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# MINERAL INDUSTRY SURVEYS

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# **IRON AND STEEL SCRAP IN OCTOBER 1997**

Estimated consumption of iron and steel scrap on a daily average basis in October 1997 was down slightly compared with that in September 1997, according to the U.S. Geological Survey. Compared with September 1997 data, daily average production fell 5%, net receipts rose slightly, and stocks at the end of the month rose slightly. These observations are based upon responses from 70% of the companies surveyed that manufacture pig iron and semi-finished steel products, which represent 60% of the total scrap consumption in those sectors, and estimates for non-respondents of this survey.

On a daily average basis, pig iron production fell 4% and consumption fell slightly from that in September 1997. Stocks of pig iron at month's end rose slightly compared with those at the end of September 1997.

Exports of ferrous scrap for the month of September 1997 rose 23% compared with those in August 1997. Korea was the leading principal country of destination, accounting for 37% of the total exports in September 1997, followed by Mexico with 20% and Canada with 14%. Trade data for October will appear in a subsequent issue.

Table 7 shows that Los Angeles, CA, was the leading customs district for tonnage of exports in September 1997, accounting for 16% of total exports, followed by New York, NY, with 14% and San Francisco, CA, with 10%.

Table 10 reveals that Detroit, MI, was the leading customs district for tonnage of imports in September 1997, accounting for 51% of the total imports, followed by Buffalo, NY, with 17% and Seattle, WA, with 14%.

According to the American Iron and Steel Institute (AISI), domestic raw steel production in October 1997 amounted to 8,280,000 metric tons, up slightly from 8,170,000 metric tons in September 1997, and up 5% from 7,900,000 metric tons in October 1996. Year-to-date production through October 1997 was 81,000,000 metric tons, up slightly compared with 79,300,000 metric tons for the same period in 1996. The electric furnace portion of raw steel production for October 1997 was 43%, unchanged from that in September 1997, and down slightly from that in October 1996.

Raw steel capability utilization (AISI data) in October 1997 was 87%, down 4% from that in September 1997, and down slightly from that in October 1996. Continuous cast steel production in the United States accounted for 95% of total raw steel production in October 1997 and was unchanged from that in September 1997, while up slightly from that in October 1996. Through October, continuous cast steel production represented 95% of total steel production in 1997 compared with 93% in 1996.

Prepared by the Metals Section and the Data Collection and Coordination Section, December 18, 1997.

## IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS 1/ FOR STEEL PRODUCERS 2/

#### (Thousand metric tons)

|   |              | October 1997 |           |              | Year to date | 000         34,000           W         2,100           000         12,000           30         130            (5/)           W         14,000           W         32,000            (5/)           000         47,000           20         1,600           000         46,000            41,000            (5/)           W         41,000            (5/)           W         1,200 |  |  |
|---|--------------|--------------|-----------|--------------|--------------|--|--|--|
|   |              | Electric     |           |              | Electric     |  |  |  |
|   | Integrated   | furnace      | Total for | Integrated   | furnace      | Total for  |  |  |
|   | steel        | steel        | steel     | steel        | steel        | steel  |  |  |
|   | producers 3/ | producers 4/ | producers | producers 3/ | producers 4/ | producers  |  |  |
| Scrap:                                  | _            |              |           |              |              |  |  |  |
| Receipts from dealers and other sources | 770          | 2,800        | 3,600     | 7,200        | 27,000       | 34,000   |  |  |
| Receipts from other own company plants  | W            | W            | 220       | W            | W            | 2,100  |  |  |
| Production recirculating scrap          | 730          | 450          | 1,200     | 7,500        | 4,300        | 12,000   |  |  |
| Production obsolete scrap               | 10           | 2            | 12        | 100          | 30           | 130  |  |  |
| Consumption (by type of furnace):       | -            |              |           |              |              |  |  |  |
| Blast furnace                           | - (5/)       |              | (5/)      | (5/)         |              | (5/)   |  |  |
| Basic oxygen process                    | W            | W            | 1,400     | W            | W            | 14,000   |  |  |
| Electric furnace                        | W            | W            | 3,200     | W            | W            | 32,000   |  |  |
| Other (including air furnace) 6/        | - (5/)       |              | (5/)      | (5/)         |              | (5/)   |  |  |
| Total consumption                       | 1,400        | 3,200        | 4,700     | 15,000       | 32,000       | 47,000   |  |  |
| Shipments                               | 140          | 12           | 150       | 1,400        | 120          | 1,600  |  |  |
| Stocks end of month                     | 2,100        | 2,800        | 4,900     | 20,000       | 26,000       | 46,000   |  |  |
| Pig iron (includes hot metal):          |              |              |           |              |              |  |  |  |
| Receipts                                | 420          | 160          | 580       | 3,400        | 1,400        | 4,800  |  |  |
| Production                              | 4,000        |              | 4,000     | 41,000       |              | 41,000   |  |  |
| Consumption (by type of furnace):       | -            |              |           |              |              |  |  |  |
| Basic oxygen process                    | W            | W            | 4,200     | W            | W            | 41,000   |  |  |
| Direct castings 7/                      | (5/)         |              | (5/)      | (5/)         |              | (5/)   |  |  |
| Electric furnace                        | W            | W            | 99        | W            | W            | 1,200  |  |  |
| Total consumption                       | 4,200        | 100          | 4,300     | 41,000       | 1,200        | 43,000   |  |  |
| Shipments                               | - (8/)       |              | (8/)      | (8/)         |              | (8/)   |  |  |
| Stocks end of month                     | W            | W            | 400       | XX           | XX           | XX   |  |  |
| Direct-reduced iron: 9/                 | -            |              |           |              |              |  |  |  |
| Receipts                                | -<br>W       | W            | 110       | W            | W            | 930  |  |  |
| Consumption (by type of furnace):       |              |              |           |              |              |  |  |  |
| Blast furnace                           | - 100        |              | 100       | 1,100        |              | 1,100  |  |  |
| Basic oxygen process                    | (10/)        |              | (10/)     | (10/)        |              | (10/)  |  |  |
| Electric furnace                        |              | (8/)         | (8/)      |              | (8/)         | (8/)   |  |  |
| Total consumption                       | 100          | (8/)         | 100       | 1,100        | (8/)         | 1,100  |  |  |
| Shipments                               |              |              |           | (8/)         |              | (8/)   |  |  |
| Stocks end of month                     | - W          | W            | 150       | XX           | XX           | XX   |  |  |

W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and/or "Total consumption." XX Not applicable.

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings. October 1997 data are based on returns from 70% of monthly respondents, representing 60% of scrap consumption during this month, and estimates for nonrespondents of this survey. Year to date data are based on returns from 77% of respondents, representing 64% of scrap consumption and estimates for nonrespondents.

3/ Includes data for electric furnaces operated by integrated steel producers.

4/ Includes minimill and specialty steel producers; includes data for other furnaces operated by these steel producers.

5/ Withheld to avoid disclosing company proprietary data; included in "Consumption: Basic oxygen process."

6/ Includes vacuum melting furnaces and miscellaneous uses.

7/ Includes ingot molds and stools.

8/ Withheld to avoid disclosing company proprietary data.

9/ Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

10/ Withheld to avoid disclosing company proprietary data; included in "Consumption: Blast furnace."

#### RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, 1/ FOR STEEL PRODUCERS 2/

|                                |  | October 1997                                |                                |                  |  | Year to date                                |                                |
|--------------------------------|--|---|--------------------------------|------------------|--|---|--------------------------------|
|                                | Receipts of scrap<br>from brokers,<br>dealers, and other | Production of home<br>scrap (recirculating  | Consumption of                 | En dia a         | Receipts of scrap<br>from brokers,<br>dealers, and other | Production of home<br>scrap (recirculating  | Consumption of                 |
| Item                           | outside sources  | scrap resulting from<br>current operations) | purchased and<br>home scrap 3/ | Ending<br>stocks | outside sources  | scrap resulting from<br>current operations) | purchased and<br>home scrap 3/ |
| Carbon steel:                  | outoide sources  | current operations)                         | nome serup 5,                  | storius          | Sublue Sources   | culterit operations)                        | nome serup o,                  |
| Low-phosphorus plate and       |  |   |                                |                  |  |   |                                |
| punchings                      | 30   | W   | 29                             | 14               | 320  | W   | 310                            |
| Cut structural and plate       | 340  | 57  | 380                            | 310              | 3,000  | 570   | 3,600                          |
| No. 1 heavy melting steel      | 520  | 320   | 840                            | 740              | 5,200  | 3,100                                       | 8,400                          |
| No. 2 heavy melting steel      | 420  | 58  | 450                            | 580              | 4,100  | 530   | 4,500                          |
| No. 1 and electric furnace     |  |   |                                |                  |  |   |                                |
| bundles                        | 490  | W   | 570                            | 380              | 4,300  | W   | 5,400                          |
| No. 2 and all other bundles    | 83   | W   | 82                             | 64               | 920  | W   | 960                            |
| Electric furnace 1 foot and    |  |   |                                |                  |  |   |                                |
| under (not bundles)            | W  | W   | W                              | W                | W  | W   | W                              |
| Railroad rails                 | 13   | W   | 15                             | 8                | 110  | W   | 140                            |
| Turnings and borings           | 170  | 4   | 180                            | 120              | 1,700  | 52  | 1,800                          |
| Slag scrap                     | 54   | 110   | 170                            | 170              | 600  | 1,200                                       | 1,800                          |
| Shredded and fragmentized      | 620  | W   | 740                            | 520              | 5,800  | W   | 7,100                          |
| No. 1 busheling                | 360  | W   | 330                            | 250              | 3,400  | W   | 3,400                          |
| Steel cans (Post consumer)     | W  | W   | W                              | W                | W  | W   | 520                            |
| All other carbon steel scrap   | 200  | 210   | 380                            | 480              | 2,100  | 2,400                                       | 4,300                          |
| Stainless steel scrap          | 62   | 35  | 95                             | 48               | 600  | 350   | 960                            |
| Alloy steel scrap              | 30   | 66  | 79                             | 110              | 270  | 550   | 790                            |
| Ingot mold and stool scrap     | W  | W   | 8                              | 19               | 4  | W   | 79                             |
| Machinery and cupola cast iron | W  | W   | W                              | 7                | W  | W   | W                              |
| Cast iron borings              | 18   | W   | 19                             | W                | 190  | W   | 180                            |
| Motor blocks                   | W  |   | W                              | W                | W  |   | W                              |
| Other iron scrap               | 36   | 41  | 79                             | W                | 300  | 410   | 750                            |
| Other mixed scrap              | 80   | 64  | 120                            | W                | 810  | 520   | 1,300                          |
| Total                          | 3,600  | 1,200                                       | 4,700                          | 4,900            | 34,000   | 12,000                                      | 47,000                         |

(Thousand metric tons)

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings.

3/ Includes recirculating scrap and home-generated obsolete scrap.

# TABLE 3 RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, AND CONSUMPTION OF IRON AND STEEL SCRAP, 1/ BY REGION AND STATE, FOR STEEL PRODUCERS 2/

#### (Thousand metric tons)

|                                |                    | October 1997         |                |                    | Year to date         |                |
|--------------------------------|--------------------|----------------------|----------------|--------------------|----------------------|----------------|
|                                | Receipts of scrap  | Production of home   |                | Receipts of scrap  | Production of home   |                |
|                                | from brokers,      | scrap (recirculating | Consumption of | from brokers,      | scrap (recirculating | Consumption of |
|                                | dealers, and other | scrap resulting from | purchased and  | dealers, and other | scrap resulting from | purchased and  |
| Region and State               | outside sources    | current operations)  | home scrap 3/  | outside sources    | current operations)  | home scrap 3/  |
| Mid-Atlantic and New England:  |                    | * · ·                |                |                    | · · · · · ·          |                |
| New Jersey, New York           | 130                | 8                    | 140            | 1,300              | 72                   | 1,300          |
| Pennsylvania                   | 370                | 190                  | 570            | 3,300              | 1,900                | 5,500          |
| Total                          | 500                | 200                  | 710            | 4,500              | 2,000                | 6,800          |
| North Central:                 |                    |                      |                |                    |                      |                |
| Illinois                       | 290                | 100                  | 390            | 3,300              | 1,000                | 4,100          |
| Indiana                        | 300                | 360                  | 660            | 2,900              | 3,600                | 6,400          |
| Iowa, Minnesota, Missouri,     |                    |                      |                |                    |                      |                |
| Nebraska, Wisconsin            | 210                | 15                   | 200            | 2,200              | 160                  | 2,000          |
| Michigan                       | 170                | 57                   | 200            | 1,800              | 600                  | 2,300          |
| Ohio                           | 490                | 170                  | 660            | 4,500              | 1,600                | 6,500          |
| Total                          | 1,500              | 710                  | 2,100          | 15,000             | 7,000                | 21,000         |
| South Atlantic:                |                    |                      |                |                    |                      |                |
| Delaware, Maryland, Virginia,  |                    |                      |                |                    |                      |                |
| West Virginia                  | 140                | 76                   | 210            | 1,300              | 750                  | 2,000          |
| Florida, Georgia, North        |                    |                      |                |                    |                      |                |
| Carolina, South Carolina       | 170                | 11                   | 180            | 1,700              | 150                  | 1,800          |
| Total                          | 310                | 87                   | 390            | 3,000              | 900                  | 3,900          |
| South Central:                 |                    |                      |                |                    |                      |                |
| Alabama, Kentucky,             |                    |                      |                |                    |                      |                |
| Mississippi, Tennessee         | 320                | 60                   | 380            | 3,100              | 640                  | 3,700          |
| Arkansas, Louisiana,           |                    |                      |                |                    |                      |                |
| Oklahoma, Texas                | 630                | 64                   | 710            | 5,700              | 580                  | 7,100          |
| Total                          | 940                | 120                  | 1,100          | 8,800              | 1,200                | 11,000         |
| Mountain and Pacific:          |                    |                      |                |                    |                      |                |
| Arizona, California, Colorado, |                    |                      |                |                    |                      |                |
| Oregon, Utah, Washington       | 340                | 69                   | 380            | 3,100              | 640                  | 3,700          |
| Grand total                    | 3,600              | 1,200                | 4,700          | 34,000             | 12,000               | 47,000         |

 $1/\operatorname{Data}$  are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings.

3/ Includes recirculating scrap and home-generated obsolete scrap.

# TABLE 4 RECEIPTS OF IRON AND STEEL SCRAP, 1/ BY REGION 2/ AND GRADE, FOR STEEL PRODUCERS 3/ 4/

(Thousand metric tons)

|                                |              | C       | ctober 1997 |         |          |              | •       | Year to date |         |          |
|--------------------------------|--------------|---------|-------------|---------|----------|--------------|---------|--------------|---------|----------|
|                                | Mid-Atlantic |         |             |         | Mountain | Mid-Atlantic |         |              |         | Mountain |
|                                | and          | North   | South       | South   | and      | and          | North   | South        | South   | and      |
| Item                           | New England  | Central | Atlantic    | Central | Pacific  | New England  | Central | Atlantic     | Central | Pacific  |
| Carbon steel:                  |              |         |             |         |          |              |         |              |         |          |
| Low-phosphorus plate and       |              |         |             |         |          |              |         |              |         |          |
| punchings                      | 17           | 12      | W           | W       |          | 170          | 130     | W            | W       |          |
| Cut structural and plate       | 53           | 120     | 69          | 58      | 34       | 450          | 1,200   | 590          | 540     | 290      |
| No. 1 heavy melting steel      | 57           | 230     | 28          | 170     | 41       | 520          | 2,200   | 290          | 1,700   | 390      |
| No. 2 heavy melting steel      | 19           | 140     | 36          | 160     | 66       | 180          | 1,400   | 370          | 1,500   | 620      |
| No. 1 and electric furnace     |              |         |             |         |          |              |         |              |         |          |
| bundles                        | 57           | 350     | 29          | 46      | 10       | 440          | 3,100   | 270          | 410     | 83       |
| No. 2 and all other bundles    | 9            | 30      | 6           | 28      | 10       | 99           | 390     | 57           | 260     | 95       |
| Electric furnace 1 foot and    |              |         |             |         |          |              |         |              |         | 100      |
| under (not bundles)            |              | W       |             |         |          |              | W       |              |         | 7        |
| Railroad rails                 | W            | W       |             | 4       | 5        | W            | W       |              | 42      | 31       |
| Turnings and borings           | 28           | 37      | 22          | 75      | 4        | 290          | 350     | 230          | 740     | 39       |
| Slag scrap                     | 14           | 17      | 10          | 12      | 2        | 100          | 250     | W            | 110     | 14       |
| Shredded and fragmentized      | 61           | 170     | 70          | 220     | 94       | 560          | 1,800   | 650          | 2,000   | 810      |
| No. 1 busheling                | 72           | 150     | 27          | 99      | 12       | 670          | 1,500   | 240          | 890     | 110      |
| Steel cans (Post consumer)     | W            | W       | W           | W       | (5/)     | W            | W       | 21           | W       | 4        |
| All other carbon steel scrap   | 22           | 120     | 7           | 39      | 10       | 200          | 1,500   | 53           | 310     | 100      |
| Stainless steel scrap          | 53           | 9       |             |         |          | 520          | 77      |              |         |          |
| Alloy steel scrap              | 10           | 19      |             | W       |          | 86           | W       | 1            | W       |          |
| Ingot mold and stool scrap     | (5/)         | W       |             |         |          | W            | W       |              | W       |          |
| Machinery and cupola cast iron |              | W       |             | W       |          |              | W       | W            | W       | 1        |
| Cast iron borings              | W            | W       |             | W       |          | W            | W       |              | 71      |          |
| Motor blocks                   | (5/)         |         | W           |         |          | (5/)         |         | W            |         |          |
| Other iron scrap               | W            | W       | W           | 6       |          | W            | W       | W            | 57      | (5/)     |
| Other mixed scrap              | W            | W       | W           | W       | 46       | W            | W       | W            | W       | 470      |
| Total                          | 500          | 1,500   | 310         | 940     | 340      | 4,500        | 15,000  | 3,000        | 8,800   | 3,100    |

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Scrap received from brokers, dealers, and other outside sources.

2/ A breakout of the States within each region is provided in Table 3.

3/ Includes manufacturers of raw steel that also produce steel castings.

4/ Data are rounded to two significant digits; may not add to totals shown.

5/ Less than 1/2 unit.

# TABLE 5 CONSUMPTION OF IRON AND STEEL SCRAP 1/ BY REGION 2/ AND GRADE, FOR STEEL PRODUCERS 3/

#### (Thousand metric tons)

|                                |              | C       | ctober 1997 |         |          |              | •       | Year to date |         |          |
|--------------------------------|--------------|---------|-------------|---------|----------|--------------|---------|--------------|---------|----------|
|                                | Mid-Atlantic |         |             |         | Mountain | Mid-Atlantic |         |              |         | Mountain |
|                                | and          | North   | South       | South   | and      | and          | North   | South        | South   | and      |
| Item                           | New England  | Central | Atlantic    | Central | Pacific  | New England  | Central | Atlantic     | Central | Pacific  |
| Carbon steel:                  |              |         |             |         |          | -            |         |              |         |          |
| Low-phosphorus plate and       |              |         |             |         |          |              |         |              |         |          |
| punchings                      | 18           | 9       | W           | W       |          | 170          | 120     | W            | W       |          |
| Cut structural and plate       | 73           | 120     | 93          | 61      | 32       | 610          | 1,200   | 890          | 620     | 290      |
| No. 1 heavy melting steel      | 98           | 420     | 50          | 200     | 77       | 960          | 4,100   | 520          | 2,000   | 840      |
| No. 2 heavy melting steel      | 28           | 160     | 34          | 170     | 70       | 260          | 1,500   | 370          | 1,700   | 630      |
| No. 1 and electric furnace     |              |         |             |         |          |              |         |              |         |          |
| bundles                        | 51           | 420     | 33          | 53      | 10       | 480          | 4,100   | 310          | 520     | 82       |
| No. 2 and all other bundles    | 9            | 30      | 4           | 30      | 10       | 100          | 420     | 57           | 280     | 110      |
| Electric furnace 1 foot and    |              |         |             |         |          |              |         |              |         |          |
| under (not bundles)            |              | W       |             | W       |          |              | W       |              | W       | 7        |
| Railroad rails                 | W            | W       |             | 4       | 5        | W            | W       |              | 39      | 31       |
| Turnings and borings           | 32           | 47      | 22          | 73      | 4        | 330          | 450     | 230          | 81      | 40       |
| Slag scrap                     | 22           | 97      | 15          | 35      | 2        | 200          | 1,100   | 190          | 310     | 14       |
| Shredded and fragmentized      | 94           | 200     | 82          | 270     | 92       | 910          | 2,000   | 760          | 2,600   | 830      |
| No. 1 busheling                | 70           | 150     | 26          | 79      | 92       | 710          | 1,500   | 240          | 890     | 110      |
| Steel cans (Post consumer)     | W            | W       | W           | W       | 13       | W            | 320     | 17           | W       | 4        |
| All other carbon steel scrap   | 50           | 220     | 18          | 76      | W        | 480          | 2,800   | 160          | 700     | W        |
| Stainless steel scrap          | 84           | 12      |             |         |          | 860          | 100     |              |         |          |
| Alloy steel scrap              | 21           | 54      |             | 4       |          | 190          | 560     | 1            | 36      |          |
| Ingot mold and stool scrap     | W            | 2       |             | W       | W        | W            | 19      |              | W       | W        |
| Machinery and cupola cast iron |              | W       |             | W       | 1        |              | W       | W            | W       | 1        |
| Cast iron borings              | W            | W       |             | 7       |          | W            | W       |              | 72      |          |
| Motor blocks                   | (4/)         |         | W           |         |          | (4/)         |         | W            |         |          |
| Other iron scrap               | 21           | 42      | W           | 11      | W        | 190          | 400     | W            | 100     | W        |
| Other mixed scrap              | 17           | 37      | W           | 16      | 51       | 150          | 460     | W            | 120     | 490      |
| Total                          | 710          | 2,100   | 390         | 1,100   | 380      | 6,800        | 21,000  | 3,900        | 11,000  | 3,700    |

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ A breakout of the States within each region is provided in Table 3.

3/ Includes manufacturers of raw steel that also produce steel castings.

4/ Less than 1/2 unit.

## U.S. EXPORTS OF IRON AND STEEL SCRAP 1/ BY SELECTED REGION AND COUNTRY 2/

### (Thousand metric tons and thousand dollars)

|                                  | Septemb  | er 1997 | Year t   | o date    |
|----------------------------------|----------|---------|----------|-----------|
| Region and country               | Quantity | Value   | Quantity | Value     |
| North America and South America: |          |         |          | -         |
| Canada                           | 130      | 18,300  | 1,120    | 144,000   |
| Mexico                           | . 189    | 25,100  | 1,380    | 179,000   |
| Venezuela                        | (3/)     | 28      | 50       | 5,320     |
| Other                            | 30       | 4,460   | 77       | 12,200    |
| Total                            | 348      | 47,900  | 2,620    | 340,000   |
| Africa, Europe, and Middle East: |          |         |          |           |
| Belgium                          | (3/)     | 113     | 2        | 1,200     |
| Italy                            | (3/)     | 210     | 7        | 2,310     |
| South Africa                     | 2        | 1,090   | 14       | 8,220     |
| Spain                            | 13       | 9,890   | 49       | 37,400    |
| Turkey                           | 73       | 9,620   | 349      | 42,400    |
| Other                            | 2        | 583     | 25       | 10,400    |
| Total                            | 90       | 21,500  | 446      | 102,000   |
| Asia, Australia, and Oceania:    |          |         |          |           |
| Australia                        | (3/)     | 230     | 2        | 1,670     |
| China                            | 33       | 6,070   | 182      | 34,300    |
| Hong Kong                        | 12       | 2,270   | 72       | 17,100    |
| India                            | 53       | 7,040   | 108      | 16,200    |
| Japan                            | 33       | 4,620   | 53       | 15,100    |
| Korea, Republic of               | 350      | 50,000  | 2,530    | 378,000   |
| Malaysia                         | 24       | 2,170   | 273      | 31,700    |
| Pakistan                         | (3/)     | 47      | 2        | 376       |
| Taiwan                           | 4        | 1,160   | 446      | 73,900    |
| Thailand                         |          |         | 91       | 12,400    |
| Other                            | 1        | 633     | 105      | 12,800    |
| Total                            | 510      | 74,300  | 3,860    | 593,000   |
| Grand total                      | 950      | 144,000 | 6,930    | 1,040,000 |

1/ Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Export valuation is on a "free alongside ship" (f.a.s.) basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than 1/2 unit.

# U.S. EXPORTS 1/ OF IRON AND STEEL SCRAP 2/ BY REGION AND SELECTED CUSTOMS DISTRICT 3/

## (Thousand metric tons and thousand dollars)

|  | Septemb  | er 1997 | Year to date |           |
|--|----------|---------|--------------|-----------|
| Region and customs district                | Quantity | Value   | Quantity     | Value     |
| Canadian-U.S. Border:                      |          |         |              |           |
| Buffalo, NY                                | - 19     | 4,790   | 129          | 31,200    |
| Detroit, MI                                | 23       | 3,730   | 221          | 35,100    |
| Duluth, MN                                 | - 1      | 78      | 14           | 1,300     |
| Pembina, ND                                | 29       | 3,300   | 275          | 27,300    |
| Other 4/                                   | - 58     | 6,150   | 469          | 46,900    |
| Total                                      | 128      | 18,000  | 1,110        | 142,000   |
| East Coast:                                |          |         |              |           |
| Boston, MA                                 | 12       | 1,550   | 486          | 58,200    |
| Miami, FL                                  | 2        | 437     | 33           | 5,360     |
| New York, NY                               | 136      | 26,100  | 1,040        | 158,000   |
| Norfolk, VA                                | - 1      | 224     | 82           | 9,500     |
| Philadelphia, PA                           | - 61     | 7,210   | 297          | 33,800    |
| Portland, ME                               | (5/)     | 5       | 60           | 7,170     |
| Other                                      | 156      | 20,400  | 399          | 52,700    |
| Total                                      | 368      | 56,000  | 2,400        | 325,000   |
| Gulf Coast & Mexican-U.S. Border (includes |          |         |              |           |
| Caribbean territories):                    |          |         |              |           |
| Houston-Galveston, TX                      | 21       | 2,700   | 73           | 33,600    |
| Laredo, TX                                 | 80       | 10,300  | 716          | 92,300    |
| New Orleans, LA                            | - 6      | 4,550   | 52           | 42,400    |
| Tampa, FL                                  | 21       | 2,770   | 231          | 29,500    |
| Other                                      | - 1      | 267     | 56           | 4,970     |
| Total                                      | 129      | 20,600  | 1,130        | 203,000   |
| West Coast:                                |          |         |              |           |
| Honolulu, HI, and Anchorage, AK            | 26       | 4,020   | 120          | 16,600    |
| Columbia-Snake                             | - 1      | 510     | 60           | 11,000    |
| Los Angeles, CA                            | 154      | 22,900  | 954          | 157,000   |
| San Diego, CA                              | 14       | 2,110   | 164          | 20,700    |
| San Francisco, CA                          | - 95     | 14,500  | 722          | 118,000   |
| Seattle, WA                                | - 34     | 5,110   | 275          | 42,600    |
| Total                                      | 324      | 49,100  | 2,300        | 366,000   |
| Grand total                                | 950      | 144,000 | 6,930        | 1,040,000 |

1/Re-export activity for September 1997 amounted to 320 metric tons valued at \$91,000; year to date amounted to

21,300 metric tons valued at \$2,800,000.

2/Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Export valuation is on a "free alongside ship" (f.a.s.) basis.

3/ Data are rounded to three significant digits; may not add to totals shown.

4/ Includes Code 70, which is for low-valued exports from the United States to Canada.

5/ Less than 1/2 unit.

## U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE $1/\,2/$

### (Thousand metric tons and thousand dollars)

|  | Septemb  | er 1997 | Year t   | o date    |
|--|----------|---------|----------|-----------|
| Item                                     | Quantity | Value   | Quantity | Value     |
| No. 1 heavy melting steel                | 162      | 21,100  | 1,460    | 182,000   |
| No. 2 heavy melting steel                | 52       | 7,000   | 375      | 43,400    |
| No. 1 bundles                            | 9        | 1,240   | 78       | 8,940     |
| No. 2 bundles                            | 15       | 1,710   | 132      | 13,200    |
| Shredded steel scrap                     | 357      | 48,200  | 1,860    | 246,000   |
| Borings, shovelings and turnings         | 21       | 2,010   | 209      | 18,300    |
| Cut plate and structural                 | 61       | 9,070   | 613      | 80,800    |
| Tinned iron or steel                     | 4        | 1,590   | 61       | 15,500    |
| Remelting scrap ingots                   | (3/)     | 32      | 1        | 556       |
| Cast iron                                | 66       | 7,840   | 656      | 72,800    |
| Other iron and steel                     | 78       | 10,200  | 516      | 68,100    |
| Total carbon steel and cast iron         | 825      | 110,000 | 5,960    | 749,000   |
| Stainless steel                          | 35       | 20,400  | 286      | 180,000   |
| Other alloy steel                        | 89       | 13,200  | 678      | 105,000   |
| Total stainless and alloy steel          | 124      | 33,600  | 964      | 286,000   |
| Total carbon, stainless, alloy steel and |          |         |          |           |
| cast iron                                | 950      | 144,000 | 6,930    | 1,040,000 |
| Ships, boats, and other vessels for      |          |         |          |           |
| breaking up (for scrapping)              | 1        | 206     | 36       | 4,100     |
| Used rails for rerolling and other uses  | 13       | 4,890   | 31       | 12,700    |
| Total scrap exports                      | 964      | 149,000 | 6,990    | 1,050,000 |
| Exports of manufactured                  |          |         |          |           |
| ferrous products:                        |          |         |          |           |
| Pig iron $<$ or $= 0.5\%$ phosphorus     | 6        | 907     | 39       | 6,680     |
| Pig iron $> 0.5\%$ phosphorus            | 2        | 183     | 13       | 1,450     |
| Alloy pig iron                           |          |         |          |           |
| Total pig iron                           | 7        | 1,090   | 52       | 8,130     |
| Direct-reduced iron (DRI)                | 1        | 100     | 5        | 578       |
| Spongy iron products, not DRI            | 3        | 990     | 10       | 4,020     |
| Granules for abrasive cleaning and       |          |         |          |           |
| other uses                               | 2        | 1,200   | 20       | 13,300    |
| Powders of alloy steel                   | 1        | 1,780   | 4        | 22,700    |
| Other ferrous powders                    | 2        | 5,460   | 24       | 54,800    |
| Total DRI, granules and powders          | 9        | 9,540   | 63       | 95,400    |
| Grand total                              | 980      | 159,000 | 7,110    | 1,160,000 |

1/ Export valuation is on a "free alongside ship" (f.a.s.) basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than 1/2 unit.

Source: Bureau of the Census.

#### TABLE 9

# U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP $1/\,2/$ BY SELECTED COUNTRY

#### (Thousand metric tons and thousand dollars)

|           | Septemb  | er 1997 | Year to  | Year to date |  |
|-----------|----------|---------|----------|--------------|--|
| Country   | Quantity | Value   | Quantity | Value        |  |
| Canada    | 161      | 22,300  | 1,460    | 192,000      |  |
| Jamaica   | 2        | 211     | 4        | 335          |  |
| Japan     | 14       | 1,940   | 39       | 5,370        |  |
| Mexico    | 11       | 2,860   | 135      | 22,900       |  |
| Venezuela | 24       | 857     | 58       | 3,540        |  |
| Other     | 2        | 1,940   | 350      | 49,500       |  |
| Total     | 213      | 30,100  | 2,040    | 274,000      |  |

1/ Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

#### TABLE 10 U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP 1/ 2/ BY SELECTED CUSTOMS DISTRICT

(Thousand metric tons and thousand dollars)

|                  | Septemb  | er 1997 | Year to  | Year to date |  |
|------------------|----------|---------|----------|--------------|--|
| Customs district | Quantity | Value   | Quantity | Value        |  |
| Buffalo, NY      | 36       | 5,370   | 277      | 43,600       |  |
| Chicago, IL      | 5        | 517     | 41       | 5,430        |  |
| Cleveland, OH    | 3        | 328     | 66       | 6,120        |  |
| Detroit, MI      | 109      | 13,300  | 797      | 104,000      |  |
| El Paso, TX      | 4        | 474     | 31       | 3,680        |  |
| Laredo, TX       | 4        | 1,870   | 91       | 15,300       |  |
| New Orleans, LA  | 13       | 1,720   | 338      | 45,400       |  |
| Nogales, AZ      | 2        | 185     | 7        | 1,120        |  |
| Pembina, ND      | 2        | 388     | 13       | 3,480        |  |
| Seattle, WA      | 29       | 2,960   | 291      | 30,000       |  |
| Other            | 5        | 2,920   | 92       | 15,800       |  |
| Total            | 213      | 30,100  | 2,040    | 274,000      |  |

1/ Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

#### TABLE 11 U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE 1/2/

#### (Thousand metric tons and thousand dollars)

|   | Septemb  | er 1997 | Year to date |         |  |
|---|----------|---------|--------------|---------|--|
| Item  | Quantity | Value   | Quantity     | Value   |  |
| No. 1 heavy melting steel                     | 7        | 898     | 76           | 9,810   |  |
| No. 2 heavy melting steel                     | 1        | 120     | 10           | 1,160   |  |
| No. 1 bundles                                 | 11       | 1,570   | 195          | 25,000  |  |
| No. 2 bundles                                 | 8        | 1,190   | 31           | 4,080   |  |
| Shredded steel scrap                          | 3        | 386     | 240          | 32,400  |  |
| Borings, shovelings and turnings              | 12       | 1,340   | 107          | 11,300  |  |
| Cut plate and structural                      | 27       | 1,230   | 58           | 5,240   |  |
| Tinned iron or steel                          | 1        | 219     | 31           | 4,430   |  |
| Remelting scrap ingots                        | 12       | 1,720   | 53           | 4,930   |  |
| Cast iron                                     | 17       | 2,350   | 140          | 18,100  |  |
| Other iron and steel                          | 80       | 10,900  | 756          | 92,700  |  |
| Total carbon steel and cast iron              | 179      | 21,900  | 1,700        | 209,000 |  |
| Stainless steel                               | 5        | 2,550   | 49           | 27,000  |  |
| Other alloy steel                             | 29       | 5,620   | 300          | 37,700  |  |
| Total stainless and alloy steel               | 34       | 8,170   | 349          | 64,800  |  |
| Total carbon, stainless, alloy steel and      |          |         |              |         |  |
| cast iron                                     | 213      | 30,100  | 2,040        | 274,000 |  |
| Ships, boats, and other vessels for           |          |         |              |         |  |
| breaking up (for scrapping)                   |          |         | (3/)         | 39      |  |
| Used rails for rerolling and other uses       | 41       | 6,750   | 215          | 42,700  |  |
| Total scrap imports                           | 253      | 36,800  | 2,260        | 317,000 |  |
| Imports of manufactured ferrous products:     |          |         |              |         |  |
| Pig iron $<$ or $= 0.5\%$ phosphorus          | 242      | 31,800  | 2,040        | 292,000 |  |
| Pig iron > 0.5% phosphorus                    |          |         |              |         |  |
| Alloy pig iron                                | (3/)     | 8       | 18           | 2,550   |  |
| Total pig iron                                | 242      | 31,800  | 2,060        | 294,000 |  |
| Direct-reduced iron (DRI)                     | 85       | 11,800  | 708          | 90,200  |  |
| Spongy iron products, not DRI                 | 30       | 2,700   | 57           | 5,900   |  |
| Granules for abrasive cleaning and other uses | 2        | 1,010   | 17           | 8,980   |  |
| Powders of alloy steel                        | 2        | 3,100   | 17           | 25,400  |  |
| Other ferrous powders                         | 7        | 7,460   | 61           | 60,700  |  |
| Total DRI, granules and powders               | 126      | 26,000  | 860          | 191,000 |  |
| Grand total                                   | 622      | 94,600  | 5,180        | 802,000 |  |

1/ Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than 1/2 unit.

# TABLE 12 U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION, AND CONTINUOUS CAST STEEL PRODUCTION

|           | Raw steel p | roduction,    | Raw steel   | capability | Continuous | s cast steel |
|-----------|-------------|---------------|-------------|------------|------------|--------------|
|           | thousand me | etric tons 1/ | utilization | , percent  | production | n, percent   |
|           |             | Year          |             | Year       |            | Year         |
| Period    | Monthly     | to date       | Monthly     | to date    | Monthly    | to date      |
| 1996:     |             |               |             |            |            |              |
| October   | 7,900       | 79,300        | 88.0%       | 90.4%      | 92.9%      | 93.1%        |
| November  | 7,510       | 86,800        | 86.5%       | 90.0%      | 93.6%      | 93.2%        |
| December  | 7,880       | 94,700        | 87.9%       | 89.9%      | 94.0%      | 93.2%        |
| 1997      |             |               |             |            |            |              |
| January   | 7,930       | 7,930         | 85.3%       | 85.3%      | 94.0%      | 94.0%        |
| February  | 7,500       | 15,400        | 89.3%       | 85.8%      | 94.3%      | 94.2%        |
| March     | 8,320       | 23,800        | 89.6%       | 88.3%      | 94.4%      | 94.2%        |
| April     | 8,060       | 32,200        | 89.2%       | 89.5%      | 94.2%      | 94.3%        |
| May       | 8,210       | 40,400        | 87.9%       | 89.2%      | 94.4%      | 94.3%        |
| June      | 7,860       | 48,300        | 87.0%       | 88.8%      | 94.3%      | 94.3%        |
| July      | 7,890       | 56,500        | 85.1%       | 88.7%      | 95.0%      | 94.4%        |
| August    | 8,000       | 64,500        | 86.4%       | 88.4%      | 94.7%      | 94.4%        |
| September | 8,170       | 72,700        | 91.2%       | 88.8%      | 95.1%      | 94.6%        |
| October   | 8,280       | 81,000        | 86.9%       | 88.6%      | 94.8%      | 94.6%        |

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: American Iron and Steel Institute.

| TABLE 13  |  |  |  |  |  |
|---|--|--|--|--|--|
| COMPOSITE PRICES FOR NO. 1 HEAVY MELTING STEEL SCRAP AND PIG IRON |  |  |  |  |  |

| American Me | American Metal Market<br>No. 1 HMS  |  | Iron Age<br>No. 1 HMS                                    |  | Iron Age<br>Pig Iron                                     |  |
|-------------|---|--|--|--|--|--|
| No. 1 H     |   |  |  |  |  |  |
| \$/lt       | \$/t  | \$/lt  | \$/t   | \$/lt  | \$/t   |  |
|             |   |  |  |  |  |  |
| 115.14      | 113.32  | 108.67   | 106.95   | NA   | NA   |  |
| 116.79      | 114.95  | 109.84   | 108.10   | NA   | NA   |  |
| 115.97      | 130.60  | 109.26   | 107.53   | NA   | NA   |  |
|             |   |  |  |  |  |  |
| 127.44      | 125.43  | 120.75   | 118.84   | 169.12   | 166.45   |  |
| 134.04      | 131.92  | 127.50   | 125.49   | 170.29   | 167.60   |  |
| 128.75      | 126.72  | 120.70   | 118.79   | 173.04   | 170.31   |  |
| 123.76      | 121.80  | 118.25   | 116.38   | 170.80   | 168.10   |  |
| 130.08      | 128.03  | 125.80   | 123.81   | 172.48   | 169.76   |  |
| 130.79      | 128.73  | 127.70   | 125.68   | 176.40   | 173.61   |  |
| 136.00      | 133.85  | 131.67   | 129.59   | 179.76   | 176.92   |  |
| 137.67      | 135.49  | 134.25   | 132.13   | 179.76   | 176.92   |  |
| 132.03      | 129.95  | 128.27   | 126.24   | 179.76   | 176.92   |  |
| 133.23      | 131.13  | 129.92   | 127.87   | 179.76   | 176.92   |  |
| NA          | NA  | 134.67   | 132.54   | 179.76   | 176.92   |  |
| NA          | NA  | 127.23   | 125.21   | 175.54   | 172.77   |  |
|             | No. 1 H           \$/lt           115.14           116.79           115.97           127.44           134.04           128.75           123.76           130.08           130.79           136.00           137.67           132.03           133.23           NA | No. 1 HMS           \$/lt         \$/t           115.14         113.32           116.79         114.95           115.97         130.60           127.44         125.43           134.04         131.92           128.75         126.72           123.76         121.80           130.08         128.03           130.79         128.73           136.00         133.85           137.67         135.49           132.03         129.95           133.23         131.13           NA         NA | $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ | $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ | $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ |  |

NA Not available.

Note: Long tons = lt; metric tons = t.