

Insulated Wire and Cable: 2006

Issued June 2006

MA335J(06)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (XLS format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS

In 2006, the total value of manufacturers' shipments of copper insulated wire and cable increased by 37.4 percent to \$17.9 billion from \$13.0 billion in 2005. Quantity of shipments of aluminum insulated wire and cable shows a 5.7-percent increase for 2006, totaling 451.6 million pounds, up from the 2005 total of 427.2 million pounds. Copper magnet wire increased to \$1.7 billion, up 53.8 percent from \$1.1 billion in 2005. In 2006 insulated optical fiber cable increased by 7.2 percent to \$1,241.3 million, from the 2005 value of shipment totaling \$1,158.8 million. Optical fiber increased 8.7 percent to \$489.4 million, from the 2005 total of \$450.3 million.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900 or call Phil Brown, 301-763-4740.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Table 1. Summary of Shipments of Insulated Wire and Cable: 2001 to 2006
[Value in millions of dollars]

| Product code | Product description | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
|--------------|---|----------|------------|----------|----------|----------|----------|
| | Insulated wire and cable 1/..... | 21,480.3 | 15,865.1 | 13,233.8 | 11,441.5 | 11,944.8 | 16,873.4 |
| 335929A | Electronic wire and cable..... | 3,309.6 | 2,748.2 | 2,614.3 | 2,358.8 | 2,576.2 | 2,657.5 |
| 335929B | Telephone and telegraph wire and cable..... | 2,545.2 | r/ 1,590.1 | 957.7 | 1,276.0 | 1,290.9 | 2,074.4 |
| 3359291 | Power wire and cable 2/..... | 2,875.2 | 2,256.2 | 1,810.4 | 1,484.5 | 1,466.0 | 1,545.8 |
| 3359291 pt. | Portable power cable 2/..... | (NA) | (NA) | (D) | (D) | 117.9 | 137.9 |
| 335929C | Control and signal wire and cable..... | 446.7 | 291.6 | (D) | (D) | 208.0 | 197.3 |
| 335929D | Building wire and cable..... | 7,247.7 | 4,835.2 | 3,707.3 | 2,433.8 | 2,302.4 | 2,121.1 |
| 331491F | Apparatus wire and cordage..... | 553.6 | 509.9 | 560.6 | 671.9 | 629.2 | 735.4 |
| 335929E | Other insulated wire and cable..... | 938.3 | r/ 810.6 | 600.1 | 519.8 | 604.3 | 675.0 |
| 331491H | Magnet wire..... | 1,833.3 | 1,214.7 | 1,120.7 | 957.3 | 980.0 | 1,059.4 |
| 3359210 | Insulated optical fiber cable..... | 1,241.3 | 1,158.3 | 886.3 | 944.4 | 1,282.5 | 3,646.2 |
| 327215A | Optical fiber..... | 489.4 | r/ 450.3 | 502.3 | 449.1 | 487.4 | 2,023.4 |

D Withheld to avoid disclosing data for individual companies. NA Not available. pt. Part. r/Revised by 5 percent or more from previously published data.

1/Detail may not add to total due to rounding.

2/Beginning in 2005, part of product code 3359291, "Portable power cable," is included with the rest of product code 3359291, "Power wire and cable."

Table 2. Shipments of Copper Insulated Wire and Cable: 2006 and 2005
[Shipments in thousands of pounds. Value in thousands of dollars]

| | | Shipments, including interplant transfers 1/ | | | | | |
|--------------|--|--|--------------------------|----------------|-------------|--------------------------|----------------|
| | | 2006 | | | 2005 | | |
| Product code | Product description | No. of cos. | Copper content weight 2/ | Total Value 2/ | No. of cos. | Copper content weight 2/ | Total Value 2/ |
| 335929 pt. | Insulated wire and cable (except magnet wire and optical wire)..... | (NA) | 2,789,562 | 17,916,197 | (NA) | 2,995,129 | 13,041,736 |
| 335929A1 | Electronic wire and cable..... | 66 b/ | 264,723 | a/ 3,309,589 | 69 c/ | 254,186 | c/ 2,748,171 |
| | Flexible coaxial cable, armored or unarmored: | | | | | | |
| 335929A130 | 135 C and over..... | 10 | 2,573 | a/ 83,735 | 11 c/r/ | 3,996 | c/r/ 84,263 |
| 335929A140 | Under 135 C..... | 19 | 32,326 | 554,735 | 20 b/ | 26,787 | b/ 392,165 |
| | Hookup wire (single conductor, shielded and nonshielded): | | | | | | |
| 335929A170 | 135 C and over temperature rating..... | 18 b/ | 14,374 | b/ 218,170 | 18 c/ | 12,953 | c/ 159,518 |
| 335929A180 | Under 135 C temperature rating..... | 27 c/ | 69,811 | c/ 438,236 | 31 a/ | 58,664 | a/ 359,897 |
| | Multiconductor electronic wire and cable (shielded and nonshielded): | | | | | | |
| 335929A190 | Flat and ribbon cable..... | 13 b/ | 3,576 | 73,248 | 17 c/r/ | 3,369 | c/r/ 65,283 |
| | Other multiconductor electronic wire and cable: | | | | | | |
| | Shielded: | | | | | | |
| 335929A1A0 | 135 C and over temperature rating..... | 21 | (D) | (D) | 20 | (D) | (D) |
| 335929A1B0 | Under 135 C temperature rating..... | 28 a/ | 43,452 | 414,814 | 30 c/r/ | 43,385 | c/r/ 342,375 |
| | Nonshielded: | | | | | | |
| 335929A1C0 | 135 C and over temperature rating..... | 10 | (D) | (D) | 8 | (D) | (D) |
| 335929A1D0 | Under 135 C temperature rating..... | 22 | 36,093 | 279,289 | 22 c/r/ | 34,414 | c/ 238,481 |
| 335929A1 pt. | Other electronic wire and cable..... | 17 | 35,583 | 926,899 | 19 r/ | 46,572 | r/ 862,326 |
| 335929B | Telephone and telegraph wire and cable..... | 20 b/ | 358,801 | b/ 2,545,176 | 20 b/ | 358,704 | b/r/ 1,590,129 |
| 335929B120 | Station wire and cable..... | 8 b/ | 13,109 | b/ 73,691 | 8 b/r/ | 13,627 | b/r/ 56,417 |
| 335929B140 | Inside wiring cable..... | 8 a/ | 88,488 | 706,089 | 9 c/r/ | 63,898 | c/r/ 480,132 |
| 335929B180 | Other telephone and telegraph wire and cable..... | 14 | 257,204 | 1,765,396 | 15 a/r/ | 281,179 | a/r/ 1,053,580 |
| 3359291 | Power wire and cable..... | 19 | 315,030 | 2,875,244 | 21 c/r/ | 342,085 | c/ 2,256,177 |
| 3359291810 | Paper insulated cable (all voltages, all types)..... | 1 | (D) | (D) | 1 | (D) | (D) |
| | Plastic and rubber insulated: | | | | | | |
| | 2 kV or less: | | | | | | |
| 3359291820 | Portable welding cable..... | 6 a/ | 18,507 | b/ 81,482 | 7 a/ | 18,244 | b/ 55,099 |
| 3359291830 | Underground distribution cable (UD, URD)..... | 7 | 8,321 | a/ 523,733 | 7 a/ | 8,196 | b/ 421,158 |
| 3359291840 | Thermoplastic insulated power cable..... | 9 c/ | 24,264 | c/ 155,929 | 9 a/r/ | 29,134 | b/r/ 111,761 |
| | Thermoset insulated: | | | | | | |
| 3359291850 | Armored, rubber and cross linked..... | 6 a/ | 8,928 | a/ 64,220 | 6 c/r/ | 10,721 | c/r/ 52,692 |
| 3359291860 | Unarmored, rubber..... | 5 c/ | 23,328 | b/ 98,719 | 6 a/r/ | 20,802 | a/r/ 70,291 |
| 3359291870 | Unarmored, cross linked..... | 6 | 16,465 | a/ 98,574 | 6 a/ | 13,560 | a/ 58,425 |
| 3359291890 | Weatherproof cable..... | 4 | (D) | (D) | 4 | (D) | (D) |
| 3359291891 | Service drop cable, thermoset and thermoplastic insulated..... | 4 | (D) | (D) | 4 | (D) | (D) |
| | Over 2 kV: | | | | | | |
| 33592918C0 | Underground distribution cable (UD, URD), all insulations (jacketed and unjacketed)..... | 6 | 61,364 | 610,278 | 7 a/ | 61,693 | b/ 480,032 |
| | Thermoset insulated power cable, excluding underground: | | | | | | |
| | 2 kV to 15 kV: | | | | | | |
| 33592918E0 | Armored, rubber and cross-linked..... | 7 a/ | 30,981 | a/ 199,994 | 7 c/r/ | 24,155 | c/r/ 116,764 |
| 33592918F0 | Unarmored, rubber..... | 6 a/ | 60,491 | a/ 364,487 | 6 c/r/ | 60,760 | c/r/ 244,470 |
| 33592918G0 | Unarmored, cross-linked..... | 4 | 3,424 | 20,725 | 5 b/r/ | 3,931 | b/r/ 14,596 |
| 33592918H0 | Over 15.1 kV (rubber and cross-linked)..... | 4 | (D) | (D) | 4 | (D) | (D) |
| 33592918I0 | Other power wire and cable, including portable..... | 3 a/ | 27,094 | b/ 214,513 | 3 c/r/ | 29,937 | c/r/ 197,394 |
| 335929C | Control and signal wire..... | 19 b/ | 51,617 | b/ 446,666 | 21 c/r/ | 46,139 | c/ 291,552 |
| 335929C110 | Signal wire and cable..... | 14 b/ | 27,566 | b/ 242,139 | 16 c/r/ | 26,595 | c/r/ 174,238 |
| | Control wire and cable, excluding elevator cable: | | | | | | |
| 335929C120 | Thermoset insulated..... | 8 a/ | 6,291 | a/ 77,449 | 8 c/r/ | 5,710 | c/r/ 50,152 |
| 335929C130 | Thermoplastic insulated..... | 10 a/ | 17,760 | b/ 127,078 | 10 c/ | 13,834 | c/ 67,162 |
| 335929D | Building wire and cable..... | 22 | 1,532,858 | 7,247,665 | 22 c/ | 1,700,219 | c/ 4,835,179 |
| | Building wire and cable having underwriters' labels: | | | | | | |
| | Thermoset insulated: | | | | | | |
| 335929D110 | Cross-linked polyethylene (XHHW)..... | 12 | 46,101 | 375,075 | 11 c/ | 44,654 | c/ 177,371 |
| 335929D120 | Cross-linked polyethylene (XLP, USE)..... | 12 | 14,226 | 101,804 | 10 c/ | 20,691 | c/ 73,149 |
| | Thermoplastic insulated: | | | | | | |
| 335929D130 | Flame-retardant nylon (THHN, THWN)..... | 13 | 743,015 | 3,082,594 | 14 c/ | 779,550 | c/ 1,935,254 |
| 335929D140 | Moisture and heat resistant (TW, THW)..... | 12 | 5,087 | 18,918 | 12 c/r/ | 3,017 | c/r/ 11,456 |
| 335929D150 | Service entrance cable (SER, SEU, ASE)..... | 9 b/ | 13,168 | 237,317 | 9 c/ | 16,848 | c/ 178,179 |

Table 2. Shipments of Copper Insulated Wire and Cable: 2006 and 2005
[Shipments in thousands of pounds. Value in thousands of dollars]

| | | Shipments, including interplant transfers 1/ | | | | | | |
|--------------|---|--|--------------------------|----------------|-------------|--------------------------|----------------|-----------|
| | | 2006 | | | 2005 | | | |
| Product code | Product description | No. of cos. | Copper content weight 2/ | Total Value 2/ | No. of cos. | Copper content weight 2/ | Total Value 2/ | |
| | Nonmetallic branch-circuit and under-ground feeder: | | | | | | | |
| 335929D160 | Type NM-B..... | 7 | 537,725 | 2,355,303 | 8 b/ | 652,789 | c/ | 1,689,028 |
| 335929D170 | Type UF and NMC (corrosion resistant)..... | 8 | 40,558 | 200,134 | 10 c/ | 47,735 | c/ | 145,261 |
| 335929D190 | Other building wire and cable..... | 10 | 132,978 | 876,520 | 11 a/ | 134,935 | b/ | 625,481 |
| 331491F | Apparatus wire and cordage 3/..... | 31 a/ | 89,085 | a/ 553,578 | 32 c/r/ | 106,190 | c/ | 509,908 |
| | Flexible cordage: | | | | | | | |
| 331491F110 | Thermoset insulated..... | 9 b/ | 15,528 | b/ 111,200 | 9 b/r/ | 19,962 | b/ | 100,260 |
| 331491F120 | Thermoplastic, including thermoplastic elastomers..... | 11 a/ | 2,891 | a/ 19,925 | 11 c/ | 3,087 | c/ | 15,276 |
| 331491F180 | Extension cord sets..... | 4 a/ | 2,099 | a/ 25,680 | 4 a/r/ | 3,949 | a/r/ | 30,595 |
| 331491F190 | Fixed power supply cords..... | 11 | 1,326 | 9,007 | 11 c/r/ | 1,061 | c/r/ | 8,058 |
| 331491F1A0 | Detachable power supply cords..... | 6 | 1,902 | 6,074 | 6 b/r/ | 1,435 | b/r/ | 4,563 |
| 331491F1B0 | Retractable power cords and other..... | 8 | 461 | 20,904 | 8 b/r/ | 424 | a/ | 16,134 |
| | Apparatus wire: | | | | | | | |
| 331491F130 | Appliance fixture wire..... | 10 | 15,138 | 98,502 | 11 c/ | 18,623 | c/ | 85,502 |
| 331491F145 | Appliance wiring material 14 gauge and larger, (including motor lead and transformer lead wire), thermoset and thermoplastic insulated..... | 10 b/ | 14,053 | a/ 63,314 | 11 c/r/ | 24,797 | c/ | 114,458 |
| 331491F160 | Submersible pump cable..... | 9 | 17,204 | 102,332 | 9 b/ | 15,853 | b/ | 69,736 |
| 331491F170 | Other apparatus wire and cordage, including machine tool wire..... | 14 | 18,483 | 96,640 | 14 c/r/ | 16,999 | c/r/ | 65,326 |
| 335929E | Other insulated wire and cable..... | 37 b/ | 177,448 | b/ 938,279 | 40 c/r/ | 187,606 | c/r/ | 810,620 |
| | Automotive: | | | | | | | |
| 335929E110 | Bulk automotive primary wire..... | 12 b/ | 93,322 | b/ 337,687 | 12 c/ | 98,770 | c/ | 259,425 |
| 335929E120 | Bulk battery cable..... | 7 a/ | 6,935 | a/ 29,046 | 7 b/ | 8,859 | b/ | 25,970 |
| 335929E130 | Bulk ignition wire..... | 5 | (D) | (D) | 7 | (D) | (D) | (D) |
| 335929E140 | Other automotive wire and cable..... | 7 | (D) | (D) | 9 | (D) | (D) | (D) |
| | Airframe, shipboard and ground support cable, excluding coaxial cable and ignition cable: | | | | | | | |
| 335929E150 | Airframe and missile, including ground support cable..... | 8 a/ | 4,752 | 44,229 | 8 a/ | 4,193 | r/ | 44,229 |
| 335929E160 | Shipboard cable..... | 5 c/ | 3,208 | b/ 19,064 | 5 a/ | 3,173 | a/r/ | 19,064 |
| 335929E170 | Other insulated or covered wire and cable, n.e.c. | 19 c/ | 59,787 | c/ 320,032 | 22 c/r/ | 60,386 | c/r/ | 320,032 |

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. pt. Part. r/Revised by 5 percent or more from previously published data.

1/Interplant transfers for 2006 totaled \$87,544 and for 2005 totaled \$67,240.

2/Aluminum content for 2006 totaled 451,623 thousand pounds and for 2005 totaled 427,200 thousand pounds (not included in copper content weights). Aluminum shipment values are included in total value. See Table 3 for additional details.

3/Data include the following: (a) all known establishments which insulate wire and cable and then fabricate it into finished products, NAICS product class 331491E; (b) establishments from NAICS product class 334290, that manufacture wire, cord, and flexible cord sets from purchased insulated wire.

Note: Data presented in this table are for copper content insulated wire and cable. See Table 3 for aluminum content information. Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Aluminum Shipments of Selected Insulated Wire and Cable: 2006 and 2005
[Aluminum gross weight shipments in thousands of pounds]

| Product code | Product description | 2006 | | 2005 | |
|--------------|---|-------------|-----------------------|-------------|-----------------------|
| | | No. of cos. | Aluminum content 1/2/ | No. of cos. | Aluminum content 1/2/ |
| 335929 pt. | Insulated wire (except magnet wire)..... | (NA) | 451,623 | (NA) | r/ 427,200 |
| 335929A | Electronic wire and cable..... | 1 | (D) | 2 | (D) |
| 335929B | Telephone and telegraph wire and cable..... | - | - | - | - |
| 3359291 | Power wire and cable..... | 8 | 308,137 | 8 | r/ 311,667 |
| 3359291830 | Underground distribution cable, all insulations-- 2 kV or less..... | 5 | 195,778 | 5 | 194,317 |
| 3359291890 | Weatherproof cable..... | 3 | 2,922 | 3 | r/ 2,041 |
| 3359291891 | Service drop cable, thermoset and thermoplastic insulated..... | 2 | 39,015 | 3 | 42,485 |
| 33592918C0 | Underground distribution cable, all insulations-- over 2 kV..... | 6 | 50,847 | 6 | 46,937 |
| 33592918F0 | Thermoset insulated power cable, unarmored, rubber--2 kV to 15 kV..... | 4 | 5,687 | 4 | r/ 4,751 |
| 3359291 pt. | Other power wire and cable..... | 7 | 13,888 | 7 | r/ 21,136 |
| 335929D1 | Building wire and cable..... | 7 | 132,620 | 7 | 105,120 |
| 335929D110 | Thermoset insulated, cross-linked polyethylene (XHHW)..... | 4 | (D) | 5 | (D) |
| 335929D150 | Service entrance cable (SER, SEU, ASE)..... | 3 | (D) | 5 | (D) |
| 335929D1 pt. | Other building wire and cable..... | 7 | 39,456 | 6 | 34,543 |
| 335929C1, | Other insulated wire and cable..... | 4 | (D) | 5 | (D) |

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available.
pt. Part. r/Revised by 5 percent or more from previously published data.

1/Gross weight includes insulating materials, but excludes packing materials.
2/Value of aluminum content is included in total value of Table 2.

Table 4. Shipments of Magnet Wire (Copper and Aluminum), Including Interplant Transfers: 2006 and 2005
[Gross weight in thousands of pounds. Value in thousands of dollars]

| | | Shipments, including interplant transfers 1/ | | | | | |
|--------------|--|--|-----------------|-----------|-------------|-----------------|-----------|
| Product code | Product description | No. of cos. | 2006 | | No. of cos. | 2005 | |
| | | | Gross weight 2/ | Value | | Gross weight 2/ | Value |
| 331491H | Magnet wire..... | 17 | 564,402 | 1,833,327 | 21 | 569,901 | 1,214,695 |
| | Class 105 and below: | | | | | | |
| 331491H110 | 7 AWG and larger round, including all square and rectangle, film coated..... | 3 | (D) | (D) | 3 | 9,501 | 17,031 |
| 331491H120 | 8 to 21 AWG, film coated..... | 3 | (D) | (D) | 4 | 55,796 | 81,652 |
| 331491H135 | 22 to 33 AWG, film coated..... | 6 | 2,285 | 9,902 | 6 | 1,857 | 6,418 |
| | Class 130 to 155: | | | | | | |
| 331491H160 | 8 to 21 AWG, film coated..... | 7 | 9,451 | 35,300 | 9 | 13,665 | 30,117 |
| 331491H170 | 22 to 32 AWG, film coated..... | 9 | 16,180 | 62,179 | 11 | 26,735 | 63,928 |
| 331491H180 | 33 to 44 AWG, film coated..... | 7 | 7,873 | 45,168 | 10 | 10,960 | 42,205 |
| | Class 180 and above: | | | | | | |
| 331491H190 | 7 AWG and larger round, including all square and rectangle, film coated..... | 4 | (D) | (D) | 4 | 34,206 | 78,113 |
| 331491H1A0 | 8 to 21 AWG, film coated..... | 7 | (D) | (D) | 10 | 269,544 | 506,856 |
| 331491H1B0 | 22 to 32 AWG, film coated..... | 8 | 96,402 | 334,130 | 11 | 98,610 | 219,103 |
| 331491H1C0 | 33 to 44 AWG, film coated..... | 6 | (D) | (D) | 9 | (D) | (D) |
| 331491H1C2 | Miscellaneous film coated, n.e.c. | - | - | - | - | - | - |
| | Nonfilm coated (fibrous): | | | | | | |
| 331491H1D0 | Class 130 and below..... | 3 | (D) | (D) | 2 | (D) | (D) |
| 331491H1F0 | Class 155 and above..... | 5 | (D) | (D) | 5 | 6,808 | 24,100 |
| | Nonfilm coated (tape): | | | | | | |
| 331491H1E0 | Class 130 and below..... | 4 | (D) | (D) | 3 | 18,820 | 40,334 |
| 331491H1G0 | Class 155 and above..... | 4 | 10,277 | 40,499 | 5 | 8,244 | 22,438 |
| 331491G1H0 | Miscellaneous nonfilm coated, n.e.c. | 2 | (D) | (D) | 2 | (D) | (D) |

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.
r/Revised by 5 percent or more from previously published data.

1/Interplant transfers for 2006 and 2005 were withheld to avoid disclosing data for individual companies.

2/Gross weight includes insulating materials, but excludes packing materials.

Table 5. Value of Shipments of Fiber Optic Cable: 2006 and 2005
[Thousands of dollars]

| Product code | Product description | 2006 | | 2005 | |
|-----------------|------------------------------------|-------------------|-----------|-------------------|------------|
| | | No. of cos. | Value | No. of cos. | Value |
| 33592101 | Insulated optical fiber cable..... | 26 | 1,241,255 | 28 | 1,158,333 |
| 33592101 pt. | Communication applications..... | 20 | 1,221,641 | 21 | 1,149,001 |
| | Single-mode stepped-index: | | | | |
| 3359210125 | Dispersion shifted..... | 9 | 173,004 | 10 | r/ 191,610 |
| 3359210128 | Dispersion unshifted..... | 18 | 691,899 | 19 | 640,372 |
| 3359210129 | Multimode index..... | 18 | 356,738 | 18 | 317,019 |
| 3359210434 | Other applications..... | 12 | 19,614 | 11 | r/ 9,332 |

pt. Part. r/Revised by 5 percent or more from previously published data.

Table 6. Value of Shipments of Optical Fiber: 2006 and 2005
[Thousands of dollars]

| Product code | Product description | 2006 | | 2005 | |
|-----------------|---|-------------------|---------|-------------------|------------|
| | | No. of cos. | Value | No. of cos. | Value |
| | Optical fiber for data and nondata transmission..... | 14 | 489,424 | 14 | r/ 450,324 |
| 327215B235 | Optical fiber used for data transmission..... | 8 | 469,848 | 10 | r/ 434,252 |
| 327215B238 | Optical fiber used for nondata transmission..... | 7 | 19,576 | 5 | 16,072 |

r/Revised by 5 percent or more from previously published data.

Table 7. Shipments, Exports, and Imports of Insulated Wire and Cable: 2006
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description | Manufacturers' shipments (f.o.b. plant) | | Exports of domestic merchandise 1/ 2/ | | Imports for consumption 1/ 3/ | |
|---|---|--|-----------|---------------------------------------|---------|-------------------------------|----------|
| | | Quantity | Value | Quantity | Value | Quantity | Value 4/ |
| 331491H110, 120, 130, 140, 150, 160, 170, 180, 190, 331491G1A0, 1B0, 1C0, 1I0, 1D0, 1F0, 1E0, 1G0, 1H0 | Magnet wire (copper)..... | 505,736 | 1,711,314 | 72,971 | 399,827 | 41,546 | 344,155 |
| 331491H110, 120, 130, 140, 150, 160, 170, 180, 190, 331491H1A0, 1B0, 1C0, 1I0, 1D0, 1E0, 1F0, 1G0, 1H0 | Magnet wire (aluminum)..... | 58,666 | 122,013 | 15,048 | 108,421 | 2,381 | 18,574 |
| 335929A100, 120, 130, 140, 150 | Coaxial cable..... | 70,482 | 1,586,925 | 47,478 | 496,409 | 67,515 | 552,922 |
| 3359210125, 128, 131, 134, 3359210434 | Optical fiber cables..... | 6,248,341 | 1,241,255 | 529,174 | 355,744 | 849,082 | 468,604 |
| 327215B235, 238 | Optical fibers, bundles, and cables..... | (X) | 489,424 | 1,523,101 | 212,222 | 85,278 | 30,057 |
| 335929B110, 120, 130, 140, 150, 160, 170, 180, 335929E150, 160 | Other wire and cable used for telecommunications (except fiber optics)..... | 270,822 | 1,828,689 | (NA) | (NA) | 37,740 | 819,293 |

NA Not available. X Not applicable.

1/For comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see Table 8.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, Imports for Consumption.

4/Dollar value represents the c.i.f. (cost, insurance, and freight) value at the first point of entry in the United States plus U.S. import duties.

Table 8. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

| Product code | Product description | Export code 1/ | Import code 2/ |
|--|--|--|--|
| 331491G110, 120, 130, 140, 150, 160, 170, 180, 190, 1A0, 1B0, 1C0, 1D0, 1E0, 1F0, 1G0, 1H0, 1I0 | Magnet wire (copper)..... | 8544.11.0020 8544.11.0030 8544.11.0050 | 8544.11.0020 8544.11.0030 8544.11.0050 |
| 331491G110, 120, 130, 140, 150, 160, 170, 180, 190, 1A0, 1B0, 1C0, 1D0, 1E0, 1F0, 1G0, 1H0, 1I0 | Magnet wire (aluminum)..... | 8544.19.0000 | 8544.19.0000 |
| 335929A100, 120, 130, 140, 150 | Coaxial cable..... | 8544.20.0000 | 8544.20.0000 |
| 3359210125, 128, 131, 134, 434 | Optical fiber cable..... | 8544.70.0000 | 8544.70.0000 |
| 327215A235, 238 | Optical fibers, optical fiber bundles, and cables..... | 9001.10.0000 | 9001.10.0075 9001.10.0085 |
| 335929B110, 120, 130, 140, 150 160, 170 180 335929E150, 160 | Other wire and cable used for telecommunications (except fiber optics)..... | (NA) | 8544.41.4000 8544.49.4000 8544.51.4000 8544.51.7000 |

NA Not available.

1/Source: 2006 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2006).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and

returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on insulated wire have been collected by the Census Bureau since 1965. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.