

TABLE 44. Worldwide, domestic, and foreign total and R&D employment, by industry and company size: 2012  
(Thousands)

Industry and company size	NAICS code	Worldwide employees			Domestic employees			Foreign employees		
		Total	R&D	% R&D employees	Total	R&D	% R&D employees	Total	R&D	% R&D employees
All industries	21–23, 31–33, 42–81	28,429	2,065	7.3	18,294	1,469	8.0	10,135	597	5.9
Manufacturing industries	31–33	17,376	1,261	7.3	9,988	886	8.9	7,388	375	5.1
Food	311	1,449	32	2.2	1,009	24	2.4	440	8	1.8
Beverage and tobacco products	312	917	6	0.7	371	3	0.9	546	3	0.5
Textile, apparel, and leather products	313–16	361	8	2.2	226	7	3.2	135	1	0.6
Wood products	321	113	8 i	6.8	93	8 i	8.3	21	*	0.3
Paper	322	281	8	2.8	167	7	4.2	114	1	0.9
Printing and related support activities	323	122	5	3.8	108	4	3.9	14	*	3.0
Petroleum and coal products	324	162	6	3.4	92	4	4.9	70	1	1.5
Chemicals	325	2,566	220	8.6	1,473	162	11.0	1,093	58	5.3
Basic chemicals	3251	691	20	2.9	487	15	3.1	204	5	2.7
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	204	8	4.1	127	6	4.6	77	3	3.3
Pesticide, fertilizer, and other agricultural chemical	3253	61	8	13.2	45	6	13.6	16	2	12.1
Pharmaceuticals and medicines	3254	1,022	151	14.8	539	114	21.2	483	36	7.5
Soap, cleaning compound, and toilet preparation	3256	405	18	4.3	151	11	7.3	254	7	2.6
Paint, coating, adhesive, and other chemicals	3255, 3259	183	15	8.0	125	10	7.8	58	5	8.3
Plastics and rubber products	326	771	36	4.6	534	30	5.6	237	6	2.5
Nonmetallic mineral products	327	235	12	5.1	165	8	4.8	70	4	5.9
Primary metals	331	348	8	2.2	260	7	2.7	88	*	0.5
Fabricated metal products	332	570	33	5.8	458	31	6.8	112	2	1.7
Machinery	333	1,794	131	7.3	922	89	9.6	872	43	4.9
Agricultural implement	33311	138	13	9.2	85	8	9.3	52	5	8.9
Semiconductor machinery	333295	39	9	22.4	24	7	29.6	16	2	11.6
Engine, turbine, and power transmission equipment	3336	469	41	8.8	223	24	10.7	246	18	7.2
Other machinery	other 333	1,147	68	6.0	590	50	8.5	557	18	3.3
Computer and electronic products	334	3,127	426	13.6	1,439	267	18.6	1,689	158	9.4
Communications equipment	3342	374	79	21.1	224	53	23.7	150	26	17.3
Semiconductor and other electronic components	3344	919	175	19.0	305	101	33.0	614	75	12.1
Navigational, measuring, electromedical, and control instruments	3345	1,073	98	9.2	663	76	11.5	410	22	5.4
Electromedical, electrotherapeutic, and irradiation	334510, 334517	179	26	14.8	136	22	16.4	42	4	9.5
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	372	33	8.8	279	30	10.9	93	3	2.8
Other measuring and controlling device	other 3345	522	39	7.5	247	24	9.5	275	16	5.7
Other computer and electronic products	other 334	761	73	9.6	247	37	15.2	514	36	7.0
Electrical equipment, appliances, and components	335	643	42	6.6	325	25	7.8	319	17	5.3
Transportation equipment	336	2,742	202	7.4	1,611	147	9.2	1,130	55	4.9
Automobiles, bodies, trailers, and parts	3361–63	1,780	110	6.2	794	64	8.1	987	46	4.6
Aerospace products and parts	3364	720	82	11.3	615	73	11.9	105	9	8.2
Aircraft, aircraft engine, and aircraft parts	336411–13	671	76	11.4	569	68 i	11.9	102	9	8.4
Guided missile, space vehicle, and related parts	336414–15, 336419	49	5	10.7	46	5	11.4	3	*	0.8

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Military armored vehicle, tank, and tank component	336992	2	*	9.6	2	*	10.5	*	0	0.0
Other transportation	other 336	239	11	4.6	201	10	5.1	38	1	1.7
Furniture and related products	337	171	5	2.8	142	5	3.2	29	*	0.5
Miscellaneous manufacturing	339	1,001	75	7.5	592	57	9.6	409	18	4.5
Medical equipment and supplies	3391	615	52	8.5	367	40	11.0	248	12	4.9
Other miscellaneous manufacturing	3399	387	23	5.9	225	17	7.4	161	6	3.8
Nonmanufacturing industries	21-23, 42-81	11,053	804	7.3	8,306	583	7.0	2,747	222	8.1
Mining, extraction, and support activities	21	440	13	2.9	220	9	4.3	220	3	1.5
Utilities	22	402	2	0.5	394	2	0.5	8	*	4.6
Wholesale trade	42	496	26 i	5.3	370	25 i	6.6	125 i	2 i	1.4
Electronic shopping and electronic auctions	454111-12	130	11	8.6	93	9	9.6	37	2	6.1
Transportation and warehousing	48-49	837	4	0.4	679	3	0.5	158 i	*	0.1
Information	51	2,923	326	11.1	2,050	225	11.0	873	100	11.5
Publishing	511	1,283	233	18.1	621	148	23.9	662	85	12.8
Newspaper, periodical, book, and directory publishers	5111	176 i	3 i	1.5	151 i	2 i	1.7	25 i	* i	0.2
Software publishers	5112	1,108	230	20.8	470	146	31.0	637	85	13.3
Telecommunications	517	828	14 i	1.7	797	13 i	1.7	31	1	3.6
Data processing, hosting, and related services	518	479	41	8.6	357	33	9.3	122	8	6.8
Other information	other 51	333	37	11.2	275	31	11.1	57	6	11.2
Finance and insurance	52	1,601	31	1.9	1,323	26	2.0	278	5	1.7
Real estate and rental and leasing	53	53	2	3.5	41	1	3.6	12	*	3.4
Lessors of nonfinancial intangible assets (except copyrighted works)	533	9	1	14.6	6	1	15.8	3	*	12.3
Other real estate and rental and leasing	other 53	43	1 i	1.2	35	1 i	1.5	8	*	*
Professional, scientific, and technical services	54	1,746	353	20.2	1,269	248	19.6	477	105 i	21.9
Architectural, engineering, and related services	5413	342	42	12.4	257	39	15.3	85	3	3.8
Computer systems design and related services	5415	789	162 i	20.6	509	101	19.9	281 i	61 i	21.7
Scientific research and development services	5417	263	107	40.7	208	75	36.0	56	32	58.4
Biotechnology research and development	541711	97	32	32.5	87	25	28.4	10	7	67.9
Physical, engineering, and life sciences (except biotechnology) research and development	541712	160	72	45.1	114	46	40.6	45	26	56.3
Social sciences and humanities research and development	541720	6	4	55.1	6	4	55.2	*	*	29.8
Other professional, scientific, and technical services	other 54	351	41	11.7	295	33	11.1	56	8 i	14.5
Health care services	621-23	270	6	2.3	263	6	2.3	6	* i	2.2
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	2,155	31	1.4	1,603	28	1.7	552	3	0.6
All companies (number of domestic employees)	-	28,429	2,065	7.3	18,294	1,469	8.0	10,135	597	5.9
Small companies <sup>a</sup>										
5-499	-	3,827	494	12.9	3,200	437	13.7	626	57	9.1
5-99	-	1,619	286	17.7	1,469	258	17.6	150	28	18.7
5-49	-	1,002	201	20.0	927	181	19.5	75	19	26.0

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5-9	-	151	42	27.8	130	38	29.4	21	4	18.3
10-24	-	356	76	21.3	342	73	21.4	13	3	19.2
25-49	-	496	83	16.7	455	70	15.4	41	13	32.3
50-99	-	617	86	13.9	542	77	14.2	75	9	11.5
100-249	-	1,310	116	8.8	993	101	10.1	317	15	4.8
250-499	-	897	93	10.3	738	79	10.7	160	14	8.7
Medium and large companies										
500-999	-	1,035	83	8.1	755	67	8.9	279	16	5.7
1,000-4,999	-	4,338	335	7.7	2,583	226	8.8	1,755	108	6.2
5,000-9,999	-	3,140	247	7.9	1,557	138	8.9	1,583	109	6.9
10,000-24,999	-	4,028	263	6.5	2,590	198	7.7	1,438	65	4.5
25,000 or more	-	12,062	643	5.3	7,608	401	5.3	4,453	242	5.4

\* = amount < 500 employees or 1% of R&D employees; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

<sup>a</sup> The upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2012.