October 17, 2025

The Honorable Howard Lutnick
Secretary
Department of Commerce
1401 Constitution Ave., NW
Washington, D.C. 20230

RE: Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Robotics and Industrial Machinery (BIS-2025-0257, XRIN 0694-XC138)

On behalf of the National Retail Federation and pursuant to the Federal Register notice published by the Bureau of Industry and Security, U.S. Department of Commerce regarding the above-referenced investigation, we are submitting the following written comments regarding the important and growing role robotics play in retail operations and the ability to provide customers with goods either in-store or at home across the United States.

I. Introduction

NRF passionately advocates for the people, brands, policies and ideas that help retail succeed. Retail is the nation's largest private-sector employer, contributing $5.3 trillion to annual GDP and supporting one in four U.S. Jobs — 55 million working Americans. NRF empowers the industry that powers the economy. For over a century, NRF has been a voice for every retailer and every retail job, educating, inspiring and communicating the powerful impact retail has on local communities.

Our members include some of the most innovative companies in the United States, including those that are increasingly using robotics for key retail operations in their stores, warehouses and distribution centers to manage and distribute consumer goods.

The United States remains highly dependent on imported robotics and industrial machinery as domestic manufacturing capacity is limited. While there is no question that the United States has a strong national security interest in bolstering existing domestic capacity and maintaining access to advanced technologies relating to robotics and industrial machinery, imposing tariffs on imports would increase the costs of imported robotics and potentially create supply chain shortages if the implementation of the tariffs is not sensitive to the time needed to ramp up U.S. production and workforce development. Higher costs from the tariffs and shortages would increase retail costs and ultimately the prices of goods sold by retailers. Instead, the administration should work with the private sector to develop policies that will secure critical supply chains without compromising the goal of bolstering U.S. manufacturing and technological leadership.

II. Demand for and Supply of Robotics and Industrial Machinery

U.S. companies are developing and investing in advanced robotics manufacturing to create custom automation solutions that drive operational excellence and economic growth, and lead to upskilling and enhanced safety for employees. The U.S. retail industry is both a direct and indirect beneficiary of new drives to automate production and other business activities with the use of robotics.

Robotics applications are transforming retail fulfillment operations through artificial intelligence-powered solutions and advanced process control. These systems enable comprehensive inventory management, sophisticated defect detection and sustainable packaging solutions. Robotics technology reduces retail costs, improves productivity and stabilizes supply chains, allowing rapid scaling during demand surges. Processing times and accuracy are significantly enhanced, creating a more efficient fulfillment ecosystem.

The integration of robotics also creates a safer work environment for employees by eliminating physically demanding tasks such as long-distance walking, ladder climbing and repetitive reaching while maintaining optimal storage density. This technological transformation creates opportunities for workforce development, enabling workers to transition from manual roles to higher-skill technical positions in engineering, programming and maintenance. This upskilling pathway demonstrates how robotics not only enhances workplace safety but also creates new career advancement opportunities for retail employees.

Retailers also benefit from the cost savings afforded using robotics in the manufacture of goods retailers sell. For example, R&D labs, prototyping and packaging teams in the U.S. consumer electronics sector routinely import robots, RLC equipment, fixtures, and jigs. This equipment is not available domestically and is necessary for this work in the United States.

While manufacturers are investing in U.S. robotic production capabilities, we are still a long way from having sufficient capacity, especially in parts and components, to meet domestic demand. Challenges include:

- Higher operating costs (energy, compliance and infrastructure) in the United States inhibit production scaling and supply chain development.
- Critical workforce shortages in engineering and technical roles, along with inadequate retraining programs, slow innovation and expansion.
- U.S. actuator and motor production is focused on expensive aerospace and military applications, with higher technical requirements that are unsuitable for general robotics.
- Domestic robotics motor production is limited by insufficient rare earth magnet resources and processing capacity.
- Domestic sources for graphic processing units lack the advanced technologies that have been developed outside the United States. If domestic companies were forced to rely on domestic GPUs, their ability to integrate AI and edge computing into cameras would be limited, reducing speed and efficiency.

- Major manufacturers of industrial equipment for the consumer electronics industry are in allied countries (Fanuc is in Japan) and can provide advanced capabilities with short lead times at competitive costs and at scale. The United States does not have comparable equipment that is produced at scale. U.S.-based companies also tend to focus on niche use cases that are not directly comparable.

This means that U.S. manufacturers and retailers wanting to produce or install robots or industrial machines remain dependent on global supply chains. The table below compares domestic and global vendors. Most imports today come from strategic U.S. allies, including Austria, Germany (Witron), the Netherlands (KNAPP), Mexico and Europe (Symbotic).

Feature	U.S. Vendors	Global Vendors
Market Share	~24% of global market	~76% (Asia-Pacific, Europe dominant)
Scalability	Moderate	High
Technology	Flexible, AI-enabled	Proprietary, advanced navigation
Geographic Reach	Primarily domestic	Global (over 100 countries)
Integration Models	Customizable, integrator-heavy	Full-stack producers and integrators
Innovation Leadership	Growing	Leading (Visual SLAM, AGVaaS, LiDAR)

III. U.S. Trade Policy Options

Because imposing tariffs under Section 232 would have such an adverse impact on U.S. manufacturers of robotics as well as their retail (and other sector) customers, NRF offers the following alternative recommendations for supporting the development of a viable U.S. robotics industry:

- Develop tax and regulatory policies that will make it easier and more profitable to manufacture in this country.
- Work with manufacturers to develop a more robust supply of engineers and technicians.
- Ensure that U.S. companies have access to the materials necessary to develop a stronger robotics and industrial machinery industry in this country, including imported parts and components.
- Promote robotics innovation hubs across the country that can accelerate development by bringing together researchers and manufacturers. Education and technical training programs in such a hub would help to build a skilled workforce. Such hubs could also attract capital, which would help startups and small businesses turn their ideas into market-ready solutions.
- Support international collaboration — properly managed — to lead to more capacity in the United States. By working with non-U.S. partners on funding research, developing industry-wide standards and exchanging technology, U.S. companies can remain at the forefront of innovation while ensuring that U.S. products are aligned with market trends around the world.

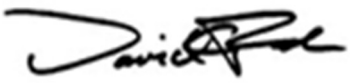
In the event the administration elects to impose new tariffs under Section 232, it should exempt all robotics (including parts and components) imported under the U.S.-Mexico-Canada Agreement that qualify for duty-free treatment; include these products within the 15% tariff cap on imports under the U.S.-EU Framework on an Agreement on Reciprocal, Fair and Balanced Trade, the U.S.-UK Economic Prosperity Deal and the Framework Agreement with Japan, and add these products to the Potential Tariff Adjustments for Aligned Partners Annex.

V. Conclusion

There can be no question that robotics are critical to the future of production in the United States. The technologies associated with robotics and industrial machinery enhance the speed, precision and resilience of production lines that supply essential goods, from advanced electronics and defense components to critical infrastructure equipment. Robotics also improve consistency and allow U.S. workers to be more productive and safer — thus allowing essential items to be produced reliably at scale. However, for the United States to maintain world-class competitive manufacturing and retail sectors, U.S. companies need access to the entire robotics and industrial machinery supply chain — including materials that are not currently available in this country. We would encourage the administration to not put tariffs on these categories of imports. If tariffs are imposed, they must be done in a strategic manner that allows time for the industry to properly adjust.

NRF appreciates the opportunity to provide comments on this matter. If you have any questions, please contact me or Jonathan Gold, NRF's vice president of supply chain and customs policy.

Sincerely,



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