

Mineral Industry Surveys

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MAGNESIUM METAL IN THE SECOND QUARTER 2021

Total magnesium metal imports for consumption in the second quarter of 2021 were 11,500 metric tons (t), 20% less than imports in the first quarter of 2021, slightly less than those in the second quarter of 2020, and 21% less than those in the second quarter of 2019 (table 1).

Compared with those in the first quarter of 2021, imports of alloys and semifabricated products increased by 8% and 57%, respectively, but imports of metal and scrap decreased by 34% and 33%, respectively. In the second quarter of 2021, magnesium metal accounted for 26% of the imports, with Turkey (47%), Russia (30%), and Israel (9%) being the leading sources (fig. 1). Scrap accounted for 34% of the imports in the second quarter of 2021, with Canada (35%), Mexico (27%), and China (10%), as the leading sources. Alloys accounted for 31% of the imports, with Taiwan (26%), Czechia (20%), Israel (15%), and Germany (10%) as the leading sources (table 1).

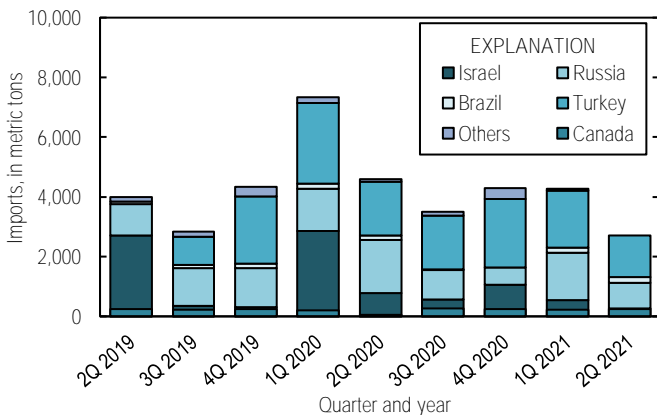


Figure 1. Quarterly imports of magnesium metal from the second quarter of 2019 through the second quarter of 2021. Source: U.S. Census Bureau.

Total magnesium metal exports in the second quarter of 2021 were 12% more than exports in the first quarter of 2021, 4% less than those in the second quarter of 2020, but 3% more than those in the second quarter of 2019. Exports of metal and semifabricated products increased by 162% and 104%,

respectively, compared with exports in the first quarter of 2021. These increased exports were partially offset by decreased exports of alloys and scrap, which declined by 89% and 9%, respectively (table 1). Canada (48%), Mexico (17%), the Republic of Korea (11%) and Serbia (9%) were the leading export destinations in the second quarter of 2021. Canada received 94% of metal, 95% of alloy, 12% of semifabricated product, and 40% of scrap exports. The Republic of Korea and Mexico received 25% and 39% of semifabricated product exports. Serbia and Czechia received 38% and 7%, respectively, of scrap exports.

The U.S. spot Western average price for magnesium decreased by 5% in the second quarter of 2021. The average U.S. spot dealer price for imported magnesium decreased slightly during the second quarter of 2021. In Europe, the average price was 36% more at the end of the quarter compared with that of the beginning of the quarter (table 2).

Update

Spot magnesium prices in 2021 have generally trended upward in China and Europe since March although spot import prices in the United States did not start to increase until May. The price range in Europe at the end of March was \$2,600 per metric ton to \$2,700 per metric ton. At the end of June the price range in Europe increased to \$3,500 per metric ton to \$3,700 per metric ton, and by the end of August price ranged between \$4,100 per metric ton and \$4,500 per metric ton. Rising prices for ferrosilicon (an important raw material in the Pidgeon process) and coal used for power in China were cited for increasing magnesium prices. Environmental regulations in China were cited for decreased coal and ferrosilicon production and increased prices for the raw materials starting in April, and strong demand for coal by powerplants in the summer months caused prices to continue to rise. Strong demand for magnesium by aluminum smelters and diecasters was also cited for tight supplies, contributing to price increases in the early part of the second quarter of the year. China supplies most of the primary magnesium consumed in Europe. Constrained shipping and high freight rates, especially in the wake of a blockage of the Suez

Canal in March, were also cited for increasing magnesium prices. Stockpiling by speculators was also blamed for supply shortages and increased prices. The decrease in spot prices in the United States for magnesium imports in the second quarter was attributed to abundant supplies of secondary magnesium favored by secondary aluminum producers. But the average spot price for imported magnesium in the United States increased from \$2.06 per pound at the end of June to \$2.18 at the end of August. Increased spot purchases in the United States were attributed to contracted deliveries being exhausted with strong demand from aluminum smelters and diecasters (Liu, 2021; McBeth, 2021a, b, c).

Reference Cited

Liu, Ruby, 2021, China's Mg price surges on output costs, supply shortage: Fastmarkets-AMM, v. 129, no. 35-2, August 31, p. 8.

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TABLE 1
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM¹

(Metric tons)

	2021				
	2020	April	May	June	January– June
Imports for consumption:					
Metal	20,400 ^r	1,190	936	825	7,440
Waste and scrap	23,800	1,490	1,000	1,450	9,820
Alloys (magnesium content)	16,200	1,190	1,170	1,210	6,890
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	3,390	484	218	373	1,760
Total	63,800	4,360	3,320	3,870	25,900
Exports:					
Metal	7,250	109	87	424	857
Waste and scrap	2,300	121	180	136	918
Alloys (gross weight)	2,950 ^r	--	21	48	682
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,370	221	251	323	1,180
Total	14,900	451	539	930	3,640

^rRevised. -- Zero.

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

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 2
MAGNESIUM PRICES, SECOND QUARTER 2021

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	2.02–2.12	2.02–2.10
U.S. spot Western	do.	2.30–2.35	2.10–2.30
European free market	dollar per metric ton	2,600–2,700	3,500–3,700
do. Ditto.			

Source: S&P Global Platts Metals Week.