

TABLE 121. Worldwide R&D employment, by occupation, industry, and company size: 2010
(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	1,924	1,307	389	228
Manufacturing industries	31–33	1,180	821	222	137
Food	311	29	15	9	4
Beverage and tobacco products	312	7	5	1	*
Textiles, apparel, and leather products	313–316	6	2	2	2
Wood products	321	2	1	1	*
Paper	322	12	8	3	1
Printing and related support activities	323	4	2	1	1
Petroleum and coal products	324	6	4	1	1
Chemicals	325	234	146	51	37
Basic chemicals	3251	18	9	7	2
Resin, synthetic rubber, fibers, and filaments	3252	7	4	2	1
Pesticide, fertilizer, and other agricultural chemical	3253	D	5	2	D
Pharmaceuticals and medicines	3254	160	99	31	30
Soap, cleaning compound, and toilet preparation	3256	18	14	2	2
Paint, coating, adhesive, and other chemical	3255, 3259	D	15	7	D
Plastics and rubber products	326	27	14	7	6
Nonmetallic mineral products	327	13	7	5	2
Primary metals	331	8	3	3	3
Fabricated metal products	332	29	13	10	7
Machinery	333	86	60	17	8
Agricultural implement	33311	9	7	1	*
Semiconductor machinery	333295	9	6	2	1
Engine, turbine, and power transmission equipment	3336	12	6	5	1
Other machinery	other 333	57	41	9	6
Computer and electronic products	334	390	301	60	29
Communications equipment	3342	85	63	16	6
Semiconductor and other electronic components	3344	133	108	16	10
Navigational, measuring, electromedical, and control instruments	3345	105	76	21	8
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	24	17	5	1
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	51	38	9	4
Other measuring and controlling instruments	other 3345	31	21	7	3
Other computer and electronic products	other 334	66	55	7	5
Electrical equipment, appliances, and components	335	51	38	10	3
Transportation equipment	336	215	161	29	25 i
Automobiles, bodies, trailers, and parts	3361–3363	88	70	12	7
Aerospace products and parts	3364	102	78	12	12 i
Aircraft, aircraft engine, and aircraft parts	336411–336413	96	72	12	11 i
Guided missile, space vehicle, and related parts	336414, 336415, 336419	7	6	1	*
Military armored vehicle, tank, and tank components	336992	*	*	*	* i
Other transportation	other 336	24 i	12 i	5 i	6 i
Furniture and related products	337	6	3	1	2
Miscellaneous manufacturing	339	56	37	12	7
Medical equipment and supplies	3391	38	25	7	6
Other miscellaneous manufacturing	3399	19	12	5	2
Nonmanufacturing industries	21–23, 42–81	744	486	167	91
Mining, extraction, and support activities	21	9	6	2	1
Utilities	22	4	2	1	1
Construction	23	13	9	2	2
Wholesale trade	42	15	6	6	3
Retail trade	44, 45	5	2	2	2
Electronic shopping and electronic auctions	454111, 454112	3	1	2	1
Other retail trade	other 44, 45	2	1	*	1
Transportation and warehousing	48, 49	2	1	*	1
Information	51	300	240	40	20

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Publishing	511	226	187	21	17
Newspaper, periodical, book, and directory publishers	5111	4	3	* i	1
Software publishers	5112	222	184	21	17
Telecommunications	517	18 i	15 i	3	1
Data processing, hosting, and related services	518	23	14	8	1
Other information	other 51	32	24	7	1
Finance and insurance	52	20	10	9	2
Real estate and rental and leasing	53	1	1	*	*
Professional, scientific, and technical services	54	339	195	91	52
Architectural, engineering, and related services	5413	41	30	7	5
Computer systems design and related services	5415	160	95	50	15
Scientific R&D services	5417	106	52	26	28
Biotechnology R&D	541711	31	20	6	5
Physical, engineering, and life sciences (except biotechnology) R&D	541712	71	30	19	22
Social sciences and humanities R&D	541720	3 i	1	2 i	1
Other professional, scientific, and technical services	other 54	32	19	8	5
Health care services	621–623	10	4	3	3
Other nonmanufacturing	55, 56, 624, 71, 72, 81	26	11	11 i	5
All companies (number of employees)	–	1,924	1,307	389	228
Small companies (number of employees) ^a					
5–499	–	492	290	139	63
5–99	–	295	173	86	36
5–49	–	205	122	59	24
5–9	–	40	21	12	7
10–24	–	85	50	25	10
25–49	–	80	51	22	7
50–99	–	90	51	27	12
100–249	–	115	67	32	16
250–499	–	83	50	20	12
Medium and large companies (number of employees)					
500–999	–	72	46	18	7
1,000–4,999	–	322	224	63	35
5,000–9,999	–	207	135	35	37
10,000–24,999	–	248	164	56	28
25,000 or more	–	583	448	78	58

* = amount < 500 employees; D = data withheld to avoid disclosing operations of individual companies; 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, 2010.