

# Mineral Industry Surveys

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## MAGNESIUM IN THE FOURTH QUARTER 2019

Total magnesium imports for consumption in the fourth quarter of 2019 were 36% more than imports in the third quarter of 2019, 44% more than those in the fourth quarter of 2018, and 59% more than those in the fourth quarter of 2017.

Compared with those in the third quarter of 2019, imports of alloys and scrap increased by 48% and 72%, respectively, but imports of semifabricated products decreased by 22%, and metal imports were essentially unchanged. In the fourth quarter of 2019, magnesium metal accounted for 15% of the imports, with Russia (56%), Israel (13%), and Canada (10%) being the leading sources (fig. 1). Scrap accounted for 64% of the imports in the fourth quarter of 2019, with Canada (46%), China (14%), and Mexico (13%) as the leading sources. Alloys accounted for 17% of the imports, with Taiwan (36%) and Germany (22%) as the leading sources. For the full year, total magnesium imports increased by 20% compared with those in 2018; imports of alloys and scrap increased by 13% and 45%, respectively, but imports of metal decreased by 12% and imports of semifabricated products decreased slightly compared with those in 2018 (table 1).

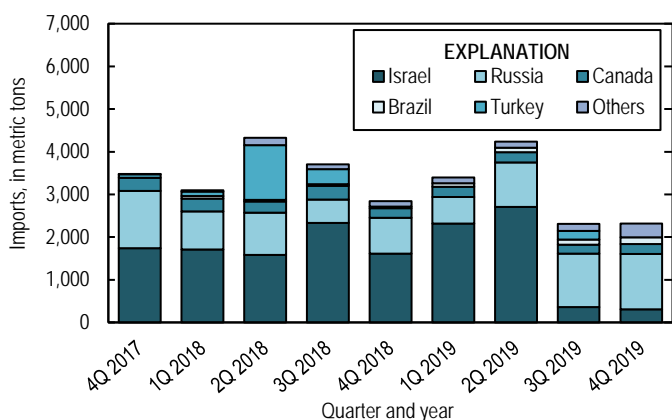


Figure 1. Quarterly imports of magnesium metal from the fourth quarter of 2017 through the fourth quarter of 2019. Source: U.S. Census Bureau.

Total U.S. magnesium exports in the fourth quarter of 2019 were 28% more than exports in the third quarter of 2019 but 20% less than those in the fourth quarter of 2018. Canada (51%), Mexico (20%), and Brazil (11%) were the principal export destinations in the fourth quarter of 2019.

Exports of metal, alloys, and scrap increased by 20%, 63%, and 159%, respectively, compared with exports in the third quarter of 2019 but exports of semifabricated products decreased by 16% compared with those in the third quarter of 2019. For the full year, total magnesium exports decreased by 14% compared with those in 2018; exports of metal and alloys decreased by 25% and 32%, respectively, but exports of semifabricated products and scrap increased by 61% and 20%, respectively, compared with those in 2018 (table 1).

The U.S. spot Western average price for magnesium metal increased by 9% in the fourth quarter of 2019. The average U.S. spot dealer price for imported magnesium metal increased by 12% during the fourth quarter of 2019. In Europe, the price decreased by 5% during the quarter (table 2).

## Update

In China, many magnesium producers decreased production in January and February 2020 in response to the Coronavirus Disease 2019 (COVID-19) pandemic and heavy snow in the northwest part of the country. Workers returning from the spring festival holiday were required to quarantine for 14 days after traveling, decreasing labor availability at smelters. Road closures in response to COVID-19 were cited for shortages of raw materials at some magnesium smelters. In early March, some smelters restarted production. Despite the decreased production, many producers and traders had sufficient stocks to meet demand, minimizing shortages (Leung, 2020).

Alliance Magnesium Inc. secured additional funding for a magnesium smelter in Asbestos, Quebec, Canada, and planned to start construction by mid-year 2020. The first phase of the smelter would produce secondary magnesium from scrap and was scheduled to be completed in about one year. Once the secondary smelter is completed, Alliance Magnesium planned to start construction on a primary magnesium smelter that would

produce magnesium from tailings from an asbestos mine adjacent to the smelter. Construction of the primary smelter was expected to take one additional year. The smelter would have 18,000 metric tons per year of total capacity when completed (Alliance Magnesium Inc., 2020).

### References Cited

Alliance Magnesium Inc., 2020, Alliance Magnesium completes near to \$145 million in funding for its commercial demonstration phase: Danville, Quebec, Canada, Alliance Magnesium Inc. press release, March 13. (Accessed June 1, 2020, at

<http://alliancemagnesium.com/alliance-magnesium-completes-near-to-145-million-in-funding-for-its-commercial-demonstration-phase/>.)  
Leung, Joshua, 2020, Snow, coronavirus squeeze spot magnesium supply in China—CNIA: Platts Metals Daily, v. 9, no. 43, March 2, p. 1, 4.

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TABLE 1  
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM<sup>1</sup>

(Metric tons)

	2019					
	2018	January– September	October	November	December	January– December
<b>Imports for consumption:</b>						
Metal	14,000	9,950	646	809	866	12,300
Waste and scrap	22,200	22,100	3,750	3,130	3,140	32,100
Alloys (magnesium content)	7,210	5,560 <sup>r</sup>	672	477	1,480	8,180
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	3,230	2,470 <sup>r</sup>	280	208	222	3,180
Total	46,600	40,100 <sup>r</sup>	5,350	4,630	5,700	55,700
<b>Exports:</b>						
Metal	2,430 <sup>r</sup>	1,320 <sup>r</sup>	156	147	206	1,830
Waste and scrap	824 <sup>r</sup>	682 <sup>r</sup>	86	85	134	986
Alloys (gross weight)	8,300 <sup>r</sup>	4,010 <sup>r</sup>	836	524	248	5,620
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,070 <sup>r</sup>	2,430 <sup>r</sup>	463	190	242	3,330
Total	13,600 <sup>r</sup>	8,450 <sup>r</sup>	1,540	946	830	11,800

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 2  
MAGNESIUM PRICES, FOURTH QUARTER 2019

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	2.25–2.45	2.45–2.65
U.S. spot Western	do.	2.40–2.60	2.70–2.90
China	dollars per metric ton	NA	NA
European free market	do.	2,230–2,260	2,100–2,175

do. Ditto. NA Not available.

Source: Platts Metals Week.