

TABLE 58

Foreign total employment, R&D employment, and level of education of researchers, by activity, industry, and company size: 2018

(Thousands)

Industry and company size	NAICS code	Total employment	Total R&D employment	Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff
				Total	With PhD		
All industries	21-23, 31-33, 42-81	10,700	797	558	29	169	70
Manufacturing industries	31-33	7,381	450	349	21	63	38
Food	311	525	13	8	i *	4	1
Beverage and tobacco products	312	397	2	2	*	*	*
Textile, apparel, and leather products	313-16	209	2	1	*	1	*
Wood products	321	7	*	*	* i	*	*
Paper	322	106	2	1	*	*	*
Printing and related support activities	323	19	*	*	0	*	*
Petroleum and coal products	324	71	2	1	* i	1	*
Chemicals	325	1,018	79	56	9	13	11
Basic chemicals	3251	106	5	3	1	2	*
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	78	5	3	1	1	*
Pesticide, fertilizer, and other agricultural chemicals	3253	31	2	i 1	i *	* i	*
Pharmaceuticals and medicines	3254	456	53	39	7	6	9
Soap, cleaning compound, and toilet preparation	3256	223	6	5	1	*	*
Paint, coating, adhesive, and other chemicals	3255, 3259	126	8	5	*	2	*
Plastics and rubber products	326	164	4	2	* i	1	*
Nonmetallic mineral products	327	90	1	* i	*	1	*
Primary metals	331	124	2	2	i *	* i	* i
Fabricated metal products	332	142	2	1	* i	*	*
Machinery	333	886	49	37	1	7	4
Agricultural implement	33311	85	9	7	*	1	*
Semiconductor machinery	333242	54	7	7	i *	* i	* i
Engine, turbine, and power transmission equipment	3336	147	9	8	*	*	1
Other machinery	other 333	600	24	16	i 1	5	3
Computer and electronic products	334	1,468	186	157	6	i 16	i 14
Communications equipment	3342	124	32	28	* i	1	3
Semiconductor and other electronic components	3344	565	80	72	3	i 5	2
Navigational, measuring, electromedical, and control instruments	3345	390	35	27	2	i 5	i 3
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	75	7	i 4	i 1	i 2	i 1
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	108	8	6	*	1	1
Other measuring and controlling device	other 3345	207	21	17	1	2	1
Other computer and electronic products	other 334	388	39	29	i 1	i 4	i 6
Electrical equipment, appliances, and components	335	443	21	18	i 1	2	1
Transportation equipment	336	1,059	61	47	1	9	4
Motor vehicles, bodies, trailers, and parts	3361-63	818	50	39	*	8	4
Aerospace products and parts	3364	174	8	7	*	1	*
Aircraft, aircraft engine, and aircraft parts	336411-13	160	8	7	*	1	*

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				Total	With PhD						
Guided missile, space vehicle, and related parts	336414-15, 336419	14	*	*	0	*	*				
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0				
Other transportation	other 336	67	2	1	*	*	*				
Furniture and related products	337	32	*	*	0	*	*				
Miscellaneous	339	618	24	16	1	6	2				
Medical equipment and supplies	3391	468	21	14	1	6	1				
Other miscellaneous manufacturing	3399	151	3	2	i	* i	* i				
Nonmanufacturing industries	21-23, 42-81	3,319	347	209	9	106	32				
Mining, quarrying, oil and gas extraction, and support activities	21	172	2	1	*	1	*				
Utilities	22	11	*	*	*	*	*				
Wholesale trade	42	29	1	*	i	* i	* i				
Electronic shopping and electronic auctions	454111-12	19 - 619	19 - 47	0 - 25	*	i	13 - 22	0 - 7			
Transportation and warehousing	48-49	287	*	*	*	*	*	i			
Information	51	820	151	110	4	25	15				
Publishing	511	307	68	53	2	8	7				
Newspaper, periodical, book, and directory publishers	5111	5	i	*	i	*	i	* i			
Software publishers	5112	302	68	53	2	8	7				
Telecommunications	517	77	1	1	*	*	*				
Data processing, hosting, and related services	518	298	60	40	*	11	8				
Other information	other 51	138	22	16	2	6	1				
Finance and insurance	52	323	14	10	*	3	1				
Real estate and rental and leasing	53	6	*	*	0	*	*				
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0	0	0	0	0				
Other real estate and rental and leasing	other 53	6	*	*	0	*	*				
Professional, scientific, and technical services	54	1,054	134	65	4	57	i	11			
Architectural, engineering, and related services	5413	97	1	1	*	*	*				
Computer systems design and related services	5415	538	48	38	1	i	4	i	5		
Scientific research and development services	5417	104	80	22	3	52	i	5			
Research and development in biotechnology	541711	32	25	10	1	15	i	* i			
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	72	54	12	2	37		5			
Research and development in the social sciences and humanities	541720	*	*	*	*	*	i	*			
Other professional, scientific, and technical services	other 54	315	i	6	4	i	*	1	i	1	i
Health care services	621-23	2	*	*	*	i	*	*			
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	0 - 600	0 - 28	0 - 25	*		0 - 3	0 - 3			
All companies (number of domestic employees)	-	10,700	797	558	29	169	70				
Small companies											
10-19 ^b	-	8	2	1	*	1	*	i			

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20–49	–	47	7	5	*	1	1
Medium companies							
50–99	–	39	7	6	*	1	*
100–249	–	223	20	15	1	4	2
Large companies							
250–499	–	259	20	15	1	3	2
500–999	–	350	29	19	1 i	7	3
1,000–4,999	–	1,794	146	109	5	24	13
5,000–9,999	–	1,553	130	71	4	47	12
10,000–24,999	–	2,539	173	120	8 i	39 i	13
25,000 or more	–	3,887	263	197	8	41	24

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

NAICS = 2012 North American Industry Classification System.

^a Researchers include R&D scientists and engineers and their managers.

^b Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):

Detail may not add to total because of rounding. 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.