COBALT

(Data in metric tons, cobalt content, unless otherwise specified)

Domestic Production and Use: In 2025, the Eagle Mine, a nickel-copper mine in Michigan, produced cobalt-bearing nickel concentrate, which was exported to Canada or overseas for processing. Most U.S. cobalt supply consisted of imports and secondary (scrap) materials. About five companies in the United States produced cobalt chemicals. An estimated 51% of cobalt consumed in the United States was used in superalloys, mainly for aircraft gas turbine engines; 25% in a variety of chemical applications; 15% in various other metallic applications; and 9% in cemented carbides for cutting and wear-resistant applications. The total estimated value of cobalt consumed in 2025 was $320 million.

Salient Statistics—United States:	2021	2022	2023	2024	2025[e]
Production:[e]					
Mine	650	500	500	200	300
Secondary[1]	1,800	1,920	2,030	2,050	2,000
Imports for consumption	9,790	10,500	9,500	10,800	14,000
Exports	4,930	5,360	5,110	4,880	4,500
Consumption (includes secondary):					
Estimated[2]	7,270	7,570	7,840	7,830	8,000
Apparent[e, 3]	6,650	7,150	6,440	7,960	9,600
Price, average, dollars per pound:					
U.S. spot, cathode[4]	24.21	30.78	17.20	16.77	21
London Metal Exchange (LME), cash	23.17	28.83	15.48	11.84	15
Stocks, yearend:					
Industry[e, 2, 5]	1,010	946	925	956	1,500
LME, U.S. warehouse	50	34	34	34	34
Net import reliance[6] as a percentage of apparent consumption	73	73	69	74	79

Recycling: In 2025, cobalt content of purchased scrap represented 25% of estimated cobalt consumption.

Import Sources (2021–24): Metal, oxide, and salts: Norway, 26%; Finland, 16%; Canada, 14%; Japan, 14%; and other, 30%.

Tariff: Item	Number	Normal Trade Relations 12–31–25
Cobalt ores and concentrates	2605.00.0000	Free.
Chemical compounds:		
Cobalt oxides and hydroxides; cobalt oxide	2822.00.0010	0.1% ad valorem.
Cobalt oxides and hydroxides; other	2822.00.0090	0.1% ad valorem.
Cobalt sulfates	2833.29.1000	1.4% ad valorem.
Cobalt carbonates	2836.99.1000	4.2% ad valorem.
Cobalt acetates	2915.29.3000	4.2% ad valorem.
Unwrought cobalt, alloys	8105.20.3000	4.4% ad valorem.
Unwrought cobalt, other	8105.20.6000	Free.
Cobalt mattes and other intermediate products; cobalt powders	8105.20.9000	Free.
Cobalt waste and scrap	8105.30.0000	Free.
Wrought cobalt and cobalt articles	8105.90.0000	3.7% ad valorem.

Depletion Allowance: 22% (domestic), 14% (foreign).

Government Stockpile:[7]

	FY 2025		FY 2026	
Material	Potential acquisitions	Potential disposals	Potential acquisitions	Potential disposals
Cobalt alloys, gross weight[8]	60	—	NA	NA

Prepared by **Samantha M. Ewing [(703) 648–6183, sewing@usgs.gov]**

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Events, Trends, and Issues: Congo (Kinshasa) was the world's leading source of mined cobalt and accounted for an estimated 73% of world total, followed by Indonesia, which accounted for 14%. In February, Congo (Kinshasa) temporarily banned cobalt exports to address market oversupply and low prices. In October, the temporary ban was replaced with export quotas of 18,125 tons of contained cobalt for the remainder of 2025, and up to 96,600 tons contained cobalt per year in 2026 and 2027, inclusive of 9,600 tons for national strategic reserves. Uncertainty in supply availability following the announcement of the Congo (Kinshasa) export ban likely contributed to the sharp increase in estimated United States imports and industry stocks during the year. China remained the world leading producer of refined cobalt and the world leading consumer, primarily for the lithium-ion battery industry. In 2025, the United States published a solicitation to procure 7,480 tons of cobalt over a period of 5 years for the National Defense Stockpile. The solicitation was cancelled before the end of the year.

World Mine Production and Reserves: Significant revisions were made to the 2024 production for Australia, Canada, and Indonesia based on company and Government reports. Reserves for Indonesia, Papua New Guinea, Russia, and "Other countries" were revised based on company and Government reports.

	Mine production[e]		Reserves[9]
	2024	2025	
United States	200	300	70,000
Australia	4,780	3,700	[10]1,700,000
Canada	3,350	3,500	220,000
China	2,000	2,000	160,000
Congo (Kinshasa)	226,000	230,000	6,000,000
Cuba	3,450	2,000	500,000
Indonesia	35,000	44,000	760,000
Madagascar	3,100	3,900	100,000
Papua New Guinea	2,630	2,800	84,000
Philippines	3,100	3,700	260,000
Russia	8,000	7,700	[11]800,000
Turkey	2,200	1,900	91,000
Other countries	7,780	9,100	780,000
World total (rounded)	302,000	310,000	12,000,000

World Resources:[9] Identified cobalt resources of the United States are estimated to be about 1 million tons. Most of these resources are in Minnesota. Other notable occurrences are in Alaska, California, Idaho, Michigan, Missouri, Montana, Oregon, and Pennsylvania. Identified world terrestrial cobalt resources are about 25 million tons, the vast majority of which are in sediment-hosted stratiform copper deposits in Congo (Kinshasa) and Zambia; nickel-bearing laterite deposits in Australia and nearby island countries and Cuba; and magmatic nickel-copper sulfide deposits of mafic and ultramafic rocks in Australia, Canada, Russia, and the United States. An estimated 5 billion tons of cobalt is contained globally in sea floor polymetallic nodules.

Substitutes: Depending on the application, substitution for cobalt could result in a loss in product performance or increased cost. The cobalt content of lithium-ion batteries, the leading global use for cobalt, was being decreased; cobalt-free substitutes that use iron and phosphorus held significant market share in China. Potential substitutes in other applications include barium or strontium ferrites, neodymium-iron-boron alloys, or nickel-iron alloys in magnets; cerium, iron, lead, manganese, or vanadium in paints; cobalt-iron-copper or iron-copper in diamond tools; copper-iron-manganese for curing unsaturated polyester resins; iron, iron-cobalt-nickel, nickel, ceramic-metallic composites (cermets), or ceramics in cutting and wear-resistant materials; nickel-base alloys or ceramics in jet engines; nickel in petroleum catalysts; rhodium in hydroformylation catalysts; and titanium-base alloys in prosthetics.

[e]Estimated. NA Not available. — Zero.

[1]Estimated from consumption of purchased scrap.

[2]Includes reported data and U.S. Geological Survey estimates.

[3]Defined for 2021–22 as secondary production + imports – exports ± adjustments for Government and industry stock changes for refined cobalt. Beginning in 2023, Government stock changes no longer included.

[4]Source: S&P Global Platts Metals Week. Cobalt cathode is refined cobalt metal produced by an electrolytic process.

[5]Stocks held by consumers and processors; excludes stocks held by trading companies and held for investment purposes.

[6]Defined for 2021–22 as imports – exports ± adjustments for Government and industry stock changes for refined cobalt. Beginning in 2023, Government stock changes no longer included.

[7]See Appendix B for definitions. For fiscal year 2026, the Annual Materials Plan was not released.

[8]Samarium-cobalt alloy; excludes potential disposals of aerospace alloys.

[9]See Appendix C for resource and reserve definitions and information concerning data sources.

[10]For Australia, Joint Ore Reserves Committee-compliant or equivalent reserves were 680,000 tons.

[11]Data from the Russia Ministry of Natural Resources.