27 and Exhibit GEN-20.
[12] *Id.* at 26.
[13] *Id.* at 27.

producers in the subject countries.[14] Thus, the petitioner contends that subject imports are simultaneously available throughout the U.S. market through similar channels of trade and compete directly with one another.[15]

The petitioner also argues that it is clear that subject imports and the domestic like product compete with each other.[16] For support, the petitioner notes that ATI publicly stated that the decision to idle its Utah production facility was directly attributable to the availability of low-priced subject imports.[17] Thus, the petitioner contends that the subject imports displaced ATI's domestically-produced titanium sponge based on price.[18] The petitioner further notes that its own domestic production of titanium sponge faces the same kind of competition with low-priced imports.[19] Furthermore, the petitioner notes that its own recent efforts to sell its domestically-produced titanium sponge have been universally rejected in favor of subject imports.[20] As a result, the petitioner argues that subject imports from Japan and Kazakhstan should be cumulated.[21]

V. Negligibility

Section 771(24)(A)(i) of the Act states that "imports from a country of merchandise corresponding to a domestic like product identified by the {ITC} are 'negligible' if such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which the data are available . . . ."

The petitioner contends that imports from Japan and Kazakhstan are not negligible.[22] For support, the petitioner provided import data for the 12-month period of April 2016 through March 2017.[23] Based on the volume data provided by the petitioner, the import shares are as follows:[24]

Country	Share of Total Imports (%)
Japan	91.4
Kazakhstan	4.7

The data provided by the petitioner demonstrate that imports of titanium sponge from Japan and Kazakhstan each exceed the three percent negligibility threshold provided under section 771(24)(A)(i) of the Act.[25]

[14] *Id.* at 27 and Exhibit GEN-20.
[15] *Id.* at 27.
[16] *Id.*
[17] *Id.* at 27 and Exhibits GEN-1 and GEN-2.
[18] *Id.* at 27.
[19] *Id.* at 27-28 and Exhibit GEN-21.
[20] *Id.* at 28 and Exhibits GEN-15 and GEN-20.
[21] *Id.* at 28.
[22] *Id.* at 25-26.
[23] *See* Volume I of the Petitions, at 25-26 and Exhibits GEN-5 and GEN-6.
[24] *Id.* at Exhibit GEN-5.
[25] *Id.*

VI. Causation of Material Injury and Threat of Material Injury

The petitioner contends that the material injury and the threat of material injury to the domestic industry discussed in Section III above were caused by the impact of the allegedly dumped imports from Japan and the allegedly dumped and subsidized imports from Kazakhstan. In support of its argument, the petitioner provided information on the historical trend of the allegedly dumped and subsidized imports, focusing on the period beginning with 2014 and ending with June 2017, the most recently available data at the date of filing the Petitions.[26] In the Petitions, the petitioner demonstrates the effect of these import volumes, and their respective values, on domestic prices, market share, production, and the consequent impact on the domestic industry, specifically on sales and revenue.[27] The petitioner argues that this evidence reflects the injurious effects on the U.S. industry's performance caused by increasing imports of the subject titanium sponge at prices substantially lower than the prices offered by the petitioner, thereby resulting in significant incidents of lost sales and revenues.[28]

In making a determination regarding causation of material injury, the ITC is directed to evaluate the volume of subject imports (section 771(7)(B)(i)(I) of the Act), the effect of those imports on the prices of domestically produced products (section 771(7)(B)(i)(II) of the Act) and their impact on the domestic operations of U.S. producers (section 771(7)(B)(i)(III) of the Act). The petitioner bases its allegations of causation of current injury upon a significant and increasing volume of imports; reduced market share; displacement of U.S. production by subject imports; underselling and price depression or suppression; decline in production, capacity utilization, hours worked, and earnings before interest and taxes; lost sales and revenues; and decline in pricing for downstream titanium products.[29]

With regard to the threat of material injury, the petitioner bases its allegations upon the potential for increased reliance on foreign-produced titanium sponge, in addition to current supplementation of domestic production; jeopardized capital investment needed to sustain U.S. production of titanium sponge; rapid increase of subject imports; significant excess capacity to increase production in subject countries; and export-orientation of subject producers.[30]

The allegations of causation of material injury and the threat of material injury are based upon the factors indicating current injury, as well as the factors indicating threat of material injury, as noted above. The factors related to causation presented in the injury section of the Petitions are the types of factors that the ITC is directed to consider for the purpose of evaluating causation under sections 771(7)(C) and 771(7)(F) of the Act.

[26] *Id.* at 14-15, 24-25, 30-32 and Exhibits GEN-5, GEN-6, and GEN-10.
[27] *Id.* at 1-3, 14-15, 18-47 and Exhibits GEN-1, GEN-2, GEN-5, GEN-6, GEN-10, GEN-12 – GEN-15, GEN-19 – GEN-26, GEN-30, GEN-31, and GEN-33.
[28] *Id.*
[29] *See* Section III above.
[30] *Id.*

VII. Conclusion

In order to assess the accuracy and adequacy of the evidence relating to the allegations regarding material injury, threat of material injury, cumulation, negligibility, and causation, we examined the information presented in the Petitions and compared it with information that was reasonably available (*e.g.*, import data on the ITC website). We did not locate any information that contradicts the petitioner's assertions.

We analyzed the petitioner's evidence regarding material injury, threat of material injury, cumulation, negligibility, and causation and have found that the information in the Petitions demonstrates a sufficient showing of injury or threat of injury to the U.S. industry producing titanium sponge. Therefore, we find the overall evidence of injury included in the Petitions to be adequate to initiate the investigations of titanium sponge from Japan and Kazakhstan. Ultimately, the ITC will make the final determination with respect to material injury, or threat thereof, cumulation, negligibility, and causation.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary)

Titanium Sponge from Japan and Kazakhstan

Institution of antidumping and countervailing duty investigations and scheduling of preliminary phase investigations.

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping and countervailing duty investigation Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary) pursuant to the Tariff Act of 1930 ("the Act") to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of titanium sponge from Japan and Kazakhstan, provided for in subheading 8108.20.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value and alleged to be subsidized by the Government of Kazakhstan. Unless the Department of Commerce extends the time for initiation, the Commission must reach a preliminary determination in antidumping and countervailing duty investigations in 45 days, or in this case by October 10, 2017. The Commission's views must be transmitted to Commerce within five business days thereafter, or by October 17, 2017.

DATE: August 24, 2017.

FOR FURTHER INFORMATION CONTACT: Jordan Harriman (202-205-2610), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (*https://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION:

Background.--These investigations are being instituted, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a) and 1673b(a)), in response to a petition filed on August 24, 2017, by Titanium Metals Corporation, Exton, PA.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A and B (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

Participation in the investigations and public service list.--Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the *Federal Register*. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping duty and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.--Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.--The Commission's Director of Investigations has scheduled a conference in connection with these investigations for 9:30 a.m. on Thursday, September 14, 2017, at the U.S. International Trade Commission Building, 500 E Street SW, Washington, DC. Requests to appear at the conference should be emailed to William.bishop@usitc.gov and Sharon.bellamy@usitc.gov (DO NOT FILE ON EDIS) on or before September 12, 2017. Parties in support of the imposition of countervailing and antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.--As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before September 19, 2017, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference. All written submissions must conform with the provisions of section 201.8 of the

Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's website at https://edis.usitc.gov, elaborates upon the Commission's rules with respect to electronic filing.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Certification.--Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these investigations must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that any information that it submits to the Commission during these investigations may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of these or related investigations or reviews, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

AUTHORITY: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.12 of the Commission's rules.

By order of the Commission.

Lisa R. Barton
Secretary to the Commission

Issued:

6. *Russia: Measures Concerning Traffic in Transit* (DS512), US.3d.Pty.Sub.Re.GATT.XXI.fin.(public).

November 7, 2017

Mr. Georges Abi-Saab
Chairperson
Russia – Measures Concerning Traffic in Transit (DS512)
World Trade Organization
Centre William Rappard
154 Rue de Lausanne
1211 Geneva 21

Dear Mr. Chairperson,

The United States is in receipt of the first written submissions of the parties in the above-mentioned dispute. My authorities have requested me to provide the following comments that the matter before the Panel is not capable of resolution through WTO dispute settlement.

1. The United States understands from Russia's submission that Russia has invoked in its defense of all claims raised by Ukraine the essential security exception under Article XXI(b)(iii) of the GATT 1994.[1]

2. Issues of national security are political matters not susceptible for review or capable of resolution by WTO dispute settlement. Every Member of the WTO retains the authority to determine for itself those matters that it considers necessary to the protection of its essential security interests, as is reflected in the text of Article XXI.[2]

3. GATT Contracting Parties and WTO Members have repeatedly recognized this inherent right of each Member.[3] As Russia has stated in its submission, "determination of an action that is necessary for the protection of a Member's essential security interests and determination of such Member's essential security interests is at the sole discretion of that Member."

4. For these reasons, the United States considers that this Panel lacks the authority to review the invocation of Article XXI and to make findings on the claims raised in this dispute. Under DSU Article 7.1, the Dispute Settlement Body has established the Panel's terms of reference as to examine the matter referred to the DSB by the complaining party and "to make such findings as will assist the DSB in making the recommendations or in giving the rulings provided for in

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[1] *General Agreement on Tariffs and Trade 1994* ("GATT 1994").
[2] GATT 1994 Article XXI(b)(iii) ("Nothing in this Agreement shall be construed … (b) to prevent any contracting party from taking any action *which it considers necessary* for the protection of *its essential security interests* … (iii) taken in time of war or other emergency in international relations.") (italics added).
[3] *See, e.g.*, GATT, *Article XXI – Note by the Secretariat*, MTN.GNG/NG7/W/16, paras. 14-23 (reviewing invocations of Article XXI and Council discussions) (18 August 1987).

that/those agreement(s)." In the circumstances of this dispute, there are no findings by the Panel that may assist the DSB in making the recommendations provided for in DSU Article 19.1 because no finding of WTO-inconsistency may be made.[4] Therefore, the Panel should limit its "findings" to a recognition that GATT 1994 Article XXI has been invoked.

5. In light of DSU Article 11, the Panel may consider encouraging the parties to resolve this issue outside the context of WTO dispute settlement.[5] This could include requesting assistance from the Director-General through his good offices or from another person or WTO Member in which the parties have confidence.

* * *

The United States thanks the Panel for its consideration of these comments and is providing a copy of this letter directly to the parties and third parties to this dispute.

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[4] DSU Article 19.1: "Where a panel or the Appellate Body concludes that a measure is inconsistent with a covered agreement, it shall recommend that the Member concerned bring the measure into conformity with that agreement."
[5] DSU Article 11: "Panels should consult regularly with the parties to the dispute and give them adequate opportunity to develop a mutually satisfactory solution."

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

7. Titanium Scrap Average Prices per metalprices.com. **(*Public Version*)**

EXHIBIT NOT SUSCEPTIBLE TO PUBLIC SUMMARY

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

8. Vanadium Pentoxide Prices per Metal Bulletin. **(*Public Version*)**

EXHIBIT NOT SUSCEPTIBLE TO PUBLIC SUMMARY

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

9. TIMET Internal Estimates of Global Titanium Mill Products Shipments (Excluding Domestic Russian & Chinese Markets (essentially closed markets). **(*Public Version*)**

EXHIBIT NOT SUSCEPTIBLE TO PUBLIC SUMMARY

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

10. Perks, Impact of Feedstock Supply on Sponge Markets 2019/20

THE IMPACT OF FEEDSTOCK SUPPLY ON SPONGE MARKETS 2019/20

CAMERON PERKS

CONSULTANT

TZ MINERALS INTERNATIONAL PTY LTD

About TZMI

TZMI is a global, independent consulting and publishing company with offices in Australia, the US and China. The strength of TZMI's consulting services stems from extensive practical experience in the mineral sands, titanium dioxide and coatings industries and from a comprehensive database, which has been built up over many years.

TZMI has proven expertise gained from our consultants having many years of direct operating experience in the industry in chief executive, senior operational, analytical and marketing roles.

TZMI's publications and data services support the consulting activities and ensure up-to-date, high quality and comprehensive data, analysis and information across the mineral sands, zircon and TiO_2 pigment industries.

TZMI provides operational and technical expert advice on many areas including:

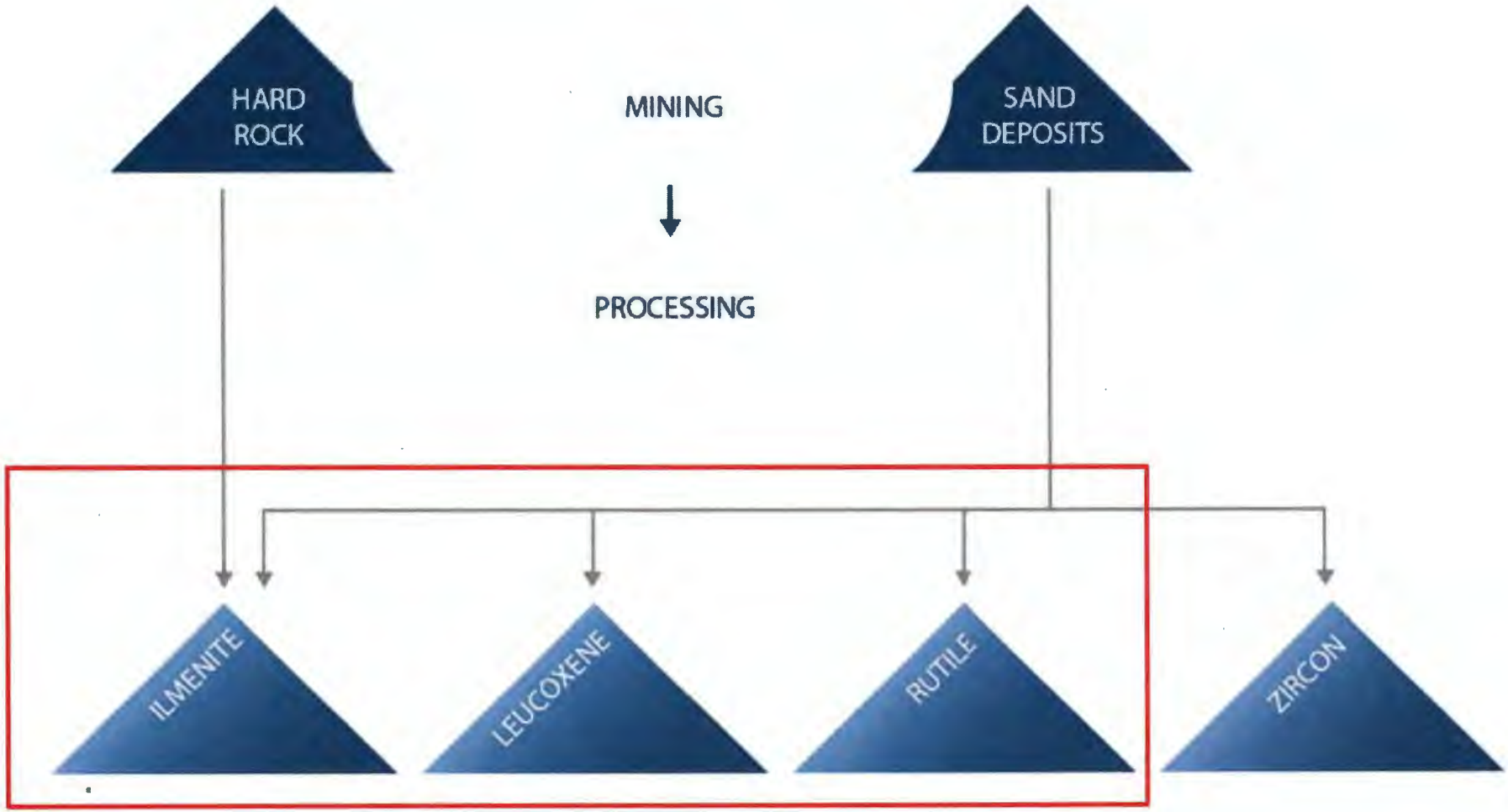
- Mergers and acquisitions
- Market assessments and industry analysis
- Due diligence
- Pre-feasibility studies including preliminary capital and operating cost estimation
- Competitive cost analysis and benchmarking
- Technical reviews and audits
- Resource assessments
- Physical separation testwork
- Flowsheet development
- Customised data analysis and reporting

Presentation Outline

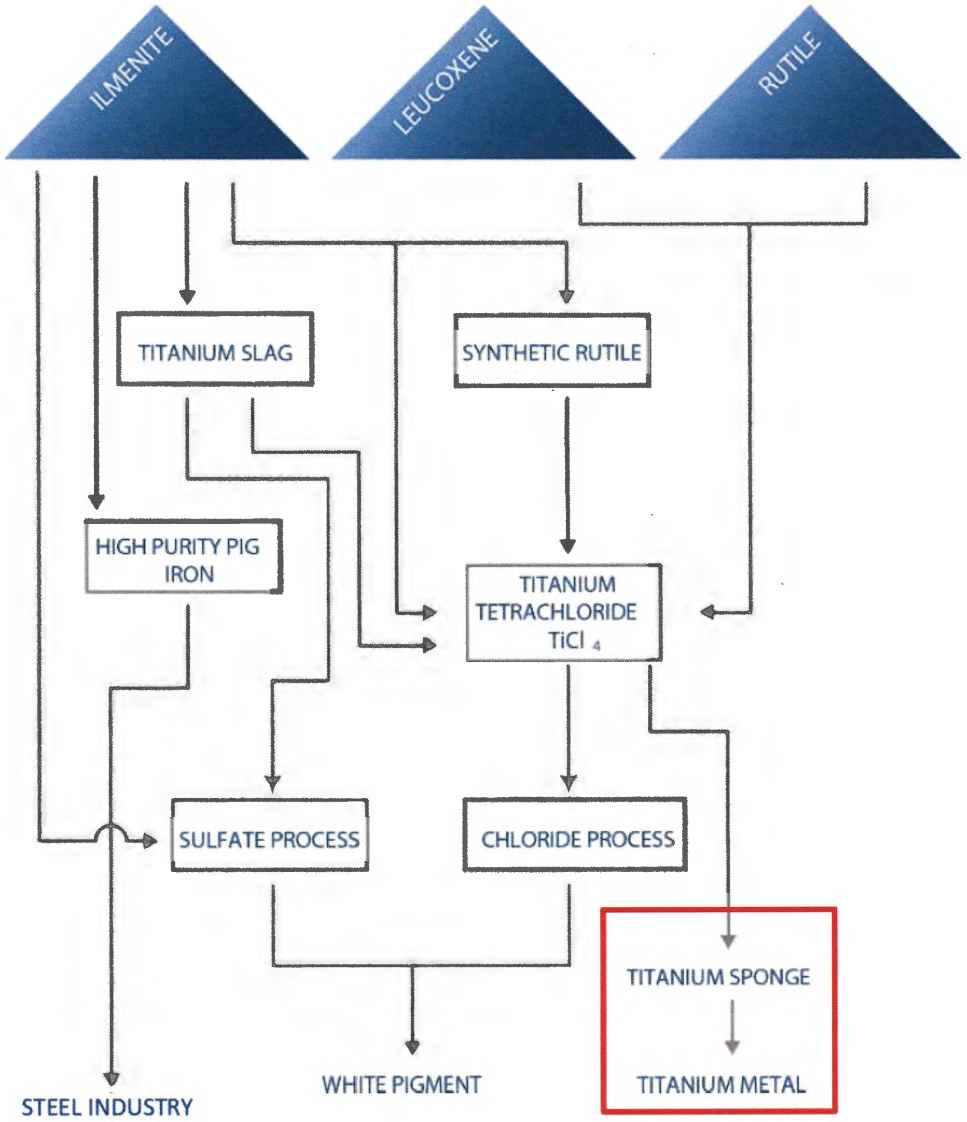
- What are titanium metal feedstocks and raw materials?
- Who mines and refines raw materials?
- Today's supply (and demand)
- Supply (and demand) outlook
- What it means for sponge producers

Base Resources Hydraulic Mining Operations
Source: Base Resources

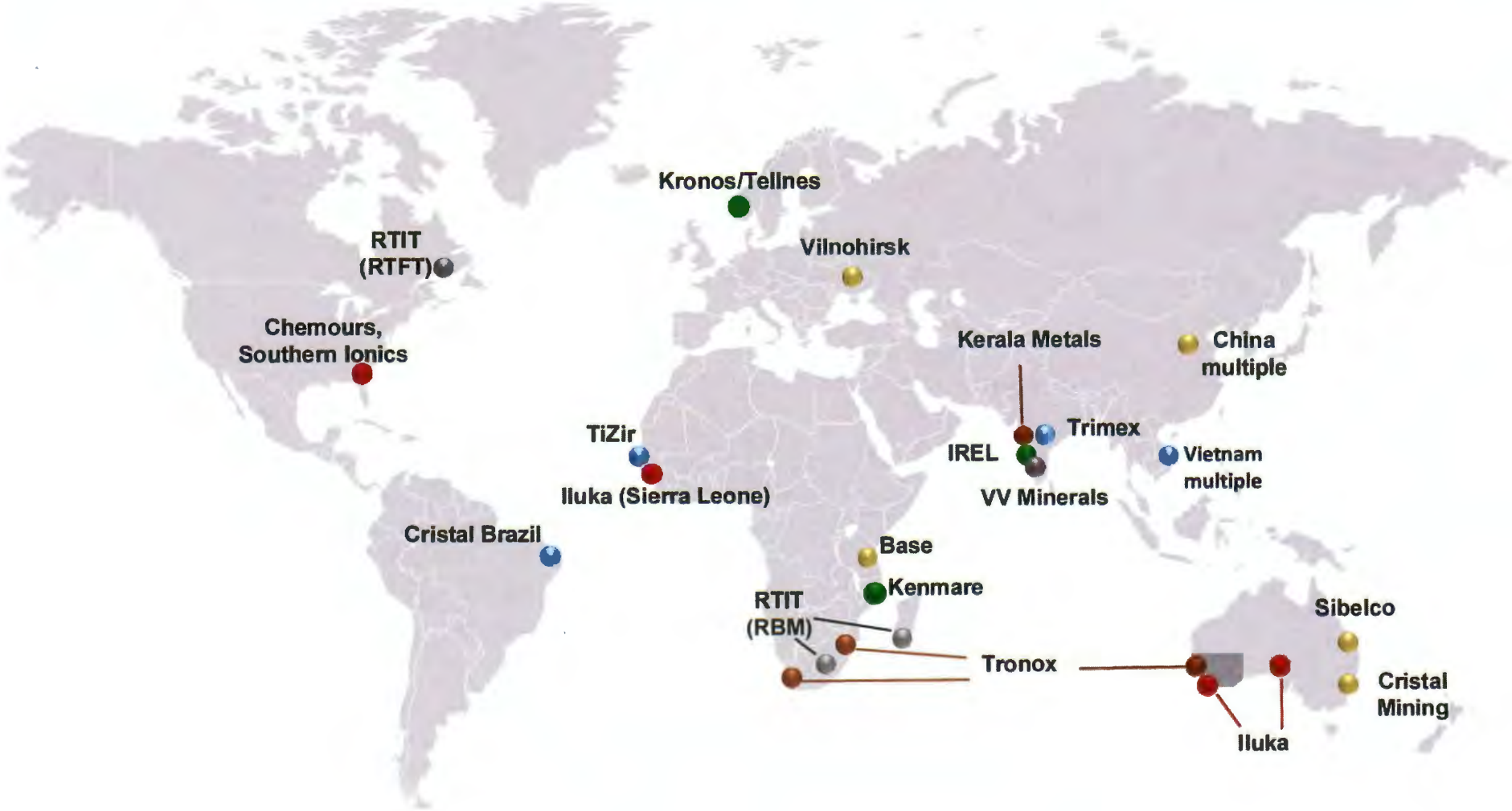
What are titanium metal feedstocks and raw materials?



How do these minerals enter the supply chain?



Miners of titanium minerals



Slag producers

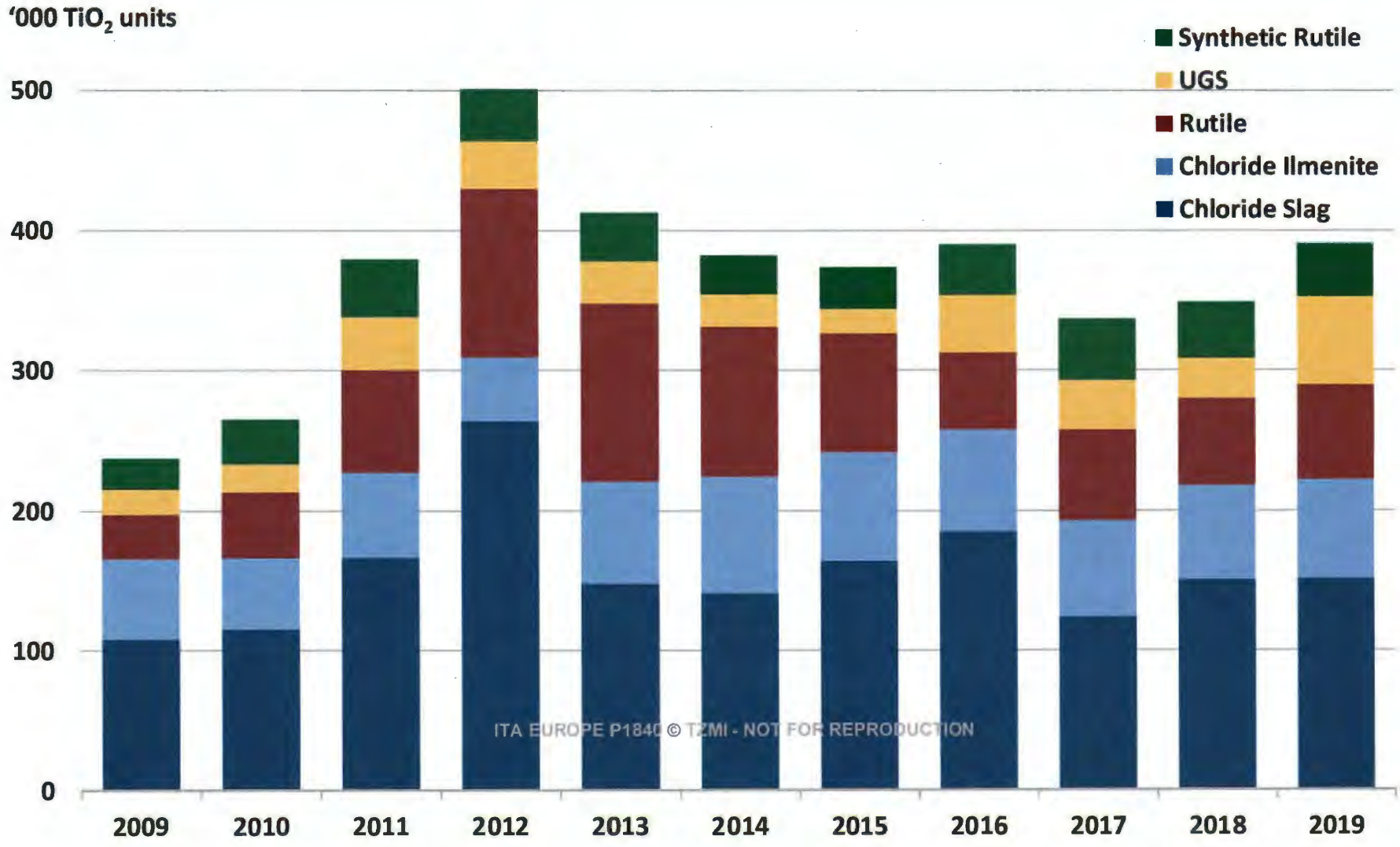
Synthetic rutile producers

Feedstock choices for use in $TiCl_4$ production

	Synthetic Rutile	Upgraded Slag	Chloride Slag
Availability	Low	Low	High
Occurrence	Beneficiated	Beneficiated	Beneficiated
Ave producer margin	Low	Low	Depends on ilmenite cost/electricity
TiO_2 content	~90%	~95%	~87-88%
Radioactivity	Varies	None	None
Particle size	Medium (ilmenite dependent)	Large	Large
Waste volume	Medium	Low	High
Form	Porous Solid (Sponge)	Homogeneous solid	Homogeneous solid
Beneficiation co-products	Minor	None	Iron

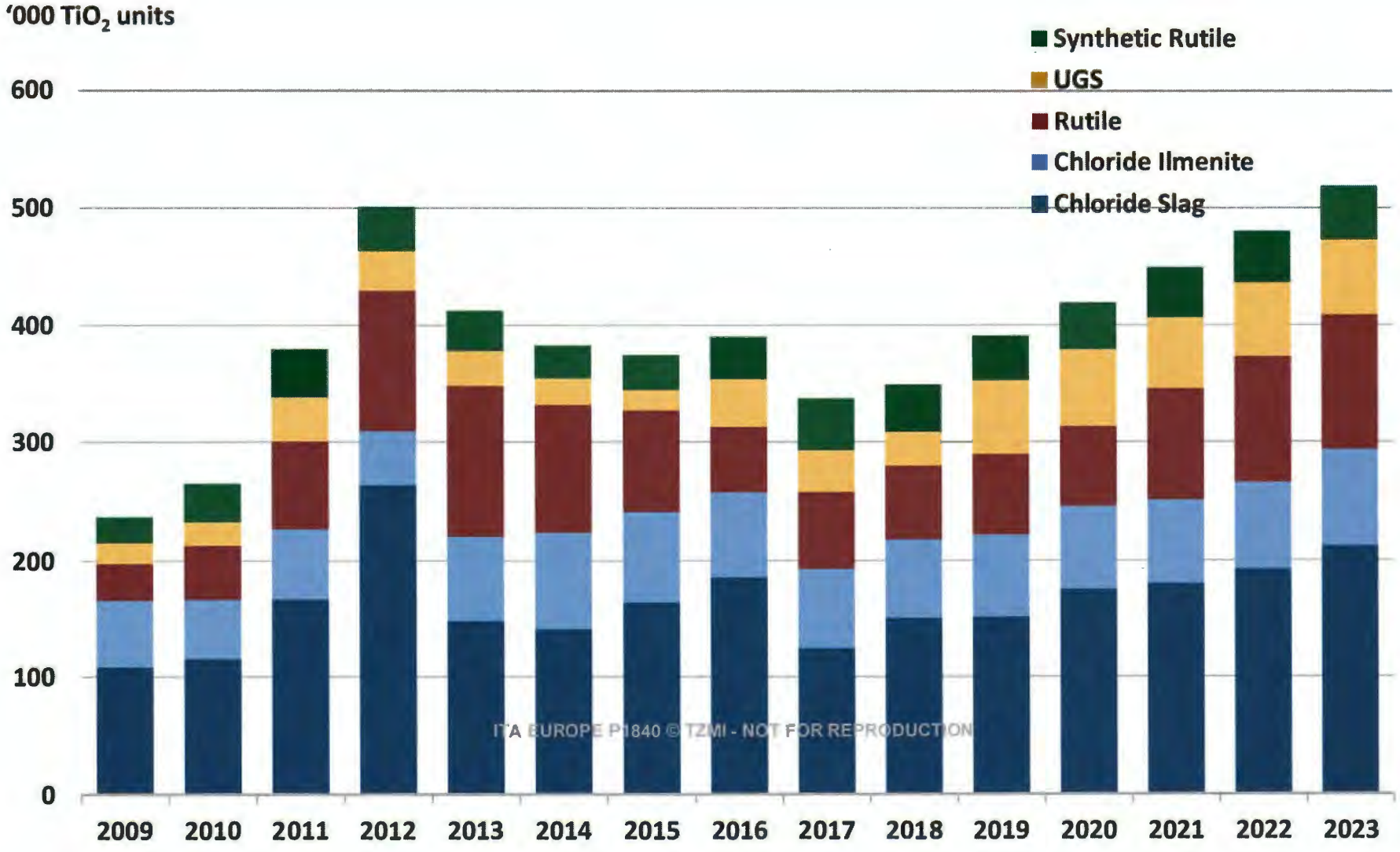
Rutile	Chloride ilmenite
Low-Medium	High
Natural	Natural
High	Varies
~95%	~>55%
Varies	Varies
Deposit dependent	Deposit dependent
Low	High
Homogeneous solid	Homogeneous solid
None	Iron

Demand to 2019



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

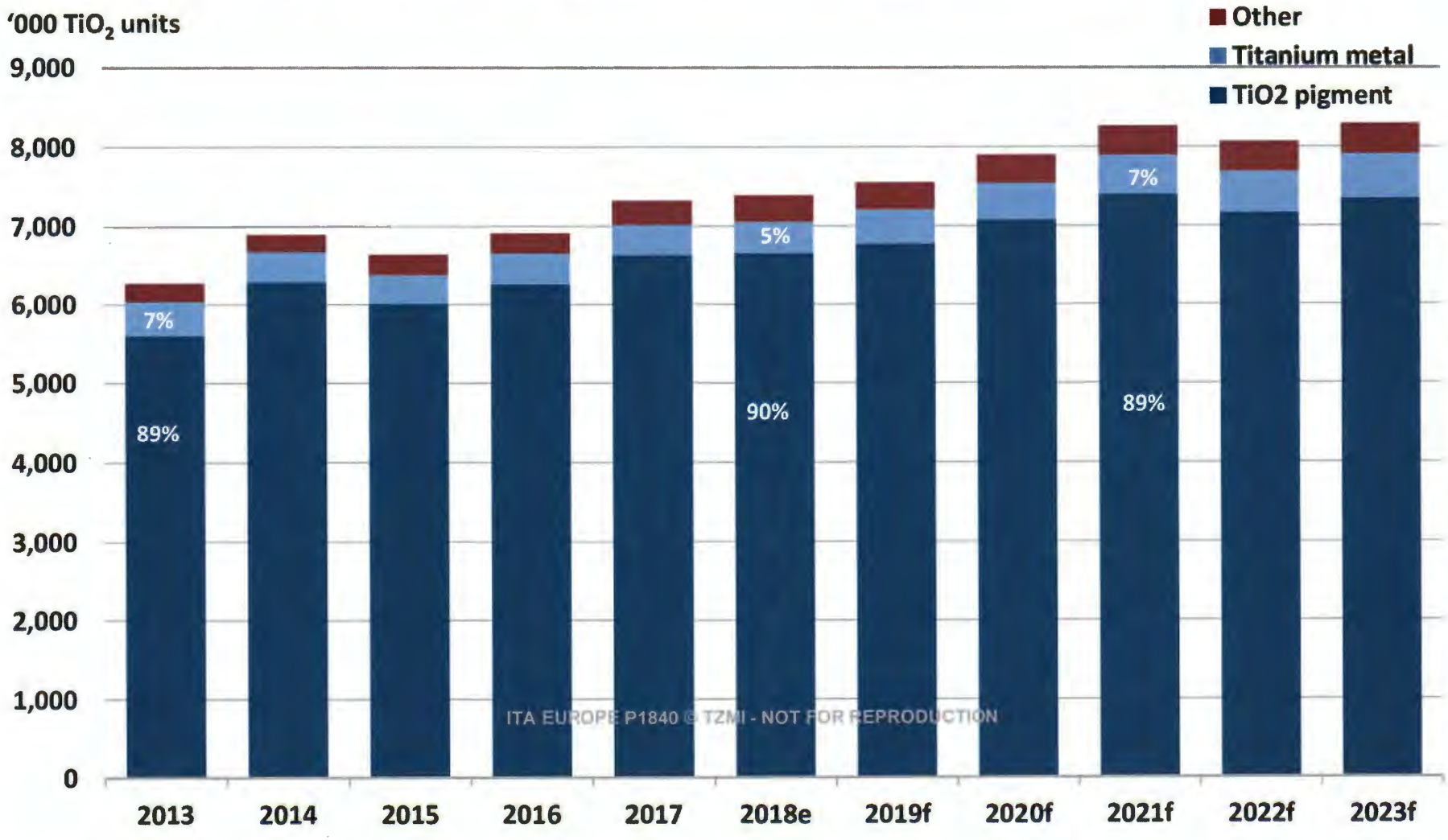
Demand outlook to 2023



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Metal makes up a small % of end-use

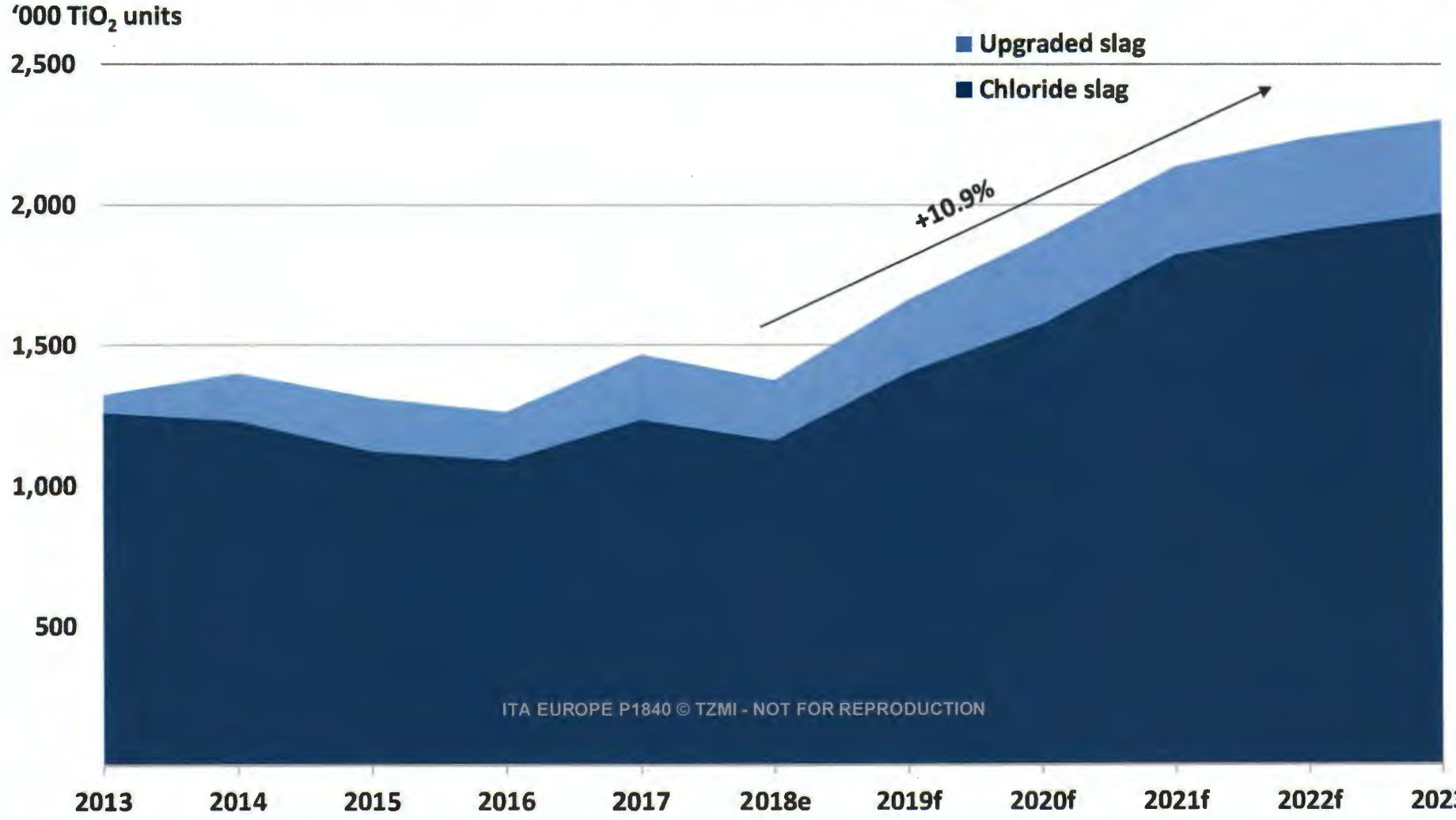
Demand outlook to 2023 by end-use segments



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Chloride slag and UGS output to increase

Global chloride slag and UGS: supply

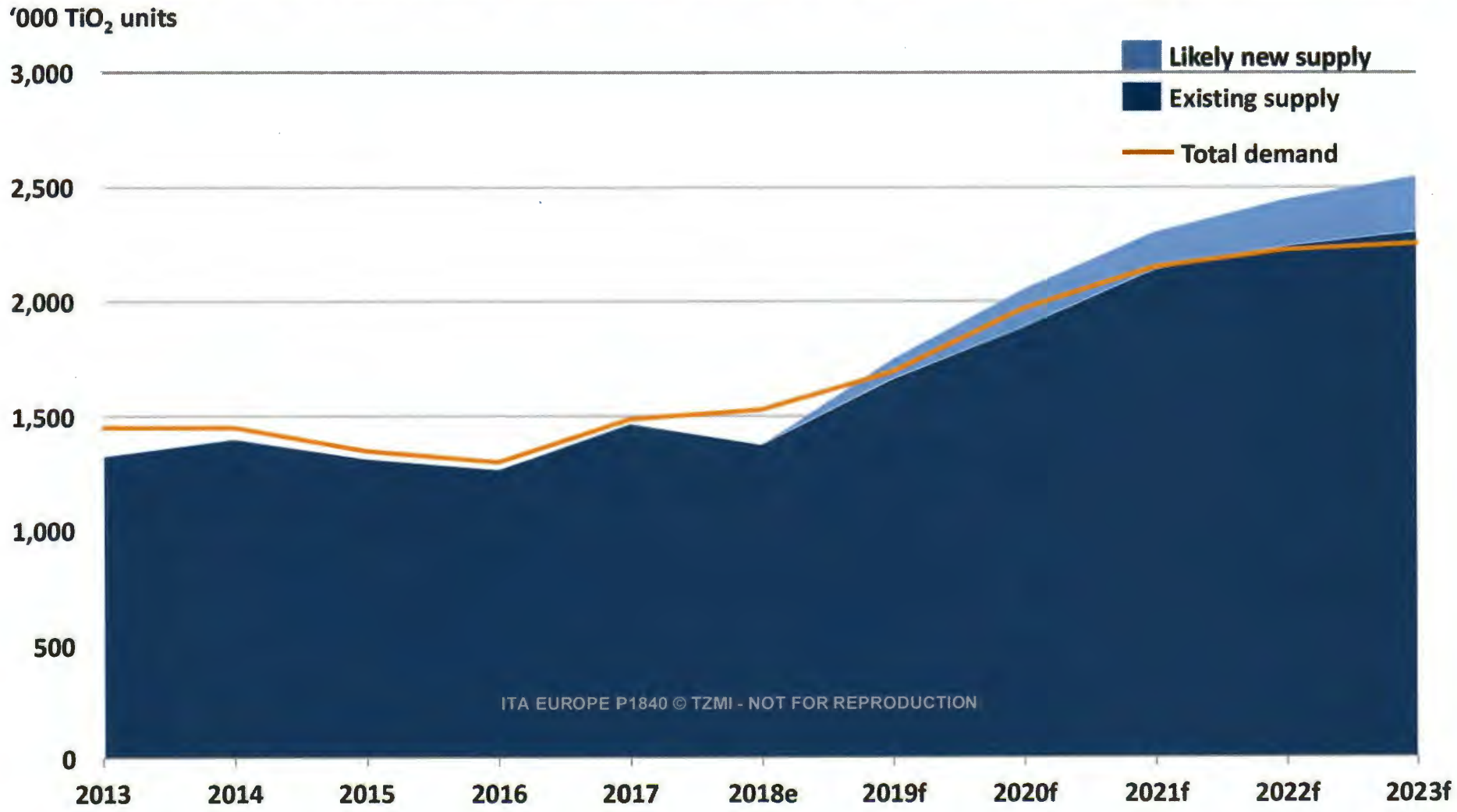


Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Note: Supply profile only reflects existing operations

Chloride slag and UGS output to increase

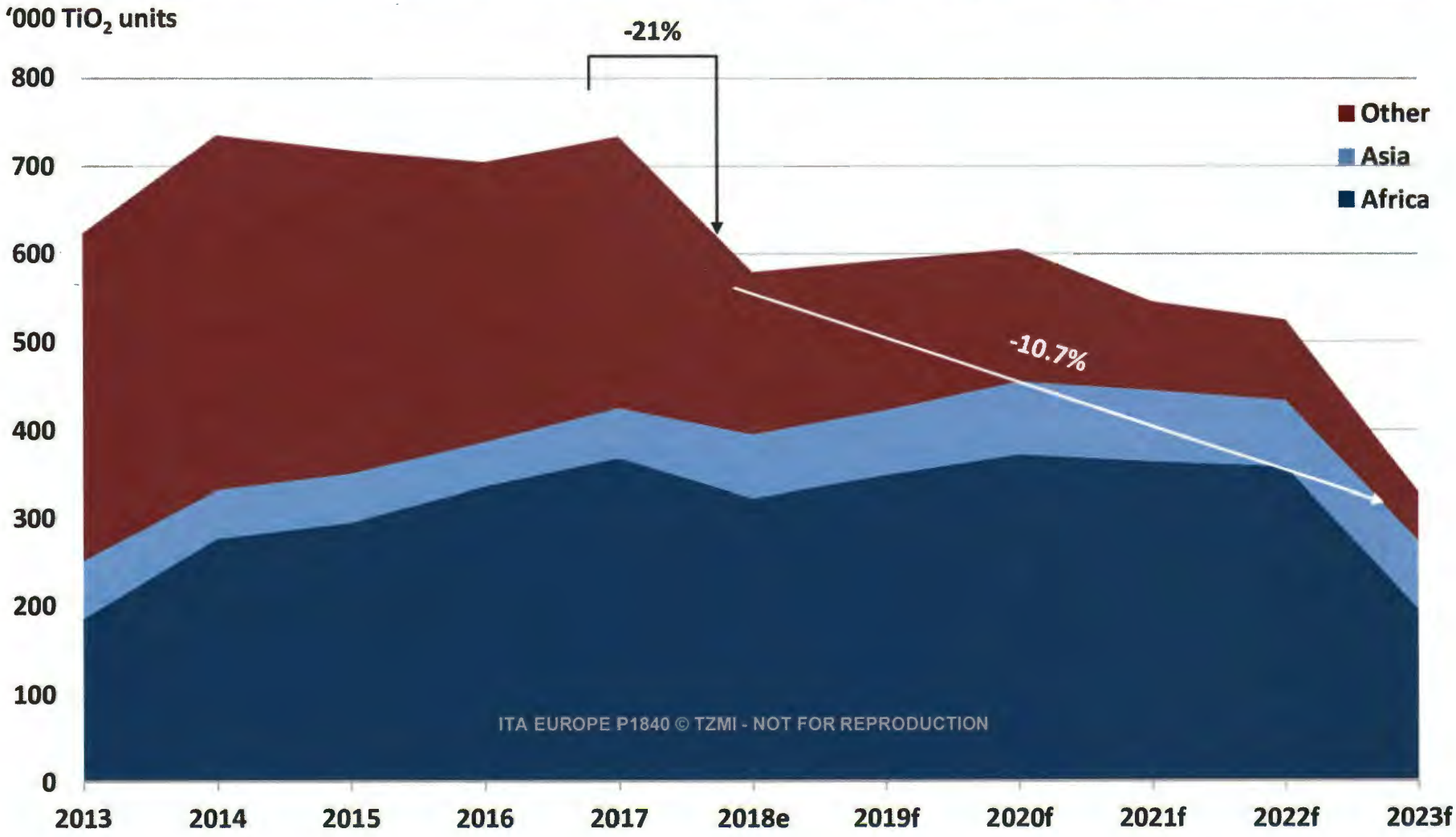
Global chloride slag and UGS: demand and new and existing supply



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Rutile supply is tight

Global rutile: supply 2013 - 2023

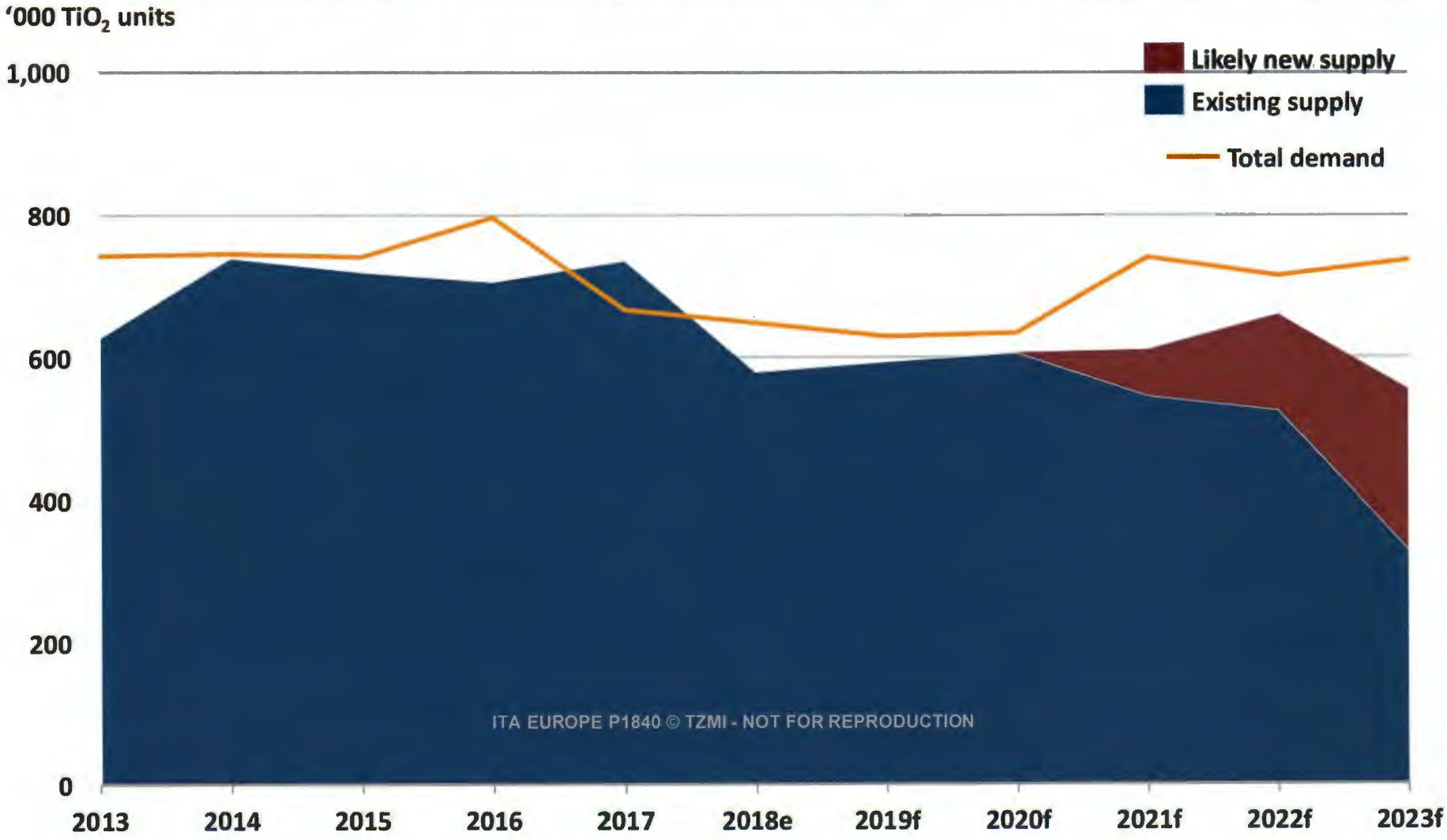


Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Note: Supply profile only reflects existing operations

Rutile supply is tight

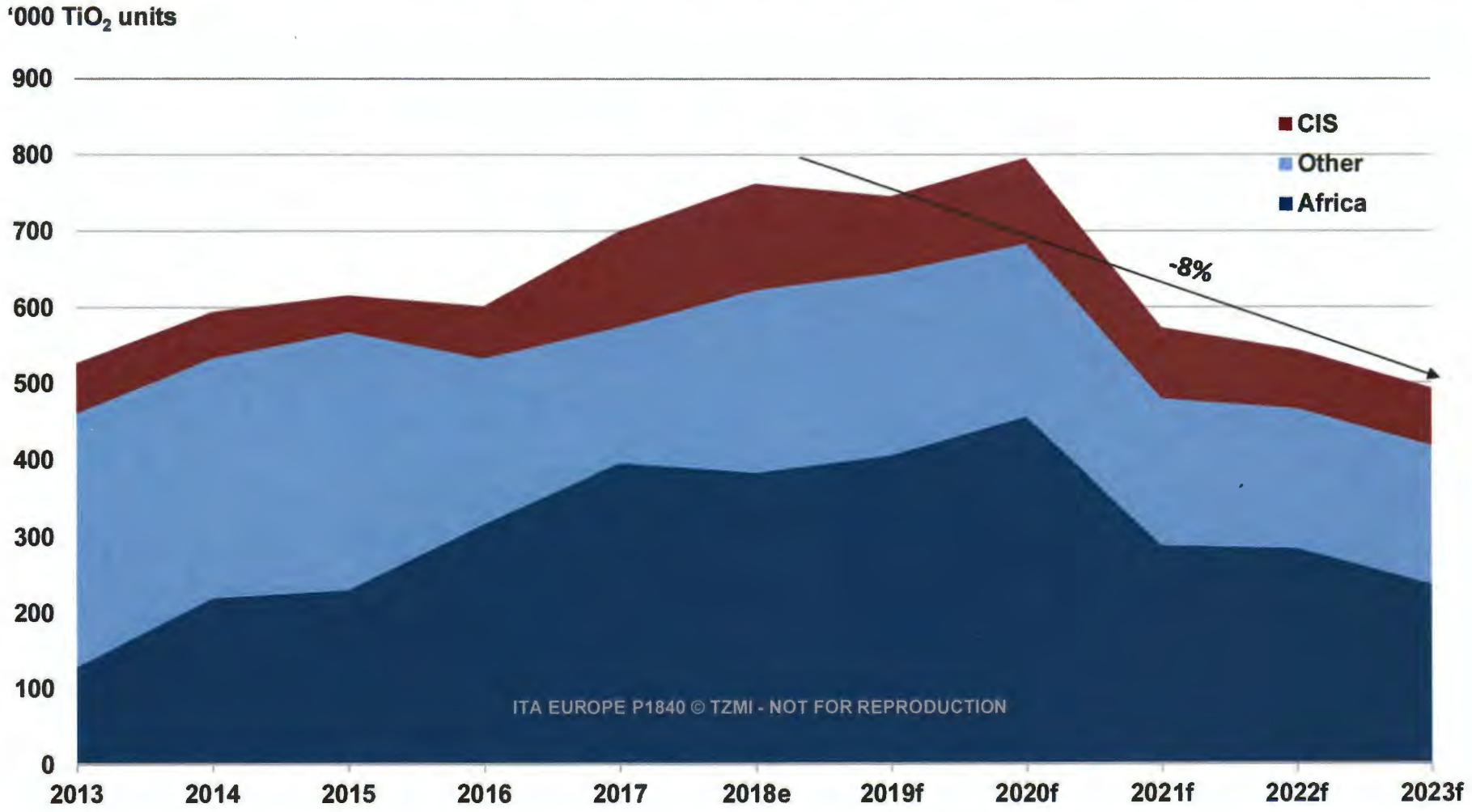
Global rutile: demand and new and existing supply 2013 - 2023



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Chloride ilmenite supply

Global net chloride ilmenite: supply 2013 - 2023

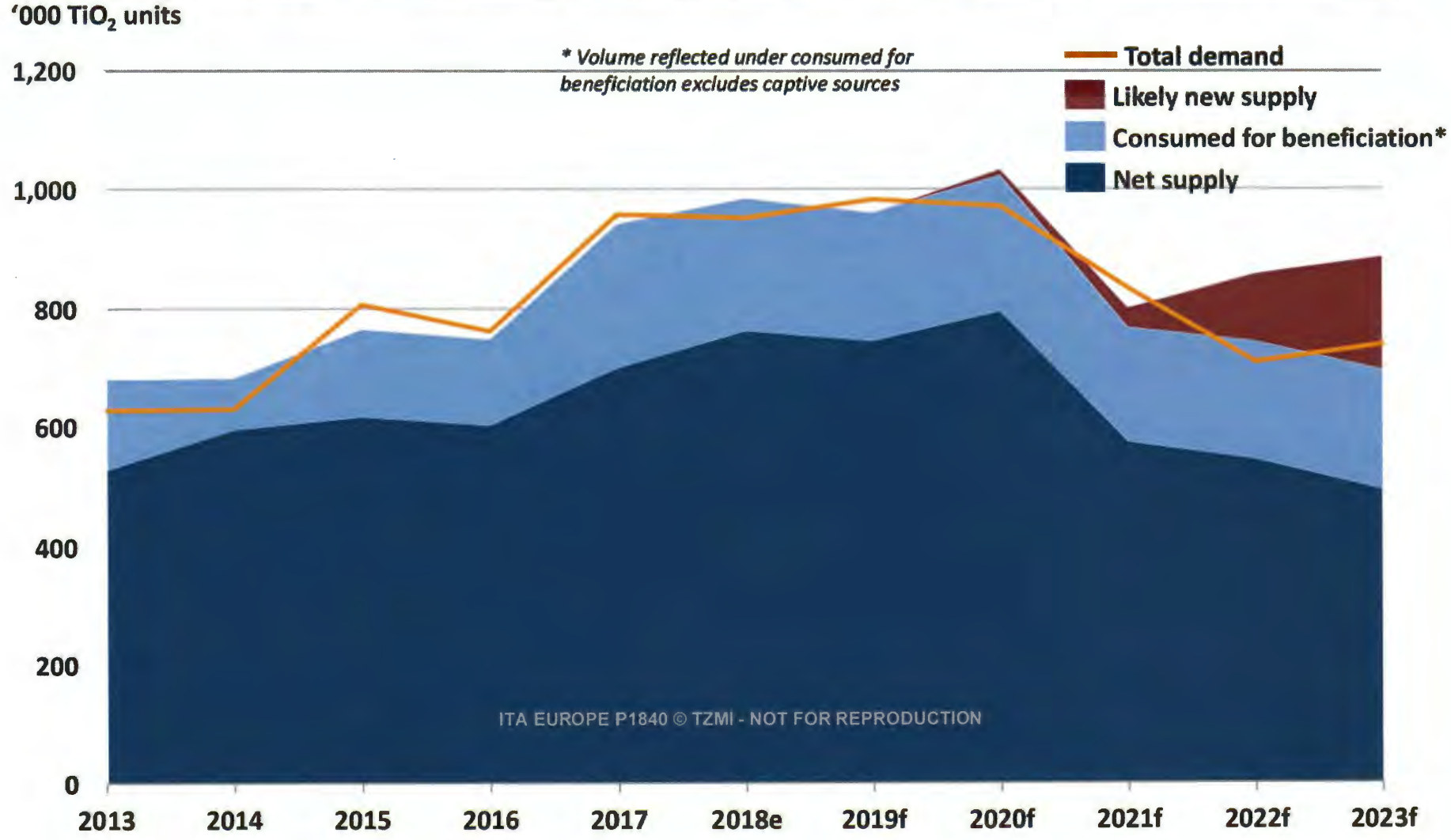


Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Note: supply profile only reflects existing operations. Net chloride ilmenite supply excludes captive sources and chloride ilmenite consumed for titanium slag and SR manufacture.

Chloride ilmenite supply to track demand closely

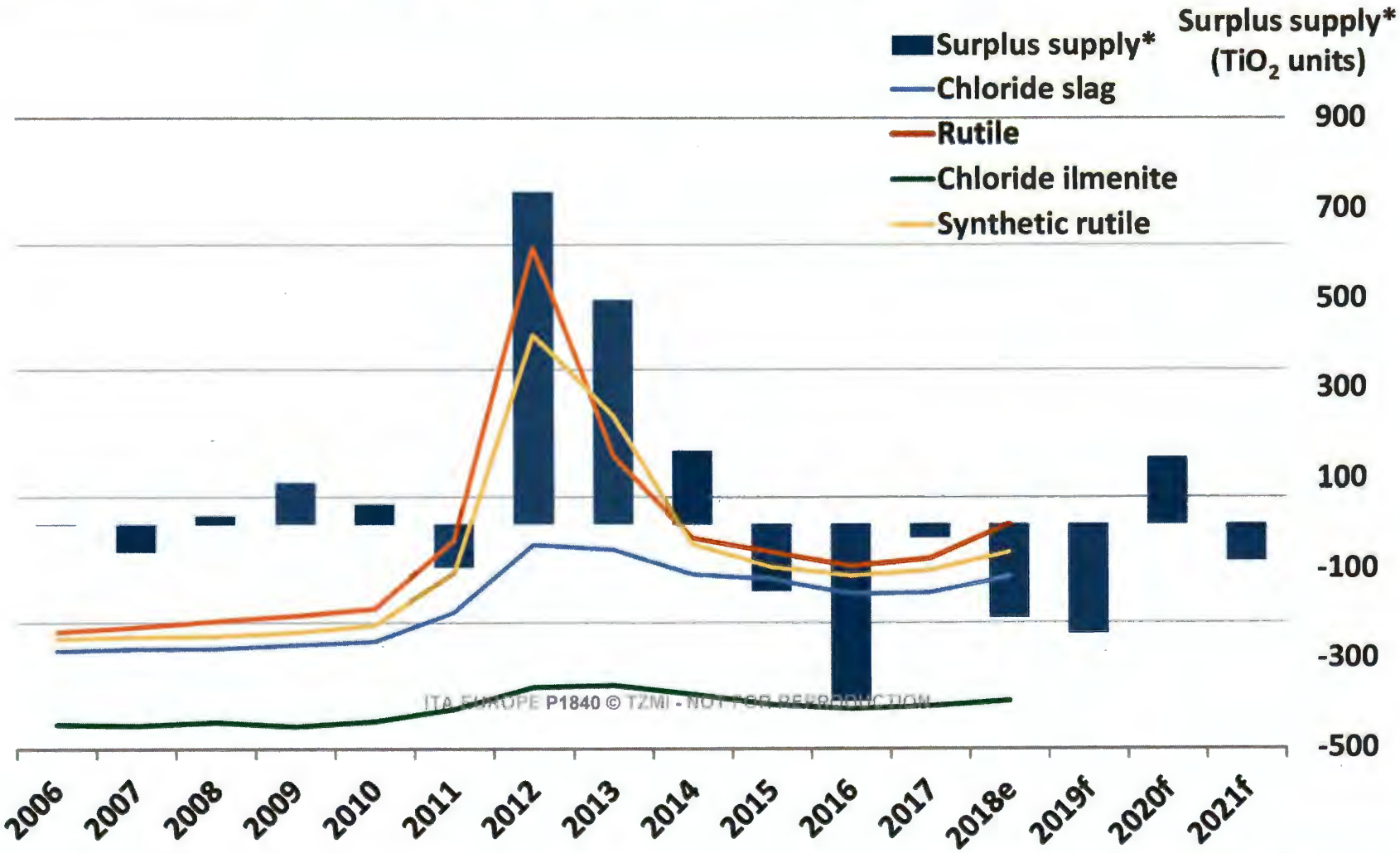
Global net chloride ilmenite: demand and new and existing supply 2013 - 2023



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

Pricing vs Supply and Demand

Feedstock price and supply surplus 2006 - 2021



Source: TZMI Titanium Feedstock Supply/Demand February, 2019

**Note negative numbers indicate a supply deficit, positive numbers indicate a supply surplus*

Conclusions

- Feedstock demand for titanium sponge is increasing, particularly for chloride slag and rutile
- Rutile supply is tight, this may result in:
  - » Higher input costs for those using rutile
  - » Increased competition for rutile with pigment producers
  - » Increased competition for slag, UGS and SR as pigment producers switch from rutile
- The cost of feedstock, labour and energy are the most significant drivers of the variable cost to produce titanium sponge; however, costs may be absorbed further downstream more easily than in the pigment industry
- Demand for chloride ilmenite dependent on future supply coming online
  - » Failure of new supply to come online may result in pigment producers moving to slag, UGS and SR

Global delivery of insight and expert advice

Thank you

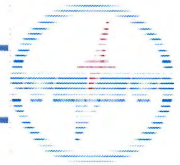
TZMI.COM

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

11. Gehler, World Titanium Sponge Supply Situation

WORLD TITANIUM SPONGE SUPPLY SITUATION

Sylvain GEHLER, UKTMP Chairman



1. TI FEEDSTOCK FOR SPONGE PRODUCTION SUPPLY ISSUES

2. WORLD TITANIUM SPONGE SUPPLY
   - *A. WORLD TITANIUM SPONGE PRODUCTION*
   - *B. CURRENT PRODUCTION LEVEL AT EACH PRODUCER*
   - *C. US IMPORTS*
   - *D. TI SPONGE PRODUCTION CAPACITY VERSUS ACTUAL PRODUCTION*
   - *E. TITANIUM SPONGE INVENTORY LEVEL*

3. CONCLUSION AND FUTURE TRENDS

1. TI FEEDSTOCK SUPPLY FROM SPONGE PRODUCER PERSPECTIVE

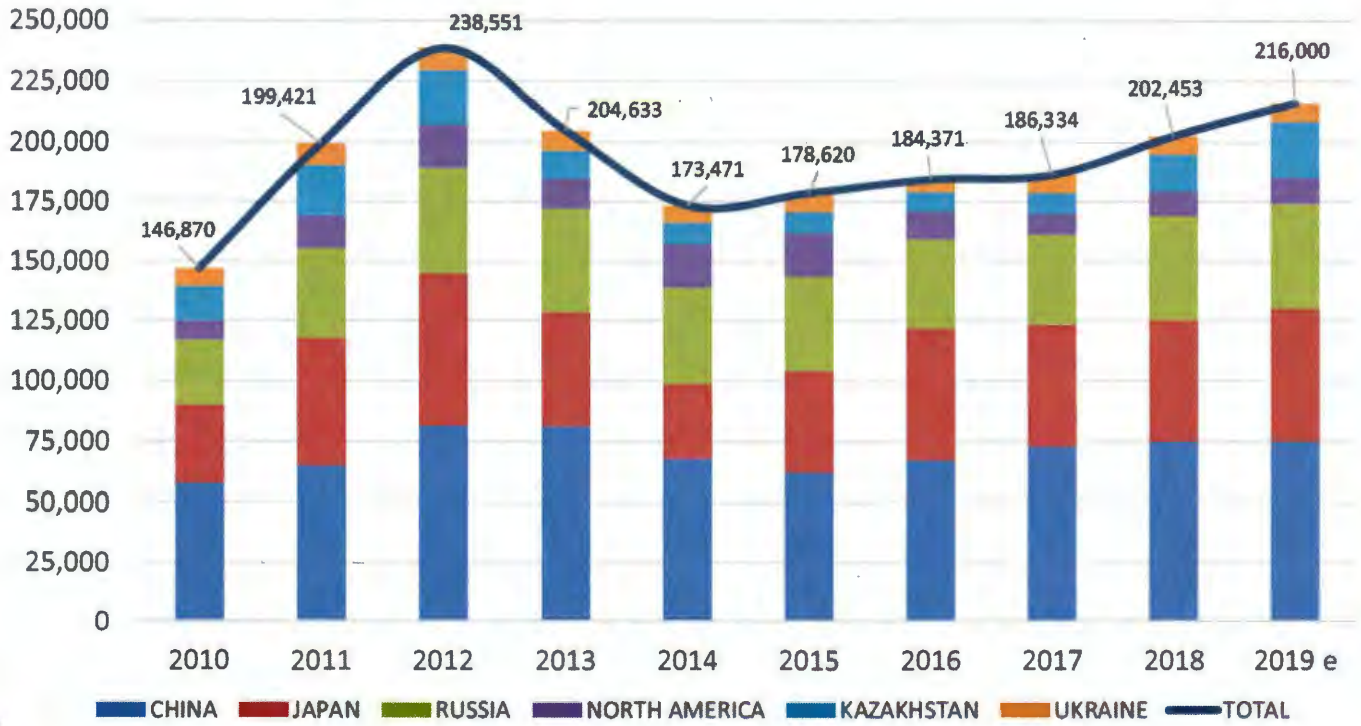
- During Q4 2018 destocking of TiO2 pigment inventory took place.
- Ti feedstock supply still remains in deficit position.
- Demand for TiO2 pigment should increase in H2 2019 triggering inventory replacement.
- No new sources of feedstock are expected in near future.
- Ti sponge producers have been unable to get additional supply of high grade Titanium feedstock in 2019.

1. TI FEEDSTOCK SUPPLY FROM SPONGE PRODUCERS PERSPECTIVE

- Price increase for rutile, synthetic rutile and high grade slag.
- As a consequence, additional sales of sponge are limited and sponge producers are unable to use fully their production capacity.
- Operational problems at Ti feedstock producers could be expected due to high production.
- Ti sponge producers will have to monitor closely Ti feedstock availability and pricing situation.


WORLDWIDE TITANIUM SPONGE
PRODUCTION

World Titanium Sponge Production per country and Total



World consolidated sponge production has increased in 2018 to 202,453 t which is 16,119 t over 2017. It is set to increase further in 2019 to 216,000 t which is again an increase of 13,547 t against 2018. It is estimated to increase in 2018 and 2019 by 29,666 t. This is the largest increase of production in the last 6 years.

AEROSPACE MARKET

Aerospace industry demand for Titanium is very strong with Boeing and Airbus showing a backlog at the end of March 2019 of 12,962 airplanes although mainly single aisle :

- A320 family being 86.7% of Airbus backlog and
- B737 family being 79.4% of Boeing backlog.

This backlog represents 9 years of production.
Aeroengines manufacturers have as well increased their production in line with the ramp up of Boeing and Airbus.

Aerospace Market

Airbus Orders Backlog

31 March 2019

Aircraft	Firm Order Backlog
Single Aisle (A320, A320NEO)	6,379
Long Range (A330, A350XWB)	923
Large Aircraft (A380)	55
Total	7,357

Source: www.airbus.com

Boeing Orders Backlog

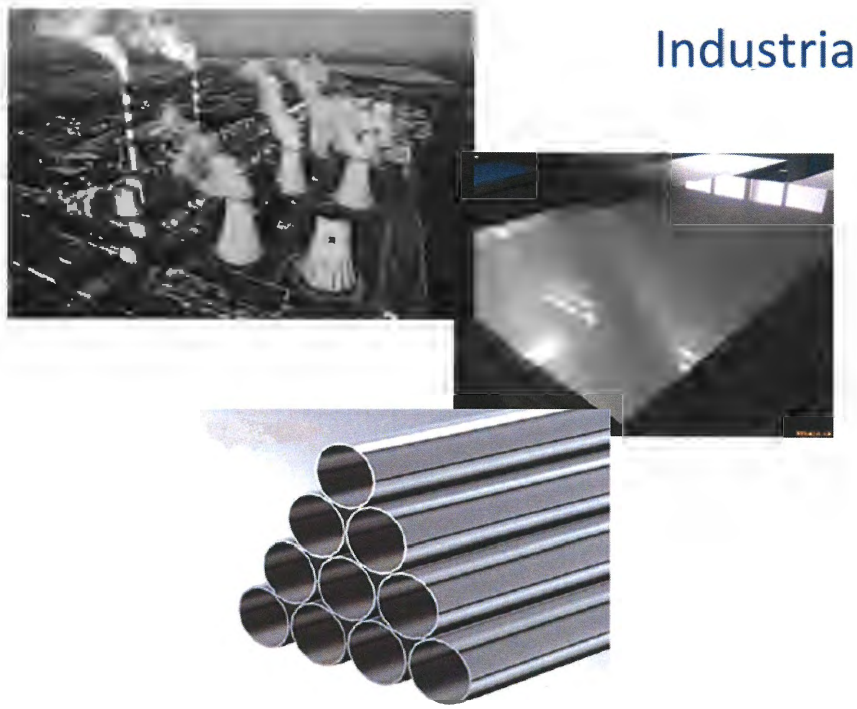
31 March 2019

Aircraft	Firm Order Backlog
Boeing 737 family	4,448
Boeing 747-800	22
Boeing 767/777 family	539
Boeing 787 family	596
Total	5,605

Source: www.boeing.com

Single Aisle Aircraft share in the backlog	March 2019	July 2013
Boeing (B737 family)	79,4%	47,7%
Airbus (A320 family)	86,7%	79,0%

Industrial Market



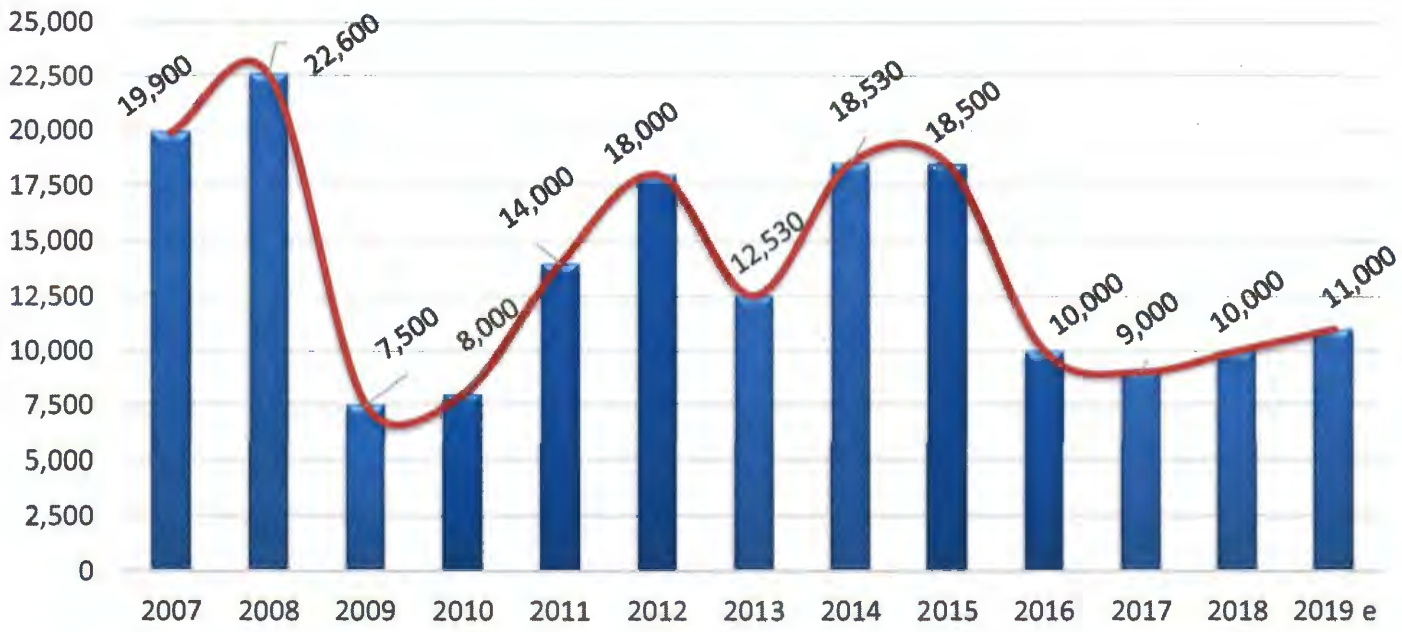
Demand of the industrial market has recovered, particularly for energy, chemical industry, oil and gas in Asia.

Large orders taken by ship builders in China and Korea have contributed to the recovery of industrial market.

Titanium Sponge Production in CIS countries

CIS sponge production shows an increase of 13,900 t in 2018 against 2017 with 2018 production at 67,500 t. In 2019 CIS sponge production is forecasted to increase further by 7,500 t against 2018.

North America Titanium Sponge Production

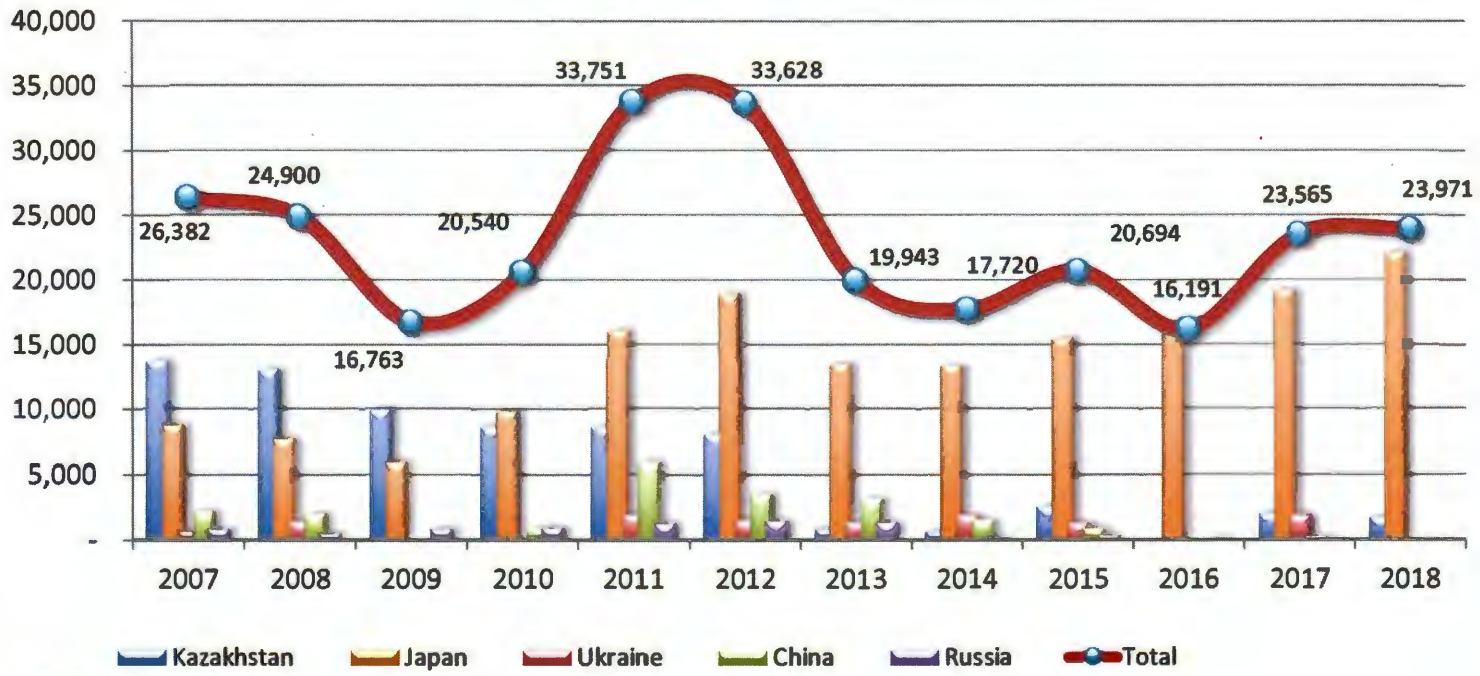


US sponge production shows a stable production after 2015, due to ATI Rowley sponge plant stopping production in 2015.
Since 2016 sponge production in the US is coming only from Timet who remains the only sponge producer in the USA.

Source: USGS

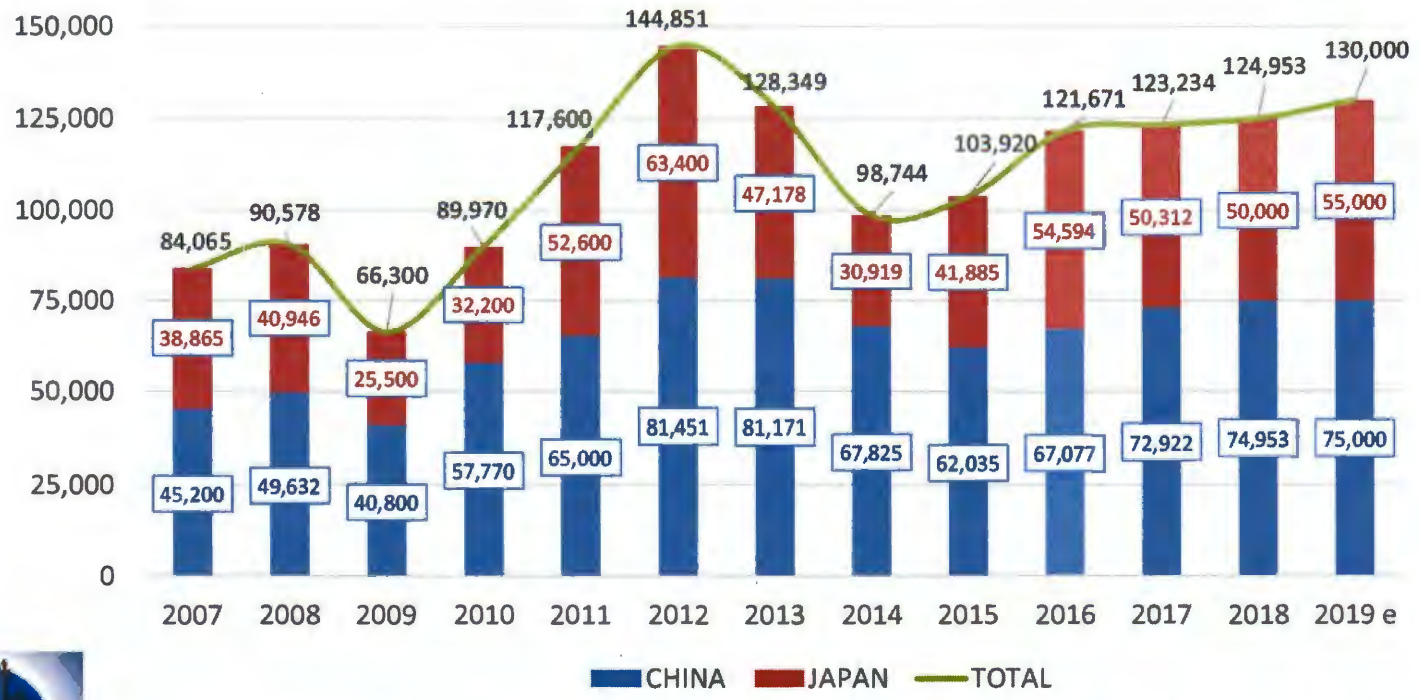
US Imports of Titanium Sponge

from Kazakhstan, Japan, China, Russia and Ukraine



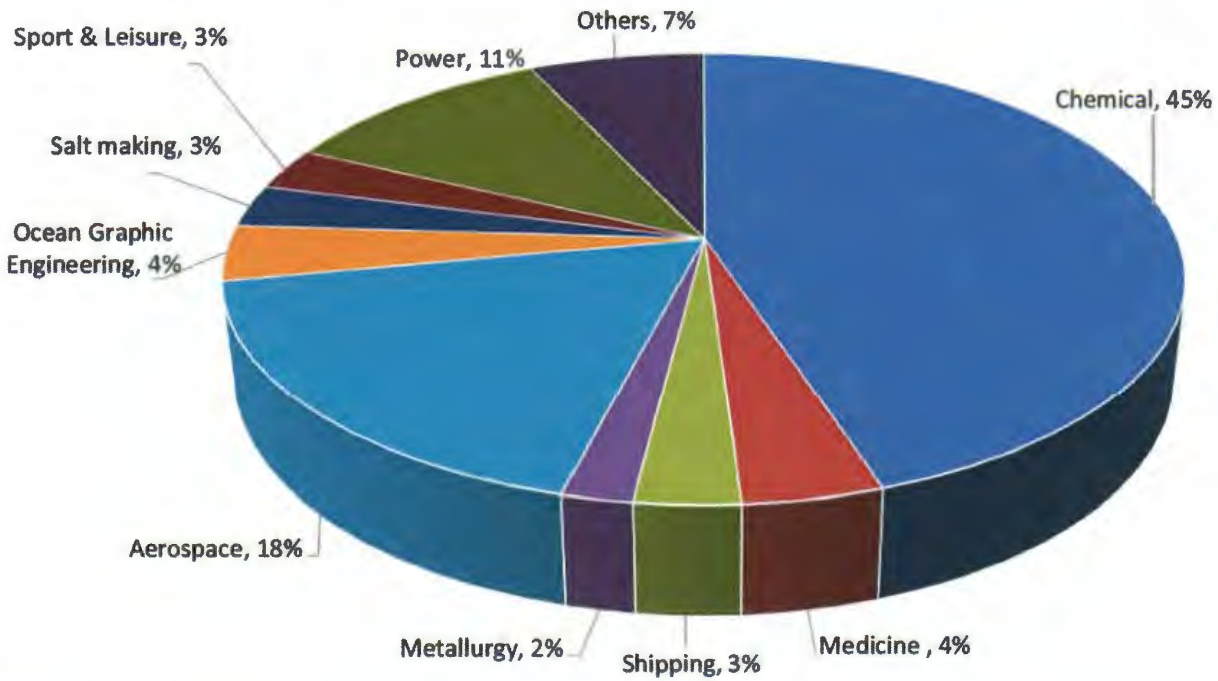
US imports in 2018 were 23,971 t, a slight increase of 406 t compared to 2017. Japanese sponge increased further its lead on imported sponge to the US in 2018 with 92.3% of US imports compared to 2017 where Japanese sponge represented 81.3% of imported sponge in the US.

Titanium Sponge Production in Asian countries



Sponge production in Asia increased only by about 1,000 t in 2018 at 124,953 t against 123,922 t in 2017. In 2019 sponge production is forecasted to reach 130,000 t an increase of 5,000 t compared to 2018.

Applications and ratio of Ti processed materials in different areas in China in 2018

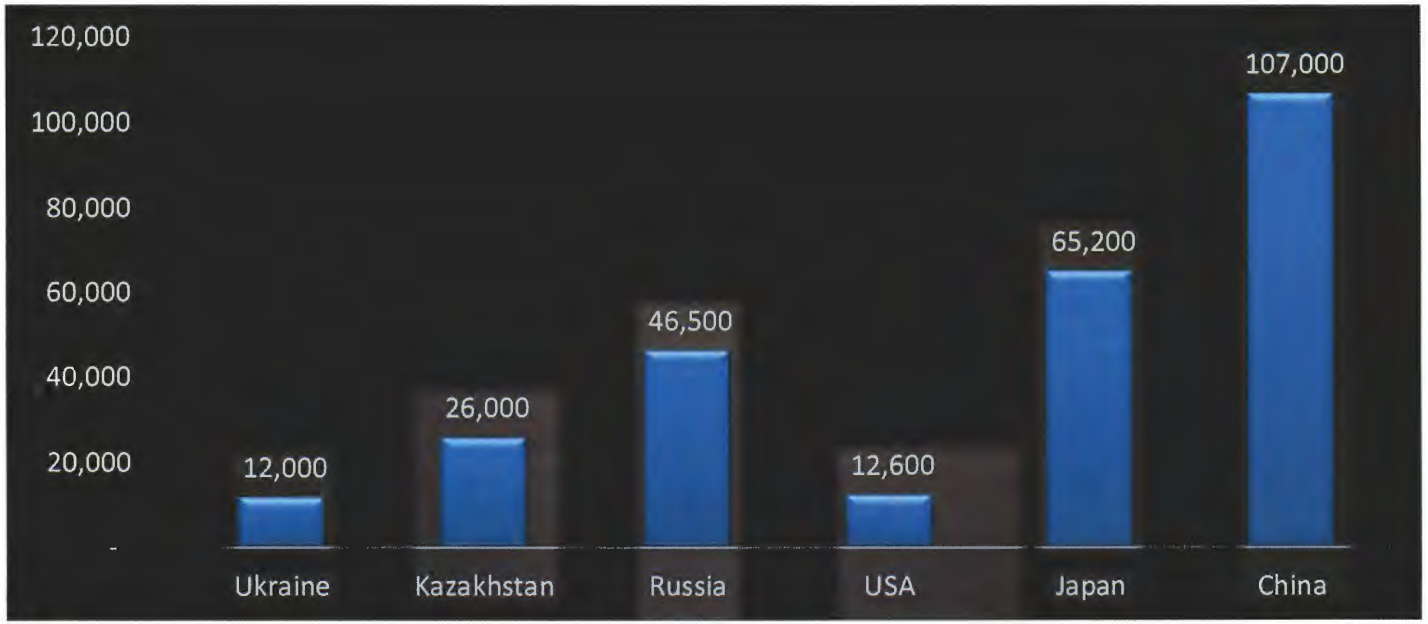


Chinese Ti sponge production in 2018 – 74,953 mt
Chinese Ti ingots production in 2018 – 75,049 mt

Source: Chinese Titanium Association

World Titanium Sponge Capacity

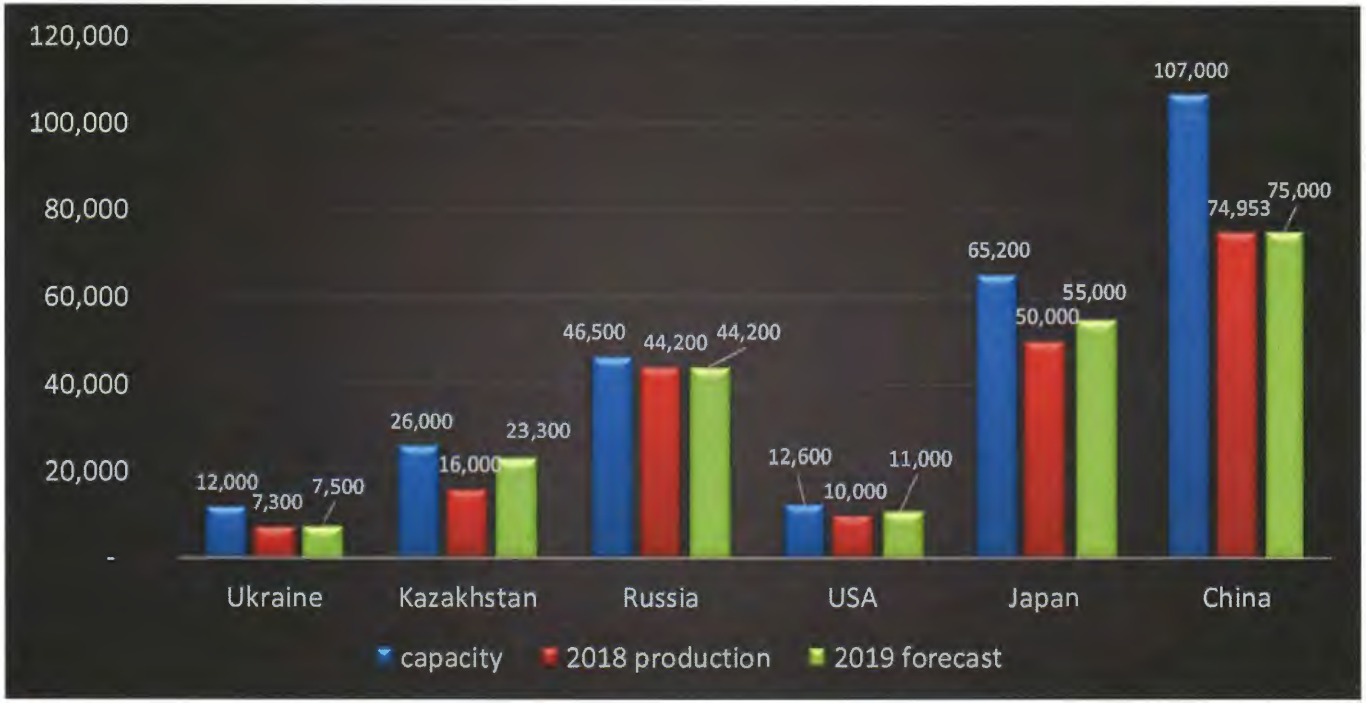
end of 2018



Total World Titanium sponge production capacity is 269,300 mt

World Titanium Sponge Capacity vs Production

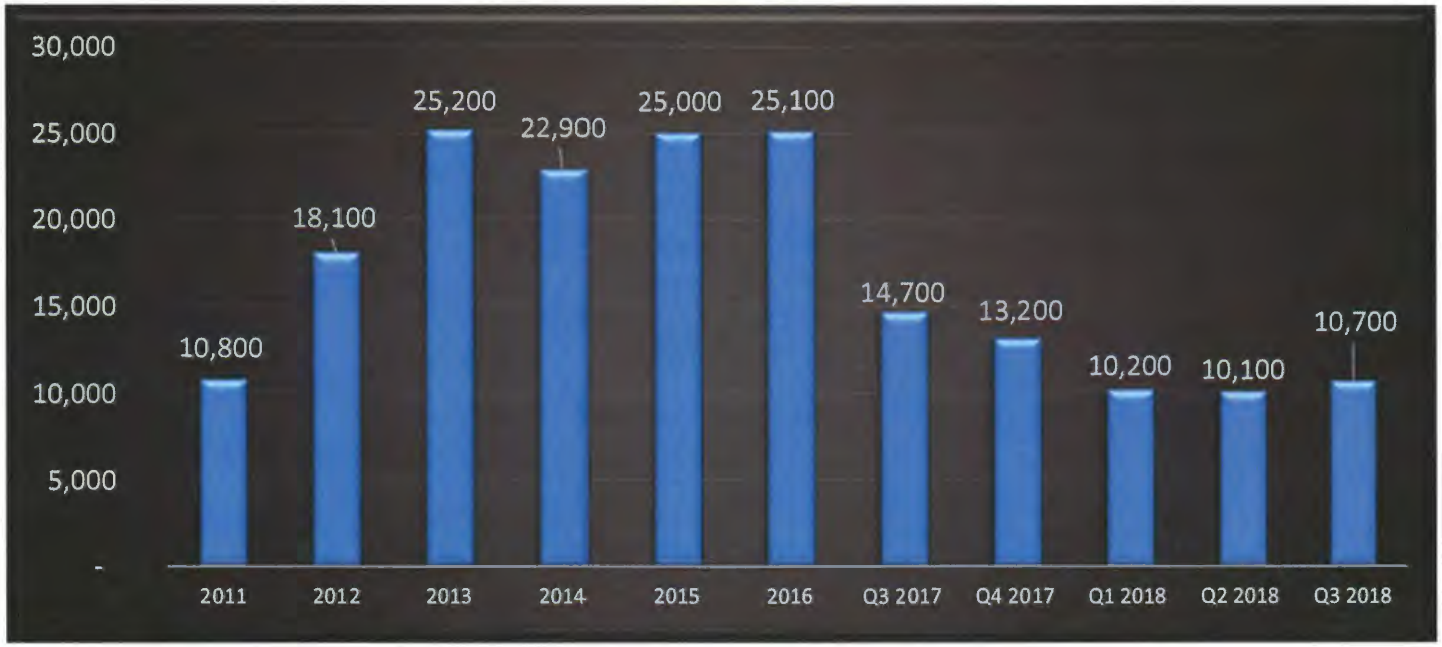
end of 2018 and forecast for 2019



Average rate of utilization of sponge capacity is 75%. Russia has the highest rate (over 90%). Only Japan and Ukraine have biggest idle production capacity. Forecast for 2019 shows capacity utilization at 80%.

US Titanium Sponge Stocks

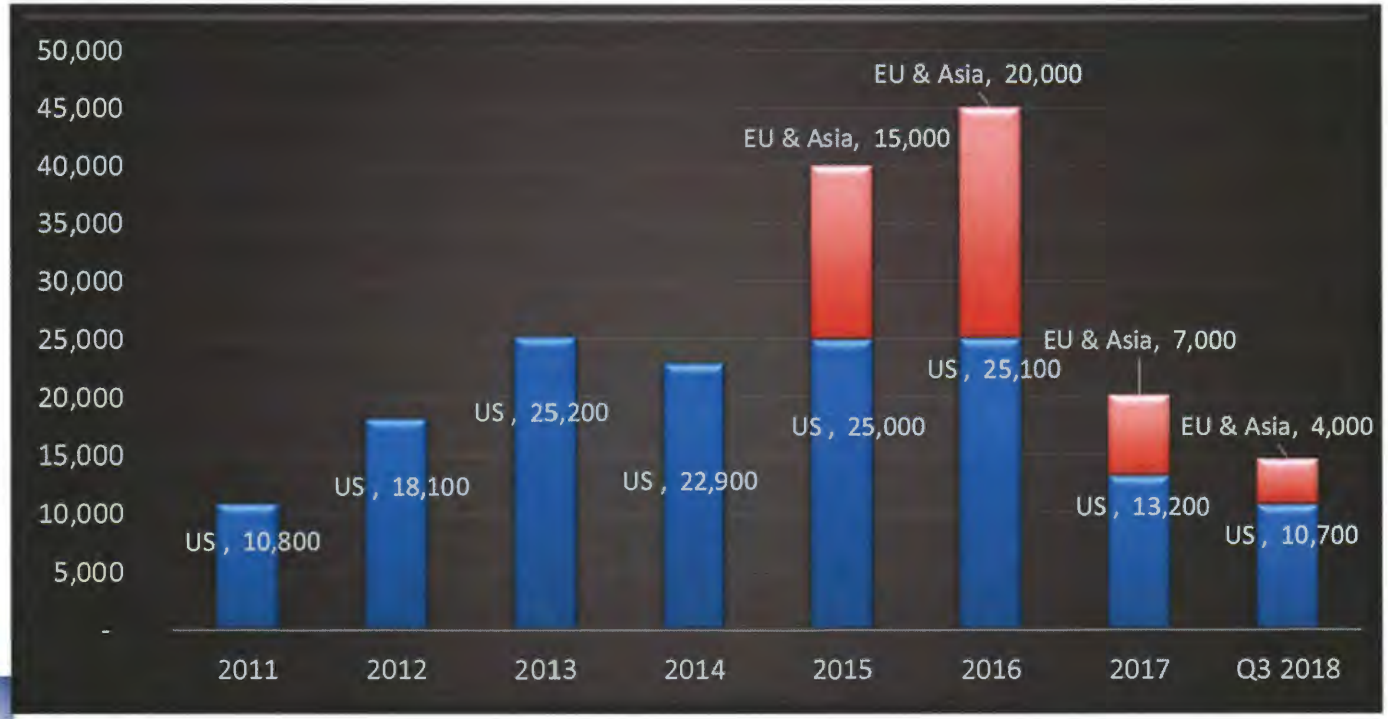
metric tons, end of year



Source: USGS

Titanium Sponge Stocks

metric tons, end of year



Source: USGS for US inventory

Asian inventory does not include China.

CONCLUSION

- Supply of sponge has been increasing in line with demand in spite of a tight availability of Ti feedstock.
- Decreasing inventory of sponge in the US shows increase of demand.
- In 2018 production capacity of sponge was used at 75%. Chinese sponge being used in its domestic market, is not available to the rest of the world. Production capacity usage of non-Chinese sponge producers is actually 79% in 2018.
- In 2019 non-Chinese sponge capacity usage goes to 87% demonstrating the tightness of sponge supply in the future.
- It is expected that 2020 will follow the same trend as 2019.
- Titanium feedstock availability to sponge producers is a serious challenge to the stability of Titanium market.

THANK YOU FOR YOUR ATTENTION!

BIS-2018-0027: TIMET REBUTTAL COMMENTS - ATTACHMENTS

12. Vanadium Price History per Ametek.

AMETEK®

SPECIALTY METAL PRODUCTS

Master Alloys Today for Tomorrow's Applications

Mike Marucci & Graham Walker

TITANIUM EUROPE 2019

MAY 13-15 · VIENNA, AUSTRIA

Forward-looking Information

Statements in this presentation may contain information regarding future events that may be considered "forward-looking statements." Forward-looking statements are subject to various factors and uncertainties that may cause actual results to differ significantly from expectations. These factors and uncertainties include our ability to consummate and successfully integrate future acquisitions; risks associated with international sales and operations; our ability to successfully develop new products, open new facilities or transfer product lines; the price and availability of raw materials; compliance with government regulations, including environmental regulations; changes in the competitive environment or the effects of competition in our markets; the ability to maintain adequate liquidity and financing sources; and general economic conditions affecting the industries we serve. A detailed discussion of these and other factors that may affect our future results is contained in AMETEK's filings with the U.S. Securities and Exchange Commission, including its most recent reports on Form 10-K, 10-Q and 8-K. AMETEK disclaims any intention or obligation to update or revise any forward-looking statements.

Presentation Overview

- **Part 1: Production of Master Alloys**
- Part 2: Key Master Alloy Materials & Focus on Vanadium

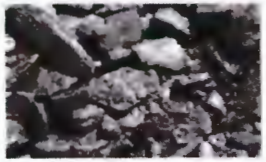
Master Alloys

- A combination of two or more metals in a metallurgically alloyed form
- Added with base metals into a melt furnace charge to achieve desired final ingot chemistry
- Typically available in a powder/aggregate form
- Process control to regulate precise chemistry consistency and non-metallic inclusions is essential

Use of Master Alloys for Titanium Alloys

Preparation

Master Alloy + Ti Sponge



Formed Into Briquettes

+

Ti Scrap

Welded Electrode

Melting

Cold Hearth Melting

or

VAR Melting

Titanium Ingot

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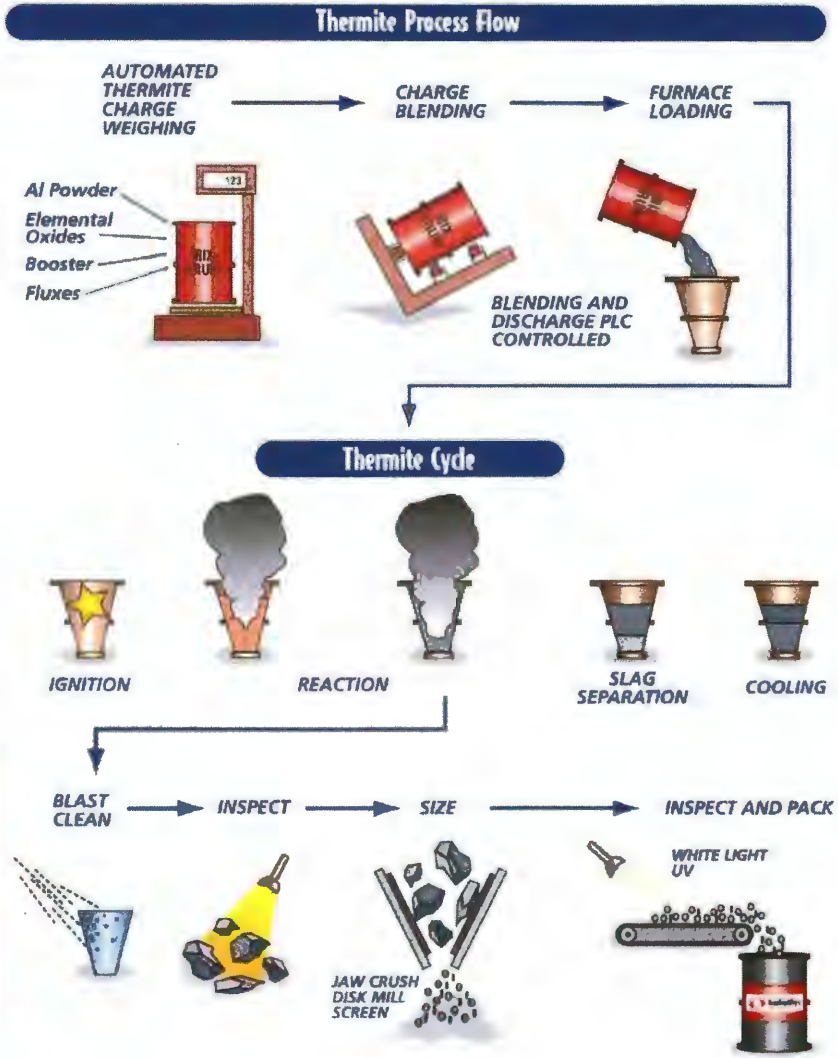
ReadingAlloys

Aerospace Quality Master Alloy Production

- Mix high quality raw materials
- Charge into refractory free melt vessel
- Ignite to start exothermic reaction
- Refine, cool, ingot blast
- Inspect 1, size, inspect 2, optional X-Ray

Keys to Aerospace Quality Master Alloys

- Robust raw material supply chain
- Refractory free melting practices
- In-line automated inspection techniques
- Comprehensive High Density Inclusion (HDI) program



Vanadium Master Alloys

- Approximately 80% by weight of all Master Alloys
- Available as a binary Aluminum + Vanadium alloy
- Widely used in the production of Ti-6Al-4V

- Al - V chemistries include
  - 65V/35Al
  - 75V/25Al
  - 85V/15Al

- Applications
  - Airframes
  - Engines – rotating parts
  - Medical
  - Industrial
  - Consumer

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Molybdenum Master Alloys

- Approximately 10% of master alloy consumption
- Available as a binary Al-Mo or tertiary Al-Mo-Ti alloy
- Used in the production Ti-6Al-2Sn-4Zr-2Mo, Ti-6Al-2Sn-4Zr-6Mo, & Ti-15Mo

- Chemistries include
  - 35Al/65Mo
  - 42Al/55Mo/3Ti
  - 50Mo/50Ti
- Applications
  - Primarily used in high temperature jet engine applications
  - Increasingly used in medical applications

Niobium Master Alloys

- Approximately 5% of master alloy consumption
- Available as a binary Al-Nb

- Chemistries include
  - 40Al/60Nb

- Applications
  - Used in alloys such as Ti-6Al-7Nb for medical implant applications
  - Used in high temperature titanium aluminides

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Multi-Component Master Alloys

- Master alloys with 3-5 alloying elements
- Often tailored to the customers process

- Often contain combinations of Zr, Cr, Si, Sn, Nb and Mo
- Master Alloys for Titanium Alloys
  - Ti-17
  - β 21
- Applications
  - Often used in stabilized Ti alloys designed for high service temperatures

Key Issues for Master Alloy Producers

- Quality is non-negotiable
- Certification of raw material suppliers
- Documentation & traceability
- Supplier understanding and acknowledgement of the risk of High Density Inclusions (HDI)
- Risk prevention strategies
- Comprehensive inspection strategy
- Robust audit & record retention

Accredited Nadcap™

AS9100D CERTIFIED ISO 9001

AMETEK SPECIALTY METAL PRODUCTS

ReadingAlloys

Presentation Overview

- Part 1: Production of Master Alloys
- **Part 2: Key Master Alloy Materials & Focus on Vanadium**

Key Raw Materials for Master Alloys

Aluminum Powder

- Pure aluminum
- Produced by gas atomization
- Commercially available
- Use at fuel for the aluminothermic melt process
- Key master alloy addition

Vanadium Pentoxide

- Used as an oxide
- Vanidate ore is concentrated, chemically refined and roasted into V_2O_5
- Used for ferro vanadium used by the worldwide steel industry
- Only a small fraction of V_2O_5 is produced in high purity form for Titanium

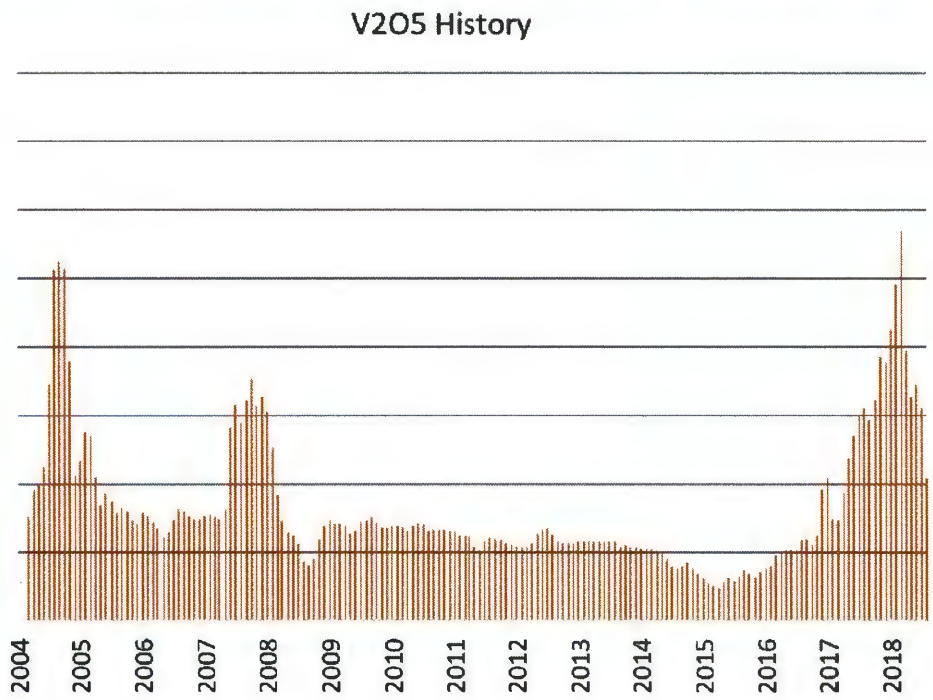
Molybdenum Trioxide

- Used as an oxide
- Mo rich ore is concentrated into MoS_2 that is roasted and refined into pure MoO_3
- Used in ferro Mo for the worldwide steel industry
- Master alloys are a minor use for MoO_3

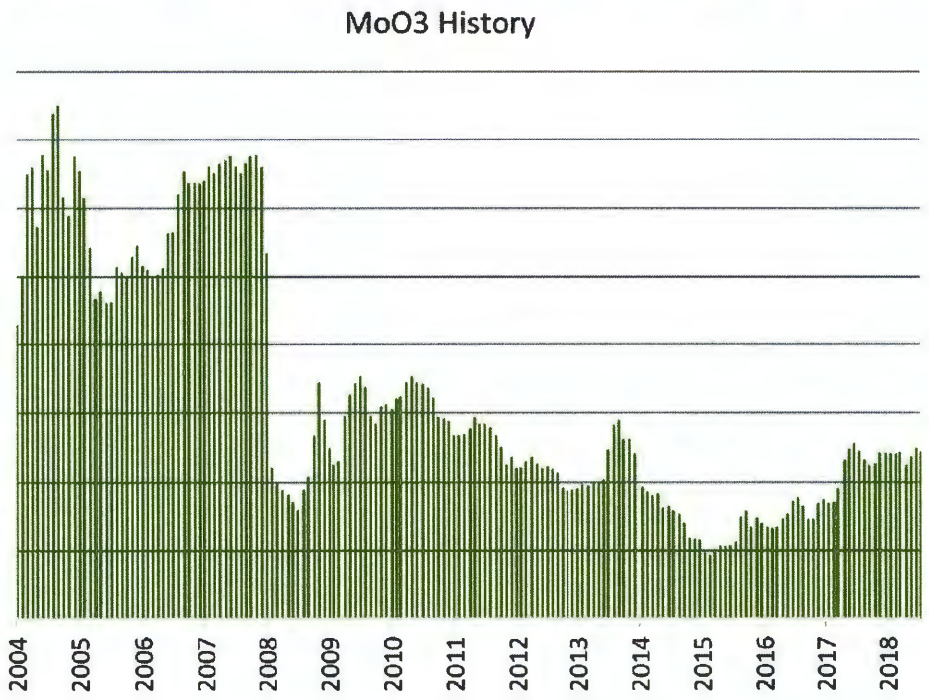
AMETEK SPECIALTY METAL PRODUCTS ReadingAlloys

Oxide Trend 2004 to Present

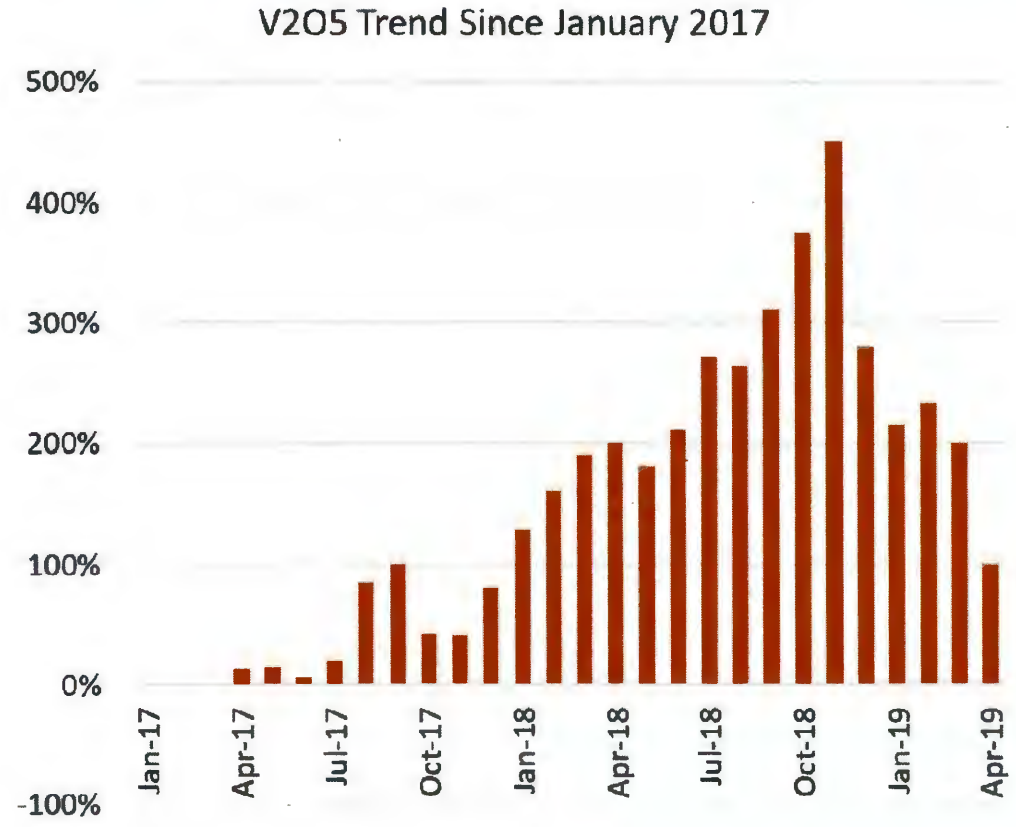
Vanadium Pentoxide



Molybdenum Trioxide



Recent Vanadium Volatility



Recent volatility attributed to:

- Suppliers exiting market
- China rebar regulations
- Vanadium redox batteries

The following provides a survey of recent publications related to the V2O5 Market

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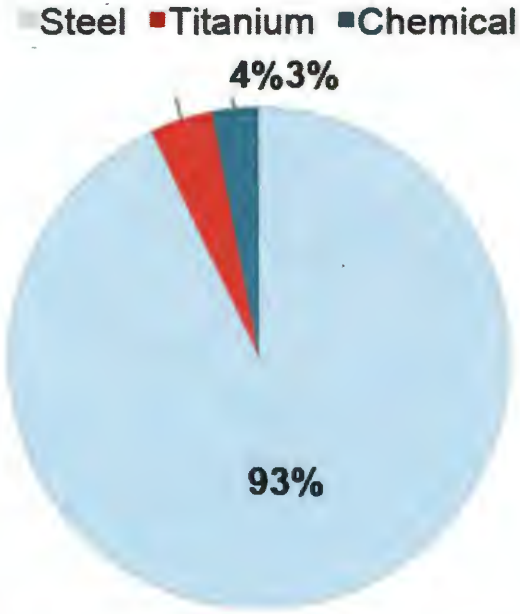
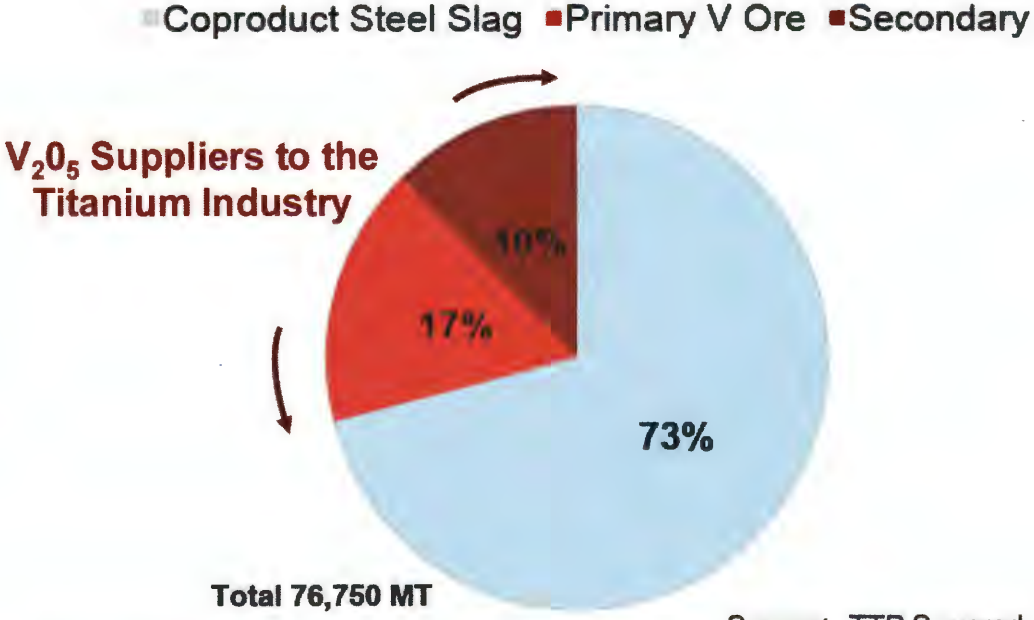
Vanadium Demand & Supply Dynamics

Vanadium Consumers



Vanadium Supply by Raw Material



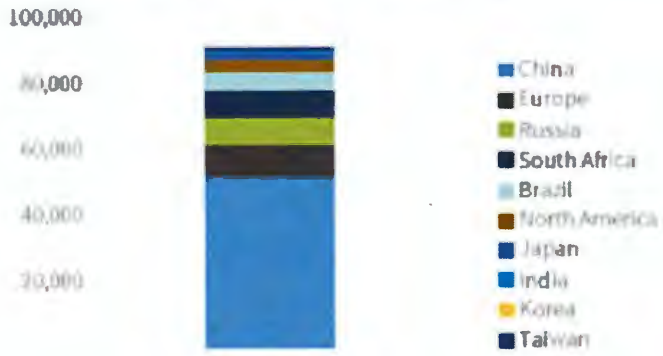
Source: TTP Squared

- Vanadium demand & price is driven by the worldwide steel industry
- More than 70% of Vanadium Pentoxide supply is NOT suitable for Titanium production

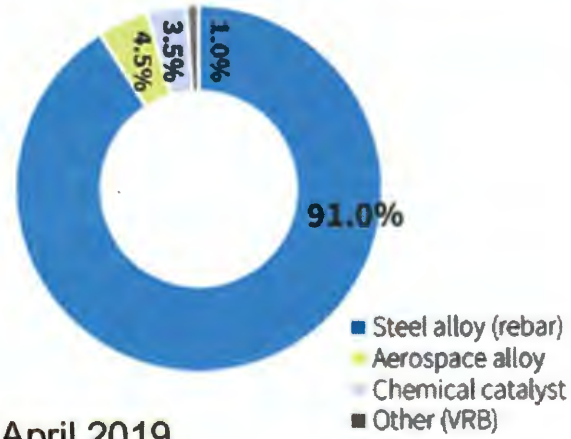
High Purity Vanadium Consumption

- Largo's April 2019 estimate
- 2018 total V supply ~90,000 mTon V
- 9% of V high purity (~8,100 mTon V)
- 50% of high purity used for Aerospace (~4,050 mTon V)

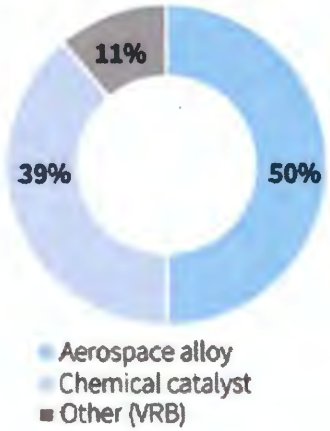
2018 V supply: ~90,000 tonnes



Vanadium consumption by end use



High purity vanadium consumption

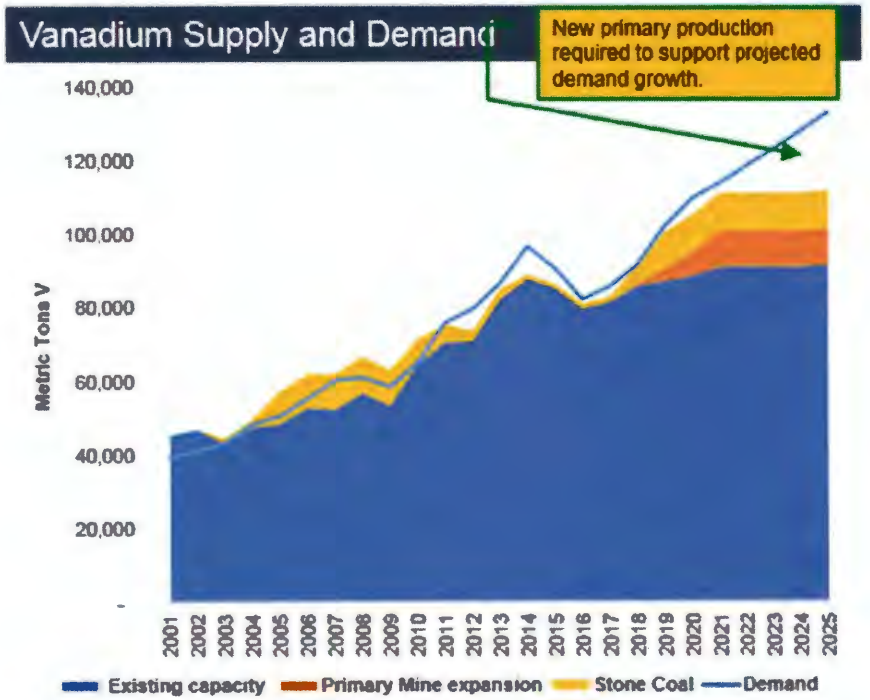


Source: Largo Corporate Presentation April 2019

Vanadium Demand Forecasts

World supply expected to continue to be less than demand in 2019 (~105,000 mTon V)

TTP Squared & Technology Metals Australia predict a supply gap of 30,000 mTon V by 2025

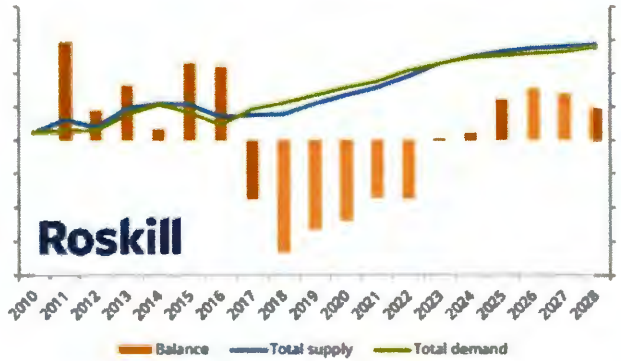


Source: Technology Metals Australia investor presentation & TTP Squared

China Rebar Demand

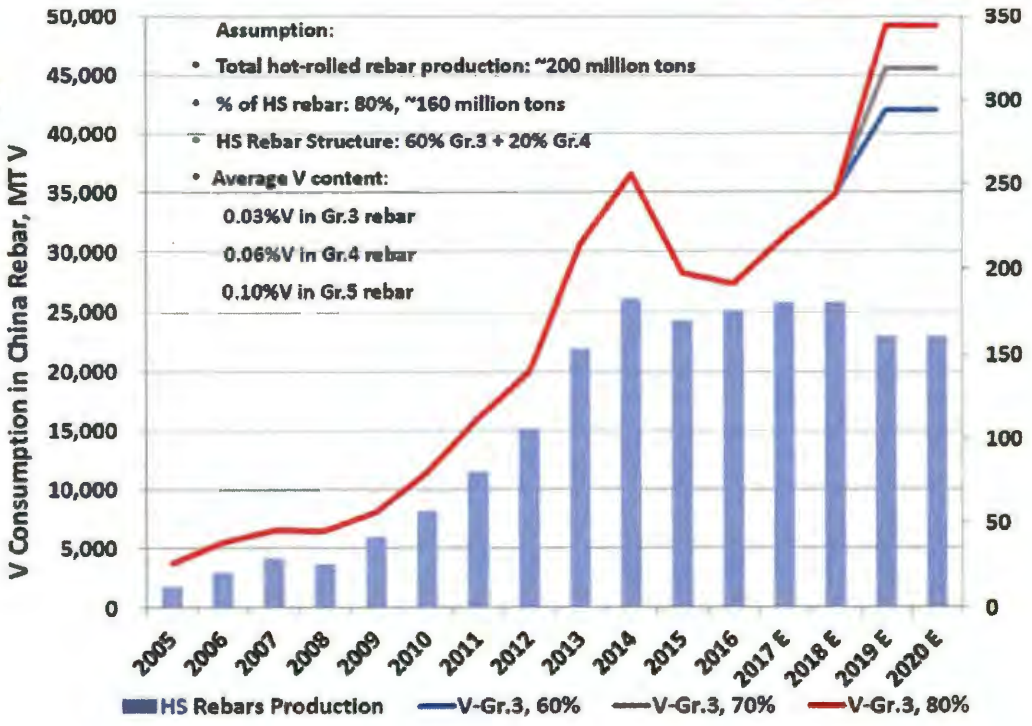
- The new standard for 600 MPa tensile strength rebar was enacted in November 2018
- Estimate shows that V demand used in rebar could reach 40,000-50,000 mTon per year
- Roskill also believes that this will result strong demand and limited excess supply

Roskill's base case sees market in structural deficit until 2023. Impact of new rebar regulations in China, substitution effects, and development of new projects are key factors impacting supply/demand over medium term.



Data - China Iron & Steel Research Institute
Chart – TTP Squared

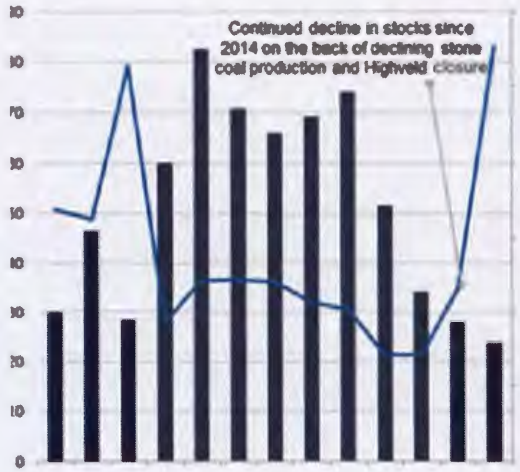
CISRI



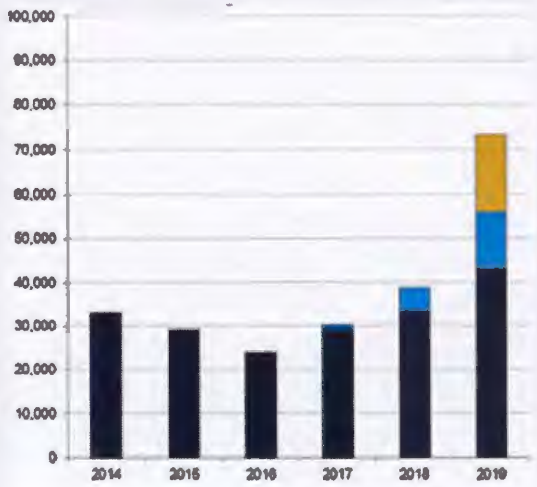
CRU Predicts 2019 Turbulence Due to China Rebar

- CRU predicts that V stocks will continue to decline
- China has been managing the implementation of the new rebar standard and demand is predicted to begin accelerating
- China is importing more Ferro Niobium as a substitute for Vanadium

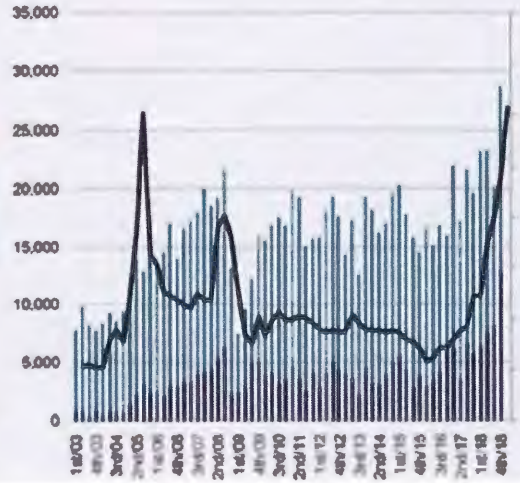
V Stock Levels



China V Demand for Rebar



FeNb Export from Brazil

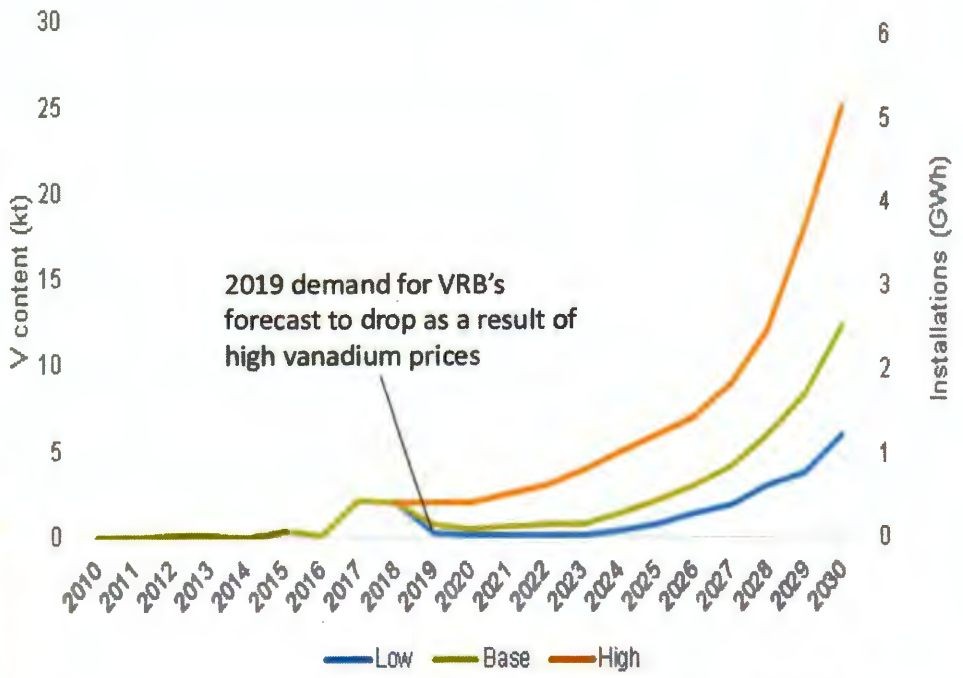


Source - CRU Insight Article 5 April 2019

Vanadium Redox Batteries (VRB)

- A battery technology suited for power grid level storage used with wind and solar
- The technology is targeted to solar installations to enable power delivery after dark
- VRB technology is reliable and maturing
- Installations require large amounts of vanadium and deployment is dependent on Vanadium price

Vanadium prices, oil prices, and CO_2 emission regulations will be a major factor in the rate of adoption



Data - Roskill
Chart – TTP Squared

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ReadingAlloys

Large Amount Vanadium Supply Activity

- Largo is expanding its Maracas Menchen vanadium mine by 25% to produce about 12,000 mTon of V2O5 per year

- Seeking Alpha 'Vanadium Miners News – 29 March 2019' list **12** separate vanadium production projects under review in Australia, South Africa, Canada, and the USA

Our industry must be ready for price volatility !

Vanadium in 2019

- China Vanadium demand will continue to drive the price in Europe and North America
- New vanadium capacity is entering the market during 2019 but will need qualification
- Chinese rebar mandates and VRB demand will create additional demand over the next few years – expect turbulence
- The high purity vanadium pentoxide market will remain concentrated with multi-national producers leveraging pricing

Master Alloy users and suppliers must continue to strengthen partnerships

Thank You!

TITANIUM EUROPE 2019

MAY 13-15 · VIENNA, AUSTRIA

AMETEK®

SPECIALTY METAL PRODUCTS

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13. TIMET Ingot Products

INGOT

TIMET titanium ingot is produced to meet a wide range of quality standards and includes the largest variety of alloys in the industry – from customary alloys like TIMETAL 6Al-4V and TIMETAL CP products to highly specialized TIMETAL 17, TIMETAL 6246, and TIMETAL 834 for critical engine applications.

Ingot is available from 36" diameter and from 4,000 to 30,000 pounds.

As the industry leader in melting technology, TIMET's manufacturing processes yield superior quality products. With our portfolio of Cold Hearth Melting (CHM), Vacuum Arc Remelting (VAR) or a combination of both, we take the time to understand your requirements and then manufacture product to meet or exceed them.

Grades Offered

TIMETAL 35A	TIMETAL 3-2.5	TIMETAL 17
TIMETAL 50A	TIMETAL 6-4	TIMETAL 6-2-4-2
TIMETAL 65A	TIMETAL 6-4 ELI	TIMETAL 6-2-4-6
TIMETAL 75A	TIMETAL Grade 29	TIMETAL 407
TIMETAL 100A	TIMETAL 62S	TIMETAL 10-2-3
TIMETAL Grade 7	TIMETAL 6-6-2	TIMETAL 18

Products

- Ingot
- Slab
- Coil/Strip
- Casting Stock
- Billet
- Bar
- Plate
- Sheet
- Powder Metals

TIMETAL Grade 11	TIMETAL 5111	TIMETAL 5333
TIMETAL Grade 12	TIMETAL 6-7	TIMETAL 215
TIMETAL XT	TIMETAL 7-4	TIMETAL 1100

Timet Literature Library

Visit our Literature Library for datasheets on product grades.

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14. Timet Updated Make or Buy Analysis 2018 **(*Public Version*)**

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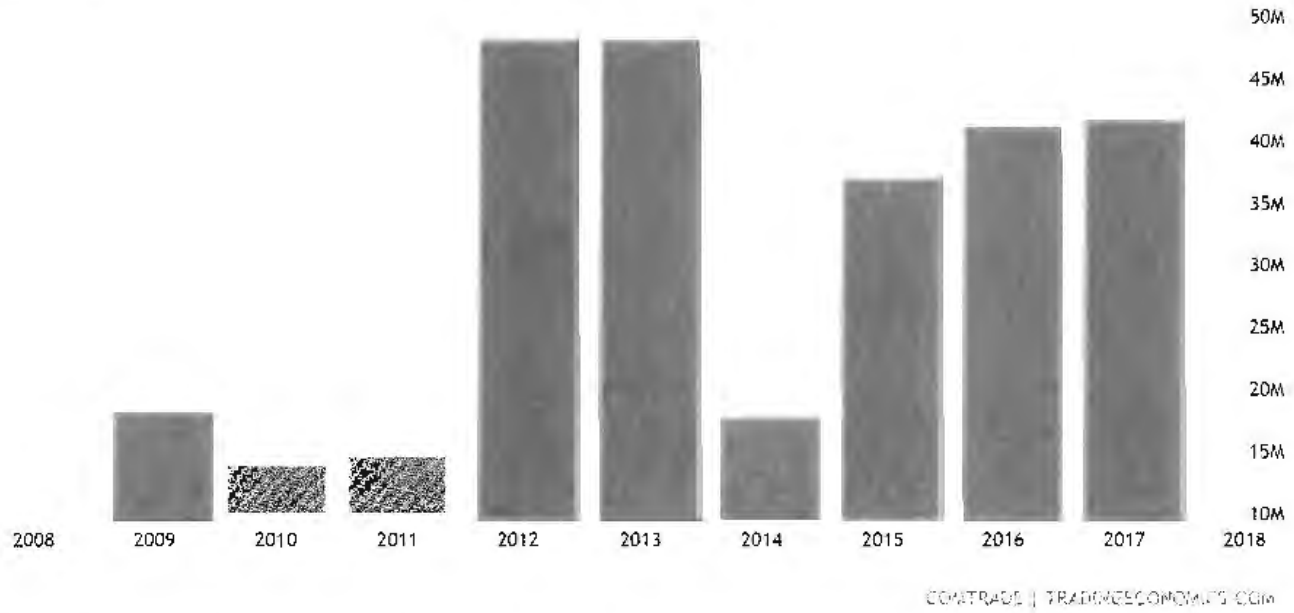
15. Japan Imports of Canadian Titanium Ores - https://tradingeconomics.com/japan/imports/canada/titanium-ores-concentrates

Japan Imports from Canada of Titanium Ores and Concentrates

Japan Imports from Canada of Titanium Ores and Concentrates was US$42.01 Million during 2017, according to the United Nations COMTRADE database on international trade.

Historical Data API



1Y 5Y 10Y MAX

Feedback

Japan Imports by Country of null

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16. Sponge Consumed by TIMET **(Public Version)**

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17. Military Engine Parts Requiring the Use of Titanium Sponge

Military Engine Parts

Must be Made via Sponge Alloy Production Route

Exclude Incorporation of Scrap

CUSTOMER PART NUMBER	ENGINE	PART DESCRIPTION	ALLOY
9B54110802	F-135	STG 2 Compressor Disk (ALP)	TI 6Al-2Sn-4Zr-2Mo
2S4110802	F-135	STG 2 Compressor Disk (ALP)	TI 6Al-2Sn-4Zr-2Mo
9B54110803	F-135	COMP Rotor, Axial, STG 3 (ALP)	TI 6Al-2Sn-4Zr-2Mo
2S4110803	F-135	COMP Rotor, Axial, STG 3 (ALP)	TI 6Al-2Sn-4Zr-2Mo
9A54110804	F-135	HUB, Front Comp, Rear (ALP)	TI 6Al-2Sn-4Zr-2Mo
1S4110804	F-135	HUB, Front Comp, Rear (ALP)	TI 6Al-2Sn-4Zr-2Mo
1S2302603SK02	F-135	Compressor Rotor-Axial, 3-Stage	TI 6Al-2Sn-4Zr-2Mo
9D54066505	F100	Disk, STG 5 Compressor	TI 6Al-2Sn-4Zr-6Mo
9D54066504	F100	Disk, STG 4 Compressor	TI 6Al-2Sn-4Zr-6Mo
9A54321602	F119	COMP Rotor, Axial, STG 2	TI 6Al-2Sn-4Zr-6Mo
9A54319103	F119	Comp Rotor, Axial, STG 3	TI 6Al-2Sn-4Zr-6Mo
9A54319104	F119	Comp Rotor, Axial, STG 3	TI 6Al-2Sn-4Zr-6Mo
9A54322504	F119 & F-135	Comp. Rotor & Hub Axial STG 4	TI 6Al-2Sn-4Zr-6Mo
1S4322504	F119 & F-135	Comp. Rotor & Hub Axial STG 4	TI 6Al-2Sn-4Zr-6Mo
9A54320805	F119	Comp Rotor Axial, STG 5	TI 6Al-2Sn-4Zr-6Mo
1S4320805	F119	Comp Rotor Axial, STG 5	TI 6Al-2Sn-4Zr-6Mo
9B54071701	F119	Disk & Hub, STG 1 Compressor	TI 6Al-2Sn-4Zr-6Mo
9D54066506	F100	Disk, STG 6 Compressor	TI 6Al-2Sn-4Zr-6Mo
9A54131121-02	F-135	Comp. Rotor - Axial, STG 1	TI 6Al-4V
1S2302402SK02	F-135	Compressor Rotor-Axial, 2-Stage	TI 6Al-4V

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18. Financial Performance Comparison

Financial Performance Comparison

Airlines vs OEM's vs Japanese Sponge Producers

	2011	2012	2013	2014	2011-2014 Ave	2015	2016	2017	2018	2015-2018 Ave	Change Percent
American Airlines											
Top Line Revenue	$23,979,000,000	$24,855,000,000	$26,743,000,000	$42,650,000,000	$29,556,750,000	$40,990,000,000	$40,142,000,000	$42,622,000,000	$44,541,000,000	$42,073,750,000	
EBITDA	$38,000,000	$1,149,000,000	$2,419,000,000	$5,591,000,000	$2,299,250,000	$7,691,000,000	$6,759,000,000	$6,134,000,000	$4,723,000,000	$6,326,750,000	
Gross Profit	$4,373,000,000	$5,111,000,000	$6,938,000,000	$12,006,000,000	$7,107,000,000	$14,387,000,000	$13,251,000,000	$13,032,000,000	$11,890,000,000	$13,140,000,000	
Earnings Per Share	-$15.83	-$7.52	-$6.54	$3.93		$11.07	$4.65	$2.61	$3.03		
United Continental											
Top Line Revenue	$37,100,000	$37,152,000,000	$38,279,000,000	$38,901,000,000	$28,592,275,000	$37,863,000,000	$36,558,000,000	$37,784,000,000	$41,303,000,000	$38,377,000,000	
EBITDA	$3,281,000,000	$1,950,000,000	$2,988,000,000	$4,052,000,000	$3,067,750,000	$6,985,000,000	$6,321,000,000	$5,820,000,000	$5,532,000,000	$6,164,500,000	
Gross Profit	$20,588,000,000	$19,784,000,000	$20,304,000,000	$23,103,000,000	$20,944,750,000	$26,401,000,000	$26,799,000,000	$26,783,000,000	$27,628,000,000	$26,902,750,000	
Earnings Per Share	$2.26	-$2.18	$1.53	$2.93		$19.47	$6.76	$7.06	$7.70		
Southwest Airlines											
Top Line Revenue	$15,658,000,000	$17,088,000,000	$17,699,000,000	$18,605,000,000	$17,262,500,000	$19,820,000,000	$20,289,000,000	$21,246,000,000	$21,965,000,000	$20,830,000,000	
EBITDA	$1,408,000,000	$1,467,000,000	$2,415,000,000	$3,163,000,000	$2,113,250,000	$5,131,000,000	$4,743,000,000	$4,625,000,000	$4,407,000,000	$4,726,500,000	
Gross Profit	$3,421,000,000	$3,689,000,000	$4,357,000,000	$5,494,000,000	$4,240,250,000	$7,412,000,000	$7,446,000,000	$7,472,000,000	$7,259,000,000	$7,397,250,000	
Earnings Per Share	$0.23	$0.56	$1.05	$1.64		$3.27	$3.45	$5.57	$4.29		
Delta											
Top Line Revenue	$35,115,000,000	$36,670,000,000	$37,773,000,000	$40,362,000,000	$37,480,000,000	$40,704,000,000	$39,450,000,000	$41,138,000,000	$44,438,000,000	$41,432,500,000	
EBITDA	$3,691,000,000	$3,933,000,000	$5,058,000,000	$3,977,000,000	$4,164,750,000	$9,637,000,000	$8,882,000,000	$8,188,000,000	$7,593,000,000	$8,575,000,000	
Gross Profit	$7,050,000,000	$7,374,000,000	$8,583,000,000	$8,190,000,000	$7,799,250,000	$13,342,000,000	$16,883,000,000	$16,585,000,000	$16,390,000,000	$15,800,000,000	
Earnings Per Share	$1.01	$1.19	$12.29	$0.78		$5.63	$5.55	$4.43	$5.67		
Top Line Revenue					$112,891,525,000					$142,713,250,000	26%
EBITDA					$11,645,000,000					$25,792,750,000	121%
EBITDA Percent					10%					18%	
Gross Profit					$40,091,250,000					$63,240,000,000	58%
Gross Profit Percent					36%					44%	
Boeing											
Top Line Revenue	$68,735,000,000	$81,698,000,000	$86,623,000,000	$90,762,000,000	$81,954,500,000	$96,114,000,000	$93,496,000,000	$94,005,000,000	$101,127,000,000	$96,185,500,000	
EBITDA	$7,647,000,000	$8,210,000,000	$8,481,000,000	$9,448,000,000	$8,446,500,000	$9,340,000,000	$8,475,000,000	$12,461,000,000	$14,170,000,000	$11,111,500,000	
Gross Profit	$12,996,000,000	$13,142,000,000	$13,430,000,000	$14,079,000,000	$13,411,750,000	$14,090,000,000	$14,529,000,000	$17,463,000,000	$19,706,000,000	$16,447,000,000	
Earnings Per Share	$5.34	$5.11	$5.96	$7.38		$7.44	$7.83	$13.85	$17.85		
Airbus											
Top Line Revenue	£49,128,000,000	£56,480,000,000	£59,256,000,000	£61,000,000,000	£56,466,000,000	£64,000,000,000	£67,000,000,000	£59,000,000,000	£63,700,000,000	£63,425,000,000	
EBITDA	£1,624,000,000	£2,144,000,000	£2,661,000,000	£4,020,000,000	£2,612,250,000	£4,110,000,000	£3,960,000,000	£3,200,000,000	£5,800,000,000	£4,267,500,000	
Gross Profit	£1,541,000,000	£2,089,000,000	£2,607,000,000	£3,991,000,000	£2,557,000,000	£4,062,000,000	£2,258,000,000	£2,665,000,000	£8,048,000,000	£4,258,250,000	
Earnings Per Share	£1.27	£1.46	£1.85	£1.20		£1.30	£1.35	£1.50	£1.35		
UTC (UTX)											
Top Line Revenue	$55,754,000,000	$57,708,000,000	$56,600,000,000	$57,900,000,000	$56,990,500,000	$56,098,000,000	$57,244,000,000	$59,837,000,000	$66,501,000,000	$59,920,000,000	
EBITDA	$9,109,000,000	$9,208,000,000	$10,284,000,000	$11,413,000,000	$10,003,500,000	$9,154,000,000	$10,183,000,000	$10,278,000,000	$10,986,000,000	$10,150,250,000	
Gross Profit	$15,385,000,000	$15,555,000,000	$16,132,000,000	$17,002,000,000	$16,018,500,000	$15,667,000,000	$15,773,000,000	$15,636,000,000	$16,516,000,000	$15,898,000,000	
Earnings Per Share	$5.49	$5.66	$6.25	$6.82		$8.61	$6.12	$5.70	$6.50		
Top Line Revenue					308,302,525,000					362,243,750,000	17%
EBITDA					32,707,250,000					51,322,000,000	57%
EBITDA Percent					11%					14%	
Gross Profit					72,078,500,000					99,843,250,000	39%
Gross Profit Percent					23%					28%	
Source:kaijinet											
Osaka ($K USD)											
Net Sales	$405,989	$757,112	$594,099	$416,916	$543,529	$365,185	$335,824	$349,229	$408,801	$364,760	-33%
Net income	-$50,186	$38,131	$22,063	-$28,236	-$4,557	-$78,452	$22,185	$5,161	$17,479	-$8,407	84%
Net income Percent					-1%					-2%	
Toho ($K USD)											
Net Sales	$338,364	$438,082	$426,167	$295,667	$374,570	$280,453	$385,375	$278,207	$350,668	$323,676	-14%
"Comprehensive income"	-$66,073	-$8,286	-$25,359	-$50,282	-$37,500	-$21,203	$35,383	$29,602	$31,815	$18,899	-150%
"Comp income" Percent					-10%					6%	

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19. Feedstock Impact on Sponge Cost (*Public Version*)

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20. Rutile Price History-Forecast *(Public Version)*

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21. Lomon Billions Chinese Titanium Expansion

China's Lomon Billions to build titanium alloy plant

Print

15 Apr 19 07:47 - Metals, Non-ferrous, Rare metals, Titanium

Beijing, 15 April (Argus) -- China's largest titanium dioxide producer Lomon Billions is planning to build a 30,000 t/yr plant for high-end titanium alloy at Jiaozuo city in central China's Henan province.

The facility aims to establish a complete industry chain with titanium ore, slag, tetrachloride, sponge and titanium alloy.

The firm's subsidiary Sichuan Lomon Mining and Metallurgy will also build a 300,000 t/yr titanium chloride slag plant at Yanbian county, Panzhihua city, in southwest China's Sichuan province. The project is designed to convert a 500,000 t/yr titanium concentrate plant to a 280,000 t/yr titanium chloride slag facility to ensure feedstock supply to the firm's dioxide production, which uses the chlorination process.

The company will invest 1.58bn yuan ($229mn) and Yn1.5bn to build the 30,000 t/yr facility and the 300,000 t/yr plant, respectively. Both are scheduled to be completed in two years.

Lomon Billions is the world's fourth-largest titanium dioxide producer, after US producers Chemours with 1,242mn t/yr, Sakai Chemical with 298,000 t/yr and Venator with 310,000 t/yr.

The firm's total capacity increased to 700,000 t/yr following the acquisition of Sichuan Lomon Titanium Industry in June 2016. Lomon Billions plans to raise its dioxide capacity to 1.3mn t/yr in the next two years to meet rising demand from the country's urbanisation developments.

[illegible]

Send comments to feedback@argusmedia.com

Request more information about Argus' energy and commodity news, data and analysis services.