

TABLE 32. Foreign R&D employment, by occupation, sex, industry, and company size: 2008

(Thousands of employees)

Industry and company size	NAICS code	Engineers and their managers			Scientists and their managers			Technicians and technologists			Support staff (clerical and others)		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All industries	21-23, 31-33, 42-81	271	222	49 i	43	27	16	76 i	52 i	24 i	51	25	26
Manufacturing industries	31-33	184	154	30	36	22	14	40 i	28 i	12 i	33 i	16	17
Food	311	1 i	* i	* i	2 i	1	1	1	*	1	1 i	* i	* i
Beverage and tobacco products	312	*	*	*	*	*	*	*	*	*	*	*	*
Textiles, apparel, and leather products	313-316	2 i	2 i	* i	* i	* i	* i	1 i	1 i	* i	* i	* i	* i
Wood products	321	*	*	* i	*	*	0	*	*	0	*	*	*
Paper	322	3	2	1	*	*	*	1	*	*	*	*	*
Printing and related support activities	323	*	*	*	* i	* i	* i	* i	*	* i	* i	* i	* i
Petroleum and coal products	324	1 i	1 i	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i
Chemicals	325	9	6	3	24	14	11	10	6	4	11	4	8
Basic chemicals	3251	1	1	*	3	2	1	3	2	1	1	*	*
Resin, synthetic rubber, fibers, and filaments	3252	*	*	*	*	*	*	1 i	*	* i	*	*	*
Pesticide, fertilizer, and other agricultural chemical	3253	* i	* i	* i	1 i	1 i	* i	* i	* i	* i	* i	* i	* i
Pharmaceuticals and medicines	3254	3 i	2 i	1 i	17	9	8	5	3	3	9	3	6
Soap, cleaning compound, and toilet preparation	3256	2	2	1	3	1	1	1	*	*	1	*	1
Paint, coating, adhesive, and other chemical	3255, 3259	2	1	*	1	1	*	1	*	*	*	*	*
Plastics and rubber products	326	4 i	4 i	*	1 i	1 i	*	1	1	*	1 i	*	* i
Nonmetallic mineral products	327	1 i	1 i	* i	* i	* i	* i	1 i	1 i	* i	* i	* i	* i
Primary metals	331	*	*	*	*	*	*	* i	* i	* i	* i	* i	* i
Fabricated metal products	332	2 i	2 i	* i	*	*	* i	1 i	1 i	* i	* i	* i	* i
Machinery	333	14	12	1	* i	* i	* i	2 i	2 i	* i	2 i	1	1 i
Agricultural implements	33311	3	2	*	*	*	*	*	*	*	*	*	*
Semiconductor machinery	333295	2	2	*	*	*	*	*	*	*	*	*	*
Engine, turbine, and power transmission equipment	3336	1	1	*	*	*	*	*	*	*	1 i	*	* i
Other machinery	other 333	8 i	8 i	1 i	* i	* i	* i	2 i	2 i	* i	1 i	1 i	* i
Computer and electronic products	334	89	76 i	13 i	2 i	1 i	* i	9 i	7 i	2 i	11 i	6 i	5 i
Communications equipment	3342	19 i	16 i	3 i	* i	* i	* i	3 i	2 i	1 i	4 i	2 i	1 i
Semiconductor and other electronic components	3344	41	36	6	* i	* i	* i	3	3	1	3	2	1
Navigational, measuring, electromedical, and control instruments	3345	13 i	11 i	2 i	1 i	1 i	* i	2 i	1 i	1 i	3 i	1 i	2 i
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	5 i	4 i	1 i	1 i	* i	* i	1 i	1 i	* i	1 i	* i	1 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	1 i	1 i	* i	* i	* i	* i	* i	* i	* i	1 i	* i	1 i
Other measuring and controlling instruments	other 3345	7	5	1	* i	* i	* i	1 i	1 i	* i	1 i	*	* i
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	15	14 i	2 i	* i	* i	*	1	1	*	2	1	1
Electrical equipment, appliances, and components	335	7 i	6 i	1 i	1 i	1 i	* i	2 i	2 i	* i	1 i	* i	* i
Transportation equipment	336	48	39	9	3	3	1	9 i	6 i	3 i	4 i	2 i	1 i
Automobiles, bodies, trailers, and parts	3361-3363	33	26	7	2	2	*	7 i	5 i	2 i	2 i	1 i	1 i

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		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Aerospace products and parts	3364	15	13	2	1	1	*	2	2	1	2	1	*
Aircraft, aircraft engine, and aircraft parts	336411-336413	14	13	2	1	1	*	2	1	*	1	1	*
Guided missile, space vehicle, and related parts	336414, 336415, 336419	* i	* i	* i	* i	* i	0	* i	* i	* i	* i	* i	* i
Military armored vehicle, tank, and tank components	336992	0	0	0	0	0	0	0	0	0	0	0	0
Other transportation equipment	other 336	*	*	*	0	0	0	*	*	0	0	0	0
Furniture and related products	337	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous manufacturing	339	5	4	1	1	*	*	1	1	1	2	1	1
Medical equipment and supplies	3391	2	2	*	1	*	*	1	*	*	1	1	1
Other miscellaneous manufacturing	3399	2	2	1	*	*	*	1	*	*	*	*	*
Nonmanufacturing industries	21-23, 42-81	87	68 i	20 i	7	5	3	36 i	24 i	12 i	19	9 i	9
Mining, extraction, and support activities	21	*	*	*	*	*	*	*	*	*	*	*	*
Utilities	22	*	*	*	0	0	0	*	*	*	*	0	*
Construction	23	* i	* i	0	0	0	0	0	0	0	0	0	0
Wholesale trade	42	1 i	1 i	* i	* i	* i	* i	1 i	1 i	1 i	* i	* i	* i
Retail trade	44, 45	2	1	*	0	0	0	* i	* i	* i	* i	* i	* i
Electronic shopping and mail-order houses	4541	2	1	*	0	0	0	* i	* i	* i	* i	* i	* i
Other retail trade	other 44, 45	0	0	0	0	0	0	0	0	0	0	0	0
Transportation and warehousing	48, 49	1 i	* i	* i	0	0	0	0	0	0	0	0	0
Information	51	61	47 i	13 i	2	2 i	* i	9 i	7 i	2 i	8	5 i	2 i
Publishing	511	53	42	12 i	2	2 i	* i	3	2	1 i	6	4 i	2 i
Newspaper, periodical, book, and directory publishers	5111	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i
Software publishers	5112	53	41	11 i	2	2 i	* i	3	2	1 i	6	4 i	2 i
Telecommunications	517	1 i	1 i	* i	* i	* i	* i	1 i	1 i	* i	* i	* i	* i
Internet service providers, Web search portals, and data processing services	518	6 i	5 i	2 i	* i	* i	* i	5 i	4 i	1 i	* i	* i	* i
Other information	other 51	* i	* i	* i	* i	* i	0	* i	* i	* i	1 i	1 i	* i
Finance and insurance	52	1 i	* i	* i	0	0	0	* i	* i	* i	* i	* i	* i
Real estate and rental and leasing	53	*	*	*	0	0	0	*	*	*	*	*	*
Professional, scientific, and technical services	54	22 i	17 i	5 i	4	2	2	24	15 i	9	10	4	6
Architectural, engineering, and related services	5413	1	1 i	*	*	*	*	* i	* i	* i	* i	* i	* i
Computer systems design and related services	5415	18 i	15 i	4 i	* i	* i	* i	16 i	12 i	4 i	1 i	1 i	* i
Scientific R&D services	5417	2	1	1	3	1	2	8	2	5	8	2	6
Other professional, scientific, and technical services	other 54	1	1	*	* i	* i	* i	1	*	* i	* i	* i	* i
Health care services	621-623	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i	* i
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	*	*	* i	1	1	*	1 i	* i	* i	* i	* i	* i
All companies	21-23, 31-33, 42-81	271	222	49 i	43	27	16	76 i	52 i	24 i	51	25	26
Small companies (number of domestic employees) ^a													
5-499	-	29 i	24 i	6 i	3 i	2 i	1 i	8 i	6 i	2 i	5 i	3 i	2 i

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		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
5-99	-	11 i	9 i	2 i	1 i	1 i	* i	4 i	3 i	1 i	1 i	1 i	1 i
5-49	-	6 i	5 i	1 i	1 i	* i	* i	3 i	2 i	1 i	1 i	* i	* i
5-24	-	2 i	1 i	* i	* i	* i	* i	1 i	1 i	* i	* i	* i	* i
25-49	-	5 i	4 i	1 i	* i	* i	* i	2 i	1 i	* i	1 i	* i	* i
50-99	-	4 i	4 i	1 i	* i	* i	* i	1 i	1 i	* i	1 i	* i	* i
100-249	-	11 i	9 i	2 i	1 i	1 i	* i	3 i	2 i	1 i	2 i	1 i	1 i
250-499	-	8	6	1 i	1 i	* i	* i	1 i	1 i	* i	1 i	* i	* i
Medium and large companies (number of domestic employees)													
500-999	-	9	8	2	1	1	*	2	2	1 i	1 i	1 i	1 i
1,000-4,999	-	59	48	11	7	5	2	12	8	4	9	5	5
5,000-9,999	-	34	28	7	5 i	3 i	2 i	15	9 i	6	11	4	6
10,000-24,999	-	52 i	43 i	10 i	10	6	4	18 i	13 i	5 i	12 i	5 i	7
25,000 or more	-	87	72	15	17	10	7	19	14	6	13	8 i	6 i

* = amount < \$500,000; i = value > 50% of estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2002 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. After 2008 BRDIS sample was selected and surveyed, an error was identified that resulted in excluding 226,884 single-establishment companies with five paid employees from sample frame. Most excluded establishments were classified in industries with low R&D intensities, such as construction, retail trade, and service sectors. Based on available information for these small single-establishment companies, their contribution to 2008 R&D estimates is estimated to be negligible.

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, 2008.