

Table 46. Worldwide, domestic, and foreign total and R&D employment, by industry and company size: 2024

(Thousands and percent)

Industry and company size	NAICS code	Worldwide employees			Domestic employees			Foreign employees		
		Total	R&D	Percentage of R&D employees	Total	R&D	Percentage of R&D employees	Total	R&D	Percentage of R&D employees
All industries	21–23, 31–33, 42–81	34,779	3,298	9.5	23,145	2,130	9.2	11,634	1,168	10.0
Manufacturing industries	31–33	17,769	1,598	9.0	10,183	1,032	10.1	7,586	566	7.5
Food	311	1,596	42	2.6	1,169	29	2.5	428	13	3.0
Beverage and tobacco products	312	1,038	11	1.1	481	7	1.5	557	4	0.7
Textile, apparel, and leather products	313–16	327	6	1.9	187	5	2.7	140	1	0.9
Wood products	321	173	5	2.7	155	5	2.9	18	*	0.2
Paper	322	322	7	2.1	203	6	2.7	119	1	1.1
Printing and related support activities	323	114	3	2.6	95	3	2.9	18	*	0.7
Petroleum and coal products	324	180	6	3.3	128	4	3.1	52	2	3.8
Chemicals	325	2,415	304	12.6	1,397	227	16.3	1,018	77	7.6
Basic chemicals	3251	320	28	8.7	203	20	10.1	117	7	6.3
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	159	10	6.6	81	6	7.9	78	4	5.1
Pesticide, fertilizer, and other agricultural chemicals	3253	112	4	3.9	69	4	5.3	43	1	1.6
Pharmaceuticals and medicines	3254	1,158	231	19.9	691	176	25.5	467	54	11.6
Soap, cleaning compound, and toilet preparations	3256	416	17	4.1	198	10	5.2	218	7	3.0
Paint, coating, adhesive, and other chemicals	3255, 3259	251	14	5.7	156	10	6.4	95	4	4.4
Plastics and rubber products	326	601	22	3.6	390	18	4.6	211	4	1.8
Nonmetallic mineral products	327	216	11	5.0	132	9	7.1	84	1	1.7
Primary metals	331	240	10	4.2	163	8	4.7	76	2	3.1
Fabricated metal products	332	579	36	6.2	430	28	6.6	149	8	5.0
Machinery	333	1,943	166	8.5	996	101	10.2	947	64	6.8
Agricultural implement	33311	183	19	10.2	104	10	10.0	79	8	10.6
Semiconductor machinery	333242	126	31	24.7	48	17	36.2	78	14	17.7
Engine, turbine, and power transmission equipment	3336	365	30	8.2	156	17	11.2	210	13	6.0
Other machinery	other 333	1,269	86	6.8	688	56	8.2	581	29	5.1
Computer and electronic products	334	2,467	527	21.4	1,059	272	25.7	1,408	254	18.1
Communications equipment	3342	324	73	22.6	194	36	18.7	130	37	28.4
Semiconductor and other electronic components	3344	892	244	27.3	291	104	35.8	601	139	23.2

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Navigational, measuring, electromedical, and control instruments	3345	588	88	15.0	320	60	18.7	267	28	10.5
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	76	11	14.6	47	8	18.0	29	3	9.3
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	160	36	22.2	134	29	21.9	26	6	24.0
Other measuring and controlling devices	other 3345	351	41	11.8	139	22	15.9	212	19	9.1
Other computer and electronic products	other 334	663	122	18.4	253	72	28.3	410	50	12.2
Electrical equipment, appliances, and components	335	589	39	6.6	297	25	8.4	291	14	4.8
Transportation equipment	336	3,236	277	8.5	1,929	197	10.2	1,306	79	6.1
Motor vehicles, bodies, trailers, and parts	3361–63	1,890	169	8.9	946	111	11.7	944	58	6.1
Aerospace products and parts	3364	1,088	91	8.4	790	73	9.2	298	19	6.3
Aircraft, aircraft engine, and aircraft parts	336411–13	D	D	D	612	53	8.6	D	D	D
Guided missile, space vehicle, and related parts	336414–15, 336419	D	D	D	178	20	11.1	D	D	D
Military armored vehicle, tank, and tank components	336992	3	*	14.4	3	*	14.4	0	0	NA
Other transportation	other 336	255	16	6.2	191	13	7.0	64	3 i	3.9
Furniture and related products	337	164	4	2.7	130	4	3.0	34	1	1.6
Miscellaneous	339	1,570	124	7.9	841	84	9.9	729	40	5.5
Medical equipment and supplies	3391	1,206	105	8.7	601	69	11.5	605	36	5.9
Other miscellaneous manufacturing	3399	364	18	5.0	240	14	5.9	124	4	3.4
Nonmanufacturing industries	21–23, 42–81	17,011	1,700	10.0	12,962	1,098	8.5	4,049	602	14.9
Mining, quarrying, oil and gas extraction, and support activities	21	D	D	D	118	5	3.9	D	D	D
Utilities	22	351	7	2.0	344	7	2.0	7	*	3.8
Wholesale trade	42	555 i	24 i	4.3	427 i	22 i	5.2	128 i	2 i	1.4
Electronic shopping and electronic auctions	454111–12	D	D	D	1,421	28 i	1.9	D	D	D
Transportation and warehousing	48–49	1,388	36	2.6	1,117	35	3.1	271	1	0.5
Information	51	3,567	839	23.5	2,295	502	21.9	1,272	337	26.5
Publishing	511	903	300	33.2	508	153	30.2	395	146	37.0

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Newspaper, periodical, book, and directory publishers	5111	20	5	25.7	20	5	25.9	*	*	16.3
Software publishers	5112	882	294	33.4	487	148	30.4	395	146	37.0
Telecommunications	517	510	17	3.2	458	15	3.3	53	1	2.7
Data processing, hosting, and related services	518	1,312	310	23.6	735	174	23.7	578	136	23.6
Other information	other 51	842	212	25.2	595	159	26.8	247	53	21.6
Finance and insurance	52	2,233	130	5.8	1,673	90	5.4	560	40	7.2
Real estate and rental and leasing	53	188	6	3.3	162	6	3.5	26	1	2.1
Lessors of nonfinancial intangible assets (except copyrighted works)	533	2	*	3.8	2	*	3.8	*	0	NA
Other real estate and rental and leasing	other 53	186	6	3.3	160	6	3.5	26	1	2.1
Professional, scientific, and technical services	54	2,780	554	19.9	1,782	354	19.9	998	200	20.0
Architectural, engineering, and related services	5413	513	71	13.8	457	70	15.2	56	1	2.1
Computer systems design and related services	5415	963	175	18.1	506	111	22.0	456	63	13.8
Scientific research and development services	5417	618	248	40.1	352	124	35.2	267	124	46.5
Research and development in nanotechnology	541713	9	2	24.9	6	2	30.3	2	*	9.5
Research and development in biotechnology (except nanobiotechnology)	541714	149	61	40.9	109	30	27.2	41	31	77.4
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	449	177	39.4	226	85	37.6	224	92	41.3
Research and development in the social sciences and humanities	541720	11	8	69.3	11	8	69.3	*	*	65.6
Other professional, scientific, and technical services	other 54	686	61	8.8	467	49	10.5	219	11	5.2
Health care services	621–23	467	9	2.0	445	8	1.9	22	1	3.9
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	3,353	45	1.3	3,178	43	1.3	175	2	1.2

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All companies (number of domestic employees)	–	34,779	3,298	9.5	23,145	2,130	9.2	11,634	1,168	10.0
Small companies										
10–19 ^a	–	103	36	34.8	69	26	38.3	34	9	27.6
20–49	–	284	86	30.4	249	74	29.9	35	12	34.2
Medium companies										
50–99	–	405	103	25.5	333	87	26.2	72	16	22.1
100–249	–	841	158	18.7	690	130	18.9	151	27	18.0
Large companies										
250–499	–	1,015	154	15.2	713	112	15.8	302	42	13.9
500–999	–	1,490	166	11.2	1,108	122	11.0	382	44	11.6
1,000–4,999	–	5,294	611	11.5	3,121	381	12.2	2,173	231	10.6
5,000–9,999	–	3,318	307	9.3	1,945	203	10.4	1,373	105	7.6
10,000–24,999	–	6,202	599	9.7	3,560	323	9.1	2,642	276	10.4
25,000 or more	–	15,829	1,077	6.8	11,358	671	5.9	4,470	406	9.1

* = amount < 500 employees; D = data withheld to avoid disclosing operations of individual companies; i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse; NA = not available.

NAICS = 2017 North American Industry Classification System.

^a The Business Enterprise 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. Statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2024.