TABLE 52

Foreign total employment, R&D employment, and level of education of researchers, by activity, industry, and company size: 2020 (Thousands)

	NAICS code			Researchersa		R&D technicians	
Industry and company size		Total employment	Total R&D employment	Total	With PhD	and	Other R&D supporting staff
All industries	21-23, 31-33, 42-81	11,052	910	613	35	214	83
Manufacturing industries	31-33	7,390	472	357	25	70	45
Food	311	598	17	9	1	4	4
Beverage and tobacco products	312	348	3	2	*	1	*
Textile, apparel, and leather products	313-16	190	1	1	* i	1	*
Wood products	321	9	*	* i	* i	*	*
Paper	322	103	2	2	*	*	*
Printing and related support activities	323	22	*	*	* i	*	*
Petroleum and coal products	324	66	2	1	* i	1	*
Chemicals	325	1,059	73	44	8	13	16
Basic chemicals	3251	181	7	3	1	3	1
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	75	4	2	*	1	*
Pesticide, fertilizer, and other agricultural chemicals	3253	31	1	* i	*	*	*
Pharmaceuticals and medicines	3254	428	47	27	6	6	14
Soap, cleaning compound, and toilet preparation	3256	196	6	5	1	*	*
Paint, coating, adhesive, and other chemicals	3255, 3259	148	9	6	*	2	1
Plastics and rubber products	326	225	5 i	2 i	* i	2 i	1 i
Nonmetallic mineral products	327	62	1 i	* i	* i	* i	*
Primary metals	331	43	*	*	*	* i	*
Fabricated metal products	332	172	2	2	*	*	*
Machinery	333	887	52	35	2	12	4
Agricultural implement	33311	71	7 i	5 i	* i	1 i	* i
Semiconductor machinery	333242	59	9	6	*	2	*
Engine, turbine, and power transmission equipment	3336	132	4	4	1	1	*
Other machinery	other 333	625	32	20 i	1	9	3
Computer and electronic products	334	1,304	195	166	8 i	16	12
Communications equipment	3342	120	34	27	1 i	4	3
Semiconductor and other electronic components	3344	481	86	80	4 i	4 i	2
Navigational, measuring, electromedical, and control instruments	3345	347	29	24	2 i	5	1
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	42	3 i	2 i	* i	*	* i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	76	5	4	*	1	*
Other measuring and controlling device	other 3345	229	22	17	1	3	1
Other computer and electronic products	other 334	356	46	35	2 i	5 i	7 i

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Industry and company size		Total employment	Total R&D employment	Researchersa		R&D technicians	
	NAICS code			Total	With PhD	and	Other R&D supporting staff
Electrical equipment, appliances, and components	335	417	24 i	19 i	* i	3	2
Transportation equipment	336	1,093	60	49	3	8	3
Motor vehicles, bodies, trailers, and parts	3361-63	896	50	40	2	7	3
Aerospace products and parts	3364	149	7	6 i	*	1	*
Aircraft, aircraft engine, and aircraft parts	336411-13	148	7	6 i	*	1	*
Guided missile, space vehicle, and related parts	336414-15, 336419	2	*	*	* i	0	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0
Other transportation	other 336	48	3 i	2 i	* i	* i	*
Furniture and related products	337	39	*	*	0	*	*
Miscellaneous	339	752	34	24	1	8	2
Medical equipment and supplies	3391	612	29	20	1	7	2
Other miscellaneous manufacturing	3399	140	5	3 i	* i	1	*
Nonmanufacturing industries	21-23, 42-81	3,662	438	256	10 i	144	38
Mining, quarrying, oil and gas extraction, and support activities	21	81	1 i	0 - 2 i	0 - 2 i	0-2 i	*
Utilities	22	9	*	0 - 1	0	0 - 1	0 - 1
Wholesale trade	42	82	*	*	0 -	*	*
Electronic shopping and electronic auctions	454111-12	0 - 703	0 - 70	0 - 41	0	0 - 41	0 - 11
Transportation and warehousing	48-49	294	*	*	*	*	*
Information	51	980	204	148	6	38	18
Publishing	511	287	74	53	2 i	15	6
Newspaper, periodical, book, and directory publishers	5111	*	0	0	0	0	0
Software publishers	5112	286	74	53	2 i		6
Telecommunications	517	86	2	1	*	1	*
Data processing, hosting, and related services	518	458	100	71	1 i	17	12
Other information	other 51	149	29	23	2	5	1
Finance and insurance	52	402	22	3 - 17	* i	0 - 19	0 - 10
Real estate and rental and leasing	53	6	*	*	*	*	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	*	*	0
Other real estate and rental and leasing	other 53	6	*	*	* i	*	0
Professional, scientific, and technical services	54	1,095	144	66	4 i	67 i	11

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Foreign total employment, R&D employment, and level of education of researchers, by activity, industry, and company size: 2020 (Thousands)

Industry and company size	NAICS code			Researchers		s ^a R&D	
		Total employment	Total R&D employment	Total	With PhD	technicians and equivalent staff	Other R&D
Architectural, engineering, and related services	5413	78	*	*	*	*	*
Computer systems design and related services	5415	548	42	36	* i	3	3
Scientific research and development services	5417	141	95 i	26	3 i	63 i	7 i
Research and development in nanotechnology	541713	*	* i	* i	0	0	0
Research and development in biotechnology (except nanobiotechnology)	541714	40	32	14	1	18	*
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	101 i	63 i	12	2 i	44 i	7 i
Research and development in the social sciences and humanities	541720	*	*	*	0	0	*
Other professional, scientific, and technical services	other 54	328	6	3	* i	1 i	1
Health care services	621-23 23, 44-45 (excluding 454111-	15	*	* 0 -	0 - 1 0 -	*	* 0 -
Other nonmanufacturing	12), 55–56, 624, 71–72, 81	0 - 703	0 - 70	41	1 i	0 - 41	11
All companies (number of domestic employees)	_	11,052	910	613	35	214	83
Small companies							
10-19 ^b	_	12	4	3	*	1	*
20-49	_	62	8	5	*	3	1
Medium companies							
50-99	_	52	13	6	1	7	1
100-249	_	240	20	13	1	5	2
Large companies							
250-499	_	240	23	18	1	4	1
500-999	_	394	39	29	1 i	7	3
1,000-4,999	_	1,828	157	114	6 i	31	12
5,000-9,999	_	1,281	96	62	5 i	22 i	12
10,000-24,999	_	2,769	217	118	7	75 i	24
25,000 or more	_	4,174	333	245	13	60	28

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

NAICS = 2017 North American Industry Classification System.

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

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

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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. Statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D and are not comparable 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 Census Bureau, Business Enterprise Research and Development Survey, 2020.