

ARIZONA AND UNITED STATES COPPER STATISTICS  
1910 to 1951 Inclusive

Source: U.S.B.M. Minerals Yearbook

The accompanying tables show some pertinent data on copper ore sold or treated in Arizona and the United States from 1910 to 1951 inclusive. The early records are shown for every fifth year from 1910 to 1945, and later figures are given for each year from 1945 to 1951 inclusive.

The tables show how the tonnage of copper ore sold or treated in Arizona rose from 3,644,495 in 1910 to 42,791,111 in 1951, while at the same time the recoverable metal content decreased from 4.07% copper in 1910 to 0.91% copper in 1951. The value of the by-product gold and silver per ton of ore decreased from 59 cents to 13 cents.

The development of cheap methods of mining and concentrating low-grade copper ores was responsible for the introduction of mass-production into copper mining. Concentrating ores containing as little as 12 pounds of copper per ton have been profitably treated; and open-pit mining has been developed to the point of handling as much as fifty-thousand tons of ore per day in one Arizona property.

From 1945 to 1951 inclusive, concentrating ore constituted about 89.4% of the total ore produced and averaged 0.86% in recoverable copper. Leaching ore constituted 9.1% and averaged 0.88% in recoverable copper. Direct smelting ore constituted 1.5% and averaged 4.27% in recoverable copper.

Arizona Department of Mineral Resources

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COPPER ORE, OLD TAILINGS, ETC. SOLD OR TREATED IN ARIZONA AND THE UNITED STATES  
Every Fifth Year From 1910 to 1945  
By Years From 1945 to 1951 Inclusive

Source: U.S.B.M. Minerals Yearbook

Year	Ore, Old Tailings etc. Sold or Treated tons	Recoverable Metal Content				Value Gold & Silver per ton Ore	Avg. Price Copper cents per lb.
		COPPER	GOLD		SILVER		
		Pounds	Per Cent	Fine ozs.	Fine ozs.		
1910:							
Arizona	3,644,495	296,739,350	4.07	52,707	1,934,363	\$.59	12.7
Total U.S.	28,497,238	1,073,436,846	1.88	264,680	16,024,424	.49	12.7
1915:							
Arizona	9,045,224	454,194,850	2.51	87,707	4,010,510	.42	17.5
Total U.S.	43,404,182	1,453,912,379	1.66	344,012	18,781,509	.38	17.5
1920:							
Arizona	14,516,580	557,364,143	1.92	76,402	3,716,246	.39	18.4
Total U.S.	36,765,370	1,201,686,812	1.63	171,055	12,151,292	.46	18.4
1925:							
Arizona	20,628,410	709,098,985	1.72	153,277	5,789,869	.35	14.2
Total U.S.	53,103,014	1,634,869,668	1.54	347,114	17,924,228	.37	14.2
1930:							
Arizona	19,703,349	562,956,307	1.43	132,087	4,968,973	.24	13.0
Total U.S.	47,381,509	1,357,314,057	1.43	332,368	13,611,804	.26	13.0
1935:							
Arizona	6,011,755	274,609,892	2.28	112,784	4,545,944	1.24	8.3
Total U.S.	19,112,030	720,546,761	1.89	226,760	12,692,582	.93	8.3
1940:							
Arizona	20,284,826	525,163,470	1.29	128,720	4,463,702	.38	11.3
Total U.S.	69,278,476	1,663,432,484	1.20	537,358	20,787,406	.48	11.3
1945:							
Arizona	30,644,470	548,501,577*	.89	62,265	2,113,537	.12	13.5
Total U.S.	77,472,983	1,436,613,343*	.93	396,952	9,233,160	.26	13.5
1946:							
Arizona	30,386,149	555,943,336*	.91	61,347	1,764,558	.12	16.2
Total U.S.	62,232,342	1,133,739,347*	.91	284,372	5,679,932	.23	16.2
1947:							
Arizona	37,810,448	709,708,360*	.94	75,711	2,583,264	.13	21.0
Total U.S.	87,864,898	1,589,100,347*	.90	513,198	8,316,044	.29	21.0
1948:							
Arizona	39,072,204	725,032,855*	.93	84,301	2,814,833	.14	21.7
Total U.S.	84,729,043	1,556,367,739*	.92	489,869	7,997,147	.29	21.7
1949:							
Arizona	37,365,611	683,129,855*	.91	78,735	2,412,359	.13	19.7
Total U.S.	76,032,531	1,389,033,833*	.91	435,700	7,042,954	.28	19.7
1950:							
Arizona	41,757,273	765,358,274*	.92	79,567	2,853,599	.13	20.8
Total U.S.	94,585,792	1,691,778,098*	.89	583,205	8,389,913	.30	20.8
1951:							
Arizona	42,791,111	775,699,816*	.91	83,525	3,088,738	.13	24.2
Total U.S.	95,494,214	1,709,655,673*	.90	564,471	8,339,270	.29	24.2

\* Excludes copper recovered from precipitates. In Arizona this was for 1945: 20,193,515 lbs.; for 1946: 16,492,429 lbs.; for 1947: 15,392,462 lbs.; for 1948: 16,874,713 lbs.; for 1949: 19,923,626 lbs.; for 1950: 24,778,121 lbs.; for 1951: 34,172,315 lbs.



**ARIZONA COPPER CONCENTRATING AND SMELTING STATISTICS**  
**1945 - 1951 Inclusive**

Source: U.S.B.M. Minerals Yearbook

Copper Ore, Old Tailings, etc. Concentrated in Arizona  
 With Content in Terms of Recoverable Copper.

Year	Ore, Old Tailings, etc. concentrated (Short Tons)	Recoverable Copper Content		Copper Ores Treated by Straight Leaching		
		Pounds	Per-cent	Short Tons	Recoverable Copper Content Pounds	Percent
1945	27,504,269	455,187,391	0.83	2,477,471	36,150,953	0.73
1946	26,984,754	465,885,731	0.86	2,969,041	57,061,962	0.96
1947	33,494,441	586,856,015	0.88	3,671,800	67,918,108	0.92
1948	34,632,227	594,377,003	0.86	3,753,197	69,834,970	0.93
1949	33,528,676	587,407,347	0.88	3,368,001	57,028,112	0.85
1950	37,586,791	662,985,876	0.88	3,755,352	65,843,700	0.88
1951	38,545,214	662,877,431	0.86	3,696,413	62,774,397	0.85

Copper Ore, Old Tailings, etc. Smelted in Arizona  
 With content in Terms of Recoverable Copper

Year	Ore, Old Tailings, etc. Shipped to Smelters		
	Short Tons	Recoverable Copper Content	
		Pounds	Percent
1945	662,730	57,163,233	4.31
1946	432,354	32,995,643	3.82
1947	644,207	54,934,237	4.26
1948	686,780	60,820,312	4.43
1949	468,934	38,694,396	4.13
1950	415,120	36,528,698	4.40
1951	549,484	50,047,988	4.55

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