

TABLE 56. Worldwide R&D employment, by occupation, industry, and company size: 2013  
(Thousands)

Industry and company size	NAICS code	Total	R&D scientists and engineers and their managers	R&D technicians and technologists	R&D support staff (clerical and others)
All industries	21–23, 31–33, 42–81	2,095	1,438	412	245
Manufacturing industries	31–33	1,267	904	221	142
Food	311	40	26 i	8 i	6 i
Beverage and tobacco products	312	6	3	3	1
Textile, apparel, and leather products	313–16	9	4	4 i	1
Wood products	321	3	1	1 i	1
Paper	322	10	4	5	*
Printing and related support activities	323	4	2 i	1 i	1 i
Petroleum and coal products	324	2	1	1	1 i
Chemicals	325	229	148	36	46
Basic chemicals	3251	19	11	6	2
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	12	7	3	2
Pesticide, fertilizer, and other agricultural chemicals	3253	8 i	5 i	2 i	1 i
Pharmaceuticals and medicines	3254	155	99	18	38
Soap, cleaning compound, and toilet preparation	3256	18	15	2	2
Paint, coating, adhesive, and other chemicals	3255, 3259	17	11	4	2
Plastics and rubber products	326	34	19	12 i	4
Nonmetallic mineral products	327	13	7 i	5	1
Primary metals	331	13	5 i	6 i	1
Fabricated metal products	332	36	16 i	13 i	7 i
Machinery	333	114	79	24	10 i
Agricultural implement	33311	15	10	4	1
Semiconductor machinery	333295	12	9	3	1
Engine, turbine, and power transmission equipment	3336	14	9	4	1 i
Other machinery	other 333	72	51	13	8 i
Computer and electronic products	334	395	318	44	33
Communications equipment	3342	86	72	9	5
Semiconductor and other electronic components	3344	183	147 i	17 i	19
Navigational, measuring, electromedical, and control instruments	3345	80	63	13	5
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	12	8	2 i	1
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	30	24	5	1
Other measuring and controlling device	other 3345	39	31	6 i	3 i
Other computer and electronic products	other 334	45	36	5	4 i
Electrical equipment, appliances, and components	335	54	37	14 i	4 i
Transportation equipment	336	215	174	24	17
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	119	98	13	8
Aerospace products and parts	3364	85	70	8	7

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Aircraft, aircraft engine, and aircraft parts	336411-13	81	66	8	6
Guided missile, space vehicle, and related parts	336414-15, 336419	5	4	*	*
Military armored vehicle, tank, and tank components	336992	* i	* i	* i	* i
Other transportation	other 336	11	6 i	3 i	3 i
Furniture and related products	337	4	2	2 i	1
Miscellaneous manufacturing	339	84	59	18 i	7
Medical equipment and supplies	3391	65	45	14 i	6
Other miscellaneous manufacturing	3399	20	14	4 i	2
Nonmanufacturing industries	21-23, 42-81	828	535	192 i	102 i
Mining, extraction, and support activities	21	19	11	6	2
Utilities	22	2	1	1	*
Wholesale trade	42	14	5 i	2 i	7 i
Electronic shopping and electronic auctions	454111-12	11	2 i	8 i	1 i
Transportation and warehousing	48-49	3	1 i	1	1 i
Information	51	406	294	62	50
Publishing	511	298	229	25	44
Newspaper, periodical, book, and directory publishers	5111	8 i	4 i	1 i	3 i
Software publishers	5112	289	225	24	41
Telecommunications	517	20	11 i	9 i	*
Data processing, hosting, and related services	518	50	26	20 i	5
Other information	other 51	38	29	8	1
Finance and insurance	52	30	9	19	2
Real estate and rental and leasing	53	1	1	* i	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	* i	*
Other real estate and rental and leasing	other 53	1	*	*	*
Professional, scientific, and technical services	54	310	193 i	86 i	31 i
Architectural, engineering, and related services	5413	47	29 i	15 i	3
Computer systems design and related services	5415	113	87 i	16 i	11 i
Scientific research and development services	5417	106	49	45	12 i
Biotechnology research and development	541711	28	21	6	1
Physical, engineering, and life sciences (except biotechnology) research and development	541712	74	28	37	9 i
Social sciences and humanities research and development	541720	5	*	2 i	2 i
Other professional, scientific, and technical services	other 54	45	29 i	11 i	5 i
Health care services	621-23	3	1 i	2 i	* i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	30	16 i	5 i	8 i

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Industry and company size	NAICS code	Total	R&D scientists and engineers and their managers	R&D technicians and technologists	R&D support staff (clerical and others)
All companies (number of domestic employees)	-	2,095	1,438	412	245
Small companies <sup>a</sup>					
5-499	-	506	314 i	126 i	66 i
5-99	-	281	173 i	67 i	41 i
5-49	-	192	121 i	42 i	30 i
5-9	-	37	23 i	8 i	7 i
10-24	-	75	48 i	15 i	12 i
25-49	-	80	50 i	20 i	11 i
50-99	-	89	52 i	25 i	12 i
100-249	-	128	77 i	37 i	14 i
250-499	-	96	63	22	11
Medium and large companies					
500-999	-	85	55	22	8
1,000-4,999	-	363	247	74	42
5,000-9,999	-	254	167	59	27
10,000-24,999	-	270	187	55	27
25,000 or more	-	618	468	76	74

\* = amount < 500; 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> Upper bound based on U.S. Small Business Administration's definition of a small business; 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. 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 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, 2013.