

Survey of Plant Capacity: 2005

Issued January 2007

MQ-C1(05)

Current Industrial Reports



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Introduction

SUMMARY OF 2005 SURVEY RESULTS

U.S. domestic manufacturing plants used an estimated 71 percent (± 1 percent) of their full production capacity for the fourth quarter of 2005 and 70 percent (± 1 percent) for the fourth quarter of 2004. The durable goods industries fourth quarter 2005 rate of 70 percent (± 1 percent) was similar to the rate of 71 percent (± 1 percent) observed for the nondurable goods industries. Durable goods industries are manufacturing industries in which products have a normal life expectancy of 3 years or more. North American Industry Classification System (NAICS) subsectors 321, 327, 331, 332, 333, 334, 335, 336, 337, and 339 are considered durable goods industries. Nondurable goods industries are manufacturing industries in which products generally have a life expectancy of less than 3 years. NAICS subsectors 311, 312, 313, 314, 315, 316, 322, 323, 324, 325, and 326 are nondurable goods industries.

The advanced processing industries fourth quarter rate of 70 percent (± 1 percent) was slightly lower than the rate of 73 percent (± 1 percent) estimated for primary processing industries. Primary processing industries are industries in which products are generally the first processed output of raw materials in the manufacturing process. NAICS subsectors 313, 314, 321, 322, 324, 326, 327, and 331 are classified as the primary processing industries. Advanced processing industries are industries in which products are considered finished manufactured items. NAICS subsectors 311, 312, 315, 316, 323, 333, 334, 335, 336, 337, and 339 are advanced processing industries.

Among the manufacturing subsectors with the lowest utilization rates of their full production capacity in the fourth quarter of 2005 were leather and allied product manufacturing (NAICS 316) at 65 percent and machinery manufacturing (NAICS 333) at 67 percent. Among the manufacturing subsectors with the highest utilization rates for 2005 were primary metal manufacturing (NAICS 331) at 79 percent and petroleum and coal products manufacturing (NAICS 324) at 76 percent. Full production capacity is broadly defined as the maximum level of production an establishment could attain under normal operating conditions. In this report, the full production utilization rate is a ratio of the actual level of operations to the full production level.

Manufacturing subsectors with the lowest utilization rates of their national emergency production capacity in the fourth quarter of 2005 were leather and allied product manufacturing (NAICS 316) and furniture and related product manufacturing (NAICS 337), both at 42 percent and miscellaneous manufacturing (NAICS 339) at 43 percent. Among the manufacturing subsectors with the highest utilization rates of 2005 were petroleum and coal products manufacturing (NAICS 324) at 73 percent and primary metal manufacturing (NAICS 331), at 69 percent. National emergency production is broadly defined as the greatest level of production an establishment can expect to sustain for 1 year or more under national emergency conditions. The national emergency production utilization rate is a ratio of the actual level of operations to the national emergency production level.

Table 1a summarizes full production utilization rates and Table 1b summarizes emergency production utilization rates, at three-, four-, five-, and six-digit NAICS industry levels, for fourth quarters 2001 through 2005. Table 2 shows both full and emergency production utilization rates and standard errors for fourth quarters 2004 and 2005, and the standard error of the change in utilization rates from 2004 to 2005 at the three-, four-, five-, and six-digit NAICS industry levels. Estimates are subject to sampling variability and nonsampling error. The range at which estimates are tested in this report is at the 90-percent confidence level. Appendix A contains reproductions of the survey form and instructions; Appendix B describes the qualifications of the data; and Appendix C contains a description of the survey sample and estimating procedure.

INDUSTRIAL CLASSIFICATION

The industrial classification definitions are based on the 2002 edition of the North American Industry Classification System (NAICS) manual published by the Office of Management and Budget.

SURVEY DESCRIPTION

Data are obtained from manufacturing establishments by means of a mailed questionnaire. Respondents are asked to report their actual production, full production, and national emergency production levels of operation for the fourth quarter of the year in terms of value of production. From these reported dollar values, utilization rates for full production and national emergency production are derived. Year-to-year changes in these rates are affected by changes in the estimated capacity of industrial plants due to factors such as capital expenditures, capital retirements, changes in the workforce, changes in prices, changes in product mix, and changes in respondents' estimates of productivity.

Final estimates are based on information collected from a sample of approximately 17,000 manufacturing and publishing establishments. Estimates in this release are based on response from approximately 80 percent of the survey panel.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols appear frequently in the tables:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies.
- (NA) Not available.
- NAICS North American Industry Classification System.
- ^a Data cells with a level of imputation exceeding 50 percent.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
31-33	Manufacturing¹	71	70	64	63	64
	Durable goods industries¹	70	68	61	59	61
	Nondurable goods industries¹	71	72	69	69	70
	Advanced processing industries¹	70	68	62	61	63
	Primary processing industries¹	73	73	70	68	68
311	Food mfg	73	73	74	73	72
3111	Animal food mfg	72	75	71	73	69
31111	Animal food mfg	72	75	71	73	69
311111	Dog & cat food mfg	70	73	81	80	75
311119	Other animal food mfg	75	78	63	68	63
3112	Grain & oilseed milling	81	78	84	79	79
31121	Flour milling & malt mfg	80	80	79	78	77
311211	Flour milling	81	81	79	79	75
311212	Rice milling	74	77	78	74	89
311213	Malt mfg	91	93	82	75	75
31122	Starch & vegetable fats & oils mfg	87	85	90	91	89
311221	Wet corn milling	94	95	95	93	94
311222	Soybean processing	88	85	94	96	92
311223	Other oilseed processing	87	78	76	70	80
311225	Fats & oils refining & blending	73	73	80	84	81
31123	Breakfast cereal mfg	76	71	81	^{a72}	73
311230	Breakfast cereal mfg	76	71	81	^{a72}	73
3113	Sugar & confectionery product mfg	69	70	70	69	71
31131	Sugar mfg	92	93	93	93	90
311311	Sugarcane mills	87	87	98	93	98
311312	Cane sugar refining	^{a90}	^{a89}	^{a71}	^{a79}	^{a76}
311313	Beet sugar mfg	96	99	99	97	97
31132	Chocolate & confectionery mfg from cacao beans	70	67	83	81	76
311320	Chocolate & confectionery mfg from cacao beans	70	67	83	81	76
31133	Confectionery mfg from purchased chocolate	66	68	64	63	65
311330	Confectionery mfg from purchased chocolate	66	68	64	63	65
31134	Nonchocolate confectionery mfg	66	^{a65}	66	63	70
311340	Nonchocolate confectionery mfg	66	^{a65}	66	63	70
3114	Fruit & vegetable preserving & specialty food mfg	71	69	62	64	63
31141	Frozen food mfg	79	78	77	77	77
311411	Frozen fruit, juice, & vegetable mfg	75	73	85	79	81
311412	Frozen specialty food mfg	83	81	72	76	74
31142	Fruit & vegetable canning, pickling, & drying	66	64	54	57	55
311421	Fruit & vegetable canning	56	53	49	51	52
311422	Specialty canning	84	86	64	66	63
311423	Dried & dehydrated food mfg	78	77	67	68	50
3115	Dairy product mfg	71	72	79	77	78
31151	Dairy product (except frozen) mfg	73	74	81	78	78
311511	Fluid milk mfg	74	74	85	82	82
311512	Creamery butter mfg	72	71	74	72	71
311513	Cheese mfg	78	81	79	81	80
311514	Dry, condensed, & evaporated dairy product mfg	64	69	75	69	71
31152	Ice cream & frozen dessert mfg	67	62	^{a73}	69	79
311520	Ice cream & frozen dessert mfg	67	62	^{a73}	69	79
3116	Meat product mfg	81	84	82	83	83
31161	Animal slaughtering & processing	81	84	82	83	83
311611	Animal (except poultry) slaughtering	76	79	84	88	88
311612	Meat processed from carcasses	70	77	75	77	77
311613	Rendering & meat byproduct processing	73	70	78	76	75
311615	Poultry processing	91	91	87	86	86
3117	Seafood product preparation & packaging	60	60	61	56	60
31171	Seafood product preparation & packaging	60	60	61	56	60
311711	Seafood canning	52	50	69	64	64
311712	Fresh & frozen seafood processing	62	62	60	55	60
3118	Bakeries & tortilla mfg	72	71	72	73	69
31181	Bread & bakery product mfg	76	74	76	76	68
311811	Retail bakeries	74	75	^{a58}	^{a65}	66
311812	Commercial bakeries	77	75	78	76	68
311813	Frozen cakes, pies, & other pastries mfg	72	66	80	78	79
31182	Cookie, cracker, & pasta mfg	65	66	64	68	69
311821	Cookie & cracker mfg	63	65	62	66	69
311822	Flour mixes & dough mfg from purchased flour	70	70	69	72	72
311823	Dry pasta mfg	70	66	63	77	68
31183	Tortilla mfg	84	75	81	79	76
311830	Tortilla mfg	84	75	81	79	76
3119	Other food mfg	66	67	74	73	71
31191	Snack food mfg	85	82	85	80	77
311911	Roasted nuts & peanut butter mfg	73	75	72	76	71
311919	Other snack food mfg	88	84	89	81	78
31192	Coffee & tea mfg	60	67	^{a71}	71	71
311920	Coffee & tea mfg	60	67	^{a71}	71	71
31193	Flavoring syrup & concentrate mfg	49	50	72	70	69
311930	Flavoring syrup & concentrate mfg	49	50	72	70	69
31194	Seasoning & dressing mfg	64	65	67	67	64
311941	Mayonnaise, dressing, & other prepared sauce mfg	69	69	74	74	69
311942	Spice & extract mfg	60	61	61	62	59
31199	All other food mfg	69	72	70	71	71
311991	Perishable prepared food mfg	73	67	68	67	66
311999	All other miscellaneous food mfg	67	74	70	72	73

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
312	Beverage & tobacco product mfg	69	65	64	65	68
3121	Beverage mfg	67	64	68	65	66
31211	Soft drink & ice mfg	59	56	63	57	56
312111	Soft drink mfg	64	62	70	60	58
312112	Bottled water mfg	^a 42	45	32	50	51
312113	Ice mfg	30	24	28	23	27
31212	Breweries	82	82	78	81	82
312120	Breweries	82	82	78	81	82
31213	Wineries	63	55	63	66	69
312130	Wineries	63	55	63	66	69
31214	Distilleries	68	70	69	66	68
312140	Distilleries	68	70	69	66	68
3122	Tobacco mfg	72	67	61	65	69
31221	Tobacco stemming & redrying	(NA)	64	77	59	75
312210	Tobacco stemming & redrying	(NA)	64	77	59	75
31222	Tobacco product mfg	71	67	61	65	69
312221	Cigarette mfg	71	65	61	65	70
312229	Other tobacco product mfg	74	95	69	66	60
313	Textile mills	69	72	64	66	68
3131	Fiber, yarn, & thread mills	75	80	77	74	69
31311	Fiber, yarn, & thread mills	75	80	77	74	69
313111	Yarn spinning mills	82	87	82	78	70
313112	Yarn texturing, throwing, & twisting mills	68	73	68	69	68
313113	Thread mills	70	^a 67	^a 72	66	69
3132	Fabric mills	69	71	66	65	70
31321	Broadwoven fabric mills	71	78	69	66	72
313210	Broadwoven fabric mills	71	78	69	66	72
31322	Narrow fabric mills & schiffli machine embroidery	68	76	64	68	63
313221	Narrow fabric mills	69	76	68	69	63
313222	Schiffli machine embroidery	^a 63	73	53	66	62
31323	Nonwoven fabric mills	69	65	60	62	74
313230	Nonwoven fabric mills	69	65	60	62	74
31324	Knit fabric mills	63	64	62	61	61
313241	Weft knit fabric mills	^a 68	^a 73	71	71	60
313249	Other knit fabric & lace mills	59	56	58	59	63
3133	Textile & fabric finishing & fabric coating mills	66	70	58	64	64
31331	Textile & fabric finishing mills	64	70	58	65	65
313311	Broadwoven fabric finishing mills	58	67	55	71	67
313312	Textile & fabric finishing mills	73	77	63	55	^a 59
31332	Fabric coating mills	71	70	61	59	58
313320	Fabric coating mills	71	70	61	59	58
314	Textile product mills	72	73	73	66	70
3141	Textile furnishings mills	79	78	76	73	78
31411	Carpet & rug mills	82	82	78	75	77
314110	Carpet & rug mills	82	82	78	75	77
31412	Curtain & linen mills	74	73	73	72	79
314121	Curtain & drapery mills	84	84	^a 72	77	76
314129	Other household textile product mills	72	71	73	70	80
3149	Other textile product mills	62	64	69	57	61
31491	Textile bag & canvas mills	65	72	59	61	61
314911	Textile bag mills	60	71	^a 49	67	60
314912	Canvas & related product mills	^a 67	73	66	59	61
31499	All other textile product mills	61	62	73	55	61
314991	Rope, cordage, & twine mills	73	75	61	61	^a 56
314992	Tire cord & tire fabric mills	91	89	83	78	80
314999	All other miscellaneous textile product mills	57	58	73	53	60
315	Apparel mfg	71	74	66	72	69
3151	Apparel knitting mills	76	73	65	78	78
31511	Hosiery & sock mills	75	71	75	78	77
315111	Sheer hosiery mills	70	62	80	77	67
315119	Other hosiery & sock mills	78	74	73	78	81
31519	Other apparel knitting mills	78	79	^a 54	^a 77	80
315191	Outerwear knitting mills	80	84	^a 52	^a 75	78
315192	Underwear & nightwear knitting mills	75	65	68	^a 91	^a 88
3152	Cut & sew apparel mfg	70	75	66	^a 72	^a 68
31521	Cut & sew apparel contractors	47	50	68	69	71
315211	Men's & boys' cut & sew apparel contractors	60	69	79	75	^a 77
315212	Women's, girls', & infants' cut & sew apparel contractors	^a 44	45	63	66	68
31522	Men's & boys' cut & sew apparel mfg	79	84	^a 67	75	71
315221	Men's & boys' cut & sew underwear & nightwear mfg	81	^a 81	^a 71	^a 60	^a 54
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	81	79	^a 50	^a 60	71
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	80	^a 73	^a 70	^a 73	65
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	77	86	69	80	76
315225	Men's & boys' cut & sew work clothing mfg	81	86	90	88	89
315228	Men's & boys' cut & sew other outerwear mfg	75	88	^a 57	77	^a 75
31523	Women's & girls' cut & sew apparel mfg	79	83	^a 65	^a 70	^a 65
315231	Women's & girls' cut & sew lingerie & nightwear mfg	^a 64	^a 96	45	^a 63	53
315232	Women's & girls' cut & sew blouse & shirt mfg	^a 89	^a 71	82	83	^a 78
315233	Women's & girls' cut & sew dress mfg	^a 82	^a 72	^a 51	^a 58	^a 49
315234	Women's & girls' cut & sew suit, coat, skirt mfg	^a 71	^a 92	^a 60	^a 61	^a 75
315239	Women's & girls' cut & sew other outerwear mfg	82	92	^a 87	^a 78	^a 76
31529	Other cut & sew apparel mfg	^a 60	69	69	^a 78	74
315291	Infants' cut & sew apparel mfg	88	^a 88	92	(NA)	^a 91
315292	Fur & leather apparel mfg	56	54	^a 78	^a 61	^a 68
315299	All other cut & sew apparel mfg	^a 72	^a 58	61	^a 60	68
3159	Apparel accessories & other apparel mfg	70	72	61	64	^a 62
31599	Apparel accessories & other apparel mfg	70	72	61	64	^a 62
315991	Hat, cap, & millinery mfg	67	67	59	59	^a 59
315992	Glove & mitten mfg	79	71	37	^a 51	56
315993	Men's & boys' neckwear mfg	89	82	71	76	70
315999	Other apparel accessories & other apparel mfg	^a 65	71	66	68	64

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
316	Leather & allied product mfg	65	68	58	54	56
3161	Leather & hide tanning & finishing	65	71	70	63	^a 57
31611	Leather & hide tanning & finishing	65	71	70	63	^a 57
316110	Leather & hide tanning & finishing	65	71	70	63	^a 57
3162	Footwear mfg	59	62	52	^a 48	^a 56
31621	Footwear mfg	59	62	52	^a 48	^a 56
316211	Rubber & plastics footwear mfg	57	51	54	^a 41	^a 55
316212	House slipper mfg	(D)	(NA)	69	57	62
316213	Men's footwear (except athletic) mfg	57	71	59	61	61
316214	Women's footwear (except athletic) mfg	^a 65	^a 56	^a 27	^a 26	^a 37
316219	Other footwear mfg	70	60	^a 69	^a 79	^a 69
3169	Other leather & allied product mfg	73	72	57	56	54
31699	Other leather & allied product mfg	73	72	57	56	54
316991	Luggage mfg	77	75	47	48	45
316992	Women's handbag & purse mfg	84	75	69	62	^a 77
316993	Personal leather good (except women's handbag & purse) mfg	^a 41	^a 56	^a 74	^a 55	^a 53
316999	All other leather good mfg	82	81	^a 73	78	79
321	Wood product mfg	70	73	70	67	66
3211	Sawmills & wood preservation	82	83	73	75	69
32111	Sawmills & wood preservation	82	83	73	75	69
321113	Sawmills	83	85	74	75	70
321114	Wood preservation	70	73	66	71	64
3212	Veneer, plywood, & engineered wood product mfg	80	78	76	66	66
32121	Veneer, plywood, & engineered wood product mfg	80	78	76	66	66
321211	Hardwood veneer & plywood mfg	82	79	69	67	62
321212	Softwood veneer & plywood mfg	86	78	88	86	84
321213	Engineered wood member (except truss) mfg	84	89	73	64	63
321214	Truss mfg	81	82	68	54	55
321219	Reconstituted wood product mfg	75	72	83	72	69
3219	Other wood product mfg	62	67	67	65	65
32191	Millwork	66	67	75	73	73
321911	Wood window & door mfg	61	62	73	72	74
321912	Cut stock, resawing lumber, & planing	75	75	79	77	77
321918	Other millwork (including flooring)	73	77	77	73	68
32192	Wood container & pallet mfg	52	97	65	59	57
321920	Wood container & pallet mfg	52	97	65	59	57
32199	All other wood product mfg	61	61	58	58	59
321991	Manufactured home (mobile home) mfg	71	63	55	54	58
321992	Prefabricated wood building mfg	55	66	69	65	56
321999	All other miscellaneous wood product mfg	58	56	56	59	64
322	Paper mfg	75	77	81	81	76
3221	Pulp, paper, & paperboard mills	84	90	89	90	83
32211	Pulp mills	92	93	89	87	90
322110	Pulp mills	92	93	89	87	90
32212	Paper mills	80	88	87	89	81
322121	Paper (except newsprint) mills	80	89	86	90	80
322122	Newsprint mills	82	81	95	86	88
32213	Paperboard mills	95	94	94	93	87
322130	Paperboard mills	95	94	94	93	87
3222	Converted paper product mfg	68	68	74	73	70
32221	Paperboard container mfg	68	67	76	74	69
322211	Corrugated & solid fiber box mfg	65	63	83	78	70
322212	Folding paperboard box mfg	77	79	86	79	73
322213	Setup paperboard box mfg	73	77	64	68	69
322214	Fiber can, tube, drum, & similar products mfg	64	65	^a 35	^a 44	51
322215	Nonfolding sanitary food container mfg	80	73	70	69	71
32222	Paper bag & coated & treated paper mfg	68	66	69	71	73
322221	Coated & laminated packaging paper & plastics film mfg	32	28	69	65	63
322222	Coated & laminated paper mfg	74	72	67	69	72
322223	Plastics, foil, & coated paper bag mfg	74	74	73	73	71
322224	Uncoated paper & multiwall bag mfg	67	70	72	79	79
322225	Laminated aluminum foil mfg for flexible packaging uses	77	77	72	81	82
322226	Surface-coated paperboard mfg	66	78	78	84	82
32223	Stationery product mfg	72	75	69	65	66
322231	Die-cut paper & paperboard office supplies mfg	74	75	76	79	76
322232	Envelope mfg	79	77	73	75	69
322233	Stationery, tablet, & related product mfg	57	70	58	44	55
32229	Other converted paper product mfg	68	68	77	76	70
322291	Sanitary paper product mfg	68	72	80	79	76
322299	All other converted paper product mfg	67	59	72	73	63
323	Printing & related support activities	73	75	68	69	71
3231	Printing & related support activities	73	75	68	69	71
32311	Printing	73	75	68	69	71
323110	Commercial lithographic printing	79	81	72	72	76
323111	Commercial gravure printing	65	74	88	84	78
323112	Commercial flexographic printing	71	76	75	74	70
323113	Commercial screen printing	66	65	66	^a 57	63
323114	Quick printing	73	75	67	69	66
323115	Digital printing	75	68	82	^a 71	70
323116	Manifold business form printing	55	63	52	64	68
323117	Book printing	^a 77	82	59	64	58
323118	Blankbook, looseleaf binder, & device mfg	^a 59	^a 43	51	58	52
323119	Other commercial printing	73	82	68	70	71
32312	Support activities for printing	73	71	72	69	68
323121	Tradebinding & related work	64	75	66	66	65
323122	Prepress services	80	69	75	71	69

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
324	Petroleum & coal products mfg	76	86	80	80	80
3241	Petroleum & coal products mfg	76	86	80	80	80
32411	Petroleum refineries	78	93	90	91	91
324110	Petroleum refineries	78	93	90	91	91
32412	Asphalt paving, roofing, & saturated materials mfg	66	68	44	43	44
324121	Asphalt paving mixture & block mfg	51	56	33	32	31
324122	Asphalt shingle & coating materials mfg	86	88	67	66	72
32419	Other petroleum & coal products mfg	71	64	56	59	57
324191	Petroleum lubricating oil & grease mfg	69	62	55	59	57
324199	All other petroleum & coal products mfg	83	79	63	60	58
325	Chemical mfg	68	67	63	63	68
3251	Basic chemical mfg	74	76	75	72	69
32511	Petrochemical mfg	85	92	80	75	77
325110	Petrochemical mfg	85	92	80	75	77
32512	Industrial gas mfg	78	76	72	75	67
325120	Industrial gas mfg	78	76	72	75	67
32513	Dye & pigment mfg	79	79	76	81	71
325131	Inorganic dye & pigment mfg	81	79	83	86	78
325132	Synthetic organic dye & pigment mfg	75	77	68	76	64
32518	Other basic inorganic chemical mfg	64	64	65	64	66
325181	Alkalies & chlorine mfg	85	94	75	76	70
325182	Carbon black mfg	79	^a 92	83	^a 78	74
325188	All other basic inorganic chemical mfg	60	59	63	62	65
32519	Other basic organic chemical mfg	73	81	83	76	69
325191	Gum & wood chemical mfg	67	69	72	80	78
325192	Cyclic crude & intermediate mfg	75	88	73	^a 83	^a 72
325193	Ethyl alcohol mfg	94	96	97	86	90
325199	All other basic organic chemical mfg	72	80	84	75	67
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	79	87	78	75	72
32521	Resin & synthetic rubber mfg	79	87	77	75	72
325211	Plastics material & resin mfg	79	87	80	79	77
325212	Synthetic rubber mfg	81	86	60	54	51
32522	Artificial & synthetic fibers & filaments mfg	78	88	85	77	72
325221	Cellulosic organic fiber mfg	^a 64	83	90	84	78
325222	Noncellulosic organic fiber mfg	80	89	84	76	72
3253	Pesticide, fertilizer, & other agricultural chemical mfg	73	64	61	60	69
32531	Fertilizer mfg	74	70	63	66	74
325311	Nitrogenous fertilizer mfg	85	74	83	86	89
325312	Phosphatic fertilizer mfg	83	93	85	83	94
325314	Fertilizer (mixing only) mfg	59	55	41	45	51
32532	Pesticide & other agricultural chemical mfg	73	61	59	57	66
325320	Pesticide & other agricultural chemical mfg	73	61	59	57	66
3254	Pharmaceutical & medicine mfg	69	68	56	58	70
32541	Pharmaceutical & medicine mfg	69	68	56	58	70
325411	Medicinal & botanical mfg	60	67	73	80	88
325412	Pharmaceutical preparation mfg	70	68	52	54	66
325413	In-vitro diagnostic substance mfg	67	65	79	^a 84	^a 85
325414	Biological product (except diagnostic) mfg	63	64	69	72	86
3255	Paint, coating, & adhesive mfg	66	66	67	58	56
32551	Paint & coating mfg	66	66	69	61	55
325510	Paint & coating mfg	66	66	69	61	55
32552	Adhesive mfg	67	66	63	53	57
325520	Adhesive mfg	67	66	63	53	57
3256	Soap, cleaning compound, & toilet preparation mfg	52	51	62	67	64
32561	Soap & cleaning compound mfg	64	63	64	66	67
325611	Soap & other detergent mfg	64	67	59	68	66
325612	Polish & other sanitation good mfg	65	58	70	61	66
325613	Surface active agent mfg	57	57	73	76	75
32562	Toilet preparation mfg	45	44	60	68	62
325620	Toilet preparation mfg	45	44	60	68	62
3259	Other chemical product mfg	74	70	68	66	64
32591	Printing ink mfg	55	59	76	60	60
325910	Printing ink mfg	55	59	76	60	60
32592	Explosives mfg	66	56	70	69	71
325920	Explosives mfg	66	56	70	69	71
32599	All other chemical product & preparation mfg	77	72	67	67	65
325991	Custom compounding of purchased resin	71	71	71	69	66
325992	Photographic film, paper, plate, & chemical mfg	89	82	72	69	65
325998	All other miscellaneous chemical product & preparation mfg	71	65	61	63	64
326	Plastics & rubber products mfg	75	76	73	68	66
3261	Plastics product mfg	75	74	72	66	65
32611	Unsupported plastics film, sheet, & bag mfg	79	80	72	70	67
326111	Unsupported plastics bag mfg	73	73	73	65	69
326112	Unsupported plastics packaging film & sheet mfg	82	82	67	70	70
326113	Unsupported plastics film & sheet (except packaging) mfg	82	84	73	73	66
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	76	69	72	69	66
326121	Unsupported plastics profile shape mfg	70	60	70	69	69
326122	Plastics pipe & pipe fitting mfg	87	85	74	69	64
32613	Laminated plastics plate, sheet, & shape mfg	77	75	70	62	64
326130	Laminated plastics plate, sheet, & shape mfg	77	75	70	62	64
32614	Polystyrene foam product mfg	84	78	77	78	76
326140	Polystyrene foam product mfg	84	78	77	78	76
32615	Urethane & other foam product (except polystyrene) mfg	71	74	69	71	66
326150	Urethane & other foam product (except polystyrene) mfg	71	74	69	71	66
32616	Plastics bottle mfg	83	75	77	79	67
326160	Plastics bottle mfg	83	75	77	79	67
32619	Other plastics product mfg	72	73	72	63	63
326191	Plastics plumbing fixture mfg	66	67	56	54	57
326192	Resilient floor covering mfg	74	59	67	62	69
326199	All other plastics product mfg	73	73	73	63	64

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
326	Plastics & rubber products mfg—Con.					
3262	Rubber product mfg	77	82	77	74	72
32621	Tire mfg	81	90	85	85	81
326211	Tire mfg (except retreading)	82	92	85	87	82
326212	Tire retreading	76	69	89	61	67
32622	Rubber & plastics hoses & belting mfg	79	84	66	61	66
326220	Rubber & plastics hoses & belting mfg	79	84	66	61	66
32629	Other rubber product mfg	72	75	73	70	67
326291	Rubber product mfg for mechanical use	69	72	75	74	68
326299	All other rubber product mfg	75	78	71	66	67
327	Nonmetallic mineral product mfg	72	70	61	66	66
3271	Clay product & refractory mfg	78	79	69	70	69
32711	Pottery, ceramics, & plumbing fixture mfg	72	74	64	66	68
327111	Vitreous china plumbing fixture & bathroom accessories mfg	83	84	^{a89}	92	82
327112	Vitreous china, fine earthenware, & other pottery product mfg	68	72	52	58	64
327113	Porcelain electrical supply mfg	65	68	61	59	60
32712	Clay building material & refractories mfg	83	82	74	74	70
327121	Brick & structural clay tile mfg	94	95	91	88	88
327122	Ceramic wall & floor tile mfg	81	79	72	65	62
327123	Other structural clay product mfg	82	79	72	85	77
327124	Clay refractory mfg	66	67	57	64	52
327125	Nonclay refractory mfg	78	77	65	^{a67}	69
3272	Glass & glass product mfg	78	80	74	73	65
32721	Glass & glass product mfg	78	80	74	73	65
327211	Flat glass mfg	86	88	83	79	76
327212	Other pressed & blown glass & glassware mfg	83	84	67	68	57
327213	Glass container mfg	92	91	94	95	94
327215	Glass product mfg made of purchased glass	70	72	70	68	59
3273	Cement & concrete product mfg	65	62	50	59	63
32731	Cement mfg	92	93	88	84	83
327310	Cement mfg	92	93	88	84	83
32732	Ready-mix concrete mfg	52	48	35	47	52
327320	Ready-mix concrete mfg	52	48	35	47	52
32733	Concrete pipe, brick, & block mfg	74	71	74	77	71
327331	Concrete block & brick mfg	71	72	76	79	73
327332	Concrete pipe mfg	79	69	72	75	70
32739	Other concrete product mfg	75	76	64	63	71
327390	Other concrete product mfg	75	76	64	63	71
3274	Lime & gypsum product mfg	87	86	84	76	76
32741	Lime mfg	88	90	82	75	71
327410	Lime mfg	88	90	82	75	71
32742	Gypsum product mfg	87	85	84	77	77
327420	Gypsum product mfg	87	85	84	77	77
3279	Other nonmetallic mineral product mfg	77	72	74	71	71
32791	Abrasive product mfg	73	67	65	67	66
327910	Abrasive product mfg	73	67	65	67	66
32799	All other nonmetallic mineral product mfg	78	74	78	73	74
327991	Cut stone & stone product mfg	68	61	70	69	76
327992	Ground or treated mineral & earth mfg	75	71	77	70	59
327993	Mineral wool mfg	94	85	85	85	86
327999	All other miscellaneous nonmetallic mineral product mfg	66	75	75	59	70
331	Primary metal mfg	79	74	72	71	70
3311	Iron & steel mills & ferroalloy mfg	88	85	86	88	79
33111	Iron & steel mills & ferroalloy mfg	88	85	86	88	79
331111	Iron & steel mills	88	85	87	89	79
331112	Electrometallurgical ferroalloy product mfg	92	^{a90}	70	77	68
3312	Steel product mfg from purchased steel	71	68	67	65	61
33121	Iron & steel pipes & tubes mfg from purchased steel	67	64	64	65	63
331210	Iron & steel pipes & tubes mfg from purchased steel	67	64	64	65	63
33122	Rolling & drawing of purchased steel	74	71	70	66	59
331221	Cold-rolled steel shape mfg	72	67	71	66	53
331222	Steel wire drawing	76	76	69	66	66
3313	Alumina & aluminum production & processing	82	85	76	74	^{a70}
33131	Alumina & aluminum production & processing	82	85	76	74	^{a70}
331311	Alumina refining	91	93	76	^{a79}	^{a84}
331312	Primary aluminum production	84	92	72	^{a70}	^{a64}
331314	Secondary smelting & alloying of aluminum	79	77	75	75	74
331315	Aluminum sheet, plate, & foil mfg	86	90	86	^{a87}	^{a75}
331316	Aluminum extruded product mfg	76	77	71	66	67
331319	Other aluminum rolling & drawing	75	81	^{a70}	65	59
3314	Nonferrous metal (except aluminum) production & processing	74	69	70	67	71
33141	Nonferrous metal (except aluminum) smelting & refining	70	70	66	73	73
331411	Primary smelting & refining of copper	66	64	56	68	73
331419	Other nonferrous metal primary smelting & refining	75	74	78	78	73
33142	Copper rolling, drawing, extruding, & alloying	80	78	75	76	74
331421	Copper rolling, drawing, & extruding	79	76	75	78	73
331422	Copper wire (except mechanical) drawing	81	80	80	80	82
331423	Secondary smelting, refining, & alloying of copper	85	86	68	^{a60}	67
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	71	61	69	60	69
331491	Other nonferrous metal rolling, drawing, & extruding	77	68	64	61	71
331492	Other nonferrous metal secondary smelting, refining, & alloying	65	55	83	^{a56}	64
3315	Foundries	70	64	63	63	64
33151	Ferrous metal foundries	72	68	63	62	65
331511	Iron foundries	69	66	63	65	68
331512	Steel investment foundries	72	74	65	54	64
331513	Steel foundries (except investment)	83	70	64	58	55
33152	Nonferrous metal foundries	66	60	63	65	62
331521	Aluminum die-casting foundries	69	65	66	67	65
331522	Nonferrous (except aluminum) die-casting foundries	62	49	64	61	59
331524	Aluminum foundries (except die-casting)	67	63	60	64	62
331525	Copper foundries (except die-casting)	54	51	56	58	56
331528	Other nonferrous foundries (except die-casting)	79	76	76	75	^{a75}

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
332	Fabricated metal product mfg	68	66	61	59	60
3321	Forging & stamping	63	62	58	56	57
33211	Forging & stamping	63	62	58	56	57
332111	Iron & steel forging	73	69	56	57	57
332112	Nonferrous forging	73	68	67	60	65
332114	Custom roll forming	65	64	60	53	54
332115	Crown & closure mfg	59	59	62	53	57
332116	Metal stamping	58	59	56	55	57
332117	Powder metallurgy part mfg	70	67	73	68	66
3322	Cutlery & handtool mfg	64	66	61	62	63
33221	Cutlery & handtool mfg	64	66	61	62	63
332211	Cutlery & flatware (except precious) mfg	^a 60	63	54	65	57
332212	Hand & edge tool mfg	64	65	61	58	63
332213	Saw blade & handsaw mfg	70	77	73	72	69
332214	Kitchen utensil, pot, & pan mfg	64	65	^a 71	67	63
3323	Architectural & structural metals mfg	67	63	58	57	60
33231	Plate work & fabricated structural product mfg	72	68	59	58	65
332311	Prefabricated metal building & component mfg	64	64	59	60	64
332312	Fabricated structural metal mfg	73	70	60	58	67
332313	Plate work mfg	78	67	56	53	58
33232	Ornamental & architectural metal products mfg	64	59	58	56	58
332321	Metal window & door mfg	67	54	61	60	58
332322	Sheet metal work mfg	61	60	54	53	56
332323	Ornamental & architectural metal work mfg	67	66	66	59	61
3324	Boiler, tank, & shipping container mfg	72	69	67	64	66
33241	Power boiler & heat exchanger mfg	66	70	62	54	60
332410	Power boiler & heat exchanger mfg	66	70	62	54	60
33242	Metal tank (heavy gauge) mfg	71	67	56	58	57
332420	Metal tank (heavy gauge) mfg	71	67	56	58	57
33243	Metal can, box, & other metal container (light gauge) mfg	74	70	76	75	74
332431	Metal can mfg	82	79	79	77	76
332439	Other metal container mfg	60	52	68	66	68
3325	Hardware mfg	69	68	62	67	69
33251	Hardware mfg	69	68	62	67	69
332510	Hardware mfg	69	68	62	67	69
3326	Spring & wire product mfg	65	65	64	65	62
33261	Spring & wire product mfg	65	65	64	65	62
332611	Spring (heavy gauge) mfg	60	57	64	71	66
332612	Spring (light gauge) mfg	67	67	65	64	61
332618	Other fabricated wire product mfg	65	65	64	65	62
3327	Machine shops, turned product, & screw, nut, & bolt mfg	70	71	58	53	53
33271	Machine shops	73	75	57	50	51
332710	Machine shops	73	75	57	50	51
33272	Turned product & screw, nut, & bolt mfg	66	65	61	59	59
332721	Precision turned product mfg	67	66	58	54	55
332722	Bolt, nut, screw, rivet, & washer mfg	65	65	65	65	65
3328	Coating, engraving, heat treating, & allied activities	72	67	63	61	63
33281	Coating, engraving, heat treating, & allied activities	72	67	63	61	63
332811	Metal heat treating	85	83	71	65	65
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	72	62	70	71	71
332813	Electroplating, plating, polishing, anodizing, & coloring	66	67	55	52	55
3329	Other fabricated metal product mfg	69	66	65	64	65
33291	Metal valve mfg	67	65	65	64	64
332911	Industrial valve mfg	63	61	63	63	63
332912	Fluid power valve & hose fitting mfg	71	71	67	64	65
332913	Plumbing fixture fitting & trim mfg	64	65	67	66	67
332919	Other metal valve & pipe fitting mfg	74	63	65	62	62
33299	All other fabricated metal product mfg	67	67	66	64	66
332991	Ball & roller bearing mfg	80	78	71	68	69
332992	Small arms ammunition mfg	78	71	63	69	66
332993	Ammunition (except small arms) mfg	70	58	52	52	65
332994	Small arms mfg	63	64	71	72	66
332995	Other ordnance & accessories mfg	68	^a 56	63	67	69
332996	Fabricated pipe & pipe fitting mfg	75	73	62	63	67
332997	Industrial pattern mfg	68	70	55	69	61
332998	Enameled iron & metal sanitary ware mfg	62	72	72	68	81
332999	All other miscellaneous fabricated metal product mfg	65	64	66	62	62
333	Machinery mfg	67	66	59	57	54
3331	Agriculture, construction, & mining machinery mfg	73	72	60	55	58
33311	Agricultural implement mfg	68	74	57	52	53
333111	Farm machinery & equipment mfg	70	80	55	53	54
333112	Lawn & garden tractor & home lawn & garden equipment mfg	63	60	63	50	51
33312	Construction machinery mfg	75	68	65	57	62
333120	Construction machinery mfg	75	68	65	57	62
33313	Mining & oil & gas field machinery mfg	79	76	57	54	61
333131	Mining machinery & equipment mfg	77	74	57	53	59
333132	Oil & gas field machinery & equipment mfg	80	76	57	54	62
3332	Industrial machinery mfg	57	64	52	51	45
33321	Sawmill & woodworking machinery mfg	74	70	56	49	53
333210	Sawmill & woodworking machinery mfg	74	70	56	49	53
33322	Plastics & rubber industry machinery mfg	62	62	57	56	60
333220	Plastics & rubber industry machinery mfg	62	62	57	56	60
33329	Other industrial machinery mfg	56	64	52	50	44
333291	Paper industry machinery mfg	69	71	68	62	58
333292	Textile machinery mfg	52	46	^a 57	^a 57	^a 51
333293	Printing machinery & equipment mfg	67	67	65	58	55
333294	Food product machinery mfg	71	73	55	52	62
333295	Semiconductor machinery mfg	49	58	43	44	36
333298	All other industrial machinery mfg	64	67	56	54	58

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
333	Machinery mfg—Con.					
3333	Commercial & service industry machinery mfg	72	67	58	55	54
33331	Commercial & service industry machinery mfg	72	67	58	55	54
333311	Automatic vending machine mfg	53	61	44	41	^a 40
333312	Commercial laundry, drycleaning, & pressing machine mfg	78	81	33	^a 28	33
333313	Office machinery mfg	^a 78	79	^a 43	^a 56	^a 51
333314	Optical instrument & lens mfg	68	70	71	66	64
333315	Photographic & photocopying equipment mfg	85	41	70	59	54
333319	Other commercial & service industry machinery mfg	73	73	60	55	56
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	66	61	62	60	59
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	66	61	62	60	59
333411	Air purification equipment mfg	71	65	62	59	60
333412	Industrial & commercial fan & blower mfg	65	64	64	55	57
333414	Heating equipment (except warm air furnaces) mfg	65	62	59	59	58
333415	AC & warm air heating & commercial/industrial refig equip mfg	66	60	62	60	59
3335	Metalworking machinery mfg	68	66	58	57	51
33351	Metalworking machinery mfg	68	66	58	57	51
333511	Industrial mold mfg	71	73	58	64	38
333512	Machine tool (metal cutting types) mfg	66	61	49	47	47
333513	Machine tool (metal forming types) mfg	57	61	49	46	50
333514	Special die & tool, die set, jig, & fixture mfg	71	67	60	57	58
333515	Cutting tool & machine tool accessory mfg	68	68	67	60	60
333516	Rolling mill machinery & equipment mfg	72	67	56	58	55
333518	Other metalworking machinery mfg	56	57	57	58	58
3336	Engine, turbine, & power transmission equipment mfg	68	65	67	61	59
33361	Engine, turbine, & power transmission equipment mfg	68	65	67	61	59
333611	Turbine & turbine generator set unit mfg	^a 53	^a 58	^a 78	^a 88	88
333612	Speed changer, industrial high-speed drive, & gear mfg	72	64	53	53	53
333613	Mechanical power transmission equipment mfg	75	75	51	50	51
333618	Other engine equipment mfg	74	73	67	53	55
3339	Other general-purpose machinery mfg	66	66	59	58	60
33391	Pump & compressor mfg	64	68	59	63	62
333911	Pump & pumping equipment mfg	71	72	64	67	62
333912	Air & gas compressor mfg	60	58	52	56	62
333913	Measuring & dispensing pump mfg	^a 62	^a 82	^a 74	^a 70	^a 63
33392	Material handling equipment mfg	64	65	59	55	55
333921	Elevator & moving stairway mfg	76	73	66	70	73
333922	Conveyor & conveying equipment mfg	83	63	58	55	57
333923	Overhead traveling crane, hoist, & monorail system mfg	58	73	59	49	50
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	59	60	58	52	51
33399	All other general-purpose machinery mfg	68	66	59	58	61
333991	Power-driven handtool mfg	^a 60	^a 61	75	75	75
333992	Welding & soldering equipment mfg	75	76	41	50	57
333993	Packaging machinery mfg	70	66	60	62	60
333994	Industrial process furnace & oven mfg	60	69	54	49	51
333995	Fluid power cylinder & actuator mfg	69	67	66	62	66
333996	Fluid power pump & motor mfg	66	65	64	62	63
333997	Scale & balance (except laboratory) mfg	67	57	58	50	49
333999	All other miscellaneous general-purpose machinery mfg	68	66	61	55	61
334	Computer & electronic product mfg	69	67	53	52	57
3341	Computer & peripheral equipment mfg	66	^a 71	65	62	^a 62
33411	Computer & peripheral equipment mfg	66	^a 71	65	62	^a 62
334111	Electronic computer mfg	^a 66	^a 76	67	65	^a 66
334112	Computer storage device mfg	61	57	55	^a 51	^a 49
334113	Computer terminal mfg	^a 67	87	^a 94	51	^a 38
334119	Other computer peripheral equipment mfg	70	69	71	^a 66	69
3342	Communications equipment mfg		^a 56	^a 32	^a 35	^a 52
33421	Telephone apparatus mfg	^a 57	^a 58	^a 24	^a 27	^a 46
334210	Telephone apparatus mfg	^a 57	^a 58	^a 24	^a 27	^a 46
33422	Radio & TV broadcasting & wireless communications equipment mfg	59	54	52	^a 56	^a 65
334220	Radio & TV broadcasting & wireless communications equipment mfg	59	54	52	^a 56	^a 65
33429	Other communications equipment mfg	60	63	63	66	66
334290	Other communications equipment mfg	60	63	63	66	66
3343	Audio & video equipment mfg	76	71	57	54	58
33431	Audio & video equipment mfg	76	71	57	54	58
334310	Audio & video equipment mfg	76	71	57	54	58
3344	Semiconductor & other electronic component mfg	79	74	70	58	^a 56
33441	Semiconductor & other electronic component mfg	79	74	70	58	^a 56
334411	Electron tube mfg	43	47	74	73	64
334412	Bare printed circuit board mfg	59	56	60	51	^a 49
334413	Semiconductor & related device mfg	88	83	79	65	^a 57
334414	Electronic capacitor mfg	58	56	57	51	^a 44
334415	Electronic resistor mfg	56	50	50	47	45
334416	Electronic coil, transformer, & other inductor mfg	60	64	50	45	51
334417	Electronic connector mfg	61	60	65	53	64
334418	Printed circuit assembly (electronic assembly) mfg	71	65	^a 63	47	^a 62
334419	Other electronic component mfg	63	61	49	48	48
3345	Navigational, measuring, medical, & control instruments mfg	65	63	63	60	61
33451	Navigational, measuring, medical, & control instruments mfg	65	63	63	60	61
334510	Electromedical & electrotherapeutic apparatus mfg	75	73	75	79	75
334511	Search, detection, navigation, & guidance instrument mfg	62	56	^a 67	59	59
334512	Automatic environmental control mfg	68	66	62	49	67
334513	Industrial process control instrument mfg	70	64	55	58	58
334514	Totalizing fluid meter & counting device mfg	^a 67	71	70	60	70
334515	Electricity measuring & testing instrument mfg	53	57	52	51	55
334516	Analytical laboratory instrument mfg	81	84	59	62	63
334517	Irradiation apparatus mfg	79	77	77	79	71
334518	Watch, clock, & part mfg	56	82	46	51	^a 55
334519	Other measuring & controlling device mfg	63	67	53	59	57
3346	Mfg & reproducing magnetic & optical media	76	78	67	73	79
33461	Mfg & reproducing magnetic & optical media	76	78	67	73	79
334611	Software reproducing	^a 83	^a 58	78	81	75
334612	Prerecorded CD (except software), tape, & record reproducing	77	^a 83	63	72	78
334613	Magnetic & optical recording media mfg	72	75	81	77	80

See footnotes at end of table.

Table 1a. Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
335	Electrical equipment, appliance, & component mfg	68	69	64	60	62
3351	Electric lighting equipment mfg	63	63	60	58	59
33511	Electric lamp bulb & part mfg	62	71	61	67	63
335110	Electric lamp bulb & part mfg	62	71	61	67	63
33512	Lighting fixture mfg	63	61	60	56	57
335121	Residential electric lighting fixture mfg	62	55	^{a62}	^{a52}	46
335122	Commercial/industrial/institutional electric lighting fixture mfg	61	63	55	54	58
335129	Other lighting equipment mfg	66	63	67	62	66
3352	Household appliance mfg	74	76	78	72	70
33521	Small electrical appliance mfg	67	75	84	68	69
335211	Electric housewares & household fan mfg	63	75	88	65	64
335212	Household vacuum cleaner mfg	74	75	80	71	74
33522	Major appliance mfg	76	77	76	74	71
335221	Household cooking appliance mfg	57	61	57	56	50
335222	Household refrigerator & home freezer mfg	92	92	84	81	83
335224	Household laundry equipment mfg	79	77	85	87	90
335228	Other major household appliance mfg	78	77	81	74	71
3353	Electrical equipment mfg	^{a64}	69	59	59	61
33531	Electrical equipment mfg	^{a64}	69	59	59	61
335311	Power, distribution, & specialty transformer mfg	66	63	61	63	71
335312	Motor & generator mfg	^{a59}	75	62	60	61
335313	Switchgear & switchboard apparatus mfg	69	66	63	64	66
335314	Relay & industrial control mfg	65	68	53	54	54
3359	Other electrical equipment & component mfg	71	67	64	58	62
33591	Battery mfg	75	67	65	57	64
335911	Storage battery mfg	80	66	63	^{a52}	^{a62}
335912	Primary battery mfg	70	69	68	64	67
33592	Communication & energy wire & cable mfg	78	76	64	53	62
335921	Fiber optic cable mfg	67	^{a61}	^{a52}	^{a45}	^{a60}
335929	Other communication & energy wire mfg	80	78	72	58	63
33593	Wiring device mfg	66	65	64	66	68
335931	Current-carrying wiring device mfg	63	66	65	67	68
335932	Noncurrent-carrying wiring device mfg	61	61	64	64	67
33599	All other electrical equipment & component mfg	70	64	63	57	54
335991	Carbon & graphite product mfg	68	75	66	53	54
335999	All other miscellaneous electrical equipment & component mfg	70	61	^{a62}	57	^{a54}
336	Transportation equipment mfg	73	70	66	64	64
3361	Motor vehicle mfg	81	81	82	83	76
33611	Automobile & light duty motor vehicle mfg	81	82	83	85	81
336111	Automobile mfg	89	82	80	82	78
336112	Light truck & utility vehicle mfg	78	81	87	89	84
33612	Heavy duty truck mfg	74	71	61	52	43
336120	Heavy duty truck mfg	74	71	61	52	43
3362	Motor vehicle body & trailer mfg	65	67	61	61	54
33621	Motor vehicle body & trailer mfg	65	67	61	61	54
336211	Motor vehicle body mfg	76	77	64	65	68
336212	Truck trailer mfg	75	70	54	54	39
336213	Motor home mfg	45	54	61	55	71
336214	Travel trailer & camper mfg	69	67	63	64	50
3363	Motor vehicle parts mfg	73	74	73	72	71
33631	Motor vehicle gasoline engine & engine parts mfg	71	71	74	73	73
336311	Carburetor, piston, piston ring, & valve mfg	85	83	82	80	76
336312	Gasoline engine & engine parts mfg	70	70	72	71	73
33632	Motor vehicle electrical & electronic equipment mfg	75	74	64	60	59
336321	Vehicular lighting equipment mfg	75	71	79	71	66
336322	Other motor vehicle electrical & electronic equipment mfg	75	75	62	59	58
33633	Motor vehicle steering & suspension component (except spring) mfg ..	77	74	70	72	69
336330	Motor vehicle steering & suspension component (except spring) mfg	77	74	70	72	69
33634	Motor vehicle brake system mfg	71	71	78	75	70
336340	Motor vehicle brake system mfg	71	71	78	75	70
33635	Motor vehicle transmission & power train parts mfg	79	81	77	81	76
336350	Motor vehicle transmission & power train parts mfg	79	81	77	81	76
33636	Motor vehicle seating & interior trim mfg	72	72	84	83	80
336360	Motor vehicle seating & interior trim mfg	72	72	84	83	80
33637	Motor vehicle metal stamping	68	70	76	75	73
336370	Motor vehicle metal stamping	68	70	76	75	73
33639	Other motor vehicle parts mfg	72	74	72	71	70
336391	Motor vehicle air-conditioning mfg	73	70	73	76	76
336399	All other motor vehicle parts mfg	72	74	72	70	70
3364	Aerospace product & parts mfg	68	57	55	52	54
33641	Aerospace product & parts mfg	68	57	55	52	54
336411	Aircraft mfg	64	52	47	50	64
336412	Aircraft engine & engine parts mfg	71	64	^{a63}	61	63
336413	Other aircraft part & auxiliary equipment mfg	69	62	57	58	64
336414	Guided missile & space vehicle mfg	83	^{a63}	87	^{a45}	^{a25}
336415	Guided missile & space vehicle propulsion unit & parts mfg	56	49	43	45	36
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	63	58	44	46	47
3365	Railroad rolling stock mfg	79	69	50	45	^{a54}
33651	Railroad rolling stock mfg	79	69	50	45	^{a54}
336510	Railroad rolling stock mfg	79	69	50	45	^{a54}
3366	Ship & boat building	72	^{a71}	52	53	52
33661	Ship & boat building	72	^{a71}	52	53	52
336611	Ship building & repairing	^{a80}	^{a76}	^{a48}	51	49
336612	Boat building	60	62	61	59	^{a56}
3369	Other transportation equipment mfg	65	77	58	61	57
33699	Other transportation equipment mfg	65	77	58	61	57
336991	Motorcycle, bicycle, & parts mfg	98	^{a95}	^{a57}	^{a59}	^{a54}
336992	Military armored vehicle, tank, & tank component mfg	^{a43}	65	44	42	42
336999	All other transportation equipment mfg	60	70	65	74	70

See footnotes at end of table.

Table 1a. **Full Production Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.**

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production rate				
		2005	2004	2003	2002	2001
337	Furniture & related product mfg	70	69	62	61	62
3371	Household & institutional furniture & kitchen cabinet mfg	73	73	64	66	67
33711	Wood kitchen cabinet & counter top mfg	80	92	72	73	72
337110	Wood kitchen cabinet & counter top mfg	80	92	72	73	72
33712	Household & institutional furniture mfg	69	66	61	63	66
337121	Upholstered household furniture mfg	86	88	71	74	74
337122	Nonupholstered wood household furniture mfg	60	54	63	65	67
337124	Metal household furniture mfg	66	64	^{a44}	^{a47}	50
337125	Household furniture (except wood & metal) mfg	65	60	44	42	48
337127	Institutional furniture mfg	66	76	61	59	64
337129	Wood television, radio, & sewing machine cabinet mfg	58	60	^{a39}	67	69
3372	Office furniture (including fixtures) mfg	64	61	59	53	55
33721	Office furniture (including fixtures) mfg	64	61	59	53	55
337211	Wood office furniture mfg	71	65	^{a57}	42	46
337212	Custom architectural woodwork & millwork mfg	68	73	73	66	69
337214	Office furniture (except wood) mfg	64	58	54	52	56
337215	Showcase, partition, shelving, & locker mfg	59	60	60	60	56
3379	Other furniture related product mfg	75	69	64	63	57
33791	Mattress mfg	79	76	63	63	58
337910	Mattress mfg	79	76	63	63	58
33792	Blind & shade mfg	68	58	65	63	56
337920	Blind & shade mfg	68	58	65	63	56
339	Miscellaneous mfg	69	67	66	64	65
3391	Medical equipment & supplies mfg	72	73	68	63	67
33911	Medical equipment & supplies mfg	72	73	68	63	67
339111	Laboratory apparatus & furniture mfg	67	71	68	68	66
339112	Surgical & medical instrument mfg	70	70	66	58	67
339113	Surgical appliance & supplies mfg	71	73	68	66	65
339114	Dental equipment & supplies mfg	75	76	76	74	74
339115	Ophthalmic goods mfg	78	75	63	52	63
339116	Dental laboratories	87	90	84	88	85
3399	Other miscellaneous mfg	66	61	63	65	63
33991	Jewelry & silverware mfg	66	64	64	59	63
339911	Jewelry (except costume) mfg	64	61	64	58	64
339912	Silverware & plated ware mfg	63	67	63	55	64
339913	Jewelers' material & lapidary work mfg	68	^{a79}	77	68	60
339914	Costume jewelry & novelty mfg	77	^{a66}	60	64	^{a60}
33992	Sporting & athletic goods mfg	61	61	70	65	64
339920	Sporting & athletic goods mfg	61	61	70	65	64
33993	Doll, toy, & game mfg	65	^{a52}	51	60	59
339931	Doll & stuffed toy mfg	^{a50}	^{a35}	^{a16}	^{a27}	^{a57}
339932	Game, toy, & children's vehicle mfg	67	^{a54}	66	69	59
33994	Office supplies (except paper) mfg	73	64	64	63	63
339941	Pen & mechanical pencil mfg	70	56	63	63	58
339942	Lead pencil & art good mfg	74	70	71	69	78
339943	Marking device mfg	72	69	55	^{a56}	55
339944	Carbon paper & inked ribbon mfg	78	79	63	63	68
33995	Sign mfg	82	71	66	71	65
339950	Sign mfg	82	71	66	71	65
33999	All other miscellaneous mfg	64	57	60	65	63
339991	Gasket, packing, & sealing device mfg	71	74	69	70	68
339992	Musical instrument mfg	80	84	67	59	59
339993	Fastener, button, needle, & pin mfg	63	62	54	60	60
339994	Broom, brush, & mop mfg	74	67	68	66	62
339995	Burial casket mfg	33	43	74	63	69
339999	All other miscellaneous mfg	62	51	50	^{a65}	^{a61}
5111	Newspaper, periodical, book, and database publishers	72	^{a76}	^{a81}	81	(NA)

¹Excluding NAICS 5111, Newspaper, periodical, book, and database publishers.

Table 1b. **National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005**

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
31-33	Manufacturing¹	53	51	47	45	45
	Durable goods industries¹	49	47	41	40	40
	Nondurable goods industries¹	59	59	56	52	55
	Advanced processing industries¹	52	49	45	43	43
	Primary processing industries¹	58	57	51	50	52
311	Food mfg	59	61	61	58	55
3111	Animal food mfg	60	64	59	59	59
31111	Animal food mfg	60	64	59	59	59
311111	Dog & cat food mfg	64	65	71	73	68
311119	Other animal food mfg	56	61	50	48	50
3112	Grain & oilseed milling	74	72	76	73	73
31121	Flour milling & malt mfg	73	72	70	68	68
311211	Flour milling	73	71	70	71	67
311212	Rice milling	71	74	75	70	81
311213	Malt mfg	89	93	54	44	45
31122	Starch & vegetable fats & oils mfg	80	81	89	90	88
311221	Wet corn milling	93	92	95	93	94
311222	Soybean processing	76	81	94	96	91
311223	Other oilseed processing	82	72	76	70	73
311225	Fats & oils refining & blending	69	68	78	83	78
31123	Breakfast cereal mfg	68	64	69	^{a65}	66
311230	Breakfast cereal mfg	68	64	69	^{a65}	66
3113	Sugar & confectionery product mfg	55	54	56	56	58
31131	Sugar mfg	87	88	90	85	78
311311	Sugarcane mills	83	79	91	92	94
311312	Cane sugar refining	^{a79}	^{a81}	^{a67}	^{a53}	^{a53}
311313	Beet sugar mfg	96	99	99	97	97
31132	Chocolate & confectionery mfg from cacao beans	62	62	79	76	71
311320	Chocolate & confectionery mfg from cacao beans	62	62	79	76	71
31133	Confectionery mfg from purchased chocolate	51	49	46	45	48
311330	Confectionery mfg from purchased chocolate	51	49	46	45	48
31134	Nonchocolate confectionery mfg	47	^{a45}	54	55	61
311340	Nonchocolate confectionery mfg	47	^{a45}	54	55	61
3114	Fruit & vegetable preserving & specialty food mfg	62	60	50	52	46
31141	Frozen food mfg	69	68	68	67	68
311411	Frozen fruit, juice, & vegetable mfg	67	71	78	72	73
311412	Frozen specialty food mfg	70	66	63	64	64
31142	Fruit & vegetable canning, pickling, & drying	58	55	42	45	37
311421	Fruit & vegetable canning	48	44	35	38	30
311422	Specialty canning	76	81	57	59	58
311423	Dried & dehydrated food mfg	69	70	56	53	36
3115	Dairy product mfg	65	65	71	67	69
31151	Dairy product (except frozen) mfg	68	69	75	70	70
311511	Fluid milk mfg	67	68	78	72	71
311512	Creamery butter mfg	70	68	71	62	57
311513	Cheese mfg	72	75	74	74	77
311514	Dry, condensed, & evaporated dairy product mfg	63	66	70	63	64
31152	Ice cream & frozen dessert mfg	55	52	^{a57}	54	64
311520	Ice cream & frozen dessert mfg	55	52	^{a57}	54	64
3116	Meat product mfg	65	65	66	63	59
31161	Animal slaughtering & processing	65	65	66	63	59
311611	Animal (except poultry) slaughtering	65	62	69	70	53
311612	Meat processed from carcasses	60	61	61	62	60
311613	Rendering & meat byproduct processing	67	62	55	59	59
311615	Poultry processing	69	69	69	61	63
3117	Seafood product preparation & packaging	46	47	36	35	37
31171	Seafood product preparation & packaging	46	47	36	35	37
311711	Seafood canning	35	43	60	56	53
311712	Fresh & frozen seafood processing	48	48	34	34	36
3118	Bakeries & tortilla mfg	51	61	62	55	44
31181	Bread & bakery product mfg	48	66	66	62	55
311811	Retail bakeries	14	61	^{a43}	^{a33}	25
311812	Commercial bakeries	70	68	70	68	62
311813	Frozen cakes, pies, & other pastries mfg	57	54	67	61	61
31182	Cookie, cracker, & pasta mfg	55	55	55	44	30
311821	Cookie & cracker mfg	51	53	54	40	25
311822	Flour mixes & dough mfg from purchased flour	63	59	57	60	60
311823	Dry pasta mfg	71	66	61	73	66
31183	Tortilla mfg	73	66	66	66	63
311830	Tortilla mfg	73	66	66	66	63
3119	Other food mfg	53	56	58	55	57
31191	Snack food mfg	75	73	72	66	64
311911	Roasted nuts & peanut butter mfg	65	68	71	64	60
311919	Other snack food mfg	77	74	72	67	65
31192	Coffee & tea mfg	53	57	^{a39}	39	57
311920	Coffee & tea mfg	53	57	^{a39}	39	57
31193	Flavoring syrup & concentrate mfg	35	43	56	54	55
311930	Flavoring syrup & concentrate mfg	35	43	56	54	55
31194	Seasoning & dressing mfg	53	56	58	57	55
311941	Mayonnaise, dressing, & other prepared sauce mfg	61	60	65	65	58
311942	Spice & extract mfg	48	52	53	50	51
31199	All other food mfg	52	52	54	51	53
311991	Perishable prepared food mfg	57	51	62	61	57
311999	All other miscellaneous food mfg	50	53	53	49	52

See footnotes at end of table.

Table 1b. National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
312	Beverage & tobacco product mfg	57	53	53	50	58
3121	Beverage mfg	58	55	59	53	57
31211	Soft drink & ice mfg	52	48	54	44	48
312111	Soft drink mfg	56	56	59	47	51
312112	Bottled water mfg	^a 41	27	31	30	31
312113	Ice mfg	24	24	24	20	23
31212	Breweries	82	82	77	80	82
312120	Breweries	82	82	77	80	82
31213	Wineries	58	52	49	55	59
312130	Wineries	58	52	49	55	59
31214	Distilleries	34	35	53	43	45
312140	Distilleries	34	35	53	43	45
3122	Tobacco mfg	57	51	50	48	59
31221	Tobacco stemming & redrying	(NA)	47	61	45	64
312210	Tobacco stemming & redrying	(NA)	47	61	45	64
31222	Tobacco product mfg	56	51	50	48	59
312221	Cigarette mfg	55	49	50	48	60
312229	Other tobacco product mfg	70	79	53	54	49
313	Textile mills	61	65	55	56	58
3131	Fiber, yarn, & thread mills	70	75	73	65	61
31311	Fiber, yarn, & thread mills	70	75	73	65	61
313111	Yarn spinning mills	77	80	79	71	62
313112	Yarn texturing, throwing, & twisting mills	62	69	62	58	61
313113	Thread mills	60	^a 62	^a 70	53	55
3132	Fabric mills	60	64	55	56	63
31321	Broadwoven fabric mills	61	72	60	60	70
313210	Broadwoven fabric mills	61	72	60	60	70
31322	Narrow fabric mills & schiffli machine embroidery	55	56	51	54	49
313221	Narrow fabric mills	56	57	53	56	51
313222	Schiffli machine embroidery	^a 47	55	42	46	41
31323	Nonwoven fabric mills	60	58	51	52	63
313230	Nonwoven fabric mills	60	58	51	52	63
31324	Knit fabric mills	58	59	50	50	53
313241	Weft knit fabric mills	^a 62	^a 71	53	53	51
313249	Other knit fabric & lace mills	54	51	48	48	55
3133	Textile & fabric finishing & fabric coating mills	56	61	49	52	50
31331	Textile & fabric finishing mills	57	63	49	52	50
313311	Broadwoven fabric finishing mills	53	62	49	54	50
313312	Textile & fabric finishing mills	61	63	49	49	^a 50
31332	Fabric coating mills	52	55	48	48	52
313320	Fabric coating mills	52	55	48	48	52
314	Textile product mills	53	57	52	46	50
3141	Textile furnishings mills	62	63	51	49	54
31411	Carpet & rug mills	69	77	66	61	62
314110	Carpet & rug mills	69	77	66	61	62
31412	Curtain & linen mills	51	50	42	40	49
314121	Curtain & drapery mills	46	47	^a 44	44	38
314129	Other household textile product mills	53	51	41	39	55
3149	Other textile product mills	43	48	54	41	45
31491	Textile bag & canvas mills	39	46	40	40	39
314911	Textile bag mills	29	43	^a 30	34	34
314912	Canvas & related product mills	^a 43	46	48	43	43
31499	All other textile product mills	45	49	63	42	47
314991	Rope, cordage, & twine mills	62	60	55	38	^a 47
314992	Tire cord & tire fabric mills	83	86	89	81	79
314999	All other miscellaneous textile product mills	41	46	62	40	44
315	Apparel mfg	48	47	32	31	36
3151	Apparel knitting mills	61	49	47	52	52
31511	Hosiery & sock mills	63	58	59	50	49
315111	Sheer hosiery mills	66	55	58	46	46
315119	Other hosiery & sock mills	62	59	59	52	50
31519	Other apparel knitting mills	56	36	^a 35	^a 54	57
315191	Outerwear knitting mills	53	33	^a 32	^a 49	54
315192	Underwear & nightwear knitting mills	63	52	68	^a 91	^a 76
3152	Cut & sew apparel mfg	47	47	30	^a 29	^a 35
31521	Cut & sew apparel contractors	35	40	18	11	40
315211	Men's & boys' cut & sew apparel contractors	33	46	54	43	^a 51
315212	Women's, girls', & infants' cut & sew apparel contractors	^a 36	38	13	8	36
31522	Men's & boys' cut & sew apparel mfg	42	46	^a 29	33	47
315221	Men's & boys' cut & sew underwear & nightwear mfg	52	^a 57	^a 53	^a 48	^a 38
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	37	41	^a 36	^a 35	41
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	66	^a 60	^a 49	^a 54	45
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	39	45	23	27	69
315225	Men's & boys' cut & sew work clothing mfg	36	40	27	27	36
315228	Men's & boys' cut & sew other outerwear mfg	53	61	^a 31	35	^a 30
31523	Women's & girls' cut & sew apparel mfg	68	56	^a 41	^a 43	^a 27
315231	Women's & girls' cut & sew lingerie & nightwear mfg	^a 55	^a 51	34	^a 42	29
315232	Women's & girls' cut & sew blouse & shirt mfg	^a 59	^a 55	50	53	^a 58
315233	Women's & girls' cut & sew dress mfg	^a 69	^a 39	^a 48	^a 45	^a 45
315234	Women's & girls' cut & sew suit, coat, skirt mfg	^a 74	^a 82	^a 27	^a 30	^a 30
315239	Women's & girls' cut & sew other outerwear mfg	82	71	^a 42	^a 42	^a 19
31529	Other cut & sew apparel mfg	^a 30	20	20	^a 31	39
315291	Infants' cut & sew apparel mfg	22	^a 46	31	(NA)	^a 49
315292	Fur & leather apparel mfg	34	42	^a 53	^a 44	^a 40
315299	All other cut & sew apparel mfg	^a 32	^a 28	16	^a 21	35
3159	Apparel accessories & other apparel mfg	43	48	40	35	^a 31
31599	Apparel accessories & other apparel mfg	43	48	40	35	^a 31
315991	Hat, cap, & millinery mfg	45	43	37	31	^a 30
315992	Glove & mitten mfg	51	58	25	^a 20	22
315993	Men's & boys' neckwear mfg	74	71	40	47	39
315999	Other apparel accessories & other apparel mfg	^a 35	44	46	40	32

See footnotes at end of table.

Table 1b. National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
316	Leather & allied product mfg	42	40	33	27	27
3161	Leather & hide tanning & finishing	62	68	64	52	^a 50
31611	Leather & hide tanning & finishing	62	68	64	52	^a 50
316110	Leather & hide tanning & finishing	62	68	64	52	^a 50
3162	Footwear mfg	35	35	31	^a 26	^a 25
31621	Footwear mfg	35	35	31	^a 26	^a 25
316211	Rubber & plastics footwear mfg	45	40	38	^a 30	^a 29
316212	House slipper mfg	(D)	(NA)	36	19	27
316213	Men's footwear (except athletic) mfg	30	38	34	35	37
316214	Women's footwear (except athletic) mfg	^a 41	^a 23	^a 12	^a 10	^a 8
316219	Other footwear mfg	34	38	^a 54	^a 65	^a 50
3169	Other leather & allied product mfg	41	35	27	20	22
31699	Other leather & allied product mfg	41	35	27	20	22
316991	Luggage mfg	64	48	22	24	24
316992	Women's handbag & purse mfg	60	31	34	29	^a 47
316993	Personal leather good (except women's handbag & purse) mfg	^a 16	^a 17	^a 34	^a 9	^a 9
316999	All other leather good mfg	39	47	^a 35	27	33
321	Wood product mfg	48	48	43	42	41
3211	Sawmills & wood preservation	54	53	51	50	46
32111	Sawmills & wood preservation	54	53	51	50	46
321113	Sawmills	54	53	51	52	46
321114	Wood preservation	54	53	53	41	44
3212	Veneer, plywood, & engineered wood product mfg	61	57	53	43	46
32121	Veneer, plywood, & engineered wood product mfg	61	57	53	43	46
321211	Hardwood veneer & plywood mfg	61	51	42	43	44
321212	Softwood veneer & plywood mfg	61	75	83	81	79
321213	Engineered wood member (except truss) mfg	85	81	61	51	53
321214	Truss mfg	61	60	47	33	39
321219	Reconstituted wood product mfg	53	46	54	42	42
3219	Other wood product mfg	42	44	38	39	38
32191	Millwork	48	45	52	49	47
321911	Wood window & door mfg	46	44	59	59	61
321912	Cut stock, resawing lumber, & planing	53	54	38	46	46
321918	Other millwork (including flooring)	48	43	56	37	32
32192	Wood container & pallet mfg	34	94	45	39	35
321920	Wood container & pallet mfg	34	94	45	39	35
32199	All other wood product mfg	37	36	26	30	30
321991	Manufactured home (mobile home) mfg	36	34	20	25	26
321992	Prefabricated wood building mfg	38	39	38	37	31
321999	All other miscellaneous wood product mfg	37	35	32	37	39
322	Paper mfg	64	68	73	71	67
3221	Pulp, paper, & paperboard mills	78	87	86	87	78
32211	Pulp mills	92	93	81	78	88
322110	Pulp mills	92	93	81	78	88
32212	Paper mills	73	84	83	87	75
322121	Paper (except newsprint) mills	72	84	82	87	75
322122	Newsprint mills	82	81	95	85	85
32213	Paperboard mills	93	93	93	87	81
322130	Paperboard mills	93	93	93	87	81
3222	Converted paper product mfg	55	57	63	60	59
32221	Paperboard container mfg	53	57	65	64	57
322211	Corrugated & solid fiber box mfg	49	54	72	68	57
322212	Folding paperboard box mfg	66	68	73	70	62
322213	Setup paperboard box mfg	52	55	43	45	45
322214	Fiber can, tube, drum, & similar products mfg	48	48	^a 28	^a 32	39
322215	Nonfolding sanitary food container mfg	75	69	63	62	62
32222	Paper bag & coated & treated paper mfg	62	58	60	58	61
322221	Coated & laminated packaging paper & plastics film mfg	30	26	53	51	50
322222	Coated & laminated packaging paper & plastics film mfg	66	64	61	56	62
322223	Plastics, foil, & coated paper bag mfg	72	68	50	53	43
322224	Uncoated paper & multiwall bag mfg	60	51	57	63	61
322225	Laminated aluminum foil mfg for flexible packaging uses	75	70	65	71	70
322226	Surface-coated paperboard mfg	64	73	68	69	55
32223	Stationery product mfg	55	62	59	51	56
322231	Die-cut paper & paperboard office supplies mfg	63	63	71	58	58
322232	Envelope mfg	59	60	60	62	62
322233	Stationery, tablet, & related product mfg	42	63	48	35	46
32229	Other converted paper product mfg	52	54	65	59	64
322291	Sanitary paper product mfg	59	62	73	71	74
322299	All other converted paper product mfg	41	40	53	45	52
323	Printing & related support activities	54	51	53	52	50
3231	Printing & related support activities	54	51	53	52	50
32311	Printing	55	51	55	53	51
323110	Commercial lithographic printing	62	53	61	61	59
323111	Commercial gravure printing	68	79	73	73	72
323112	Commercial flexographic printing	55	52	62	61	54
323113	Commercial screen printing	35	42	44	^a 36	38
323114	Quick printing	46	46	50	32	26
323115	Digital printing	52	54	71	^a 56	50
323116	Manifold business form printing	48	50	44	53	57
323117	Book printing	^a 65	77	55	58	44
323118	Blankbook, looseleaf binder, & device mfg	^a 45	^a 34	30	31	34
323119	Other commercial printing	58	46	46	46	52
32312	Support activities for printing	45	46	41	42	40
323121	Tradebinding & related work	33	40	28	30	32
323122	Prepress services	57	51	52	51	45

See footnotes at end of table.

Table 1b. **National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.**

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
324	Petroleum & coal products mfg	73	81	70	68	67
3241	Petroleum & coal products mfg	73	81	70	68	67
32411	Petroleum refineries	77	92	90	89	89
324110	Petroleum refineries	77	92	90	89	89
32412	Asphalt paving, roofing, & saturated materials mfg	52	55	27	25	24
324121	Asphalt paving mixture & block mfg	36	42	18	17	16
324122	Asphalt shingle & coating materials mfg	82	83	63	50	54
32419	Other petroleum & coal products mfg	61	54	42	43	41
324191	Petroleum lubricating oil & grease mfg	59	51	41	43	41
324199	All other petroleum & coal products mfg	72	73	45	44	43
325	Chemical mfg	57	56	51	46	55
3251	Basic chemical mfg	67	67	69	64	65
32511	Petrochemical mfg	82	92	80	75	77
325110	Petrochemical mfg	82	92	80	75	77
32512	Industrial gas mfg	74	69	71	62	57
325120	Industrial gas mfg	74	69	71	62	57
32513	Dye & pigment mfg	75	74	70	74	61
325131	Inorganic dye & pigment mfg	79	77	81	78	71
325132	Synthetic organic dye & pigment mfg	66	69	60	70	53
32518	Other basic inorganic chemical mfg	51	51	52	50	61
325181	Alkalies & chlorine mfg	77	93	75	76	70
325182	Carbon black mfg	80	^a 90	76	^a 72	67
325188	All other basic inorganic chemical mfg	47	46	50	47	59
32519	Other basic organic chemical mfg	68	74	81	74	66
325191	Gum & wood chemical mfg	64	59	71	78	74
325192	Cyclic crude & intermediate mfg	75	88	73	^a 72	^a 65
325193	Ethyl alcohol mfg	94	94	97	62	64
325199	All other basic organic chemical mfg	66	71	82	74	66
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	74	82	71	71	68
32521	Resin & synthetic rubber mfg	75	82	69	71	68
325211	Plastics material & resin mfg	75	84	72	75	73
325212	Synthetic rubber mfg	72	72	55	52	48
32522	Artificial & synthetic fibers & filaments mfg	67	84	81	73	68
325221	Cellulosic organic fiber mfg	^a 36	71	81	73	76
325222	Noncellulosic organic fiber mfg	75	85	81	73	68
3253	Pesticide, fertilizer, & other agricultural chemical mfg	44	44	43	39	48
32531	Fertilizer mfg	63	62	54	53	59
325311	Nitrogenous fertilizer mfg	72	74	83	85	87
325312	Phosphatic fertilizer mfg	83	91	83	81	91
325314	Fertilizer (mixing only) mfg	46	42	31	30	34
32532	Pesticide & other agricultural chemical mfg	37	38	39	34	44
325320	Pesticide & other agricultural chemical mfg	37	38	39	34	44
3254	Pharmaceutical & medicine mfg	60	57	44	38	56
32541	Pharmaceutical & medicine mfg	60	57	44	38	56
325411	Medicinal & botanical mfg	48	47	61	61	68
325412	Pharmaceutical preparation mfg	62	58	41	44	53
325413	In-vitro diagnostic substance mfg	50	44	49	^a 14	^a 63
325414	Biological product (except diagnostic) mfg	61	60	67	68	75
3255	Paint, coating, & adhesive mfg	48	47	52	42	40
32551	Paint & coating mfg	49	48	53	42	40
325510	Paint & coating mfg	49	48	53	42	40
32552	Adhesive mfg	47	47	51	41	41
325520	Adhesive mfg	47	47	51	41	41
3256	Soap, cleaning compound, & toilet preparation mfg	43	43	53	54	49
32561	Soap & cleaning compound mfg	54	54	52	51	50
325611	Soap & other detergent mfg	58	60	50	54	50
325612	Polish & other sanitation good mfg	48	47	49	43	44
325613	Surface active agent mfg	54	54	70	72	71
32562	Toilet preparation mfg	37	37	53	57	49
325620	Toilet preparation mfg	37	37	53	57	49
3259	Other chemical product mfg	56	53	45	44	44
32591	Printing ink mfg	32	40	26	25	27
325910	Printing ink mfg	32	40	26	25	27
32592	Explosives mfg	38	37	36	37	36
325920	Explosives mfg	38	37	36	37	36
32599	All other chemical product & preparation mfg	62	56	51	49	47
325991	Custom compounding of purchased resin	57	59	64	62	51
325992	Photographic film, paper, plate, & chemical mfg	79	76	65	64	58
325998	All other miscellaneous chemical product & preparation mfg	51	44	39	38	38
326	Plastics & rubber products mfg	63	59	63	57	53
3261	Plastics product mfg	62	57	64	56	52
32611	Unsupported plastics film, sheet, & bag mfg	71	73	68	65	62
326111	Unsupported plastics bag mfg	65	66	70	63	66
326112	Unsupported plastics packaging film & sheet mfg	72	73	59	61	61
326113	Unsupported plastics film & sheet (except packaging) mfg	74	78	70	67	60
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	61	62	66	66	58
326121	Unsupported plastics profile shape mfg	75	54	64	67	63
326122	Plastics pipe & pipe fitting mfg	82	79	69	64	52
32613	Laminated plastics plate, sheet, & shape mfg	60	59	50	44	44
326130	Laminated plastics plate, sheet, & shape mfg	60	59	50	44	44
32614	Polystyrene foam product mfg	59	56	64	63	47
326140	Polystyrene foam product mfg	59	56	64	63	47
32615	Urethane & other foam product (except polystyrene) mfg	54	53	45	50	50
326150	Urethane & other foam product (except polystyrene) mfg	54	53	45	50	50
32616	Plastics bottle mfg	80	73	73	73	62
326160	Plastics bottle mfg	80	73	73	73	62
32619	Other plastics product mfg	59	52	64	53	49
326191	Plastics plumbing fixture mfg	40	45	43	35	34
326192	Resilient floor covering mfg	66	53	61	54	63
326199	All other plastics product mfg	60	53	65	54	49

See footnotes at end of table.

Table 1b. National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
326	Plastics & rubber products mfg—Con.					
3262	Rubber product mfg	64	68	61	60	60
32621	Tire mfg	70	77	71	75	73
326211	Tire mfg (except retreading)	76	85	78	82	77
326212	Tire retreading	33	32	31	34	35
32622	Rubber & plastics hoses & belting mfg	64	71	51	47	53
326220	Rubber & plastics hoses & belting mfg	64	71	51	47	53
32629	Other rubber product mfg	58	60	55	54	52
326291	Rubber product mfg for mechanical use	59	60	61	60	56
326299	All other rubber product mfg	57	59	50	49	49
327	Nonmetallic mineral product mfg	45	47	43	41	45
3271	Clay product & refractory mfg	63	63	62	61	57
32711	Pottery, ceramics, & plumbing fixture mfg	58	63	57	62	60
327111	Vitreous china plumbing fixture & bathroom accessories mfg	86	83	^a 87	91	80
327112	Vitreous china, fine earthenware, & other pottery product mfg	51	55	46	54	54
327113	Porcelain electrical supply mfg	45	55	53	52	55
32712	Clay building material & refractories mfg	65	64	66	61	55
327121	Brick & structural clay tile mfg	82	82	90	84	84
327122	Ceramic wall & floor tile mfg	64	60	70	57	38
327123	Other structural clay product mfg	79	75	67	72	60
327124	Clay refractory mfg	48	45	39	39	37
327125	Nonclay refractory mfg	54	58	54	^a 53	56
3272	Glass & glass product mfg	55	57	66	62	56
32721	Glass & glass product mfg	55	57	66	62	56
327211	Flat glass mfg	85	85	75	70	72
327212	Other pressed & blown glass & glassware mfg	72	70	63	59	52
327213	Glass container mfg	89	88	91	93	91
327215	Glass product mfg made of purchased glass	39	42	59	54	48
3273	Cement & concrete product mfg	35	38	31	29	34
32731	Cement mfg	92	92	83	62	64
327310	Cement mfg	92	92	83	62	64
32732	Ready-mix concrete mfg	22	26	19	19	24
327320	Ready-mix concrete mfg	22	26	19	19	24
32733	Concrete pipe, brick, & block mfg	46	46	46	49	49
327331	Concrete block & brick mfg	50	48	43	46	51
327332	Concrete pipe mfg	44	44	52	53	47
32739	Other concrete product mfg	56	55	50	44	44
327390	Other concrete product mfg	56	55	50	44	44
3274	Lime & gypsum product mfg	79	78	82	72	70
32741	Lime mfg	81	80	80	72	69
327410	Lime mfg	81	80	80	72	69
32742	Gypsum product mfg	78	78	83	72	71
327420	Gypsum product mfg	78	78	83	72	71
3279	Other nonmetallic mineral product mfg	56	52	57	56	51
32791	Abrasive product mfg	50	45	48	47	37
327910	Abrasive product mfg	50	45	48	47	37
32799	All other nonmetallic mineral product mfg	58	54	62	60	61
327991	Cut stone & stone product mfg	41	38	46	43	44
327992	Ground or treated mineral & earth mfg	62	61	67	59	54
327993	Mineral wool mfg	85	77	77	81	80
327999	All other miscellaneous nonmetallic mineral product mfg	43	44	52	52	56
331	Primary metal mfg	69	62	60	58	59
3311	Iron & steel mills & ferroalloy mfg	82	79	83	85	76
33111	Iron & steel mills & ferroalloy mfg	82	79	83	85	76
331111	Iron & steel mills	82	79	84	86	77
331112	Electrometallurgical ferroalloy product mfg	90	^a 86	62	70	56
3312	Steel product mfg from purchased steel	58	59	57	56	54
33121	Iron & steel pipes & tubes mfg from purchased steel	51	52	54	53	54
331210	Iron & steel pipes & tubes mfg from purchased steel	51	52	54	53	54
33122	Rolling & drawing of purchased steel	64	64	60	58	54
331221	Cold-rolled steel shape mfg	63	63	67	58	50
331222	Steel wire drawing	64	66	56	57	58
3313	Alumina & aluminum production & processing	77	74	70	65	^a 63
33131	Alumina & aluminum production & processing	77	74	70	65	^a 63
331311	Alumina refining	91	93	75	^a 79	^a 84
331312	Primary aluminum production	84	88	68	^a 67	^a 64
331314	Secondary smelting & alloying of aluminum	75	75	70	63	65
331315	Aluminum sheet, plate, & foil mfg	80	82	81	^a 80	^a 67
331316	Aluminum extruded product mfg	67	57	60	52	55
331319	Other aluminum rolling & drawing	68	68	^a 69	61	55
3314	Nonferrous metal (except aluminum) production & processing	61	55	61	57	61
33141	Nonferrous metal (except aluminum) smelting & refining	59	57	58	59	58
331411	Primary smelting & refining of copper	65	61	56	65	70
331419	Other nonferrous metal primary smelting & refining	54	55	59	55	51
33142	Copper rolling, drawing, extruding, & alloying	73	71	69	68	66
331421	Copper rolling, drawing, & extruding	71	71	71	71	68
331422	Copper wire (except mechanical) drawing	77	71	69	71	69
331423	Secondary smelting, refining, & alloying of copper	74	71	53	^a 44	46
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	52	44	58	50	59
331491	Other nonferrous metal rolling, drawing, & extruding	52	43	56	53	61
331492	Other nonferrous metal secondary smelting, refining, & alloying	53	46	63	^a 45	54
3315	Foundries	56	49	46	44	46
33151	Ferrous metal foundries	59	54	45	43	45
331511	Iron foundries	56	51	44	43	45
331512	Steel investment foundries	66	65	48	43	52
331513	Steel foundries (except investment)	65	59	48	46	39
33152	Nonferrous metal foundries	52	44	48	45	47
331521	Aluminum die-casting foundries	61	54	52	50	50
331522	Nonferrous (except aluminum) die-casting foundries	48	41	45	42	40
331524	Aluminum foundries (except die-casting)	48	38	50	45	49
331525	Copper foundries (except die-casting)	39	34	33	34	36
331528	Other nonferrous foundries (except die-casting)	64	62	65	59	^a 65

See footnotes at end of table.

Table 1b. **National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.**

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
332	Fabricated metal product mfg	49	47	36	36	40
3321	Forging & stamping	45	46	46	42	43
33211	Forging & stamping	45	46	46	42	43
332111	Iron & steel forging	49	57	43	43	37
332112	Nonferrous forging	65	60	57	44	54
332114	Custom roll forming	51	47	46	41	44
332115	Crown & closure mfg	56	54	50	42	41
332116	Metal stamping	37	40	45	40	43
332117	Powder metallurgy part mfg	59	57	58	54	54
3322	Cutlery & handtool mfg	52	52	45	44	49
33221	Cutlery & handtool mfg	52	52	45	44	49
332211	Cutlery & flatware (except precious) mfg	^a 56	59	45	44	46
332212	Hand & edge tool mfg	50	50	42	41	48
332213	Saw blade & handsaw mfg	49	55	58	54	53
332214	Kitchen utensil, pot, & pan mfg	60	51	^a 57	58	57
3323	Architectural & structural metals mfg	46	43	22	29	38
33231	Plate work & fabricated structural product mfg	47	43	37	34	37
332311	Prefabricated metal building & component mfg	49	47	44	43	50
332312	Fabricated structural metal mfg	46	42	36	33	36
332313	Plate work mfg	50	44	34	30	32
33232	Ornamental & architectural metal products mfg	46	43	17	27	38
332321	Metal window & door mfg	50	44	37	35	40
332322	Sheet metal work mfg	44	44	12	22	37
332323	Ornamental & architectural metal work mfg	45	40	37	38	38
3324	Boiler, tank, & shipping container mfg	56	54	45	50	51
33241	Power boiler & heat exchanger mfg	47	50	46	40	46
332410	Power boiler & heat exchanger mfg	47	50	46	40	46
33242	Metal tank (heavy gauge) mfg	50	46	37	42	42
332420	Metal tank (heavy gauge) mfg	50	46	37	42	42
33243	Metal can, box, & other metal container (light gauge) mfg	63	62	51	62	61
332431	Metal can mfg	76	75	53	70	68
332439	Other metal container mfg	44	41	45	43	45
3325	Hardware mfg	47	49	46	48	47
33251	Hardware mfg	47	49	46	48	47
332510	Hardware mfg	47	49	46	48	47
3326	Spring & wire product mfg	48	50	50	45	45
33261	Spring & wire product mfg	48	50	50	45	45
332611	Spring (heavy gauge) mfg	45	39	50	57	50
332612	Spring (light gauge) mfg	42	53	52	49	41
332618	Other fabricated wire product mfg	50	50	50	42	48
3327	Machine shops, turned product, & screw, nut, & bolt mfg	46	43	37	28	31
33271	Machine shops	48	48	37	25	29
332710	Machine shops	48	48	37	25	29
33272	Turned product & screw, nut, & bolt mfg	43	36	38	35	36
332721	Precision turned product mfg	40	30	34	30	31
332722	Bolt, nut, screw, rivet, & washer mfg	48	48	44	42	44
3328	Coating, engraving, heat treating, & allied activities	61	54	48	47	46
33281	Coating, engraving, heat treating, & allied activities	61	54	48	47	46
332811	Metal heat treating	71	76	56	54	53
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	67	51	58	58	58
332813	Electroplating, plating, polishing, anodizing, & coloring	51	51	39	37	36
3329	Other fabricated metal product mfg	51	49	47	45	47
33291	Metal valve mfg	53	51	48	45	46
332911	Industrial valve mfg	49	47	46	42	44
332912	Fluid power valve & hose fitting mfg	55	54	49	46	44
332913	Plumbing fixture fitting & trim mfg	51	50	53	52	52
332919	Other metal valve & pipe fitting mfg	66	55	52	49	50
33299	All other fabricated metal product mfg	49	48	46	44	49
332991	Ball & roller bearing mfg	78	67	55	51	58
332992	Small arms ammunition mfg	48	37	47	55	46
332993	Ammunition (except small arms) mfg	36	37	40	28	36
332994	Small arms mfg	54	55	52	52	44
332995	Other ordnance & accessories mfg	50	^a 41	59	58	57
332996	Fabricated pipe & pipe fitting mfg	53	53	38	39	52
332997	Industrial pattern mfg	47	49	37	43	38
332998	Enameled iron & metal sanitary ware mfg	45	55	43	37	54
332999	All other miscellaneous fabricated metal product mfg	42	43	46	43	45
333	Machinery mfg	48	47	39	37	29
3331	Agriculture, construction, & mining machinery mfg	53	53	38	36	41
33311	Agricultural implement mfg	46	52	34	33	36
333111	Farm machinery & equipment mfg	47	58	36	33	36
333112	Lawn & garden tractor & home lawn & garden equipment mfg	43	42	29	34	34
33312	Construction machinery mfg	59	53	43	39	45
333120	Construction machinery mfg	59	53	43	39	45
33313	Mining & oil & gas field machinery mfg	60	59	40	40	46
333131	Mining machinery & equipment mfg	63	61	43	41	44
333132	Oil & gas field machinery & equipment mfg	59	58	40	39	47
3332	Industrial machinery mfg	44	46	35	29	14
33321	Sawmill & woodworking machinery mfg	47	40	35	28	32
333210	Sawmill & woodworking machinery mfg	47	40	35	28	32
33322	Plastics & rubber industry machinery mfg	43	42	38	32	33
333220	Plastics & rubber industry machinery mfg	43	42	38	32	33
33329	Other industrial machinery mfg	44	47	35	29	13
333291	Paper industry machinery mfg	54	58	37	34	35
333292	Textile machinery mfg	38	35	^a 32	^a 31	^a 25
333293	Printing machinery & equipment mfg	46	38	32	29	30
333294	Food product machinery mfg	40	40	33	35	40
333295	Semiconductor machinery mfg	45	54	40	34	18
333298	All other industrial machinery mfg	42	46	30	23	6

See footnotes at end of table.

Table 1b. National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
333	Machinery mfg—Con.					
3333	Commercial & service industry machinery mfg	51	45	37	33	34
33331	Commercial & service industry machinery mfg	51	45	37	33	34
333311	Automatic vending machine mfg	46	36	32	30	^{a26}
333312	Commercial laundry, drycleaning, & pressing machine mfg	61	62	28	^{a25}	29
333313	Office machinery mfg	^{a42}	57	^{a33}	^{a30}	^{a30}
333314	Optical instrument & lens mfg	51	55	43	34	32
333315	Photographic & photocopying equipment mfg	55	37	57	46	41
333319	Other commercial & service industry machinery mfg	53	43	32	32	30
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	50	42	47	42	37
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	50	42	47	42	37
333411	Air purification equipment mfg	52	50	41	37	34
333412	Industrial & commercial fan & blower mfg	52	45	46	38	39
333414	Heating equipment (except warm air furnaces) mfg	37	39	43	46	45
333415	AC & warm air heating & commercial/industrial refig equip mfg	53	42	48	42	36
3335	Metalworking machinery mfg	47	44	32	35	32
33351	Metalworking machinery mfg	47	44	32	35	32
333511	Industrial mold mfg	51	54	29	39	26
333512	Machine tool (metal cutting types) mfg	47	43	32	34	33
333513	Machine tool (metal forming types) mfg	42	33	31	28	30
333514	Special die & tool, die set, jig, & fixture mfg	44	41	33	35	34
333515	Cutting tool & machine tool accessory mfg	51	51	36	41	41
333516	Rolling mill machinery & equipment mfg	43	36	29	28	30
333518	Other metalworking machinery mfg	41	33	29	31	31
3336	Engine, turbine, & power transmission equipment mfg	52	52	51	45	46
33361	Engine, turbine, & power transmission equipment mfg	52	52	51	45	46
333611	Turbine & turbine generator set unit mfg	^{a50}	^{a55}	^{a62}	^{a70}	70
333612	Speed changer, industrial high-speed drive, & gear mfg	52	42	41	29	41
333613	Mechanical power transmission equipment mfg	56	52	39	38	41
333618	Other engine equipment mfg	52	49	49	41	43
3339	Other general-purpose machinery mfg	46	45	38	38	38
33391	Pump & compressor mfg	46	46	43	44	42
333911	Pump & pumping equipment mfg	51	49	46	50	42
333912	Air & gas compressor mfg	40	37	40	39	42
333913	Measuring & dispensing pump mfg	^{a40}	^{a77}	^{a40}	^{a37}	^{a45}
33392	Material handling equipment mfg	45	43	34	33	33
333921	Elevator & moving stairway mfg	56	52	47	50	53
333922	Conveyor & conveying equipment mfg	38	42	28	28	29
333923	Overhead traveling crane, hoist, & monorail system mfg	57	44	38	34	34
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	46	41	41	38	35
33399	All other general-purpose machinery mfg	46	46	39	39	39
333991	Power-driven handtool mfg	^{a45}	^{a53}	56	59	52
333992	Welding & soldering equipment mfg	57	59	27	36	40
333993	Packaging machinery mfg	44	38	36	39	34
333994	Industrial process furnace & oven mfg	41	40	35	30	34
333995	Fluid power cylinder & actuator mfg	41	42	41	39	41
333996	Fluid power pump & motor mfg	45	49	42	41	42
333997	Scale & balance (except laboratory) mfg	47	41	44	20	20
333999	All other miscellaneous general-purpose machinery mfg	47	49	41	37	39
334	Computer & electronic product mfg	51	45	38	38	40
3341	Computer & peripheral equipment mfg	51	^{a46}	45	43	^{a40}
33411	Computer & peripheral equipment mfg	51	^{a46}	45	43	^{a40}
334111	Electronic computer mfg	^{a50}	^{a45}	49	44	^{a42}
334112	Computer storage device mfg	56	47	34	^{a36}	^{a29}
334113	Computer terminal mfg	^{a41}	39	^{a31}	50	^{a30}
334119	Other computer peripheral equipment mfg	53	50	56	^{a51}	50
3342	Communications equipment mfg		^{a36}	^{a24}	^{a26}	^{a39}
33421	Telephone apparatus mfg	^{a39}	^{a36}	^{a19}	^{a21}	^{a36}
334210	Telephone apparatus mfg	^{a39}	^{a36}	^{a19}	^{a21}	^{a36}
33422	Radio & TV broadcasting & wireless communications equipment mfg	44	37	34	^{a38}	^{a42}
334220	Radio & TV broadcasting & wireless communications equipment mfg	44	37	34	^{a38}	^{a42}
33429	Other communications equipment mfg	38	37	41	39	43
334290	Other communications equipment mfg	38	37	41	39	43
3343	Audio & video equipment mfg	50	47	41	40	42
33431	Audio & video equipment mfg	50	47	41	40	42
334310	Audio & video equipment mfg	50	47	41	40	42
3344	Semiconductor & other electronic component mfg	64	60	56	46	^{a40}
33441	Semiconductor & other electronic component mfg	64	60	56	46	^{a40}
334411	Electron tube mfg	32	33	48	55	58
334412	Bare printed circuit board mfg	42	36	48	38	^{a34}
334413	Semiconductor & related device mfg	80	79	74	56	^{a41}
334414	Electronic capacitor mfg	47	41	45	36	^{a35}
334415	Electronic resistor mfg	35	27	29	29	28
334416	Electronic coil, transformer, & other inductor mfg	32	33	32	29	34
334417	Electronic connector mfg	27	42	46	40	47
334418	Printed circuit assembly (electronic assembly) mfg	52	47	^{a47}	39	^{a51}
334419	Other electronic component mfg	43	36	27	26	27
3345	Navigational, measuring, medical, & control instruments mfg	45	37	39	40	40
33451	Navigational, measuring, medical, & control instruments mfg	45	37	39	40	40
334510	Electromedical & electrotherapeutic apparatus mfg	47	50	55	57	49
334511	Search, detection, navigation, & guidance instrument mfg	48	34	^{a44}	43	43
334512	Automatic environmental control mfg	38	37	40	37	47
334513	Industrial process control instrument mfg	41	40	34	29	31
334514	Totalizing fluid meter & counting device mfg	^{a51}	55	52	47	52
334515	Electricity measuring & testing instrument mfg	41	37	31	36	35
334516	Analytical laboratory instrument mfg	39	23	28	32	33
334517	Irradiation apparatus mfg	49	45	42	49	49
334518	Watch, clock, & part mfg	33	68	34	27	^{a24}
334519	Other measuring & controlling device mfg	38	44	34	32	36
3346	Mfg & reproducing magnetic & optical media	69	73	56	55	64
33461	Mfg & reproducing magnetic & optical media	69	73	56	55	64
334611	Software reproducing	^{a68}	^{a47}	63	69	68
334612	Prerecorded CD (except software), tape, & record reproducing	70	^{a78}	51	50	58
334613	Magnetic & optical recording media mfg	66	71	79	75	77

See footnotes at end of table.

Table 1b. National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
335	Electrical equipment, appliance, & component mfg	50	49	46	44	45
3351	Electric lighting equipment mfg	39	43	41	37	39
33511	Electric lamp bulb & part mfg	46	53	52	53	53
335110	Electric lamp bulb & part mfg	46	53	52	53	53
33512	Lighting fixture mfg	38	41	39	35	36
335121	Residential electric lighting fixture mfg	25	28	^{a41}	^{a24}	27
335122	Commercial/industrial/institutional electric lighting fixture mfg	40	44	35	35	38
335129	Other lighting equipment mfg	50	51	43	44	40
3352	Household appliance mfg	55	58	59	52	51
33521	Small electrical appliance mfg	49	67	58	43	47
335211	Electric housewares & household fan mfg	53	67	64	45	44
335212	Household vacuum cleaner mfg	44	67	53	41	49
33522	Major appliance mfg	56	56	60	56	53
335221	Household cooking appliance mfg	35	37	43	43	38
335222	Household refrigerator & home freezer mfg	73	81	61	58	58
335224	Household laundry equipment mfg	64	55	71	71	77
335228	Other major household appliance mfg	60	59	65	52	54
3353	Electrical equipment mfg	^{a50}	46	38	43	42
33531	Electrical equipment mfg	^{a50}	46	38	43	42
335311	Power, distribution, & specialty transformer mfg	60	52	46	46	52
335312	Motor & generator mfg	^{a53}	41	37	46	45
335313	Switchgear & switchboard apparatus mfg	54	51	45	45	41
335314	Relay & industrial control mfg	44	45	33	38	38
3359	Other electrical equipment & component mfg	52	51	50	44	47
33591	Battery mfg	60	53	55	49	52
335911	Storage battery mfg	63	51	55	^{a45}	^{a51}
335912	Primary battery mfg	57	56	56	54	54
33592	Communication & energy wire & cable mfg	68	67	54	41	53
335921	Fiber optic cable mfg	56	^{a56}	^{a50}	^{a34}	^{a54}
335929	Other communication & energy wire mfg	70	69	57	47	53
33593	Wiring device mfg	42	43	50	51	51
335931	Current-carrying wiring device mfg	36	39	49	50	51
335932	Noncurrent-carrying wiring device mfg	58	51	50	51	51
33599	All other electrical equipment & component mfg	53	50	41	37	36
335991	Carbon & graphite product mfg	64	66	56	43	44
335999	All other miscellaneous electrical equipment & component mfg	51	47	^{a39}	36	^{a35}
336	Transportation equipment mfg	50	47	47	45	45
3361	Motor vehicle mfg	49	48	52	52	51
33611	Automobile & light duty motor vehicle mfg	50	48	52	53	54
336111	Automobile mfg	53	48	47	48	49
336112	Light truck & utility vehicle mfg	48	48	60	59	61
33612	Heavy duty truck mfg	48	48	44	35	29
336120	Heavy duty truck mfg	48	48	44	35	29
3362	Motor vehicle body & trailer mfg	26	24	36	36	30
33621	Motor vehicle body & trailer mfg	26	24	36	36	30
336211	Motor vehicle body mfg	52	52	41	35	37
336212	Truck trailer mfg	47	41	38	36	26
336213	Motor home mfg	24	28	37	33	26
336214	Travel trailer & camper mfg	15	12	29	38	28
3363	Motor vehicle parts mfg	56	58	56	54	52
33631	Motor vehicle gasoline engine & engine parts mfg	53	53	56	56	56
336311	Carburetor, piston, piston ring, & valve mfg	75	75	70	68	50
336312	Gasoline engine & engine parts mfg	52	52	54	54	57
33632	Motor vehicle electrical & electronic equipment mfg	62	62	48	43	44
336321	Vehicular lighting equipment mfg	55	51	64	59	56
336322	Other motor vehicle electrical & electronic equipment mfg	64	64	46	41	43
33633	Motor vehicle steering & suspension component (except spring) mfg ..	63	64	54	59	57
336330	Motor vehicle steering & suspension component (except spring) mfg	63	64	54	59	57
33634	Motor vehicle brake system mfg	54	55	59	60	48
336340	Motor vehicle brake system mfg	54	55	59	60	48
33635	Motor vehicle transmission & power train parts mfg	56	64	64	66	63
336350	Motor vehicle transmission & power train parts mfg	56	64	64	66	63
33636	Motor vehicle seating & interior trim mfg	49	49	60	48	51
336360	Motor vehicle seating & interior trim mfg	49	49	60	48	51
33637	Motor vehicle metal stamping	53	54	59	57	56
336370	Motor vehicle metal stamping	53	54	59	57	56
33639	Other motor vehicle parts mfg	56	61	54	53	46
336391	Motor vehicle air-conditioning mfg	61	58	63	62	60
336399	All other motor vehicle parts mfg	56	61	53	52	45
3364	Aerospace product & parts mfg	52	43	41	38	39
33641	Aerospace product & parts mfg	52	43	41	38	39
336411	Aircraft mfg	48	38	34	35	47
336412	Aircraft engine & engine parts mfg	59	55	^{a50}	42	39
336413	Other aircraft part & auxiliary equipment mfg	47	42	41	44	47
336414	Guided missile & space vehicle mfg	82	^{a62}	85	^{a38}	^{a21}
336415	Guided missile & space vehicle propulsion unit & parts mfg	44	32	25	27	22
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	50	48	39	37	36
3365	Railroad rolling stock mfg	62	55	41	37	^{a44}
33651	Railroad rolling stock mfg	62	55	41	37	^{a44}
336510	Railroad rolling stock mfg	62	55	41	37	^{a44}
3366	Ship & boat building	54	^{a37}	38	37	36
33661	Ship & boat building	54	^{a37}	38	37	36
336611	Ship building & repairing	^{a63}	^{a34}	^{a38}	40	38
336612	Boat building	42	46	39	34	^{a33}
3369	Other transportation equipment mfg	48	49	27	29	34
33699	Other transportation equipment mfg	48	49	27	29	34
336991	Motorcycle, bicycle, & parts mfg	65	^{a49}	^{a17}	^{a18}	^{a24}
336992	Military armored vehicle, tank, & tank component mfg	^{a38}	48	39	37	36
336999	All other transportation equipment mfg	44	48	42	47	47

See footnotes at end of table.

Table 1b. **National Emergency Capacity Utilization Rates by Industry: Fourth Quarters 2001 Through 2005—Con.**

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	National emergency rate				
		2005	2004	2003	2002	2001
337	Furniture & related product mfg	42	44	36	36	36
3371	Household & institutional furniture & kitchen cabinet mfg	42	48	36	34	35
33711	Wood kitchen cabinet & counter top mfg	45	70	46	43	48
337110	Wood kitchen cabinet & counter top mfg	45	70	46	43	48
33712	Household & institutional furniture mfg	40	40	32	31	31
337121	Upholstered household furniture mfg	54	56	44	39	44
337122	Nonupholstered wood household furniture mfg	36	36	28	28	30
337124	Metal household furniture mfg	29	28	^{a22}	^{a24}	27
337125	Household furniture (except wood & metal) mfg	41	39	36	32	35
337127	Institutional furniture mfg	40	37	36	32	24
337129	Wood television, radio, & sewing machine cabinet mfg	20	23	^{a30}	44	46
3372	Office furniture (including fixtures) mfg	40	39	35	39	38
33721	Office furniture (including fixtures) mfg	40	39	35	39	38
337211	Wood office furniture mfg	41	38	^{a31}	31	34
337212	Custom architectural woodwork & millwork mfg	36	41	47	40	34
337214	Office furniture (except wood) mfg	48	41	30	39	43
337215	Showcase, partition, shelving, & locker mfg	36	36	43	42	37
3379	Other furniture related product mfg	49	43	44	40	36
33791	Mattress mfg	49	47	42	40	37
337910	Mattress mfg	49	47	42	40	37
33792	Blind & shade mfg	48	37	48	40	35
337920	Blind & shade mfg	48	37	48	40	35
339	Miscellaneous mfg	43	41	43	40	43
3391	Medical equipment & supplies mfg	48	48	48	44	49
33911	Medical equipment & supplies mfg	48	48	48	44	49
339111	Laboratory apparatus & furniture mfg	35	34	33	38	43
339112	Surgical & medical instrument mfg	51	49	46	40	46
339113	Surgical appliance & supplies mfg	46	46	52	48	51
339114	Dental equipment & supplies mfg	39	50	50	48	49
339115	Ophthalmic goods mfg	66	66	50	43	53
339116	Dental laboratories	55	56	56	66	55
3399	Other miscellaneous mfg	38	35	37	36	37
33991	Jewelry & silverware mfg	38	28	33	33	34
339911	Jewelry (except costume) mfg	37	25	34	35	35
339912	Silverware & plated ware mfg	38	42	28	27	30
339913	Jewelers' material & lapidary work mfg	37	^{a44}	57	50	46
339914	Costume jewelry & novelty mfg	44	^{a36}	28	28	^{a30}
33992	Sporting & athletic goods mfg	38	35	34	30	34
339920	Sporting & athletic goods mfg	38	35	34	30	34
33993	Doll, toy, & game mfg	15	^{a34}	38	45	34
339931	Doll & stuffed toy mfg	^{a17}	^{a32}	^{a14}	^{a24}	^{a51}
339932	Game, toy, & children's vehicle mfg	14	^{a34}	46	50	33
33994	Office supplies (except paper) mfg	49	42	49	43	45
339941	Pen & mechanical pencil mfg	45	32	42	41	38
339942	Lead pencil & art good mfg	45	46	63	64	75
339943	Marking device mfg	55	56	44	^{a31}	32
339944	Carbon paper & inked ribbon mfg	70	77	58	40	55
33995	Sign mfg	60	47	45	41	41
339950	Sign mfg	60	47	45	41	41
33999	All other miscellaneous mfg	40	33	36	36	38
339991	Gasket, packing, & sealing device mfg	48	57	45	45	49
339992	Musical instrument mfg	31	26	17	14	17
339993	Fastener, button, needle, & pin mfg	35	55	31	39	39
339994	Broom, brush, & mop mfg	55	48	36	35	36
339995	Burial casket mfg	29	31	46	45	50
339999	All other miscellaneous mfg	39	28	40	^{a45}	^{a43}
5111	Newspaper, periodical, book, and database publishers	56	^{a52}	^{a76}	69	(NA)

¹Excluding NAICS 5111, Newspaper, periodical, book, and database publishers.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹					
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change
						Level			2005	2004	
						2005	2004				
31-33	Manufacturing²	71	70	53	51	1	1	1	1	1	1
	Durable goods industries²	70	68	49	47	1	1	1	1	1	1
	Nondurable goods industries² ..	71	72	59	59	1	1	1	1	1	1
	Advanced processing industries²	70	68	52	49	1	1	1	1	1	1
	Primary processing industries² ..	73	73	58	57	1	1	1	1	1	1
311	Food mfg	73	73	59	61	1	1	1	2	1	2
3111	Animal food mfg	72	75	60	64	4	4	5	3	3	4
31111	Animal food mfg	72	75	60	64	4	4	5	3	3	4
311111	Dog & cat food mfg	70	73	64	65	6	6	2	5	4	2
311119	Other animal food mfg	75	78	56	61	3	3	3	3	5	4
3112	Grain & oilseed milling	81	78	74	72	2	2	3	2	2	3
31121	Flour milling & malt mfg	80	80	73	72	3	4	5	4	3	5
311211	Flour milling	81	81	73	71	4	5	2	5	4	3
311212	Rice milling	74	77	71	74	2	2	1	2	1	1
311213	Malt mfg	91	93	89	93	3	3	1	4	2	2
31122	Starch & vegetable fats & oils mfg	87	85	80	81	1	1	2	4	2	4
311221	Wet corn milling	94	95	93	92	1	1	1	2	2	1
311222	Soybean processing	88	85	76	81	3	3	2	9	3	7
311223	Other oilseed processing	87	78	82	72	1	2	2	1	2	2
311225	Fats & oils refining & blending	73	73	69	68	2	2	2	2	2	2
31123	Breakfast cereal mfg	76	71	68	64	3	4	5	2	3	3
311230	Breakfast cereal mfg	76	71	68	64	3	4	1	2	3	1
3113	Sugar & confectionery product mfg	69	70	55	54	2	2	3	2	2	3
31131	Sugar mfg	92	93	87	88	2	2	2	2	2	2
311311	Sugarcane mills	87	87	83	79	3	3	2	3	2	2
311312	Cane sugar refining	^a 90	^a 89	^a 79	^a 81	1	1	1	1	1	1
311313	Beet sugar mfg	96	99	96	99	3	1	3	4	1	4
31132	Chocolate & confectionery mfg from cacao beans	70	67	62	62	3	4	4	2	3	4
311320	Chocolate & confectionery mfg from cacao beans	70	67	62	62	3	4	2	2	3	2
31133	Confectionery mfg from purchased chocolate	66	68	51	49	3	3	4	3	3	4
311330	Confectionery mfg from purchased chocolate	66	68	51	49	3	3	2	3	3	3
31134	Nonchocolate confectionery mfg	66	^a 65	47	^a 45	4	2	4	3	2	4
311340	Nonchocolate confectionery mfg	66	^a 65	47	^a 45	4	2	2	3	2	3
3114	Fruit & vegetable preserving & specialty food mfg	71	69	62	60	3	3	4	3	3	4
31141	Frozen food mfg	79	78	69	68	2	2	2	3	3	4
311411	Frozen fruit, juice, & vegetable mfg ..	75	73	67	71	3	3	3	4	3	4
311412	Frozen specialty food mfg	83	81	70	66	2	2	2	4	4	3
31142	Fruit & vegetable canning, pickling, & drying	66	64	58	55	4	4	5	4	3	5
311421	Fruit & vegetable canning	56	53	48	44	5	4	3	5	4	3
311422	Specialty canning	84	86	76	81	5	4	2	5	5	2
311423	Dried & dehydrated food mfg	78	77	69	70	3	3	2	3	3	2
3115	Dairy product mfg	71	72	65	65	2	2	2	2	2	2
31151	Dairy product (except frozen) mfg	73	74	68	69	2	2	2	3	2	3
311511	Fluid milk mfg	74	74	67	68	2	2	2	3	3	2
311512	Creamery butter mfg	72	71	70	68	3	4	3	3	4	3
311513	Cheese mfg	78	81	72	75	3	2	4	3	3	4
311514	Dry, condensed, & evaporated dairy product mfg	64	69	63	66	2	3	2	2	3	2
31152	Ice cream & frozen dessert mfg	67	62	55	52	2	3	4	2	3	3
311520	Ice cream & frozen dessert mfg	67	62	55	52	2	3	3	2	3	2
3116	Meat product mfg	81	84	65	65	2	2	2	2	2	3
31161	Animal slaughtering & processing	81	84	65	65	2	2	2	2	2	3
311611	Animal (except poultry) slaughtering ..	76	79	65	62	3	3	2	4	5	5
311612	Meat processed from carcasses	70	77	60	61	3	2	3	3	4	3
311613	Rendering & meat byproduct processing	73	70	67	62	5	3	4	4	3	4
311615	Poultry processing	91	91	69	69	2	2	1	3	3	1
3117	Seafood product preparation & packaging	60	60	46	47	3	3	4	3	2	3
31171	Seafood product preparation & packaging	60	60	46	47	3	3	4	3	2	3
311711	Seafood canning	52	50	35	43	3	5	5	3	4	4
311712	Fresh & frozen seafood processing ..	62	62	48	48	4	3	2	3	2	2
3118	Bakeries & tortilla mfg	72	71	51	61	2	2	3	5	2	5
31181	Bread & bakery product mfg	76	74	48	66	2	2	2	7	2	7
311811	Retail bakeries	74	75	14	61	3	5	3	6	5	7
311812	Commercial bakeries	77	75	70	68	2	2	2	2	2	2
311813	Frozen cakes, pies, & other pastries mfg	72	66	57	54	4	4	3	4	4	2
31182	Cookie, cracker, & pasta mfg	65	66	55	55	5	3	5	4	2	4
311821	Cookie & cracker mfg	63	65	51	53	6	3	4	5	3	3
311822	Flour mixes & dough mfg from purchased flour	70	70	63	59	5	4	2	3	3	3
311823	Dry pasta mfg	70	66	71	66	2	2	1	2	2	1
31183	Tortilla mfg	84	75	73	66	2	5	5	3	3	4
311830	Tortilla mfg	84	75	73	66	2	5	5	3	3	3

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹						
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change	
						Level			2005	2004		
						2005	2004					
311	Food mfg—Con.											
3119	Other food mfg	66	67	53	56	1	1	2	2	2	2	2
31191	Snack food mfg	85	82	75	73	2	3	3	2	2	3	3
311911	Roasted nuts & peanut butter mfg...	73	75	65	68	2	3	3	2	2	2	2
311919	Other snack food mfg	88	84	77	74	3	3	2	3	2	2	2
31192	Coffee & tea mfg	60	67	53	57	5	6	3	6	6	8	8
311920	Coffee & tea mfg	60	67	53	57	5	6	3	6	6	3	3
31193	Flavoring syrup & concentrate mfg	49	50	35	43	1	1	1	1	1	1	1
311930	Flavoring syrup & concentrate mfg ..	49	50	35	43	1	1	1	1	1	2	2
31194	Seasoning & dressing mfg	64	65	53	56	2	2	3	2	2	3	3
311941	Mayonnaise, dressing, & other prepared sauce mfg	69	69	61	60	3	3	1	3	3	1	1
311942	Spice & extract mfg	60	61	48	52	2	2	2	2	2	2	2
31199	All other food mfg	69	72	52	52	4	3	5	4	4	5	5
311991	Perishable prepared food mfg	73	67	57	51	4	4	3	6	6	2	2
311999	All other miscellaneous food mfg	67	74	50	53	5	5	4	4	6	3	3
312	Beverage & tobacco product mfg	69	65	57	53	2	1	2	2	1	2	2
3121	Beverage mfg	67	64	58	55	2	2	3	2	2	3	3
31211	Soft drink & ice mfg	59	56	52	48	3	3	4	4	3	4	4
312111	Soft drink mfg	64	62	56	56	4	4	5	4	3	5	5
312112	Bottled water mfg	^a 42	45	^a 41	27	2	5	5	2	5	4	4
312113	Ice mfg	30	24	24	24	3	3	3	4	3	3	3
31212	Breweries	82	82	82	82	2	2	3	2	2	3	3
312120	Breweries	82	82	82	82	2	2	1	2	2	1	1
31213	Wineries	63	55	58	52	4	5	6	3	5	5	5
312130	Wineries	63	55	58	52	4	5	4	3	5	4	4
31214	Distilleries	68	70	34	35	2	5	5	2	3	4	4
312140	Distilleries	68	70	34	35	2	5	4	2	3	2	2
3122	Tobacco mfg	72	67	57	51	1	1	1	2	2	2	2
31221	Tobacco stemming & redrying	(NA)	64	(NA)	47	(NA)	7	(NA)	(NA)	5	(NA)	(NA)
312210	Tobacco stemming & redrying	(NA)	64	(NA)	47	(NA)	7	(NA)	(NA)	5	(NA)	(NA)
31222	Tobacco product mfg	71	67	56	51	1	1	1	2	2	2	2
312221	Cigarette mfg	71	65	55	49	1	1	1	2	2	1	1
312229	Other tobacco product mfg	74	95	70	79	3	3	3	3	3	3	2
313	Textile mills	69	72	61	65	2	2	2	2	2	2	2
3131	Fiber, yarn, & thread mills	75	80	70	75	2	3	3	3	3	4	4
31311	Fiber, yarn, & thread mills	75	80	70	75	2	3	3	3	3	4	4
313111	Yarn spinning mills	82	87	77	80	3	3	2	4	4	2	2
313112	Yarn texturing, throwing, & twisting mills	68	73	62	^a 69	3	5	4	4	4	4	4
313113	Thread mills	70	^a 67	60	^a 62	5	2	3	3	2	2	2
3132	Fabric mills	69	71	60	64	2	2	3	2	3	3	3
31321	Broadwoven fabric mills	71	78	61	72	3	2	3	3	2	4	4
313210	Broadwoven fabric mills	71	78	61	72	3	2	3	3	2	2	2
31322	Narrow fabric mills & schiffli machine embroidery	68	76	55	56	2	2	3	2	3	4	4
313221	Narrow fabric mills	69	76	56	57	2	3	3	4	4	2	2
313222	Schiffli machine embroidery	^a 63	73	^a 47	55	2	2	2	1	2	2	2
31323	Nonwoven fabric mills	69	65	60	58	4	5	6	5	6	8	8
313230	Nonwoven fabric mills	69	65	60	58	4	5	3	5	6	2	2
31324	Knit fabric mills	63	64	58	59	2	2	3	3	2	3	3
313241	Weft knit fabric mills	^a 68	^a 73	^a 62	^a 71	4	3	2	5	5	2	2
313249	Other knit fabric & lace mills	59	56	54	51	2	2	2	1	2	1	1
3133	Textile & fabric finishing & fabric coating mills	66	70	56	61	3	3	4	2	2	3	3
31331	Textile & fabric finishing mills	64	70	57	63	3	4	5	3	3	4	4
313311	Broadwoven fabric finishing mills	58	67	53	62	5	5	2	4	4	2	2
313312	Textile & fabric finishing mills	73	77	61	63	3	4	4	3	2	2	2
31332	Fabric coating mills	71	70	52	55	3	3	4	3	3	4	4
313320	Fabric coating mills	71	70	52	55	3	3	3	3	3	4	4
314	Textile product mills	72	73	53	57	3	3	4	3	3	4	4
3141	Textile furnishings mills	79	78	62	63	4	4	5	5	4	6	6
31411	Carpet & rug mills	82	82	69	77	6	7	9	8	7	10	10
314110	Carpet & rug mills	82	82	69	77	6	7	2	8	7	5	5
31412	Curtain & linen mills	74	73	51	50	4	3	5	5	4	6	6
314121	Curtain & drapery mills	84	84	46	47	4	4	3	4	4	4	4
314129	Other household textile product mills	72	71	53	51	5	3	3	7	5	5	5
3149	Other textile product mills	62	64	43	48	2	3	4	3	3	4	4
31491	Textile bag & canvas mills	65	72	39	46	3	3	4	5	3	6	6
314911	Textile bag mills	60	71	29	43	6	4	7	11	5	13	13
314912	Canvas & related product mills	^a 67	73	^a 43	46	3	4	4	3	4	4	4
31499	All other textile product mills	61	62	45	49	3	4	5	2	5	5	5
314991	Rope, cordage, & twine mills	73	75	62	60	3	3	2	3	5	5	5
314992	Tire cord & tire fabric mills	91	91	83	86	1	1	1	2	1	1	1
314999	All other miscellaneous textile product mills	57	58	41	46	3	5	5	3	5	5	5
315	Apparel mfg	71	74	48	47	2	2	3	4	3	5	5
3151	Apparel knitting mills	76	73	61	49	2	2	3	2	6	6	6
31511	Hosiery & sock mills	75	71	63	58	3	3	4	3	3	3	3
315111	Sheer hosiery mills	70	62	66	55	3	3	2	3	3	3	3
315119	Other hosiery & sock mills	78	74	62	59	3	4	3	3	3	3	3
31519	Other apparel knitting mills	78	79	56	36	2	2	3	4	10	10	10
315191	Outerwear knitting mills	80	84	53	33	3	3	5	5	10	11	11
315192	Underwear & nightwear knitting mills	75	65	63	52	1	4	4	1	2	2	2

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹							
		2005	2004	2005	2004	Full production			National emergency production				
						Level		2004 to 2005 change	Level		2004 to 2005 change		
						2005	2004		2005	2004			
315	Apparel mfg—Con.												
3152	Cut & sew apparel mfg	70	75	47	47	3	2	3	5	4	6		
31521	Cut & sew apparel contractors	47	50	35	40	3	4	5	3	3	4		
315211	Men's & boys' cut & sew apparel contractors	60	69	33	46	6	7	5	3	6	5		
315212	Women's, girls', & infants' cut & sew apparel contractors	^{a44} 79	45	^{a36} 38	38	3	4	4	3	3	4		
31522	Men's & boys' cut & sew apparel mfg ..	79	84	42	46	7	6	8	10	8	13		
315221	Men's & boys' cut & sew underwear & nightwear mfg	81	^{a81} 81	52	^{a57} 57	6	1	6	5	2	5		
315222	Men's & boys' cut & sew suit, coat, & overcoat mfg	81	79	37	41	10	4	7	5	4	3		
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg	80	^{a73} 73	66	^{a60} 60	6	3	4	10	5	6		
315224	Men's & boys' cut & sew trouser, slack, & jean mfg	77	86	39	45	15	10	17	22	14	19		
315225	Men's & boys' cut & sew work clothing mfg	81	86	36	40	3	3	2	5	6	3		
315228	Men's & boys' cut & sew other outerwear mfg	75	88	53	61	2	2	2	4	4	4		
31523	Women's & girls' cut & sew apparel mfg	79	83	68	56	1	1	2	2	3	3		
315231	Women's & girls' cut & sew lingerie & nightwear mfg	^{a64} 64	^{a96} 96	^{a55} 55	^{a51} 51	1	1	1	1	1	1		
315232	Women's & girls' cut & sew blouse & shirt mfg	^{a89} 89	^{a71} 71	^{a59} 59	^{a55} 55	2	2	1	3	1	3		
315233	Women's & girls' cut & sew dress mfg	^{a82} 82	^{a72} 72	^{a69} 69	^{a39} 39	2	1	2	9	2	7		
315234	Women's & girls' cut & sew suit, coat, skirt mfg	^{a71} 71	^{a82} 82	^{a74} 74	^{a82} 82	2	1	2	3	1	3		
315239	Women's & girls' cut & sew other outerwear mfg	82	92	82	71	1	3	3	1	9	9		
31529	Other cut & sew apparel mfg	^{a72} 72	^{a60} 60	^{a31} 31	^{a30} 30	14	2	14	3	2	3		
315291	Infants' cut & sew apparel mfg	88	^{a88} 88	22	^{a46} 46	1	2	2	2	1	2		
315292	Fur & leather apparel mfg	56	54	34	42	6	5	3	5	4	3		
315299	All other cut & sew apparel mfg	^{a72} 72	^{a58} 58	^{a32} 32	^{a28} 28	16	2	16	3	2	3		
3159	Apparel accessories & other apparel mfg	70	72	43	48	2	2	3	2	2	3		
31599	Apparel accessories & other apparel mfg	70	72	43	48	2	2	3	2	2	3		
315991	Hat, cap, & millinery mfg	67	67	45	43	2	2	1	3	2	2		
315992	Glove & mitten mfg	79	71	51	58	5	6	3	11	7	7		
315993	Men's & boys' neckwear mfg	89	82	74	71	1	3	3	4	4	2		
315999	Other apparel accessories & other apparel mfg	^{a65} 65	71	^{a35} 35	44	4	3	2	2	3	2		
316	Leather & allied product mfg	65	68	42	40	2	2	3	2	2	3		
3161	Leather & hide tanning & finishing	65	71	62	68	5	5	7	5	4	6		
31611	Leather & hide tanning & finishing	65	71	62	68	5	5	7	5	4	6		
316110	Leather & hide tanning & finishing	65	71	62	68	5	5	3	5	4	3		
3162	Footwear mfg	59	62	35	35	3	2	3	3	2	4		
31621	Footwear mfg	59	62	35	35	3	2	3	3	2	4		
316211	Rubber & plastics footwear mfg	57	51	45	40	2	2	1	2	1	1		
316212	House slipper mfg	(D)	(NA)	(D)	(NA)	(D)	(NA)	(D)	(D)	(NA)	(D)		
316213	Men's footwear (except athletic) mfg	57	71	30	38	4	3	3	4	4	2		
316214	Women's footwear (except athletic) mfg	^{a65} 65	^{a56} 56	^{a41} 41	^{a23} 23	2	3	1	5	3	3		
316219	Other footwear mfg	70	60	34	38	3	2	3	1	1	1		
3169	Other leather & allied product mfg	73	72	41	35	3	4	5	3	3	4		
31699	Other leather & allied product mfg	73	72	41	35	3	4	5	3	3	4		
316991	Luggage mfg	77	75	64	48	9	7	4	13	2	12		
316992	Women's handbag & purse mfg	84	75	60	31	1	2	2	7	5	3		
316993	Personal leather good (except women's handbag & purse) mfg ..	^{a41} 41	^{a56} 56	^{a16} 16	^{a17} 17	1	6	6	2	3	3		
316999	All other leather good mfg	82	81	39	47	6	5	2	6	4	4		
321	Wood product mfg	70	73	48	48	2	2	2	2	2	3		
3211	Sawmills & wood preservation	82	83	54	53	2	2	3	3	3	4		
32111	Sawmills & wood preservation	82	83	54	53	2	2	3	3	3	4		
321113	Sawmills	83	85	54	53	2	2	2	3	3	2		
321114	Wood preservation	70	73	54	53	3	2	4	3	4	4		
3212	Veneer, plywood, & engineered wood product mfg	80	78	61	57	4	4	5	9	8	12		
32121	Veneer, plywood, & engineered wood product mfg	80	78	61	57	4	4	5	9	8	12		
321211	Hardwood veneer & plywood mfg	82	79	61	51	5	5	4	6	9	10		
321212	Softwood veneer & plywood mfg	86	78	81	75	6	5	4	6	5	4		
321213	Engineered wood member (except truss) mfg	84	89	65	81	2	2	1	8	3	8		
321214	Truss mfg	81	82	61	60	3	3	4	5	5	4		
321219	Reconstituted wood product mfg	75	72	53	46	7	8	3	17	16	4		
3219	Other wood product mfg	62	67	42	44	2	2	3	2	2	3		
32191	Millwork	66	67	48	45	4	3	5	3	4	4		
321911	Wood window & door mfg	61	62	46	44	5	4	3	3	5	4		
321912	Cut stock, resawing lumber, & planing	75	75	53	54	7	7	2	6	7	3		
321918	Other millwork (including flooring) ..	73	77	48	43	4	4	5	5	6	7		
32192	Wood container & pallet mfg	52	97	34	94	5	4	6	3	6	6		
321920	Wood container & pallet mfg	52	97	34	94	5	4	7	3	6	8		
32199	All other wood product mfg	61	61	37	36	3	3	4	3	2	3		
321991	Manufactured home (mobile home) mfg	71	63	36	34	3	5	5	3	3	3		
321992	Prefabricated wood building mfg	55	66	38	39	6	4	5	5	4	2		
321999	All other miscellaneous wood product mfg	58	56	37	35	5	5	3	5	4	2		

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹					
		2005	2004	2005	2004	Full production			National emergency production		
						Level		2004 to 2005 change	Level		2004 to 2005 change
						2005	2004		2005	2004	
322	Paper mfg	75	77	64	68	2	2	3	2	2	3
3221	Pulp, paper, & paperboard mills	84	90	78	87	3	2	4	4	2	4
32211	Pulp mills	92	93	92	93	2	2	2	2	2	3
322110	Pulp mills	92	93	92	93	2	2	1	2	2	1
32212	Paper mills	80	88	73	84	5	3	5	5	3	6
322121	Paper (except newsprint) mills	80	89	72	84	5	3	5	5	3	5
322122	Newsprint mills	82	81	82	81	15	16	1	15	16	1
32213	Paperboard mills	95	94	93	93	2	2	2	2	2	3
322130	Paperboard mills	95	94	93	93	2	2	2	2	2	2
3222	Converted paper product mfg	68	68	55	57	2	2	3	2	2	3
32221	Paperboard container mfg	68	67	53	57	3	4	5	3	3	4
322211	Corrugated & solid fiber box mfg	65	63	49	54	4	5	5	4	4	4
322212	Folding paperboard box mfg	77	79	66	68	2	3	2	4	3	3
322213	Setup paperboard box mfg	73	77	52	55	5	4	2	4	4	1
322214	Fiber can, tube, drum, & similar products mfg	64	65	45	48	6	6	2	4	4	2
322215	Nonfolding sanitary food container mfg	80	73	78	69	4	5	2	4	4	3
32222	Paper bag & coated & treated paper mfg	68	66	62	58	4	4	6	4	4	5
322221	Coated & laminated packaging paper & plastics film mfg	32	28	30	26	14	9	6	12	7	5
322222	Coated & laminated paper mfg	74	72	66	64	4	4	3	5	5	3
322223	Plastics, foil, & coated paper bag mfg	78	74	72	68	3	3	2	4	4	2
322224	Uncoated paper & multiwall bag mfg	67	70	60	51	6	6	2	6	7	6
322225	Laminated aluminum foil mfg for flexible packaging uses	77	77	75	70	3	2	2	2	2	2
322226	Surface-coated paperboard mfg	66	78	64	73	5	2	5	4	4	5
32223	Stationery product mfg	72	75	55	62	2	2	3	4	4	5
322231	Die-cut paper & paperboard office supplies mfg	74	75	63	63	3	3	2	6	6	3
322232	Envelope mfg	79	77	59	60	3	3	4	6	5	3
322233	Stationery, tablet, & related product mfg	57	70	42	63	5	3	4	6	4	6
32229	Other converted paper product mfg	68	68	52	54	3	3	4	3	3	4
322291	Sanitary paper product mfg	68	72	59	62	3	3	3	4	4	2
322299	All other converted paper product mfg	67	59	41	40	6	5	4	4	4	2
323	Printing & related support activities	73	75	54	51	2	2	2	2	3	4
3231	Printing & related support activities	73	75	54	51	2	2	2	2	3	4
32311	Printing	73	75	55	51	2	2	2	2	4	4
323110	Commercial lithographic printing	79	81	62	53	3	2	2	3	6	6
323111	Commercial gravure printing	65	74	58	67	7	6	2	7	7	2
323112	Commercial flexographic printing	71	76	55	52	4	6	4	5	4	3
323113	Commercial screen printing	66	65	35	42	5	6	3	6	4	6
323114	Quick printing	73	75	46	46	2	3	3	4	6	6
323115	Digital printing	75	68	52	54	4	3	3	7	2	6
323116	Manifold business form printing	55	63	48	50	5	5	3	5	4	3
323117	Book printing	^{a77}	82	^{a65}	77	1	3	3	2	6	6
323118	Blankbook, looseleaf binder, & device mfg	^{a59}	^{a43}	^{a45}	^{a34}	8	5	6	7	4	5
323119	Other commercial printing	73	82	58	46	3	3	4	5	8	9
32312	Support activities for printing	73	71	45	46	3	2	3	6	6	8
323121	Tradebinding & related work	64	75	33	40	4	5	4	9	11	4
323122	Prepress services	80	69	57	51	3	1	3	5	1	5
324	Petroleum & coal products mfg	76	86	73	81	7	3	7	7	3	7
3241	Petroleum & coal products mfg	76	86	73	81	7	3	7	7	3	7
32411	Petroleum refineries	78	93	77	92	8	3	9	9	3	9
324110	Petroleum refineries	78	93	77	92	8	3	9	9	3	10
32412	Asphalt paving, roofing, & saturated materials mfg	66	68	52	55	6	6	9	8	8	11
324121	Asphalt paving mixture & block mfg	51	56	36	42	9	8	5	8	9	5
324122	Asphalt shingle & coating materials mfg	86	88	82	83	2	3	3	3	4	4
32419	Other petroleum & coal products mfg	71	64	61	54	4	7	8	4	5	6
324191	Petroleum lubricating oil & grease mfg	69	62	59	51	4	7	7	4	5	5
324199	All other petroleum & coal products mfg	83	79	72	73	4	6	4	9	8	7
325	Chemical mfg	68	67	57	56	2	2	3	2	2	2
3251	Basic chemical mfg	74	76	67	67	2	3	3	2	2	3
32511	Petrochemical mfg	85	92	82	92	3	1	3	3	1	3
325110	Petrochemical mfg	85	92	82	92	3	1	3	3	1	3
32512	Industrial gas mfg	78	76	74	69	2	2	2	2	3	3
325120	Industrial gas mfg	78	76	74	69	2	2	2	2	3	3
32513	Dye & pigment mfg	79	79	75	74	2	2	2	2	2	2
325131	Inorganic dye & pigment mfg	81	79	79	77	3	2	2	3	2	2
325132	Synthetic organic dye & pigment mfg	75	77	66	69	2	2	2	2	3	3
32518	Other basic inorganic chemical mfg	64	64	51	51	5	6	7	4	4	5
325181	Alkalies & chlorine mfg	85	94	77	93	1	1	1	1	1	1
325182	Carbon black mfg	79	^{a92}	80	^{a90}	1	1	1	1	1	1
325188	All other basic inorganic chemical mfg	60	59	47	46	5	6	2	4	4	2
32519	Other basic organic chemical mfg	73	81	68	74	1	1	2	2	3	4
325191	Gum & wood chemical mfg	67	69	64	59	2	2	2	3	6	4
325192	Cyclic crude & intermediate mfg	75	88	75	88	1	1	1	1	1	1
325193	Ethyl alcohol mfg	94	96	94	94	2	2	1	2	2	1
325199	All other basic organic chemical mfg	72	80	66	71	2	2	1	2	4	3

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹					
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change
						Level			2005	2004	
						2005	2004				
325	Chemical mfg—Con.										
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg	79	87	74	82	1	1	2	2	2	2
32521	Resin & synthetic rubber mfg	79	87	75	82	2	2	2	2	2	3
325211	Plastics material & resin mfg	79	87	75	84	2	2	2	2	2	2
325212	Synthetic rubber mfg	81	86	72	72	1	2	2	2	3	2
32522	Artificial & synthetic fibers & filaments mfg	78	88	67	84	1	1	1	1	1	1
325221	Cellulosic organic fiber mfg	^a 64	83	^a 36	71	1	2	3	1	1	3
325222	Noncellulosic organic fiber mfg	80	89	75	85	1	1	1	1	1	1
3253	Pesticide, fertilizer, & other agricultural chemical mfg	73	64	44	44	3	3	4	3	3	4
32531	Fertilizer mfg	74	70	63	62	2	3	3	3	3	4
325311	Nitrogenous fertilizer mfg	85	74	72	74	2	7	7	3	7	6
325312	Phosphatic fertilizer mfg	83	93	83	91	3	1	3	3	1	3
325314	Fertilizer (mixing only) mfg	59	55	46	42	3	3	3	4	3	3
32532	Pesticide & other agricultural chemical mfg	73	61	37	38	4	4	5	3	3	4
325320	Pesticide & other agricultural chemical mfg	73	61	37	38	4	4	2	3	3	1
3254	Pharmaceutical & medicine mfg	69	68	60	57	2	2	2	2	2	3
32541	Pharmaceutical & medicine mfg	69	68	60	57	2	2	2	2	2	3
325411	Medicinal & botanical mfg	60	67	48	47	4	4	3	4	4	3
325412	Pharmaceutical preparation mfg	70	68	62	58	2	2	2	3	2	2
325413	In-vitro diagnostic substance mfg	67	65	50	44	3	2	2	3	3	4
325414	Biological product (except diagnostic) mfg	63	64	61	60	2	2	2	2	2	1
3255	Paint, coating, & adhesive mfg	66	66	48	47	2	2	3	2	2	3
32551	Paint & coating mfg	66	66	49	48	2	2	3	2	2	3
325510	Paint & coating mfg	66	66	49	48	2	2	2	2	2	2
32552	Adhesive mfg	67	66	47	47	3	3	5	6	6	8
325520	Adhesive mfg	67	66	47	47	3	3	2	6	6	2
3256	Soap, cleaning compound, & toilet preparation mfg	52	51	43	43	7	6	9	5	4	7
32561	Soap & cleaning compound mfg	64	63	54	54	1	2	2	2	1	2
325611	Soap & other detergent mfg	64	67	58	60	2	2	2	2	2	2
325612	Polish & other sanitation good mfg	65	58	48	47	2	2	1	3	2	3
325613	Surface active agent mfg	61	54	54	44	4	6	4	4	6	4
32562	Toilet preparation mfg	45	44	37	37	10	9	13	7	6	9
325620	Toilet preparation mfg	45	44	37	37	10	9	2	7	6	2
3259	Other chemical product mfg	74	70	56	53	2	2	2	2	3	3
32591	Printing ink mfg	55	59	32	40	4	5	6	3	3	4
325910	Printing ink mfg	55	59	32	40	4	5	2	3	3	3
32592	Explosives mfg	66	56	38	37	2	8	8	4	3	5
325920	Explosives mfg	66	56	38	37	2	8	8	4	3	5
32599	All other chemical product & preparation mfg	77	72	62	56	2	2	2	2	4	4
325991	Custom compounding of purchased resin	71	71	57	59	2	2	2	3	3	2
325992	Photographic film, paper, plate, & chemical mfg	89	82	79	76	2	2	1	4	2	2
325998	All other miscellaneous chemical product & preparation mfg	71	65	51	44	2	3	3	2	5	5
326	Plastics & rubber products mfg	75	76	63	59	2	2	2	2	3	3
3261	Plastics product mfg	75	74	62	57	2	2	2	2	3	4
32611	Unsupported plastics film, sheet, & bag mfg	79	80	71	73	3	2	4	2	2	3
326111	Unsupported plastics bag mfg	73	73	65	66	4	4	3	4	4	4
326112	Unsupported plastics packaging film & sheet mfg	82	82	72	73	11	4	11	4	3	3
326113	Unsupported plastics film & sheet (except packaging) mfg	82	84	74	78	3	3	3	3	3	3
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg	76	69	71	62	3	3	4	3	3	5
326121	Unsupported plastics profile shape mfg	70	60	65	54	3	4	3	4	4	3
326122	Plastics pipe & pipe fitting mfg	87	85	82	79	4	3	3	5	5	3
32613	Laminated plastics plate, sheet, & shape mfg	77	75	60	59	2	2	3	3	2	4
326130	Laminated plastics plate, sheet, & shape mfg	77	75	60	59	2	2	2	3	2	3
32614	Polystyrene foam product mfg	84	78	59	56	5	5	7	10	8	13
326140	Polystyrene foam product mfg	84	78	59	56	5	5	5	10	8	8
32615	Urethane & other foam product (except polystyrene) mfg	71	74	54	53	5	5	7	4	4	6
326150	Urethane & other foam product (except polystyrene) mfg	71	74	54	53	5	5	4	4	4	3
32616	Plastics bottle mfg	83	75	80	73	2	8	8	3	8	8
326160	Plastics bottle mfg	83	75	80	73	2	8	8	3	8	8
32619	Other plastics product mfg	72	73	59	52	2	2	3	3	5	5
326191	Plastics plumbing fixture mfg	66	67	40	45	4	4	3	6	7	6
326192	Resilient floor covering mfg	74	59	66	53	2	4	5	2	4	4
326199	All other plastics product mfg	73	73	60	53	2	3	2	3	5	5
3262	Rubber product mfg	77	82	64	68	3	2	3	3	2	4
32621	Tire mfg	81	90	70	77	4	2	4	3	3	4
326211	Tire mfg (except retreading)	82	92	76	85	4	2	4	4	3	5
326212	Tire retreading	76	69	33	32	3	3	3	4	4	2
32622	Rubber & plastics hoses & belting mfg	79	84	64	71	5	4	7	6	5	7
326220	Rubber & plastics hoses & belting mfg	79	84	64	71	5	4	4	6	5	4
32629	Other rubber product mfg	72	75	58	60	4	3	5	5	3	6
326291	Rubber product mfg for mechanical use	69	72	59	60	5	4	3	5	5	2
326299	All other rubber product mfg	75	78	57	59	5	5	4	7	4	8

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹					
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		
						Level			2005	2004	2004 to 2005 change
						2005	2004				
327	Nonmetallic mineral product mfg	72	70	45	47	2	2	3	4	2	4
3271	Clay product & refractory mfg	78	79	63	63	2	1	2	3	3	4
32711	Pottery, ceramics, & plumbing fixture mfg	72	74	58	63	2	2	3	3	3	4
327111	Vitreous china plumbing fixture & bathroom accessories mfg	83	84	86	83	1	1	1	1	1	1
327112	Vitreous china, fine earthenware, & other pottery product mfg	68	72	51	55	3	3	2	5	6	2
327113	Porcelain electrical supply mfg	65	68	48	55	4	3	2	3	3	3
32712	Clay building material & refractories mfg	83	82	65	64	2	2	3	4	4	5
327121	Brick & structural clay tile mfg	94	95	82	82	3	3	2	9	9	5
327122	Ceramic wall & floor tile mfg	81	79	64	60	3	2	3	6	8	2
327123	Other structural clay product mfg	82	79	79	75	2	4	4	2	5	4
327124	Clay refractory mfg	66	67	48	45	6	4	5	5	4	3
327125	Nonclay refractory mfg	78	77	54	58	3	4	1	8	9	3
3272	Glass & glass product mfg	78	80	55	57	3	2	3	7	6	10
32721	Glass & glass product mfg	78	80	55	57	3	2	3	7	6	10
327211	Flat glass mfg	86	88	85	85	2	2	2	2	2	2
327212	Other pressed & blown glass & glassware mfg	83	84	72	70	4	2	4	20	4	20
327213	Glass container mfg	92	91	89	88	2	1	2	1	1	2
327215	Glass product mfg made of purchased glass	70	72	39	42	4	4	5	8	8	2
3273	Cement & concrete product mfg	65	62	35	38	3	3	5	4	3	5
32731	Cement mfg	92	93	92	92	2	2	3	2	2	3
327310	Cement mfg	92	93	92	92	2	2	2	2	2	2
32732	Ready-mix concrete mfg	52	48	22	26	5	5	6	4	3	5
327320	Ready-mix concrete mfg	52	48	22	26	5	5	3	4	3	4
32733	Concrete pipe, brick, & block mfg	74	71	50	46	2	2	3	3	4	5
327331	Concrete block & brick mfg	71	72	50	48	3	2	3	4	3	3
327332	Concrete pipe mfg	79	69	51	44	2	3	2	3	7	6
32739	Other concrete product mfg	75	76	56	55	3	3	4	4	4	5
327390	Other concrete product mfg	75	76	56	55	3	3	2	4	4	3
3274	Lime & gypsum product mfg	87	86	79	78	3	3	4	4	4	6
32741	Lime mfg	88	90	81	80	2	2	2	1	3	3
327410	Lime mfg	88	90	81	80	2	2	2	1	3	2
32742	Gypsum product mfg	87	85	78	78	4	4	5	5	5	7
327420	Gypsum product mfg	87	85	78	78	4	4	2	5	5	2
3279	Other nonmetallic mineral product mfg	77	72	56	52	3	3	4	4	3	5
32791	Abrasive product mfg	73	67	50	45	7	6	10	9	7	11
327910	Abrasive product mfg	73	67	50	45	7	6	4	9	7	4
32799	All other nonmetallic mineral product mfg	78	74	58	54	3	3	4	5	3	5
327991	Cut stone & stone product mfg	68	61	41	38	6	7	5	10	4	9
327992	Ground or treated mineral & earth mfg	75	71	62	61	2	4	4	2	6	6
327993	Mineral wool mfg	94	85	85	77	4	5	4	7	7	4
327999	All other miscellaneous nonmetallic mineral product mfg	66	75	43	44	6	3	6	4	4	4
331	Primary metal mfg	79	74	69	62	1	1	2	2	2	3
3311	Iron & steel mills & ferroalloy mfg	88	85	82	79	2	3	3	2	3	4
33111	Iron & steel mills & ferroalloy mfg	88	85	82	79	2	3	3	2	3	4
331111	Iron & steel mills	88	85	82	79	2	3	2	3	3	3
331112	Electrometallurgical ferroalloy product mfg	92	^a 90	90	^a 86	2	1	1	3	2	2
3312	Steel product mfg from purchased steel	71	68	58	59	2	2	2	2	2	3
33121	Iron & steel pipes & tubes mfg from purchased steel	67	64	51	52	2	3	4	3	3	4
331210	Iron & steel pipes & tubes mfg from purchased steel	67	64	51	52	2	3	3	3	3	3
33122	Rolling & drawing of purchased steel	74	71	64	64	2	1	2	3	2	3
331221	Cold-rolled steel shape mfg	72	67	63	63	2	1	4	4	2	3
331222	Steel wire drawing	76	76	64	66	3	2	2	4	3	2
3313	Alumina & aluminum production & processing	82	85	77	74	3	2	3	4	5	6
33131	Alumina & aluminum production & processing	82	85	77	74	3	2	3	4	5	6
331311	Alumina refining	91	93	91	93	2	2	1	2	2	1
331312	Primary aluminum production	84	92	84	88	9	3	7	9	4	5
331314	Secondary smelting & alloying of aluminum	79	77	75	75	3	5	3	4	5	3
331315	Aluminum sheet, plate, & foil mfg	86	90	80	82	3	2	3	2	2	3
331316	Aluminum extruded product mfg	76	77	67	57	5	4	5	8	12	14
331319	Other aluminum rolling & drawing	75	81	68	68	5	5	7	4	7	10
3314	Nonferrous metal (except aluminum) production & processing	74	69	61	55	3	2	4	5	3	5
33141	Nonferrous metal (except aluminum) smelting & refining	70	70	59	57	4	5	6	11	7	12
331411	Primary smelting & refining of copper	66	64	65	61	1	1	1	1	1	1
331419	Other nonferrous metal primary smelting & refining	75	74	54	55	8	8	4	19	10	17
33142	Copper rolling, drawing, extruding, & alloying	80	78	73	71	3	3	4	4	4	5
331421	Copper rolling, drawing, & extruding	79	76	71	71	4	4	4	7	6	9
331422	Copper wire (except mechanical) drawing	81	80	74	71	5	4	4	4	3	3
331423	Secondary smelting, refining, & alloying of copper	85	86	77	71	2	1	2	2	2	3

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹						
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change	
						Level			2005	2004		
						2005	2004					
331	Primary metal mfg—Con.											
3314	Nonferrous metal (except aluminum) production & processing—Con.											
33149	Other nonferrous metal rolling, drawing, extruding, & alloying	71	61	52	44	5	4	6	6	5	8	
331491	Other nonferrous metal rolling, drawing, & extruding	77	68	52	43	5	5	3	9	7	3	
331492	Other nonferrous metal secondary smelting, refining, & alloying	65	55	53	46	9	5	5	9	4	6	
3315	Foundries	70	64	56	49	2	2	3	4	4	5	
33151	Ferrous metal foundries	72	68	59	54	4	3	5	6	5	8	
331511	Iron foundries	69	66	56	51	5	4	3	8	7	3	
331512	Steel investment foundries	72	74	66	65	2	2	2	2	3	1	
331513	Steel foundries (except investment) ..	83	70	65	59	3	6	4	6	6	5	
33152	Nonferrous metal foundries	66	60	52	44	2	2	3	3	4	5	
331521	Aluminum die-casting foundries	69	65	61	54	2	2	1	3	2	2	
331522	Nonferrous (except aluminum) die-casting foundries	62	49	48	41	6	3	5	4	3	4	
331524	Aluminum foundries (except die-casting)	67	63	48	38	4	3	5	6	9	7	
331525	Copper foundries (except die-casting)	54	51	39	34	4	4	3	3	3	3	
331528	Other nonferrous foundries (except die-casting)	79	76	64	62	4	4	3	8	9	3	
332	Fabricated metal product mfg	68	66	49	47	1	1	1	1	1	1	
3321	Forging & stamping	63	62	45	46	2	2	3	2	2	3	
33211	Forging & stamping	63	62	45	46	2	2	3	2	2	3	
332111	Iron & steel forging	73	69	49	57	4	3	2	6	4	6	
332112	Nonferrous forging	73	68	65	60	3	3	1	3	3	1	
332114	Custom roll forming	65	64	51	47	3	4	4	4	4	3	
332115	Crown & closure mfg	59	59	56	54	4	4	1	4	3	1	
332116	Metal stamping	58	59	37	40	3	4	4	3	2	2	
332117	Powder metallurgy part mfg	70	67	59	57	3	3	2	3	2	2	
3322	Cutlery & handtool mfg	64	66	52	52	3	2	3	2	2	3	
33221	Cutlery & handtool mfg	64	66	52	52	3	2	3	2	2	3	
332211	Cutlery & flatware (except precious) mfg	^a 60	63	^a 56	59	4	4	2	4	3	2	
332212	Hand & edge tool mfg	64	65	50	50	4	3	2	2	2	2	
332213	Saw blade & handsaw mfg	70	77	49	55	3	7	2	5	6	2	
332214	Kitchen utensil, pot, & pan mfg	64	65	60	51	4	2	2	2	3	4	
3323	Architectural & structural metals mfg	67	63	46	43	2	2	3	2	2	2	
33231	Plate work & fabricated structural product mfg	72	68	47	43	2	2	3	2	2	3	
332311	Prefabricated metal building & component mfg	64	64	49	47	3	3	3	3	4	2	
332312	Fabricated structural metal mfg	73	70	46	42	3	3	3	3	3	2	
332313	Plate work mfg	78	67	50	44	3	3	3	5	2	5	
33232	Ornamental & architectural metal products mfg	64	59	46	43	2	3	4	3	2	3	
332321	Metal window & door mfg	67	54	50	44	4	6	5	3	4	4	
332322	Sheet metal work mfg	61	60	44	44	3	4	3	4	4	3	
332323	Ornamental & architectural metal work mfg	67	66	45	40	3	3	3	3	4	3	
3324	Boiler, tank, & shipping container mfg ...	72	69	56	54	2	3	3	2	2	2	
33241	Power boiler & heat exchanger mfg ...	66	70	47	50	2	2	3	2	3	3	
332410	Power boiler & heat exchanger mfg ...	66	70	47	50	2	2	3	2	3	3	
33242	Metal tank (heavy gauge) mfg	71	67	50	46	2	2	2	2	2	2	
332420	Metal tank (heavy gauge) mfg	71	67	50	46	2	2	2	2	2	2	
33243	Metal can, box, & other metal container (light gauge) mfg	74	70	63	62	3	4	5	3	3	4	
332431	Metal can mfg	82	79	76	75	3	3	3	4	2	3	
332439	Other metal container mfg	60	52	44	41	4	8	5	3	5	4	
3325	Hardware mfg	69	68	47	49	3	3	5	4	4	6	
33251	Hardware mfg	69	68	47	49	3	3	5	4	4	6	
332510	Hardware mfg	69	68	47	49	3	3	5	4	4	4	
3326	Spring & wire product mfg	65	65	48	50	3	2	4	2	2	3	
33261	Spring & wire product mfg	65	65	48	50	3	2	4	2	2	3	
332611	Spring (heavy gauge) mfg	60	57	45	39	4	4	3	6	5	2	
332612	Spring (light gauge) mfg	67	67	42	53	3	3	2	4	3	4	
332618	Other fabricated wire product mfg ...	65	65	50	50	4	3	2	3	2	2	
3327	Machine shops, turned product, & screw, nut, & bolt mfg	70	71	46	43	2	2	2	2	3	3	
33271	Machine shops	73	75	48	48	2	3	4	3	4	4	
332710	Machine shops	73	75	48	48	2	3	3	3	4	3	
33272	Turned product & screw, nut, & bolt mfg	66	65	43	36	2	2	2	2	4	5	
332721	Precision turned product mfg	67	66	40	30	2	2	2	3	5	5	
332722	Bolt, nut, screw, rivet, & washer mfg.	65	65	48	48	2	2	2	2	2	1	
3328	Coating, engraving, heat treating, & allied activities	72	67	61	54	3	3	4	3	3	4	
33281	Coating, engraving, heat treating, & allied activities	72	67	61	54	3	3	4	3	3	4	
332811	Metal heat treating	85	83	71	76	2	1	1	4	2	4	
332812	Metal coating/engraving (exc jewelry/silverware)/allied services	72	62	67	51	4	5	5	4	5	5	
332813	Electroplating, plating, polishing, anodizing, & coloring	66	67	51	51	4	4	3	4	5	3	

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹						
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change	
						Level			2005	2004		
						2005	2004					
332	Fabricated metal product mfg—Con.											
3329	Other fabricated metal product mfg	69	66	51	49	1	1	2	1	1	2	2
33291	Metal valve mfg	67	65	53	51	2	2	3	2	2	3	3
332911	Industrial valve mfg	63	61	49	47	4	5	3	4	3	3	3
332912	Fluid power valve & hose fitting mfg	71	71	55	54	3	2	2	2	2	2	2
332913	Plumbing fixture fitting & trim mfg	64	65	51	50	4	3	2	3	3	2	2
332919	Other metal valve & pipe fitting mfg	74	63	66	55	3	3	3	2	4	4	4
33299	All other fabricated metal product mfg	70	67	49	48	2	1	2	2	1	2	2
332991	Ball & roller bearing mfg	83	78	78	67	3	3	4	5	3	6	6
332992	Small arms ammunition mfg	78	71	48	37	4	3	2	5	4	1	1
332993	Ammunition (except small arms) mfg	70	58	36	37	2	1	2	2	3	2	2
332994	Small arms mfg	63	64	54	55	5	3	2	4	2	2	2
332995	Other ordnance & accessories mfg	68	^a 56	50	^a 41	2	1	2	2	1	2	2
332996	Fabricated pipe & pipe fitting mfg	75	73	53	53	3	3	2	4	4	3	3
332997	Industrial pattern mfg	68	70	47	49	3	4	3	4	4	2	2
332998	Enameled iron & metal sanitary ware mfg	62	72	45	55	3	2	4	5	5	3	3
332999	All other miscellaneous fabricated metal product mfg	65	64	42	43	2	2	2	2	2	2	2
333	Machinery mfg	67	66	48	47	1	1	1	1	1	1	1
3331	Agriculture, construction, & mining machinery mfg	73	72	53	53	2	2	2	2	2	3	3
33311	Agricultural implement mfg	68	74	46	52	2	3	3	3	3	4	4
333111	Farm machinery & equipment mfg	70	80	47	58	2	2	2	3	3	3	3
333112	Lawn & garden tractor & home lawn & garden equipment mfg	63	60	43	42	6	5	2	6	4	2	2
33312	Construction machinery mfg	75	68	59	53	3	3	4	3	3	4	4
333120	Construction machinery mfg	75	68	59	53	3	3	2	3	3	2	2
33313	Mining & oil & gas field machinery mfg	79	76	60	59	2	2	2	3	2	3	3
333131	Mining machinery & equipment mfg	77	74	63	61	4	3	2	4	3	3	3
333132	Oil & gas field machinery & equipment mfg	80	76	59	58	2	2	1	3	3	2	2
3332	Industrial machinery mfg	57	64	44	46	2	2	2	2	2	2	2
33321	Sawmill & woodworking machinery mfg	74	70	47	40	4	4	6	6	5	7	7
333210	Sawmill & woodworking machinery mfg	74	70	47	40	4	4	2	6	5	2	2
33322	Plastics & rubber industry machinery mfg	62	62	43	42	2	2	3	3	4	5	5
333220	Plastics & rubber industry machinery mfg	62	62	43	42	2	2	2	3	4	4	4
33329	Other industrial machinery mfg	56	64	44	47	2	2	2	2	2	3	3
333291	Paper industry machinery mfg	69	71	54	58	5	4	2	5	5	2	2
333292	Textile machinery mfg	52	46	38	35	3	3	2	2	2	2	2
333293	Printing machinery & equipment mfg	67	67	46	38	4	3	3	5	5	2	2
333294	Food product machinery mfg	71	73	40	40	3	3	3	4	4	4	4
333295	Semiconductor machinery mfg	49	58	45	54	2	2	2	2	3	3	3
333298	All other industrial machinery mfg	64	67	42	46	3	3	3	5	3	5	5
3333	Commercial & service industry machinery mfg	72	67	51	45	2	2	3	2	2	3	3
33331	Commercial & service industry machinery mfg	72	67	51	45	2	2	3	2	2	3	3
333311	Automatic vending machine mfg	53	61	46	36	4	6	4	4	3	4	4
333312	Commercial laundry, drycleaning, & pressing machine mfg	78	81	61	62	1	1	1	3	3	1	1
333313	Office machinery mfg	^a 78	79	^a 42	57	2	2	2	4	4	4	4
333314	Optical instrument & lens mfg	68	70	51	55	4	5	3	3	4	4	4
333315	Photographic & photocopying equipment mfg	85	41	55	37	6	2	6	11	2	11	11
333319	Other commercial & service industry machinery mfg	73	73	53	43	3	3	2	4	4	4	4
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg	66	61	50	42	3	3	4	3	3	3	3
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg	66	61	50	42	3	3	4	3	3	3	3
333411	Air purification equipment mfg	71	65	52	50	4	2	4	5	4	4	4
333412	Industrial & commercial fan & blower mfg	65	64	52	45	3	3	2	3	3	2	2
333414	Heating equipment (except warm air furnaces) mfg	65	62	37	39	1	2	1	2	2	1	1
333415	AC & warm air heating & commercial/industrial refig equip mfg	66	60	53	42	4	4	2	4	3	4	4
3335	Metalworking machinery mfg	68	66	47	44	1	1	2	1	1	2	2
33351	Metalworking machinery mfg	68	66	47	44	1	1	2	1	1	2	2
333511	Industrial mold mfg	71	73	51	54	3	3	2	3	3	3	3
333512	Machine tool (metal cutting types) mfg	66	61	47	43	5	5	3	5	5	3	3
333513	Machine tool (metal forming types) mfg	57	61	42	33	2	3	3	3	6	5	5
333514	Special die & tool, die set, jig, & fixture mfg	71	67	44	41	2	2	2	2	2	2	2
333515	Cutting tool & machine tool accessory mfg	68	68	51	51	2	2	2	3	2	2	2
333516	Rolling mill machinery & equipment mfg	72	67	43	36	10	9	2	16	12	5	5
333518	Other metalworking machinery mfg	61	56	41	33	3	4	4	3	3	2	2

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹						
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production			
						Level			2005	2004	2004 to 2005 change	
						2005	2004					
333	Machinery mfg—Con.											
3336	Engine, turbine, & power transmission equipment mfg	68	65	52	52	2	1	2	3	2	4	
33361	Engine, turbine, & power transmission equipment mfg	68	65	52	52	2	1	2	3	2	4	
333611	Turbine & turbine generator set unit mfg	^a 53	^a 58	^a 50	^a 55	3	1	3	3	1	3	
333612	Speed changer, industrial high-speed drive, & gear mfg	72	64	52	42	3	2	2	5	4	3	
333613	Mechanical power transmission equipment mfg	75	75	56	52	4	3	3	3	3	2	
333618	Other engine equipment mfg	74	73	52	49	2	3	2	5	5	2	
3339	Other general-purpose machinery mfg	66	66	46	45	1	1	2	2	1	2	
33391	Pump & compressor mfg	64	68	46	46	2	3	3	3	4	4	
333911	Pump & pumping equipment mfg	71	72	51	49	3	3	2	3	3	3	
333912	Air & gas compressor mfg	60	58	40	37	3	4	2	5	6	4	
333913	Measuring & dispensing pump mfg	^a 42	^a 82	^a 40	^a 77	1	1	1	1	1	1	
33392	Material handling equipment mfg	64	65	45	43	3	3	3	2	2	3	
333921	Elevator & moving stairway mfg	76	73	56	52	3	4	2	4	4	2	
333922	Conveyor & conveying equipment mfg	58	63	38	42	4	4	3	3	3	2	
333923	Overhead traveling crane, hoist, & monorail system mfg	83	73	57	44	2	3	4	3	4	5	
333924	Industrial truck, tractor, trailer, & stacker machinery mfg	59	60	46	41	3	3	2	3	3	3	
33399	All other general-purpose machinery mfg	68	66	46	46	2	2	2	2	2	2	
333991	Power-driven handtool mfg	^a 60	^a 61	^a 45	^a 53	3	3	2	3	4	2	
333992	Welding & soldering equipment mfg	75	76	57	59	2	1	2	2	2	2	
333993	Packaging machinery mfg	70	66	44	38	3	3	3	3	2	3	
333994	Industrial process furnace & oven mfg	60	69	41	40	7	3	7	3	3	3	
333995	Fluid power cylinder & actuator mfg	69	67	41	42	2	3	2	3	5	3	
333996	Fluid power pump & motor mfg	66	65	45	49	3	4	2	4	3	3	
333997	Scale & balance (except laboratory) mfg	67	57	47	41	2	5	7	3	3	4	
333999	All other miscellaneous general-purpose machinery mfg	68	66	47	49	4	3	3	4	3	2	
334	Computer & electronic product mfg	69	67	51	45	1	1	1	1	1	2	
3341	Computer & peripheral equipment mfg	66	^a 71	51	^a 46	1	1	2	2	3	4	
33411	Computer & peripheral equipment mfg	66	^a 71	51	^a 46	1	1	2	2	3	4	
334111	Electronic computer mfg	^a 66	^a 76	^a 50	^a 45	1	2	2	3	4	4	
334112	Computer storage device mfg	61	57	56	47	2	3	2	3	3	3	
334113	Computer terminal mfg	^a 67	87	^a 41	39	1	1	1	1	1	1	
334119	Other computer peripheral equipment mfg	70	69	53	50	4	3	2	4	3	2	
3342	Communications equipment mfg	^a 58	^a 56	^a 41	^a 36	2	2	3	3	2	3	
33421	Telephone apparatus mfg	^a 57	^a 58	^a 39	^a 36	4	2	4	5	1	5	
334210	Telephone apparatus mfg	^a 57	^a 58	^a 39	^a 36	4	2	4	5	1	5	
33422	Radio & TV broadcasting & wireless communications equipment mfg	59	54	44	37	3	3	4	3	3	4	
334220	Radio & TV broadcasting & wireless communications equipment mfg	59	54	44	37	3	3	3	3	3	3	
33429	Other communications equipment mfg	60	63	38	37	2	2	3	3	2	4	
334290	Other communications equipment mfg	60	63	38	37	2	2	2	3	2	2	
3343	Audio & video equipment mfg	76	71	50	47	1	1	1	1	1	2	
33431	Audio & video equipment mfg	76	71	50	47	1	1	1	1	1	2	
334310	Audio & video equipment mfg	76	71	50	47	1	1	1	1	1	1	
3344	Semiconductor & other electronic component mfg	79	74	64	60	1	1	2	2	2	3	
33441	Semiconductor & other electronic component mfg	79	74	64	60	1	1	2	2	2	3	
334411	Electron tube mfg	43	47	32	33	1	1	1	1	1	1	
334412	Bare printed circuit board mfg	59	56	42	36	2	2	2	2	2	2	
334413	Semiconductor & related device mfg	88	83	80	79	2	2	2	3	3	4	
334414	Electronic capacitor mfg	58	56	47	41	31	2	31	23	3	23	
334415	Electronic resistor mfg	56	50	35	27	3	2	2	4	2	2	
334416	Electronic coil, transformer, & other inductor mfg	60	64	32	33	13	3	13	7	3	7	
334417	Electronic connector mfg	61	60	27	42	4	3	3	7	3	9	
334418	Printed circuit assembly (electronic assembly) mfg	71	65	52	47	2	2	2	3	3	1	
334419	Other electronic component mfg	63	61	43	36	3	2	2	3	2	3	
3345	Navigational, measuring, medical, & control instruments mfg	65	63	45	37	2	2	2	1	2	3	
33451	Navigational, measuring, medical, & control instruments mfg	65	63	45	37	2	2	2	1	2	3	
334510	Electromedical & electrotherapeutic apparatus mfg	75	73	47	50	2	2	2	2	3	3	
334511	Search, detection, navigation, & guidance instrument mfg	62	56	48	34	2	2	2	1	4	4	
334512	Automatic environmental control mfg	68	66	38	37	6	4	6	4	4	3	
334513	Industrial process control instrument mfg	70	64	41	40	3	4	4	4	3	2	
334514	Totalizing fluid meter & counting device mfg	^a 67	71	^a 51	55	3	3	2	3	4	2	
334515	Electricity measuring & testing instrument mfg	53	57	41	37	5	4	2	3	3	2	
334516	Analytical laboratory instrument mfg	81	84	39	23	2	2	2	3	4	4	
334517	Irradiation apparatus mfg	79	75	49	45	2	3	3	2	3	3	
334518	Watch, clock, & part mfg	56	82	33	68	1	8	8	2	12	12	

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹					
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change
						Level			2005	2004	
						2005	2004				
334	Computer & electronic product mfg—Con.										
3345	Navigational, measuring, medical, & control instruments mfg—Con.										
33451	Navigational, measuring, medical, & control instruments mfg—Con.										
334519	Other measuring & controlling device mfg	63	67	38	44	3	3	2	4	4	2
3346	Mfg & reproducing magnetic & optical media	76	78	69	73	1	1	1	1	1	2
33461	Mfg & reproducing magnetic & optical media	76	78	69	73	1	1	1	1	1	2
334611	Software reproducing	^a 83	^a 58	^a 68	^a 47	1	2	1	1	1	1
334612	Prerecorded CD (except software), tape, & record reproducing	77	^a 83	70	^a 78	2	1	1	2	1	1
334613	Magnetic & optical recording media mfg	72	75	66	71	2	1	2	2	1	2
335	Electrical equipment, appliance, & component mfg	68	69	50	49	2	1	2	2	2	2
3351	Electric lighting equipment mfg	63	63	39	43	2	2	3	2	2	3
33511	Electric lamp bulb & part mfg	62	71	46	53	3	4	5	2	2	3
335110	Electric lamp bulb & part mfg	62	71	46	53	3	4	2	2	2	1
33512	Lighting fixture mfg	63	61	38	41	3	3	4	2	2	3
335121	Residential electric lighting fixture mfg	62	55	25	28	5	3	2	3	3	2
335122	Commercial/industrial/institutional electric lighting fixture mfg	61	63	40	44	3	3	3	2	2	2
335129	Other lighting equipment mfg	66	63	50	51	6	5	2	5	4	5
3352	Household appliance mfg	74	76	55	58	2	2	2	3	3	4
33521	Small electrical appliance mfg	67	75	49	67	3	2	3	5	3	5
335211	Electric housewares & household fan mfg	63	75	53	67	4	3	4	4	4	4
335212	Household vacuum cleaner mfg	74	75	44	67	3	3	3	9	3	2
33522	Major appliance mfg	76	77	56	56	2	2	3	3	4	4
335221	Household cooking appliance mfg	57	61	35	37	4	4	4	3	6	4
335222	Household refrigerator & home freezer mfg	92	92	73	81	2	3	2	4	2	3
335224	Household laundry equipment mfg ..	79	77	64	55	2	2	1	6	6	1
335228	Other major household appliance mfg	78	77	60	59	5	5	1	7	8	3
3353	Electrical equipment mfg	^a 64	69	^a 50	46	2	2	3	2	2	3
33531	Electrical equipment mfg	^a 64	69	^a 50	46	2	2	3	2	2	3
335311	Power, distribution, & specialty transformer mfg	66	63	60	52	2	2	2	2	3	3
335312	Motor & generator mfg	^a 59	75	^a 53	41	1	4	4	1	2	2
335313	Switchgear & switchboard apparatus mfg	69	66	54	51	4	3	2	5	5	2
335314	Relay & industrial control mfg	65	68	44	45	5	4	4	5	3	4
3359	Other electrical equipment & component mfg	71	67	52	51	3	2	4	3	3	4
33591	Battery mfg	75	67	60	53	3	4	5	4	3	5
335911	Storage battery mfg	80	66	63	51	6	6	7	7	6	6
335912	Primary battery mfg	70	69	57	56	1	3	3	1	2	2
33592	Communication & energy wire & cable mfg	78	76	68	67	8	7	10	6	6	8
335921	Fiber optic cable mfg	67	^a 61	56	^a 56	4	3	1	3	2	2
335929	Other communication & energy wire mfg	80	78	70	69	9	8	3	7	7	2
33593	Wiring device mfg	66	65	42	43	4	2	4	5	4	6
335931	Current-carrying wiring device mfg ..	63	66	36	39	5	3	5	5	5	2
335932	Noncurrent-carrying wiring device mfg	71	61	58	51	1	3	2	3	2	3
33599	All other electrical equipment & component mfg	70	64	53	50	5	5	7	7	4	8
335991	Carbon & graphite product mfg	68	75	64	66	7	7	7	8	5	6
335999	All other miscellaneous electrical equipment & component mfg	70	61	51	47	7	5	6	7	5	5
336	Transportation equipment mfg	73	70	50	47	1	1	1	2	2	2
3361	Motor vehicle mfg	81	81	49	48	3	2	3	4	3	4
33611	Automobile & light duty motor vehicle mfg	81	82	50	48	3	3	3	4	3	5
336111	Automobile mfg	89	82	53	48	4	3	4	10	2	9
336112	Light truck & utility vehicle mfg	78	81	48	48	3	3	4	3	3	4
33612	Heavy duty truck mfg	74	71	48	48	2	2	3	3	4	5
336120	Heavy duty truck mfg	74	71	48	48	2	2	3	3	4	3
3362	Motor vehicle body & trailer mfg	65	67	26	24	2	2	3	6	6	8
33621	Motor vehicle body & trailer mfg	65	67	26	24	2	2	3	6	6	8
336211	Motor vehicle body mfg	76	77	52	52	2	2	2	2	2	2
336212	Truck trailer mfg	75	70	47	41	12	4	12	4	4	3
336213	Motor home mfg	45	54	24	28	3	3	4	3	2	3
336214	Travel trailer & camper mfg	69	67	15	12	3	3	3	6	5	2
3363	Motor vehicle parts mfg	73	74	56	58	1	1	1	1	1	2
33631	Motor vehicle gasoline engine & engine parts mfg	71	71	53	53	1	2	2	2	2	3
336311	Carburetor, piston, piston ring, & valve mfg	85	83	75	75	2	2	2	2	1	2
336312	Gasoline engine & engine parts mfg ..	70	70	52	52	1	2	2	2	2	2
33632	Motor vehicle electrical & electronic equipment mfg	75	74	62	62	2	1	2	2	2	2
336321	Vehicle lighting equipment mfg	75	71	55	51	3	3	3	4	4	2
336322	Other motor vehicle electrical & electronic equipment mfg	75	75	64	64	2	2	2	2	2	2

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹						
		2005	2004	2005	2004	Full production		2004 to 2005 change	National emergency production		2004 to 2005 change	
						Level			2005	2004		
						2005	2004					
336	Transportation equipment mfg—Con.											
3363	Motor vehicle parts mfg—Con.											
33633	Motor vehicle steering & suspension component (except spring) mfg	77	74	63	64	2	2	2	3	2	3	
336330	Motor vehicle steering & suspension component (except spring) mfg	77	74	63	64	2	2	1	3	2	2	2
33634	Motor vehicle brake system mfg	71	71	54	55	2	2	2	2	1	2	2
336340	Motor vehicle brake system mfg	71	71	54	55	2	2	2	2	1	2	2
33635	Motor vehicle transmission & power train parts mfg	79	81	56	64	1	1	2	3	2	3	
336350	Motor vehicle transmission & power train parts mfg	79	81	56	64	1	1	1	3	2	3	
33636	Motor vehicle seating & interior trim mfg	72	72	49	49	3	4	5	3	3	4	
336360	Motor vehicle seating & interior trim mfg	72	72	49	49	3	4	4	3	3	3	3
33637	Motor vehicle metal stamping	68	70	53	54	3	3	4	3	2	3	3
336370	Motor vehicle metal stamping	68	70	53	54	3	3	2	3	2	3	3
33639	Other motor vehicle parts mfg	72	74	56	61	2	2	3	3	2	3	3
336391	Motor vehicle air-conditioning mfg	73	70	61	58	2	1	2	3	2	2	2
336399	All other motor vehicle parts mfg	72	74	56	61	2	2	1	3	3	2	2
3364	Aerospace product & parts mfg	68	57	52	43	1	1	1	1	1	1	1
33641	Aerospace product & parts mfg	68	57	52	43	1	1	1	1	1	1	1
336411	Aircraft mfg	64	52	48	38	1	1	1	1	1	1	2
336412	Aircraft engine & engine parts mfg ..	71	64	59	55	2	2	2	2	3	1	
336413	Other aircraft part & auxiliary equipment mfg	69	62	47	42	1	2	2	2	2	1	1
336414	Guided missile & space vehicle mfg ..	83	^a 63	82	^a 62	1	1	1	1	1	1	1
336415	Guided missile & space vehicle propulsion unit & parts mfg	56	49	44	32	1	1	1	2	1	2	
336419	Other guided missile & space vehicle parts & auxiliary equip mfg	63	58	50	48	1	1	1	1	1	1	1
3365	Railroad rolling stock mfg	79	69	62	55	5	5	7	4	2	4	4
33651	Railroad rolling stock mfg	79	69	62	55	5	5	7	4	2	4	4
336510	Railroad rolling stock mfg	79	69	62	55	5	5	2	4	2	2	2
3366	Ship & boat building	72	^a 71	54	^a 37	2	2	3	2	3	3	3
33661	Ship & boat building	72	^a 71	54	^a 37	2	2	3	2	3	3	3
336611	Ship building & repairing	^a 80	^a 76	^a 63	^a 34	1	3	3	3	2	2	2
336612	Boat building	60	62	42	46	3	3	2	3	4	2	2
3369	Other transportation equipment mfg	65	77	48	49	4	2	4	2	2	2	2
33699	Other transportation equipment mfg	65	77	48	49	4	2	4	2	2	2	2
336991	Motorcycle, bicycle, & parts mfg	98	^a 95	65	^a 49	1	1	1	3	2	1	
336992	Military armored vehicle, tank, & tank component mfg	^a 43	65	^a 38	48	3	4	5	2	5	6	
336999	All other transportation equipment mfg	60	70	44	48	6	2	6	2	2	2	2
337	Furniture & related product mfg	70	69	42	44	2	3	3	2	2	3	
3371	Household & institutional furniture & kitchen cabinet mfg	73	73	42	48	2	5	5	3	4	4	
33711	Wood kitchen cabinet & counter top mfg	80	92	45	70	3	6	6	4	15	15	
337110	Wood kitchen cabinet & counter top mfg	80	92	45	70	3	6	6	4	15	14	
33712	Household & institutional furniture mfg ..	69	66	40	40	3	6	6	3	3	4	
337121	Upholstered household furniture mfg	86	88	54	56	5	4	2	7	6	4	
337122	Nonupholstered wood household furniture mfg	60	54	36	36	5	8	7	5	5	4	
337124	Metal household furniture mfg	66	64	29	28	6	5	4	3	4	4	
337125	Household furniture (except wood & metal) mfg	65	60	41	39	9	10	3	5	5	4	
337127	Institutional furniture mfg	66	76	40	37	6	5	5	5	4	3	
337129	Wood television, radio, & sewing machine cabinet mfg	58	60	20	23	3	6	3	2	4	2	
3372	Office furniture (including fixtures) mfg ...	64	61	40	39	3	2	3	3	3	4	
33721	Office furniture (including fixtures) mfg ..	64	61	40	39	3	2	3	3	3	4	
337211	Wood office furniture mfg	71	65	41	38	6	5	4	6	4	3	
337212	Custom architectural woodwork & millwork mfg	68	73	36	41	5	5	5	4	4	3	
337214	Office furniture (except wood) mfg ..	64	58	48	41	4	3	5	5	4	2	
337215	Showcase, partition, shelving, & locker mfg	59	60	36	36	5	4	4	5	4	3	
3379	Other furniture related product mfg	75	69	49	43	3	4	5	3	3	4	
33791	Mattress mfg	79	76	49	47	4	5	6	4	4	5	
337910	Mattress mfg	79	76	49	47	4	5	3	4	4	3	
33792	Blind & shade mfg	68	58	48	37	5	5	7	5	5	7	
337920	Blind & shade mfg	68	58	48	37	5	5	3	5	5	5	
339	Miscellaneous mfg	69	67	43	41	2	2	2	2	2	3	
3391	Medical equipment & supplies mfg	72	73	48	48	2	2	3	3	3	3	
33911	Medical equipment & supplies mfg	72	73	48	48	2	2	3	3	3	3	
339111	Laboratory apparatus & furniture mfg	67	71	35	34	2	2	2	6	6	3	
339112	Surgical & medical instrument mfg ..	70	70	51	49	3	3	2	4	4	5	
339113	Surgical appliance & supplies mfg ..	71	73	46	46	3	3	2	4	4	3	
339114	Dental equipment & supplies mfg	75	76	39	50	3	2	3	5	3	5	
339115	Ophthalmic goods mfg	78	75	66	66	3	2	2	4	3	2	
339116	Dental laboratories	87	90	55	56	2	2	2	3	3	4	

See footnotes at end of table.

Table 2. Capacity Utilization Rates by Industry: Fourth Quarters 2005 and 2004—Con.

[For meaning of abbreviations and symbols, see introductory text]

NAICS code	Industry	Full production		National emergency production		Standard errors ¹							
		2005	2004	2005	2004	Full production			National emergency production				
						Level		2004 to 2005 change	Level		2004 to 2005 change		
						2005	2004		2005	2004			
339	Miscellaneous mfg—Con.												
3399	Other miscellaneous mfg	66	61	38	35	2	2	3	3	2	4		
33991	Jewelry & silverware mfg	66	64	38	28	4	3	4	3	2	3		
339911	Jewelry (except costume) mfg	64	61	37	25	4	4	2	3	2	3		
339912	Silverware & plated ware mfg.....	63	67	38	42	6	6	5	9	4	7		
339913	Jewelers' material & lapidary work mfg	68	^a 79	37	^a 44	3	2	2	2	2	2		
339914	Costume jewelry & novelty mfg	77	^a 66	44	^a 36	7	5	4	8	4	5		
33992	Sporting & athletic goods mfg	61	61	38	35	4	4	5	4	3	4		
339920	Sporting & athletic goods mfg	61	61	38	35	4	4	2	4	3	2		
33993	Doll, toy, & game mfg	65	^a 52	15	^a 34	5	3	6	7	5	9		
339931	Doll & stuffed toy mfg	^a 50	^a 35	^a 17	^a 32	7	4	5	5	3	3		
339932	Game, toy, & children's vehicle mfg .	67	^a 54	14	^a 34	6	4	4	8	5	9		
33994	Office supplies (except paper) mfg	73	64	49	42	2	3	3	4	4	5		
339941	Pen & mechanical pencil mfg.....	70	56	45	32	3	4	2	4	3	3		
339942	Lead pencil & art good mfg.....	74	70	45	46	3	2	3	8	10	5		
339943	Marking device mfg	72	69	55	56	2	3	2	5	5	2		
339944	Carbon paper & inked ribbon mfg ...	78	79	70	77	3	4	1	3	3	3		
33995	Sign mfg.....	82	71	60	47	4	4	5	6	4	7		
339950	Sign mfg.....	82	71	60	47	4	4	3	6	4	4		
33999	All other miscellaneous mfg	64	57	40	33	4	4	5	3	3	4		
339991	Gasket, packing, & sealing device mfg	71	74	48	57	3	3	2	6	5	5		
339992	Musical instrument mfg	80	84	31	26	5	4	5	11	9	3		
339993	Fastener, button, needle, & pin mfg .	63	62	35	55	4	4	2	10	5	10		
339994	Broom, brush, & mop mfg	74	67	55	48	10	9	3	8	8	5		
339995	Burial casket mfg	33	43	29	31	7	7	1	4	3	2		
339999	All other miscellaneous mfg	62	51	39	28	5	5	5	5	3	5		
5111	Newspaper, periodical, book, and database publishers.....	72	^a 76	56	^a 52	3	2	3	3	2	3		

¹A description of the standard error is given in Appendix B, "Qualifications of the Data" of the report.

²Excluding NAICS 5111, Newspaper, periodical, book, and database publishers.

Appendix A.

MQ-C1 Report Form and Instructions

The MQ-C1 form and instructions are shown on the following pages.

FORM **MQ-C1**
(11-17-2005)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

**SURVEY OF PLANT CAPACITY UTILIZATION
FOURTH QUARTER 2005 (October–December)**

NOTICE – YOUR RESPONSE IS REQUIRED BY LAW (Title 13, United States Code). By section 9 of the same law, **YOUR REPORT IS CONFIDENTIAL.** It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report refer to the ID NUMBER (ID) (11 digits)

IMPORTANT

PLEASE READ INSTRUCTIONS AND DEFINITIONS BEFORE COMPLETING FORM

Please correct errors in name, address, and ZIP Code. ENTER street and number if not shown.

NOTE — If you need a copy of the instructions, please visit www.census.gov/cir/www/mqc1pag2.html

Item 1 OPERATIONAL STATUS

Mark (X) ONE box which best describes this establishment at the end of 2005. See instructions for reporting.

- 12 In operation – Complete items 2 through 6.
- 13 Temporarily idle – See instruction sheet – Complete items 2–6.
- 14 Sold or leased to another company See instruction sheet
- 15 Permanently ceased operations – See instruction sheet.

} Give date sold or closed	16	Month	Year

Item 2 VALUE OF PRODUCTION

ACTUAL PRODUCTION

4th QTR. 2005 4th QTR. 2004

\$	Mil.	Thou.	Mil.	Thou.
----	------	-------	------	-------

a. Report market value of **actual production** for the 4th quarter of 2005 23

FULL PRODUCTION CAPABILITY

4th QTR. 2005 4th QTR. 2004

\$	Mil.	Thou.	Mil.	Thou.
----	------	-------	------	-------

b. Estimate the market value of production of this plant as if it had been operating at **full production capability** in the 4th quarter of 2005. 34
Assume:

- only machinery and equipment **in place and ready to operate.**
- normal downtime.
- Labor, materials, utilities, etc. **ARE FULLY AVAILABLE.**
- the number of shifts, hours of operation, and overtime pay that can be **sustained** under **normal** conditions and a **realistic** work schedule in the long run.
- the **same product mix** as in the fourth quarter.

c. Divide your **actual production estimate** by your **full production estimate.** Multiply this ratio by 100 to get a percentage. Enter this percentage in the box.

Capacity Utilization:

Is this a reasonable estimate of your sustainable capacity use in the 4th quarter?

Yes No – Please review your full production estimate

d. If your estimate of 2005 fourth quarter **full production capability** has changed compared to 2004, mark (X) the primary reasons.

- 35 Building capital expenditures
- 36 Machinery capital expenditures – Include new, replaced, or enhanced machinery
- 37 Building retirements
- 38 Machinery retirements
- 39 Price changed but product mix is the same
- 40 Revised estimation assumption with no change in plant or operations
- 41 Change in method of operation
- 42 Change in product mix or product specifications
- 43 Change in material input
- 44 Other – Specify
- 49

Item 3 WORK PATTERNS OF FOURTH QUARTER OPERATIONS 2005

Column (1-3) – Report work patterns for **each shift of actual operations** in the **4th quarter of 2005**.
 If the plant did not operate a second or third shift, do not complete the corresponding columns.
 Column (4) – Report work patterns as if the plant operated at **full production capability** as defined in item 2b.

	Actual Operations									Full Production Capability			
	Shift one			Shift two			Shift three			Number of shifts per day			
	(1)	(2)	(3)							(4)			
90													
a. Days per week in operation	91												
b. Plant hours per week in operation	92												
c. Weeks in operation in the quarter	93												
d. Total number of production workers	94												
e. Temporary production workers included in line d (not on the payroll and hired through temporary agencies or as their own agent; see instructions)	95												
		Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.
f. Total hours worked by production workers	96												
g. Hours worked by temporary production workers (included in line f)	97												
h. Overtime hours worked by production workers (included in line f)	98												

Item 4 FOURTH QUARTER ACTUAL OPERATIONS VS FULL PRODUCTION CAPABILITY FOR 2005

- a. If this plant's **actual** production in the 4th quarter was **less** than **full production capability**, mark (X) the primary reasons:
- | | | |
|--|--|--|
| 51 <input type="checkbox"/> Not most profitable to operate at full production capability | 55 <input type="checkbox"/> Lack of sufficient fuel or electric energy | 60 <input type="checkbox"/> Strike or work stoppage |
| 52 <input type="checkbox"/> Insufficient supply of materials | 56 <input type="checkbox"/> Equipment limitations | 61 <input type="checkbox"/> Seasonal operations |
| 53 <input type="checkbox"/> Insufficient orders | 57 <input type="checkbox"/> Storage limitations | 62 <input type="checkbox"/> Environmental restrictions |
| 54 <input type="checkbox"/> Insufficient supply of local labor force/skills | 58 <input type="checkbox"/> Logistics/transportation constraints | 68 <input type="checkbox"/> Other – <i>Specify</i> ↘ |
| | 59 <input type="checkbox"/> Sufficient inventory of finished goods on hand | 69 <input type="text"/> |
- b. If **actual** operations in the 4th quarter were **less** than **full production capability**, how quickly could you increase to that level, if necessary? Assume sufficient demand for your product. Mark (X) the shortest amount of time you would require.
- 71 Less than 3 months 72 3 to 6 months 73 7 to 12 months 74 More than one year

Item 5 NATIONAL EMERGENCY PRODUCTION

NATIONAL EMERGENCY PRODUCTION

	4th QTR. 2005		4th QTR. 2004	
	Mil.	Thou.	Mil.	Thou.
a. Estimate the value of production for this plant as if it had been operating under national emergency conditions in the 4th quarter of 2005.				
99				

Assume:

- **full** use of **all** your machinery and equipment, including that requiring reconditioning.
- **plant production as close to 168 hours per week as possible**, including extra shifts.
- **minimal** downtime.
- **funding, labor, materials, components, utilities, etc., are fully available to you and your suppliers.**
- your product mix **is** permitted to change.
- you can sell **all** of your output

See the instruction sheet for additional guidance.

- b. If **actual** operations in the 4th quarter were **less** than **national emergency production**, how quickly could you increase to the national emergency production level if given emergency priority by the government? Mark (X) the shortest amount of time you would require.

- 82 Less than 3 months 83 3 to 6 months 84 7 to 12 months 85 More than one year

911 Remarks

Item 6 PERSON TO BE CONTACTED REGARDING THIS REPORT – Print name and telephone number.

Name	Telephone →	Area code	Number
	()		

RETURN COMPLETED FORM TO

**U.S. CENSUS BUREAU
 1201 EAST 10TH STREET
 JEFFERSONVILLE, IN 47132-0001**

FORM MQ-C1 (11-17-2005)

**INSTRUCTIONS FOR
THE SURVEY OF PLANT CAPACITY UTILIZATION
DURING THE FOURTH QUARTER 2005**

	Page
General Instructions	2
Item by Item Instructions	2
Item 1 – Operational Status	2
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AUTHORITY AND CONFIDENTIALITY – Your response is required by law (Title 13, United States Code). By section 9 of the same law, your report is confidential. It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information, and may be used only for statistical purposes. The law also provides that copies of your report retained in your files are immune from legal process. Response is not required to any information collection form unless it displays a valid approval number from the Office of Management and Budget. This 8-digit number appears in the upper right corner of the form.

PUBLIC REPORTING

Public reporting burden for this collection of information is estimated to average 2.25 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Paperwork Project 0607-0175, U.S. Census Bureau, 4700 Silver Hill Road, Stop 1500, Washington, DC 20233-1500. You may e-mail comments to Paperwork@census.gov; use "Paperwork Project 0607-0175" as the subject.

WHO SHOULD REPORT?

This report covers the manufacturing plant or printing facility named in the address box of the form. If your company operates more than one location, **REPORT ONLY FOR THOSE PLANTS SELECTED FOR THIS SAMPLE SURVEY**. A report form and instruction sheet are enclosed for each plant selected.

Since some of the information necessary to complete this form may not be in your records, **CONSULT THE PLANT MANAGER** on questions regarding full production capability and emergency production.

WHAT TO REPORT?

This survey form primarily asks for 3 levels of operating capability of this plant in the fourth quarter of 2005:

- (1)** the market value of actual goods produced;
- (2)** the value of products that could have been produced if the plant was operating at full capacity in the fourth quarter; and
- (3)** the value of products that could have been produced if required in a national emergency.

If 2004 data are NOT printed on the form, you do not need to enter data for that period.

WHEN TO REPORT

Complete the survey form and return it in the enclosed return envelope by the date printed on the top of the form. If you have misplaced the return envelope, mail the completed form to:

U.S. Census Bureau
1201 East 10th Street
Jeffersonville, IN 47132-0001

HOW TO REPORT

Answer all questions on the report form. Follow the instructions for each item given on this sheet.

Report market value of production figures in **thousands of dollars**. For example, if value of production is 1,125,788 dollars, enter the figure as follows:

Mil.	Thou.
1	126

NAME AND ADDRESS

Review the name and address of this plant printed in the top right corner of the report form. Line out any errors and make any necessary corrections or additions in the address box.

Item 1 – OPERATIONAL STATUS

Report the status of operations at this plant at the end of 2005 by marking the appropriate box. If:

In Operation – Complete items 2 through 6.

Idle Plants – Complete items 2 through 6.

- a.** If this plant was temporarily idle during the **entire fourth quarter** report actual operations as zero where appropriate.
- b.** If this plant was temporarily idle during **only part of the fourth quarter** report the actual operations for the time the plant was in operation.

Item 1 – OPERATIONAL STATUS – Continued

For both cases, report full production and emergency production capabilities based on the plant's **peak** quarterly production during 2005.

Sold or Leased Plant – If this plant was sold or leased to another company, indicate the month and year this action took place.

- a. If you still maintain records for this plant, complete items 2 through 6.
- b. If you do not have 4th quarter information about this plant, complete item 6 only and return the form.

Permanently Ceased Operations – Indicate the month and year when operations ceased at this plant. If the plant was in operation at ANY time during the fourth quarter of 2005, complete items 2 through 6. Report full production and emergency production capabilities, as if the plant operated the **entire** quarter.

SPECIAL NOTE:

Seasonal Operations

- a. If this plant is usually temporarily idle during the fourth quarter *due to seasonal factors*, report as instructed for idle plants.
- b. If this plant was not temporarily idle during the fourth quarter, but its operations vary substantially from quarter to quarter, *due to seasonal factors*, complete items 2 through 6, and report full production and national emergency production capabilities based on the plant's **peak** quarterly production during the year.

For both types of seasonal operations, check "Seasonal Operations" in item 4a if actual operations are less than full production capability.

Item 2 – VALUE OF PRODUCTION

Item 2a – MARKET VALUE OF PRODUCTION

Report the value of production based on estimated sales price(s) of what was produced during the fourth quarter, not fourth quarter sales. If production at this plant consists of only interplant transfers, use method (2) below to calculate market value of production.

Three methods – to estimate market value of goods produced during the fourth quarter:

- (1) Estimate the sales price(s) of item(s) produced, then multiply the sales price(s) by the total number of items produced during the fourth quarter.
- (2) Use book figures of actual production costs plus an estimate of markup to cover overhead and profit.

- (3) Use fourth quarter value of shipments f.o.b. (freight on board) from the plant (including the value of interplant transfers within a company, in addition to direct costs of production, but excluding resales and miscellaneous receipts) plus any additions or subtractions to the finished stock of inventories present before the fourth quarter (excluding materials and supplies). [Value of production = value of shipments + value of ending inventory – value of beginning inventory].

SPECIAL NOTE:

Do **not** include manufacturing contracted to others. If you contract out all of your manufacturing, please state this in the "Remarks" section, complete item 6, and return the form.

Job shops and custom orders: For actual production, report value of work done in the fourth quarter of 2005.

Publishing/printing plants: For actual production, report your printing sales only (NOT advertising sales) for the location named in the address box of the form. Do not include any printing that is contracted out. **If you do not perform any printing activities, please indicate so in the remarks section on the back of the form.**

Item 2b – FULL PRODUCTION CAPABILITY

Read the definition and assumptions regarding full production capability. Estimate your market value of products that would have been produced if the plant was operating at full capacity in the fourth quarter. Use one of the two methods suggested below or your own computations.

Full Production Capability – The maximum level of production that this establishment could reasonably expect to attain under **normal** and **realistic** operating conditions fully utilizing the machinery and equipment in place. In estimating market value at full production capability, consider the following:

- Assume **only** the machinery and equipment in place and ready to operate will be utilized. Do not include facilities or equipment that would require extensive reconditioning before they can be made operable.
- Assume **normal** downtime, maintenance, repair, and cleanup. If full production requires additional shifts or hours of operation, then appropriate downtime should be considered in the estimate.
- Assume number of shifts, hours of plant operations, and overtime pay that can be sustained under **normal** conditions and a **realistic** work schedule.
- Assume labor, materials, utilities, etc. are fully available.
- Assume a product mix that was **typical** or representative of your production during the fourth quarter. If your plant is subject to short-run variation assume the product mix of the current period.

Item 2b – FULL PRODUCTION CAPABILITY – Continued

- Do not assume increased use of productive facilities outside the plant for services (such as contracting out subassembly work) in excess of the proportion that would be normal during the fourth quarter.

SPECIAL NOTE:

Job shops and custom orders: For full production, estimate the market value of work that you could have accomplished under sustainable operating conditions and if you had sufficient orders.

Publishing/printing plants: For full production, report printing sales for this location as if it were running at peak circulation.

Two Methods to estimate market value of production when operating at full production capability:

- (1) If you have a reliable or accurate estimate of your plant's sustainable capacity utilization rate: **Divide** your market value of production at **actual** operations (item 2c) by your current **rate of capacity** utilization (in decimal form). For example, if your value of actual operations for the fourth quarter is \$1,200,000 and your plant is currently at 80% capacity, divide \$1,200,000 by 0.80 for a full production capability of \$1,500,000.

$$\frac{\text{Actual Value of Production}}{\text{Capacity Utilization Rate}} = \text{Market value of production at Full Capacity}$$

Your plant's capacity utilization rate should be based on a capacity output measure that your plant could have sustained under **normal**, not emergency, conditions.

- (2) For each product, estimate the number of items that could have been produced if operating at full production, as defined by the assumptions given. Multiply the number of items produced by its sales price (or market value). For example, if you can produce 25,000 items in the fourth quarter, under full production criteria, and the sales price (market value) for each item is \$4.50, then multiply 25,000 times \$4.50 for a full production capability of \$112,500.

$$\text{Number of items produced} \times \text{Sales price (Market Value)} = \text{Market value of production at Full Capacity}$$

If producing **more than one product**, **sum** the market values of production at full production estimated for each product (assuming the same product mix) for a **total** value of full production for the plant.

Enter your estimate for value of full production in item 2b.

Item 2c – CAPACITY UTILIZATION

- (1) Divide your estimate for actual production (Item 2a) by full production (Item 2b) capability. Multiply this number by 100. Enter this percentage in the box.
- (2) **Is this a reasonable percentage of your sustainable capacity use in the 4th quarter of 2005?** Mark (X) yes or no. If no, please review your full production capability estimate. If yes, continue with the next item.

Item 2d – Comparing full production capability between fourth quarters of 2004 and 2005

If the value of full production for the fourth quarter of 2005 differs from 2004, mark (X) the primary reasons for the change.

Item 3 – WORK PATTERNS OF FOURTH QUARTER OPERATIONS

Actual Operations – In columns 1 through 3, report work patterns for the following characteristics covering each *production shift* of actual operations in the 4th quarter of 2004. Report based on the average number of shifts per day in the fourth quarter. Do not consider maintenance, administrative, or support operations as additional shifts. Do not consider overtime hours as additional shifts. If the plant did not operate a second or third shift, do not complete the corresponding columns.

a. Days per week in operation – For each shift, report the typical number of days per week in operation for the fourth quarter. If your plant has departments or assembly lines that operate varied number of days *within a shift*, report days per week in operation for the department operating the greatest number of days per week for that shift. For example, if one production line operates 7 days per week during the first shift and a second production line operates 5 days per week during the first shift, report that the first shift operates 7 days per week.

b. Plant hours per week – For each shift, report the typical number of **hours the plant was in production** during a single week. If your plant has departments or assembly lines that operate at varied periods of time *within a shift*, report hours per week in operation for the production department operating the greatest number of hours per week for that shift. **Do not report the number of person hours worked (see below).**

c. Weeks in operation in the quarter – For each shift, report the total number of weeks the plant operated during the fourth quarter. NOTE: The fourth quarter of the year covers 13 weeks.

d. Total number of production workers – For each shift, report the total number of production workers at this establishment, including both permanent (payroll) and temporary employees who were paid during the pay period which included November 12. Include all persons on paid sick leave, paid holidays, paid vacation during this pay period.

NOTE: **Include** workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power plant), record keeping, and other closely associated services. Include truck drivers delivering ready-mixed concrete.

Item 3 – WORK PATTERNS OF FOURTH QUARTER OPERATIONS – Continued

Exclude nonproduction personnel, including those engaged in supervision above line-supervisor level, sales, sales delivery (truck drivers and helpers), advertising, credit, collection, installation and servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional and technical.

- e. Number of temporary production workers –** For each shift, report the number of *temporary production workers* **not** on the payroll (hired through temporary help agencies or as their own agent) and working during the pay period including November 12. Include temporary production workers who perform the same tasks as listed above. **Do not include part-time workers.**
- f. Total hours worked by production workers –** For each shift, report number of hours worked by all production workers in the fourth quarters (both those on the payroll and temporary production workers). Include overtime hours, but excluded paid vacations, holidays, and sick leave.
- g. Hours worked by temporary production workers –** For each shift, report number of hours worked by temporary production workers included in the total hours worked by production workers (line f). Include overtime hours worked by temporary production workers.
- h. Overtime hours worked by production workers –** For each shift, report number of overtime hours included in the total hours worked by production workers (line f).

Full production capability – In column 4, report work patterns for each characteristic as if the plant operated at full production capability in the 4th quarter of 2005. Use the criteria defined for Full Production Capability in item 2b.

Enter the number of shifts per day at full capacity in the box provided in the upper right hand corner. **See examples of responses to item 3 on page 6.**

Item 4 – FOURTH QUARTER ACTUAL OPERATIONS VS. FULL PRODUCTION CAPABILITY

Compare the actual value of production in the fourth quarter of 2005 to the estimated value of full production.

Item 4a – Mark (X) reasons why your actual operations were less than the estimated value of full production capability, if appropriate.

Item 4b – Select a time period that would have been reasonable to increase output to full production level.

Item 5 – NATIONAL EMERGENCY PRODUCTION

Read the definition and assumptions regarding national emergency production. Estimate your value of production under national emergency conditions for the fourth quarter of 2005. Use your own computations or methods similar to those described for estimating full production capability.

SPECIAL NOTE: Your value of production at national emergency levels should be **greater than or equal to** your value of full production capability. If it is less than your full production capability, please review your computations.

National Emergency Production – The maximum level of production that this plant could expect to attain and sustain for one year or more under national emergency conditions.

National emergency conditions are situations, such as a military mobilization or natural disaster, which are likely to create widespread excess demand requiring additional work shifts.

For example, military mobilization may require increased production of food, clothing, building supplies, and conversion of plants to produce alternative products in addition to traditional defense hardware. Devastation from natural disasters, such as hurricanes, floods, earthquakes, or fire, may require increased production of similar goods as well as increased production to compensate for plants damaged or destroyed.

In estimating national emergency production, consider the following:

- Assume full use of **all** machinery and equipment in place (including machinery and equipment that would require extensive reconditioning before they could be made operable).
- Assume minimal downtime and **multi-work shift** operations.
- Assume plant production as close to 168 hours per week as possible, including extra shifts (e.g., operating 7 days per week, 24 hours per day less minimal downtime).
- Assume overtime pay, availability of labor, materials, utilities, etc., are **fully available** to you and your suppliers.
- Assume you can sell all your output.
- Assume your product mix can change.
- Assume increased use of productive facilities outside the plant for services (such as contracting out subassembly work) in excess of the proportion that would be normal during the fourth quarter.

SPECIAL NOTE

Jobs shops and custom orders: For national emergency production, estimate the market value of work that could have been done if you received additional orders assuming maximum number of employees working multiple shifts that the facility can accommodate.

Publishing/printing plants: For national emergency production, report value of printing if operating machinery as close to 168 hours/week as possible.

Item 5b – Select a time period that would have been reasonable to increase output to emergency production level, if required.

If you have any questions concerning the definitions or instructions, please contact the Special Studies Branch of the Manufacturing and Construction Division on (301) 763-4667.

Example 1. A plant with one 8-hour shift operating 5 days/week

- a. Days per week in operation.
- b. Plant hours per week in operation
- c. Weeks in operation in the quarter
- d. **Total number of production workers**
- e. **Temporary** production workers **included** in line d (not on the payroll and hired through temporary agencies or as their own agent; see instructions).
- f. **Total hours worked by production workers**
- g. Hours worked by temporary production workers (**included** in line f)
- h. Overtime hours worked by production workers (**included** in line f)

Actual Operations									Full Production Capability		
Shift one (1)			Shift two (2)			Shift three (3)			Number of shifts (4)		
5									7		
40									56		
13									13		
32									44		
2									4		
Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.
	15	880								17	680
		240									600
		0									0

Example 2. A plant with Two Production Shifts and One Maintenance Shift

- a. Days per week in operation.
- b. Plant hours per week in operation
- c. Weeks in operation in the quarter
- d. **Total number of production workers**
- e. **Temporary** production workers **included** in line d (not on the payroll and hired through temporary agencies or as their own agent; see instructions).
- f. **Total hours worked by production workers**
- g. Hours worked by temporary production workers (**included** in line f)
- h. Overtime hours worked by production workers (**included** in line f)

Actual Operations									Full Production Capability		
Shift one (1)			Shift two (2)			Shift three (3)			Number of shifts (4)		
7			5						7		
56			40						112		
13			13						13		
110			50						210		
10			0						0		
Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.
	53	200		24	800					117	000
	1	200			0						0
		0			0						0

Example 3. A plant in Continuous Operation

- a. Days per week in operation.
- b. Plant hours per week in operation
- c. Weeks in operation in the quarter
- d. **Total number of production workers**
- e. **Temporary** production workers **included** in line d (not on the payroll and hired through temporary agencies or as their own agent; see instructions).
- f. **Total hours worked by production workers**
- g. Hours worked by temporary production workers (**included** in line f)
- h. Overtime hours worked by production workers (**included** in line f)

Actual Operations									Full Production Capability		
Shift one (1)			Shift two (2)			Shift three (3)			Number of shifts (4)		
7			7			7			7		
56			56			56			168		
13			13			13			13		
360			360			200			1080		
0			0			0			0		
Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.	Mil.	Thou.	Hrs.
	168	480		168	480		104	000		505	440
		0			0			0			0
		200			200			0			0

Appendix B.

Qualifications of the Data

DEFINITIONS AND CONCEPTS

Although survey respondents were provided detailed instructions for estimating full production capacity and national emergency production capacity (see Appendix A), it is extremely difficult to translate the concept of plant capacity into a working definition which is applicable to all industries and situations. A host of problems are inherent in any attempt to measure capacity. Following are some of the more significant:

1. Telephone conversations with respondents have revealed that there are a variety of methods by which plants can measure their capacity. For example, it is customary for petroleum refineries to use an engineering concept of capacity based on maximum throughput during around-the-clock operations, with allowance made for maintenance or other necessary downtime. Other industries use different methods. They might base capacity on the maximum number of work hours of their labor force, on a past peak performance period, or on any number of other methods.

In order to improve the consistency of reporting across industries, the U.S. Census Bureau made an attempt to prescribe a standardized method for calculating levels of capacity and capacity utilization. Respondents across industries were asked to report production by the plant for actual, full production, and national emergency levels of production, in terms of market value of production, and given specific assumptions to follow in estimating each level of production (see Appendix A). The capacity utilization rates estimates produced in this report are calculated as a ratio of actual value of production to full production and national emergency values of production.

2. Full production limitations. Respondents were instructed as follows when estimating full production capacity: "Do not consider overtime pay, availability of labor, materials, utilities, etc., to be limiting factors." However, some respondents appear to be unrealistic in reporting their full production operations. For example, some establishments defined full production capacity as continuous operations (7 days a week, 24 hours a day) even though they were currently operating a single shift and admitted they could not expect realistically to operate continuously with their present plant and equipment or within their industry or locality. Census Bureau staff have discussed the most questionable estimates with respondents and adjusted the reports where appropriate; however, there is a distinct element of subjectivity, and it is apparent that not all plants have defined full production capacity in realistic terms.
3. National emergency production limitations. Some individual plants do not differentiate between their full production capacity and national emergency capacity. Therefore, for some individual plants, the levels of capacity and capacity utilization rates calculated for full production and national emergency are the same. For these plants, no measurable difference between full production and national emergency capacity levels or capacity utilization can be obtained.

Census Bureau staff have discussed the most questionable estimates with respondents and adjusted the reports where appropriate; however, there is a distinct element of subjectivity, and it is apparent that not all plants have defined national emergency capacity in realistic terms.

4. Year-to-year variations in reported data. There is considerable year-to-year change in reported capacity and capacity utilization for individual plants. Some of this reflects real change in capacity due to additions or retirements of plant and equipment, change in product mix, or change in productivity. Other changes, however, are the result of response variations that are

part of the nonsampling errors described in the following section on sampling and nonsampling errors. These variations, which often result from different personnel completing the form, include different judgmental decisions about work patterns and what plant and equipment to include in estimating capacity. At the summary levels, the individual establishment changes (either up or down) have a tendency to cancel each other.

SAMPLING AND NONSAMPLING ERRORS

The survey estimates presented in this report are subject to both sampling and nonsampling errors. Nonsampling errors include various response and operational errors; errors of collection, reporting, transcription, and bias due to nonresponse, etc. These errors would also occur if a complete canvass were conducted under the same conditions as this survey. Most of the important operational errors were detected and corrected in the course of the review of the data for reasonableness and consistency.

However, because of the definitional and conceptual problems associated with this survey, it is likely that the response errors are greater in magnitude than for other manufacturing surveys in which respondents are asked to report data that are generally kept as a matter of record. Explicit measures of the nonsampling errors are not available. As derived, the estimated standard error provides a measure of sampling error only. The total error will most likely exceed the standard errors shown.

The panel selected for this survey was sampled using probabilities proportionate to size. Independent samples were chosen for each sample industry, except for the publishing industry group, where the sample was controlled at the industry group only. Probabilities were assigned to control sampling allocation by industry subject to the constraint of a predetermined total sample size. These probabilities determined an expected sample size for each industry. The sampling procedure used ensured that this expected sample size was exactly realized. The particular sample selected was but one of the many probability samples of this size that could have resulted using this sampling methodology. Each of the possible samples would yield somewhat different sets of results. The sampling errors—the differences between the estimates obtained from the sample actually selected and the results theoretically obtainable from a comparable complete canvass of the same target universe—are unknown. However, the estimated standard errors of the utilization rates and the year-to-year changes are guides to the potential sizes of these sampling errors.

The estimated standard error of a utilization rate, or of a year-to-year change in a utilization rate, may be used to define a confidence interval about that rate or change such that the complete coverage result will be included within that interval with known probability. As examples:

1. The interval defined by one standard error below the estimates rate or change to one standard error above contains the complete coverage result with approximately 67-percent confidence.
2. The interval defined by two standard errors below and above the estimates rate or change contains the complete coverage result with approximately 95-percent confidence.
3. The interval defined by three standard errors below and above the estimates rate or change contains the complete coverage result with approximately 99-percent confidence.

Thus, an inference that the complete coverage result lies within the indicated intervals would, with the prescribed confidences, be correct. For example, if an estimated utilization rate is shown as 80 percent, with an associated standard error of 3 percent, there is approximately 67-percent confidence that the interval 77 percent to 83 percent includes the complete coverage rate, about 95-percent confidence that the interval 74 percent to 86 percent would include the complete coverage rate, and approximately 99-percent confidence that the interval 71 percent to 89 percent would include the complete coverage rate.

Note that the estimates of the standard errors are derived from the sample and are also subject to sampling error.

Appendix C.

Description of Survey Sample and Estimating Procedure

SURVEY SAMPLE

The 2005 survey estimates presented in this report are derived from a sample of about 17,000 establishments covering the manufacturing sector, North American Industry Classification System (NAICS) codes 31–33, and the publishing industry group, NAICS code 5111: Newspaper, Periodical, Book and Database Publishers. Data are collected from the publishing industry group so that the Federal Reserve Board (FRB), one of the funding agencies for the Survey of Plant Capacity Utilization (SPCU), can maintain continuity of production and capacity measures that are featured in their statistical release, “*G.17: Industrial Production and Capacity Utilization*,” a principal federal economic indicator. The original sample for the 2004 SPCU was selected using the 2002 Economic Census as the primary frame source. This sample is being maintained for a 5-year cycle and supplemented with birth establishments each survey year to account for sample attrition. In other words, a sample of birth establishments is selected each intermediate survey year to replace establishments from the previous survey cycle that are no longer active, thus preserving the desired sample size of roughly 17,000 establishments. When the original sample was selected for the 2004 SPCU, the primary frame source was supplemented with a universe of birth establishments that came into existence in 2003, subsequent to the 2002 Economic Census. For the 2005 SPCU, a universe of birth establishments that came into existence in 2004 was created and a sample of roughly 400 establishments was selected to supplement the ongoing sample for the 2005 survey. This birth sample was selected using a probability proportionate to size (pps) sample design, similar to that employed for the 2004 SPCU sample selection, which is described in detail below.

The sampling frame for the 2004 SPCU was limited to establishments that were actually mailed a Census form. The remaining Census cases were imputed based on administrative data obtained from Internal Revenue Service and/or Social Security Administration records. These small administrative record cases were excluded from the sampling frame for the 2004 SPCU. As a result, the Census portion of the sampling frame consisted of roughly 217,500 establishments: almost 205,200 plants from the manufacturing sector and around 12,300 establishments from the publishing industry group. The supplemental birth universe consisted of almost 11,000 establishments.

The primary portion of the 2004 SPCU sample was selected using a pps sample design. The measure of size on which probabilities of selection were based for each establishment in the frame was the total value of receipts from the Census. There was a small portion of this frame, less than 200 establishments, with zero receipts data that did not seem to be legitimate based on other data reported for these plants. This would have implied a zero measure of size for all of these establishments. Since there was some doubt about the validity of these zero data, a simple random sample of 50 establishments was selected from these plants. Simple random sampling was also employed to select a sample of 450 birth establishments from the birth universe.

As mentioned earlier, the primary portion of the 2004 SPCU sample was selected using a pps sample design with Census total receipts used as the measure of size for each establishment in the frame. For every establishment in the frame, this measure of size was used to assign probabilities of selection for the 2004 SPCU sample. Establishments actually selected for the sample were assigned sampling weights equal to the inverse of their respective probabilities of selection.

Sampling was conducted independently for each NAICS-6 industry, so actual probabilities of selection were dependent on the final sample size determined for each industry. This determination was based upon a level of priority assigned to each industry and the overall constraint that the total sample size would be limited to around 17,000 establishments. Industry priority was based

on requirements specified by the survey sponsors, the FRB and the Department of Defense (DOD). Both the FRB and the DOD furnished lists of priority NAICS-6 industries and these lists were merged together to provide one unduplicated master list of priority industries for sampling. In response to some external interest in industries with significant value-added data, research was also done to determine a preliminary set of important NAICS-3 industries in terms of value-added data obtained from the 2003 Annual Survey of Manufactures (ASM). Value added is defined as the difference between sales values and the cost of merchandise sold without any further manufacturing, processing, or assembly. NAICS-3 industries were deemed to be important if their value-added contribution was more than 5 percent of the U.S. value-added total. Under these criteria, there were six NAICS-3 industries identified as important value-added industries.

All of the aforementioned priority requirements were combined to determine the final NAICS-6 industry priorities for sampling purposes. All FRB and DOD priority NAICS-6 industries from the six important value-added NAICS-3 industries were designated as priority-1 industries. These 75 NAICS-6 industries were sampled under the tightest error constraints. The remaining FRB and DOD priority NAICS-6 industries, together with the balance of NAICS-6 industries from the six important value-added NAICS-3 industries, were designated as priority-2 industries. These 237 NAICS-6 industries were sampled under error constraints slightly looser than those enforced for the highest priority industries. All of the remaining 167 NAICS-6 industries were designated as priority-3 industries and were sampled under the loosest error constraints.

The 2004 SPCU sample selection was accomplished using Tillé sampling, a pps fixed sample size sampling methodology that ensured the exact desired sample size for each NAICS-6 industry was realized. This fixed sample size methodology was first used to select the entire SPCU sample for the 1999 survey. In previous sample selections, Poisson sampling was employed, which yielded sample sizes that, under repeated applications, varied from the expected sample sizes. The Tillé sampling methodology guarantees that the exact expected industry sample sizes resulting from the specified error constraints and sample selection probabilities are obtained. Therefore, under Tillé sampling, sample size is no longer a random variable, as it was under Poisson sampling, so any sample variance due to variation in sample size is eliminated. Prior to sampling, an adjustment was made to all assigned probabilities that fell below some specified minimum probability. This adjustment, which reset the original selection probabilities to this minimum probability, helped guard against exceedingly large sample weights (inverse of the probability of selection). This was done to help prevent sample estimates from being so adversely affected by establishments reporting data much more significant than expected relative to their measures of size. The minimum probability for the 2004 SPCU was set to 0.02, thus ensuring a maximum sample weight of 50. This minimum probability rule resulted in a slight increase in the originally allocated industry sample sizes.

Working within the sample size constraints of roughly 17,000 establishments from the manufacturing sector and about 300 establishments from the publishing sector, and incorporating the NAICS-6 industry prioritization scheme described above, error constraints were established for each sample industry so as to ensure that the total sample size would be around the target of 17,300 establishments. Several iterations were performed to test various error constraints for each of the three priority industry groups to determine the set of error constraints that would yield the desired target sample size. As a result, sampling from the pps portion of the frame was controlled under error constraints of 0.05 for priority-1 NAICS-6 industries, 0.11 for priority-2 industries, and 0.20 for priority-3 industries. Under these error constraints, a sample of roughly 16,800 establishments was selected from the pps portion of the sampling frame. This sample, combined with the simple random samples of birth establishments and zero receipts cases, yielded a final total sample of about 17,300 establishments, about 17,000 from the manufacturing sector and roughly 300 from the publishing sector.

ESTIMATING PROCEDURE

The estimated full production rates shown in this report for the 6-digit NAICS industries in Table 1a were computed in the following manner:

$$R_j = \frac{\sum_i WT_{ij} VPA_{ij}}{\sum_i WT_{ij} VPF_{ij}}$$

where R_j is the utilization rate for the j th 6-digit NAICS industry; WT_{ij} is the sampling weight for establishment i in 6-digit industry j ; VPA_{ij} is the actual value of production for establishment i in 6-digit industry j ; VPF_{ij} is the value of production at the full production level; and the summations are for those establishments with reported or imputed value of production at both actual and full production level. National emergency production rates in Table 1b are computed similarly, by substituting national emergency production (VPE) for VPF in the above formula. Imputed nonrespondent data were included because the utilization rates for nonrespondents were not necessarily imputed at the average rate for respondents.

The estimated utilization rates for the higher level manufacturing industry groupings (total manufacturing sector, subsectors, industry groups, durable goods industries, nondurable goods industries, advance processing industries, and primary processing industries) were computed in the following manner:

$$R_{(K)} = \frac{\sum_j VA_j}{\sum_j \left(\frac{VA_j}{R_j} \right)}$$

where $R_{(K)}$ is the utilization rate for the K th industry group; VA_j is the value added for the j th 6-digit industry as published in the most recent ASM or economic census; and VA_j/R_j represents the value added for the j th 6-digit industry adjusted to full production or national emergency production levels of operation.

Value added is used when aggregating to higher levels to avoid duplication in figures of production that result when products of some establishments are also input materials for other establishments.

Most users of industrial data consider value added to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas. Therefore, using value added in the methodology to derive utilization rate measures should provide better estimates.

In accord with the sample design, estimates for publishing are presented at the industry group level only. These estimates are not included in any of the aggregated manufacturing estimates. Since the value added concept is not applicable to the publishing industry, the industry group estimates are derived in the same manner as the 6-digit industry estimates described above for manufacturing, except that the summations range over all establishments within the industry group.

The estimated variances for the sample estimates based on the fixed sample size methodology are calculated as shown below. The equations shown refer to full production utilization rate variances. Similar calculations for emergency utilization rate variances are computed by substituting VPE for VPF. The variable γ_i is an establishment variable that arises from the use of the fixed sample size method. For the 6-digit NAICS industries and publishing industry group, the variances were computed as:

$$\sigma^2(R_j) = \sigma^2(A_j/B_j) = \frac{1}{B_j^2} [\sigma^2(A_j) + R_j^2 \sigma^2(B_j) - 2R_j \sigma(A_j B_j)] \quad (1)$$

where $A_j = \sum_i WT_{ij} VPA_{ij}$

$B_j = \sum_i WT_{ij} VPF_{ij}$

$$\sigma^2(A_j) = \sum_i \gamma_i \left(i \sum_{l=1}^i (WT_{lj} VPA_{lj})^2 - \left(\sum_{l=1}^i WT_{lj} VPA_{lj} \right)^2 \right)$$

$$\sigma^2(B_j) = \sum_i \gamma_i \left(i \sum_{l=1}^i (WT_{lj} VPF_{lj})^2 - \left(\sum_{l=1}^i WT_{lj} VPF_{lj} \right)^2 \right)$$

$$\sigma^2(A_j B_j) = \sum_i \gamma_i \left(i \sum_{l=1}^i WT_{lj}^2 VPA_{lj} VPF_{lj} - \left(\sum_{l=1}^i WT_{lj} VPA_{lj} \right) \left(\sum_{l=1}^i WT_{lj} VPF_{lj} \right) \right)$$

Estimates of variances of higher level manufacturing aggregates $R_{(K)}$ were computed as follows:

$$\sigma^2(R_{(K)}) = \frac{1}{\left[\sum_j \frac{VA_j}{R_j}\right]^2} \left[\sum_j \sigma^2(VA_j) + R_{(K)}^2 \left(\sum_j \left[\left(\frac{1}{R_j^2}\right) \sigma^2(VA_j) + \left(\frac{VA_j^2}{R_j^4}\right) \sigma^2(R_j) \right] \right) - 2R_{(K)} \sum_j \left[\left(\frac{1}{R_j}\right) \sigma^2(VA_j) \right] \right] \quad (2)$$

where $\sigma^2(VA_j)$ is the ASM estimate of variance for value added in industry j , and where the summations range over the set of 6-digit industries comprising the higher level industry group K . When census year value added data are utilized, the variance terms $\sigma^2(VA_j)$ reduce to zero.

Table 2 shows standard errors of the utilization rates. Standard errors are the square root of the corresponding variances. Estimated standard errors of the changes in utilization rates from 2004 to 2005 are also presented in Table 2. For more information regarding these estimates, contact the Special Studies Branch at 301-763-7657.

IMPUTATION

A new imputation methodology was implemented beginning with the 2003 survey. The new methodology utilizes the industry average to impute data for the current year if the plant's response was not received in time to meet publication deadlines. Prior to 2003, the estimates for these cases were derived using reported data from the plant in the previous survey.

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