

# Ground or Treated Mineral and Earth Manufacturing: 2002

Issued January 2005

EC02-311-327992 (RV)

## 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



## CONTENTS

---

Introduction to the Economic Census .....	v
Manufacturing .....	ix
Tables	
1. Historical Statistics for the Industry: 2002 and Earlier Years ...	1
2. Industry Statistics for Selected States: 2002 .....	2
3. Detailed Statistics by Industry: 2002 .....	3
4. Industry Statistics by Employment Size: 2002.....	4
5. Industry Statistics by Primary Product Class Specialization: 2002 .....	5
6a. Products Statistics: 2002 and 1997 .....	6
6b. Product Class Shipments for Selected States: 2002 and 1997 .	--
7. Materials Consumed by Kind: 2002 and 1997.....	--
Appendixes	
A. Explanation of Terms .....	A-1
B. NAICS Codes, Titles, and Descriptions .....	B-1
C. Methodology .....	C-1
D. Geographic Notes .....	--
E. Metropolitan and Micropolitan Statistical Areas .....	--
F. Comparability of Product Classes and Product Codes: 2002 to 1997.....	F-1

-- 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)					
327992, Ground or treated mineral and earth manufacturing .....	2002..	184	291	6 836	278 862	4 645	9 504	173 009	1 431 741	656 727	2 078 277	'82 828
	2001..	N	N	9 509	349 086	6 847	14 595	227 555	1 158 710	1 055 942	2 217 323	93 871
	2000..	N	N	10 084	369 888	7 431	15 864	240 077	1 240 811	1 087 268	2 311 496	127 690
	1999..	N	N	10 130	370 657	7 475	15 894	239 209	1 330 169	955 325	2 268 757	131 059
	1998..	N	N	9 757	353 037	7 170	15 054	229 330	1 315 086	902 660	2 222 143	132 646
	1997..	261	387	10 115	360 995	7 149	15 130	227 263	1 427 108	943 880	2 362 480	133 223

<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)				
<b>327992, Ground or treated mineral and earth manufacturing</b>												
United States .....	1	291	80	6 836	278 862	4 645	9 504	173 009	1 431 741	656 727	2 078 277	182 828
Arkansas .....	2	4	4	121	4 436	100	202	3 031	23 981	10 385	34 036	11 178
Indiana .....	1	11	4	457	21 523	313	667	12 994	64 768	18 625	83 510	16 426
Kentucky .....	-	7	3	117	4 887	90	180	3 896	18 138	15 384	33 062	1645
Michigan .....	5	11	3	398	17 580	298	659	12 221	78 582	49 625	127 408	12 371
New Jersey .....	1	9	3	170	8 271	116	268	4 472	52 273	38 166	88 436	17 009
New York .....	7	10	2	110	4 194	88	157	3 075	11 712	9 322	20 744	11 059
North Carolina .....	-	9	4	232	7 883	181	345	5 138	26 065	19 300	44 310	12 966
Pennsylvania .....	3	29	6	355	10 985	266	491	7 175	33 370	25 532	58 527	13 260
South Carolina .....	-	6	3	166	5 799	120	232	3 835	23 851	9 955	33 735	1708
Tennessee .....	1	7	2	163	4 465	141	182	3 202	17 035	8 569	25 613	1710
Texas .....	1	24	9	636	21 304	494	1 085	15 414	51 646	40 695	91 778	12 859

<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>327992, Ground or treated mineral and earth manufacturing</b>	
Companies <sup>1</sup> .....	number.. 184
All establishments <sup>2</sup> .....	number.. 291
Establishments with 1 to 19 employees .....	number.. 211
Establishments with 20 to 99 employees .....	number.. 69
Establishments with 100 employees or more .....	number.. 11
All employees <sup>3</sup> .....	number.. 6 836
Total compensation .....	\$1,000.. 362 658
Annual payroll .....	\$1,000.. 278 862
Total fringe benefits .....	\$1,000.. 83 796
Production workers, average for year .....	number.. 4 645
Production workers on March 12 .....	number.. 4 664
Production workers on May 12 .....	number.. 4 660
Production workers on August 12 .....	number.. 4 613
Production workers on November 12 .....	number.. 4 621
Production worker hours .....	1,000.. 9 504
Production worker wages .....	\$1,000.. 173 009
Total cost of materials .....	\$1,000.. 656 727
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 476 619
Resales .....	\$1,000.. 43 944
Purchased fuels .....	\$1,000.. 71 905
Purchased electricity .....	\$1,000.. 55 493
Contract work .....	\$1,000.. 8 766
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 1 089 927
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. D
Total value of shipments .....	\$1,000.. 2 078 277
Primary products value of shipments .....	\$1,000.. 1 905 093
Secondary products value of shipments .....	\$1,000.. 75 917
Total miscellaneous receipts .....	\$1,000.. 97 267
Value of resales .....	\$1,000.. 52 348
Contract receipts .....	\$1,000.. D
Other miscellaneous receipts .....	\$1,000.. D
Primary products specialization ratio .....	percent.. 96
Value of primary products shipments made in all industries .....	\$1,000.. 1 985 600
Value of primary products shipments made in this industry .....	\$1,000.. 1 905 093
Value of primary products shipments made in other industries .....	\$1,000.. 80 507
Coverage ratio .....	percent.. 96
Value added .....	\$1,000.. 1 431 741
Total inventories, beginning of year .....	\$1,000.. 239 128
Finished goods inventories .....	\$1,000.. 79 661
Work-in-process inventories .....	\$1,000.. 22 522
Materials and supplies inventories .....	\$1,000.. 136 945
Total inventories, end of year .....	\$1,000.. 237 116
Finished goods inventories .....	\$1,000.. 88 936
Work-in-process inventories .....	\$1,000.. 23 438
Materials and supplies inventories .....	\$1,000.. 124 742
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '1 642 649
Total capital expenditures (new and used) .....	\$1,000.. '82 828
Buildings and other structures (new and used) .....	\$1,000.. '14 803
Machinery and equipment (new and used) .....	\$1,000.. '68 025
Automobiles, trucks, etc., for highway use .....	\$1,000.. '2 753
Computers and peripheral data processing equipment .....	\$1,000.. '4 616
All other expenditures for machinery and equipment .....	\$1,000.. '60 656
Total retirements .....	\$1,000.. '39 122
Gross value of depreciable assets at end of year .....	\$1,000.. '1 686 355
Depreciation charges during year .....	\$1,000.. '102 508
Total rental payments .....	\$1,000.. 24 181
Buildings and other structures .....	\$1,000.. 10 128
Machinery and equipment .....	\$1,000.. 14 053
Total other expenses <sup>4</sup> .....	\$1,000.. 136 381
Response coverage ratio <sup>5</sup> .....	percent.. 81
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 20 186
Communications services <sup>4</sup> .....	\$1,000.. 2 581
Legal services <sup>4</sup> .....	\$1,000.. 1 743
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 900
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 1 661
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 1 064
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 2 267
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 950
Taxes and license fees <sup>4</sup> .....	\$1,000.. 7 303
All other expenses <sup>4</sup> .....	\$1,000.. 97 725

<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 2002 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>327992, Ground or treated mineral and earth manufacturing</b>											
All establishments .....	1	291	6 836	278 862	4 645	9 504	173 009	1 431 741	656 727	2 078 277	'82 828
Establishments with—											
1 to 4 employees .....	8	72	150	5 727	117	226	4 025	15 313	17 231	33 016	'837
5 to 9 employees .....	2	67	460	18 359	341	675	11 844	92 024	70 750	164 006	'7 662
10 to 19 employees .....	1	72	1 008	41 814	741	1 566	27 925	164 985	135 647	297 391	'14 575
20 to 49 employees .....	1	49	1 450	50 319	1 077	2 032	33 796	239 046	146 562	375 678	'12 229
50 to 99 employees .....	—	20	1 398	58 253	919	1 847	35 092	295 826	113 374	411 382	'17 347
100 to 249 employees .....	1	10	g	D	D	D	D	D	D	D	D
250 to 499 employees .....	—	—	—	—	—	—	—	—	—	—	—
500 to 999 employees .....	—	1	f	D	D	D	D	D	D	D	D
1,000 to 2,499 employees .....	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	61	173	7 384	139	273	5 135	18 643	22 094	40 738	'951

<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)				
327992	Ground or treated mineral and earth manufacturing .....	291	6 836	278 862	4 645	9 504	173 009	1 431 741	656 727	2 078 277	'82 828
3279920	Treated minerals and earths .....	291	6 836	278 862	4 645	9 504	173 009	1 431 741	656 727	2 078 277	'82 828

<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)
327992	Ground or treated mineral and earth manufacturing	2002.. N 1997.. N	X X	X X	1 985 600 2 258 930
3279920	Treated minerals and earths	2002.. N 1997.. N	X X	X X	1 985 600 2 258 930
32799204	Treated lightweight aggregate and crushed slag, minerals and earths	2002.. N 1997.. N	X X	X X	342 279 N
3279920415	Treated lightweight aggregate (diatomaceous earth, expanded clay, expanded slag, cinders, perlite, haydite, pumice, etc.)	2002.. 19 1997.. N	X X	X X	91 346 N
3279920421	Crushed slag	2002.. 23 1997.. N	X X	X X	250 933 N
32799205	Treated clays, artificially activated with acid or other materials	2002.. N 1997.. N	X X	X X	558 834 N
3279920521	Treated clays, artificially activated with acid or other materials	1,000 s tons. 2002.. 15 1997.. N	X X	<sup>q</sup> 2 256.3 N	558 834 N
32799206	Other minerals or earths, treated	2002.. N 1997.. N	X X	X X	814 881 N
3279920611	Exfoliated vermiculite aggregate	mil cu ft. 2002.. 11 1997.. N	X X	<sup>q</sup> 40.5 N	20 777 N
3279920621	Other exfoliated vermiculite (including loose fill insulation, acoustical, etc.)	mil cu ft. 2002.. 5 1997.. N	X X	S N	14 428 N
3279920630	Refractory magnesia (including dead-burned magnesia or magnesite) <sup>1</sup>	2002.. 15 1997.. N	X X	X X	108 930 N
3279920653	Graphite, refined or blended	1,000 s tons. 2002.. 4 1997.. N	X X	S N	8 495 N
3279920667	Other treated minerals and earths (including feldspar, mica, roofing, granules, etc.) (includes heat treated, chemical treated, and other manufacturing processes)	2002.. 33 1997.. N	X X	X X	662 251 N
3279920Y	Treated minerals and earths, nsk, total	2002.. N 1997.. N	X X	X X	269 606 169 573
3279920YWW	Treated minerals and earths, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	229 770 91 410
3279920YWY	Treated minerals and earths, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	39 836 78 163

<sup>1</sup>For additional detail, see Current Industrial Report MA327C, Refractories.

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**

[Not applicable for this report.]

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

[Not applicable for this report]