



MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
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Iron and Steel Scrap, Monthly

IRON AND STEEL SCRAP IN APRIL 1974

Returns from 96% of reporting consumers indicated that consumption of iron and steel scrap in April on a daily average basis was 1.2% above that in March, according to the Bureau of Mines, U.S. Department of the Interior. Compared with March data, daily average production and net receipts were down 0.9% and up 10.7%, respectively, and stocks at the end of the month were up 6%.

Exports of ferrous scrap during the month were 0.6% above those for March 1974 and 7.6% below those for April 1973. Japan was the largest importer of U.S. scrap, taking 49.3% of the total exported in April 1974. The next largest importers were Mexico and Canada, which received 11.1% and 10.4%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh and Philadelphia) at the end of April was \$116 per gross ton, up 146% from the April 1973 price of \$47.17.

Pig iron production and consumption on a daily average basis during the month were up 0.6% and 1.3%, respectively, from those of the previous month. Stocks of pig iron decreased 1.6% during April compared with those at the end of March 1974.

Final 1973 statistics on iron and steel scrap and pig iron are given in tables 12 through 14 of this release.

Table 1. - U.S. receipts, production, consumption, shipments, and stocks of iron and steel scrap and pig iron, by type of manufacturer (Short tons)

| Item | April 1974 (preliminary) 1/ | | | | Final total for month of March 1974 4/ | Total year through April 1974 5/ |
|--|--|--|--|-------------------------------|--|----------------------------------|
| | Mfrs. of pig iron and steel ingots and castings 2/ | Mfrs. of steel and miscellaneous castings 3/ | Iron foundries and miscellaneous users | Total for month of April 1974 | | |
| SCRAP: | | | | | | |
| Receipts from dealers and other sources----- | 3,105,356 | 186,029 | 947,527 | 4,238,912 | 4,019,260 | 15,040,632 |
| Receipts from other own company plants----- | 499,000 | 7,403 | 105,685 | 612,088 | 604,481 | 2,276,637 |
| Production recirculating scrap----- | 3,786,986 | 87,905 | 447,231 | 4,322,122 | 4,525,335 | 17,320,487 |
| Production obsolete scrap----- | 198,006 | 1,750 | 67,230 | 266,986 | 259,166 | 1,052,416 |
| Consumption by grade: | | | | | | |
| Carbon steel- | | | | | | |
| Low-phosphorous plate and punchings----- | 63,420 | 65,158 | 57,269 | 185,847 | 212,335 | 801,740 |
| Cut-structural and plate----- | 52,454 | 21,780 | 137,329 | 211,563 | 229,800 | 857,960 |
| No. 1 heavy melting steel----- | 2,470,186 | 20,529 | 36,308 | 2,527,023 | 2,520,899 | 9,659,848 |
| No. 2 heavy melting steel----- | 348,110 | 2,243 | 5,790 | 356,143 | 365,782 | 1,371,447 |
| No. 1 and electric furnace bundles----- | 727,840 | 5,455 | 36,598 | 769,893 | 789,778 | 3,348,137 |
| No. 2 and all other bundles----- | 317,399 | 1,649 | 60,864 | 379,912 | 392,585 | 1,474,151 |
| Electric furnace 1 foot and under (not bundles)----- | 21,470 | 6,019 | 24,366 | 51,855 | 43,054 | 151,460 |
| Railroad rails----- | 6,489 | 775 | 7,716 | 14,980 | 24,031 | 80,359 |
| Machinery and cupola cast 5/----- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 175,064 | 9,410 | 54,075 | 238,549 | 240,578 | 934,825 |
| Slag scrap (Fe content 70%)----- | 343,499 | 613 | 2,757 | 346,869 | 359,247 | 1,347,066 |
| Shredded or fragmented----- | 161,773 | 5,273 | 73,585 | 240,631 | 230,245 | 896,792 |
| All other carbon steel scrap----- | 1,225,602 | 76,214 | 155,321 | 1,457,137 | 1,523,342 | 5,861,688 |
| Stainless steel scrap----- | 97,788 | 2,356 | 3,417 | 103,561 | 109,224 | 392,524 |
| Alloy steel (except stainless)----- | 185,575 | 13,693 | 15,861 | 215,129 | 233,845 | 846,819 |
| Ingot mold scrap----- | 292,067 | 485 | 17,906 | 310,458 | 326,962 | 1,156,196 |
| Cast iron borings----- | 146,416 | 5,462 | 153,346 | 305,224 | 343,534 | 1,393,042 |
| Motor blocks----- | 157 | 1,616 | 83,678 | 85,451 | 83,484 | 328,942 |
| Other iron scrap----- | 116,757 | 17,750 | 334,108 | 468,615 | 400,823 | 1,595,629 |
| Other mixed scrap----- | 35,678 | 5,368 | 215,361 | 256,407 | 273,555 | 1,046,528 |
| Consumption total----- | 6,787,744 | 261,848 | 1,475,655 | 8,525,247 | 8,703,103 | 33,545,153 |
| Shipments----- | 476,940 | 1,972 | 31,675 | 510,587 | 571,844 | 1,994,329 |
| Stocks end of month----- | 5,934,818 | 228,390 | 1,026,813 | 7,190,021 | 6,781,720 | -- |
| FIG IRON: | | | | | | |
| Receipts----- | 521,442 | 5,286 | 302,633 | 829,361 | 813,349 | 3,210,316 |
| Production----- | 8,140,248 | -- | -- | 8,140,248 | 8,358,678 | 32,838,341 |
| Consumption----- | 8,010,752 | 4,023 | 284,516 | 8,299,291 | 8,467,066 | 33,265,165 |
| Shipments----- | 771,896 | -- | 254 | 772,150 | 800,799 | 3,113,122 |
| Stocks end of month----- | 739,645 | 8,380 | 228,922 | 976,947 | 992,862 | -- |

1/ Based on 96% return of reporting consumers.

2/ Includes only those manufacturers of steel castings that also produce ingots.

3/ Excludes companies that produce both steel ingots and castings.

4/ Based on 97% return from reporting consumers.

5/ Cumulative totals may not agree with sum of monthly reports because of addition of reports from late respondents.

6/ Included in "Other mixed scrap."

Table 2. - Manufacturers of pig iron and steel ingots and castings ^{1/} - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, April 1974 (preliminary) ^{2/}
(Short tons)

| Item | Receipts of scrap | | Production of home scrap | | Consumption of both purchased and home scrap (includes recirculating scrap) | Shipments of scrap | Ending stocks |
|--|---|---------------------------|---|--|---|--------------------|---------------|
| | From brokers, dealers and other outside sources | From other company plants | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | |
| SCRAP: | | | | | | | |
| Carbon steel - | | | | | | | |
| Low-phosphorous plate and punchings-- | 60,092 | 3,231 | 1,847 | 148 | 63,420 | -- | 72,162 |
| Cut-structural and plate----- | 37,860 | 927 | 18,281 | 530 | 52,454 | 378 | 29,449 |
| No. 1 heavy melting steel----- | 696,384 | 213,478 | 1,756,380 | 17,987 | 2,470,186 | 190,206 | 1,716,668 |
| No. 2 heavy melting steel----- | 326,256 | 11,287 | 102,807 | 391 | 348,110 | 14,074 | 392,177 |
| No. 1 and electric furnace bundles--- | 587,701 | 39,713 | 220,369 | 2,435 | 727,840 | 5,382 | 742,132 |
| No. 2 and all other bundles----- | 325,949 | 19,572 | 36,226 | -- | 317,399 | 4,947 | 367,813 |
| Electric furnace 1 foot and under (not bundles)----- | 15,647 | 576 | 8,564 | -- | 21,470 | -- | 31,982 |
| Railroad rails----- | 9,382 | -- | -- | -- | 6,489 | -- | 14,307 |
| Machinery and cupola cast ^{3/} ----- | -- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 164,252 | 9,035 | 26,131 | 541 | 175,064 | 7,644 | 130,385 |
| Slag scrap (Fe content 70%)----- | 159,019 | 6,179 | 191,893 | -- | 343,499 | 10,404 | 269,364 |
| Shredded or fragmented----- | 147,538 | 18,973 | -- | -- | 161,773 | 267 | 80,152 |
| All other carbon steel scrap----- | 379,944 | 22,793 | 924,206 | 4,690 | 1,225,602 | 93,669 | 604,429 |
| Stainless steel scrap----- | 41,092 | 6,066 | 62,750 | 43 | 97,788 | 5,744 | 133,886 |
| Alloy steel (except stainless)----- | 15,461 | 16,684 | 172,499 | 1,118 | 185,575 | 10,278 | 199,168 |
| Ingot mold scrap----- | 23,733 | 54,268 | 91,652 | 155,888 | 292,067 | 57,669 | 646,639 |
| Cast iron borings----- | 66,094 | 44,144 | 76,668 | 9,832 | 146,416 | 29,220 | 130,011 |
| Motor blocks----- | 275 | -- | -- | -- | 157 | -- | 215 |
| Other iron scrap----- | 32,061 | 21,067 | 87,102 | 4,402 | 116,757 | 44,025 | 360,171 |
| Other mixed scrap----- | 16,616 | 11,007 | 9,611 | 1 | 35,678 | 3,033 | 13,708 |
| Total scrap----- | 3,105,356 | 499,000 | 3,786,986 | 198,006 | 6,787,744 | 476,940 | 5,934,818 |
| PIG IRON----- | | | | | | | |
| | | Receipts | Production | | Consumption | Shipments | Stocks |
| | 521,442 | | 8,140,248 | | 8,010,752 | 771,896 | 739,645 |

^{1/} Includes only those manufacturers of steel castings that also produce ingots.

^{2/} Based on 100% return of reporting consumers.

^{3/} Included in "Other mixed scrap."

Table 3. - Manufacturers of steel castings 1/ - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, April 1974 (preliminary) 2/ (Short tons)

| Item | Receipts of scrap | | Production of home scrap | | Consumption of both purchased and home scrap (includes re-circulating scrap) | Shipments of scrap | Ending stocks |
|--|--|-------------------------------|---|--|--|--------------------|---------------|
| | From brokers, dealers, and other outside sources | From other own company plants | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | |
| SCRAP: | | | | | | | |
| Carbon steel - | | | | | | | |
| Low-phosphorous plate and punchings-- | 59,897 | 539 | 14,849 | 249 | 65,158 | 260 | 55,458 |
| Cut-structural and plate----- | 15,683 | 2,104 | 3,608 | -- | 21,780 | -- | 14,363 |
| No. 1 heavy melting steel----- | 14,711 | 2,291 | 4,523 | -- | 20,529 | -- | 24,518 |
| No. 2 heavy melting steel----- | 3,124 | 192 | 442 | -- | 2,243 | -- | 3,248 |
| No. 1 and electric furnace bundles-- | 3,696 | -- | 620 | -- | 5,455 | -- | 1,443 |
| No. 2 and all other bundles----- | 1,874 | -- | -- | -- | 1,649 | -- | 1,611 |
| Electric furnace 1 foot and under (not bundles)----- | 3,595 | -- | 2,357 | -- | 6,019 | -- | 2,484 |
| Railroad rails----- | 1,308 | -- | -- | -- | 775 | -- | 1,830 |
| Machinery and cupola cast 3/----- | -- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 9,057 | 26 | 1,958 | -- | 9,410 | 210 | 3,828 |
| Slag scrap (Fe content 70%)----- | 7,071 | -- | 587 | -- | 613 | -- | 70 |
| Shredded or fragmented----- | 42,293 | -- | 35,109 | 443 | 5,273 | -- | 3,627 |
| All other carbon steel scrap----- | 1,652 | 849 | 663 | -- | 76,214 | 206 | 66,722 |
| Stainless steel scrap----- | 6,337 | 247 | 8,472 | 27 | 2,356 | 143 | 2,159 |
| Alloy steel (except stainless)----- | 423 | 1,117 | -- | -- | 13,693 | 1,067 | 15,467 |
| Ingot mold scrap----- | 3,221 | -- | 2,158 | -- | 485 | -- | 2,090 |
| Cast iron borings----- | 1,879 | -- | -- | -- | 5,462 | 7 | 2,456 |
| Motor blocks----- | 7,229 | 38 | 10,613 | 227 | 1,616 | -- | 3,878 |
| Other iron scrap----- | 2,979 | -- | 1,946 | 804 | 17,750 | 79 | 20,106 |
| Other mixed scrap----- | | | | | 5,368 | | 3,032 |
| Total scrap----- | 186,029 | 7,403 | 87,905 | 1,750 | 261,848 | 1,972 | 228,390 |
| | Receipts | | Production | | Consumption | Shipments | Stocks |
| PIG IRON----- | 5,286 | | -- | | 4,023 | -- | 8,380 |

1/ Excludes companies that produce both steel ingots and castings.
2/ Based on 96% return of reporting consumers.
3/ Included in "Other mixed scrap."

Table 4. - Iron foundries and miscellaneous users - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, April 1974 (preliminary) 1/

(Short tons)

| Item | Receipts_of scrap | | Production of home scrap | | | Consumption of both purchased and home scrap (includes re-circulating scrap) | Shipments of scrap | Ending stocks |
|--|---|-------------------------------|---|--|-------------|--|--------------------|---------------|
| | From brokers, dealers and other outside sources | From other own company plants | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | | |
| SCRAP: | | | | | | | | |
| Carbon steel - | | | | | | | | |
| Low-phosphorous plate and punchings-- | 50,084 | 9,839 | 2,209 | 125 | 57,269 | 577 | 40,658 | |
| Cut-structural and plate----- | 116,151 | 11,677 | 15,990 | 120 | 137,329 | 1,442 | 85,381 | |
| No. 1 heavy melting steel----- | 21,701 | 4,709 | 5,818 | -- | 36,308 | 1,597 | 48,556 | |
| No. 2 heavy melting steel----- | 2,893 | 256 | 3,343 | 91 | 5,790 | 86 | 7,220 | |
| No. 1 and electric furnace bundles-- | 20,871 | 9,898 | 3,940 | 52 | 36,598 | -- | 16,033 | |
| No. 2 and all other bundles----- | 49,339 | 5,375 | -- | 283 | 60,864 | 18 | 50,512 | |
| Electric furnace 1 foot and under (not bundles)----- | 20,589 | 9,191 | -- | -- | 24,366 | -- | 15,018 | |
| Railroad rails----- | 7,595 | -- | 1,572 | -- | 7,716 | -- | 19,286 | |
| Machinery and cupola cast <u>2/</u> ----- | -- | -- | -- | -- | -- | -- | -- | |
| Turnings and borings----- | 51,567 | 10,438 | 4,681 | 8 | 54,075 | 4,658 | 69,302 | |
| Slag scrap (Fe content 70%)----- | 2,718 | -- | 45 | -- | 2,757 | 522 | 3,941 | |
| Shredded or fragmented----- | 78,200 | 572 | 1,008 | -- | 73,585 | 160 | 49,954 | |
| All other carbon steel scrap----- | 162,040 | 6,268 | 10,859 | 268 | 155,321 | 1,920 | 171,083 | |
| Stainless steel scrap----- | 6,675 | -- | 504 | 7 | 3,417 | 15 | 16,242 | |
| Alloy steel (except stainless)----- | 10,240 | 743 | 336 | 117 | 15,861 | 125 | 10,179 | |
| Ingot mold scrap----- | 16,725 | 181 | 3,528 | 384 | 17,906 | 949 | 22,427 | |
| Cast iron borings----- | 88,260 | 24,379 | 53,116 | 1,488 | 153,346 | 7,850 | 84,183 | |
| Motor blocks----- | 56,312 | 1,235 | 34,429 | -- | 83,678 | 203 | 47,823 | |
| Other iron scrap----- | 96,176 | 8,564 | 234,169 | 3,853 | 334,108 | 10,300 | 174,835 | |
| Other mixed scrap----- | 89,391 | 2,160 | 71,684 | 60,434 | 215,361 | 1,253 | 94,180 | |
| Total scrap----- | 947,527 | 105,685 | 447,231 | 67,230 | 1,475,655 | 31,675 | 1,026,813 | |
| | | | | | | | | |
| | | Receipts | Production | | Consumption | Shipments | Stocks | |
| PIG IRON----- | 302,633 | | | -- | 284,516 | 254 | 228,922 | |

1/ Based on 95% return of reporting consumers.

2/ Included in "Other mixed scrap."

Table 5. - Consumption of iron and steel scrap and pig iron in the United States in April 1974 (preliminary),
by type of consumer and type of furnace or other use

(Short tons)

| Type of furnace or other use | Manufacturers of pig iron and steel ingots and castings 1/ | | Manufacturers of steel castings 2/ | | Iron foundries and miscellaneous users | | Total all types | |
|---------------------------------------|--|-----------|------------------------------------|----------|--|----------|-----------------|-----------|
| | Scrap | Pig iron | Scrap | Pig iron | Scrap | Pig iron | Scrap | Pig iron |
| Blast furnace 3/----- | 351,014 | -- | -- | -- | -- | -- | 351,014 | -- |
| Basic oxygen process 4/----- | 2,217,280 | 5,705,117 | -- | -- | -- | -- | 2,217,280 | 5,705,117 |
| Open-hearth furnace----- | 1,633,927 | 1,993,189 | 14,762 | 538 | -- | -- | 1,648,689 | 1,993,727 |
| Electric furnace----- | 2,510,935 | 82,205 | 222,960 | 2,229 | 273,237 | 13,417 | 3,007,132 | 97,851 |
| Cupola furnace----- | 18,630 | 22,050 | 20,316 | 511 | 1,078,466 | 137,891 | 1,117,412 | 160,452 |
| Other (including air furnace) 5/----- | 55,958 | 44,547 | 3,810 | 745 | 123,951 | 6,730 | 183,719 | 52,022 |
| Direct castings 6/----- | -- | 163,644 | -- | -- | -- | 126,478 | -- | 290,122 |
| Total----- | 6,787,744 | 8,010,752 | 261,848 | 4,023 | 1,475,654 | 284,516 | 8,525,246 | 8,299,291 |

1/ Includes only those castings made by companies producing steel ingots.

2/ Excludes companies that produce both steel ingots and steel castings.

3/ Includes consumption in all blast furnaces producing pig iron.

4/ Includes scrap and pig iron processed in metallurgical blast cupolas and used in oxygen converters.

5/ Includes vacuum melting furnaces and miscellaneous uses.

6/ Includes ingot molds and stools.

Table 6. - Manufacturers of pig iron and steel ingots and castings 1/ - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, March 1974 (final) 2/

(Short tons)

| Item | Receipts of scrap | | Production of home scrap | | Consumption of both purchased and home scrap (includes recirculating scrap) | Shipments of scrap | Ending stocks |
|--|---|-------------------------------|---|--|---|--------------------|---------------|
| | From brokers, dealers and other outside sources | From other own company plants | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | |
| SCRAP: | | | | | | | |
| Carbon steel - | | | | | | | |
| Low-phosphorous plate and punchings----- | 68,473 | 3,701 | 1,753 | -- | 69,130 | -- | 70,209 |
| Cut-structural and plate----- | 27,434 | 2,609 | 22,867 | 250 | 56,274 | 22 | 24,683 |
| No. 1 heavy melting steel----- | 689,844 | 188,903 | 1,802,728 | 24,030 | 2,460,381 | 193,139 | 1,684,821 |
| No. 2 heavy melting steel----- | 275,400 | 12,725 | 98,105 | 470 | 355,648 | 12,564 | 313,713 |
| No. 1 and electric furnace bundles----- | 535,458 | 47,394 | 244,532 | 1,347 | 748,720 | 9,787 | 622,909 |
| No. 2 and all other bundles----- | 316,919 | 16,874 | 39,358 | -- | 332,535 | 7,852 | 311,505 |
| Electric furnace 1 foot and under (not bundles)----- | 10,591 | 408 | 8,489 | -- | 31,458 | -- | 28,665 |
| Railroad rails----- | 13,782 | 70 | -- | -- | 15,236 | -- | 11,414 |
| Machinery and cupola cast 3/----- | -- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 137,846 | 8,291 | 25,031 | 510 | 181,862 | 10,251 | 111,856 |
| Slag scrap (Fe content 70%)----- | 150,540 | 13,755 | 202,101 | -- | 356,949 | 6,369 | 267,789 |
| Shredded or fragmented----- | 139,202 | 18,312 | -- | -- | 155,671 | -- | 78,121 |
| All other carbon steel scrap----- | 309,720 | 29,300 | 1,036,257 | 7,452 | 1,283,313 | 112,132 | 588,123 |
| Stainless steel scrap----- | 37,966 | 3,542 | 66,628 | 97 | 103,741 | 4,288 | 127,911 |
| Alloy steel (except stainless)----- | 17,286 | 15,383 | 180,128 | 580 | 205,173 | 10,169 | 191,977 |
| Ingot mold scrap----- | 37,783 | 38,758 | 105,277 | 141,331 | 309,988 | 74,332 | 669,909 |
| Cast iron borings----- | 53,223 | 48,008 | 78,771 | 10,643 | 140,829 | 28,239 | 108,937 |
| Motor blocks----- | 207 | -- | -- | -- | 328 | -- | 48 |
| Other iron scrap----- | 35,616 | 30,560 | 84,098 | 4,755 | 122,943 | 53,828 | 376,251 |
| Other mixed scrap----- | 32,089 | 5,799 | 6,089 | -- | 42,421 | 3,288 | 15,165 |
| Total scrap----- | 2,889,379 | 484,392 | 4,002,212 | 191,465 | 6,972,600 | 526,260 | 5,604,006 |
| Receipts | | Production | | Consumption | | Shipments | |
| 535,354 | | 8,358,678 | | 8,166,848 | | 799,549 | |
| Stocks | | Stocks | | Stocks | | Stocks | |
| 775,120 | | 775,120 | | 775,120 | | 775,120 | |

1/ Includes only those manufacturers of steel castings that also produce ingots.
2/ Based on 100% return of reporting consumers.
3/ Included in "Other mixed scrap."

Table 7. - Manufacturers of steel castings, 1/ - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, March 1974 (final) 2/

(Short tons)

| Item | Receipts of scrap | | Production of home scrap | | Consumption of both purchased and home scrap (includes re-circulating scrap) | Shipments of scrap | Ending stocks |
|--|--|-------------------------------|---|--|--|--------------------|---------------|
| | From | | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | |
| | brokers, dealers and other outside sources | From other own company plants | | | | | |
| Carbon steel - | | | | | | | |
| Low-phosphorous plate and punchings----- | 56,408 | 256 | 15,340 | 130 | 69,053 | 553 | 44,843 |
| Cut-structural and plate----- | 19,265 | 2,545 | 3,023 | -- | 24,032 | 60 | 14,716 |
| No. 1 heavy melting steel----- | 14,271 | 2,524 | 5,100 | -- | 23,009 | -- | 23,981 |
| No. 2 heavy melting steel----- | 3,609 | 156 | 1,032 | -- | 3,754 | -- | 1,733 |
| No. 1 and electric furnace bundles----- | 5,625 | -- | 564 | -- | 5,959 | -- | 2,582 |
| No. 2 and all other bundles----- | 1,351 | -- | -- | -- | 1,392 | -- | 1,386 |
| Electric furnace 1 foot and under (not bundles)----- | 3,806 | -- | 2,357 | -- | 5,971 | -- | 2,551 |
| Railroad rails----- | 1,533 | -- | -- | -- | 992 | -- | 1,297 |
| Machinery and cupola cast 3/----- | -- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 8,464 | 18 | 1,962 | -- | 9,214 | 433 | 2,407 |
| Slag scrap (Fe content 70%)----- | -- | -- | 606 | -- | 624 | -- | 96 |
| Shredded or fragmented----- | 7,153 | -- | -- | -- | 6,910 | -- | 1,829 |
| All other carbon steel scrap----- | 49,105 | 826 | 33,891 | 568 | 75,991 | 116 | 64,783 |
| Stainless steel scrap----- | 1,338 | 269 | 766 | -- | 2,322 | 184 | 2,147 |
| Alloy steel (except stainless)----- | 6,452 | 1,190 | 9,547 | -- | 14,992 | 1,266 | 14,385 |
| Ingot mold scrap----- | 1,012 | -- | -- | -- | 554 | -- | 2,152 |
| Cast iron borings----- | 3,431 | -- | 2,538 | -- | 5,357 | 32 | 2,546 |
| Motor blocks----- | 1,153 | -- | -- | -- | 2,352 | 6 | 3,647 |
| Other iron scrap----- | 7,734 | 84 | 10,463 | 59 | 18,766 | 401 | 19,828 |
| Other mixed scrap----- | 2,789 | -- | 2,166 | 460 | 5,741 | 30 | 2,671 |
| Total scrap----- | 194,499 | 7,868 | 89,355 | 1,217 | 276,985 | 3,081 | 209,580 |
| | | | | | | | |
| | | Receipts | Production | | Consumption | Shipments | Stocks |
| FIG IRON----- | 5,386 | | -- | | 4,822 | 2 | 7,104 |

1/ Excludes companies that produce both steel ingots and castings.

2/ Based on 97% return of reporting consumers.

3/ Included in "Other mixed scrap."

Table 8. - Iron foundries and miscellaneous users - receipts, production, consumption, shipments, and stocks of pig iron and iron and steel scrap, by grade, March 1974 (final) ^{1/}

(Short tons)

| Item | Receipts of scrap | | Production of home scrap | | Consumption of both purchased and home scrap (includes recirculating scrap) | Shipments of scrap | Ending stocks |
|--|---|---------------------------|---|--|---|--------------------|---------------|
| | From brokers, dealers and other outside sources | From other company plants | Recirculating scrap resulting from current operations | Obsolete scrap (includes ingot molds and scrap from old equipment, obsolete buildings, etc.) | | | |
| SCRAP: | | | | | | | |
| Carbon steel - | | | | | | | |
| Low-phosphorous plate and punchings----- | 55,023 | 9,876 | 8,071 | 126 | 74,152 | 2,846 | 41,614 |
| Cut-structural and plate----- | 112,055 | 20,748 | 19,750 | 180 | 149,494 | 1,303 | 82,082 |
| No. 1 heavy melting steel----- | 31,394 | 3,973 | 5,179 | -- | 37,509 | 1,563 | 54,338 |
| No. 2 heavy melting steel----- | 3,094 | 248 | 3,770 | 84 | 6,380 | 88 | 6,507 |
| No. 1 and electric furnace bundles----- | 21,701 | 13,640 | 2,696 | 52 | 35,099 | -- | 17,570 |
| No. 2 and all other bundles----- | 45,505 | 7,763 | -- | 1,330 | 58,658 | 52 | 55,197 |
| Electric furnace 1 foot and under (not bundles)----- | 5,743 | -- | -- | -- | 5,625 | -- | 4,237 |
| Railroad rails----- | 7,171 | -- | 1,572 | -- | 7,803 | -- | 17,883 |
| Machinery and cupola cast 2/----- | -- | -- | -- | -- | -- | -- | -- |
| Turnings and borings----- | 55,342 | 9,764 | 5,493 | 10 | 49,502 | 5,353 | 61,989 |
| Slag scrap (Fe content 70%)----- | 1,905 | -- | 65 | -- | 1,674 | -- | 4,325 |
| Shredded or fragmented----- | 74,672 | -- | 252 | -- | 67,664 | 572 | 44,314 |
| All other carbon steel scrap----- | 161,620 | 4,987 | 13,608 | -- | 164,038 | 3,257 | 149,789 |
| Stainless steel scrap----- | 6,890 | 6 | 431 | 4 | 3,161 | 4 | 12,487 |
| Alloy steel (except stainless)----- | 11,334 | 32 | 257 | 39 | 13,680 | 30 | 14,750 |
| Ingot mold scrap----- | 17,330 | -- | 379 | 669 | 16,420 | 506 | 20,746 |
| Cast iron borings----- | 75,135 | 22,252 | 108,547 | 2,024 | 197,348 | 7,201 | 93,141 |
| Motor blocks----- | 53,437 | 1,436 | 29,215 | -- | 80,804 | 146 | 39,397 |
| Other iron scrap----- | 92,860 | 8,841 | 169,486 | 1,605 | 259,114 | 16,263 | 160,036 |
| Other mixed scrap----- | 103,171 | 8,655 | 64,997 | 60,361 | 225,393 | 3,319 | 87,732 |
| Total scrap----- | 935,382 | 112,221 | 433,768 | 66,484 | 1,453,518 | 42,503 | 968,134 |
| PIG IRON----- | | | | | | | |
| | | Receipts | Production | | Consumption | Shipments | Stocks |
| | 272,609 | -- | -- | | 295,396 | 1,248 | 210,638 |

^{1/} Based on 96% return of reporting consumers.

^{2/} Included in "Other mixed scrap."

Table 9. - Consumption of iron and steel scrap and pig iron in the United States in March 1974 (final)
by type of consumer and type of furnace or other use

(Short tons)

| Type of furnace or other use | Manufacturers of pig iron and steel ingots and castings 1/ | | Manufacturers of steel castings 2/ | | Iron foundries and miscellaneous users | | Total all types | |
|---------------------------------------|--|-----------|------------------------------------|----------|--|----------|-----------------|-----------|
| | Scrap | Pig iron | Scrap | Pig iron | Scrap | Pig iron | Scrap | Pig iron |
| Blast furnace 3/----- | 354,617 | -- | -- | -- | -- | -- | 354,617 | -- |
| Basic oxygen process 4/----- | 2,274,142 | 5,840,519 | -- | -- | -- | -- | 2,274,142 | 5,840,519 |
| Open-hearth furnace----- | 1,687,218 | 2,014,071 | 14,298 | 1,003 | -- | -- | 1,701,516 | 2,015,074 |
| Electric furnace----- | 2,560,016 | 97,187 | 235,959 | 2,460 | 288,536 | 13,527 | 3,084,511 | 113,174 |
| Cupola furnace----- | 46,329 | 20,745 | 23,111 | 554 | 1,076,751 | 139,720 | 1,146,191 | 161,019 |
| Other (including air furnace) 5/----- | 50,278 | 37,712 | 3,617 | 805 | 88,231 | 7,640 | 142,126 | 46,157 |
| Direct castings 6/----- | -- | 156,614 | -- | -- | -- | 134,509 | -- | 291,123 |
| Total----- | 6,972,600 | 8,166,848 | 276,985 | 4,822 | 1,453,518 | 295,396 | 8,703,103 | 8,467,066 |

1/ Includes only those castings made by companies producing steel ingots.

2/ Excludes companies that produce both steel ingots and steel castings.

3/ Includes consumption in all blast furnaces producing pig iron.

4/ Includes scrap and pig iron processed in metallurgical blast cupolas and used in oxygen converters.

5/ Includes vacuum melting furnaces and miscellaneous uses.

6/ Includes ingot molds and stools.

FOREIGN TRADE

Exports of iron and steel scrap totaled 691,828 short tons in April compared with 687,614 tons in March. Exports of pig iron during April totaled 31,452 tons and 12,808 tons in March. Imports of scrap totaled 13,954 short tons in April compared with 20,034 tons in March. Of the scrap imported during April, 13,832 short tons came from Canada and 122 tons from other sources. Imports of pig iron totaled 21,521 short tons in April and 14,144 tons in March. In addition to the foregoing imports of pig iron during April there were 501 tons of sponge iron, valued at \$108,654 imported, of which 230 tons came from Canada, and 271 tons from other countries.

Table 10. - U.S. exports of iron and steel scrap 1/, by country

| Country | April 1974 | | Year to date | |
|----------------------------|------------|------------|--------------|-------------|
| | Short tons | Value | Short tons | Value |
| Argentina----- | 9,263 | \$970,384 | 53,522 | \$3,479,711 |
| Canada----- | 72,243 | 3,762,170 | 268,728 | 12,109,711 |
| China, People's Rep. of--- | 8,702 | 320,777 | 189,348 | 12,407,178 |
| Greece----- | 813 | 70,406 | 42,530 | 3,703,222 |
| Italy----- | 45,569 | 4,661,176 | 174,913 | 15,297,009 |
| Japan----- | 341,051 | 27,106,402 | 967,874 | 75,179,784 |
| Korea, Republic of----- | 49,617 | 6,708,662 | 361,564 | 34,528,837 |
| Mexico----- | 76,589 | 4,086,090 | 281,555 | 19,095,613 |
| Spain----- | 70,744 | 6,647,864 | 330,448 | 23,615,545 |
| Taiwan----- | 1,220 | 86,845 | 322,375 | 26,537,772 |
| Thailand----- | - | - | 19,935 | 1,503,374 |
| Other Countries----- | 16,017 | 1,868,778 | 55,010 | 5,891,229 |
| Total----- | 691,828 | 56,289,554 | 3,067,802 | 233,348,985 |

1/ Excludes ships, boats, and other vessels for breaking up (for scrapping) which was included in 1965-1970 figures.

Table 11. - U.S. exports of iron and steel scrap, by grade

| Grade of Scrap | April 1974 | | Year to date | |
|--|------------|--------------|--------------|--------------|
| | Short tons | Value | Short tons | Value |
| No. 1 heavy melting steel scrap----- | 197,001 | \$16,531,698 | 985,623 | \$76,914,999 |
| No. 2 heavy melting steel scrap----- | 76,949 | 6,105,655 | 325,939 | 24,280,711 |
| No. 1 bundles----- | 968 | 38,641 | 25,412 | 1,758,740 |
| No. 2 bundles----- | 144,789 | 8,824,568 | 516,248 | 30,913,993 |
| Borings, shovelings and turnings----- | 33,916 | 1,331,452 | 173,823 | 9,110,383 |
| Stainless steel----- | 2,306 | 1,018,279 | 11,851 | 4,507,282 |
| Shredded steel scrap----- | 160,453 | 16,479,074 | 698,146 | 61,779,970 |
| Iron scrap (excluding borings and shovelings) | 40,516 | 2,602,232 | 169,594 | 11,603,489 |
| All other steel scrap <u>1/</u> | 34,930 | 3,357,955 | 161,166 | 12,479,418 |
| Total----- | 691,828 | 56,289,554 | 3,067,802 | 233,348,985 |
| Ships, boats, and other vessels for breaking up (for scrapping)----- | 45,767 | 5,333,102 | 102,127 | 10,753,122 |
| Total----- | 737,595 | 61,622,656 | 3,169,929 | 244,102,107 |

1/ Includes tinplate and terneplate.

Table 12. - Consumer receipts, production, consumption, shipments and stocks of iron and steel scrap and pig iron in 1973, by grade (Thousand short tons)

| Grades of scrap | Receipts | Production | Consumption | Shipments | Stocks Dec. 31 |
|---|----------|------------|-------------|-----------|----------------|
| MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS | | | | | |
| Carbon steel: | | | | | |
| Low-phosphorous plate and punchings----- | 531 | 11 | 532 | 2 | 58 |
| Cut-structural and plate----- | 660 | 103 | 782 | 3 | 48 |
| No. 1 heavy melting steel----- | 10,146 | 21,904 | 30,375 | 2,486 | 1,881 |
| No. 2 heavy melting steel----- | 2,644 | 1,412 | 4,008 | 93 | 333 |
| No. 1 and electric furnace bundles----- | 6,448 | 814 | 7,544 | 53 | 566 |
| No. 2 and all other bundles----- | 3,043 | 500 | 3,549 | 76 | 292 |
| Turnings and borings----- | 1,826 | 300 | 1,992 | 155 | 154 |
| Slag scrap (Fe content)----- | 1,563 | 2,346 | 3,658 | 124 | 240 |
| Shredded or fragmentized----- | 1,789 | -- | 1,778 | 1 | 70 |
| All other carbon steel scrap----- | 3,744 | 14,957 | 17,491 | 1,220 | 859 |
| Stainless steel----- | 429 | 670 | 1,036 | 46 | 119 |
| Alloy steel (except stainless)----- | 538 | 1,939 | 2,399 | 79 | 189 |
| Cast iron (includes borings)----- | 2,577 | 5,151 | 6,364 | 1,346 | 1,120 |
| Other grades of scrap----- | 717 | 299 | 959 | 49 | 44 |
| U.S. total----- | 36,655 | 50,406 | 82,467 | 5,733 | 5,973 |
| PIG IRON----- | 4,768 | 100,542 | 96,604 | 8,327 | 955 |
| MANUFACTURERS OF STEEL CASTINGS | | | | | |
| Carbon steel: | | | | | |
| Low-phosphorous plate and punchings----- | 621 | 172 | 800 | 1 | 47 |
| Cut-structural and plate----- | 230 | 13 | 236 | 5 | 12 |
| No. 1 heavy melting steel----- | 146 | 81 | 226 | 1 | 19 |
| No. 2 heavy melting steel----- | 13 | -- | 13 | -- | -- |
| No. 1 and electric furnace bundles----- | 71 | -- | 73 | -- | 4 |
| No. 2 and all other bundles----- | 19 | -- | 18 | -- | 1 |
| Turnings and borings----- | 73 | 7 | 80 | 3 | 5 |
| Slag scrap (Fe content)----- | 1 | 3 | 3 | -- | -- |
| Shredded or fragmentized----- | 76 | -- | 77 | -- | 2 |
| All other carbon steel scrap----- | 586 | 306 | 879 | 11 | 70 |
| Stainless steel----- | 15 | 12 | 25 | 2 | 2 |
| Alloy steel (except stainless)----- | 81 | 69 | 137 | 15 | 17 |
| Cast iron (includes borings)----- | 166 | 113 | 285 | 3 | 30 |
| Other grades of scrap----- | 47 | 52 | 97 | 2 | 3 |
| U.S. total----- | 2,145 | 828 | 2,949 | 43 | 212 |
| PIG IRON----- | 66 | -- | 64 | 1 | 8 |

Table 12. - Consumer receipts, production, consumption, shipments and stocks of iron and steel scrap and pig iron in 1973, by grade--Continued (Thousand short tons)

| Grades of scrap | Receipts | Production | Consumption | Shipments | Stocks Dec. 31 |
|---|----------|------------|-------------|-----------|----------------|
| IRON FOUNDRIES AND MISCELLANEOUS USERS | | | | | |
| Carbon steel: | | | | | |
| Low-phosphorous plate and punchings----- | 1,222 | 57 | 1,247 | 14 | 70 |
| Cut-structural and plate----- | 1,092 | 134 | 1,202 | 10 | 79 |
| No. 1 heavy melting steel----- | 455 | 79 | 485 | 29 | 32 |
| No. 2 heavy melting steel----- | 175 | 4 | 175 | 2 | 18 |
| No. 1 and electric furnace bundles----- | 435 | 1 | 423 | -- | 28 |
| No. 2 and all other bundles----- | 623 | 14 | 607 | -- | 58 |
| Turnings and borings----- | 724 | 50 | 722 | 45 | 57 |
| Slag scrap (Fe content)----- | 6 | 6 | 13 | 1 | -- |
| Shredded or fragmentized----- | 567 | -- | 562 | 1 | 30 |
| All other carbon steel scrap----- | 1,858 | 136 | 2,035 | 29 | 131 |
| Stainless steel----- | 15 | -- | 13 | -- | 3 |
| Alloy steel (except stainless)----- | 116 | 4 | 117 | 1 | 19 |
| Cast iron (includes borings)----- | 4,408 | 5,649 | 9,725 | 289 | 355 |
| Other grades of scrap----- | 440 | 433 | 846 | 28 | 27 |
| U.S. total <u>1/</u> ----- | 12,136 | 6,567 | 18,173 | 449 | 907 |
| PIG IRON----- | 3,236 | -- | 3,148 | 112 | 252 |
| TOTAL--ALL TYPES OF MANUFACTURERS | | | | | |
| Carbon steel: | | | | | |
| Low-phosphorous plate and punchings----- | 2,374 | 240 | 2,579 | 17 | 175 |
| Cut-structural and plate----- | 1,982 | 250 | 2,220 | 18 | 139 |
| No. 1 heavy melting steel----- | 10,747 | 22,064 | 31,086 | 2,516 | 1,932 |
| No. 2 heavy melting steel----- | 2,832 | 1,416 | 4,196 | 95 | 351 |
| No. 1 and electric furnace bundles----- | 6,954 | 815 | 8,040 | 53 | 598 |
| No. 2 and all other bundles----- | 3,685 | 514 | 4,174 | 76 | 351 |
| Turnings and borings----- | 2,623 | 357 | 2,794 | 203 | 216 |
| Slag scrap (Fe content)----- | 1,570 | 2,355 | 3,674 | 125 | 240 |
| Shredded or fragmentized----- | 2,432 | -- | 2,418 | 2 | 102 |
| All other carbon steel scrap----- | 6,188 | 15,399 | 20,405 | 1,260 | 1,060 |
| Stainless steel----- | 459 | 682 | 1,074 | 48 | 124 |
| Alloy steel (except stainless)----- | 735 | 2,012 | 2,653 | 95 | 225 |
| Cast iron (includes borings)----- | 7,151 | 10,913 | 16,374 | 1,638 | 1,505 |
| Other grades of scrap----- | 1,204 | 784 | 1,902 | 79 | 74 |
| U.S. total----- | 50,936 | 57,801 | 103,589 | 6,225 | 7,092 |
| PIG IRON <u>2/</u> ----- | 8,070 | 100,542 | 99,816 | 8,440 | 1,215 |

1/ Data may not add to totals shown because of independent rounding.

2/ Includes all pig iron used in reporting establishments.