

## Cleveland, OH

Advanced industries employ

**94,370**

full-time workers. (2013)

These direct jobs supports an additional

**75,500**

indirect jobs in other industries in the region.

Advanced industries produce

**\$15.7**

billion dollars in output in the region.  
(2013, 2005 Chained)

Advanced industries pay, on average

**\$76,490**

dollars per year (2013).

Advanced industries directly account for

**9.1%**

of all jobs in the region.

This employment share is

**#40**

among all large metros.

This accounts for

**14.6%**

of all output in the region (2013).

This compares to average pay of

**\$49,880**

for all industries (2013).

Advanced industry annual average growth, 2010-2013

**JOBS**

3.6%

2.7%

Cleveland, OH

U.S.

**OUTPUT**

5.3%

3.8%

Cleveland, OH

U.S.

### What are Advanced Industries?

The Metropolitan Policy Program at Brookings defines advanced industries as those that: 1) Spend at least \$450 per worker per year on R&D and 2) employ at least 20 percent of their workforce in STEM-intensive occupations. The definition identifies 50 4-digit NAICS industries across the manufacturing, energy, and services sectors that together constitute the advanced industries super-sector.

### Why do Advanced Industries Matter?

Advanced industries encompass the nation's "tech" sector at its broadest and most consequential. They represent a sizable economic anchor for the U.S. economy and have led the post-recession employment recovery. Their competitiveness and growth are prerequisites for any future broadly shared prosperity. As such, the sector encompasses the country's best shot at supporting innovative, inclusive, and sustainable growth. Advanced industries are present in nearly every U.S. region, but the sector's geography is uneven.

### For More Information

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#### DATA NOTES

All figures reflect Brookings analysis of data from Moody's Analytics.

# Cleveland, OH

## Twenty-Five Largest Advanced Industries (2013)

There are 15 advanced industries in Cleveland, OH with LQs over 1.5. LQs over 1.5 indicate specialization †

Industry 4-Digit NAICS Code	Industry Title	Industry Employment (2013)	Industry Location Quotient (LQ) † 2013	Industry Share of Total Advanced Industries Employment (2013)	Industry Employment Annual Growth 2010-2013	Industry Share of Total Advanced Industries Output (2013)	Industry Output Annual Growth 2010-2013
5415	Computer Systems Design	11,660	0.94	12.4%	6.8%	11.2%	8.2%
5413	Architecture & Engineering	9,160	0.93	9.7%	2.4%	6.5%	0.9%
3363	Motor Vehicle Parts	7,470	2.00	7.9%	4.1%	4.3%	13.8%
5416	Management Consulting	7,450	0.86	7.9%	8.0%	5.7%	4.4%
3339	General Purpose Machinery	6,190	3.31	6.6%	6.5%	4.6%	11.0%
3311	Iron & Steel Products	3,980	5.96	4.2%	11.3%	3.3%	18.0%
3391	Medical Equipment & Supplies	3,820	1.71	4.0%	4.3%	2.6%	1.8%
3353	Electrical Equipment	3,080	2.93	3.3%	0.5%	3.2%	-1.0%
3399	Misc. Manufacturing	2,930	1.46	3.1%	-0.8%	1.3%	-2.3%
3345	Precision Instruments	2,840	0.99	3.0%	0.3%	1.9%	0.7%
3364	Aircraft Products & Parts	2,820	0.77	3.0%	3.3%	6.6%	10.5%
3251	Basic Chemicals	2,610	2.48	2.8%	0.6%	6.1%	3.0%
3315	Foundries	2,600	2.83	2.8%	-4.2%	1.5%	0.3%
5417	R&D Services	2,230	0.48	2.4%	1.4%	2.1%	4.1%
2211	Power Generation & Supply	2,070	0.72	2.2%	-2.3%	9.7%	10.1%
3359	Misc. Electrical Equipment	2,060	2.24	2.2%	9.1%	1.9%	6.2%
3361	Motor Vehicles	2,030	1.48	2.1%	4.1%	1.7%	14.1%
3252	Resins & Synthetic Rubbers	1,700	2.51	1.8%	0.8%	3.6%	3.1%
3259	Misc. Chemicals	1,650	2.70	1.7%	1.7%	2.3%	0.4%
3344	Semiconductors	1,610	0.59	1.7%	2.5%	0.8%	-1.9%
3254	Pharmaceuticals	1,520	0.75	1.6%	-1.9%	4.6%	2.0%
3279	Stone & Mineral Products	1,380	2.71	1.5%	9.4%	1.0%	13.2%
3336	Engine & Power Equipment	1,110	1.50	1.2%	1.9%	0.7%	4.0%
3333	Commercial & Service Machinery	1,060	1.65	1.1%	5.7%	0.7%	7.8%
5182	Data Processing & Hosting	1,000	0.51	1.1%	-0.1%	0.9%	4.9%
Advanced industries manufacturing		57,590	1.44	61.0%	3.1%	59.7%	4.9%
Advanced industries energy		2,120	0.46	2.2%	-2.4%	9.8%	9.9%
Advanced industries services		34,670	0.76	36.7%	4.8%	30.5%	4.7%
<b>ADVANCED INDUSTRIES TOTAL</b>		<b>94,370</b>	<b>1.05</b>	<b>100.0%</b>	<b>3.6%</b>	<b>100.0%</b>	<b>5.3%</b>

† Location quotients are a measure of specialization for an industry using employment. A LQ of over 1 indicates that an industry employs more workers, as a share of total employment, than the nation as a whole.