COPPER IN 1961

REVIEW BASED ON PRELIMINARY STATISTICS

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A preliminary estimate of recoverable copper production from U. S. mines in 1961 (1,158,844 tors) was up only about 7 percent from the final figures of the 1960 production (1,080,169 tons). The U. S. Bureau of Mines estimated the 1961 production to be 1,159,000 tons while the Copper Institute's estimate was 1,181,000 tons. The latter estimate was up less than 4 percent from the Institute's estimate of the 1960 production (1,140,000 tons).

Based on an estimated annual capacity of 1,350,000 tons of recoverable copper in 1961, the estimated mine production was about 85.8 percent of capacity. Curtailment in the first six months, summer vacations in June and July, strikes at Utah Copper and the Inspiration Mine, all accounted for less than capacity production during the year.

Domestic producers' price for copper began the year 1961 at 30 cents, which price had prevailed since October 12, 1960. On January 17, 1961 the primary producers' price was lowered to 29 cents. Shortly after the price of copper dropped, producers here and abroad announced production curtailments. Copper Range Company stated that the White Pine mine, Michigan, was operating at 80 percent capacity; and operations at the Champion mine would be suspended entirely on February 1. On January 18, the Anaconda Company announced a 10-percent cut at its mines in the United States and Chile. Kennecott announced it would begin a 13-percent reduction at its domestic mines, effective February 1. Inspiration announced a cutback of 10 percent in its output. Phelps Dodge had already begun to curtail in 1960.

Primary copper producers advanced the price to 30 cents on May 2 and 3, and to 31 cents after mid-May. The producers' price remained at 31 cents for the remainder of the year. Vacations in June and July were responsible for reduced copper production in these months. Chief reason for the drop in August was the 83-percent cut in output in Utah where Kennecott properties were closed by strike on August 18 and did not reopen until September 11. On August 10, all U. S. owned Chilean properties were closed down for 3 weeks. The Inspiration strike started on September 27 and the mine was re-opened on October 19. The Mount Isa mine at Queensland, Australia was struck on September 25, and remained down for 8 weeks.

Offsetting the domestic strikes was the completion of the Mission project, near Tucson, Arizona, where production began in August at an annual rate of 45,000 tons of copper. As a result, both Arizona and the United States topped all previous records in copper production. Arizona alone accounted for 50.7 percent of the estimated U. S. production, or more than all other states combined. The U. S. Bureau of Mines' preliminary estimate of copper production for the five leading States was: 1. Arizona with 587,500 tons; 2. Utah with 211,110 tons; 3. Nevada with 117,800 tons; 4. Montana with 103,840 tons; and 5. New Mexico with 78,340 tons.

Free World production outside the U.S.A. is estimated at 2,584,000 tons in 1961, as compared with 2,626,000 tons in 1960. Copper production in Communist controlled countries is not known but it is believed to have been at least 600,000 tons which was the figure used for 1960. The total World mine production is therefore estimated at 4,343,000 tons, practically the same as for 1960.

The Free World mine production of 3,743,000 tons amounts to about 86 percent of an estimated Free World capacity of 4,350,000 tons.

The U. S. Bureau of Mines reported producers' refined copper stocks at the beginning of the year at 98,000 tons, and at the end of the year, at 49,000 tons. The Copper Institute, which differs from the Bureau's figures by including refined

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copper in process, reported 139,272 tons in the hands of producers at the beginning of the year, and 79,755 tons at the end of the year.

United States refined copper production in 1961 was reported by the U. S. Bureau of Mines at 1,177,000 tons of domestic copper and 370,000 tons of foreign copper, or a total of 1,547,000 tons. This includes an estimated 283,000 tons of secondary unalloyed copper. The Copper Institute reported a total refined production of 1,679,362 tons, which includes 1,180,687 tons of U. S. mine production, 135,335 tons of secondary, and 363,340 tons of foreign copper.

According to the U. S. Bureau of the Census, U. S. imports of copper in 1961 amounted to 47,392 tons in ore, matte and regulus, 340,212 tons of blister, and 66,856 tons of refined, total 454,460 tons; as compared with 80,536 tons in ore, matte and regulus, 296,160 tons of blister, and 142,706 tons of refined, total 519,402 tons in 1960. Copper exports in 1961 amounted to 4,478 tons of copper in ore, concentrates and matte, and 432,253 tons of refined ingots, bars, etc.,total 436,731 tons; as compared with 11,111 tons of copper in ore, concentrates, and matte, and 433,762 tons of refined ingots, bars, etc., in 1960. The net excess of imports over exports in 1961 was 17,729 tons, as compared with 74,529 tons in 1960. The United States had excess of exports over imports in the last half of 1960 and the first half of 1961.

Apparent consumption of new refined copper in the United States in 1961 was estimated by the Bureau of Mines at approximately 1,234,000 tons, while the actual consumption was estimated at approximately 1,432,187 tons. These figures compare with an apparent consumption of 1,148,000 tons in 1960, and actual consumption of 1,341,000 tons for the same year.

OUTLOOK

The stability of copper prices during the last two or three years indicates the willingness of copper producers to curtail output in order to keep supplies

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and demand in reasonable balance. At the same time, the producers are maintaining large exploration staffs, discovering and developing new copper deposits all over the world. Their efforts are meeting with success, and the industry is now organized to take care of unusual demand for copper and avoid a runaway market like that in 1955 and 1956.

It is worthy of note that some of the large copper companies have already made wage agreements with their labor unions, covering the next three years, although their present agreements do not expire until June 30, 1962. Naturally, this action reduces the danger of inventory purchasing in preparation for possible strikes.

The Copper Products Development Association had a very successful year of Research in 1961. The Research has contributed materially in determining the value of copper as an alloy in gray iron castings. The Association expects copper to eventually capture from 30 to 50 percent of the 100,000-ton-a-year market in alloying elements used in manufacturing gray iron castings.

The E. & M.J. price for copper in 1961 averaged 29.920 cents per pound, while the foreign refinery price averaged 27.919 cents per pound.

Attached hereto is TABLE I, giving a summary of U.S. Copper Industry Preliminary Statistics for 1960 and 1961. TABLE I

SUMMARY OF U. S. COPPER INDUSTRY PRELIMINARY COPPER STATISTICS FOR 1961

COMPARED WITH STATISTICS FOR 1960

Unit: Short Tons Source: U. S. B. M.

Source: U. S. B.	Μ.	Prelim.
	1960	<u>1961</u>
Mine production of New Cu from U. S. ores	1,080,169	1,158,894
Ref. Prod. of New Cu from U. S. ores	1,121,286	1,181,015
Ref. Prod. of New Cu from Foreign ores	397,641	369,124
Total Ref. Prod. of New Copper	1,518,927	1,550,139
Imports of Refined Copper	142,706	66,855
Stock at beginning of year	18,000	98,000
Total Available Supply	1,679,633	1,714,994
Exports of Refined Copper	433,762	432,253
Refined Stocks at end of period	98,000	49,000
TOTAL	531,762	481,253
Withdrawn on Domestic Acct	1,147,874	1,234,000
Actual Consumption	1,349,896	1,432,187
Imports of Ores, Matte & Regulus (Copper Content)	80,536	47,000
Imports of Blister Copper	296,160	340,000
Imports of Refined Copper	142,706	67,000
Total Imports of Crude & Refined	519,402	454,000
Exports of Ores, Concts. & Matte (Copper content) .	11,111	4,500
Exports of Refined	433,762	432,000
Total Exports of Crude & Refined	444,873	436,500
Excess Imports of Crude & Refined	74,529	17,500
Copper Recovered as Unalloyed Copper	300,259	283,000

Arizona Department of Mineral Resources

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