TIN

(Data in metric tons of tin content unless otherwise noted)

Domestic Production and Use: Tin has not been mined or smelted in the United States since 1993 and 1989, respectively. Twenty-five firms used about 81% of the primary tin consumed domestically in 2006. The major uses were as follows: cans and containers, 27%; electrical, 23%; construction, 10%; transportation, 10%; and other, 30%. On the basis of the average New York composite price, the estimated values of some critical items were as follows: primary metal consumed, $397 million; imports for consumption, refined tin, $496 million; and secondary production (old scrap), $138 million. Estimated secondary (old scrap) tonnage for 2005 and 2006 (see below) show significant increases for those 2 years owing to more complete coverage of the secondary tin industry; the years 2005 and 2006 are more reflective of the actual tonnage.

Salient Statistics—United States:	2002	2003	2004	2005	2006[e]
Production:					
Secondary (old scrap)	6,760	5,500	5,240	11,800	12,000
Secondary (new scrap)	3,790	3,570	3,590	2,280	3,000
Imports for consumption, refined tin	42,200	37,100	47,600	37,500	43,300
Exports, refined tin	2,940	3,690	3,650	4,330	5,500
Shipments from Government stockpile excesses	8,960	8,880	10,600	8,368	9,000
Consumption, reported:					
Primary	34,000	32,900	36,700	32,200	34,600
Secondary	5,830	4,510	7,990	9,170	10,000
Consumption, apparent	55,700	48,700	58,770	54,730	58,100
Price, average, cents per pound:					
New York market	195	232	409	360	415
New York composite	292	340	547	483	520
London	184	222	385	334	362
Kuala Lumpur	184	222	385	333	363
Stocks, consumer and dealer, yearend	8,930	7,960	8,975	8,270	9,000
Net import reliance[1] as a percentage of apparent consumption	88	89	92	78	79

Recycling: About 15,000 tons of tin from old and new scrap was recycled in 2006. Of this, about 12,000 tons was recovered from old scrap at 2 detinning plants and 91 secondary nonferrous metal processing plants.

Import Sources (2002-05): Peru, 47%; Bolivia, 14%; China, 13%; Indonesia, 10%; and other, 16%.

Tariff: Most major imports of tin, including unwrought metal, waste and scrap, and unwrought tin alloys, enter the United States duty free.

Depletion Allowance: 22% (Domestic), 14% (Foreign).

Government Stockpile: The Defense National Stockpile Center (DNSC) continued its tin sales program by offering material for sale under the Negotiated format (long-term sales) and the Basic Ordering Agreement (BOA) format (spot market sales). The DNSC Annual Materials Plan for tin sales for fiscal year 2007 (October 1, 2006, through September 30, 2007) remained at 12,000 tons, although current inventory levels are approximately 8,900 tons. DNSC plans one long-term negotiated "contract" sale for fiscal year 2007 and weekly offerings under the DNSC BOA. Under the BOA approach, DNSC posts the amount of tin that it wants to sell on its Web site every Tuesday. Interested parties submit a quote, and DNSC makes a sales determination by the end of the business day. In fiscal year 2006, DNSC sold 8,000 tons under negotiated and 368 tons under BOA. Tin is held in Federal depots at two locations: Hammond, IN; and New Haven, IN.

Stockpile Status—9-30-06[2]

Material	Uncommitted inventory	Committed inventory	Authorized for disposal	Disposal plan FY 2006	Disposals FY 2006
Pig tin	8,932	—	8,932	12,000	8,368

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TIN

Events, Trends, and Issues: Apparent consumption of tin in the United States increased an estimated 6% in 2006 compared with that of 2005. The average monthly dealer price of tin rose steadily during the first 5 months of 2006, rising from $3.40 per pound in January to $4.21 per pound in May. The price declined to $3.81 per pound in June, and rose to $4.01 per pound in July. These represented generally higher prices than prevailed in 2005.

Developments accelerated in major tin-consuming countries in moving to new lead-free solders that usually contain greater amounts of tin than do leaded solders.

Tin producers responded to the higher tin prices and strong demand of the past several years with tin mine and tin smelter openings and expansions. Several closed or partially disabled tin mines were reopened. A large tin smelter started production in Singapore. China continued to be the leading tin producer, from both mines and smelters.

The world tinplate industry continued to experience major mergers and consolidations. The dominant one resulted in the combination of two of the world's largest steel producers and tinplate manufacturers. The Steel Recycling Institute announced that the steel can (usually tinplated) recycling rate in the United States was 63% for 2005, compared with 62% in 2004. Tin, as well as steel, is recovered in can recycling.

Two leading tin information organizations, ITRI Ltd. and CRU International Ltd., both based in the United Kingdom, jointly released new data regarding world tin consumption. Solder and tinplate have long been considered the "big two" applications for tin, but their new data indicate that the global solder market is now more than twice the size of the tinplate market.

World Mine Production, Reserves, and Reserve Base: Reserve estimates for the United States were revised to zero because there has been no reported mine production of tin in the United States since 1993.

	Mine production		Reserves[3]	Reserve base[3]
	2005	2006[e]		
United States	—	—	—	40,000
Australia	2,800	2,000	150,000	300,000
Bolivia	18,700	18,400	450,000	900,000
Brazil	12,500	11,800	540,000	2,500,000
China	120,000	100,000	1,700,000	3,500,000
Congo (Kinshasa)	80	2,100	NA	NA
Indonesia	80,000	85,000	800,000	900,000
Malaysia	3,000	3,100	1,000,000	1,200,000
Peru	42,100	42,200	710,000	1,000,000
Portugal	200	100	70,000	80,000
Russia	3,000	3,400	300,000	350,000
Thailand	600	250	170,000	200,000
Vietnam	3,500	1,000	NA	NA
Other countries	4,000	4,000	180,000	200,000
World total (rounded)	290,000	273,000	6,100,000	11,000,000

World Resources: U.S. resources of tin, primarily in Alaska, were insignificant compared with those of the rest of the world. World resources, principally in western Africa, southeastern Asia, Australia, Bolivia, Brazil, China, and Russia, are sufficient to sustain recent annual production rates well into the future.

Substitutes: Aluminum, glass, paper, plastic, or tin-free steel substitute for tin in cans and containers. Other materials that substitute for tin are epoxy resins for solder; aluminum alloys, copper-base alloys, and plastics for bronze; plastics for bearing metals that contain tin; and compounds of lead and sodium for some tin chemicals.

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

[1]Defined as imports - exports + adjustments for Government and industry stock changes.

[2]See Appendix B for definitions.

[3]See Appendix C for definitions.