



Testimony of  
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On behalf of the Precision Machined Products Association (PMPA), thank you for the opportunity to testify today on the negative impact of the Section 232 steel and aluminum tariffs on the precision manufacturing industry. Despite sales still being elevated and growing for the precision machining industry, the 25 percent tariffs imposed on steel and 10 percent on aluminum continue to serve as an anchor holding back businesses.

The 232 tariffs are not just about imports as the majority of our companies source domestically. These government-imposed tariffs impact markets across multiple industries and change the sourcing landscape and global pricing structure for steel and aluminum.

In a December 2021 survey of our members, one in five reported having their steel or aluminum supply reduced for 2022. In addition, 35 percent reported delivery delays of at least two months, when compared to pre-COVID deliveries. At the same time, 45 percent of respondents expected sales to increase in the first quarter of 2022.

Pricing, availability, and quantity remain a top concern for our precision manufacturers. Quantity is an important factor here as small businesses always face a disadvantage without the purchasing power of their much larger competitors and are often turned away from placing orders due to steel mills not wanting to fill smaller orders.

To understand these numbers and what they mean for our manufacturers and the nation's economy, you need a better understanding of what members of the PMPA do and what role they play as part of critical essential infrastructure.

Our nearly 400 member companies are involved in the production of highly engineered, precision machined components used in advanced automotive, aerospace, defense, electrical, construction, and medical technologies. The precision machining industry is best described by NAICS code 332721 and accounts for over 103,200 jobs with payrolls of \$5 billion and shipments of over \$19.1 billion.

PMPA members typically average 35-50 employees per shop with annual sales of \$12 million. Our members manufacture precision components, often their tolerance is a fraction the size of a human hair. These are highly specialized operations that can produce surgical parts that wind up in the human body and munitions our warfighters use to protect our nation.

These types of precision manufacturers cannot just switch steel suppliers on a whim – buying metal is not like choosing between Coke and Pepsi – the chemical makeup and tolerances can mean the difference between life and death. For some of our medical industry manufacturers, it can take eighteen months to

secure and test a metal prior to its approval for use. So simply switching vendors when Washington imposes tariffs is not a realistic option, especially due to the lack of availability of specialty steel and aluminum.

Let me discuss a little more on why the types and sources of metals are so important to the precision machining industry as this is a topic I know something about.

I have been around steel plants and precision machining facilities making parts from metal for nearly fifty years. As a metallurgist, my professional career spans the lifecycle of steel from creating to shaping to recycling. I have over 500 publications, an additional 1,000 blog posts, and more than one million views of my technical content.

When it comes to sourcing raw materials, availability, quantity, and quality are often the driver for our members, not price. No shop sets up their machines based on price, they can only start production when the material is available. However, price is the driving factor for our customers, who shop our quotes around globally.

The steel or aluminum in our products typically accounts for more than 50 percent of the cost of the component we sell. So when a 25 percent tariff or even a 10 percent price hike hits our members it is significant. And this is not an additive raw material, without that steel or aluminum, we cannot manufacture a single part, so we are trapped between our metal supplier, our demanding customer, and with tariffs, our federal government.

Let us set aside the impact of the tariffs on price and focus on availability, or lack thereof. Without availability, we cannot make parts – PLAIN AND SIMPLE – NO MATERIAL, NO PRODUCT. The stated goal of the steel tariff at the time of imposition was to raise the steel industry's capacity utilization rate to at least 80 percent, a rate reached several years ago, yet the tariffs continue.

In the time since the steel industry reached the 80 percent threshold, our members continue to report the same challenges securing the steel they need. In fact, reports are getting worse, especially when it comes to stainless steel. At a time of record profits for their industry, some steel companies are taking mills offline or changing to producing a more profitable type of metal. Last year ATI announced an exit from the standard stainless steel business. Just last month, U.S. Steel announced the closure of the Granite City Works plant, likely costing 1,000 jobs in Illinois.

These are headlines one would have expected during the Great Recession, not when steel companies report record profits and their customers continue to demonstrate a clear demand for their product. It is clear the Section 232 tariffs on steel and aluminum are not creating more supply in the U.S., just more shareholder profits.

While U.S. domestic producers may have the "capacity to produce", if they are not actually producing and delivering the aluminum and steel, our members and thousands of manufacturing businesses like them have no choice but to import the products they need to continue operations and employing millions of Americans.

Let me be specific on the continued shortages in steel and aluminum. Multiple PMPA members report that no adequate supply of 6262A aluminum exists in the U.S., forcing manufacturers to purchase from the four European producers of this specialty raw material. Certain customers only allow 6262A in a T9 temper format to allow for a stronger material. If our members cannot efficiently and economically procure 6262A, their customers seek alternate suppliers, particularly those overseas with access to these raw materials.

Another challenge in the steel supply is environmental regulation of leaded bar steel, used in everything from military to commercial applications when high volumes are needed. Leaded steel accounts for roughly one-third of the foreign steel our members consume and those producing the highest volumes – up to the millions of a single part – typically use leaded steel.

Leaded steel bars provide critical finish capabilities suitable for high production volume and complex machining requirements better than any other non-leaded materials. The lead is needed to assure the production volumes and cycle times are met economically, while the low carbon in the typical grade, 12L14, assures that after machining, manufacturers can successfully crimp the part (cold deform) without cracking.

We have discussed the price of metals, and the availability of metals, now we must discuss the quality and characteristics of metals in the U.S. as another reason our members cite for using imports. Quality and specific characteristics of certain steel needed in highly precision components, many of which wind up in our wounded warriors, is critical.

The highest precision, highest quality bars for the production of medical parts, surgical and dental tools, orthopedic implants such as bone screws and plates, are made in Germany, Switzerland, Italy, and other nations that for decades have developed an expertise in manufacturing medical quality steel for precision machined products. Even in cases where a U.S. supplier is available, it is rarely of medical-grade bar stock to the quality needed and required by our processes and customers as many of these products enter the human body.

The tariffs, however, are like our customers, inflexible when it comes to sourcing the materials we need. Despite no domestic availability, or ability for that matter, Section 232 tariffs continue on steel and aluminum from our allies.

Few of our members can use the exclusions process as small businesses like ours are not direct importers because they do not buy mill direct. Their customers procure the metal for them or more likely, they purchase through an intermediary such as a service center. Were the Department of Commerce to allow product-wide exclusions instead of company-specific, downstream small manufacturers like PMPA members could see some relief. In addition, the exclusion process does not hold the steel and aluminum producers accountable when they make a claim of ability to manufacture a specific product, yet will not deliver.

The tariff rate quota system imposed on the European Union, United Kingdom, and Japan, has not lessened the challenges our members face sourcing the materials needed for the precision machining industry. The TRQs are just another level of uncertainty our members have to factor in.

American manufacturers using steel or aluminum have seen how the steel and aluminum industries, have, and have not, evolved since the imposition of the tariffs over four years ago. The same sourcing challenges our members faced in 2018, they face today, with little change in the domestic supply of materials our industry requires. The majority of steel companies have not used the government's protection to substantially increase the supply of bars and rods our members use, especially stainless steel. In fact, as I stated earlier, the availability is decreasing.

If the goal of the Section 232 tariffs was to substantially increase the supply of steel and aluminum in the U.S., they did not achieve that goal. If the goal was to incentivize the reshoring of downstream parts made with steel and aluminum, it had the opposite effect.

The PMPA has surveyed its members since the announcement of the tariffs on imported steel and aluminum in 2017. In preparation for this testimony, we reviewed some of those comments. Just a few received over the years.

“We received a 100 percent price increase on 304 stainless steel from North American Stainless.”

“Getting no orders...losing customers as there are no tariffs on finished goods.”

“The price of steel and aluminum have gone up - lead times have lengthened. We have lost orders due to extended lead times.”

“It has made us un-competitive on stainless steel components.”

“Some mills are implementing restricted order entry.”

I would like to highlight this last comment from a PMPA member. Many of us who have been around the steel industry for decades can see clearly that they have a captive domestic market and can freely reject order requests and raise prices. The tariffs have restricted market access and supply our members need.

Our allies upon which the U.S. government imposed the tariffs had no behavior to change. If the culprit is China, then Washington should unite with our national security allies to address the real reason for any global oversupply of certain steel and aluminum.

If the U.S. economy is indeed heading towards a slowdown, American manufacturers do not need the federal government further anchoring them down.

Thank you for allowing me to testify today.