

# Mineral Industry Surveys

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## MAGNESIUM METAL IN THE THIRD QUARTER 2021

Total magnesium metal imports for consumption in the third quarter of 2021 were 11,900 metric tons (t), 3% more than imports in the second quarter of 2021, 11% less than those in the third quarter of 2020, but slightly more than those in the third quarter of 2019 (table 1).

Compared with those in the second quarter of 2021, imports of scrap increased by 14% and imports of alloys increased by 3%, but imports of metal and semifabricated products decreased by 7% and 6%, respectively. In the third quarter of 2021, magnesium metal accounted for 23% of the imports, with Russia (57%), Israel (15%), and Turkey (13%) being the leading sources (fig. 1). Scrap accounted for 38% of the imports in the third quarter of 2021, with Canada (46%), Mexico (22%), and India (11%), as the leading sources. Alloys accounted for 31% of the imports, with Czechia (37%), Israel (17%), Hungary (14%), and Taiwan (11%) as the leading sources (table 1).

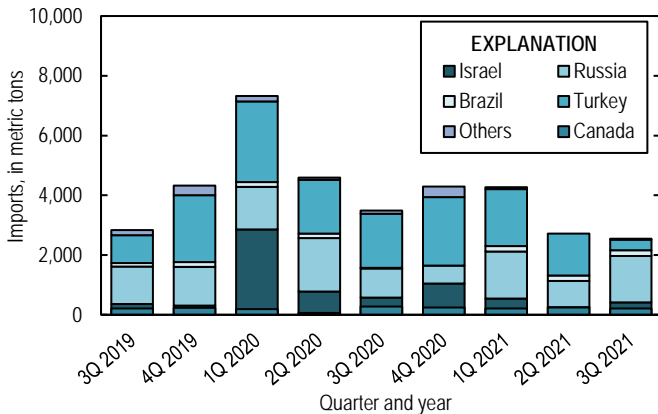


Figure 1. Quarterly imports of magnesium metal from the third quarter of 2019 through the third quarter of 2021. Source: U.S. Census Bureau.

Total magnesium metal exports in the third quarter of 2021 were 6% less than exports in the second quarter of 2021, 55% less than those in the third quarter of 2020, and 19% less than those in the third quarter of 2019. Exports of alloys increased by 677%, compared with exports in the second quarter of 2021.

This increase was offset by decreased exports of metal, semifabricated products, and scrap, which declined by 28%, 31%, and 35%, respectively (table 1). Canada (71%), Mexico (14%), and Czechia (6%) were the leading export destinations in the third quarter of 2021. Canada received 99% of metal, 94% of alloys, 17% of semifabricated product, and 53% of scrap exports. The Mexico received 52% of semifabricated product exports. Czechia received 44% of scrap exports.

The U.S. spot dealer average price for magnesium increased by 149% in the third quarter of 2021. The average U.S. spot Western price for imported magnesium increased by 133% during the third quarter of 2021. In Europe, the average price was 199% more at the end of the quarter compared with that of the beginning of the quarter (table 2).

**Update**

On September 29, US Magnesium LLC declared force majeure and notified customers with contracts that deliveries would be adjusted, citing an equipment failure at its smelter in Rowley, UT. US Magnesium did not announce how much of the 63,500-metric-ton-per-year smelter’s capacity was affected by the issue or provide details on how long it would take to complete repairs and restore production. Repairs were still underway in early November. Decreased production by US Magnesium was cited for increased prices for spot delivery of imported magnesium in the United States in October and November, although the volume of spot purchases was limited. In mid-September, the spot import price range was \$3.25 to \$4.25 per pound, but within a few days the price range increased to \$4.50 to \$5.75 per pound. In early October the spot import price range was \$6.50 to \$8.00 per pound, and by early November the range peaked at \$6.75 to \$8.50 per pound. By late November the spot import price range decreased to \$6.00 to \$7.00 per pound. The shortage of magnesium caused concerns at aluminum smelters and diecasters in the United States but disruptions at most consumers in October and November were minimal as they had enough inventory for the short term. Most major consumers reported that they have enough magnesium until at least yearend (McBeth, 2021a, b, d, e).

Magnesium prices in China and Europe hit all-time highs in September after several producers in China were ordered to shut down production temporarily to comply with energy consumption and pollution regulations. Several producers in Shaanxi Province were ordered to shut down all production and others were ordered to decrease production by 50% in mid-September. Within a week of the shutdown announcements, the price range in Europe was \$6,500 to \$7,500 per ton compared with the prior week's range of \$5,350 to \$5,600 per ton. By mid-October the price range in Europe peaked at \$12,500 to \$15,500 per ton before declining at the end of October to a range of \$7,100 to \$8,900 per ton. By mid-November the price range in Europe was \$6,000 to \$8,000 per ton (McBeth, 2021a, b, c, e).

On November 16, the U.S. International Trade Commission completed the third five-year sunset review of antidumping duties on magnesium alloy produced in China. The review concluded that magnesium producers in the United States would be harmed by imports of magnesium alloy from China. The antidumping duty ranging from 49.66% to 141.49% first imposed in April 2005 remained in place (Coyne, 2021; U.S. International Trade Commission, 2021).

## References Cited

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

(Metric tons)

	2020	2021			
		July	August	September	January– September
<b>Imports for consumption:</b>					
Metal	20,400	715	1,100	937	10,200
Waste and scrap	23,800	1,700	1,390	1,410	14,300
Alloys (magnesium content)	16,200	1,610	1,360	697	10,600
Sheet, tubing, ribbons, wire, powder, and other (magnesium content)	3,390	402	288	325	2,770
<b>Total</b>	<b>63,800</b>	<b>4,430</b>	<b>4,140</b>	<b>3,370</b>	<b>37,900</b>
<b>Exports:</b>					
Metal	7,250	384	58	6	1,300
Waste and scrap	2,300	40	118	128	1,200
Alloys (gross weight)	2,950	208	165	163	1,220
Sheet, tubing, ribbons, wire, powder, and other (gross weight)	2,370	359	117	69	1,730
<b>Total</b>	<b>14,900</b>	<b>991</b>	<b>457</b>	<b>365</b>	<b>5,450</b>

<sup>1</sup>Data 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, THIRD QUARTER 2021

		Beginning of quarter	End of quarter
U.S. spot dealer import	dollars per pound	2.02–2.10	4.50–5.75
U.S. spot Western	do.	2.10–2.30	4.50–5.75
European free market	dollar per metric ton	3,500–3,700	10,000–11,500
do. Ditto.			

Source: S&P Global Platts Metals Week.