

# Wet Corn Milling: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



**USCENSUSBUREAU**

*Helping You Make Informed Decisions*

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



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-- Not applicable for this report.

**Table 1. Historical Statistics for the Industry: 2002 and Earlier Years**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Industry and year <sup>1</sup> | Com-panies <sup>2</sup> | All estab-lish-ments <sup>3</sup> | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expendi-tures (\$1,000) |          |
|--------------------------------|-------------------------|-----------------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|---------------------------------------|----------|
|                                |                         |                                   | Number <sup>4</sup> | Payroll (\$1,000) | Number <sup>4</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |                                    |                                       |          |
| 311221, Wet corn milling ..... | 2002..                  | 33                                | 61                  | 8 995             | 479 066             | 6 090         | 13 610          | 301 715               | 3 150 757                         | 4 741 369                          | 7 860 047                             | '253 524 |
|                                | 2001..                  | N                                 | N                   | 8 632             | 439 239             | 5 676         | 13 234          | 267 196               | 2 869 704                         | 4 710 107                          | 7 582 557                             | 693 631  |
|                                | 2000..                  | N                                 | N                   | 9 154             | 442 997             | 5 850         | 13 600          | 271 015               | 2 871 371                         | 4 505 014                          | 7 335 021                             | 718 180  |
|                                | 1999..                  | N                                 | N                   | 9 116             | 416 953             | 5 815         | 13 151          | 257 235               | 2 936 073                         | 4 675 000                          | 7 657 388                             | 423 686  |
|                                | 1998..                  | N                                 | N                   | 9 324             | 414 259             | 5 989         | 13 898          | 264 133               | 3 007 261                         | 4 988 033                          | 7 972 104                             | 423 752  |
|                                | 1997..                  | 30                                | 58                  | 9 217             | 422 533             | 6 372         | 14 726          | 274 677               | 3 071 056                         | 5 361 443                          | 8 455 172                             | 540 906  |

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

| Industry and geographic area | All establishments <sup>2</sup> |       |                           | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|------------------------------|---------------------------------|-------|---------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
|                              | E <sup>1</sup>                  | Total | With 20 employees or more | Number <sup>3</sup> | Payroll (\$1,000) | Number <sup>3</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |                                    |                                      |
| 311221, Wet corn milling     |                                 |       |                           |                     |                   |                     |               |                 |                       |                                   |                                    |                                      |
| United States.....           | 1                               | 61    | 42                        | 8 995               | 479 066           | 6 090               | 13 610        | 301 715         | 3 150 757             | 4 741 369                         | 7 860 047                          | '253 524                             |
| Illinois .....               | —                               | 3     | 3                         | 1 105               | 59 719            | 788                 | 1 588         | 40 951          | 578 898               | 949 735                           | 1 531 801                          | 52 136                               |
| Iowa .....                   | —                               | 12    | 11                        | 3 020               | 169 650           | 1 877               | 4 125         | 92 363          | 1 005 604             | 1 676 347                         | 2 666 208                          | '97 798                              |

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Item   | Value                 |
|--|-----------------------|
| <b>311221, Wet corn milling</b>  |                       |
| Companies <sup>1</sup> .....   | number.. 33           |
| All establishments <sup>2</sup> .....  | number.. 61           |
| Establishments with 1 to 19 employees .....  | number.. 19           |
| Establishments with 20 to 99 employees .....   | number.. 16           |
| Establishments with 100 employees or more .....  | number.. 26           |
| All employees <sup>3</sup> .....   | number.. 8 995        |
| Total compensation .....   | \$1,000.. 617 247     |
| Annual payroll .....   | \$1,000.. 479 066     |
| Total fringe benefits .....  | \$1,000.. 138 181     |
| Production workers, average for year .....   | number.. 6 090        |
| Production workers on March 12 .....   | number.. 6 107        |
| Production workers on May 12 .....   | number.. 6 123        |
| Production workers on August 12 .....  | number.. 6 109        |
| Production workers on November 12 .....  | number.. 6 012        |
| Production worker hours .....  | 1,000.. 13 610        |
| Production worker wages .....  | \$1,000.. 301 715     |
| Total cost of materials .....  | \$1,000.. 4 741 369   |
| Materials, parts, containers, packaging, etc., used .....                                  | \$1,000.. 3 916 244   |
| Resales .....  | \$1,000.. 35 204      |
| Purchased fuels .....  | \$1,000.. 469 909     |
| Purchased electricity .....  | \$1,000.. 265 155     |
| Contract work .....  | \$1,000.. 54 857      |
| Quantity of electricity purchased for heat and power .....                                 | 1,000 kWh.. 7 303 591 |
| Quantity of electricity generated less sold for heat and power .....                       | 1,000 kWh.. 2 155 628 |
| Total value of shipments .....   | \$1,000.. 7 860 047   |
| Primary products value of shipments .....  | \$1,000.. 6 345 807   |
| Secondary products value of shipments .....  | \$1,000.. 1 478 140   |
| Total miscellaneous receipts .....   | \$1,000.. 36 100      |
| Value of resales .....   | \$1,000.. 34 860      |
| Contract receipts .....  | \$1,000.. D           |
| Other miscellaneous receipts .....   | \$1,000.. D           |
| Primary products specialization ratio .....  | percent.. 81          |
| Value of primary products shipments made in all industries .....                           | \$1,000.. 6 471 301   |
| Value of primary products shipments made in this industry .....                            | \$1,000.. 6 345 807   |
| Value of primary products shipments made in other industries .....                         | \$1,000.. 125 494     |
| Coverage ratio .....   | percent.. 98          |
| Value added .....  | \$1,000.. 3 150 757   |
| Total inventories, beginning of year .....   | \$1,000.. 416 312     |
| Finished goods inventories .....   | \$1,000.. 221 780     |
| Work-in-process inventories .....  | \$1,000.. 23 340      |
| Materials and supplies inventories .....   | \$1,000.. 171 192     |
| Total inventories, end of year .....   | \$1,000.. 463 057     |
| Finished goods inventories .....   | \$1,000.. 245 988     |
| Work-in-process inventories .....  | \$1,000.. 31 211      |
| Materials and supplies inventories .....   | \$1,000.. 185 858     |
| Gross value of depreciable assets (acquisition costs) at beginning of year .....           | \$1,000.. '7 998 679  |
| Total capital expenditures (new and used) .....  | \$1,000.. '253 524    |
| Buildings and other structures (new and used) .....  | \$1,000.. '31 319     |
| Machinery and equipment (new and used) .....   | \$1,000.. '222 205    |
| Automobiles, trucks, etc., for highway use .....   | \$1,000.. '5 116      |
| Computers and peripheral data processing equipment .....                                   | \$1,000.. '7 338      |
| All other expenditures for machinery and equipment .....                                   | \$1,000.. '209 751    |
| Total retirements .....  | \$1,000.. '165 951    |
| Gross value of depreciable assets at end of year .....                                     | \$1,000.. '8 086 252  |
| Depreciation charges during year .....   | \$1,000.. '588 834    |
| Total rental payments .....  | \$1,000.. 48 678      |
| Buildings and other structures .....   | \$1,000.. 30 328      |
| Machinery and equipment .....  | \$1,000.. 18 350      |
| Total other expenses <sup>4</sup> .....  | \$1,000.. 656 974     |
| Response coverage ratio <sup>5</sup> .....   | percent.. 83          |
| Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....           | \$1,000.. 139 302     |
| Communications services <sup>4</sup> .....   | \$1,000.. 3 541       |
| Legal services <sup>4</sup> .....  | \$1,000.. 2 950       |
| Accounting, auditing, and bookkeeping services <sup>4</sup> .....                          | \$1,000.. 505         |
| Advertising and promotional services <sup>4</sup> .....                                    | \$1,000.. 2 132       |
| Expensed computer hardware and supplies and purchased computer services <sup>4</sup> ..... | \$1,000.. 3 252       |
| Refuse removal (including hazardous waste) services <sup>4</sup> .....                     | \$1,000.. 58 823      |
| Management consulting and administrative services <sup>4</sup> .....                       | \$1,000.. 12 749      |
| Taxes and license fees <sup>4</sup> .....  | \$1,000.. 22 022      |
| All other expenses <sup>4</sup> .....  | \$1,000.. 411 699     |

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Employment size class                     | E <sup>1</sup> | All establishments <sup>2</sup> | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|---|----------------|---------------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
|   |                |                                 | Number <sup>3</sup> | Payroll (\$1,000) | Number <sup>3</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |                                    |                                      |
| <b>311221, Wet corn milling</b>           |                |                                 |                     |                   |                     |               |                 |                       |                                   |                                    |                                      |
| All establishments .....                  | 1              | 61                              | 8 995               | 479 066           | 6 090               | 13 610        | 301 715         | 3 150 757             | 4 741 369                         | 7 860 047                          | '253 524                             |
| Establishments with—                      |                |                                 |                     |                   |                     |               |                 |                       |                                   |                                    |                                      |
| 1 to 4 employees .....                    | 9              | 12                              | b                   | D                 | D                   | D             | D               | D                     | D                                 | D                                  | D                                    |
| 5 to 9 employees .....                    | 5              | 3                               | b                   | D                 | D                   | D             | D               | D                     | D                                 | D                                  | D                                    |
| 10 to 19 employees .....                  | 4              | 4                               | 60                  | 2 589             | 41                  | 87            | 1 743           | 11 254                | 13 508                            | 24 542                             | '732                                 |
| 20 to 49 employees .....                  | 4              | 9                               | 273                 | 11 069            | 211                 | 475           | 7 295           | 47 614                | 71 766                            | 119 918                            | '3 990                               |
| 50 to 99 employees .....                  | —              | 7                               | 532                 | 22 786            | 426                 | 776           | 16 429          | 125 520               | 227 294                           | 348 560                            | '5 816                               |
| 100 to 249 employees .....                | 1              | 11                              | 2 132               | 120 407           | 1 434               | 3 512         | 76 410          | 817 000               | 1 122 696                         | 1 932 670                          | '42 295                              |
| 250 to 499 employees .....                | —              | 11                              | 3 578               | 194 382           | 2 360               | 5 189         | 121 266         | 1 466 659             | 2 317 830                         | 3 775 647                          | '149 094                             |
| 500 to 999 employees .....                | 2              | 4                               | 2 377               | 125 820           | 1 589               | 3 500         | 77 409          | 675 740               | 971 549                           | 1 634 139                          | '51 300                              |
| 1,000 to 2,499 employees .....            | —              | —                               | —                   | —                 | —                   | —             | —               | —                     | —                                 | —                                  | —                                    |
| 2,500 employees or more .....             | —              | —                               | —                   | —                 | —                   | —             | —               | —                     | —                                 | —                                  | —                                    |
| Administrative records <sup>4</sup> ..... | 9              | 10                              | 18                  | 738               | 11                  | 21            | 416             | 3 236                 | 6 287                             | 9 523                              | '144                                 |

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Industry or product class code | Industry or primary product class | All establishments <sup>1</sup> | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|--------------------------------|-----------------------------------|---------------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
|                                |                                   |                                 | Number <sup>2</sup> | Payroll (\$1,000) | Number <sup>2</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |                                    |                                      |
| 311221                         | Wet corn milling .....            | 61                              | 8 995               | 479 066           | 6 090               | 13 610        | 301 715         | 3 150 757             | 4 741 369                         | 7 860 047                          | '253 524                             |
| 3112211                        | Corn sweeteners .....             | 22                              | 5 519               | 305 456           | 3 715               | 8 518         | 195 934         | 2 362 992             | 3 791 097                         | 6 125 570                          | '178 412                             |
| 3112214                        | Manufactured starch .....         | 18                              | h                   | D                 | D                   | D             | D               | D                     | D                                 | D                                  | D                                    |
| 311221A                        | Wet process corn byproducts ..... | 2                               | e                   | D                 | D                   | D             | D               | D                     | D                                 | D                                  | D                                    |

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6a. Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Product code | Product   | Number of companies with shipments of \$100,000 or more | Quantity of production for all purposes | Product shipments      |                        |
|--------------|---|---|---|------------------------|------------------------|
|              |   |   |   | Quantity               | Value (\$1,000)        |
| 311221       | Wet corn milling  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 6 471 301<br>7 188 399 |
| 3112211      | Corn sweeteners   | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 3 104 601<br>3 056 213 |
| 31122111     | Glucose (corn) syrup sweeteners and solids  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 702 992<br>686 304     |
| 3112211111   | Glucose (corn) syrup sweeteners, type I (20 up to 38 dextrose equivalent)   | 2002.. 7<br>1997.. 5                                    | X<br>X                                  | P1 458.9<br>P1 677.2   | 151 828<br>127 554     |
| 3112211121   | Glucose (corn) syrup sweeteners, type II (38 up to 58 dextrose equivalent)  | 2002.. 6<br>1997.. 6                                    | X<br>X                                  | S<br>S                 | 251 008<br>271 488     |
| 3112211131   | Glucose (corn) syrup sweeteners, type III and IV (58 and over dextrose equivalent)  | 2002.. 5<br>1997.. 5                                    | X<br>X                                  | 2 325.0<br>S           | 180 882<br>167 063     |
| 3112211141   | Glucose (corn) syrup solids (dried glucose syrup) and maltodextrins less than 20 dextrose equivalent  | 2002.. 5<br>1997.. 4                                    | X<br>X                                  | S<br>P495.3            | 119 274<br>120 199     |
| 31122112     | Corn syrup sweeteners, dextrose monohydrate and dextrose anhydrous sweeteners   | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 907 679<br>935 729     |
| 3112211251   | Dextrose monohydrate and dextrose anhydrous sweeteners  | 2002.. 5<br>1997.. 5                                    | X<br>X                                  | 3 260.0<br>D           | 302 526<br>D           |
| 3112211261   | High fructose corn syrup (HFCS) sweeteners, (20 up to 50 percent fructose)  | 2002.. 6<br>1997.. 8                                    | X<br>X                                  | 7 668.0<br>D           | 605 153<br>D           |
| 31122113     | High fructose corn syrup (HFCS) sweeteners, 50 percent or more fructose, including crystalline fructose (adjusted to a liquid equivalent, 77 percent solids basis)    | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 1 493 025<br>1 360 705 |
| 3112211371   | High fructose corn syrup (HFCS) sweeteners, 50 percent or more fructose, including crystalline fructose (adjusted to a liquid equivalent, 77 percent solids basis)    | 2002.. 8<br>1997.. 9                                    | X<br>X                                  | 15 698.1<br>S          | 1 493 025<br>1 360 705 |
| 3112211Y     | Corn sweeteners, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 905<br>73 475          |
| 3112211YV    | Corn sweeteners, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 905<br>73 475          |
| 3112214      | Manufactured starch   | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 1 696 085<br>1 526 122 |
| 31122141     | Modified corn (including sorghum) starch and dextrin  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 977 155<br>1 010 001   |
| 3112214111   | Modified corn (including sorghum) starch and dextrin  | 2002.. 13<br>1997.. 12                                  | X<br>X                                  | 4 796.0<br>S           | 977 155<br>1 010 001   |
| 31122142     | Not modified corn (including sorghum) starch and dextrin  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 598 777<br>367 620     |
| 3112214221   | Not modified corn (including sorghum) starch and dextrin  | 2002.. 6<br>1997.. 11                                   | X<br>X                                  | S<br>P3 002.0          | 598 777<br>367 620     |
| 31122143     | Other starch and dextrin, modified and not modified (potato, rice, wheat, etc.)   | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 113 360<br>129 083     |
| 3112214331   | Other starch and dextrin, modified and not modified (potato, rice, wheat, etc.)   | 2002.. 10<br>1997.. 11                                  | X<br>X                                  | 460.1<br>S             | 113 360<br>129 083     |
| 3112214Y     | Manufactured starch, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 6 793<br>19 418        |
| 3112214YV    | Manufactured starch, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 6 793<br>19 418        |
| 3112218      | Corn oil  | 2002.. N<br>1997.. N                                    | X<br>N                                  | X<br>N                 | 347 827<br>N           |
| 31122181     | Corn oil  | 2002.. N<br>1997.. N                                    | X<br>N                                  | X<br>N                 | 347 827<br>N           |
| 3112218111   | Crude corn oil <sup>1</sup>   | 2002.. 8<br>1997.. N                                    | X<br>N                                  | P1 552.4<br>N          | 284 568<br>N           |
| 3112218121   | Once-refined corn oil, after alkali or caustic wash, but before deodorizing or use in end products, made from oilseeds crushed in the same establishment <sup>2</sup> | 2002.. 2<br>1997.. N                                    | X<br>N                                  | D<br>N                 | D<br>N                 |
| 3112218131   | Fully-refined corn oil, including margarine oil, made from seeds crushed in the same establishment <sup>2</sup>   | 2002.. 2<br>1997.. N                                    | X<br>N                                  | D<br>N                 | D<br>N                 |
| 3112218Y     | Corn oil, nsk   | 2002.. N<br>1997.. N                                    | X<br>N                                  | X<br>N                 | N<br>N                 |
| 3112218YV    | Corn oil, nsk   | 2002.. N<br>1997.. N                                    | X<br>N                                  | X<br>N                 | N<br>N                 |
| 311221A      | Wet process corn byproducts   | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 1 246 370<br>1 585 020 |
| 311221A1     | Wet process corn gluten feed  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 495 557<br>634 976     |
| 311221A111   | Wet process corn gluten feed  | 2002.. 9<br>1997.. 10                                   | X<br>X                                  | P17 645.7<br>P11 602.3 | 495 557<br>634 976     |
| 311221A2     | Wet process gluten meal and other byproducts  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 707 068<br>840 254     |
| 311221A221   | Wet process corn gluten meal  | 2002.. 9<br>1997.. 11                                   | X<br>X                                  | P3 400.1<br>P2 891.5   | 377 498<br>486 087     |
| 311221A231   | Wet process gluten (except corn), including wheat, rice, potato, etc.   | 2002.. 5<br>1997.. 6                                    | X<br>X                                  | P96.7<br>P118.1        | 54 106<br>85 753       |
| 311221A241   | Other wet process corn byproducts, including steepwater concentrate (50 percent solids basis)   | 2002.. 11<br>1997.. 10                                  | X<br>X                                  | 3 541.8<br>P3 842.8    | 275 464<br>268 414     |
| 311221AY     | Wet process corn byproducts, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 43 745<br>109 790      |
| 311221AYV    | Wet process corn byproducts, nsk  | 2002.. N<br>1997.. N                                    | X<br>X                                  | X<br>X                 | 43 745<br>109 790      |

See footnotes at end of table.

**Table 6a. Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Product code | Product  | Number of companies with shipments of \$100,000 or more | Quantity of production for all purposes | Product shipments |                 |        |
|--------------|--|---|---|-------------------|-----------------|--------|
|              |  |   |   | Quantity          | Value (\$1,000) |        |
| 311221       | Wet corn milling—Con.  |   |   |                   |                 |        |
| 311221W      | Wet corn milling, nsk, total .....                                       | 2002..  | N                                       | X                 | X               | 76 418 |
|              |  | 1997..  | N                                       | X                 | X               | 40 650 |
| 311221WY     | Wet corn milling, nsk, total .....                                       | 2002..  | N                                       | X                 | X               | 76 418 |
|              |  | 1997..  | N                                       | X                 | X               | 40 650 |
| 311221WYWW   | Wet corn milling, nsk, for nonadministrative-record establishments ..... | 2002..  | N                                       | X                 | X               | 66 956 |
|              |  | 1997..  | N                                       | X                 | X               | 19 213 |
| 311221WYWY   | Wet corn milling, nsk, for administrative-record establishments .....    | 2002..  | N                                       | X                 | X               | 9 462  |
|              |  | 1997..  | N                                       | X                 | X               | 21 437 |

<sup>1</sup>For additional detail, see Current Industrial Report M311J, Fats and Oils: Oilseed Crushings.

<sup>2</sup>For additional detail, see Current Industrial Report M311K, Fats and Oils: Production, Consumption, and Stocks.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6b. Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

| NAICS product class code | Product class and geographic area | Value of product shipments (\$1,000) |
|--------------------------|-----------------------------------|--------------------------------------|
| 3112211                  | Corn sweeteners                   |                                      |
|                          | United States .....               | 2002.. 3 104 601                     |
|                          | United States .....               | 1997.. 3 056 213                     |
|                          | Illinois .....                    | 2002.. 729 821                       |
|                          | Illinois .....                    | 1997.. 774 197                       |
| 3112214                  | Iowa .....                        | 2002.. 1 038 848                     |
|                          | Iowa .....                        | 1997.. 877 008                       |
|                          | Manufactured starch               |                                      |
| 3112218                  | United States .....               | 2002.. 1 696 085                     |
|                          | United States .....               | 1997.. 1 526 122                     |
|                          | Indiana .....                     | 2002.. 872 939                       |
|                          | Indiana .....                     | 1997.. 484 293                       |
|                          | Iowa .....                        | 2002.. 336 630                       |
| 311221A                  | Iowa .....                        | 1997.. 443 185                       |
|                          | Corn oil                          |                                      |
|                          | United States .....               | 2002.. 347 827                       |
|                          | United States .....               | 1997.. N                             |
| 311221A                  | Iowa .....                        | 2002.. 151 103                       |
|                          | Iowa .....                        | 1997.. N                             |
|                          | Wet process corn byproducts       |                                      |
|                          | United States .....               | 2002.. 1 246 370                     |
| 311221A                  | United States .....               | 1997.. 1 585 020                     |
|                          | Illinois .....                    | 2002.. 295 132                       |
|                          | Illinois .....                    | 1997.. 418 575                       |
|                          | Iowa .....                        | 2002.. 519 156                       |
|                          | Iowa .....                        | 1997.. 561 217                       |

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Material code | Material consumed   | Quantity | Delivered cost (\$1,000) |
|---------------|---|----------|--------------------------|
| 311221        | Wet corn milling  |          |                          |
| 0090001       | Total materials .....   | X        | 3 916 244                |
|               |   | X        | 4 443 432                |
| 11116000      | Rice, rough ..... mil lb. ....  | D        | D                        |
|               |   | 280.7    | 160 567                  |
| 11115003      | Corn ..... mil bushels. ....  | S        | 2 651 089                |
|               |   | D        | 3 675 049                |
| 11119915      | Sorghum ..... mil lb. ....  | D        | D                        |
|               |   | D        | D                        |
| 31491101      | Textile bags (burlap, cotton, polypropylene, etc.) .....                  | X        | D                        |
|               |   | X        | 2 253                    |
| 001900A3      | Bags (plastics, foil, and coated paper) .....                             | X        | D                        |
|               |   | X        | D                        |
| 32222401      | Bags (uncoated paper and multiwall) .....                                 | X        | 17 595                   |
|               |   | X        | 28 373                   |
| 001900A1      | Packaging paper and plastics film, coated and laminated .....             | X        | 7 871                    |
|               |   | X        | D                        |
| 00970099      | All other materials and components, parts, containers, and supplies ..... | X        | 481 363                  |
|               |   | X        | 481 121                  |
| 00971000      | Materials, ingredients, containers, and supplies, nsk .....               | X        | 649 631                  |
|               |   | X        | 14 656                   |

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.