

TABLE 76. Worldwide, domestic, and foreign all and R&D employment, by industry and company size: 2009

(Thousands of employees)

Industry and company size	NAICS code	Worldwide employees			Domestic employees			Foreign employees		
		All	R&D	% R&D employees	All	R&D	% R&D employees	All	R&D	% R&D employees
All industries	21–23, 31–33, 42–81	27,094	1,879	6.9	17,788	1,424	8.0	9,306	454	4.9
Manufacturing industries	31–33	16,679	1,137	6.8	9,882	850	8.6	6,798	287	4.2
Food	311	2,015	30	1.5	1,435	24	1.6	580	7	1.2
Beverage and tobacco products	312	339	4	1.1	112	2	1.8	227	2	0.8
Textiles, apparel, and leather products	313–316	269	6	2.2	175	5	2.8	94	1	1.1
Wood products	321	157	4	2.4	124	4	3.0	32	*	*
Paper	322	349	12	3.4	216	8	3.8	133	4	2.8
Printing and related support activities	323	184	4	1.9	170	3	2.0	14	*	0.6
Petroleum and coal products	324	185	3	1.8	85	2	2.3	101	1	1.4
Chemicals	325	2,286	201	8.8	1,287	157	12.2	999	44	4.4
Basic chemicals	3251	399	17	4.2	220	12	5.4	179	5	2.7
Resin, synthetic rubber, fibers, and filaments	3252	239	8	3.4	162	7	4.1	76 i	2	2.0
Pesticide, fertilizer, and other agricultural chemical	3253	75	6	8.6	49	5	9.5	25	2	6.7
Pharmaceuticals and medicines	3254	910	136	15.0	538	110	20.4	372	26	7.1
Soap, cleaning compound, and toilet preparation	3256	411	16	4.0	159	11	6.7	253	6	2.2
Paint, coating, adhesive, and other chemical	3255, 3259	251	17	6.8	159	13	8.3	93	4	4.4
Plastics and rubber products	326	667	30	4.5	459	22	4.7	208	8	3.9
Nonmetallic mineral products	327	263	6	2.3	204	5	2.7	59	*	0.8
Primary metals	331	367	7	2.0	256	7	2.6	112	1	0.6
Fabricated metal products	332	596	34	5.8	480	33	6.9	116	1	0.9
Machinery	333	1,388	82	5.9	799	65	8.1	589	18	3.0
Agricultural implements	33311	141	10	7.1	83	7	8.4	58	3	5.2
Semiconductor machinery	333295	39	8	21.3	24	6	24.8	15	2	15.5
Engine, turbine, and power transmission equipment	3336	120	7	5.8	74	5	7.3	46	1	3.2
Other machinery	other 333	1,089	57	5.3	618	46	7.5	471	11	2.3
Computer and electronic products	334	2,697	371	13.8	1,268	260	20.5	1,429	111	7.8
Communications equipment	3342	370	94	25.3	213	63	29.6	158	31	19.5
Semiconductor and other electronic components	3344	735	121	16.5	279	76	27.4	456	45	9.9
Navigational, measuring, electromedical, and control instruments	3345	980	101	10.3	565	83	14.7	415	18	4.3
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	285	25	8.9	159	22	13.8	126	3 i	2.7
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	353	48	13.7	228 i	41	18.0	126 i	7	5.9
Other measuring and controlling instruments	other 3345	341	27	8.0	178	20	11.3	163	7	4.3
Computer and peripheral equipment and other computer and electronic products	other 334	611	55	9.1	211	38	17.8	400	18	4.4
Electrical equipment, appliances, and components	335	739	45	6.2	320	25	7.8	419	21	4.9
Transportation equipment	336	3,055	220	7.2	1,748	167	9.5	1,307	53	4.1
Automobiles, bodies, trailers, and parts	3361–3363	1,722	87	5.1	753	55	7.3	969	32	3.3
Aerospace products and parts	3364	1,174	110	9.3	862	89	10.4	313	20	6.5

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Aircraft, aircraft engine, and aircraft parts	336411–336413	949	100	10.6	663	81	12.2	286	19	6.8
Guided missile, space vehicle, and related parts	336414, 336415, 336419	225	9	4.1	198	8	4.2	27	1	3.3
Military armored vehicle, tank, and tank components	336992	3	*	5.4	3	*	6.7	1 i	*	*
Other transportation equipment	other 336	156	23 i	14.9	130 i	22 i	17.2	25 i	1 i	3.0
Furniture and related products	337	211	5	2.6	172	5	3.1	39	*	*
Miscellaneous manufacturing	339	912	72	7.9	572	57	9.9	341	15	4.4
Medical equipment and supplies	3391	601	50	8.3	352	38	10.7	249	12	4.8
Other miscellaneous manufacturing	3399	311	22	7.1	219	19	8.7	92	3	3.4
Nonmanufacturing industries	21–23, 42–81	10,415	742	7.1	7,906	574	7.3	2,509	167	6.7
Mining, extraction, and support activities	21	444	11	2.5	235	9	3.6	210	2	1.2
Utilities	22	398	2	0.6	391	2	0.5	7	*	0.9
Construction	23	83	5	5.8	71	4	5.6	12	1	6.6
Wholesale trade	42	242	8 i	3.4	163	7 i	4.2	79	1 i	1.7
Retail trade	44, 45	383	5	1.2	371	3 i	0.9	11	1 i	11.5
Electronic shopping and mail-order houses	4541	45	4	9.6	38	3 i	8.1	7	1 i	17.4
Other retail trade	other 44, 45	338	*	*	334	*	*	4	*	0.5
Transportation and warehousing	48, 49	920	2	*	849	2	*	72	*	*
Information	51	2,499	295	11.8	1,795	206	11.5	704	89	12.6
Publishing	511	1,128	221	19.6	542	140	25.9	587	80	13.7
Newspaper, periodical, book, and directory publishers	5111	58	4	6.9	49	4	7.5	9	*	3.6
Software publishers	5112	1,071	217	20.3	493	137	27.7	578	80	13.9
Telecommunications	517	840	28 i	3.4	835	27 i	3.3	5	1	19.2
Data processing, hosting, and related services	518	210	27	13.0	155	23	14.8	55	4	7.9
Other information	other 51	320	18	5.7	262 i	15	5.7	58	3	5.4
Finance and insurance	52	1,399	27	1.9	1,115	22	2.0	284	4	1.6
Real estate and rental and leasing	53	54	1	1.8	48	1	2.0	6	*	*
Professional, scientific, and technical services	54	2,439	374	15.3	1,721	307	17.8	718	67	9.3
Architectural, engineering, and related services	5413	328	40	12.3	240	39	16.2	89	1	1.7
Computer systems design and related services	5415	1,090	154	14.2	756	117	15.5	333 i	37	11.2
Scientific R&D services	5417	284	107	37.5	234	85	36.5	50	21	41.9
Biotechnology R&D	541711	121	43	35.6	105	36	34.1	16 i	7	45.7
Physical, engineering, and life sciences (except biotechnology) R&D	541712	153	59	38.3	120	45	37.3	33	14	41.6
Social sciences and humanities R&D	541720	11	5	47.7	9 i	5 i	54.7	2	*	15.7
Other professional, scientific, and technical services	other 54	737	72	9.8	491	65	13.3	245	7	2.8
Health care services	621–623	271	6	2.2	266	6	2.2	5	*	1.9
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	1,283	7	0.5	882	6	0.7	401	1	*
All companies	–	27,094	1,879	6.9	17,788	1,424	8.0	9,306	454	4.9
Small companies (number of domestic employees) ^a										
5–499	–	3,832	504	13.2	3,045	459	15.1	787	45	5.7

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5-99	-	1,803	314	17.4	1,471	295	20.1	332	19	5.6
5-49	-	1,099	208	19.0	869	197	22.6	231	12	5.1
5-24	-	585	122	20.9	429	116	27.1	156	6	3.9
25-49	-	515	86	16.8	440	81	18.3	75	6	7.4
50-99	-	703	106	15.0	602	99	16.4	101	7	6.8
100-249	-	1,112	105	9.5	853	91	10.7	259	14	5.4
250-499	-	918	84	9.2	721	72	10.0	197	12	6.3
Medium and large companies (number of domestic employees)										
500-999	-	1,083	83	7.7	795	64	8.0	288	20	6.8
1,000-4,999	-	3,856	297	7.7	2,349	204	8.7	1,507	94	6.2
5,000-9,999	-	2,608	168	6.5	1,603	112	7.0	1,005	56	5.6
10,000-24,999	-	4,411	292	6.6	2,679	212	7.9	1,733	81	4.7
25,000 or more	-	11,302	533	4.7	7,316	374	5.1	3,986	160	4.0

* = amount < 500 employees; i = value > 50% of estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of small business; Business R&D and Innovation Survey (BRDIS) does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in 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, 2009.