



American Foundry Society
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June 23, 2017

Mr. Brad Botwin
Director, Industrial Studies
Office of Technology Evaluation, Bureau of Industry and Security
U.S. Department of Commerce
1401 Constitution Avenue, NW - Room 1093
Washington, D.C. 20230
Via email to Aluminum232@bis.doc.gov

Dear Mr. Botwin:

On behalf of the American Foundry Society (AFS), we are writing in support of the domestic aluminum industry and the Section 232 investigation efforts to review the strategic importance of aluminum and consider actions that will address unfair trade.

The U.S. metalcasting industry is composed of 1,956 facilities, down from 2,380 in 2005.¹ This significant reduction in the number of foundries can be attributed to foreign competition, globalization, economic recessions, technological advancements, and the wave of federal regulations. Out of the 1,916 U.S. metalcasting facilities, more than 800 foundries pour aluminum for a wide variety of castings that have thousands of applications and are used in cars, trucks, aerospace, defense, air conditioners, street lights, refrigerators, lawn mowers, medical devices, and agricultural equipment.

AFS is the major trade and technical association for the North American metalcasting industry. The association has more than 8,000 members representing nearly 2,000 metalcasting firms, their suppliers, and customers.

In 2000, China produced only about 11% of the world's primary aluminum. Now, it produces more than half. This historically unprecedented expansion of production capacity resulted from government policies rather than process improvements or lower input costs.

China's government has been subsidizing aluminum smelters, as well as some aluminum foundries, through direct grants, interest free loans and other incentives. Absent this massive support, a significant number of the smelters in China would have been forced to declare bankruptcy. Chinese overcapacity has suppressed global aluminum prices. In the United States., nearly one third of the total aluminum production capacity either has been idled temporarily or permanently shut down.

¹ 2017 Forecast: Most Markets to See Small Gains, Modern Casting – January 2017 – pg. 20.

AFS is concerned about the impact that Chinese aluminum overcapacity has on the American aluminum industry and the full value chain, including the U.S. aluminum foundry sector, for the following reasons:

- **Threat to our National Security** - if the United States were to go to war, we potentially would not have enough aluminum supply for U.S. defense capabilities. Since 2000, 18 of 23 domestic smelters have shut down. Despite a slight recovery in prices in early 2017, U.S. primary aluminum producers are barely surviving.
- **China's Market Distorting Practices** – In addition to low wages and currency manipulation, China's industrial policy promotes downstream production and exports through the use of massive production subsidies and an export tax on primary aluminum designed to channel cheap inputs into manufacturing downstream aluminum products. Chinese exports of downstream products have soared, taking market share away from processors elsewhere, and reducing demand for primary aluminum outside of China.
- **Trade Through Third Countries** – Increasingly, we are seeing some Chinese firms re-routing various manufactured products, including aluminum castings, through third countries/regions.

AFS believes that exemptions should be made for producers who trade fairly and have not contributed to rising global capacity in the aluminum market.

Metalcasting Industry is Critical to the U.S. Economy

The U.S. metalcasting industry is the second largest supplier of castings in the world, after China. More than 90% of all manufactured goods and capital equipment use metal castings as engineered components or rely on castings for their manufacture. Metal castings are truly the foundation for all other manufacturing. Foundries produce both simple and complex components of infinite variety that are strong and vital for performance-critical applications. Castings are seldom seen or identified by consumers because they are normally component parts inside assemblies.

In addition to the defense, automotive, construction, and aerospace industries, other major sectors supplied by the metalcasting industry include agriculture, energy exploration and conversion, oil and gas, mining, railroad, municipal/water infrastructure, transportation, and health care. In short, cast metal products are integral to our economy and our way of life.

Our energy-intensive, trade-exposed industry supports a payroll of more than \$8 billion and sales of more than \$30 billion annually. Industry capacity is 15.3 million tons with the industry forecast to operate at 75% of capacity in 2017.

The industry is widely dispersed throughout the country, with the highest geographic concentration of facilities located in Ohio, Pennsylvania, California, Wisconsin, Michigan, Illinois, Texas, and Indiana. The American metalcasting industry provides employment for more than 200,000 men and women directly and supports thousands of other jobs indirectly. Our industry is dominated by small businesses, with more than 80% of U.S. metalcasters employing 100 workers or fewer.

A Viable Aluminum Industry and Aluminum Foundry Industry is Vital to our National Security

Since 1992, in a joint effort with the Defense Logistics Agency (DLA), the U.S. metalcasting industry has identified qualified suppliers and located tools used for producing castings needed by the U.S. Department of Defense (DoD). There are 130 U.S. aluminum foundries in the defense casting supplier database (See Attachment A). Many of these foundries are small businesses and some are still family-owned. Of the more than 35,000 metalcasting components procured by the military, approximately 32% are aluminum castings. There are roughly 3,400 patterns for these aluminum components.

Aluminum castings support a wide range of military applications that are critical to defense systems for land, maritime, and aircraft. Aluminum castings for several aircraft include the F-18, F-22 and F-35, as well as helicopters. In addition to aircraft, foundries are producing castings for radar super structures and missile systems to name just a few examples.

Global competition, primarily from China, has taken at least 25% of the aluminum casting market from U.S. suppliers. Recently, a Midwest-based foundry with 150 workers was notified by one of its customers that two casting configurations it routinely makes were resourced in Asia. The combined annual sales of these two castings were as much as \$2 million per year.

There have been many instances where foundries have bid on potential for new orders, only to find out that the castings were sourced in low-cost countries for a fraction of the price than what we can manufacture in the United States. Several foundries have estimated that the lost revenue they have sustained due to low-cost foreign competition ranges from \$5-10 million per year per foundry, which represents around 25-50% of their current annual sales. These foundries cannot stay in business if they continue to lose business to foreign competition at this rate.



Foundries are producing gear boxes and other key components for Bell Helicopters, Sikorsky Black Hawks, and Boeing's Apache.



Aluminum foundries supply to the Aerospace industry including engine castings for the Boeing 777X that power the jetliner.

These examples highlight the critical yet specialized products that aluminum foundries produce for the defense sector. It is imperative to our national security to have a strong, viable domestic aluminum foundry industry. The United States should not rely on foreign castings for our national defense requirements. In addition to the defense sector, aluminum foundries make critical components that are vital to rebuild our nation's infrastructure as well.

Conclusion

Once again, thank you for the opportunity to provide these comments on the significant challenges facing the U.S. aluminum foundry industry against the tide of imports and unfair trade practices. We appreciate the administration's and Commerce Department's taking the time to investigate and determine the effects of aluminum imports on our national security.

A more aggressive U.S. trade policy is needed to combat these foreign trade-distorting practices in order to preserve and strengthen our nation's manufacturing base. We would like to extend an invitation to you and your colleagues to tour an aluminum foundry. This would provide the opportunity to see first-hand how critical aluminum castings are manufactured, in particular those with military and infrastructure applications.

If you have any questions or would like additional information, please contact me or Stephanie Salmon with our AFS Washington office at 202-452-7135.

Sincerely,

Handwritten signature of Doug Kurkul

Doug Kurkul
CEO
American Foundry Society

ATTACHMENT A

List of U.S. Foundries Producing Defense Castings

A & B FOUNDRY	Franklin	OH
A C FOUNDRY INC	Battle Creek	MI
ABERLE INDUSTRIAL MANUFACTURING	Wheat Ridge	CO
ACME BRASS & ALUMINUM FOUNDRY	Marshalltown	IA
ACME CASTINGS, INC.	Thousand Oaks	CA
ACRA CAST INC	Bay City	MI
ADAMS & WESTLAKE LTD	Elkhart	IN
AEROTEC ALLOYS INC	Norwalk	CA
AFW FOUNDRY INC	Lannon	WI
AIM INDUSTRIAL GROUP	Saint Clair Shores	MI
ALCASCO FOUNDRY INC	Harvey	IL
ALCAST COMPANY	Peoria	IL
ALGONAC CAST PRODUCTS, INC.	Algonac	MI
ALUM-ALLOY CO, INC	Ontario	CA
AMERICAN ALUMINUM CASTING COMPANY	Irvington	NJ
ANCHOR CASTINGS, INC.	Neenah	WI
ARISTO-CAST, INC.	Almont	MI
ARMSTRONG MOLD CORP	East Syracuse	NY
ATLAS FOUNDERS INC	Agawam	MA
AURORA CASTING & ENGINEERING INC	Santa Paula	CA
AVALON PRECISION METALSMITHS	Brook Park	OH
B&P ALLOYS, INC.	Waukesha	WI
BARRON INDUSTRIES	Oxford	MI
BATESVILLE PRODUCTS, INC	Lawrenceburg	IN
BOOSE ALUMINUM FOUNDRY CO INC	Reamstown	PA
BREMER MANUFACTURING	Elkhart Lake	WI
BROST FOUNDRY	Cleveland	OH
BROWARD CASTING FOUNDRY	Fort Lauderdale	FL
BUCK COMPANY	Quarryville	PA
C & L ALUMINUM FOUNDRY	Ft. Worth	TX
CANADIAN SPECIALTY CASTINGS INC.	Niagara Falls	ON
CARLEY FOUNDRY, INC.	Blaine	MN
CAST INDUSTRIES, LLC.	St. Cloud	MN
Cast Metals Technology Inc.	Winchester	IN

CASTCO CAST ALUMINUM CORPORATION	San Leandro	CA
COCHRANE FOUNDRY INC	York	PA
COMPASS AUTOMOTIVE GROUP	Fruitport	MI
CORBITT MANUFACTURING CO.	Saint Charles	MO
COST CAST INC.	Haines City	FL
CRAFT CAST CO. INC.	Jackson	WI
Crucible Foundry, LLC	Neenah	WI
CURTO-LIGONIER FOUNDRIES CO	Melrose Park	IL
DAMERON ALLOY FOUNDRIES	Compton	CA
DANKO ARLINGTON INC	Baltimore	MD
DECCO CASTINGS INC	El Cajon	CA
DENISON INDUSTRIES	Denison	TX
DOLPHIN CASTING	Phoenix	AZ
EAST POINT FOUNDRY INC	East Point	GA
ECK INDUSTRIES INC.	Manitowoc	WI
ELKHART BRASS MANUFACTURING CO.	Elkhart	IN
ENGINEERED PRECISION CASTING	Middletown	NJ
EPCOR FOUNDRY	Cincinnati	OH
EUTECTIC ENGINEERING	Detroit	MI
FEDERAL BRONZE CASTING INDUSTRY	Newark	NJ
FLORIDA MACHINE AND CASTING COMPANY	West Palm Beach	FL
FUTURE DIECAST AND ENGINEERING	Shelby Township	MI
GENERAL FOUNDRY SERVICE	San Leandro	CA
GIBBS DIE CASTING	Henderson	KY
HACKETT BRASS & ALUMINUM	Detroit	MI
HARBOR CASTINGS, INC.	North Canton	OH
HARMONY CASTINGS LLC	Harmony	PA
HAWVER ALUMINUM FOUNDRY, INC.	Tampa	FL
HEGEDUS ALUMINUM INDUSTRIES INC	Oil City	PA
INTEGRA-CAST, INC.	New Britain	CT
J W REFFEL METAL FOUNDRY INC	Englewood	CO
JACOB PATTERN WORKS INC	Pottstown	PA
JOSEFF INVESTMENT CASTING	Burbank	CA
KENWALT DIE CASTING CORP	Sun Valley	CA
KINETIC DIE CASTING, INC.	North Hollywood	CA
KLOPPENBORG FOUNDRY & FAN CO	Davenport	IA

KOVATCH CASTINGS INC.	Uniontown	OH
L A ALUMINUM CASTING COMPANY	Hayden	ID
LARGEN MANUFACTURING COMPANY	Creighton	NE
LECLAIRE MANUFACTURING COMPANY	Bettendorf	IA
LEITELT BROS INC	Chicago	IL
LESUEUR INCORPORATED	LeSueur	MN
LINE PRECISION INC	Farmington Hills	MI
LITE METALS COMPANY	Ravenna	OH
LITTLESTOWN FOUNDRY, INC.	Littlestown	PA
MAGNESIUM ALLOY PRODUCTS COMPANY	Compton	CA
MAGPARTS	AZUSA	CA
MANSFIELD CASTINGS	New Washington	OH
MARLBOROUGH FOUNDRY, INC.	Marlborough	MA
MESKAN Foundry	Chicago	IL
METAL DYNAMICS CORP	Tulsa	OK
MILLER FOUNDRY COMPANY	Santa Ana	CA
MOREL INDUSTRIES, INC.	Seattle	WA
MORRISON BROTHERS COMPANY	Dubuque	IA
NON-FERROUS CAST ALLOYS	Muskegon	MI
NON-FERROUS CASTING COMPANY	Dayton	OH
O'FALLON CASTING, LLC	O'Fallon	MO
P & W FOUNDRY INC.	Plano	IL
PALMER FOUNDRY	Palmer	MA
PEERLESS FOUNDRY, LLC	Bridgeport	CT
PENTZ DESIGN PATTERN & FOUNDRY	Duvall	WA
PHILLIPS PATTERNS & CASTINGS INC	Muncie	IN
PORT TOWNSEND FOUNDRY LLC	Port Townsend	WA
PRECISE CAST PROTOTYPES	Commerce City	CO
PRECISION CASTINGS INC.	WINFIELD	MO
PRECISION CASTINGS OF TENNESSEE	Gallatin	TN
PRECISION ENTERPRISES, INC.	Warrenville	IL
PROTO CAST, INC.	Denver	CO
RICHMOND INDUSTRIES	Dayton	NJ
RIMER ENTERPRISES, INC.	Waterville	OH
RLM INDUSTRIES, INC.	Oxford	MI
ROSS ALUMINUM CASTINGS, LLC	Sidney	OH

SANDWICH CASTING & MACHINE	Sandwich	IL
SEYEKCUB ALUMINUM, INC.	Uhrichsville	OH
SOLIDIFORM INC.	Fort Worth	TX
SOUTHLAND MACHINE & MOLD COMPANY	Carrollton	GA
ST PAUL BRASS & ALUMINUM FOUNDRY	Saint Paul	MN
STALLION FOUNDRY	Gallatin	TN
STANDARD MANUFACTURERS SERVICES LTD.	Winnipeg	MB
STATE BRASS FOUNDRY & MACHINE	Salt Lake City	UT
TAMPA BRASS & ALUMINUM	Tampa	FL
TECHNI-CAST CORPORATION	Southgate	CA
TECHNIKON, LLC.	Sacramento	CA
TENNESSEE INVESTMENT CASTING COMPANY	Bristol	TN
THOMPSON ALUMINUM CASTING CO	Cuyahoga Heights	OH
TPI ARCADE	Arcade	NY
TRAVIS PATTERN & FOUNDRY INC	Spokane	WA
TWIN CITY HOLLAND INDUSTRIES	Davenport	IA
US CASTINGS, LLC	Entiat	WA
W.L. INVESTMENT CASTINGS, INC.	Louisville	KY
WATERFORD ALUMINUM CO., INC.	Waterford	WI
WEST COAST CASTINGS	Bradenton	FL
WEST PHILADELPHIA BRONZE CO	Chester	PA
WESTERN BRONZE, INC.	West Springfield	MA
WINONA PATTERN & MOLD	Winona	MN
YANKEE CASTING CO INC	ENFIELD	CT