

# Explosives Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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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)				
325920, Explosives manufacturing . . . . . 2002..	56	88	5 633	227 701	4 124	7 652	137 724	596 813	416 733	1 026 888	'24 887
2001..	N	N	6 473	252 708	4 612	8 830	143 304	605 487	492 527	1 085 924	24 109
2000..	N	N	7 957	301 832	5 398	10 491	167 554	642 628	500 417	1 134 959	24 176
1999..	N	N	8 680	301 334	5 928	11 069	175 210	504 696	507 741	1 011 811	40 320
1998..	N	N	8 410	296 903	6 039	11 712	179 198	612 345	623 284	1 247 881	59 903
1997..	66	103	8 972	312 301	6 648	13 516	190 534	789 782	649 413	1 447 274	44 209

<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	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)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
<b>325920, Explosives manufacturing</b>												
United States.....	—	88	46	5 633	227 701	4 124	7 652	137 724	596 813	416 733	1 026 888	'24 887
California .....	—	5	2	320	12 506	227	368	6 880	27 665	9 758	37 296	'879
Texas .....	—	9	6	563	25 266	456	997	19 851	59 906	59 388	125 226	'1 390

<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>325920, Explosives manufacturing</b>	
Companies <sup>1</sup> .....	number.. 56
All establishments <sup>2</sup> .....	number.. 88
Establishments with 1 to 19 employees .....	number.. 42
Establishments with 20 to 99 employees .....	number.. 31
Establishments with 100 employees or more .....	number.. 15
All employees <sup>3</sup> .....	number.. 5 633
Total compensation .....	\$1,000.. 310 033
Annual payroll .....	\$1,000.. 227 701
Total fringe benefits .....	\$1,000.. 82 332
Production workers, average for year .....	number.. 4 124
Production workers on March 12 .....	number.. 4 234
Production workers on May 12 .....	number.. 4 181
Production workers on August 12 .....	number.. 4 066
Production workers on November 12 .....	number.. 4 005
Production worker hours .....	1,000.. 7 652
Production worker wages .....	\$1,000.. 137 724
Total cost of materials .....	\$1,000.. 416 733
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 352 000
Resales .....	\$1,000.. 46 954
Purchased fuels .....	\$1,000.. 6 942
Purchased electricity .....	\$1,000.. 8 345
Contract work .....	\$1,000.. 2 492
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 165 880
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. D
Total value of shipments .....	\$1,000.. 1 026 888
Primary products value of shipments .....	\$1,000.. 853 595
Secondary products value of shipments .....	\$1,000.. -
Total miscellaneous receipts .....	\$1,000.. 173 293
Value of resales .....	\$1,000.. 58 687
Contract receipts .....	\$1,000.. D
Other miscellaneous receipts .....	\$1,000.. D
Primary products specialization ratio .....	percent.. 100
Value of primary products shipments made in all industries .....	\$1,000.. 892 239
Value of primary products shipments made in this industry .....	\$1,000.. 853 595
Value of primary products shipments made in other industries .....	\$1,000.. 38 644
Coverage ratio .....	percent.. 96
Value added .....	\$1,000.. 596 813
Total inventories, beginning of year .....	\$1,000.. 127 698
Finished goods inventories .....	\$1,000.. 45 887
Work-in-process inventories .....	\$1,000.. 35 798
Materials and supplies inventories .....	\$1,000.. 46 013
Total inventories, end of year .....	\$1,000.. 117 652
Finished goods inventories .....	\$1,000.. 38 817
Work-in-process inventories .....	\$1,000.. 29 526
Materials and supplies inventories .....	\$1,000.. 49 309
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '386 240
Total capital expenditures (new and used) .....	\$1,000.. '24 887
Buildings and other structures (new and used) .....	\$1,000.. '1 679
Machinery and equipment (new and used) .....	\$1,000.. '23 208
Automobiles, trucks, etc., for highway use .....	\$1,000.. '2 780
Computers and peripheral data processing equipment .....	\$1,000.. '775
All other expenditures for machinery and equipment .....	\$1,000.. '19 653
Total retirements .....	\$1,000.. '7 408
Gross value of depreciable assets at end of year .....	\$1,000.. '403 719
Depreciation charges during year .....	\$1,000.. '21 514
Total rental payments .....	\$1,000.. 11 611
Buildings and other structures .....	\$1,000.. 6 256
Machinery and equipment .....	\$1,000.. 5 355
Total other expenses <sup>4</sup> .....	\$1,000.. 87 243
Response coverage ratio <sup>5</sup> .....	percent.. 89
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 21 756
Communications services <sup>4</sup> .....	\$1,000.. 2 662
Legal services <sup>4</sup> .....	\$1,000.. 1 664
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 136
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 896
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 448
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 2 361
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 2 847
Taxes and license fees <sup>4</sup> .....	\$1,000.. 3 071
All other expenses <sup>4</sup> .....	\$1,000.. 51 402

<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>325920, Explosives manufacturing</b>											
All establishments .....	—	88	5 633	227 701	4 124	7 652	137 724	596 813	416 733	1 026 888	'24 887
Establishments with—											
1 to 4 employees .....	2	23	60	2 374	39	73	1 159	8 823	6 161	15 076	'261
5 to 9 employees .....	2	9	58	2 612	46	87	1 714	21 840	23 482	45 235	'1 543
10 to 19 employees .....	2	10	129	5 927	81	157	2 420	13 349	16 984	30 780	'503
20 to 49 employees .....	2	21	676	27 189	439	812	14 015	81 679	100 091	182 796	'3 148
50 to 99 employees .....	—	10	737	24 579	634	1 190	17 123	70 881	44 849	116 726	'1 920
100 to 249 employees .....	—	10	1 810	78 621	1 185	2 386	44 409	213 664	170 827	393 134	10 127
250 to 499 employees .....	—	4	g	D	D	D	D	D	D	D	D
500 to 999 employees .....	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees .....	—	1	g	D	D	D	D	D	D	D	D
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	21	94	3 718	73	141	2 012	7 208	4 980	12 187	'240

<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)				
325920	Explosives manufacturing .....	88	5 633	227 701	4 124	7 652	137 724	596 813	416 733	1 026 888	'24 887
3259200	Explosives .....	88	5 633	227 701	4 124	7 652	137 724	596 813	416 733	1 026 888	'24 887

<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)
325920	Explosives manufacturing .....	2002.. N 1997.. N	X X	X X	892 239 1 242 257
3259200	Explosives .....	2002.. N 1997.. N	X X	X X	892 239 1 242 257
32592001	Industrial explosives .....	2002.. N 1997.. N	X X	X X	364 519 613 061
3259200111	Industrial ammonium nitrate explosives, fuel sensitized, excluding slurry .....	2002.. 7 1997.. 11	X X	S P1 607.9	111 391 200 244
3259200121	Other industrial explosives; including water gel and slurries, permissibles, dynamites, black blasting powder, liquid oxygen explosives, nitroglycerin, etc. ....	2002.. 13 1997.. 18	X X	X X	253 128 412 817
32592002	Blasting accessories, including blasting caps, squibs, ignitors, detonating primers, fuses, detonating cord, etc. ....	2002.. N 1997.. N	X X	X X	231 829 360 506
3259200231	Blasting accessories, including blasting caps, squibs, ignitors, detonating primers, fuses, detonating cord, etc. ....	2002.. 10 1997.. 15	X X	X X	231 829 360 506
32592003	Other explosives and propellants, including military detonators, jet starters, fuse and explosive assemblies, etc. ....	2002.. N 1997.. N	X X	X X	231 535 159 117
3259200341	Other explosives and propellants, including military detonators, jet starters, fuse and explosive assemblies, etc. ....	2002.. 14 1997.. 14	X X	X X	231 535 159 117
3259200Y	Explosives, nsk, total .....	2002.. N 1997.. N	X X	X X	64 356 109 573
3259200YWW	Explosives, nsk, for nonadministrative-record establishments .....	2002.. N 1997.. N	X X	X X	53 671 98 148
3259200YWY	Explosives, nsk, for administrative-record establishments .....	2002.. N 1997.. N	X X	X X	10 685 11 425

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**

[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)
325920	Explosives manufacturing		
00900001	Total materials .....	X	352 000
	.....2002..	X	578 867
	.....1997..		D
32531103	Nitrogenous fertilizers, ammonia, synthetic anhydrous (100 percent NH <sub>3</sub> ) .....	D	D
	.....1,000 s tons ..2002..	D	D
	.....1997..		D
32531105	Nitrogenous fertilizers, ammonium nitrate (100 percent NH <sub>4</sub> NO <sub>3</sub> ) .....	558.7	63 434
	.....1,000 s tons ..2002..	710.5	89 507
	.....1997..		
32531101	Nitrogenous fertilizers, nitric acid (100 percent HNO <sub>3</sub> ) .....	D	D
	.....1,000 s tons ..2002..	D	D
	.....1997..		D
32518805	Sulfuric acid, excluding spent (100 percent H <sub>2</sub> SO <sub>4</sub> ) .....	D	D
	.....1,000 s tons ..2002..	D	D
	.....1997..		D
32592009	High explosives (including PETN, TNT, azides, and fulminates).....	X	34 387
	.....2002..	X	62 368
	.....1997..		
32220017	Paper and paperboard containers (including shipping sacks and other paper packaging supplies) .....	X	15 671
	.....2002..	X	17 653
	.....1997..		
00970099	All other materials and components, parts, containers, and supplies .....	X	187 711
	.....2002..	X	153 021
	.....1997..		
00971000	Materials, ingredients, containers, and supplies, nsk .....	X	42 231
	.....2002..	X	180 874
	.....1997..		

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.