

FEDERAL RESERVE statistical release



G.12.3

For release at 9:15 a.m. (EDT)
August 16, 1989

INDUSTRIAL PRODUCTION

Industrial production rose 0.2 percent in July following a revised 0.1 percent decline in June. The July gain mainly reflected a rebound in the output of total materials as well as continued strength in business equipment excluding motor vehicles. In contrast, automobile and truck production fell sharply, and output of construction supplies, on balance, remained weak. At 141.7 percent of the 1977 average, the total index in July was 2.7 percent higher than a year earlier. Manufacturing output rose 0.2 percent in July. Capacity utilization in manufacturing, at 83.9 percent, was about unchanged from June. Detailed data for capacity utilization are shown separately in release G.3.

Market Groupings

Durable consumer goods fell 2.5 percent in July owing mainly to a significant curtailment in output of both autos and light trucks for consumer use; auto assemblies fell from an annual rate of 6.8 million units in June to a rate of 6.0 million units in July. In addition, the output of home goods, which had grown rapidly during the first half of this year, fell noticeably in July as the production of appliances dropped back from a high level in June. Nondurable consumer goods rose again as all major sectors posted gains.

The further large increase in business equipment excluding motor vehicles again was led by gains in manufacturing and commercial equipment as well as aircraft production. Materials output rose in July, with increases widespread; this rebound followed two months during which most categories of durable and nondurable materials had weakened. The main exception to this pattern was textile materials, which has been strong since March. Energy materials, following two months of strike-related declines, edged up in July.

Industry Groupings

Manufacturing production rose slightly in July as most nondurable industries advanced. Durables were unchanged in July as production of motor vehicles and parts fell, but primary metals and aerospace industries rose. Outside manufacturing, production at both mines and utilities increased following declines during most of the second quarter.

Industrial Production: Summary

Seasonally adjusted

| Item | Index, 1977=100 | | Monthly percent change | | | | | Current month from a year ago |
|-----------------------------|-----------------|-------|------------------------|------|------|------|------|-------------------------------|
| | 1989 | | 1989 | | | | | |
| | Jun | Jul | Mar | Apr | May | Jun | Jul | |
| Total Index | 141.4 | 141.7 | .1 | .7 | -0.1 | -0.1 | .2 | 2.7 |
| Market groupings | | | | | | | | |
| Products, total | 151.9 | 151.9 | .3 | .7 | .1 | .1 | .0 | 3.7 |
| Final products | 150.7 | 150.6 | .2 | .9 | .2 | .1 | -0.1 | 3.8 |
| Consumer goods | 139.4 | 138.9 | -0.3 | .8 | -0.2 | .1 | -0.4 | 3.5 |
| Durable consumer goods | 130.5 | 127.2 | -1.1 | 1.6 | -0.7 | -0.5 | -2.5 | 1.5 |
| Nondurable consumer goods | 142.7 | 143.3 | .0 | .6 | .0 | .3 | .4 | 4.2 |
| Business equipment | 168.9 | 169.3 | .8 | .9 | .7 | .0 | .2 | 6.2 |
| Defense and space equipment | 181.1 | 181.7 | -0.3 | .7 | .5 | .2 | .3 | -1.7 |
| Intermediate products | 156.1 | 156.4 | .6 | .3 | -0.2 | -0.1 | .2 | 3.2 |
| Construction supplies | 139.8 | 139.3 | -0.1 | .6 | -0.6 | .4 | -0.4 | .7 |
| Materials | 127.2 | 127.8 | -0.1 | .8 | -0.4 | -0.4 | .5 | 1.1 |
| Industry groupings | | | | | | | | |
| Manufacturing | 148.1 | 148.3 | .1 | .7 | .0 | .0 | .2 | 3.3 |
| Durable manufacturing | 146.8 | 146.7 | -0.1 | .7 | .0 | -0.1 | .0 | 2.7 |
| Nondurable manufacturing | 149.9 | 150.6 | .4 | .7 | .0 | .2 | .5 | 4.1 |
| Mining | 100.4 | 100.7 | .6 | .9 | -0.8 | -1.1 | .3 | -3.5 |
| Utilities | 114.9 | 115.8 | .9 | -0.4 | -0.7 | -1.2 | .8 | 1.2 |

Revisions

Total Industrial Production
(Estimates as shown last month and current estimates)

| Month | Index (1977=100) | | Percentage change from previous month | |
|--------------|-------------------------|----------------|--|----------------|
| | Previous | Current | Previous | Current |
| April | 141.6 | 141.7 | .6 | .7 |
| May | 141.4 | 141.6 | -0.1 | -0.1 |
| June | 141.1 | 141.4 | -0.2 | -0.1 |
| July | NA | 141.7 | NA | .2 |

NA—not applicable.

FEDERAL RESERVE



Industrial Production

INDUSTRIAL PRODUCTION

JULY DATA

Seasonally adjusted, ratio scale, 1977=100

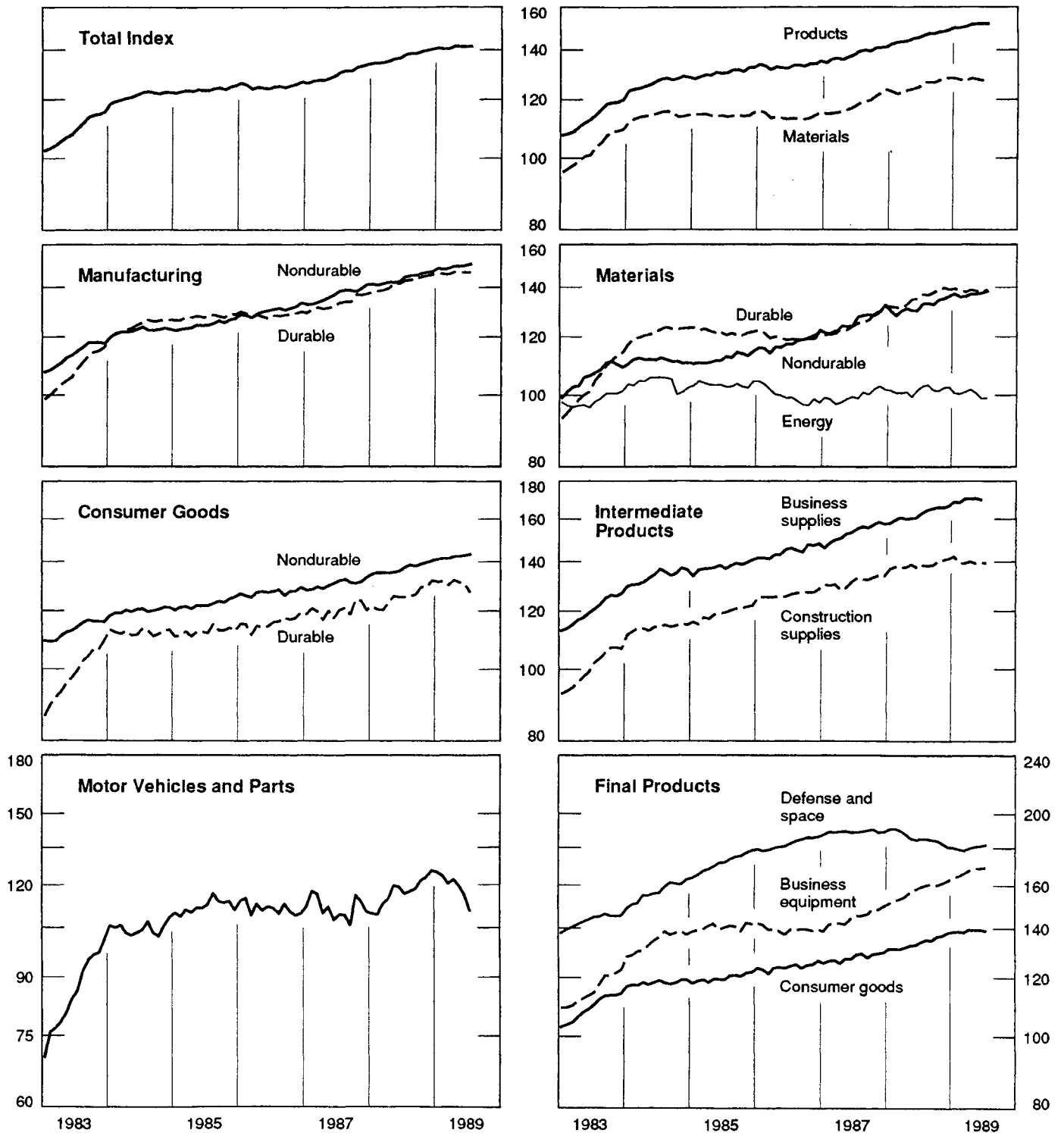


Table 1A
INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Seasonally adjusted, 1977=100

| Major Market Groupings | 1977 | 1988 | 1988 | | | | | | | 1989 | | | | | | |
|--------------------------------|----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | Pro- por- tion | Ann. Avg. | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | |
| TOTAL INDEX | 100.00 | 137.2 | 138.0 | 138.5 | 138.6 | 139.4 | 139.9 | 140.4 | 140.8 | 140.5 | 140.7 | 141.7 | 141.6 | 141.4 | 141.7 | |
| PRODUCTS, TOTAL | 57.72 | 145.9 | 146.5 | 147.3 | 147.4 | 148.1 | 148.4 | 149.4 | 150.1 | 150.0 | 150.5 | 151.6 | 151.7 | 151.9 | 151.9 | |
| FINAL PRODUCTS | 44.77 | 144.3 | 145.0 | 145.8 | 145.8 | 146.4 | 146.8 | 147.7 | 148.2 | 148.6 | 148.9 | 150.2 | 150.5 | 150.7 | 150.6 | |
| CONSUMER GOODS | 25.52 | 133.9 | 134.2 | 135.0 | 134.8 | 136.4 | 136.8 | 138.2 | 138.5 | 138.7 | 138.4 | 139.5 | 139.3 | 139.4 | 138.9 | |
| EQUIPMENT, TOTAL | 19.25 | 158.2 | 159.4 | 160.1 | 160.4 | 159.7 | 159.9 | 160.4 | 161.1 | 161.6 | 162.8 | 164.3 | 165.3 | 165.5 | 166.0 | |
| INTERMEDIATE PRODUCTS | 12.94 | 151.5 | 151.6 | 152.3 | 152.9 | 154.0 | 154.2 | 155.0 | 156.6 | 155.1 | 156.1 | 156.5 | 156.2 | 156.1 | 156.4 | |
| MATERIALS | 42.28 | 125.2 | 126.4 | 126.5 | 126.5 | 127.5 | 128.3 | 128.3 | 128.1 | 127.4 | 127.3 | 128.2 | 127.7 | 127.2 | 127.8 | |
| CONSUMER GOODS | 25.52 | 133.9 | 134.2 | 135.0 | 134.8 | 136.4 | 136.8 | 138.2 | 138.5 | 138.7 | 138.4 | 139.5 | 139.3 | 139.4 | 138.9 | |
| DURABLE CONSUMER GOODS | 6.89 | 125.3 | 125.3 | 125.7 | 126.3 | 129.3 | 129.2 | 131.9 | 131.5 | 131.6 | 130.1 | 132.2 | 131.2 | 130.5 | 127.2 | |
| Automotive products | 2.98 | 124.9 | 124.4 | 124.2 | 126.4 | 128.9 | 129.5 | 134.5 | 132.5 | 131.6 | 128.9 | 131.7 | 128.8 | 126.3 | 120.7 | |
| Autos and trucks, consumer | 1.79 | 122.7 | 120.8 | 123.1 | 124.8 | 128.3 | 129.5 | 138.0 | 135.6 | 133.1 | 128.3 | 131.7 | 127.4 | 123.6 | 114.5 | |
| Autos, consumer | 1.16 | 95.4 | 93.8 | 93.0 | 97.7 | 101.3 | 101.0 | 105.1 | 99.6 | 96.0 | 95.0 | 98.8 | 96.0 | 91.4 | 81.2 | |
| Trucks, consumer | .63 | 177.0 | 170.8 | 179.0 | 175.3 | 178.4 | 182.4 | 199.1 | 202.3 | 201.9 | 190.0 | 192.8 | 185.5 | 183.3 | 176.3 | |
| Auto parts & allied gds | 1.19 | 128.2 | 129.9 | 125.9 | 128.8 | 129.8 | 129.5 | 129.3 | 127.9 | 129.4 | 129.8 | 131.7 | 131.0 | 130.5 | 130.0 | |
| Home goods | 3.91 | 125.6 | 125.9 | 126.8 | 126.2 | 129.7 | 128.9 | 130.0 | 130.7 | 131.6 | 131.1 | 132.6 | 133.0 | 133.7 | 132.2 | |
| Appliances-TV & air-cond | 1.24 | 144.1 | 143.3 | 146.5 | 144.9 | 154.4 | 150.4 | 151.0 | 151.0 | 153.9 | 151.6 | 151.7 | 151.3 | 155.1 | 151.0 | |
| Appliances and TV | 1.19 | 143.6 | 143.8 | 146.1 | 143.7 | 151.9 | 148.9 | 150.0 | 149.5 | 153.0 | 152.3 | 152.5 | 151.4 | 154.5 | | |
| Carpeting & furniture | .96 | 136.2 | 136.6 | 137.2 | 137.1 | 138.8 | 139.8 | 140.5 | 141.1 | 141.3 | 140.7 | 142.8 | 145.6 | 141.5 | | |
| Misc. home goods | 1.71 | 106.3 | 107.4 | 106.8 | 106.6 | 106.7 | 107.3 | 108.9 | 110.1 | 110.1 | 110.9 | 113.0 | 113.9 | 113.8 | | |
| NONDURABLE CONSUMER GOODS | 18.63 | 137.1 | 137.5 | 138.5 | 138.0 | 139.0 | 139.7 | 140.5 | 141.1 | 141.4 | 141.4 | 142.2 | 142.2 | 142.7 | 143.3 | |
| Clothing | 3.34 | 101.3 | 101.7 | 101.2 | 102.2 | 102.5 | 102.2 | 101.7 | 102.9 | 103.1 | 102.2 | 103.5 | 103.5 | 104.0 | | |
| Consumer staples | 15.29 | 144.9 | 145.3 | 146.6 | 145.8 | 147.0 | 147.9 | 148.9 | 149.4 | 149.7 | 149.9 | 150.7 | 150.7 | 151.2 | 151.7 | |
| Consumer foods & tobacco | 7.80 | 140.9 | 141.1 | 141.3 | 141.1 | 142.4 | 143.7 | 144.5 | 144.8 | 144.3 | 143.3 | 144.7 | 145.2 | 145.5 | | |
| Nonfood staples | 7.49 | 149.1 | 149.6 | 152.1 | 150.7 | 151.8 | 152.2 | 153.6 | 154.2 | 155.4 | 156.9 | 156.9 | 156.4 | 157.1 | 157.9 | |
| Consumer chem. products | 2.75 | 180.0 | 181.8 | 183.8 | 185.0 | 186.1 | 185.7 | 186.8 | 187.6 | 187.8 | 188.9 | 187.3 | 188.1 | 188.9 | | |
| Consumer paper products | 1.88 | 163.4 | 164.0 | 165.3 | 166.3 | 167.1 | 167.8 | 169.0 | 174.2 | 177.0 | 180.4 | 180.9 | 180.6 | 181.4 | | |
| Consumer energy | 2.86 | 110.0 | 109.3 | 113.0 | 107.6 | 108.9 | 109.8 | 111.6 | 109.1 | 110.1 | 110.7 | 112.0 | 110.1 | 110.7 | 111.9 | |
| Consumer fuel | 1.44 | 95.4 | 94.6 | 95.5 | 92.7 | 95.3 | 94.1 | 96.3 | 96.7 | 95.0 | 95.6 | 97.3 | 93.6 | 96.2 | | |
| Residential utilities | 1.42 | 124.8 | 124.4 | 130.9 | 122.8 | 122.7 | 125.8 | 127.1 | 121.7 | 125.4 | 126.1 | 127.0 | 127.0 | | | |
| EQUIPMENT, TOTAL | 19.25 | 158.2 | 159.4 | 160.1 | 160.4 | 159.7 | 159.9 | 160.4 | 161.1 | 161.6 | 162.8 | 164.3 | 165.3 | 165.5 | 166.0 | |
| BUSINESS & DEFENSE EQUIP. | 18.01 | 163.3 | 164.6 | 165.2 | 165.6 | 165.1 | 165.5 | 166.2 | 167.1 | 167.9 | 168.9 | 170.3 | 171.3 | 171.4 | 171.8 | |
| BUSINESS EQUIPMENT | 14.34 | 157.6 | 159.3 | 160.2 | 160.8 | 160.2 | 161.2 | 162.6 | 163.8 | 165.0 | 166.3 | 167.8 | 168.9 | 168.9 | 169.3 | |
| Constr., mining, & farm | 2.09 | 71.9 | 73.6 | 73.1 | 74.3 | 74.2 | 74.5 | 74.6 | 74.3 | 75.6 | 76.9 | 77.6 | 76.4 | 76.2 | 76.1 | |
| Manufacturing equipment | 3.27 | 131.3 | 132.4 | 134.0 | 135.8 | 136.2 | 136.2 | 137.0 | 136.3 | 137.8 | 138.6 | 139.7 | 140.2 | 141.5 | 142.4 | |
| Power equipment | 1.27 | 89.4 | 89.8 | 90.9 | 92.2 | 91.5 | 92.1 | 91.8 | 92.8 | 92.7 | 93.0 | 93.6 | 93.1 | 92.6 | 92.9 | |
| Commercial equipment | 5.22 | 125.2 | 124.8 | 249.8 | 248.7 | 245.4 | 247.0 | 248.9 | 252.4 | 254.3 | 257.6 | 260.1 | 263.2 | 262.8 | 264.3 | |
| Transit equipment | 2.49 | 115.1 | 115.9 | 115.2 | 116.8 | 120.3 | 122.3 | 124.9 | 125.7 | 125.2 | 123.9 | 124.8 | 125.3 | 124.8 | 122.6 | |
| DEFENSE & SPACE EQUIPMENT | 3.67 | 185.8 | 184.9 | 184.9 | 184.5 | 184.0 | 182.2 | 180.5 | 180.0 | 179.3 | 178.7 | 179.9 | 180.7 | 181.1 | 181.7 | |
| INTERMEDIATE PRODUCTS | 12.94 | 151.5 | 151.6 | 152.3 | 152.9 | 154.0 | 154.2 | 155.0 | 156.6 | 155.1 | 156.1 | 156.5 | 156.2 | 156.1 | 156.4 | |
| Construction supplies | 5.95 | 138.6 | 138.4 | 138.1 | 138.4 | 140.0 | 140.7 | 141.4 | 142.3 | 139.5 | 139.3 | 140.2 | 139.3 | 139.8 | 139.3 | |
| Business supplies | 6.99 | 162.5 | 162.8 | 164.4 | 165.2 | 165.9 | 165.7 | 166.7 | 168.8 | 168.4 | 170.4 | 170.4 | 170.6 | 170.0 | | |
| Gen. business supplies | 5.67 | 168.5 | 168.6 | 170.6 | 171.8 | 172.3 | 172.9 | 173.8 | 175.9 | 175.4 | 177.4 | 177.9 | 178.1 | 177.2 | | |
| Commercial energy prod. | 1.31 | 136.3 | 137.6 | 137.7 | 136.7 | 138.2 | 134.3 | 135.8 | 138.2 | 138.3 | 140.3 | 138.0 | 138.2 | 138.8 | | |
| MATERIALS | 42.28 | 125.2 | 126.4 | 126.5 | 126.5 | 127.5 | 128.3 | 128.3 | 128.1 | 127.4 | 127.3 | 128.2 | 127.7 | 127.2 | 127.8 | |
| DURABLE GOODS MATERIALS | 20.50 | 135.4 | 136.8 | 136.6 | 137.8 | 138.9 | 139.8 | 139.0 | 139.4 | 138.6 | 137.9 | 139.0 | 138.4 | 138.2 | 138.9 | |
| Consumer durable parts | 4.92 | 108.9 | 110.1 | 109.8 | 111.0 | 111.4 | 113.9 | 112.5 | 111.7 | 112.1 | 110.7 | 110.8 | 111.9 | 110.1 | 109.2 | |
| Equipment parts | 5.94 | 171.6 | 174.1 | 173.5 | 174.0 | 174.9 | 175.0 | 174.1 | 175.2 | 175.2 | 175.3 | 176.9 | 177.2 | 177.2 | 178.8 | |
| Durable materials nec | 9.64 | 126.7 | 127.5 | 127.6 | 129.2 | 130.8 | 131.3 | 130.9 | 131.5 | 129.7 | 128.8 | 130.0 | 128.0 | 128.6 | 129.5 | |
| Basic metal materials | 4.64 | 95.9 | 98.4 | 97.3 | 100.3 | 101.1 | 101.4 | 99.8 | 100.8 | 98.4 | 95.9 | 98.0 | 94.0 | 95.5 | 97.3 | |
| NONDURABLE GOODS MATERIALS | 10.10 | 132.0 | 132.8 | 133.1 | 132.6 | 134.7 | 135.1 | 136.3 | 137.1 | 135.9 | 136.0 | 137.1 | 137.1 | 137.5 | 138.3 | |
| Textile, paper, & chem. mater. | 7.53 | 134.4 | 135.3 | 135.7 | 134.9 | 137.4 | 137.9 | 139.1 | 139.9 | 138.6 | 139.0 | 140.3 | 139.6 | 140.6 | 141.6 | |
| Textile materials | 1.52 | 110.0 | 108.5 | 110.1 | 109.2 | 109.5 | 110.1 | 110.0 | 112.1 | 110.7 | 111.8 | 114.6 | 116.8 | 119.4 | | |
| Pulp & paper materials | 1.55 | 147.3 | 150.3 | 148.3 | 148.1 | 148.4 | 147.2 | 150.3 | 150.4 | 147.5 | 147.3 | 146.7 | 145.2 | 144.3 | | |
| Chemical materials | 4.46 | 138.2 | 139.2 | 140.0 | 139.0 | 143.1 | 144.2 | 145.1 | 145.7 | 145.0 | 145.4 | 146.8 | 145.5 | 146.5 | | |
| Misc. nondurable materials | 2.57 | 125.0 | 125.6 | 125.6 | 125.9 | 126.6 | 127.0 | 128.0 | 129.1 | 128.0 | 127.2 | 127.8 | 129.6 | | | |
| ENERGY MATERIALS | 11.69 | 101.5 | 102.7 | 103.2 | 101.5 | 101.3 | 102.3 | 102.6 | 100.5 | 100.5 | 101.0 | 101.7 | 100.8 | 98.9 | 99.1 | |
| Primary energy | 7.57 | 106.3 | 106.8 | 106.2 | 106.8 | 106.0 | 108.6 | 107.6 | 105.2 | 104.4 | 103.7 | 104.1 | 103.5 | 101.6 | | |
| Converted fuel materials | 4.12 | 92.7 | 95.3 | 97.7 | 91.8 | 92.6 | 90.7 | 93.3 | 92.0 | 93.3 | 96.1 | 97.4 | 95.7 | 94.0 | | |

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Table 1B
INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Not seasonally adjusted, 1977=100

| Major Market Groupings | 1977 Pro-portion | 1988 Ann. Avg. | 1988 | | | | | 1989 | | | | | | | |
|--------------------------------|------------------|----------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL |
| TOTAL INDEX | 100.00 | 137.2 | 136.3 | 141.7 | 143.0 | 142.2 | 139.3 | 136.4 | 137.1 | 140.1 | 139.5 | 140.9 | 140.1 | 144.3 | 139.9 |
| PRODUCTS, TOTAL | 57.72 | 145.9 | 146.1 | 152.6 | 154.5 | 152.4 | 147.9 | 144.4 | 144.9 | 147.7 | 147.6 | 149.6 | 149.6 | 155.6 | 151.6 |
| FINAL PRODUCTS | 44.77 | 144.3 | 143.8 | 150.6 | 152.5 | 150.5 | 146.3 | 143.0 | 144.0 | 147.0 | 146.4 | 148.2 | 148.4 | 154.1 | 149.5 |
| CONSUMER GOODS | 25.52 | 133.9 | 133.2 | 141.3 | 142.9 | 141.7 | 135.7 | 131.4 | 133.4 | 136.6 | 134.7 | 137.5 | 137.0 | 143.6 | 137.9 |
| EQUIPMENT, TOTAL | 19.25 | 158.2 | 158.0 | 162.8 | 165.3 | 162.1 | 160.2 | 158.3 | 158.0 | 160.9 | 161.8 | 162.2 | 163.4 | 168.1 | 164.9 |
| INTERMEDIATE PRODUCTS | 12.94 | 151.5 | 153.9 | 159.8 | 161.6 | 159.0 | 153.5 | 149.6 | 148.0 | 149.9 | 151.7 | 154.7 | 153.7 | 160.7 | 158.7 |
| MATERIALS | 42.28 | 125.2 | 122.8 | 126.8 | 127.3 | 128.2 | 127.6 | 125.4 | 126.6 | 129.9 | 128.6 | 128.9 | 127.1 | 128.9 | 124.0 |
| CONSUMER GOODS | 25.52 | 133.9 | 133.2 | 141.3 | 142.9 | 141.7 | 135.7 | 131.4 | 133.4 | 136.6 | 134.7 | 137.5 | 137.0 | 143.6 | 137.9 |
| DURABLE CONSUMER GOODS | 6.89 | 125.3 | 110.2 | 122.8 | 130.2 | 139.7 | 130.7 | 121.0 | 128.1 | 135.1 | 129.8 | 138.6 | 133.0 | 133.9 | 110.4 |
| Automotive products | 2.98 | 124.9 | 99.8 | 115.0 | 130.5 | 138.2 | 129.7 | 119.8 | 130.8 | 138.9 | 131.8 | 142.9 | 133.6 | 132.5 | 93.6 |
| Autos and trucks, consumer | 1.79 | 122.7 | 82.9 | 105.8 | 128.5 | 138.5 | 131.2 | 116.2 | 134.9 | 145.9 | 133.7 | 147.9 | 137.2 | 133.8 | 72.1 |
| Autos, consumer | 1.16 | 93.4 | 59.9 | 74.6 | 97.6 | 110.2 | 102.4 | 90.2 | 100.5 | 105.6 | 98.8 | 113.0 | 103.2 | 97.6 | 46.3 |
| Trucks, consumer | .63 | 177.0 | 125.7 | 163.7 | 185.8 | 191.1 | 184.6 | 164.5 | 198.8 | 220.7 | 198.6 | 212.7 | 200.4 | 200.9 | 119.9 |
| Auto parts & allied gds | 1.19 | 128.2 | 125.2 | 128.9 | 133.6 | 137.7 | 127.4 | 125.3 | 124.5 | 128.5 | 128.9 | 135.4 | 128.0 | 130.6 | 125.9 |
| Home goods | 3.91 | 125.6 | 118.1 | 128.7 | 130.0 | 140.9 | 131.4 | 121.9 | 126.0 | 132.1 | 128.3 | 135.4 | 132.5 | 134.9 | 123.3 |
| Appliances, TV & air-cond | 1.24 | 144.1 | 130.7 | 146.6 | 144.5 | 178.0 | 155.7 | 132.6 | 149.7 | 157.7 | 143.1 | 160.7 | 152.2 | 153.4 | 135.3 |
| Appliances and TV | 1.19 | 143.6 | 132.1 | 149.9 | 146.8 | 179.6 | 156.8 | 133.1 | 145.9 | 154.6 | 141.1 | 158.0 | 149.7 | 151.2 | |
| Carpeting & furniture | .96 | 136.2 | 128.4 | 140.5 | 143.3 | 145.4 | 142.1 | 134.1 | 130.8 | 143.1 | 141.7 | 144.2 | 142.4 | 145.4 | |
| Misc. home goods | 1.71 | 106.3 | 103.3 | 109.1 | 112.0 | 111.4 | 107.9 | 107.3 | 106.3 | 107.5 | 110.2 | 112.2 | 112.8 | 115.6 | |
| NONDURABLE CONSUMER GOODS | 18.63 | 137.1 | 141.7 | 148.2 | 147.5 | 142.5 | 137.6 | 135.2 | 135.3 | 137.1 | 136.5 | 137.1 | 138.5 | 147.2 | 148.1 |
| Clothing | 3.24 | 101.3 | 99.0 | 106.3 | 106.6 | 104.5 | 101.7 | 97.5 | 97.4 | 102.1 | 101.5 | 103.9 | 102.8 | 107.7 | |
| Consumer staples | 15.29 | 144.9 | 151.0 | 157.4 | 156.5 | 150.8 | 145.5 | 143.5 | 143.6 | 144.8 | 144.2 | 144.4 | 146.2 | 155.9 | 158.1 |
| Consumer foods & tobacco | 7.80 | 140.9 | 143.5 | 150.6 | 151.3 | 149.7 | 143.0 | 137.7 | 136.9 | 137.6 | 137.4 | 140.6 | 142.7 | 150.9 | |
| Nonfood staples | 7.49 | 149.1 | 158.9 | 164.4 | 161.9 | 152.0 | 148.0 | 149.5 | 150.6 | 152.2 | 151.3 | 148.4 | 150.0 | 161.0 | 168.1 |
| Consumer chem. products | 2.75 | 180.0 | 194.8 | 197.2 | 201.6 | 191.1 | 182.3 | 177.6 | 175.7 | 177.6 | 181.9 | 177.9 | 183.6 | 198.1 | |
| Consumer paper products | 1.88 | 163.4 | 172.4 | 182.0 | 180.3 | 170.9 | 163.1 | 162.2 | 165.7 | 171.3 | 173.3 | 176.2 | 176.2 | 185.1 | |
| Consumer energy | 2.86 | 110.0 | 115.6 | 121.4 | 111.6 | 102.0 | 105.2 | 114.3 | 116.7 | 115.4 | 106.3 | 103.7 | 100.5 | 109.6 | 119.4 |
| Consumer fuel | 1.44 | 95.4 | 96.5 | 97.5 | 94.5 | 94.4 | 96.8 | 100.6 | 96.2 | 91.8 | 90.7 | 94.4 | 94.0 | 98.4 | |
| Residential utilities | 1.42 | 124.8 | 135.0 | 145.7 | 129.1 | 109.7 | 113.8 | 128.2 | 137.6 | 139.4 | 122.2 | 114.2 | 107.1 | | |
| EQUIPMENT, TOTAL | 19.25 | 158.2 | 158.0 | 162.8 | 165.3 | 162.1 | 160.2 | 158.3 | 158.0 | 160.9 | 161.8 | 162.2 | 163.4 | 168.1 | 164.9 |
| BUSINESS & DEFENSE EQUIP. | 18.01 | 163.3 | 163.3 | 168.1 | 170.8 | 167.4 | 165.5 | 163.7 | 163.7 | 167.1 | 168.0 | 168.3 | 169.7 | 174.4 | 170.9 |
| BUSINESS EQUIPMENT | 14.34 | 157.6 | 158.3 | 164.3 | 167.2 | 163.5 | 161.0 | 158.3 | 159.2 | 163.9 | 165.1 | 165.4 | 167.0 | 172.8 | 168.9 |
| Constr. mining, & farm | 2.09 | 71.9 | 73.4 | 73.5 | 76.9 | 74.1 | 72.9 | 74.2 | 72.0 | 76.8 | 76.0 | 75.9 | 75.6 | 77.8 | 77.0 |
| Manufacturing equipment | 3.27 | 131.3 | 132.2 | 136.6 | 140.5 | 137.8 | 135.2 | 134.5 | 131.7 | 138.5 | 140.0 | 137.6 | 137.6 | 142.9 | 142.5 |
| Power equipment | 1.27 | 89.4 | 89.0 | 90.8 | 95.5 | 93.5 | 92.8 | 92.5 | 90.6 | 92.0 | 92.4 | 91.1 | 91.6 | 94.9 | 92.0 |
| Commercial equipment | 5.22 | 1245.2 | 1255.7 | 263.8 | 260.2 | 250.6 | 246.9 | 242.7 | 244.1 | 248.5 | 252.8 | 251.6 | 258.0 | 269.1 | 272.6 |
| Transit equipment | 2.49 | 115.1 | 95.1 | 105.8 | 119.6 | 125.4 | 123.2 | 116.9 | 125.4 | 129.6 | 126.2 | 134.2 | 129.9 | 129.5 | 102.3 |
| DEFENSE & SPACE EQUIPMENT | 3.67 | 185.8 | 182.7 | 183.1 | 184.8 | 182.3 | 183.2 | 184.5 | 181.3 | 179.7 | 179.3 | 179.4 | 180.2 | 180.6 | 179.0 |
| INTERMEDIATE PRODUCTS | 12.94 | 151.5 | 153.9 | 159.8 | 161.6 | 159.0 | 153.5 | 149.6 | 148.0 | 149.9 | 151.7 | 154.7 | 153.7 | 160.7 | 158.7 |
| Construction supplies | 5.95 | 138.6 | 138.3 | 141.9 | 144.1 | 144.7 | 140.5 | 136.1 | 134.1 | 134.1 | 136.7 | 141.4 | 140.6 | 145.2 | 139.3 |
| Business supplies | 6.99 | 162.5 | 167.3 | 175.1 | 176.5 | 171.2 | 164.5 | 161.0 | 159.9 | 163.4 | 164.5 | 166.1 | 164.9 | 173.9 | |
| Gen. business supplies | 5.67 | 168.5 | 172.0 | 181.2 | 183.3 | 179.1 | 172.6 | 168.0 | 165.2 | 168.9 | 172.2 | 174.3 | 173.6 | 180.6 | |
| Commercial energy prod. | 1.31 | 136.3 | 146.8 | 149.0 | 147.1 | 137.2 | 129.8 | 130.8 | 136.9 | 139.7 | 131.2 | 130.6 | 127.5 | 145.2 | |
| MATERIALS | 42.28 | 125.2 | 122.8 | 126.8 | 127.3 | 128.2 | 127.6 | 125.4 | 126.6 | 129.9 | 128.6 | 128.9 | 127.1 | 128.9 | 124.0 |
| DURABLE GOODS MATERIALS | 20.50 | 135.4 | 133.0 | 136.5 | 139.4 | 140.4 | 139.2 | 136.1 | 135.4 | 139.4 | 139.7 | 140.2 | 138.9 | 140.9 | 135.0 |
| Consumer durable parts | 4.92 | 108.9 | 103.8 | 107.7 | 112.0 | 113.6 | 114.4 | 111.4 | 109.7 | 113.8 | 113.3 | 113.0 | 111.8 | 110.8 | 102.5 |
| Equipment parts | 5.94 | 171.6 | 171.0 | 173.4 | 175.3 | 174.6 | 176.8 | 177.1 | 175.2 | 174.9 | 175.4 | 175.8 | 175.9 | 178.5 | 175.7 |
| Durable materials nec | 9.64 | 126.7 | 124.4 | 128.5 | 131.3 | 132.9 | 128.8 | 123.3 | 124.0 | 130.7 | 131.1 | 132.2 | 130.0 | 133.1 | 126.4 |
| Basic metal materials | 4.64 | 95.9 | 92.0 | 93.0 | 97.5 | 99.8 | 97.0 | 91.8 | 98.2 | 101.1 | 101.0 | 104.2 | 98.5 | 99.2 | 90.6 |
| NONDURABLE GOODS MATERIALS | 10.10 | 132.0 | 128.0 | 133.4 | 134.3 | 137.3 | 134.4 | 129.1 | 134.9 | 138.8 | 136.8 | 140.2 | 137.4 | 139.4 | 132.7 |
| Textile, paper, & chem. mater. | 7.53 | 134.4 | 130.1 | 135.5 | 136.4 | 138.5 | 137.4 | 132.8 | 138.1 | 141.7 | 140.3 | 143.1 | 140.5 | 142.1 | 135.2 |
| Textile materials | 1.52 | 110.0 | 96.3 | 116.8 | 112.2 | 114.9 | 110.7 | 99.2 | 109.4 | 113.6 | 112.6 | 117.5 | 121.9 | 122.9 | |
| Pulp & paper materials | 1.55 | 147.3 | 144.9 | 149.5 | 147.7 | 148.4 | 146.2 | 142.7 | 153.4 | 150.3 | 149.0 | 147.5 | 143.4 | 145.7 | |
| Chemical materials | 4.46 | 138.2 | 136.4 | 137.0 | 140.8 | 143.1 | 143.5 | 140.9 | 142.7 | 148.3 | 146.8 | 150.3 | 145.8 | 147.5 | |
| Misc. nondurable materials | 2.57 | 125.0 | 122.1 | 127.2 | 128.0 | 133.9 | 125.5 | 118.2 | 125.6 | 130.1 | 126.5 | 131.6 | 128.2 | | |
| ENERGY MATERIALS | 11.69 | 101.5 | 100.5 | 104.3 | 99.9 | 99.0 | 101.3 | 103.5 | 104.0 | 105.4 | 102.2 | 99.3 | 97.5 | 98.8 | 97.2 |
| Primary energy | 7.57 | 106.3 | 103.0 | 106.6 | 105.4 | 105.0 | 107.6 | 107.4 | 107.3 | 108.3 | 105.9 | 103.7 | 102.2 | 101.3 | |
| Converted fuel materials | 4.12 | 92.7 | 96.0 | 99.9 | 90.0 | 88.0 | 89.7 | 96.3 | 97.9 | 100.0 | 95.3 | 91.3 | 88.9 | 94.2 | |

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Table 2A
INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Seasonally adjusted, 1977=100

| Major Industry Groupings | SIC Code | 1977 | 1988 | 1988 | | | | | | | 1989 | | | | | | |
|--------------------------|----------|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | | Pro-portion | Ann. Avg. | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | |
| MINING AND UTILITIES | | 15.79 | 107.5 | 108.1 | 109.0 | 107.2 | 107.2 | 108.1 | 108.9 | 107.2 | 106.8 | 107.5 | 107.9 | 107.1 | 105.9 | 106.4 | |
| MINING | | 9.83 | 103.4 | 104.3 | 103.8 | 103.7 | 103.1 | 104.7 | 104.9 | 103.0 | 100.9 | 101.5 | 102.4 | 101.6 | 100.4 | 100.7 | |
| UTILITIES | | 5.96 | 114.3 | 114.4 | 117.8 | 113.0 | 113.9 | 113.7 | 115.4 | 114.0 | 116.5 | 117.5 | 117.1 | 116.3 | 114.9 | 115.8 | |
| MANUFACTURING | | 84.21 | 142.7 | 143.6 | 144.0 | 144.4 | 145.3 | 145.8 | 146.3 | 147.2 | 146.8 | 147.0 | 148.0 | 148.0 | 148.1 | 148.3 | |
| NONDURABLE | | 35.11 | 143.9 | 144.6 | 145.1 | 145.3 | 146.3 | 146.7 | 147.1 | 148.5 | 148.1 | 148.6 | 149.6 | 149.6 | 149.9 | 150.6 | |
| DURABLE | | 49.10 | 141.9 | 142.9 | 143.2 | 143.8 | 144.6 | 145.2 | 145.7 | 146.2 | 145.9 | 145.8 | 146.9 | 146.9 | 146.8 | 146.7 | |
| MINING | | | | | | | | | | | | | | | | | |
| Metal mining | 10 | .50 | 93.2 | 94.0 | 96.6 | 99.1 | 101.6 | 104.6 | 111.9 | 106.9 | 98.6 | 98.1 | 96.8 | 94.0 | | | |
| Coal | 11 | 1.60 | 137.9 | 141.5 | 137.2 | 142.2 | 138.5 | 149.7 | 155.1 | 144.7 | 134.7 | 137.7 | 145.5 | 137.1 | 129.2 | 128.5 | |
| Oil & gas extraction | 13 | 7.07 | 92.9 | 93.3 | 93.2 | 92.0 | 91.5 | 90.8 | 88.9 | 88.9 | 89.5 | 89.6 | 89.1 | 90.0 | 89.7 | | |
| Stone & earth minerals | 14 | .66 | 139.9 | 140.2 | 141.3 | 139.7 | 142.8 | 144.0 | 149.4 | 150.8 | 142.5 | 143.5 | 144.5 | 145.0 | 148.1 | | |
| NONDURABLE MANUFACTURES | | | | | | | | | | | | | | | | | |
| Foods | 20 | 7.96 | 142.7 | 143.3 | 143.3 | 143.2 | 144.0 | 145.7 | 145.8 | 146.6 | 146.3 | 145.4 | 146.6 | 147.4 | 147.6 | | |
| Tobacco products | 21 | .62 | 105.2 | 100.6 | 105.1 | 105.0 | 105.4 | 102.4 | 107.0 | 105.0 | 104.7 | 101.5 | 109.2 | | | | |
| Textile mill products | 22 | 2.29 | 116.2 | 117.1 | 116.4 | 116.2 | 117.0 | 117.2 | 117.9 | 120.2 | 119.4 | 119.7 | 122.5 | 123.6 | 124.6 | | |
| Apparel products | 23 | 2.79 | 109.1 | 109.4 | 108.9 | 109.9 | 109.5 | 110.1 | 108.8 | 110.2 | 110.2 | 109.9 | 111.3 | 111.6 | | | |
| Paper & products | 26 | 3.15 | 150.3 | 152.3 | 151.0 | 150.9 | 151.8 | 150.7 | 151.7 | 153.8 | 151.7 | 151.7 | 150.7 | 150.1 | 148.4 | | |
| Printing & publishing | 27 | 4.54 | 184.2 | 184.9 | 186.7 | 188.0 | 188.1 | 188.5 | 188.0 | 193.0 | 194.6 | 198.5 | 200.1 | 199.4 | 199.5 | 200.2 | |
| Chemicals & products | 28 | 8.05 | 151.9 | 153.4 | 154.8 | 155.3 | 156.7 | 157.5 | 158.1 | 159.0 | 158.5 | 159.2 | 159.3 | 158.4 | 159.1 | | |
| Petroleum products | 29 | 2.40 | 96.0 | 95.0 | 96.0 | 93.7 | 96.3 | 95.0 | 98.0 | 98.0 | 96.3 | 97.0 | 97.3 | 96.7 | 98.4 | 99.9 | |
| Rubber & plastics prod. | 30 | 2.80 | 174.4 | 175.4 | 175.3 | 175.3 | 176.9 | 177.5 | 177.5 | 175.9 | 175.0 | 176.4 | 178.0 | 180.1 | 180.5 | | |
| Leather & products | 31 | .53 | 59.5 | 59.1 | 59.4 | 59.9 | 61.0 | 61.5 | 60.2 | 62.9 | 62.9 | 61.2 | 61.4 | 60.3 | 60.3 | | |
| DURABLE MANUFACTURES | | | | | | | | | | | | | | | | | |
| Lumber & products | 24 | 2.30 | 137.3 | 136.6 | 133.8 | 133.5 | 137.5 | 139.4 | 143.0 | 139.9 | 132.8 | 133.4 | 135.1 | 134.7 | 135.6 | | |
| Furniture & fixtures | 25 | 1.27 | 162.1 | 162.9 | 164.9 | 164.9 | 164.5 | 165.4 | 165.4 | 166.3 | 164.8 | 165.8 | 168.0 | 169.5 | 169.5 | | |
| Clay, glass, stone prod. | 32 | 2.72 | 122.6 | 122.2 | 122.6 | 122.6 | 123.3 | 124.7 | 125.1 | 126.6 | 125.4 | 125.5 | 124.7 | 122.7 | 123.4 | | |
| Primary metals | 33 | 5.33 | 89.2 | 91.5 | 90.8 | 93.1 | 94.2 | 92.7 | 90.0 | 93.2 | 91.1 | 88.4 | 90.1 | 86.9 | 87.3 | 88.8 | |
| Iron & steel | 331 | 3.49 | 78.1 | 80.2 | 78.9 | 81.4 | 83.1 | 80.8 | 77.6 | 82.2 | 79.1 | 75.9 | 77.0 | 73.2 | 73.4 | | |
| Fabricated metal prod. | 34 | 6.46 | 120.9 | 121.7 | 122.1 | 122.5 | 122.6 | 124.6 | 125.1 | 124.5 | 124.5 | 123.8 | 123.1 | 124.7 | 124.6 | 124.9 | |
| Nonelectrical machinery | 35 | 9.54 | 170.8 | 173.1 | 174.1 | 174.8 | 173.8 | 175.4 | 177.8 | 178.7 | 180.8 | 183.0 | 184.7 | 186.5 | 187.6 | 187.6 | |
| Electrical machinery | 36 | 7.15 | 180.1 | 181.5 | 182.2 | 181.8 | 183.0 | 182.2 | 180.9 | 180.9 | 181.7 | 181.6 | 182.2 | 181.1 | 181.1 | 180.9 | |
| Transportation equip. | 37 | 9.13 | 132.1 | 131.9 | 131.8 | 132.7 | 134.8 | 135.2 | 136.8 | 136.7 | 136.4 | 134.8 | 136.4 | 135.5 | 134.3 | 132.0 | |
| Motor vehicles & pts. | 371 | 5.25 | 117.2 | 116.6 | 117.5 | 118.5 | 121.7 | 122.9 | 125.5 | 124.9 | 123.4 | 120.4 | 122.0 | 119.7 | 116.5 | 110.8 | |
| Aerospace & misc. | 372-6 | 3.87 | 152.4 | 152.7 | 151.3 | 151.9 | 152.7 | 151.9 | 152.2 | 152.7 | 154.0 | 154.4 | 155.9 | 157.1 | 158.5 | 160.8 | |
| Instruments | 38 | 2.66 | 154.3 | 156.4 | 156.8 | 157.8 | 159.9 | 160.4 | 159.1 | 161.0 | 161.3 | 161.8 | 163.0 | 164.6 | 164.4 | 166.1 | |
| Miscellaneous mfrs. | 39 | 1.46 | 107.1 | 107.8 | 108.3 | 108.5 | 107.7 | 109.0 | 110.9 | 112.2 | 110.0 | 112.5 | 115.3 | 116.8 | 116.4 | | |
| UTILITIES | | | | | | | | | | | | | | | | | |
| Electric | | 4.17 | 132.0 | 134.6 | 138.8 | 132.2 | 132.8 | 131.6 | 132.9 | 131.0 | 135.3 | 137.0 | 137.1 | 135.8 | 133.7 | 135.5 | |

Table 3A
INDUSTRIAL PRODUCTION: PERCENT CHANGES

Based on seasonally adjusted indexes

| Series | 1988 | 1989 | | | | | | | | | | | |
|----------------------------|---------------------------------------|------|------|------|------|------|------|------|------|-----|------|------|------|
| | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL |
| | CHANGE FROM PREVIOUS MONTH | | | | | | | | | | | | |
| TOTAL INDEX | 1.1 | .3 | .1 | .6 | .4 | .4 | .3 | -0.2 | .1 | .7 | -0.1 | -0.1 | .2 |
| Final products | .7 | .5 | .0 | .4 | .2 | .7 | .3 | .3 | .2 | .9 | .2 | .1 | -0.1 |
| Consumer goods | .9 | .6 | -0.1 | 1.2 | .3 | 1.0 | .2 | .2 | -0.3 | .8 | -0.2 | .1 | -0.4 |
| Durable consumer goods | .0 | .3 | .5 | 2.4 | -0.1 | 2.1 | -0.4 | .1 | -1.1 | 1.6 | -0.7 | -0.5 | -2.5 |
| Nondurable consumer goods | 1.2 | .7 | -0.3 | .7 | .5 | .6 | .4 | .2 | .0 | .6 | .0 | .3 | .4 |
| Business equipment | .8 | .5 | .4 | -0.4 | .6 | .8 | .8 | .7 | .8 | .9 | .7 | .0 | .2 |
| Construction Supplies | .6 | -0.2 | .2 | 1.2 | .5 | .5 | .6 | -1.9 | -0.1 | .6 | -0.6 | .4 | -0.4 |
| Materials | 1.6 | .1 | .0 | .8 | .6 | .0 | -0.1 | -0.5 | -0.1 | .8 | -0.4 | -0.4 | .5 |
| Durable goods materials | 1.4 | -0.1 | .9 | .8 | .6 | -0.6 | .3 | -0.5 | -0.5 | .8 | -0.4 | -0.1 | .5 |
| Nondurable goods materials | 2.1 | .2 | -0.4 | 1.6 | .4 | .8 | .6 | -0.9 | .1 | .8 | .0 | .3 | .6 |
| Manufacturing | 1.1 | .3 | .3 | .6 | .4 | .3 | .6 | -0.2 | .1 | .7 | .0 | .0 | .2 |
| Durable manufacturing | .9 | .2 | .4 | .6 | .4 | .3 | .3 | -0.2 | -0.1 | .7 | .0 | -0.1 | .0 |
| Nondurable manufacturing | 1.4 | .3 | .1 | .7 | .3 | .3 | .9 | -0.3 | .4 | .7 | .0 | .2 | .5 |
| Mining and utilities | 1.2 | .9 | -1.7 | -0.1 | .8 | .7 | -1.6 | -0.4 | .7 | .4 | -0.7 | -1.2 | .5 |
| | CHANGE FROM SAME MONTH A YEAR EARLIER | | | | | | | | | | | | |
| TOTAL INDEX | 5.7 | 5.5 | 5.7 | 5.2 | 5.1 | 4.9 | 4.8 | 4.5 | 4.4 | 4.7 | 4.0 | 3.6 | 2.7 |
| Final products | 5.2 | 5.4 | 5.8 | 5.1 | 5.4 | 5.6 | 5.0 | 4.9 | 5.0 | 5.4 | 4.9 | 4.7 | 3.8 |
| Consumer goods | 4.1 | 4.3 | 5.6 | 5.7 | 5.7 | 6.5 | 5.5 | 5.6 | 5.5 | 5.7 | 4.9 | 4.9 | 3.5 |
| Durable consumer goods | 4.1 | 3.7 | 6.5 | 4.0 | 4.3 | 9.7 | 8.0 | 9.2 | 8.1 | 7.2 | 4.5 | 4.2 | 1.5 |
| Nondurable consumer goods | 4.1 | 4.5 | 5.3 | 6.3 | 6.2 | 5.4 | 4.7 | 4.5 | 4.6 | 5.2 | 5.1 | 5.1 | 4.2 |
| Business equipment | 9.5 | 10.0 | 9.9 | 7.8 | 8.7 | 8.5 | 8.4 | 8.2 | 8.5 | 8.6 | 7.7 | 6.8 | 6.2 |
| Construction Supplies | 4.0 | 4.2 | 4.6 | 5.0 | 4.8 | 5.7 | 4.0 | 1.3 | 1.5 | 1.9 | .4 | 1.6 | .7 |
| Materials | 6.7 | 6.0 | 5.7 | 5.2 | 4.8 | 3.7 | 4.2 | 4.3 | 3.9 | 3.8 | 3.0 | 2.2 | 1.1 |
| Durable goods materials | 9.3 | 8.8 | 9.1 | 7.9 | 7.4 | 5.3 | 5.7 | 5.5 | 5.0 | 4.7 | 2.6 | 2.5 | 1.5 |
| Nondurable goods materials | 4.1 | 3.8 | 3.1 | 5.1 | 4.3 | 2.9 | 5.6 | 6.1 | 4.6 | 4.6 | 5.3 | 5.7 | 4.2 |
| Manufacturing | 6.0 | 6.0 | 6.4 | 5.8 | 5.7 | 5.3 | 5.6 | 5.2 | 5.0 | 5.1 | 4.4 | 4.2 | 3.3 |
| Durable manufacturing | 7.0 | 7.0 | 7.5 | 5.7 | 6.2 | 6.1 | 6.0 | 5.4 | 5.0 | 5.1 | 3.8 | 3.6 | 2.7 |
| Nondurable manufacturing | 4.5 | 4.6 | 4.8 | 5.9 | 5.1 | 4.2 | 5.0 | 5.0 | 4.9 | 5.1 | 5.3 | 5.1 | 4.1 |
| Mining and utilities | 4.2 | 3.4 | 1.7 | .3 | .2 | 1.5 | -0.6 | .0 | .8 | .8 | 1.0 | -0.9 | -1.6 |

Table 2B
INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Not seasonally adjusted, 1977=100

| Major Industry Groupings | SIC Code | 1977 | 1988 | 1988 | | | | | | | 1989 | | | | | | |
|--------------------------------|----------|----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | | Pro- por- tion | Ann. Avg. | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | |
| MINING AND UTILITIES | | | | | | | | | | | | | | | | | |
| MINING | | 15.79 | 107.5 | 108.3 | 112.6 | 107.9 | 105.1 | 106.6 | 109.4 | 110.2 | 111.1 | 106.6 | 104.5 | 102.0 | 105.9 | 106.6 | |
| UTILITIES | | 9.83 | 103.4 | 100.6 | 104.3 | 103.4 | 104.3 | 105.9 | 105.1 | 103.5 | 103.1 | 102.2 | 101.8 | 99.8 | 99.6 | 96.2 | |
| | | 5.96 | 114.3 | 121.1 | 126.4 | 115.4 | 106.4 | 107.8 | 116.6 | 121.2 | 124.3 | 113.8 | 108.9 | 105.6 | 116.3 | 123.8 | |
| MANUFACTURING | | | | | | | | | | | | | | | | | |
| NONDURABLE | | 84.21 | 142.7 | 141.5 | 147.2 | 149.6 | 149.1 | 145.4 | 141.4 | 142.2 | 145.6 | 145.8 | 147.7 | 147.1 | 151.5 | 146.2 | |
| DURABLE | | 15.11 | 143.9 | 145.1 | 151.7 | 152.8 | 151.2 | 146.0 | 141.1 | 141.6 | 145.0 | 145.6 | 148.0 | 148.0 | 154.0 | 151.2 | |
| | | 49.10 | 141.9 | 138.9 | 144.0 | 147.3 | 147.6 | 145.0 | 141.6 | 142.7 | 146.0 | 145.9 | 147.5 | 146.6 | 149.8 | 142.7 | |
| MINING | | | | | | | | | | | | | | | | | |
| Metal mining | 10 | .50 | 93.2 | 93.8 | 96.3 | 97.7 | 100.2 | 97.6 | 98.0 | 98.9 | 99.5 | 100.4 | 102.6 | 102.1 | | | |
| Coal | 11 | 1.12 | 1.60 | 137.9 | 128.1 | 147.5 | 145.3 | 143.0 | 146.3 | 141.2 | 138.8 | 140.0 | 144.2 | 144.4 | 133.5 | 114.0 | |
| Oil & gas extraction | 13 | 7.07 | 92.9 | 90.9 | 91.1 | 90.3 | 91.4 | 93.2 | 93.6 | 93.0 | 92.5 | 89.7 | 87.9 | 87.4 | 86.7 | | |
| Stone & earth minerals | 14 | .66 | 139.9 | 143.3 | 146.1 | 145.7 | 151.8 | 150.2 | 145.8 | 134.2 | 129.7 | 135.9 | 146.1 | 147.9 | 152.5 | | |
| NONDURABLE MANUFACTURES | | | | | | | | | | | | | | | | | |
| Foods | 20 | 7.96 | 142.7 | 146.1 | 151.5 | 152.7 | 151.2 | 145.7 | 141.7 | 139.1 | 139.4 | 139.1 | 142.2 | 144.7 | 151.8 | | |
| Tobacco products | 21 | .62 | 105.2 | 87.0 | 113.4 | 109.2 | 117.9 | 106.3 | 83.1 | 104.1 | 109.1 | 102.6 | 110.6 | | | | |
| Textile mill products | 22 | 2.29 | 116.2 | 109.4 | 123.6 | 121.1 | 123.7 | 117.4 | 104.8 | 111.2 | 118.5 | 118.2 | 126.7 | 127.9 | 130.5 | | |
| Apparel products | 23 | 2.79 | 109.1 | 105.9 | 112.4 | 113.9 | 111.2 | 110.2 | 108.1 | 106.8 | 109.4 | 109.9 | 110.5 | 110.2 | | | |
| Paper & products | 26 | 3.15 | 150.3 | 146.8 | 152.0 | 151.8 | 155.4 | 148.5 | 143.1 | 155.5 | 154.6 | 153.7 | 154.4 | 148.1 | 150.3 | | |
| Printing & publishing | 27 | 4.54 | 184.2 | 194.8 | 206.0 | 206.3 | 197.1 | 187.1 | 182.4 | 177.7 | 183.7 | 188.5 | 191.7 | 193.1 | 204.4 | 210.9 | |
| Chemicals & products | 28 | 8.05 | 151.9 | 156.0 | 157.6 | 161.5 | 158.6 | 155.2 | 151.5 | 152.6 | 156.9 | 157.5 | 158.6 | 157.8 | 163.5 | | |
| Petroleum products | 29 | 2.40 | 96.0 | 99.4 | 100.9 | 97.3 | 96.8 | 96.8 | 98.7 | 94.1 | 89.9 | 91.0 | 93.7 | 97.0 | 102.1 | 104.3 | |
| Rubber & plastics prod. | 30 | 2.80 | 174.4 | 166.2 | 177.9 | 181.0 | 183.1 | 176.0 | 167.9 | 166.0 | 180.7 | 180.7 | 181.4 | 179.7 | 185.0 | | |
| Leather & products | 31 | .53 | 59.5 | 51.0 | 62.0 | 61.6 | 64.8 | 63.5 | 56.3 | 60.9 | 65.2 | 62.4 | 61.6 | 60.2 | 60.9 | | |
| DURABLE MANUFACTURES | | | | | | | | | | | | | | | | | |
| Lumber & products | 24 | 2.30 | 137.3 | 134.2 | 139.2 | 140.6 | 145.6 | 135.0 | 129.6 | 131.2 | 129.9 | 132.7 | 137.8 | 136.0 | 142.9 | | |
| Furniture & fixtures | 25 | 1.27 | 162.1 | 155.6 | 170.9 | 172.1 | 169.4 | 165.9 | 161.3 | 159.4 | 170.6 | 165.9 | 164.2 | 164.4 | 170.9 | | |
| Clay, glass, stone prod. | 32 | 2.72 | 122.6 | 123.4 | 127.6 | 127.6 | 129.0 | 124.7 | 119.1 | 118.2 | 118.7 | 123.4 | 125.2 | 124.2 | 127.9 | | |
| Primary metals | 33 | 5.33 | 89.2 | 85.4 | 85.9 | 90.5 | 92.6 | 89.4 | 82.6 | 90.8 | 93.4 | 93.4 | 97.2 | 90.8 | 91.3 | 82.0 | |
| Iron & steel | 33 | 3.49 | 78.1 | 76.7 | 73.7 | 78.0 | 80.6 | 76.2 | 69.9 | 79.0 | 80.6 | 80.6 | 85.7 | 77.8 | 78.0 | | |
| Fabricated metal prod. | 34 | 6.46 | 120.9 | 119.4 | 122.3 | 125.4 | 124.8 | 125.3 | 124.0 | 120.5 | 124.9 | 124.4 | 123.2 | 123.9 | 126.7 | 122.4 | |
| Nonelectrical machinery | 35 | 9.54 | 170.8 | 176.7 | 182.3 | 182.6 | 176.1 | 173.6 | 171.8 | 171.7 | 178.2 | 181.3 | 179.5 | 183.0 | 190.8 | 192.8 | |
| Electrical machinery | 36 | 7.15 | 180.1 | 176.1 | 182.2 | 184.0 | 189.4 | 185.9 | 181.7 | 179.9 | 181.5 | 179.0 | 181.1 | 178.9 | 181.2 | 175.3 | |
| Transportation equip. | 37 | 9.13 | 132.1 | 116.3 | 123.8 | 134.1 | 138.1 | 136.7 | 132.8 | 137.7 | 140.6 | 136.9 | 142.3 | 138.4 | 137.2 | 115.2 | |
| Motor vehicles & pts. | 37 | 5.25 | 117.2 | 93.2 | 106.2 | 120.9 | 127.3 | 123.7 | 114.9 | 124.9 | 130.4 | 123.6 | 131.5 | 125.0 | 122.6 | 85.9 | |
| Aerospace & misc. | 37 | 6.91 | 3.87 | 152.4 | 147.7 | 147.8 | 152.0 | 152.9 | 154.4 | 157.2 | 155.0 | 154.5 | 155.0 | 157.0 | 157.2 | 155.1 | |
| Instruments | 38 | 2.66 | 154.3 | 158.5 | 161.0 | 162.4 | 161.1 | 159.6 | 157.7 | 157.5 | 158.8 | 159.9 | 160.1 | 161.8 | 167.6 | 168.7 | |
| Miscellaneous mfrs. | 39 | 1.46 | 107.1 | 107.1 | 113.9 | 116.0 | 111.8 | 107.0 | 105.1 | 106.4 | 110.1 | 112.4 | 113.8 | 114.7 | 118.7 | | |
| UTILITIES | | | | | | | | | | | | | | | | | |
| Electric | | 4.17 | 132.0 | 146.0 | 152.9 | 137.2 | 123.5 | 123.4 | 131.6 | 137.2 | 143.5 | 130.1 | 125.6 | 121.8 | 137.7 | 148.9 | |

Table 3B
INDUSTRIAL PRODUCTION: HISTORICAL DATA

Seasonally adjusted, 1977=100

| YR | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | Q1 | Q2 | Q3 | Q4 | AVG. |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| INDEX | | | | | | | | | | | | | | | | | |
| 72 | 83.8 | 84.4 | 85.1 | 86.5 | 86.3 | 86.5 | 86.4 | 87.6 | 88.5 | 89.8 | 90.9 | 91.8 | 84.4 | 86.4 | 87.5 | 90.8 | 87.3 |
| 73 | 91.8 | 93.1 | 93.1 | 93.4 | 93.8 | 94.5 | 95.1 | 95.1 | 95.8 | 96.1 | 96.2 | 94.7 | 92.7 | 93.9 | 95.3 | 95.7 | 94.4 |
| 74 | 93.3 | 93.0 | 93.4 | 93.2 | 94.3 | 94.6 | 94.2 | 93.9 | 94.2 | 93.6 | 90.9 | 87.1 | 93.2 | 94.1 | 94.1 | 90.5 | 93.0 |
| 75 | 84.8 | 83.5 | 82.0 | 82.7 | 82.5 | 83.6 | 84.1 | 85.6 | 86.4 | 86.9 | 87.7 | 88.4 | 83.4 | 82.9 | 85.3 | 87.6 | 84.8 |
| 76 | 89.3 | 90.9 | 90.7 | 91.1 | 92.1 | 92.2 | 92.7 | 93.2 | 93.5 | 93.9 | 95.4 | 96.2 | 90.3 | 91.8 | 93.2 | 95.2 | 92.6 |
| 77 | 96.5 | 97.2 | 98.0 | 99.0 | 99.6 | 100.4 | 100.7 | 101.0 | 101.4 | 101.8 | 102.1 | 102.1 | 97.3 | 99.7 | 101.0 | 102.0 | 100.0 |
| 78 | 101.6 | 101.6 | 103.0 | 105.5 | 105.8 | 106.9 | 107.5 | 107.7 | 108.3 | 109.2 | 109.9 | 110.8 | 102.1 | 106.1 | 107.9 | 110.0 | 106.5 |
| 79 | 110.3 | 110.9 | 111.2 | 109.9 | 110.9 | 110.9 | 110.5 | 110.2 | 110.4 | 111.0 | 111.0 | 111.0 | 110.8 | 110.6 | 110.4 | 111.0 | 110.7 |
| 80 | 111.3 | 111.4 | 111.4 | 109.1 | 106.2 | 105.0 | 104.8 | 106.3 | 107.7 | 108.5 | 110.7 | 111.0 | 111.4 | 106.8 | 106.3 | 110.1 | 108.6 |
| 81 | 111.0 | 111.2 | 111.6 | 110.6 | 111.2 | 112.0 | 113.4 | 112.8 | 111.5 | 110.4 | 109.0 | 107.4 | 111.2 | 111.3 | 112.5 | 108.9 | 111.0 |
| 82 | 105.4 | 107.0 | 105.8 | 104.5 | 103.6 | 103.0 | 102.5 | 102.0 | 101.3 | 100.5 | 100.6 | 100.5 | 106.1 | 103.7 | 102.0 | 100.6 | 103.1 |
| 83 | 102.5 | 103.3 | 104.2 | 105.6 | 106.9 | 107.8 | 109.8 | 111.6 | 113.7 | 114.4 | 114.8 | 115.5 | 103.3 | 106.8 | 111.7 | 114.9 | 109.2 |
| 84 | 118.5 | 119.3 | 119.9 | 120.5 | 121.0 | 121.9 | 122.8 | 123.0 | 122.4 | 122.1 | 122.7 | 122.7 | 119.3 | 121.1 | 122.7 | 122.5 | 121.4 |
| 85 | 122.4 | 122.9 | 123.3 | 123.1 | 123.7 | 123.5 | 123.4 | 124.1 | 124.4 | 123.7 | 124.8 | 125.4 | 122.9 | 123.4 | 124.0 | 124.7 | 123.7 |
| 86 | 126.4 | 125.5 | 123.9 | 124.7 | 124.3 | 124.1 | 124.8 | 124.9 | 124.5 | 125.3 | 125.7 | 126.8 | 125.2 | 124.4 | 124.8 | 125.9 | 125.1 |
| 87 | 126.2 | 127.1 | 127.4 | 127.4 | 128.2 | 129.1 | 130.6 | 131.2 | 131.0 | 132.5 | 133.2 | 133.9 | 126.9 | 128.2 | 131.0 | 133.2 | 129.8 |
| 88 | 134.4 | 134.4 | 134.7 | 135.4 | 136.1 | 136.5 | 138.0 | 138.5 | 138.6 | 139.4 | 139.9 | 140.4 | 134.5 | 136.0 | 138.4 | 139.9 | 137.2 |
| CHANGE* | | | | | | | | | | | | | | | | | |
| 72 | 2.2 | 0.7 | 0.8 | 1.6 | -0.2 | 0.2 | -0.1 | 1.4 | 1.0 | 1.5 | 1.2 | 1.0 | 3.8 | 2.4 | 1.3 | 3.8 | 9.7 |
| 73 | 0.0 | 1.4 | 0.0 | 0.3 | 0.4 | 0.7 | 0.6 | 0.0 | 0.7 | 0.3 | 0.1 | -1.6 | 2.1 | 1.3 | 1.5 | 0.4 | 8.1 |
| 74 | -1.5 | -0.3 | 0.4 | -0.2 | 1.2 | 0.3 | -0.4 | -0.3 | 0.3 | -0.6 | -2.9 | -4.2 | -2.6 | 1.0 | 0.0 | -3.8 | -1.5 |
| 75 | -2.6 | -1.5 | -1.8 | 0.9 | -0.2 | 1.3 | 0.6 | 1.8 | 0.9 | 0.6 | 0.9 | 0.8 | -7.8 | -0.6 | 2.9 | 2.7 | -8.8 |
| 76 | 1.0 | 1.8 | -0.2 | 0.4 | 1.1 | 0.1 | 0.5 | 0.5 | 0.3 | 0.4 | 1.6 | 0.8 | 3.1 | 1.7 | 1.5 | 2.1 | 9.2 |
| 77 | 0.3 | 0.7 | 0.8 | 1.0 | 0.6 | 0.8 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.0 | 2.2 | 2.5 | 1.3 | 1.0 | 8.0 |
| 78 | -0.5 | 0.0 | 1.4 | 2.4 | 0.3 | 1.0 | 0.6 | 0.2 | 0.6 | 0.8 | 0.6 | 0.8 | 0.1 | 3.9 | 1.7 | 1.9 | 6.5 |
| 79 | -0.5 | 0.5 | 0.3 | -1.2 | 0.9 | 0.0 | -0.4 | -0.3 | 0.2 | 0.5 | 0.0 | 0.0 | 0.7 | -0.2 | -0.2 | 0.5 | 3.9 |
| 80 | 0.3 | 0.1 | 0.0 | -2.1 | -2.7 | -1.1 | -0.2 | 1.4 | 1.3 | 0.7 | 2.0 | 0.3 | 0.4 | -4.1 | -0.5 | 3.6 | -1.9 |
| 81 | 0.0 | 0.2 | 0.4 | -0.9 | 0.5 | 0.7 | 1.2 | -0.5 | -1.2 | -1.0 | -1.3 | -1.5 | 1.0 | 0.1 | 1.1 | -3.2 | 2.2 |
| 82 | -1.9 | 1.5 | -1.1 | -1.2 | -0.9 | -0.6 | -0.5 | -0.5 | -0.7 | -0.8 | 0.1 | -0.1 | -2.6 | -2.3 | -1.6 | -1.4 | -7.1 |
| 83 | 2.0 | 0.8 | 0.9 | 1.3 | 1.2 | 0.8 | 1.9 | 1.6 | 1.9 | 0.6 | 0.3 | 0.6 | 2.7 | 3.4 | | | |

Table 4A

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977=100

| Series | SIC Code | 1977 | 1988 | 1988 | | | | | | | | 1989 | | | | | |
|-------------------------|------------|----------------------|--------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | | Pro- por- tion | Ann. Avg. | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | |
| METAL MINING | 10 | .50 | 93.2 | 82.2 | 94.0 | 96.6 | 99.1 | 101.6 | 104.6 | 111.9 | 106.9 | 98.6 | 98.1 | 96.8 | 94.0 | | |
| Iron ore | 101 | .15 | 100.6 | 81.1 | 100.3 | 99.2 | 107.8 | 113.8 | 125.7 | 141.3 | 143.9 | 101.3 | 94.2 | 81.2 | 84.6 | | |
| Nonferrous ores | 102-6,8,9 | .35 | 90.1 | 86.7 | 94.7 | 96.6 | 95.4 | 99.8 | 95.8 | 100.2 | 96.4 | 96.8 | 94.5 | 102.7 | 97.8 | | |
| Copper ore | 1021 | .15 | 104.1 | 97.5 | 108.4 | 114.3 | 105.7 | 108.2 | 105.9 | 112.1 | 110.3 | 112.6 | 107.8 | 112.2 | 106.2 | | |
| Lead and zinc ores | 103 | .05 | 65.8 | 74.3 | 69.5 | 75.0 | 68.0 | 65.9 | 67.7 | 64.1 | 66.3 | 64.0 | 64.0 | 71.1 | 72.0 | | |
| Gold and silver ores | 104 | .02 | 327.9 | 292.0 | 337.5 | 320.4 | 380.9 | 402.7 | 382.1 | 421.9 | 377.1 | 385.8 | 351.6 | 401.9 | | | |
| Ferroalloy ores | 106 | .04 | 79.6 | 85.4 | 92.9 | 87.0 | 84.1 | 96.2 | 86.0 | 90.2 | 93.8 | 90.2 | 102.5 | 119.6 | 107.1 | 123.4 | |
| ANTHRACITE | 11 | .02 | 69.8 | 71.1 | 63.9 | 76.4 | 74.9 | 66.7 | 56.0 | 51.8 | 54.6 | 58.4 | 55.8 | 70.8 | 56.8 | 50.6 | |
| BITUMINOUS | 12 | 1.58 | 138.7 | 128.0 | 143.1 | 136.2 | 141.2 | 138.6 | 151.3 | 154.7 | 152.0 | 138.5 | 136.1 | 144.3 | 135.4 | 129.7 | |
| OIL AND GAS EXTRACTION | | 7.07 | 92.9 | 95.8 | 93.3 | 93.2 | 92.0 | 91.5 | 90.8 | 88.9 | 88.9 | 89.5 | 89.6 | 89.1 | 90.0 | 89.7 | |
| Crude oil & natural gas | 131 | 5.62 | 93.9 | 95.6 | 93.2 | 93.2 | 92.1 | 92.7 | 93.9 | 92.4 | 91.4 | 92.7 | 91.3 | 89.6 | 90.5 | 89.4 | |
| Crude oil, total | | 3.46 | 98.5 | 100.5 | 98.3 | 97.7 | 97.1 | 95.9 | 96.9 | 95.8 | 95.6 | 94.9 | 92.9 | 91.6 | 92.3 | 90.6 | |
| Texas crude | | 1.34 | 64.4 | 65.9 | 64.5 | 63.9 | 63.2 | 62.5 | 63.4 | 62.5 | 62.7 | 62.6 | 59.6 | 60.8 | 61.8 | 61.7 | |
| Alaska-Calif. crude | | .57 | 210.3 | 122.5 | 206.4 | 207.3 | 208.8 | 207.7 | 211.8 | 207.5 | 203.3 | 200.6 | 199.3 | 183.9 | 183.8 | 178.0 | |
| La. and other crude | | 1.54 | 86.5 | 89.0 | 87.7 | 86.3 | 85.1 | 83.4 | 83.3 | 83.2 | 84.1 | 83.8 | 82.4 | 84.1 | 84.9 | 83.2 | |
| Natural gas | | 2.16 | 86.6 | 87.7 | 84.9 | 86.0 | 84.1 | 87.4 | 89.2 | 87.0 | 84.8 | 89.0 | 88.6 | 86.3 | 87.6 | 87.4 | |
| Natural gas liquids | 132 | .47 | 100.3 | 101.0 | 99.8 | 100.9 | 102.2 | 104.2 | 100.9 | 100.3 | 102.8 | 99.0 | 104.6 | 107.5 | 103.2 | | |
| Propane | | .05 | 99.1 | 98.1 | 99.1 | 99.7 | 98.3 | 101.8 | 98.4 | 96.9 | 93.2 | 90.7 | 96.3 | 98.0 | 95.5 | | |
| Liquefied petroleum | | .42 | 100.4 | 101.3 | 99.9 | 101.0 | 102.7 | 104.5 | 101.2 | 100.7 | 103.9 | 99.9 | 105.5 | 108.5 | 104.1 | | |
| Oil & gas well drilling | 138 | .99 | 84.0 | 86.5 | 86.9 | 86.8 | 85.3 | 82.7 | 77.3 | 73.2 | 70.9 | 69.2 | 74.9 | 78.8 | 78.5 | 82.3 | |
| FOODS | 20 | 7.96 | 142.7 | 141.3 | 143.3 | 143.3 | 143.2 | 144.0 | 145.7 | 145.8 | 146.6 | 146.3 | 145.4 | 146.6 | 147.4 | 147.6 | |
| Meat products | 201 | 1.06 | 126.1 | 127.8 | 126.6 | 127.0 | 128.3 | 125.7 | 127.6 | 127.2 | 126.2 | 130.4 | 127.3 | 127.9 | 127.6 | 130.2 | |
| Beef | | .43 | 93.4 | 94.6 | 98.0 | 95.4 | 94.2 | 92.3 | 90.8 | 90.4 | 89.1 | 93.3 | 90.7 | 94.2 | 91.8 | 94.5 | |
| Pork | | .25 | 119.4 | 116.8 | 120.7 | 120.6 | 124.7 | 124.4 | 126.9 | 125.8 | 119.5 | 123.6 | 117.9 | 123.0 | 117.1 | 120.1 | |
| Poultry | | .20 | 171.7 | 174.3 | 161.8 | 167.0 | 173.8 | 163.4 | 173.0 | 173.4 | 180.5 | 183.4 | 185.2 | 175.6 | 184.9 | 185.3 | |
| Misc. meats | | .18 | 163.2 | 171.3 | 164.4 | 167.8 | 164.8 | 165.7 | 166.9 | 166.3 | 164.4 | 170.1 | 163.6 | 162.3 | 164.5 | 168.9 | |
| Dairy products | 202 | .80 | 131.5 | 129.8 | 129.1 | 129.6 | 131.6 | 131.5 | 132.4 | 134.5 | 137.0 | 137.6 | 135.6 | 134.0 | 130.9 | 127.5 | |
| Butter | 2021 | .01 | 109.9 | 103.6 | 104.1 | 99.7 | 108.5 | 112.7 | 107.9 | 115.3 | 118.4 | 126.0 | 129.5 | 129.8 | 118.9 | 107.8 | |
| Cheese | 2022 | .13 | 164.3 | 159.1 | 161.1 | 162.7 | 172.5 | 170.1 | 169.8 | 171.7 | 167.0 | 166.2 | 166.6 | 160.4 | 160.2 | 162.8 | |
| Concentrated milk | 2023 | .11 | 128.2 | 130.6 | 114.2 | 118.7 | 126.1 | 118.6 | 123.3 | 128.5 | 143.9 | 145.8 | 143.3 | 134.9 | 127.8 | 114.4 | |
| Frozen desserts | 2024 | .09 | 152.5 | 156.5 | 157.5 | 154.4 | 147.9 | 152.1 | 150.6 | 153.4 | 157.9 | 156.2 | 151.0 | 158.7 | 154.7 | 148.1 | |
| Canned and frozen food | 203 | 1.09 | 166.5 | 167.1 | 166.6 | 167.9 | 167.3 | 165.4 | 173.1 | 172.6 | 173.0 | 168.6 | 170.4 | 166.2 | 177.3 | 179.1 | |
| Grain mill products | 204 | .94 | 146.0 | 144.9 | 149.3 | 147.5 | 144.7 | 150.4 | 153.5 | 154.4 | 152.2 | 149.9 | 149.7 | 155.8 | 156.2 | 154.9 | |
| Flour | 2041 | .12 | 131.0 | 129.3 | 147.2 | 132.1 | 128.4 | 146.1 | 141.0 | 135.5 | 135.6 | 126.7 | 116.7 | 141.0 | 127.9 | 123.7 | |
| Bakery products | 205 | 1.00 | 139.7 | 138.8 | 138.0 | 140.7 | 142.0 | 142.4 | 142.7 | 146.5 | 146.6 | 144.2 | 144.8 | 144.1 | 144.1 | 144.5 | |
| Beverages | 208 | 1.41 | 136.2 | 131.5 | 138.3 | 136.3 | 136.3 | 138.5 | 136.9 | 135.5 | 136.8 | 135.7 | 134.7 | 136.4 | 139.4 | 136.4 | |
| Beer and ale | 2082,3 | .38 | 115.7 | 109.7 | 116.1 | 111.5 | 114.0 | 123.2 | 117.9 | 114.9 | 122.1 | 119.0 | 114.9 | 117.6 | 114.0 | | |
| Wine and brandy | 2084 | .07 | 204.1 | 1213.6 | 224.7 | 197.7 | 193.9 | 199.7 | 193.2 | 205.5 | 200.6 | 194.3 | 180.6 | 194.0 | 197.0 | | |
| Soft drinks | 2086,7 | .79 | 151.3 | 147.5 | 153.5 | 155.0 | 153.0 | 155.0 | 151.1 | 147.8 | 148.6 | 149.1 | 152.0 | 151.0 | 156.1 | 153.1 | |
| Liquors | 2085 | .16 | 81.6 | 69.1 | 79.6 | 77.1 | 82.5 | 72.6 | 88.0 | 94.0 | 86.4 | 84.6 | 77.4 | 84.4 | | | |
| Fats and oils | 207 | .27 | 128.6 | 132.5 | 138.1 | 129.4 | 128.3 | 120.9 | 124.0 | 121.6 | 122.1 | 122.3 | 122.5 | 128.4 | 123.2 | 120.8 | |
| Coffee & misc. foods | 209 | .79 | 160.8 | 160.7 | 159.9 | 155.1 | 155.0 | 164.0 | 164.6 | 164.2 | 169.6 | 170.4 | 166.7 | 169.8 | 165.7 | 169.7 | |
| TOBACCO PRODUCTS | | .62 | 105.2 | 104.5 | 100.6 | 105.1 | 105.0 | 105.4 | 102.4 | 107.0 | 105.0 | 104.7 | 101.5 | 109.2 | | | |
| Cigarettes | 211 | .54 | 104.7 | 101.2 | 99.3 | 108.1 | 104.4 | 105.5 | 100.9 | 109.0 | 98.9 | 105.2 | 98.6 | 117.7 | | | |
| Cigars | 212 | .02 | 54.0 | 48.2 | 47.4 | 58.6 | 50.7 | 54.0 | 50.7 | 54.1 | 56.1 | 50.6 | 51.4 | 59.2 | | | |
| TEXTILE MILL PRODUCTS | | 2.29 | 116.2 | 114.3 | 117.1 | 116.4 | 116.2 | 117.0 | 117.2 | 117.9 | 120.2 | 119.4 | 119.7 | 122.5 | 123.6 | 124.6 | |
| Fabrics | 221-4 | .77 | 104.0 | 104.1 | 102.7 | 105.4 | 104.4 | 99.6 | 99.9 | 102.6 | 105.7 | 102.5 | 103.7 | 109.0 | 109.9 | 112.7 | |
| Cotton fabrics | 221 | .28 | 120.9 | 120.3 | 114.1 | 121.2 | 120.5 | 113.4 | 114.1 | 116.8 | 124.8 | 123.7 | 129.2 | 135.1 | 136.8 | 143.7 | |
| Synthetic fabrics | 222 | .40 | 92.1 | 93.4 | 94.6 | 94.7 | 92.8 | 88.0 | 88.1 | 90.7 | 90.9 | 86.1 | 84.4 | 90.4 | 90.6 | | |
| Knit goods | 225 | .55 | 117.3 | 112.5 | 116.9 | 118.4 | 119.2 | 123.3 | 119.9 | 124.5 | 123.5 | 126.0 | 122.3 | 134.1 | 126.9 | 126.6 | |
| Hosiery | 2251,2 | .12 | 165.1 | 148.3 | 162.7 | 181.3 | 170.8 | 181.3 | 175.2 | 179.9 | 169.2 | 174.9 | 161.2 | 207.6 | | | |
| Knit garments | 2253,4,7-9 | .43 | 103.6 | 102.2 | 103.8 | 100.4 | 104.4 | 106.8 | 104.1 | 108.7 | 110.4 | 112.1 | 111.1 | 113.1 | 113.3 | 114.7 | |
| Carpeting | 227 | .22 | 158.2 | 158.2 | 166.5 | 164.2 | 149.1 | 160.0 | 162.9 | 160.3 | 168.4 | 164.7 | 153.4 | 161.4 | 162.2 | 150.9 | |
| Yarns & misc. text. | 228,9 | .55 | 124.6 | 116.8 | 126.6 | 125.0 | 120.3 | 126.0 | 130.1 | 121.4 | 134.9 | 126.4 | 124.5 | 134.0 | 134.4 | 134.5 | |
| APPAREL PRODUCTS | 23 | 2.79 | 109.1 | 109.3 | 109.4 | 108.9 | 109.9 | 109.5 | 110.1 | 108.8 | 110.2 | 110.2 | 109.9 | 111.3 | 111.6 | | |
| LUMBER AND PRODUCTS | | 2.30 | 137.3 | 136.4 | 136.6 | 133.8 | 133.5 | 137.5 | 139.4 | 143.0 | 139.9 | 132.8 | 133.4 | 135.1 | 134.7 | 135.6 | |
| Logging and lumber | 241,2 | 1.05 | 128.8 | 124.4 | 130.9 | 119.8 | 121.8 | 133.9 | 126.3 | 134.3 | 132.4 | 120.3 | 116.5 | 127.1 | 124.0 | 123.7 | |
| Lumber products | 243-5,9 | 1.25 | 144.5 | 146.2 | 143.9 | 144.6 | 143.6 | 142.1 | 148.7 | 148.7 | 147.6 | 144.1 | 146.7 | 144.1 | 144.6 | | |
| Millwork & plywood | 243 | .67 | 179.2 | 181.7 | 178.0 | 178.8 | 175.5 | 172.6 | 182.8 | 182.5 | 180.2 | 179.6 | 183.9 | 179.5 | 179.7 | | |
| Manufactured homes | 245 | .25 | 80.6 | 83.6 | 78.9 | 80.2 | 83.6 | 82.7 | 83.8 | 84.7 | 85.5 | 78.9 | 77.8 | 77.2 | 74.8 | 74.4 | |
| FURNITURE AND FIXTURES | | 1.27 | 162.1 | 161.2 | 162.9 | 164.9 | 164.9 | 164.5 | 165.4 | 165.4 | 166.3 | 164.8 | 165.8 | 168.0 | 169.5 | 169.5 | |
| Household furniture | 251 | .74 | 129.7 | 129.8 | 129.2 | 131.1 | 131.8 | 133.0 | 135.1 | 133.9 | 133.5 | 133.4 | 135.7 | 136.2 | 139.0 | 139.5 | |
| Fixt., office furn. | 252,4,9 | .47 | 214.1 | 215.0 | 216.7 | 217.9 | 217.2 | 214.6 | 216.6 | 214.1 | 214.7 | 210.2 | 215.0 | 218.7 | 220.8 | 221.3 | |
| PAPER AND PRODUCTS | | 3.15 | 150.3 | 148.6 | 152.3 | 151.0 | 150.9 | 151.8 | 150.7 | 151.7 | 153.8 | 151.7 | 151.7 | 150.7 | 150.1 | 148.4 | |
| Pulp and paper | 261-3 | 1.33 | 135.6 | 131.9 | 141.4 | 136.6 | 135.0 | 135.0 | 133.6 | 144.6 | 141.0 | 133.9 | 132.4 | 135.5 | 131.9 | 132.4 | |
| Wood pulp | 261 | .44 | 130.1 | 125.8 | 137.7 | 132.3 | 130.5 | 126.9 | 128.3 | 141.9 | 137.9 | 129.0 | 128.4 | 132 | | | |

Table 4A--continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977=100

| Series | SIC Code | 1977 | 1988 | 1988 | | | | | | 1989 | | | | | | |
|---------------------------|-----------|----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Pro- por- tion | Ann. Avg. | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN |
| FABRICATED METAL PRODUCTS | 34 | 6.46 | 120.9 | 120.4 | 121.7 | 122.1 | 122.5 | 122.6 | 124.6 | 125.1 | 124.5 | 124.5 | 123.8 | 123.1 | 124.7 | 124.6 |
| Metal containers | 341 | .52 | 99.4 | 97.6 | 98.9 | 100.6 | 99.5 | 103.1 | 102.7 | 102.3 | 104.9 | 105.8 | 101.6 | 101.7 | 106.5 | 105.9 |
| Hardware, tools, cutlery | 342 | .73 | 111.5 | 112.4 | 113.4 | 113.2 | 114.5 | 112.5 | 112.9 | 113.6 | 112.6 | 112.7 | 112.4 | 116.2 | 116.6 | 115.3 |
| Structural metal prod. | 344 | 1.67 | 115.7 | 115.7 | 116.7 | 115.4 | 116.0 | 116.9 | 119.1 | 119.6 | 123.8 | 123.0 | 123.4 | 124.1 | 123.5 | 122.7 |
| Fasteners, stamp, etc. | 345-7 | 1.95 | 130.8 | 130.8 | 131.8 | 131.6 | 131.9 | 132.9 | 136.4 | 134.6 | 133.3 | 133.8 | 131.0 | 129.3 | 132.2 | 134.6 |
| NONELECTRICAL MACHINERY | 35 | 9.54 | 170.8 | 171.2 | 173.1 | 174.1 | 174.8 | 173.8 | 175.4 | 177.8 | 178.7 | 180.8 | 183.0 | 184.7 | 186.5 | 186.6 |
| Engine & farm equip. | 351.2 | 1.48 | 73.6 | 73.2 | 74.7 | 74.4 | 75.0 | 75.8 | 76.0 | 75.6 | 75.7 | 75.5 | 75.0 | 75.4 | 76.2 | 74.4 |
| Construct. & allied eq. | 353 | 1.68 | 83.7 | 84.2 | 86.3 | 86.0 | 88.0 | 87.2 | 87.2 | 87.2 | 86.7 | 89.2 | 90.9 | 93.1 | 92.3 | 93.7 |
| Metalworking machinery | 354 | 1.24 | 149.5 | 150.4 | 153.5 | 154.6 | 155.5 | 152.7 | 153.4 | 155.5 | 151.4 | 154.2 | 157.6 | 155.0 | 156.3 | 162.6 |
| Spec. & genl. ind. eq. | 355.6 | 2.12 | 114.6 | 114.2 | 116.0 | 116.0 | 117.5 | 119.4 | 119.0 | 119.8 | 119.6 | 120.0 | 120.2 | 121.1 | 120.9 | 121.2 |
| Office, serv., & misc. | 357-9 | 3.02 | 315.3 | 317.3 | 316.6 | 320.0 | 320.3 | 315.8 | 320.4 | 329.9 | 333.6 | 337.3 | 345.1 | 348.9 | 351.9 | 350.2 |
| ELECTRICAL MACHINERY | 36 | 7.15 | 180.1 | 179.5 | 181.5 | 182.2 | 181.8 | 183.0 | 182.2 | 180.9 | 180.9 | 181.7 | 181.6 | 182.2 | 181.1 | 181.1 |
| Major elect. eq. & pts | 361.2 | 1.27 | 104.3 | 104.8 | 106.0 | 106.9 | 105.9 | 106.1 | 107.0 | 106.3 | 107.0 | 108.6 | 109.3 | 107.3 | 108.6 | 108.5 |
| Household appliances | 363 | .75 | 136.8 | 123.5 | 135.4 | 142.1 | 129.2 | 150.3 | 149.9 | 143.3 | 147.1 | 148.2 | 137.2 | 150.8 | 138.1 | 142.3 |
| Cooking equipment | 363.1 | .11 | 218.4 | 164.2 | 219.1 | 222.4 | 203.4 | 254.4 | 240.4 | 255.9 | 241.2 | 258.6 | 248.5 | 263.7 | 199.6 | 215.7 |
| Refrigeration appl. | 363.2 | .17 | 117.5 | 105.5 | 108.2 | 131.6 | 105.6 | 136.2 | 137.5 | 116.6 | 130.9 | 122.8 | 107.5 | 122.7 | 121.0 | 129.6 |
| Laundry appliances | 363.3 | .12 | 160.8 | 165.6 | 155.3 | 166.9 | 141.5 | 168.7 | 179.7 | 159.5 | 173.2 | 172.7 | 153.8 | 179.3 | 165.0 | 175.7 |
| Misc. appliances | 3634-6.9 | .35 | 112.0 | 104.8 | 115.0 | 113.2 | 112.7 | 117.8 | 116.9 | 114.8 | 116.2 | 116.9 | 110.3 | 118.7 | 117.5 | 113.7 |
| TV and radio sets | 365 | .44 | 155.3 | 148.8 | 157.6 | 159.2 | 163.8 | 152.3 | 153.3 | 172.9 | 156.1 | 160.9 | 160.4 | 174.2 | 173.9 | 167.0 |
| Communication equipment | 366 | 2.01 | 219.1 | 221.1 | 221.3 | 221.1 | 218.1 | 214.9 | 214.3 | 207.4 | 212.3 | 213.1 | 208.6 | 211.3 | 211.0 | 210.9 |
| Electronic components | 367 | 1.31 | 278.8 | 277.3 | 282.3 | 282.9 | 283.1 | 287.5 | 290.3 | 293.3 | 283.5 | 285.2 | 283.9 | 285.1 | 282.9 | 284.3 |
| TV tubes | 367.1-3 | .13 | 146.8 | 139.2 | 145.5 | 166.8 | 165.7 | 166.5 | 173.8 | 205.0 | 131.4 | 158.4 | 189.7 | 168.9 | 158.5 | |
| Misc. electrical supp. | 369 | .70 | 133.5 | 135.6 | 136.6 | 131.7 | 133.9 | 136.6 | 136.3 | 137.5 | 136.5 | 139.3 | 139.8 | 140.5 | 137.7 | 136.2 |
| Storage battery, repl. | 369.1 | .13 | 137.5 | 144.4 | 154.2 | 131.2 | 133.2 | 133.9 | 123.3 | 137.5 | 120.9 | 143.8 | 146.3 | 157.9 | 150.6 | 145.7 |
| TRANSPORTATION EQUIPMENT | 37 | 9.13 | 132.1 | 132.8 | 131.9 | 131.8 | 132.7 | 134.8 | 135.2 | 136.8 | 136.7 | 136.4 | 134.8 | 136.4 | 135.5 | 134.3 |
| Motor vehicles & parts | 371 | 5.25 | 117.2 | 119.1 | 116.6 | 117.5 | 118.5 | 121.7 | 122.9 | 125.5 | 124.9 | 123.4 | 120.4 | 122.0 | 119.7 | 116.5 |
| Autos, total | | 1.82 | 106.6 | 113.0 | 107.1 | 106.2 | 111.5 | 115.7 | 115.3 | 119.9 | 113.7 | 109.6 | 108.4 | 112.8 | 109.6 | 104.3 |
| Consumer | | 1.16 | 93.4 | 99.0 | 93.8 | 93.0 | 97.7 | 101.3 | 101.0 | 105.1 | 99.6 | 96.0 | 95.0 | 98.8 | 96.0 | 91.4 |
| Business | | .66 | 130.0 | 137.7 | 130.6 | 129.4 | 135.9 | 141.0 | 140.5 | 146.2 | 138.7 | 133.6 | 132.2 | 137.5 | 133.6 | 127.2 |
| Trucks and buses | | 1.03 | 161.1 | 157.3 | 157.4 | 162.8 | 158.4 | 163.3 | 167.7 | 181.3 | 180.8 | 181.5 | 168.9 | 172.4 | 165.0 | 164.2 |
| Business vehicles | | .41 | 136.6 | 131.4 | 136.7 | 137.9 | 132.4 | 140.1 | 145.0 | 153.9 | 147.8 | 150.0 | 136.5 | 141.0 | 133.5 | 134.8 |
| Consumer trucks | | .63 | 177.0 | 174.1 | 170.8 | 179.0 | 175.3 | 178.4 | 182.4 | 199.1 | 202.3 | 201.9 | 190.0 | 192.8 | 185.5 | 183.3 |
| Truck trailers | 371.5 | .09 | 153.3 | 153.7 | 165.7 | 159.8 | 165.3 | 172.8 | 154.2 | 109.6 | 159.0 | 162.4 | 168.5 | 127.5 | 154.5 | 153.0 |
| Motor vehicle parts | 371.4 | 2.31 | 104.4 | 105.5 | 103.9 | 104.4 | 104.4 | 105.7 | 107.7 | 105.6 | 107.3 | 106.7 | 106.1 | 106.4 | 105.9 | 103.2 |
| Aircraft and parts | 372 | 2.09 | 168.0 | 167.6 | 169.4 | 167.4 | 167.5 | 166.8 | 169.6 | 169.2 | 170.8 | 169.6 | 171.4 | 174.2 | 175.2 | 177.4 |
| Ships and boats | 373 | .66 | 87.9 | 88.9 | 86.2 | 86.5 | 85.2 | 87.5 | 87.0 | 86.3 | 86.3 | 86.0 | 85.5 | 86.3 | 86.6 | 85.4 |
| Rail & misc trans eq. | 374-6.9 | 1.11 | 161.5 | 157.0 | 159.4 | 159.4 | 163.1 | 165.0 | 160.2 | 164.8 | 164.7 | 167.1 | 163.5 | 165.3 | 164.5 | 164.3 |
| Railroad equipment | 374 | .27 | 31.7 | 27.0 | 28.6 | 29.7 | 30.2 | 30.2 | 36.7 | 44.0 | 54.0 | 60.0 | 60.0 | 60.0 | 60.2 | |
| INSTRUMENTS | 38 | 2.66 | 154.3 | 153.0 | 156.4 | 156.8 | 157.8 | 159.9 | 160.4 | 159.1 | 161.0 | 161.3 | 161.8 | 163.0 | 164.6 | 164.4 |
| Equipment instr. & pts | 381-4 | 1.52 | 185.0 | 182.7 | 184.0 | 185.7 | 187.7 | 190.5 | 194.0 | 194.4 | 196.0 | 195.1 | 195.3 | 197.2 | 197.8 | 196.1 |
| MISC. MANUFACTURES | 39 | 1.46 | 107.1 | 107.6 | 107.8 | 108.3 | 108.5 | 107.7 | 109.0 | 110.9 | 112.2 | 110.0 | 112.5 | 115.3 | 116.8 | 116.4 |
| Misc. cons. goods | 391.3-4.6 | .84 | 106.4 | 107.1 | 106.5 | 106.5 | 105.5 | 106.5 | 108.4 | 111.0 | 111.8 | 107.6 | 110.0 | 114.5 | 114.3 | 114.5 |
| Misc. bus. supplies | 395.9 | .62 | 108.2 | 107.3 | 108.7 | 110.7 | 112.4 | 111.6 | 112.6 | 112.8 | 113.8 | 112.9 | 115.1 | 118.5 | 119.2 | 117.6 |
| ELECTRIC UTILITIES | 49 | 4.17 | 132.0 | 132.1 | 134.6 | 138.8 | 132.2 | 132.8 | 131.6 | 132.9 | 131.0 | 135.3 | 137.0 | 137.1 | 135.8 | 133.7 |
| Elec. util. generation | | 1.76 | 125.8 | 126.1 | 128.7 | 133.5 | 125.3 | 125.6 | 125.1 | 127.5 | 123.4 | 130.6 | 132.4 | 130.5 | 129.0 | |
| Fossil fuel generation | | 1.41 | 117.4 | 117.6 | 119.5 | 125.0 | 114.3 | 115.6 | 116.9 | 121.3 | 115.5 | 124.3 | 127.1 | 125.4 | 118.9 | |
| Hydro & nuclear gener. | | .35 | 159.2 | 159.9 | 165.7 | 167.7 | 169.1 | 165.8 | 158.0 | 152.4 | 154.8 | 155.8 | 153.5 | 150.8 | 169.1 | |
| Elec. util. sales | | 2.41 | 136.5 | 136.5 | 138.9 | 142.6 | 137.3 | 138.1 | 136.3 | 136.8 | 136.6 | 138.7 | 140.3 | 141.9 | | |
| Residential elec. | | .95 | 138.3 | 136.7 | 140.8 | 150.0 | 137.5 | 136.4 | 138.5 | 140.0 | 133.3 | 137.9 | 139.5 | 141.7 | 141.8 | |
| Nonresidential elec. | | 1.46 | 135.4 | 136.3 | 137.7 | 137.8 | 137.2 | 139.2 | 134.9 | 134.8 | 138.8 | 139.3 | 140.9 | 142.0 | | |
| Industrial elec. | | .68 | 113.8 | 115.5 | 117.5 | 116.4 | 114.2 | 116.5 | 113.0 | 114.4 | 117.8 | 117.0 | 118.9 | 120.8 | 118.4 | |
| Commercial & other elec. | | .78 | 154.1 | 154.5 | 155.4 | 156.5 | 157.3 | 159.0 | 153.9 | 152.5 | 157.0 | 158.7 | 160.0 | 160.5 | 159.0 | |

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4B--continued
INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977=100

| Series | SIC Code | 1977 | 1988 | 1988 | | | | | | | 1989 | | | | | |
|---------------------------|-----------|----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Pro- por- tion | Ann. Avg. | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN |
| FABRICATED METAL PRODUCTS | 34 | 6.46 | 120.9 | 122.6 | 119.4 | 122.3 | 125.4 | 124.8 | 125.3 | 124.0 | 120.5 | 124.9 | 124.4 | 123.2 | 123.9 | 126.7 |
| Metal containers | 341 | .52 | 99.4 | 102.1 | 101.6 | 105.4 | 105.8 | 103.2 | 100.2 | 96.7 | 97.3 | 103.7 | 100.7 | 101.2 | 106.6 | 110.7 |
| Hardware, tools, cutlery | 342 | .73 | 111.5 | 114.4 | 111.7 | 115.7 | 118.9 | 115.1 | 112.9 | 110.2 | 106.5 | 115.1 | 113.6 | 114.1 | 114.5 | 117.3 |
| Structural metal prod. | 344 | 1.67 | 115.7 | 117.1 | 116.8 | 118.1 | 120.3 | 120.7 | 122.1 | 122.8 | 119.8 | 118.1 | 118.8 | 119.9 | 121.3 | 124.2 |
| Fasteners, stamp, etc. | 345-7 | 1.95 | 130.8 | 133.3 | 126.7 | 130.4 | 134.2 | 133.9 | 135.1 | 131.1 | 126.2 | 137.1 | 136.4 | 132.2 | 132.3 | 137.2 |
| NONELECTRICAL MACHINERY | 35 | 9.54 | 170.8 | 175.0 | 176.7 | 182.3 | 182.6 | 176.1 | 173.6 | 171.8 | 171.7 | 178.2 | 181.3 | 179.5 | 183.0 | 190.8 |
| Engine & farm equip. | 351.2 | 1.48 | 73.6 | 73.6 | 72.8 | 71.7 | 73.7 | 74.3 | 75.6 | 77.1 | 75.6 | 77.6 | 77.8 | 75.9 | 76.5 | 74.8 |
| Construct. & allied eq. | 353 | 1.68 | 83.7 | 85.0 | 86.8 | 86.9 | 91.4 | 87.5 | 86.5 | 88.3 | 85.4 | 90.2 | 89.0 | 90.5 | 90.3 | 94.6 |
| Metalworking machinery | 354 | 1.24 | 149.5 | 151.0 | 151.5 | 157.5 | 161.5 | 156.9 | 150.6 | 149.5 | 147.0 | 157.0 | 159.0 | 154.8 | 153.7 | 163.3 |
| Spec. & genl. ind. eq. | 355.6 | 2.12 | 114.6 | 115.6 | 114.1 | 117.0 | 121.0 | 119.8 | 119.2 | 118.6 | 115.8 | 120.5 | 121.5 | 119.9 | 120.6 | 122.8 |
| Office, serv., & misc. | 357-9 | 3.02 | 135.3 | 132.6 | 132.2 | 134.1 | 139.2 | 132.9 | 138.0 | 131.5 | 131.6 | 136.2 | 134.9 | 132.0 | 134.6 | 136.6 |
| ELECTRICAL MACHINERY | 36 | 7.15 | 180.1 | 179.1 | 176.1 | 182.2 | 184.0 | 189.4 | 185.9 | 181.7 | 179.9 | 181.5 | 179.0 | 181.1 | 178.9 | 181.2 |
| Major elect. eq. & pts | 361.2 | 1.27 | 104.3 | 106.8 | 106.4 | 109.6 | 111.0 | 109.3 | 106.0 | 102.7 | 104.4 | 106.4 | 108.1 | 105.0 | 107.7 | 110.5 |
| Household appliances | 363 | .75 | 136.8 | 127.0 | 120.9 | 134.6 | 133.5 | 167.9 | 145.4 | 123.7 | 146.4 | 156.2 | 140.4 | 156.8 | 139.1 | 146.8 |
| Cooking equipment | 3631 | .11 | 128.4 | 176.0 | 188.3 | 211.0 | 206.9 | 292.1 | 257.9 | 220.2 | 236.3 | 258.1 | 234.1 | 257.0 | 223.9 | 231.2 |
| Refrigeration appl. | 3632 | .17 | 117.5 | 115.0 | 108.6 | 101.0 | 109.7 | 147.1 | 116.7 | 81.9 | 128.9 | 137.3 | 119.6 | 143.2 | 130.0 | 141.2 |
| Laundry appliances | 3633 | .12 | 160.8 | 165.2 | 142.4 | 164.6 | 140.4 | 194.3 | 159.0 | 138.0 | 180.2 | 191.8 | 164.3 | 184.4 | 156.6 | 175.5 |
| Misc. appliances | 3634-6.9 | .35 | 112.0 | 104.1 | 98.1 | 116.0 | 119.1 | 129.5 | 118.7 | 107.9 | 114.7 | 120.8 | 112.4 | 122.1 | 110.7 | 113.0 |
| TV and radio sets | 365 | .44 | 155.3 | 140.8 | 151.3 | 176.2 | 169.5 | 199.5 | 176.4 | 149.5 | 145.1 | 151.8 | 142.4 | 160.2 | 167.7 | 158.8 |
| Communication equipment | 366 | 2.01 | 129.1 | 120.6 | 217.3 | 218.2 | 217.7 | 214.8 | 216.7 | 217.0 | 212.8 | 211.6 | 209.9 | 209.7 | 208.7 | 210.5 |
| Electronic components | 367 | 1.31 | 127.8 | 127.0 | 273.3 | 283.1 | 284.0 | 290.2 | 295.2 | 296.4 | 284.1 | 283.6 | 282.7 | 284.8 | 282.0 | 283.8 |
| TV tubes | 3671-3 | .13 | 146.8 | 123.4 | 128.4 | 177.3 | 156.8 | 195.7 | 188.8 | 150.4 | 140.4 | 164.8 | 183.0 | 182.1 | 170.0 | |
| Misc. electrical supp. | 369 | .70 | 133.5 | 132.5 | 127.0 | 131.8 | 142.7 | 145.9 | 144.5 | 146.7 | 137.0 | 133.2 | 133.5 | 132.6 | 130.8 | 133.1 |
| Storage battery, repl. | 3691 | .13 | 137.5 | 128.1 | 127.4 | 142.3 | 173.9 | 174.5 | 155.8 | 161.2 | 120.8 | 119.6 | 117.7 | 118.8 | 115.4 | 129.3 |
| TRANSPORTATION EQUIPMENT | 37 | 9.13 | 132.1 | 137.9 | 116.3 | 123.8 | 134.1 | 138.1 | 136.7 | 132.8 | 137.7 | 140.6 | 136.9 | 142.3 | 138.4 | 137.2 |
| Motor vehicles & parts | 371 | 5.25 | 117.2 | 128.7 | 93.2 | 106.2 | 120.9 | 127.3 | 123.7 | 114.9 | 124.9 | 130.4 | 123.6 | 131.5 | 125.0 | 122.6 |
| Autos, total | | 1.82 | 106.6 | 129.6 | 68.3 | 85.1 | 111.4 | 125.7 | 116.9 | 102.9 | 114.8 | 120.5 | 112.8 | 128.9 | 117.8 | 111.4 |
| Consumer | | 1.16 | 93.4 | 113.5 | 59.9 | 74.6 | 97.6 | 110.2 | 102.4 | 90.2 | 100.5 | 105.6 | 98.8 | 113.0 | 103.2 | 97.6 |
| Business | | .66 | 130.0 | 158.0 | 83.3 | 103.8 | 135.8 | 153.3 | 142.5 | 125.4 | 139.9 | 146.9 | 137.5 | 157.2 | 143.6 | 135.8 |
| Trucks and buses | | 1.03 | 161.1 | 173.7 | 115.8 | 149.0 | 167.9 | 173.7 | 167.6 | 148.9 | 178.7 | 198.5 | 178.0 | 191.4 | 177.9 | 179.8 |
| Business vehicles | | .41 | 136.6 | 146.0 | 100.6 | 126.2 | 140.3 | 146.9 | 141.4 | 125.0 | 147.8 | 164.3 | 146.3 | 158.6 | 143.3 | 147.3 |
| Consumer trucks | | .63 | 177.0 | 191.7 | 125.7 | 163.7 | 185.8 | 191.1 | 184.6 | 164.5 | 198.8 | 220.7 | 198.6 | 212.7 | 200.4 | 200.9 |
| Truck trailers | 3715 | .09 | 153.3 | 159.5 | 147.1 | 163.6 | 176.4 | 176.3 | 158.8 | 115.9 | 141.3 | 157.2 | 157.0 | 137.8 | 156.4 | 158.7 |
| Motor vehicle parts | 3714 | 2.31 | 104.4 | 106.6 | 100.6 | 101.4 | 105.2 | 105.8 | 108.1 | 109.1 | 108.1 | 106.5 | 106.4 | 106.4 | 105.7 | 104.3 |
| Aircraft and parts | 372 | 2.09 | 168.0 | 166.6 | 164.6 | 162.9 | 167.3 | 167.6 | 172.7 | 173.5 | 171.6 | 171.5 | 172.4 | 173.3 | 174.3 | 176.3 |
| Ships and boats | 373 | .66 | 87.9 | 89.4 | 83.6 | 83.0 | 83.1 | 86.5 | 87.4 | 87.0 | 86.5 | 86.7 | 87.0 | 88.7 | 88.6 | 85.9 |
| Rail & misc trans eq. | 374-6.9 | 1.11 | 161.5 | 156.7 | 154.3 | 158.0 | 164.4 | 164.9 | 160.1 | 168.4 | 165.0 | 162.7 | 163.1 | 167.0 | 164.3 | 163.7 |
| Railroad equipment | 374 | .27 | 31.7 | 26.3 | 28.3 | 32.1 | 40.5 | 34.0 | 36.0 | 52.1 | 51.0 | 38.4 | 49.9 | 57.4 | 58.0 | |
| INSTRUMENTS | 38 | 2.66 | 154.3 | 155.8 | 158.5 | 161.0 | 162.4 | 161.1 | 159.6 | 157.7 | 157.5 | 158.8 | 159.9 | 160.1 | 161.8 | 167.6 |
| Equipment instr. & pts | 381-4 | 1.52 | 185.0 | 187.4 | 190.4 | 194.4 | 199.1 | 192.0 | 190.3 | 188.0 | 188.1 | 189.9 | 191.8 | 191.7 | 194.9 | 201.4 |
| MISC. MANUFACTURES | 39 | 1.46 | 107.1 | 109.8 | 107.1 | 113.9 | 116.0 | 111.8 | 107.0 | 105.1 | 106.4 | 110.1 | 112.4 | 113.8 | 114.7 | 118.7 |
| Misc. cons. goods | 391,3,4,6 | .84 | 106.4 | 110.8 | 105.1 | 112.0 | 113.8 | 111.5 | 104.5 | 103.3 | 105.3 | 105.8 | 110.0 | 112.5 | 114.1 | 118.5 |
| Misc. bus. supplies | 395.9 | .62 | 108.2 | 108.5 | 109.9 | 116.5 | 119.0 | 112.1 | 110.4 | 107.7 | 108.0 | 116.0 | 115.5 | 115.6 | 115.5 | 118.9 |
| ELECTRIC UTILITIES | 491 | 4.17 | 132.0 | 135.0 | 146.0 | 152.9 | 137.2 | 123.5 | 123.4 | 131.6 | 137.2 | 143.5 | 130.1 | 125.6 | 121.8 | 137.7 |
| Elec. util. generation | | 1.76 | 125.8 | 132.1 | 141.7 | 147.6 | 129.0 | 115.8 | 119.1 | 127.9 | 127.1 | 135.3 | 124.6 | 118.1 | 120.5 | |
| Fossil fuel generation | | 1.41 | 117.4 | 124.5 | 135.4 | 143.6 | 115.9 | 108.7 | 111.3 | 119.9 | 117.5 | 127.4 | 116.8 | 110.4 | 109.2 | |
| Hydro & nuclear gener. | | .35 | 159.2 | 162.5 | 166.8 | 163.6 | 161.5 | 144.2 | 149.9 | 159.8 | 165.7 | 166.6 | 155.6 | 148.7 | 165.9 | |
| Elec. util. sales | | 2.41 | 136.5 | 137.2 | 149.1 | 156.8 | 146.0 | 129.1 | 126.6 | 134.3 | 144.5 | 149.6 | 134.2 | 131.1 | | |
| Residential elec. | | .95 | 138.3 | 129.3 | 156.6 | 172.2 | 146.9 | 117.0 | 120.6 | 141.6 | 157.1 | 158.8 | 133.7 | 122.6 | 112.0 | |
| Nonresidential elec. | | 1.46 | 135.4 | 142.3 | 144.2 | 146.7 | 145.5 | 137.1 | 130.5 | 129.5 | 136.4 | 143.6 | 134.6 | 136.6 | | |
| Industrial elec. | | .68 | 113.8 | 119.2 | 116.5 | 120.0 | 118.1 | 116.7 | 113.3 | 109.5 | 112.4 | 119.6 | 117.9 | 119.9 | 114.3 | |
| Commercial & other elec. | | .78 | 154.1 | 162.4 | 168.4 | 170.0 | 169.3 | 154.7 | 145.6 | 146.9 | 157.3 | 164.5 | 149.1 | 151.1 | 143.1 | |

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 5
INDUSTRIAL PRODUCTION: INDEXES; 1977=100

Quarterly averages, seasonally adjusted

| SERIES | Quarterly Averages of Monthly Indexes | | | | | | | | | |
|----------------------------------|---------------------------------------|-------|-------|-------|---------|-------|-------|-------|---------|-------|
| | 1987 Q1 | Q2 | Q3 | Q4 | 1988 Q1 | Q2 | Q3 | Q4 | 1989 Q1 | Q2 |
| Total index | 126.9 | 128.2 | 131.0 | 133.2 | 134.5 | 136.0 | 138.4 | 139.9 | 140.7 | 141.6 |
| Products, total | 135.6 | 136.8 | 139.6 | 141.1 | 143.2 | 144.8 | 147.1 | 148.6 | 150.2 | 151.7 |
| Final products | 134.4 | 135.4 | 138.0 | 139.5 | 141.5 | 143.3 | 145.5 | 147.0 | 148.6 | 150.4 |
| Consumer goods | 126.2 | 126.7 | 128.7 | 129.4 | 131.2 | 132.5 | 134.7 | 137.1 | 138.5 | 139.4 |
| Durable consumer goods | 119.9 | 118.1 | 120.1 | 122.8 | 120.9 | 124.7 | 125.8 | 130.2 | 131.1 | 131.3 |
| Automotive products | 120.3 | 116.2 | 116.6 | 120.4 | 119.0 | 125.4 | 125.0 | 131.0 | 131.0 | 129.0 |
| Home goods | 119.5 | 119.5 | 122.7 | 124.7 | 122.4 | 124.2 | 126.3 | 129.5 | 131.1 | 133.1 |
| Nondurable consumer goods | 128.6 | 129.9 | 131.9 | 131.9 | 135.1 | 135.4 | 138.0 | 139.7 | 141.3 | 142.4 |
| Equipment, total | 145.3 | 146.9 | 150.4 | 152.8 | 155.2 | 157.6 | 160.0 | 160.0 | 161.9 | 165.1 |
| Business & defense equipment | 150.4 | 152.1 | 154.7 | 157.2 | 160.1 | 162.5 | 165.1 | 165.6 | 168.0 | 171.0 |
| Business equipment | 140.7 | 142.6 | 145.8 | 148.9 | 152.3 | 156.5 | 160.1 | 161.3 | 165.1 | 168.6 |
| Defense and space equipment | 188.3 | 189.0 | 189.2 | 189.3 | 190.5 | 186.0 | 184.8 | 182.2 | 179.3 | 180.6 |
| Intermediate products | 139.9 | 141.8 | 145.1 | 146.6 | 149.2 | 150.0 | 152.2 | 154.4 | 155.9 | 156.3 |
| Construction supplies | 130.2 | 129.6 | 132.6 | 133.8 | 137.3 | 138.0 | 138.3 | 140.7 | 140.4 | 139.8 |
| Business supplies | 148.1 | 152.2 | 155.7 | 157.6 | 159.3 | 160.2 | 164.1 | 166.1 | 169.2 | 170.3 |
| Commercial energy products | 127.7 | 130.9 | 133.6 | 133.1 | 135.2 | 136.6 | 137.3 | 136.1 | 138.9 | 138.3 |
| Materials | 115.0 | 116.5 | 119.2 | 122.5 | 122.5 | 124.0 | 126.5 | 128.0 | 127.6 | 127.7 |
| Durable goods materials | 121.4 | 122.9 | 125.7 | 130.3 | 131.5 | 134.1 | 137.1 | 139.2 | 138.6 | 138.5 |
| Basic metal materials | 79.4 | 81.8 | 89.4 | 97.3 | 91.6 | 93.4 | 98.7 | 100.8 | 98.4 | 95.8 |
| Nondurable goods materials | 121.2 | 124.0 | 128.2 | 130.1 | 129.4 | 130.4 | 132.8 | 135.4 | 136.3 | 137.2 |
| Textile, paper, & chem materials | 122.3 | 125.1 | 130.5 | 133.0 | 131.6 | 132.4 | 135.3 | 138.1 | 139.2 | 140.2 |
| Textile materials | 106.1 | 111.4 | 116.8 | 113.1 | 111.8 | 109.0 | 109.3 | 109.9 | 111.5 | 116.9 |
| Pulp and paper materials | 136.4 | 137.7 | 144.6 | 145.1 | 145.7 | 145.9 | 148.9 | 148.6 | 148.4 | 145.4 |
| Chemical materials | 122.9 | 125.3 | 130.2 | 135.5 | 133.5 | 135.7 | 139.4 | 144.1 | 145.4 | 146.3 |
| Energy materials | 98.3 | 98.7 | 100.0 | 102.1 | 100.9 | 100.6 | 102.5 | 102.0 | 100.7 | 100.5 |
| Manufacturing | 131.6 | 133.2 | 135.7 | 138.1 | 139.6 | 141.5 | 144.0 | 145.8 | 147.0 | 148.0 |
| Durable | 130.5 | 131.4 | 133.7 | 136.9 | 138.4 | 141.0 | 143.3 | 145.2 | 146.0 | 146.8 |
| Nondurable | 133.1 | 135.7 | 138.6 | 139.7 | 141.4 | 142.3 | 145.0 | 146.7 | 148.4 | 149.7 |
| Mining and Utilities | 102.3 | 102.5 | 104.9 | 107.3 | 107.1 | 106.7 | 108.1 | 108.0 | 107.2 | 107.0 |
| Mining | 98.8 | 99.0 | 100.7 | 104.3 | 102.5 | 103.4 | 103.9 | 104.2 | 101.8 | 101.4 |
| Utilities | 108.1 | 108.3 | 111.8 | 112.3 | 114.7 | 111.9 | 115.1 | 114.3 | 116.0 | 116.1 |

Table 6
INDUSTRIAL PRODUCTION: GROSS VALUE OF PRODUCTS

Billions of 1982 dollars at annual rates, seasonally adjusted

| SERIES | Billions of 1982 Dollars at Annual Rates | | | | | | | | | | | | | |
|------------------------------|--|----------------|---------|--------|--------|--------|---------|--------|----------|--------|--------|--------|--------|--------|
| | 1982 Dollars | 1988 Ann. Avg. | 1988 Q1 | Q2 | Q3 | Q4 | 1989 Q1 | Q2 | 1989 FEB | MAR | APR | MAY | JUN | JUL |
| Products, total | 1376.8 | 1824.5 | 1798.5 | 1815.4 | 1826.6 | 1861.4 | 1880.8 | 1887.8 | 1879.2 | 1878.0 | 1893.9 | 1885.9 | 1883.6 | 1864.9 |
| Final products | 1084.5 | 1401.2 | 1380.8 | 1395.1 | 1402.5 | 1430.6 | 1446.6 | 1453.5 | 1449.6 | 1442.8 | 1460.4 | 1450.4 | 1449.8 | 1429.9 |
| Consumer goods | 703.7 | 902.4 | 893.5 | 897.2 | 897.8 | 922.6 | 932.6 | 932.7 | 934.3 | 928.0 | 939.4 | 929.5 | 929.3 | 919.9 |
| Durable consumer goods | 133.3 | 218.4 | 209.2 | 218.1 | 218.9 | 228.6 | 230.7 | 229.0 | 231.9 | 227.9 | 232.4 | 228.7 | 225.9 | 217.8 |
| Automotive products | 65.9 | 120.2 | 113.4 | 120.8 | 120.2 | 127.3 | 128.2 | 124.7 | 129.1 | 125.2 | 128.3 | 124.5 | 121.4 | 114.5 |
| Home goods | 67.4 | 98.3 | 95.7 | 97.4 | 98.7 | 101.3 | 102.5 | 104.3 | 102.8 | 102.6 | 104.1 | 104.2 | 104.5 | 103.3 |
| Nondurable consumer goods | 570.4 | 684.0 | 684.4 | 679.0 | 678.8 | 694.0 | 701.9 | 703.7 | 702.4 | 700.1 | 707.0 | 700.8 | 703.4 | 702.1 |
| Equipment, total | 380.8 | 498.8 | 487.3 | 497.9 | 504.7 | 508.0 | 514.0 | 520.8 | 515.2 | 514.8 | 521.1 | 520.9 | 520.5 | 510.0 |
| Business & defense equipment | 345.4 | 479.7 | 468.1 | 478.3 | 485.2 | 489.7 | 496.9 | 502.7 | 498.7 | 497.4 | 503.0 | 503.0 | 502.0 | 491.2 |
| Business equipment | 278.0 | 384.2 | 370.2 | 382.7 | 390.6 | 395.8 | 404.7 | 410.5 | 406.3 | 405.6 | 410.8 | 410.8 | 409.8 | 399.1 |
| Defense and space equipment | 67.4 | 95.4 | 97.9 | 95.5 | 94.5 | 93.9 | 92.2 | 92.2 | 92.4 | 91.7 | 92.1 | 92.2 | 92.2 | 92.1 |
| Intermediate products | 292.2 | 423.3 | 417.7 | 420.3 | 424.1 | 430.8 | 434.2 | 434.3 | 429.6 | 435.3 | 433.5 | 435.5 | 433.8 | 435.0 |
| Construction supplies | 108.3 | 168.0 | 166.2 | 167.1 | 167.9 | 170.4 | 169.9 | 169.8 | 168.8 | 168.4 | 170.3 | 169.1 | 169.9 | 169.5 |
| Business supplies | 183.9 | 255.3 | 251.5 | 253.2 | 256.2 | 260.5 | 264.3 | 264.5 | 260.8 | 266.9 | 263.1 | 266.4 | 263.9 | |
| Commercial energy products | 63.4 | 80.0 | 79.1 | 80.9 | 79.7 | 80.5 | 79.9 | | 77.4 | 82.0 | 78.3 | 81.3 | | |

Table 7
AUTO ASSEMBLIES AT ANNUAL RATES

Seasonally adjusted

| | 1988 Ann. Avg. | Millions of Units | | | | | | | | | | | | |
|--------------|----------------------|-------------------|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-----|
| | | 1988 JUL | AUG | SEP | OCT | NOV | DEC | 1989 JAN | FEB | MAR | APR | MAY | JUN | JUL |
| Autos, total | 7.1 | 7.1 | 7.1 | 7.4 | 7.7 | 7.6 | 7.9 | 7.5 | 7.2 | 7.1 | 7.4 | 7.1 | 6.8 | 6.0 |

Table 8
INDUSTRIAL PRODUCTION: DIFFUSION INDEXES

Percent of component series higher than in earlier months

| | ONE MONTH EARLIER | THREE MONTHS EARLIER | SIX MONTHS EARLIER |
|----------------|----------------------|-------------------------|-----------------------|
| 1977-88 | | | |
| AVERAGE | 53.7 | 56.8 | 58.9 |
| HIGH | 76.6 | 79.4 | 88.3 |
| LOW | 26.4 | 23.2 | 23.0 |
| 1987 | | | |
| JUNE | 51.4 | 57.7 | 56.9 |
| JULY | 64.7 | 67.7 | 66.1 |
| AUGUST | 52.8 | 64.9 | 65.9 |
| SEPTEMBER | 45.6 | 61.5 | 64.3 |
| OCTOBER | 59.5 | 56.2 | 73.4 |
| NOVEMBER | 58.9 | 63.1 | 71.4 |
| DECEMBER | 54.2 | 69.4 | 72.4 |
| 1988 | | | |
| JANUARY | 57.3 | 68.3 | 67.1 |
| FEBRUARY | 48.8 | 54.6 | 62.7 |
| MARCH | 54.4 | 60.3 | 71.8 |
| APRIL | 54.6 | 56.9 | 63.9 |
| MAY | 55.6 | 60.1 | 60.5 |
| JUNE | 56.0 | 59.9 | 57.9 |
| JULY | 65.9 | 66.7 | 69.6 |
| AUGUST | 55.6 | 67.5 | 69.2 |
| SEPTEMBER | 53.2 | 63.7 | 65.7 |
| OCTOBER | 59.9 | 63.3 | 71.2 |
| NOVEMBER | 55.2 | 61.7 | 68.3 |
| DECEMBER | 54.4 | 66.5 | 70.0 |
| 1989 | | | |
| JANUARY | 62.5 | 61.7 | 65.7 |
| FEBRUARY | 43.8 | 54.0 | 62.9 |
| MARCH | 47.2 | 47.0 | 56.0 |
| APRIL | 66.7 | 49.8 | 59.1 |
| MAY | 43.5 | 53.6 | 54.0 |
| JUNE | 51.2 | 56.2 | 52.2 |

NOTE: THE DIFFUSION INDEXES SHOW THE PERCENT OF THE INDUSTRIAL PRODUCTION INDEX'S 252 SEASONALLY ADJUSTED COMPONENT SERIES THAT IN THE MONTH INDICATED WERE HIGHER THAN THEY WERE ONE MONTH EARLIER, THREE MONTHS EARLIER, AND SIX MONTHS EARLIER. IN CALCULATING THE DIFFUSION INDEXES HALF OF THE UNCHANGED COMPONENTS ARE COUNTED AS BEING HIGHER AND NO ALLOWANCE IS MADE FOR THE RELATIVE IMPORTANCE OF THE INDIVIDUAL COMPONENTS IN TOTAL INDUSTRIAL PRODUCTION. DIFFUSION INDEXES BASED ON CHANGES OVER A SIX-MONTH PERIOD GENERALLY SHOW MORE PRONOUNCED CYCLICAL PATTERNS THAN DIFFUSION INDEXES BASED ON CHANGES OVER SHORTER PERIODS.

Table 9A
ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

| Series | SIC code | 1977 (bil. KWH) | Indexes | | | | | | Percentage change from | | | | Indexes | | |
|-----------------------------------|-------------|-----------------|---------|---------|---------|---------|---------|---------|------------------------|---------|----------|---------|---------|-------|-------|
| | | | 1988 | 1988 Q2 | 1988 Q3 | 1988 Q4 | 1989 Q1 | 1989 Q2 | previous quarter | | year ago | | 1988 Q2 | 1989 | |
| | | | | | | | | | 1988 Q3 | 1988 Q4 | 1989 Q1 | 1989 Q2 | | MAY | JUN |
| TOTAL | 10-14,20-39 | 785.8 | 107.9 | 105.9 | 109.2 | 110.3 | 110.3 | 109.1 | 3.1 | 1.0 | .0 | -1.0 | 3.1 | 109.0 | 109.4 |
| MAJOR INDUSTRY DIVISIONS | | | | | | | | | | | | | | | |
| MINING | 10-14 | 59.4 | 118.0 | 114.2 | 118.9 | 123.0 | 115.9 | 114.9 | 4.1 | 3.4 | -5.7 | -0.9 | .5 | 115.2 | 115.7 |
| MANUFACTURING | 20-39 | 726.4 | 107.3 | 105.3 | 108.5 | 109.4 | 110.0 | 108.7 | 3.1 | .8 | .5 | -1.1 | 3.3 | 108.6 | 108.9 |
| DURABLE | 24,25,32-39 | 344.3 | 108.2 | 106.4 | 109.1 | 111.1 | 108.9 | 109.6 | 2.6 | 1.8 | -2.0 | .7 | 3.0 | 109.3 | 110.7 |
| NONDURABLE | 20-23,26-31 | 382.1 | 106.5 | 104.8 | 107.9 | 107.8 | 110.6 | 108.5 | 2.9 | -0.1 | 2.6 | -2.0 | 3.5 | 108.6 | 107.6 |
| INDUSTRY GROUPS AND SERIES | | | | | | | | | | | | | | | |
| METAL MINING | 10 | 15.1 | 118.3 | 106.2 | 124.2 | 137.0 | 117.3 | 114.5 | 16.9 | 10.3 | -14.4 | -2.4 | 7.8 | 112.1 | 120.3 |
| Iron ore | 101 | 6.1 | 115.9 | 97.4 | 122.8 | 146.4 | 112.1 | 99.7 | 26.0 | 19.2 | -23.4 | -11.1 | 2.3 | 96.3 | 105.9 |
| Copper ore | 102 | 5.9 | 140.0 | 137.6 | 142.4 | 148.3 | 145.1 | 153.7 | 3.5 | 4.1 | -2.1 | 5.9 | 11.7 | 159.3 | 157.4 |
| COAL | 11,12 | 10.3 | 135.1 | 130.2 | 132.3 | 143.4 | 131.5 | 130.3 | 1.6 | 8.4 | -8.3 | -0.9 | .1 | 135.4 | 125.2 |
| OIL AND GAS EXTRACTION | 13 | 23.0 | 116.1 | 117.5 | 116.3 | 112.1 | 111.3 | 110.4 | -1.0 | -3.6 | -0.7 | -0.8 | -6.1 | 110.6 | 111.2 |
| Crude oil and natural gas | 131 | 18.2 | 118.1 | 119.6 | 118.4 | 114.6 | 112.9 | 111.6 | -1.0 | -3.2 | -1.5 | -1.2 | -6.7 | 111.6 | 112.7 |
| Natural gas liquids | 132 | 3.4 | 98.9 | 100.4 | 95.5 | 92.0 | 94.5 | 94.3 | -4.9 | -3.6 | 2.7 | -0.3 | -6.1 | 94.3 | 95.0 |
| STONE AND EARTH MINERALS | 14 | 11.0 | 103.1 | 101.9 | 106.0 | 105.5 | 106.0 | 106.2 | 4.0 | -0.4 | .5 | .1 | 4.2 | 106.8 | 107.1 |
| Crushed stone | 142 | 2.4 | 149.2 | 150.6 | 150.2 | 154.8 | 141.8 | 149.9 | -0.3 | 3.0 | -8.4 | 5.7 | -0.5 | 151.8 | 155.0 |
| Sand and gravel | 144 | 2.0 | 104.1 | 105.7 | 103.8 | 105.9 | 104.8 | 107.1 | -1.7 | 1.9 | -1.0 | 2.3 | 1.4 | 110.0 | 107.9 |
| Chemical & fertilizer mat. | 147 | 5.0 | 80.0 | 78.1 | 83.4 | 81.3 | 86.9 | 85.5 | 6.8 | -2.5 | 6.9 | -1.6 | 9.5 | 85.6 | 84.8 |
| FOODS | 20 | 42.4 | 130.0 | 129.4 | 131.4 | 130.7 | 131.5 | 133.1 | 1.6 | -0.6 | .6 | 1.3 | 2.9 | 134.3 | 132.5 |
| Meat products | 201 | 6.9 | 125.6 | 126.3 | 126.2 | 126.3 | 125.5 | 128.3 | -0.1 | .1 | -0.6 | 2.2 | 1.6 | 127.7 | 128.6 |
| Dairy products | 202 | 5.3 | 133.8 | 133.9 | 134.6 | 133.0 | 135.6 | 133.7 | .5 | -1.2 | 2.0 | -1.4 | -0.2 | 135.2 | 133.3 |
| Canned and frozen foods | 203 | 5.7 | 148.5 | 145.9 | 153.7 | 149.7 | 149.1 | 155.7 | 5.3 | -2.6 | -0.4 | 4.4 | 6.7 | 154.7 | 159.3 |
| Grain mill products | 204 | 7.4 | 116.0 | 115.9 | 114.2 | 118.8 | 121.4 | 121.3 | -1.5 | 4.0 | 2.2 | .0 | 4.7 | 122.8 | 119.6 |
| Bakery products | 205 | 2.5 | 143.2 | 140.3 | 143.7 | 145.7 | 146.1 | 144.5 | 2.4 | 1.4 | .3 | -1.1 | 3.0 | 142.9 | 144.5 |
| Sugar and confectionery | 206 | 3.3 | 191.5 | 187.7 | 190.0 | 194.0 | 198.1 | 201.8 | 1.2 | 2.1 | 2.1 | 1.9 | 7.5 | 202.2 | 192.8 |
| Fats and oils | 207 | 3.4 | 98.2 | 97.2 | 96.2 | 100.7 | 102.3 | 100.9 | -1.0 | 4.6 | 1.6 | -1.4 | 3.7 | 102.2 | 96.8 |
| Beverages | 208 | 4.8 | 130.3 | 128.9 | 132.5 | 130.3 | 129.2 | 132.3 | 2.8 | -1.6 | -0.9 | 2.4 | 2.6 | 137.1 | 129.6 |
| Misc. food preparations | 209 | 3.1 | 119.9 | 119.9 | 123.9 | 118.3 | 118.1 | 120.3 | 3.4 | -4.5 | -0.2 | 1.9 | .4 | 121.6 | 120.6 |
| TOBACCO PRODUCTS | 21 | 1.3 | 107.6 | 100.8 | 111.3 | 107.8 | 102.8 | 105.1 | 10.4 | -3.1 | -4.7 | 2.3 | 4.2 | 101.7 | 109.2 |
| TEXTILE MILL PRODUCTS | 22 | 28.3 | 106.3 | 105.3 | 107.0 | 103.5 | 110.7 | 111.6 | 1.6 | -3.2 | 6.9 | .8 | 5.9 | 112.1 | 113.0 |
| Fabrics | 221-4 | 12.1 | 95.2 | 95.5 | 94.8 | 90.6 | 97.4 | 97.6 | -0.8 | -4.4 | 7.5 | .3 | 2.2 | 97.8 | 98.8 |
| Knit goods | 225 | 3.7 | 92.0 | 90.9 | 91.6 | 94.0 | 96.4 | 98.3 | .8 | 2.6 | 2.6 | 1.9 | 8.1 | 97.6 | 98.5 |
| Fabric finishing | 226 | 2.2 | 135.3 | 135.8 | 134.7 | 137.9 | 144.6 | 142.9 | -0.8 | 2.4 | 4.9 | -1.2 | 5.3 | 142.3 | 142.4 |
| Yarn and thread | 228 | 6.7 | 123.6 | 120.1 | 126.9 | 121.4 | 130.3 | 133.9 | 5.7 | -4.3 | 7.3 | 2.8 | 11.5 | 133.3 | 136.7 |
| Miscellaneous textiles | 229 | 2.1 | 108.9 | 108.7 | 109.3 | 108.0 | 111.9 | 113.2 | .6 | -1.2 | 3.6 | 1.2 | 4.2 | 114.6 | 113.3 |
| APPAREL PRODUCTS | 23 | 6.6 | 134.4 | 134.1 | 135.0 | 134.4 | 129.5 | 134.7 | .7 | -0.5 | -3.7 | 4.0 | .4 | 135.5 | 134.0 |
| Men's outerwear | 231.2 | 2.1 | 149.9 | 150.8 | 147.6 | 152.6 | 147.6 | 153.4 | -2.1 | 3.4 | -3.3 | 3.9 | 1.7 | 155.4 | 151.5 |
| Women's outerwear | 233 | 1.9 | 107.3 | 105.9 | 106.3 | 104.7 | 105.6 | 106.5 | .3 | -1.4 | .8 | .8 | .5 | 107.2 | 104.3 |
| LUMBER AND PRODUCTS | 24 | 16.4 | 143.2 | 143.7 | 143.3 | 143.3 | 144.7 | 144.6 | -0.3 | .0 | 1.0 | -0.1 | .6 | 142.3 | 149.7 |
| Lumber | 242 | 6.9 | 114.8 | 114.6 | 113.5 | 114.2 | 118.1 | 116.9 | -0.9 | .6 | 3.4 | -1.0 | 2.0 | 113.4 | 121.8 |
| Millwork and plywood | 243 | 4.4 | 151.9 | 151.4 | 152.3 | 150.9 | 146.7 | 144.5 | .6 | -0.9 | -2.8 | -1.5 | -4.6 | 140.6 | 148.3 |
| FURNITURE AND FIXTURES | 25 | 4.2 | 145.4 | 144.0 | 148.1 | 145.9 | 144.9 | 148.2 | 2.8 | -1.5 | -0.7 | 2.3 | 2.9 | 149.3 | 148.7 |
| Home furniture | 251 | 2.8 | 128.6 | 128.0 | 129.2 | 129.3 | 128.5 | 130.4 | .9 | .1 | -0.7 | 1.5 | 1.9 | 131.8 | 130.7 |
| PAPER AND PRODUCTS | 26 | 71.9 | 129.1 | 127.9 | 129.3 | 130.0 | 131.6 | 127.5 | 1.1 | .5 | 1.2 | -3.1 | -0.3 | 129.3 | 126.1 |
| Wood pulp | 261 | 5.9 | 136.2 | 133.4 | 140.8 | 137.0 | 150.0 | 144.7 | 5.6 | -2.7 | 9.4 | -3.5 | 8.5 | 143.3 | 142.5 |
| Paper | 262 | 34.4 | 137.8 | 135.8 | 137.8 | 137.9 | 139.1 | 134.8 | 1.5 | .1 | .9 | -3.1 | -0.7 | 137.5 | 133.4 |
| Paperboard | 263 | 22.1 | 107.3 | 104.3 | 110.8 | 113.3 | 107.6 | 104.8 | 6.2 | 2.2 | -5.0 | -2.6 | .5 | 104.1 | 105.1 |
| Converted paper | 264 | 5.0 | 119.1 | 121.2 | 119.8 | 117.6 | 116.3 | 110.8 | -1.2 | -1.8 | -1.1 | -4.7 | -8.5 | 111.9 | 108.1 |
| Paperboard containers | 265 | 3.4 | 133.7 | 132.1 | 135.7 | 134.7 | 136.9 | 134.5 | 2.7 | -0.7 | 1.7 | -1.8 | 1.8 | 135.6 | 133.0 |
| Building paper and board | 266 | 1.1 | 169.6 | 167.0 | 174.3 | 168.4 | 176.1 | 167.5 | 4.4 | -3.4 | 4.6 | -4.9 | .3 | 172.4 | 162.7 |
| PRINTING AND PUBLISHING | 27 | 10.6 | 170.8 | 170.0 | 172.3 | 172.2 | 176.8 | 179.3 | 1.4 | -0.1 | 2.7 | 1.4 | 5.8 | 179.0 | 178.6 |
| Newspapers | 271 | 2.6 | 140.3 | 139.8 | 141.4 | 138.6 | 141.0 | 143.1 | 1.1 | -1.9 | 1.7 | 1.5 | 2.4 | 141.4 | 143.1 |
| Commercial Printing | 275 | 4.8 | 203.5 | 202.8 | 203.3 | 207.0 | 209.7 | 213.2 | .2 | 1.8 | 1.3 | 1.7 | 5.1 | 213.6 | 210.9 |
| CHEMICALS AND PRODUCTS | 28 | 162.1 | 86.8 | 84.0 | 89.1 | 90.5 | 93.7 | 89.8 | 6.1 | 1.5 | 3.6 | -4.1 | 6.9 | 89.5 | 88.8 |
| Basic chemicals | 281 | 85.6 | 69.2 | 66.5 | 71.7 | 73.8 | 78.9 | 74.5 | 7.8 | 2.9 | 6.9 | -5.5 | 12.1 | 73.3 | 73.4 |
| Alkalies and chlorine | 2812 | 13.3 | 100.8 | 95.7 | 102.6 | 100.6 | 107.1 | 108.5 | 7.1 | -1.9 | 6.4 | 1.3 | 13.3 | 116.4 | 105.0 |
| Inorganic chemicals, nec | 2819 | 58.1 | 44.8 | 43.1 | 46.7 | 50.2 | 56.3 | 51.2 | 8.4 | 7.5 | 12.1 | -9.0 | 18.9 | 48.8 | 50.6 |
| Acid and fertilizer mat. | 282 | 13.0 | 69.8 | 66.9 | 70.0 | 73.7 | 72.6 | 70.5 | 4.6 | 5.3 | -1.5 | -2.9 | 5.3 | 69.4 | 69.6 |
| Nuclear mats., nondefense | 2821 | 44.6 | 34.3 | 33.3 | 36.6 | 40.1 | 50.2 | 43.1 | 10.2 | 9.3 | 25.2 | -14.0 | 29.7 | 40.9 | 42.3 |
| Synthetic materials | 282 | 19.3 | 132.2 | 130.8 | 131.6 | 135.4 | 135.5 | 131.0 | .6 | 2.9 | .1 | -3.4 | .1 | 133.4 | 127.0 |
| Plastics materials | 2821 | 9.2 | 164.4 | 163.3 | 164.6 | 166.9 | 161.6 | 152.1 | .8 | 1.4 | -3.2 | -5.9 | -6.9 | 158.1 | 143.8 |
| Drugs | 283 | 4.1 | 168.4 | 166.2 | 175.1 | 168.1 | 168.0 | 166.9 | 5.4 | -4.0 | .0 | -0.7 | .4 | 168.7 | 167.7 |
| Soaps and toiletries | 284 | 2.1 | 139.8 | 138.8 | 147.3 | 141.7 | 142.4 | 144.8 | 6.1 | -3.7 | .5 | 1.7 | 4.3 | 143.4 | 147.3 |
| Industrial organic chem. | 286 | 35.8 | 97.2 | 95.5 | 97.5 | 98.3 | 98.5 | 97.0 | 2.0 | .8 | .2 | -1.5 | 1.5 | 97.0 | 97.2 |
| Farm chemicals | 287 | 10.5 | 89.1 | 86.6 | 88.2 | 89.2 | 94.2 | 88.0 | 1.8 | 1.2 | 5.6 | -6.6 | 1.6 | 87.8 | 86.0 |

Table 9B
ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted indexes, 1977 = 100

| Series | SIC code | 1977 (bill. KWH) | Indexes | | | | | | Percentage change from | | | | Indexes | | |
|-----------------------------------|-------------|---------------------|--------------|------------|------------|------------|-------|-------|------------------------|-------|----------|-------|------------|-------------|-------------|
| | | | 1988 Ava. | 1988 Q2 | 1988 Q3 | 1988 Q4 | 1989 | | previous quarter | | year ago | | 1988 Q2 | 1989 MAY | 1989 JUN |
| | | | | | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| TOTAL | 10-14,20-39 | 785.8 | 107.9 | 107.3 | 111.0 | 108.8 | 108.3 | 110.6 | 3.4 | -2.0 | -0.5 | 2.2 | 3.1 | 110.6 | 112.4 |
| MAJOR INDUSTRY DIVISIONS | | | | | | | | | | | | | | | |
| MINING | 10-14 | 59.4 | 118.0 | 116.8 | 115.2 | 119.4 | 120.0 | 117.5 | -1.4 | 3.7 | .5 | -2.1 | .5 | 117.9 | 116.7 |
| MANUFACTURING | 20-39 | 726.4 | 107.3 | 106.7 | 110.7 | 108.1 | 107.5 | 110.2 | 3.8 | -2.4 | -0.5 | 2.5 | 3.3 | 110.1 | 112.1 |
| DURABLE | 24,25,32-39 | 344.3 | 108.2 | 107.6 | 110.6 | 109.4 | 107.8 | 110.8 | 2.8 | -1.0 | -1.5 | 2.8 | 3.0 | 111.1 | 112.5 |
| NONDURABLE | 20-23,26-31 | 382.1 | 106.5 | 105.9 | 110.9 | 106.9 | 107.2 | 109.6 | 4.7 | -3.6 | .3 | 2.2 | 3.5 | 109.1 | 111.7 |
| INDUSTRY GROUPS AND SERIES | | | | | | | | | | | | | | | |
| METAL MINING | 101 | 15.1 | 118.3 | 117.4 | 118.6 | 122.4 | 121.6 | 126.4 | 1.1 | 3.2 | -0.6 | 3.9 | 7.7 | 128.9 | 128.4 |
| Iron ore | 1011 | 6.1 | 115.9 | 113.3 | 117.3 | 119.2 | 117.3 | 115.7 | 3.5 | 1.6 | -1.6 | -1.4 | 2.1 | 119.8 | 116.6 |
| Copper ore | 102 | 5.9 | 140.0 | 142.7 | 138.1 | 144.8 | 147.1 | 159.4 | -3.3 | 4.9 | 1.6 | 8.3 | 11.7 | 162.0 | 161.6 |
| COAL | 11,12 | 10.3 | 135.1 | 129.1 | 116.7 | 140.0 | 150.7 | 129.4 | -9.7 | 20.0 | 7.7 | -14.1 | .2 | 131.4 | 118.0 |
| OIL AND GAS EXTRACTION | 13 | 23.0 | 116.1 | 116.4 | 116.9 | 112.4 | 111.4 | 109.3 | .5 | -3.9 | -0.8 | -1.9 | -6.1 | 107.5 | 111.5 |
| Crude oil and natural gas | 131 | 18.2 | 118.1 | 117.7 | 118.5 | 115.3 | 114.0 | 109.8 | .7 | -2.7 | -1.1 | -3.6 | -6.7 | 107.9 | 111.7 |
| Natural gas liquids | 132 | 3.4 | 98.9 | 103.3 | 100.4 | 89.3 | 89.7 | 97.0 | -2.8 | -11.0 | .5 | 8.1 | -6.1 | 96.9 | 100.3 |
| STONE AND EARTH MINERALS | 14 | 11.0 | 103.1 | 103.9 | 104.9 | 107.5 | 102.6 | 108.2 | 1.0 | 2.5 | -4.5 | 5.4 | 4.2 | 108.4 | 108.6 |
| Crushed stone | 142 | 2.4 | 149.2 | 154.0 | 156.6 | 158.9 | 128.6 | 153.3 | 1.7 | 1.5 | -19.1 | 19.2 | -0.4 | 155.0 | 160.0 |
| Sand and gravel | 144 | 2.0 | 104.1 | 106.4 | 110.6 | 113.0 | 90.0 | 107.9 | 4.0 | 2.1 | -20.3 | 19.8 | 1.4 | 111.3 | 112.2 |
| Chemical & fertilizer mat. | 147 | 5.0 | 80.0 | 79.1 | 79.0 | 82.2 | 88.8 | 86.6 | -0.1 | 4.0 | 8.1 | -2.5 | 9.5 | 85.9 | 84.1 |
| FOODS | 20 | 42.4 | 130.0 | 125.9 | 141.7 | 131.8 | 123.5 | 129.5 | 12.6 | -7.0 | -6.3 | 4.9 | 2.9 | 128.2 | 136.0 |
| Meat products | 201 | 6.9 | 125.6 | 123.0 | 138.5 | 126.3 | 116.4 | 124.9 | 12.6 | -8.8 | -7.8 | 7.3 | 1.6 | 122.7 | 132.8 |
| Dairy products | 202 | 5.3 | 133.8 | 134.8 | 148.7 | 128.8 | 124.9 | 134.5 | 10.3 | -13.4 | -3.0 | 7.7 | -0.2 | 133.0 | 141.8 |
| Canned and frozen foods | 203 | 5.7 | 148.5 | 139.0 | 170.1 | 151.9 | 137.8 | 148.4 | 22.3 | -10.7 | -9.3 | 7.6 | 6.7 | 145.3 | 159.5 |
| Grain mill products | 204 | 7.4 | 116.0 | 111.8 | 117.3 | 121.5 | 119.6 | 117.0 | 4.9 | 3.7 | -1.6 | -2.2 | 4.7 | 116.4 | 119.2 |
| Bakery products | 205 | 2.5 | 143.2 | 138.6 | 159.1 | 143.5 | 134.4 | 142.6 | 14.8 | -9.8 | -6.3 | 6.1 | 2.9 | 138.2 | 152.3 |
| Sugar and confectionery | 206 | 3.3 | 191.5 | 169.3 | 186.7 | 219.2 | 194.3 | 181.7 | 10.3 | 17.4 | -11.3 | -6.5 | 7.3 | 178.6 | 184.1 |
| Fats and oils | 207 | 3.4 | 98.2 | 92.8 | 94.9 | 105.5 | 103.2 | 96.2 | 2.2 | 11.2 | -2.2 | -6.7 | 3.7 | 94.8 | 94.7 |
| Beverages | 208 | 4.8 | 130.3 | 128.2 | 147.8 | 127.5 | 117.8 | 131.6 | 15.2 | -13.7 | -7.6 | 11.7 | 2.6 | 134.3 | 138.0 |
| Misc. food preparations | 209 | 3.1 | 119.9 | 117.6 | 133.2 | 119.3 | 110.5 | 118.0 | 13.3 | -10.4 | -7.4 | 6.9 | 4.4 | 117.5 | 125.1 |
| TOBACCO PRODUCTS | 21 | 1.3 | 107.6 | 97.7 | 117.7 | 111.8 | 95.8 | 101.9 | 20.4 | -5.0 | -14.4 | 6.4 | 4.2 | 96.7 | 113.7 |
| TEXTILE MILL PRODUCTS | 22 | 28.3 | 106.3 | 108.2 | 113.6 | 104.7 | 99.5 | 114.6 | 5.1 | -7.9 | -4.9 | 15.2 | 6.0 | 113.7 | 124.1 |
| Fabrics | 221-4 | 12.1 | 95.2 | 98.0 | 100.9 | 91.7 | 87.2 | 100.3 | 3.0 | -9.1 | -5.0 | 15.0 | 2.3 | 99.2 | 109.4 |
| Knit goods | 225 | 3.7 | 92.0 | 93.5 | 101.6 | 91.4 | 85.4 | 101.1 | 8.7 | -10.1 | -6.6 | 18.4 | 8.1 | 99.1 | 110.5 |
| Fabric finishing | 226 | 2.2 | 135.3 | 136.6 | 138.1 | 140.2 | 137.3 | 143.7 | 1.1 | 1.5 | -2.0 | 4.7 | 5.2 | 140.6 | 150.7 |
| Yarn and thread | 228 | 6.7 | 123.6 | 124.2 | 134.3 | 123.1 | 116.1 | 138.8 | 8.1 | -8.3 | -5.7 | 19.6 | 11.7 | 138.1 | 151.0 |
| Miscellaneous textiles | 229 | 2.1 | 108.9 | 110.9 | 114.6 | 106.9 | 105.3 | 115.4 | 3.4 | -6.8 | -1.5 | 9.6 | 4.1 | 116.9 | 121.3 |
| APPAREL PRODUCTS | 23 | 6.6 | 134.4 | 130.5 | 155.2 | 129.8 | 117.8 | 131.1 | 18.9 | -16.3 | -9.3 | 11.3 | .5 | 128.5 | 143.3 |
| Men's outerwear | 231-2 | 2.1 | 149.9 | 148.9 | 172.8 | 146.8 | 129.9 | 151.5 | 16.1 | -15.0 | -11.6 | 16.7 | 1.7 | 149.1 | 166.9 |
| Women's outerwear | 233 | 1.9 | 107.3 | 102.7 | 125.0 | 100.4 | 94.1 | 103.2 | 21.7 | -19.7 | -6.3 | 9.6 | .5 | 100.6 | 113.1 |
| LUMBER AND PRODUCTS | 24 | 16.4 | 143.2 | 144.0 | 139.6 | 143.4 | 147.9 | 144.8 | -3.0 | 2.7 | 3.1 | -2.1 | .6 | 142.3 | 147.3 |
| Lumber | 242 | 6.9 | 114.8 | 115.5 | 109.6 | 114.7 | 120.6 | 117.7 | -5.1 | 4.6 | 5.2 | -2.4 | 1.9 | 114.5 | 119.1 |
| Millwork and plywood | 243 | 4.4 | 151.9 | 153.2 | 148.5 | 149.5 | 149.6 | 146.2 | -3.0 | .6 | .1 | -2.3 | -4.6 | 142.7 | 146.4 |
| FURNITURE AND FIXTURES | 25 | 4.2 | 145.4 | 141.9 | 149.2 | 146.4 | 145.3 | 146.1 | 5.1 | -1.9 | -0.8 | .5 | 2.9 | 144.2 | 149.8 |
| Home furniture | 251 | 2.8 | 128.6 | 126.7 | 128.2 | 130.3 | 129.7 | 129.1 | 1.1 | 1.7 | -0.5 | -0.5 | 1.9 | 127.5 | 132.2 |
| PAPER AND PRODUCTS | 26 | 71.9 | 129.1 | 128.6 | 130.6 | 129.6 | 129.9 | 128.2 | 1.5 | -0.8 | .3 | -1.3 | -0.3 | 128.3 | 127.6 |
| Wood pulp | 261 | 5.9 | 136.2 | 134.3 | 140.7 | 139.5 | 145.9 | 145.8 | 4.7 | -0.8 | 4.6 | -0.1 | 8.5 | 143.0 | 145.0 |
| Paper | 262 | 34.4 | 137.8 | 137.4 | 137.6 | 136.8 | 138.5 | 136.4 | .1 | -0.6 | 1.3 | -1.5 | -0.7 | 137.4 | 134.2 |
| Paperboard | 263 | 22.1 | 107.3 | 105.6 | 110.2 | 111.8 | 108.3 | 106.1 | 4.3 | 1.4 | -3.1 | -2.0 | .4 | 103.1 | 107.9 |
| Converted paper | 264 | 5.0 | 119.1 | 122.0 | 123.6 | 116.9 | 112.4 | 111.6 | 1.3 | -5.4 | -3.9 | -0.7 | -8.5 | 110.8 | 112.6 |
| Paperboard containers | 265 | 3.4 | 133.7 | 131.5 | 139.9 | 134.1 | 133.6 | 133.9 | 6.4 | -4.1 | -0.4 | .2 | 1.8 | 131.7 | 135.9 |
| Building paper and board | 266 | 1.1 | 169.6 | 168.3 | 174.1 | 167.5 | 175.4 | 168.8 | 3.4 | -3.8 | 4.7 | -3.7 | .3 | 172.9 | 168.8 |
| PRINTING AND PUBLISHING | 27 | 10.6 | 170.8 | 165.3 | 194.2 | 169.5 | 161.8 | 174.3 | 17.5 | -12.7 | -4.5 | 7.7 | 5.4 | 169.9 | 185.3 |
| Newspapers | 271 | 2.6 | 140.3 | 138.2 | 158.0 | 136.0 | 128.6 | 141.5 | 14.3 | -13.9 | -5.5 | 10.0 | 2.3 | 137.6 | 151.8 |
| Commercial Printing | 275 | 4.8 | 203.5 | 195.0 | 229.7 | 205.1 | 192.3 | 205.0 | 17.8 | -10.7 | -6.2 | 6.6 | 5.1 | 198.9 | 215.4 |
| CHEMICALS AND PRODUCTS | 28 | 162.1 | 86.8 | 86.6 | 89.7 | 88.5 | 92.3 | 92.6 | 3.5 | -1.3 | 4.3 | .4 | 6.9 | 92.3 | 92.4 |
| Basic chemicals | 281 | 85.6 | 69.2 | 69.0 | 71.5 | 71.8 | 78.0 | 77.4 | 3.6 | .5 | 8.7 | -0.9 | 12.1 | 77.0 | 76.3 |
| Alkalies and chlorine | 2812 | 13.3 | 100.8 | 100.7 | 102.7 | 97.5 | 104.6 | 114.1 | 2.0 | -5.1 | 7.3 | 9.1 | 13.3 | 122.1 | 112.0 |
| Inorganic chemicals, nec | 2819 | 58.1 | 44.8 | 45.2 | 46.1 | 48.2 | 56.5 | 53.7 | 2.1 | 4.6 | 17.1 | -5.0 | 18.8 | 52.7 | 52.4 |
| Acid and fertilizer mat. | | 13.0 | 69.8 | 68.3 | 70.0 | 72.8 | 71.9 | 71.9 | 2.5 | 4.1 | -1.2 | -0.1 | 5.3 | 71.1 | 72.3 |
| Nuclear mats., nondefense | | 44.6 | 34.3 | 35.5 | 36.1 | 37.9 | 50.0 | 46.1 | 1.7 | 5.0 | 31.9 | -7.9 | 29.7 | 45.1 | 44.0 |
| Synthetic materials | 282 | 19.3 | 132.2 | 133.5 | 136.5 | 133.0 | 130.0 | 133.6 | 2.3 | -2.6 | -2.2 | 2.8 | .1 | 132.8 | 134.7 |
| Plastics materials | 2821 | 9.2 | 164.4 | 166.3 | 169.4 | 163.4 | 157.2 | 154.8 | 1.9 | -3.5 | -3.8 | -1.5 | -6.9 | 152.9 | 152.3 |
| Drugs | 282 | 4.1 | 168.4 | 165.9 | 193.9 | 164.4 | 153.9 | 166.6 | 16.9 | -15.2 | -6.4 | 8.3 | .4 | 162.4 | 180.7 |
| Soaps and toiletries | 284 | 2.1 | 139.8 | 135.6 | 155.0 | 141.0 | 139.1 | 141.3 | 14.3 | -9.0 | -1.3 | 1.6 | 4.2 | 139.5 | 148.8 |
| Industrial organic chem. | 286 | 35.8 | 97.2 | 97.5 | 95.2 | 97.1 | 100.0 | 98.9 | -2.3 | 2.0 | 3.0 | -1.1 | 1.5 | 100.8 | 98.8 |
| Farm chemicals | 287 | 10.5 | 89.1 | 88.7 | 88.9 | 89.0 | 91.4 | 90.1 | .3 | .1 | 2.7 | -1.5 | 1.6 | 88.5 | 88.0 |

Table 9A--continued
ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

| Series | SIC code | 1977 (bil. KWH) | Indexes | | | | | | Percentage change from previous quarter | | | | Indexes | | |
|--------------------------------|----------|-----------------------|--------------|-------|-------|-------|-------|-------|--|------|------|------|------------|-------------|-------------|
| | | | 1988 Avg. | 1988 | | | 1989 | | 1988 | | 1989 | | 1988 Q2 | 1989 MAY | 1989 JUN |
| | | | | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| PETROLEUM PRODUCTS | 29 | 34.7 | 118.2 | 119.3 | 116.6 | 114.3 | 117.1 | 115.9 | -2.3 | -1.9 | 2.4 | -1.0 | -2.9 | 116.2 | 115.6 |
| RUBBER & PLASTICS PRODUCTS | 30 | 23.1 | 149.2 | 148.7 | 150.5 | 149.9 | 149.2 | 150.3 | 1.2 | -0.4 | -0.5 | .7 | 1.1 | 151.6 | 151.3 |
| Tires | 301 | 5.4 | 79.2 | 79.7 | 81.1 | 78.8 | 81.0 | 84.2 | 1.8 | -2.8 | 2.9 | 4.0 | 5.8 | 84.6 | 86.3 |
| Rubber products, nec | 306 | 2.2 | 108.4 | 106.6 | 110.7 | 110.6 | 110.0 | 111.2 | 3.9 | -0.1 | -0.6 | 1.1 | 4.3 | 108.4 | 113.0 |
| Plastics products, nec | 307 | 14.2 | 197.7 | 196.9 | 197.8 | 197.8 | 194.9 | 194.6 | .5 | .0 | -1.4 | -0.2 | -1.2 | 197.6 | 194.9 |
| LEATHER AND PRODUCTS | 31 | 1.4 | 99.0 | 97.7 | 101.4 | 100.9 | 99.1 | 101.6 | 3.8 | -0.5 | -1.7 | 2.5 | 4.0 | 100.8 | 103.5 |
| Shoes | 314 | .7 | 90.6 | 90.8 | 91.7 | 91.8 | 87.6 | 90.7 | 1.0 | .1 | -4.6 | 3.5 | -0.1 | 90.6 | 92.1 |
| CLAY, GLASS, AND STONE | 32 | 31.4 | 108.8 | 108.4 | 108.1 | 109.4 | 111.9 | 110.0 | -0.3 | 1.2 | 2.3 | -1.7 | 1.5 | 110.3 | 111.8 |
| Flat glass | 321 | 1.3 | 143.3 | 142.7 | 146.4 | 146.1 | 147.0 | 145.2 | 2.5 | -0.1 | .6 | -1.2 | 1.7 | 147.3 | 147.2 |
| Pressed and blown glass | 322 | 6.8 | 102.7 | 102.7 | 104.3 | 101.4 | 102.9 | 105.7 | 1.5 | -2.7 | 1.5 | 2.7 | 2.9 | 107.1 | 106.8 |
| Cement | 324 | 10.2 | 96.1 | 96.9 | 93.2 | 97.5 | 100.0 | 97.6 | -3.8 | 4.6 | 2.6 | -2.4 | .7 | 97.6 | 100.5 |
| Structural clay products | 325 | 1.5 | 118.8 | 118.2 | 118.0 | 118.0 | 118.6 | 120.1 | -0.1 | .0 | .5 | 1.3 | 1.6 | 120.2 | 118.9 |
| Concrete products | 327 | 3.6 | 112.7 | 109.7 | 111.9 | 115.7 | 113.1 | 108.9 | 2.0 | 3.4 | -2.2 | -3.8 | -0.8 | 109.0 | 110.6 |
| PRIMARY METALS | 33 | 171.3 | 90.0 | 87.5 | 91.6 | 93.7 | 89.6 | 90.7 | 4.7 | 2.3 | -4.3 | 1.2 | 3.7 | 89.6 | 91.9 |
| Basic steel and mill prod. | 331 | 65.7 | 81.2 | 77.1 | 83.8 | 85.5 | 82.0 | 81.3 | 8.8 | 1.9 | -4.0 | -0.9 | 5.5 | 81.0 | 82.2 |
| Iron and steel foundries | 332 | 12.0 | 80.0 | 77.8 | 80.0 | 83.7 | 82.8 | 81.4 | 2.8 | 4.6 | -1.1 | -1.6 | 4.6 | 81.1 | 82.2 |
| Primary nonferrous metals | 333 | 78.1 | 106.9 | 102.1 | 107.6 | 112.0 | 112.3 | 106.4 | 5.3 | 4.1 | .3 | -5.3 | 4.2 | 106.0 | 106.3 |
| Aluminum | 3334 | 70.3 | 89.6 | 89.4 | 90.0 | 91.1 | 85.3 | 88.7 | .6 | 1.2 | -6.3 | 4.0 | -0.8 | 87.0 | 90.0 |
| Nonferrous foundries | 336 | 2.1 | 131.4 | 129.4 | 133.5 | 135.9 | 134.8 | 137.0 | 3.2 | 1.8 | -0.8 | 1.6 | 5.9 | 135.7 | 139.5 |
| FABRICATED METAL PRODUCTS | 34 | 26.4 | 132.2 | 131.7 | 133.6 | 133.4 | 132.7 | 133.0 | 1.5 | -0.2 | -0.5 | .3 | 1.0 | 133.7 | 134.1 |
| Metal cans | 341 | 2.2 | 135.3 | 132.2 | 136.6 | 139.8 | 140.8 | 141.3 | 3.3 | 2.4 | .7 | .4 | 6.9 | 144.3 | 143.3 |
| Hardware | 342 | 2.3 | 110.1 | 110.4 | 112.3 | 110.3 | 108.4 | 110.2 | 1.7 | -1.7 | -1.7 | 1.6 | -0.2 | 111.3 | 108.1 |
| Structural metal products | 344 | .8 | 128.4 | 129.0 | 130.5 | 129.0 | 126.6 | 131.7 | 1.1 | -1.2 | -1.8 | 4.0 | 2.0 | 133.3 | 133.4 |
| Fasteners | 345 | 1.6 | 124.1 | 120.0 | 128.3 | 128.2 | 124.1 | 123.1 | 6.9 | -0.1 | -3.2 | -0.8 | 2.6 | 121.7 | 125.9 |
| Metal stampings | 346 | 6.2 | 122.1 | 121.7 | 123.5 | 126.8 | 120.8 | 123.8 | 1.4 | 2.7 | -4.7 | 2.5 | 1.7 | 123.9 | 128.2 |
| NONELECTRICAL MACHINERY | 35 | 28.6 | 128.2 | 127.9 | 131.1 | 128.3 | 129.0 | 131.8 | 2.5 | -2.2 | .5 | 2.2 | 3.0 | 131.2 | 133.2 |
| Engines and turbines | 351 | 2.4 | 73.9 | 72.1 | 75.8 | 76.9 | 74.4 | 77.2 | 5.2 | 1.4 | -3.1 | 3.7 | 7.1 | 79.0 | 76.9 |
| Farm equipment | 352 | 2.1 | 61.5 | 62.7 | 63.3 | 64.2 | 59.9 | 58.8 | 1.0 | 1.5 | -6.8 | -1.8 | -6.2 | 61.6 | 57.8 |
| Construction equipment | 353 | 5.1 | 82.3 | 82.7 | 83.8 | 81.9 | 80.3 | 81.2 | 1.3 | -2.3 | -2.0 | 1.1 | -1.8 | 79.9 | 80.9 |
| Metalworking machinery | 354 | 3.8 | 127.2 | 124.7 | 132.7 | 128.8 | 128.1 | 131.4 | 6.5 | -3.0 | -0.5 | 2.6 | 5.4 | 129.8 | 135.4 |
| Special industry machinery | 355 | 2.0 | 109.1 | 105.8 | 110.3 | 107.8 | 108.2 | 111.4 | 4.3 | -2.3 | .4 | 3.0 | 5.3 | 109.6 | 117.4 |
| General industrial mach. | 356 | 4.6 | 118.7 | 117.4 | 121.3 | 119.7 | 117.0 | 113.7 | 3.3 | -1.3 | -2.3 | -2.8 | -3.2 | 112.2 | 115.2 |
| Office and computing mach. | 357 | 2.8 | 227.2 | 233.3 | 229.4 | 225.9 | 231.7 | 239.2 | -1.7 | -2.4 | 3.5 | 3.2 | 2.5 | 239.4 | 235.3 |
| Service industry machinery | 358 | 2.8 | 125.2 | 122.4 | 129.1 | 128.0 | 130.1 | 131.0 | 5.5 | -0.8 | 1.6 | .7 | 7.0 | 132.5 | 133.5 |
| ELECTRICAL MACHINERY | 36 | 25.0 | 139.2 | 136.9 | 142.4 | 141.2 | 139.3 | 138.2 | 4.0 | -0.9 | -1.3 | -0.8 | .9 | 138.4 | 139.2 |
| Elect. distribution equip. | 361 | 1.5 | 103.2 | 101.2 | 106.6 | 101.2 | 101.6 | 99.3 | 5.3 | -5.1 | .4 | -2.2 | -1.9 | 100.6 | 96.7 |
| Elect. indust. apparatus | 362 | 4.3 | 91.9 | 90.0 | 93.5 | 95.3 | 93.9 | 92.0 | 4.0 | 1.9 | -1.5 | -2.0 | 2.3 | 92.8 | 92.9 |
| Household appliances | 363 | 2.7 | 94.2 | 94.3 | 94.9 | 94.8 | 93.1 | 93.8 | .6 | -0.1 | -1.8 | .8 | -0.5 | 92.7 | 93.9 |
| Lighting and wiring prod. | 364 | 2.3 | 109.8 | 110.3 | 110.8 | 107.9 | 118.9 | 115.7 | .4 | -2.6 | 10.2 | -2.7 | 4.9 | 115.1 | 116.8 |
| Radio and TV sets | 365 | .9 | 106.5 | 107.0 | 103.6 | 109.6 | 110.0 | 108.7 | -3.2 | 5.8 | .3 | -1.2 | 1.6 | 109.8 | 106.1 |
| Communication equipment | 366 | 4.6 | 177.3 | 174.4 | 183.3 | 175.4 | 168.2 | 154.9 | 5.1 | -4.3 | -4.1 | -7.9 | -11.1 | 154.7 | 156.1 |
| Electronic components | 367 | 6.0 | 199.0 | 194.2 | 203.4 | 202.7 | 203.0 | 202.8 | 4.7 | -0.3 | .1 | -0.1 | 4.4 | 204.8 | 203.2 |
| TRANSPORTATION EQUIPMENT | 37 | 31.4 | 118.4 | 117.3 | 116.6 | 122.8 | 121.4 | 122.4 | -0.6 | 5.4 | -1.1 | .8 | 4.4 | 124.3 | 121.9 |
| Motor vehicles and parts | 371 | 19.3 | 100.8 | 100.0 | 99.7 | 104.8 | 100.3 | 101.4 | -0.2 | 5.1 | -4.2 | 1.1 | 1.5 | 102.8 | 101.3 |
| Aircraft and parts | 372 | 6.5 | 165.4 | 162.3 | 162.8 | 172.2 | 174.3 | 172.9 | .3 | 5.8 | 1.2 | -0.8 | 6.5 | 172.9 | 172.1 |
| Ships and boats | 373 | 2.1 | 131.0 | 133.9 | 129.2 | 130.1 | 136.0 | 136.2 | -3.5 | .7 | 4.6 | .2 | 1.8 | 137.5 | 139.6 |
| INSTRUMENTS | 38 | 5.5 | 165.0 | 161.1 | 168.5 | 168.7 | 172.1 | 172.8 | 4.6 | .1 | 2.0 | .4 | 7.3 | 174.7 | 169.6 |
| Copiers and related equip. | 386 | 1.4 | 140.2 | 135.7 | 147.7 | 140.7 | 144.1 | 143.0 | 8.9 | -4.8 | 2.5 | -0.8 | 5.4 | 149.1 | 136.9 |
| MISCELLANEOUS MANUFACTURES | 39 | 4.1 | 105.3 | 103.0 | 105.7 | 106.4 | 107.9 | 110.9 | 2.5 | .7 | 1.5 | 2.7 | 7.6 | 111.4 | 109.8 |
| SUPPLEMENTARY GROUPINGS | | | | | | | | | | | | | | | |
| TOTAL, LESS NUCLEAR NONDEFENSE | | 740.7 | 114.1 | 112.3 | 115.1 | 116.0 | 115.2 | 115.0 | 2.5 | .8 | -0.7 | -0.2 | 2.4 | 115.2 | 115.2 |
| UTILITY SALES TO INDUSTRY | | 715.7 | 109.1 | 107.1 | 110.3 | 111.4 | 111.5 | 110.3 | 3.0 | 1.0 | .1 | -1.1 | 3.0 | 110.2 | 110.6 |
| INDUSTRIAL GENERATION | | 70.1 | 87.8 | 85.2 | 89.6 | 91.4 | 88.0 | 89.5 | 5.2 | 2.0 | -3.7 | 1.7 | 5.0 | 88.1 | 90.1 |

Note- The electric power use data by industry, shown in billions of kilowatt hours for 1977, are from the Census of Manufactures of that year and from other sources. They are provided for information and are not used as weights to compile the electric power use indexes. All index aggregations, with their detailed components, are calculated from the kilowatt hour data collected in the Federal Reserve survey of electric power use by industry. The electric power total includes only those major divisions of industries--mining and manufacturing--for which data are collected in this Federal Reserve survey. The total does not include gas or electric utility kilowatt hour use. The supplementary grouping, "Total, less nondefense, nuclear" is shown separately because the nondefense nuclear materials series (part of SIC 2819) accounts for a disproportionately large part of total electric power use. Since the value added proportion for this industry is a considerably smaller part of total IP than its share of total electric power use, excluding this component from total power use facilitates comparisons with total IP.

Table 9B--continued
ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted indexes, 1977 = 100

| Series | SIC code | 1977 (bil. KWH) | Indexes | | | | | | Percentage change from | | | | | Indexes | |
|--------------------------------|----------|--------------------|---------|-------|-------|-------|-------|-------|------------------------|-------|-------|----------|-------|---------|-------|
| | | | 1988 | 1988 | 1988 | 1988 | 1988 | 1988 | previous quarter | | | year ago | | | |
| | | | | | | | | | Q3 | Q4 | Q1 | Q2 | 1988 | 1989 | 1988 |
| | | | Avg. | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q2 | MAY | JUN |
| PETROLEUM PRODUCTS | 29 | 34.7 | 118.2 | 117.7 | 121.7 | 113.9 | 113.7 | 114.5 | 3.4 | -6.4 | -0.2 | .8 | -2.7 | 114.5 | 118.5 |
| RUBBER & PLASTICS PRODUCTS | 30 | 23.1 | 149.2 | 150.1 | 152.7 | 149.4 | 146.2 | 151.7 | 1.7 | -2.2 | -2.1 | 3.7 | 1.1 | 151.9 | 154.5 |
| Tires | 301 | 5.4 | 79.2 | 80.0 | 83.9 | 78.6 | 78.0 | 84.6 | 4.9 | -6.4 | -0.8 | 8.6 | 5.8 | 84.7 | 88.2 |
| Rubber products, nec | 306 | 2.2 | 108.4 | 107.9 | 110.6 | 109.9 | 109.3 | 112.5 | 2.6 | -0.7 | -0.6 | 3.0 | 4.3 | 110.3 | 115.5 |
| Plastics products, nec | 307 | 14.2 | 197.7 | 198.6 | 200.2 | 196.8 | 191.7 | 196.3 | .8 | -1.7 | -2.6 | 2.4 | -1.2 | 197.5 | 199.0 |
| LEATHER AND PRODUCTS | 31 | 1.4 | 99.0 | 97.9 | 103.7 | 98.4 | 98.9 | 101.9 | 5.9 | -5.1 | .5 | 3.0 | 4.0 | 99.7 | 107.2 |
| Shoes | 314 | .7 | 90.6 | 89.9 | 95.6 | 88.4 | 87.9 | 89.9 | 6.3 | -7.5 | -0.6 | 2.2 | -0.1 | 88.2 | 94.7 |
| CLAY, GLASS, AND STONE | 32 | 31.4 | 108.8 | 109.5 | 112.2 | 111.4 | 104.3 | 111.1 | 2.5 | -0.7 | -6.4 | 6.5 | 1.5 | 111.4 | 115.0 |
| Flat glass | 321 | 1.3 | 143.3 | 141.4 | 148.8 | 146.5 | 145.5 | 143.8 | 5.2 | -1.6 | -0.7 | -1.1 | 1.7 | 145.5 | 146.8 |
| Pressed and blown glass | 322 | 6.8 | 102.7 | 102.8 | 107.0 | 101.9 | 99.7 | 105.8 | 4.2 | -4.8 | -2.2 | 6.1 | 2.9 | 106.4 | 108.4 |
| Cement | 324 | 10.2 | 96.1 | 99.4 | 100.8 | 102.0 | 84.5 | 105.1 | 1.5 | 1.2 | -17.2 | 18.6 | .8 | 101.9 | 105.6 |
| Structural clay products | 325 | 1.5 | 118.8 | 118.7 | 118.6 | 119.9 | 115.4 | 120.6 | -0.1 | 1.1 | -3.8 | 4.5 | 1.6 | 120.4 | 120.5 |
| Concrete products | 327 | 3.6 | 112.7 | 111.8 | 114.4 | 116.0 | 108.0 | 110.9 | 2.4 | 1.4 | -6.9 | 2.7 | -0.8 | 111.0 | 112.5 |
| PRIMARY METALS | 33 | 171.3 | 90.0 | 89.6 | 89.7 | 91.9 | 91.0 | 92.9 | .1 | 2.4 | -0.9 | 2.0 | 3.7 | 94.1 | 92.4 |
| Basic steel and mill prod. | 331 | 65.7 | 81.2 | 80.7 | 80.6 | 81.9 | 84.7 | 85.1 | -0.2 | 1.7 | 3.4 | .5 | 5.4 | 87.0 | 83.3 |
| Iron and steel foundries | 332 | 12.0 | 80.0 | 80.8 | 78.6 | 82.3 | 82.3 | 84.5 | -2.7 | 4.7 | -0.1 | 2.8 | 4.6 | 83.3 | 85.8 |
| Primary nonferrous metals | 333 | 78.1 | 106.9 | 101.7 | 106.8 | 115.0 | 110.2 | 106.0 | 5.0 | 7.7 | -4.2 | -3.8 | 4.2 | 108.3 | 108.2 |
| Aluminum | 3334 | 70.3 | 89.6 | 90.8 | 90.2 | 90.0 | 84.8 | 90.0 | -0.7 | -0.2 | -5.7 | 6.1 | -0.8 | 91.2 | 89.4 |
| Nonferrous foundries | 336 | 2.1 | 131.4 | 129.3 | 132.3 | 136.0 | 136.0 | 136.9 | 2.3 | 2.8 | .0 | .6 | 5.9 | 136.0 | 139.4 |
| FABRICATED METAL PRODUCTS | 34 | 26.4 | 132.2 | 131.9 | 135.8 | 131.3 | 132.2 | 133.3 | 2.9 | -3.3 | .7 | .8 | 1.0 | 132.1 | 136.1 |
| Metal cans | 341 | 2.2 | 135.3 | 134.5 | 143.0 | 135.4 | 136.1 | 143.8 | 6.3 | -5.3 | .5 | 5.7 | 6.9 | 144.5 | 150.2 |
| Hardware | 342 | 2.3 | 110.1 | 110.0 | 114.1 | 109.6 | 107.8 | 109.8 | 3.7 | -4.0 | -1.6 | 1.8 | -0.2 | 109.6 | 110.2 |
| Structural metal products | 344 | .8 | 128.4 | 126.9 | 131.0 | 128.2 | 128.8 | 129.5 | 3.3 | -2.1 | .5 | .5 | 2.0 | 128.1 | 132.3 |
| Fasteners | 345 | 1.6 | 124.1 | 120.4 | 129.2 | 125.1 | 125.5 | 123.5 | 7.3 | -3.2 | .3 | -1.6 | 2.6 | 119.4 | 128.0 |
| Metal stampings | 348 | 6.2 | 122.1 | 123.1 | 121.7 | 124.4 | 123.2 | 125.1 | -1.1 | 2.2 | -0.9 | 1.5 | 1.6 | 124.1 | 128.7 |
| NONELECTRICAL MACHINERY | 35 | 28.6 | 128.2 | 127.0 | 136.7 | 126.9 | 125.9 | 130.8 | 7.7 | -7.2 | -0.8 | 3.9 | 3.0 | 129.0 | 136.0 |
| Engines and turbines | 351 | 2.4 | 73.9 | 70.9 | 78.9 | 75.8 | 73.6 | 75.9 | 11.2 | -3.9 | -2.9 | 3.1 | 7.0 | 76.7 | 77.5 |
| Farm equipment | 352 | 2.1 | 61.5 | 62.8 | 62.7 | 62.2 | 62.2 | 58.9 | -0.1 | -0.8 | -0.1 | -5.3 | -6.2 | 60.9 | 58.1 |
| Construction equipment | 353 | 5.1 | 82.3 | 81.7 | 86.9 | 81.2 | 79.0 | 80.2 | 6.3 | -6.6 | -2.7 | 1.5 | -1.9 | 78.0 | 82.4 |
| Metalworking machinery | 354 | 3.8 | 127.2 | 123.8 | 136.0 | 126.4 | 128.1 | 130.5 | 9.8 | -7.1 | 1.4 | 1.9 | 5.4 | 127.0 | 136.4 |
| Special industry machinery | 355 | 2.0 | 109.1 | 105.4 | 113.0 | 106.6 | 107.0 | 111.1 | 7.2 | -5.6 | .4 | 3.8 | 5.4 | 107.3 | 120.1 |
| General industrial mach. | 356 | 4.6 | 118.7 | 118.0 | 124.8 | 117.9 | 114.8 | 114.2 | 5.7 | -5.5 | -2.6 | -0.5 | -3.2 | 112.1 | 118.0 |
| Office and computing mach. | 357 | 2.8 | 227.2 | 228.0 | 246.4 | 222.1 | 221.2 | 233.6 | 8.1 | -9.9 | -0.4 | 5.6 | 2.4 | 231.8 | 242.0 |
| Service industry machinery | 358 | 2.8 | 125.2 | 123.1 | 135.9 | 124.6 | 126.0 | 131.7 | 10.4 | -8.3 | 1.2 | 4.5 | 7.0 | 131.6 | 139.0 |
| ELECTRICAL MACHINERY | 36 | 25.0 | 139.2 | 136.6 | 149.2 | 139.2 | 134.7 | 137.9 | 9.2 | -6.7 | -3.2 | 2.3 | .9 | 137.2 | 143.1 |
| Elect. distribution equip. | 361 | 1.5 | 103.2 | 100.4 | 110.3 | 101.1 | 99.0 | 98.5 | 9.8 | -8.4 | -2.0 | -0.6 | -1.9 | 98.0 | 100.3 |
| Elect. indust. apparatus | 362 | 4.3 | 91.9 | 91.2 | 95.2 | 93.2 | 93.0 | 93.3 | 4.4 | -2.1 | -0.2 | .3 | 2.3 | 94.1 | 94.5 |
| Household appliances | 363 | 2.7 | 94.2 | 96.0 | 95.1 | 93.0 | 92.9 | 95.5 | -1.0 | -2.2 | -0.1 | 2.8 | -0.6 | 94.1 | 98.5 |
| Lighting and wiring prod. | 364 | 2.3 | 109.8 | 110.6 | 110.9 | 108.2 | 118.0 | 116.0 | .3 | -2.5 | 9.1 | -1.7 | 4.9 | 113.1 | 119.2 |
| Radio and TV sets | 365 | .9 | 106.5 | 105.3 | 111.5 | 106.8 | 105.9 | 106.9 | 5.9 | -4.3 | -0.8 | .9 | 1.5 | 106.6 | 109.4 |
| Communication equipment | 366 | 4.6 | 177.3 | 172.8 | 199.7 | 172.9 | 157.2 | 153.5 | 15.6 | -13.4 | -9.1 | -2.3 | -11.2 | 150.6 | 161.9 |
| Electronic components | 367 | 6.0 | 199.0 | 193.9 | 215.8 | 200.4 | 193.0 | 202.3 | 11.3 | -7.1 | -3.7 | 4.8 | 4.4 | 201.9 | 211.5 |
| TRANSPORTATION EQUIPMENT | 37 | 31.4 | 118.4 | 118.3 | 121.2 | 120.2 | 118.0 | 123.5 | 2.5 | -0.9 | -1.8 | 4.6 | 4.4 | 123.6 | 126.7 |
| Motor vehicles and parts | 371 | 19.3 | 100.8 | 102.0 | 102.1 | 102.2 | 98.4 | 103.5 | .1 | .1 | -3.7 | 5.2 | 1.4 | 103.6 | 106.4 |
| Aircraft and parts | 372 | 6.5 | 165.4 | 161.4 | 172.1 | 171.4 | 165.9 | 171.8 | 6.6 | -0.4 | -3.2 | 3.5 | 6.5 | 170.1 | 177.2 |
| Ships and boats | 373 | 2.1 | 131.0 | 132.4 | 127.7 | 128.0 | 141.1 | 134.7 | -3.5 | .2 | 10.2 | -4.5 | 1.7 | 131.6 | 136.6 |
| INSTRUMENTS | 38 | 5.5 | 165.0 | 159.8 | 180.3 | 164.6 | 165.4 | 171.3 | 12.9 | -8.7 | .5 | 3.6 | 7.2 | 170.3 | 177.0 |
| Copiers and related equip. | 386 | 1.4 | 140.2 | 135.2 | 153.0 | 139.2 | 140.8 | 142.4 | 13.2 | -9.1 | 1.2 | 1.1 | 5.3 | 144.9 | 142.9 |
| MISCELLANEOUS MANUFACTURES | 39 | 4.1 | 105.3 | 102.7 | 110.4 | 104.0 | 105.7 | 110.5 | 7.5 | -5.8 | 1.6 | 4.6 | 7.6 | 109.4 | 112.3 |
| SUPPLEMENTARY GROUPINGS | | | | | | | | | | | | | | | |
| TOTAL, LESS NUCLEAR NONDEFENSE | | 740.7 | 114.1 | 113.3 | 117.3 | 114.7 | 113.1 | 116.0 | 3.5 | -2.2 | -1.3 | 2.5 | 2.4 | 116.0 | 118.1 |
| UTILITY SALES TO INDUSTRY | | 715.7 | 109.1 | 108.6 | 112.3 | 109.9 | 109.3 | 111.9 | 3.4 | -2.1 | -0.5 | 2.3 | 3.0 | 111.8 | 113.7 |
| INDUSTRIAL GENERATION | | 70.1 | 87.8 | 85.5 | 89.0 | 89.3 | 90.3 | 89.8 | 4.2 | .2 | 1.2 | -0.6 | 5.0 | 88.5 | 90.0 |

Explanatory Note

Coverage. The index is a measure of industrial production expressed as a percentage of output in a reference period (currently 1977). The changes in the physical output of the nation's factories, mines, and electric and gas utilities are represented by 252 individual series in the index, covering 27 pertinent two-digit codes of the *Standard Industrial Classification* (SIC). For each individual series, index series relatives are calculated first and are then aggregated in the following two ways: (1) market groupings, such as consumer goods, equipment, intermediate products, and materials, from which the seasonally adjusted total index is derived (tables 1A and 1B), and (2) industry groupings, such as SIC two-digit industries, and major aggregates of these groupings, such as durable and nondurable manufacturing, mining, and utilities (tables 2A and 2B).

Market groupings. For purposes of analysis the individual industrial output series are grouped into materials, intermediate products, and final products; together, the latter two form the products category. Materials are industrial output requiring further processing within industry; intermediate products are expected to become inputs in nonindustrial sectors such as construction, farming, and services; and final products are assumed to enter final use as items of private consumption, government use, or capital formation. In the index, final products are subdivided into consumer goods and equipment.

Timing. A first estimate of output for a month is published about the 15th of the following month. This estimate may be revised in each of the next three months as new data become available. After the fourth month, indexes are not revised further until the time of an annual revision or a benchmark revision. The last three benchmark revisions were published in 1971, 1976, and 1985. Such revisions are derived mainly from the quinquennial *Census of Manufactures*, the quinquennial *Census of Mineral Industries*, and the *Annual Survey of Manufactures*, all prepared by the Bureau of the Census, and the *Minerals Yearbook* of the Bureau of Mines.

Source data. The indexes of industrial production are constructed from monthly data of two types: (1) directly measured output in physical units; and (2) estimates of output derived from data on input, expressed in physical units, adjusted by conversion factors that relate these inputs to physical output. The data on directly measured physical product (pounds, yards, barrels, and the like) are obtained from reports of the Bureau of the Census, the Bureau of Mines, other government agencies, and trade associations. When suitable monthly data on physical product are unavailable, estimates of physical output based on input data (kilowatt hours, production-worker hours) are used. The hours worked by production workers are collected in the monthly establishment survey of the Bureau of Labor Statistics, while data on the kilowatt hours used in industry are collected from electric utilities by the Federal Reserve Banks. The estimates of input conversion are based mainly on historical relationships that were derived from censuses and annual surveys and, when appropriate, on more recent cyclical, technological and statistical developments. Users of the index should bear in mind that, especially for the first and second estimates of a given month's indexes, the available source data are limited and are subject to change in the months following their initial receipt as well as in benchmark revisions.

Seasonal adjustment. Individual series are seasonally adjusted by the X-11 Method II of the Bureau of the Census with the intervention analysis technique applied to the series. The seasonal factors currently being used are based on data through 1985. The individual series and the major aggregate series are seasonally adjusted independently, and the factors for the aggregate series in the summary table and in tables 1 and 2 are reviewed monthly. The seasonally adjusted total index is aggregated from the seasonally adjusted market groupings of the index and may not precisely equal an aggrega-

tion of the seasonally adjusted industry groupings. A simple aggregation of the seasonally adjusted individual series within groupings may not precisely equal the seasonally adjusted groupings, primarily because aggregates are adjusted independently.

Weights. The total index and the various groupings of the component series are currently aggregated on the basis of 1977 value-added weights, which are shown in the first column of the index tables under the heading proportions. Value-added weights for 1972 are used for the 1972-77 period, while 1967 weights are used for the 1967-72 period. The weight years for earlier periods after World War II are 1963, 1958, 1954, and 1947. The indexes for the various periods are linked to provide the continuous final results expressed in relation to the 1977 comparison year taken as 100. The gross-value-weighted product series are expressed in terms of 1982 dollars.

Formula. The symbolic expression for the total index (I_t) is

$$I_t = \sum \left(\frac{q_{77} p_{77}}{\sum q_{77} p_{77}} \right) \cdot \left(\frac{q_t}{q_{77}} \right) \cdot 100 = \frac{\sum q_t p_{77}}{\sum q_{77} p_{77}} \cdot 100,$$

where q is quantity, p is Census value added per unit of output, t represents the t th period, and 77 denotes base-year values.

Reliability. The median of the revisions in total industrial production, without regard to sign, between the first and fourth estimates is 0.3 percent; that is, in about half of the cases the absolute value of the revision from the first to the fourth estimate was less than 0.3 percent. (This calculation used data for the period from January 1972 to January 1985.) Over the same period, positive changes in the first estimate were confirmed in the fourth estimate (available three months later) about 94 percent of the time. Negative changes in the first estimate were confirmed in the fourth estimate about 85 percent of the time. Thus the likelihood is high that the first estimate for a month will indicate the direction of change in the total index in a reliable manner. However, the magnitude of change as first estimated typically is revised during the next three months; these revisions are based on revised and more complete data sources. The estimates for the higher aggregates generally are considered more reliable than the estimates for their individual components. Revisions to the components often offset each other and thereby reduce the size of revisions to the aggregates.

Rounding. Changes shown for index components may not aggregate to changes for totals because of independent rounding. Percentage changes are calculated from indexes expressed in more digits following the decimal point than shown in their rounded form in the present release. Therefore, percentage changes calculated from the rounded indexes may not entirely coincide with the percentage changes calculated from unrounded indexes.

Literature. *Industrial Production—1986 Edition* contains a more detailed description of the index and the procedures used in compiling it, plus a history of its development, a glossary of terms, and a bibliography. The new edition was published in December 1986. To obtain copies of *Industrial Production—1986 Edition*, write to the Publication Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. The price of this volume of about 440 pages is \$9.00 per copy. Selected data on industrial production are also published monthly in the Financial and Business Statistics section of the *Federal Reserve Bulletin*.

Release date. The industrial production index is released in mid-month. For the specific date, phone 202-452-3206 about the 11th of the month.