Ohio’s Polymer and Advanced Materials Industry

Build your business with America’s polymer innovation leaders
The Polymers and Advanced Materials Industry in Ohio encompasses companies that offer products and services in the fields of polymer, plastic, rubber, paint, sealant, adhesive, ink and advanced materials. The scope of the industry includes research and development, as well as manufacturing. Ohio’s key polymer sectors include: advanced composites, advanced energy, bioproducts, flexible devices, nanotechnology and polymer processing.

Ohio’s world-leading polymer industry is one of the state’s most expansive and important economic sectors. From its early roots in Akron’s tire production and the region’s support for the auto industry to supplying today’s growth industries, Ohio has always been the heart of America’s polymer industry. The state’s polymer group of plastics, rubbers and resins manufacturers contributed more than $50 billion in Gross Domestic Product (GDP) to Ohio. This is the largest value for any state in the nation. At least one industry establishment exists in 76 of Ohio’s 88 counties. Polymer exports exceeded $1.3 billion in 2009, and employment is greater than 80,000 jobs at more than 1,150 establishments.

Ohio’s polymer industry is supported by a world-class supply chain made up of academic and technical institutions, designers and materials suppliers, mold builders, resin suppliers and compounders, plastic and polymer processors, industry associations and economic development organizations.

Between 2006 and 2009, Ohio’s abundant assets led to the state winning four consecutive Governor’s Cup Awards as the nation’s top location for capital investment, according to Site Selection magazine. Between 2006 and 2009, Ohio gained more than 250 new polymer plants and expansions.

Ohio’s polymer success is not solely dependent on the strength of its business advantages. Today’s industry leaders have made Ohio a top choice to pursue their personal goals as well. Ohio offers employees and their families a competitive cost of living, a richly diverse culture and numerous entertainment and recreation opportunities. We invite you to see why Ohio is the State of Perfect Balance for achieving your personal and professional goals.
Costs associated with accessing markets and shipping products and supplies can be a considerable business expense. Ohio’s world-class transportation infrastructure, proximity to major markets and large-scale polymer and advanced materials industries offer key cost-reducing advantages for your company.

Ohio is within 600 miles of more than 63 percent of all U.S. and Canadian manufacturing facilities. The state’s world-class transportation infrastructure of highways, class 1 rail, airports and maritime ports is well suited for distributing polymer products to customers. Companies can get their products to market quickly and efficiently, reducing shipping costs and simplifying just-in-time delivery.

Companies joining Ohio’s polymer community will find that thanks to the state’s high concentration of polymer operations, all essential assets are already in place. Twenty-nine companies on Fortune magazine’s U.S.-1,000 or Global-500 lists have polymer operations in Ohio, seven of which are global headquarters.

Ohio has the lowest tax rates in the Midwest and one of the lowest overall nationally, with comprehensive tax reforms passed in 2005. Ohio does not assess taxes on corporate income, personal property, the acquisition of manufacturing machinery and equipment, or out-of-state sales. The result is your company will have more money to invest in what matters: profitability.

“Ohio’s strong industrial base in plastics and printing, and leading research in liquid crystals, polymers and polymer engineering make the state a natural home for the polymer industry. In Ohio, I have everything I need to succeed professionally and personally.”

Bahman Taheri, Chief Executive Officer, AlphaMicron, Kent, Ohio
Ohio’s public and private polymer support organizations:

Ohio Department of Development
The Ohio Department of Development provides a variety of business development resources to help polymer companies remain at the leading edge of their industries.

Ohio Polymer Strategy Council
The Council works to strengthen Ohio’s polymer industry and to establish global leadership in technology-driven opportunities.

Ohio BioProducts Innovation Center
The Ohio BioProducts Innovation Center develops chemical conversion technologies to generate industrial products (such as lubricants and adhesives) from raw materials grown in Ohio, including corn and soybeans.

Center for Multifunctional Polymer Nanomaterials and Devices
The Center puts Ohio at the forefront of nanotechnology research and commercialization opportunities.

Edison Technology Centers
Seven Edison Technology Centers located around the state provide a variety of product and process innovation and commercialization services to both established and early-stage technology-based businesses.

The National Composite Center
The National Composite Center, located in Ohio, develops advanced manufacturing technologies to provide industry and consumers with high-performance materials that last longer and cost less.

PolymerOhio
An Ohio Edison Technology Center that is focused on enhancing the Ohio polymer industry’s global competitiveness and growth, has experts with a deep understanding of the polymer materials processes and the products derived from these materials. The organization also collaborates with the Ohio Department of Development and academic research facilities on creating exciting new applications for polymer products. Eight Ohio universities have polymer research programs providing businesses with a well-educated workforce. Research and development collaboration between universities and businesses creates new products, applications and opportunities for growth.
Increase productivity and efficiency with Ohio’s skilled polymer workforce

Ohio’s polymer industry workforce consists of more than 81,000 skilled employees in 76 of Ohio’s 88 counties. Eight thousand individuals manufacture rubber and plastic resin products for 44 foreign-owned companies with subsidiaries and joint ventures in Ohio. Polymer industry employment is greater in Ohio, with 8 percent of the U.S. industry jobs located here, compared with 4 percent of all private sector employment in the U.S. Ohioans employed in the plastic and rubber industry earn above-average salaries. These salaries vary by industry sector, but the average annual salary is $40,300, with the greatest pay earned in resins and synthetic rubber production, averaging $61,400 per year.

Akron, Ohio is home to the world’s largest concentration of materials and polymer research and development expertise. The University of Akron’s College of Polymer Science and Polymer Engineering is renowned globally and ranked in the top-five graduate polymer programs in the U.S. Additionally, the chemical engineering, polymer science and polymer engineering sections of the University of Akron’s Materials and Polymer Sciences research network have produced the most Ph.D. students in the state.

This workforce supply minimizes time associated with training, significantly increasing productivity and reducing operating costs.

Ohio colleges and universities with polymer-related programs

- Bowling Green State University Center for Photochemical Sciences
- Case Western Reserve Center for Applied Polymer Research
- Kent State Liquid Crystal Institute & Chemical Physics & Interdisciplinary Program
- Shawnee State Plastics Engineering Technology
- The Ohio State University Center for Advanced Polymer and Composite Engineering
- University of Akron College of Polymer Science & Polymer Engineering
- University of Dayton Research Institute
- University of Toledo Polymer Institute
Minimize risk by partnering with industry leaders and acquiring R&D funding to build your polymer and advanced material business

Ohio’s polymer and advanced materials companies are leading the way for the advancement of new manufacturing techniques, materials and technologies in a wide variety of applications in plastic products, resin and rubber, tire technology and others.

Statewide, Ohio boasts some of the largest polymer and advanced materials companies in the industry. Goodyear Tire and Rubber Company is the largest polymer employer in the state with 3,100 employees and investment of nearly $1 billion dollars in 2007. From 2007 through 2009, 73 polymer companies announced 78 major projects with intentions to invest $1.5 billion in the state with an anticipated creation of 2,500 new jobs. In Ohio, your company can benefit from the presence of many outstanding polymer-related businesses.

Ohio’s major polymer employers include:

- A. Schulman
- Cooper Tire and Rubber Company
- Eaton Corporation
- Goodyear Tire and Rubber
- Owens Corning
- Parker Hannifin
- PolyOne

Funding and R&D

The State and Ohio polymer companies are investing more than $100 million to commercialize new technology. Ohio Third Frontier has awarded more than $200 million in grants to the Ohio polymer industry, while 60 collaborating partners have pledged an additional $70 million. Research can be conducted in partnership with the eight Ohio universities that have polymer research programs, which places best-in-class research at a company’s fingertips. Costs are shared. Risks are minimized.
Ohio’s tax structure and business advantages eliminate obstacles, accelerate start-up, and feed business growth.

Ohio’s significant tax reform has substantially lowered the cost of doing business in the state. As of 2010, Ohio is the Best in the Midwest, providing businesses with the lowest rates of taxation in the region.

Ohio’s favorable business climate and high quality of living, combined with low business and personal costs, are making the state the top choice among executives, entrepreneurs, workers and their families.

Here are a few more advantages Ohio offers:

Ready sites make you profitable faster.
The Ohio Job Ready Sites program, backed by a third-party guarantee of on-schedule, on-budget completion, accesses state funding to support infrastructure creation at sites throughout the state.

Siting tools and assistance programs meet your project needs.
Ohio InSite is a powerful site selection tool, featuring workforce demographics, business data and thematic maps, designed to help investors find the location that best suits their project’s needs.

Business incentives reduce your risk.
Ohio’s incentive programs include low-interest financing programs for new capital investments, commercial activity tax (CAT) and property tax exemptions and financial support for employee training and assistance. Ohio also offers a variety of stimulus programs designed to improve transportation and expand logistics infrastructure and access to markets.

Professional services simplify the investment process.
Ohio’s superior corporate support provides experienced attorneys, accountants, bankers and economic development experts that ease financing and legal arrangements and facilitate access to utilities, transportation, technical research, foreign trade zones and economic development incentives.

Supplier services keep your operation running smoothly.
Ohio’s world-class supplier network provides services for sub-contracting, packaging, shipping and equipment maintenance needs.

Based on:
- A firm plans on investing $32 million into a facility
  - Real Property = $12 million
  - Tangible Personal Property = $20 million
- Plans to hire 200 employees
  - Average wage of $35,000 per year
- Total expected sales of $50 million
- Expected exports of 90%
- Net income of $5 million

Source: Ohio Department of Development, Office of Strategic Research
Welcome to Ohio, the state that offers balance without compromise. Here, an enriching future in both business and life is equally and readily attainable.

Ohio offers everything businesses need to thrive and grow – a central location supported by a world-class logistics infrastructure, easy access to markets and supply chains, a large, productive labor pool, and public/private sector leadership committed to business and policy innovation across diverse economic sectors.

In Ohio, business success is built within the broader context of life fulfillment. Eight major cities across the state, in close proximity to smaller communities, provide a choice of low-cost, low-stress environments.

The diverse regions anchored by these cities offer a tapestry of cultural, recreational, and educational opportunities that promote a life full of balance.

Ohio is a place where balance without compromise allows you to achieve at a higher level and realize your individual aspirations – at home, work, and in the community.

Key benefits of building your polymer and advanced materials business in Ohio include:

- Leverage Ohio’s extensive polymer supply chain and R&D
- Reduce costs. Increase profits. Speed innovation to market. With easy access to profitable markets
- Strong public-private collaborations accelerate polymer industry growth
- Increase productivity and efficiency with Ohio’s skilled polymer workforce
- Minimize risk by partnering with industry leaders and acquiring R&D funding to build your polymer and advanced material business
- Eliminate obstacles, accelerate start-up, and feed business growth with Ohio’s tax structure and business advantages
- Achieve a state of perfect balance in both your business and personal endeavors

Find your balance at OhioMeansBusiness.com. For direct help, contact us at (877) 466-4551.