

Company History

1940s through 2020s

Words like entrepreneurship, sales, finance, engineering, and technology are central to the history of Air Products. So are concepts like developing lasting relationships with our customers and communities based on an understanding of their needs, integrity in the way we do business, and a passion for exceeding expectations.

The early part of the Air Products story shaped an important chapter in the broader history of the industrial gas industry. In the decades that followed, the company owed much of its success to the know-how and innovative spirit of its employees—and the willingness to seize opportunities for growth.



Leonard Parker Pool founded Air Products in 1940 in Detroit, Michigan, and it was his novel idea of "on-site" built oxygen plants at the customer site to produce and sell industrial gases.

Initial sales were slow, so he pivoted and sold oxygen generators to support World War II military efforts.



Air Products leases its first oxygen gas generator to a small Detroit steel company in 1941. **Pictured:** Grede foundries plant, Milwaukee, Wisconsin; an R-760 generator, typical of generators sold and leased in the 1940s and 1950s.



World War II diverts the Company's attention to the design and manufacture of mobile generators to produce oxygen for use by the military in high-altitude flights. **Pictured:** Two of many aircraft repair units trained by Air Products to operate and maintain its mobile oxygen generators.



In 1944, Air Products moves to Chattanooga, Tennessee and produces 240 oxygen generators for the military. **Pictured:** Mobile and stationary oxygen generators under construction in Chattanooga.



The Company refocuses its sights on commercial markets by setting up headquarters operations near Allentown in Pennsylvania's Lehigh Valley. **Pictured:** Emmaus, Pennsylvania, Plant 1.



Abundant oxygen reshaped the gas industry. Leonard Pool aimed to compete in this "tonnage" gas market, while rising demand for liquid hydrogen — once considered a lab curiosity — opened new opportunities.

Leonard Pool called it the Company's largest contract — building plants to supply liquid oxygen and nitrogen for America's growing missile and space program.

Pictured: The Santa Susana Plant, featuring four 75-ton-per-day oxygen generators.



The marketing concept known as "piggy-backing" is introduced — building extra gas liquefaction capacity into the on-site plants. **Pictured:** Spencer Chemical 200-ton-per-day oxygen-nitrogen plant, Vicksburg, Mississippi.



In 1957, Air Products enters the international market for industrial gases through Air Products (Great Britain), Ltd., a joint venture with the Butterley Company.

Pictured: Members of the Board of Directors leaving Coombe House, New Malden, head office of APL in the U.K.



Air Products began building its Allentown headquarters with offices, manufacturing, and logistics facilities. Over the next six decades, the site grew into the Company's central hub. **Pictured:** First administrative office building in Allentown, Pennsylvania.



In 1961, Air Products begins manufacturing chemicals through a joint venture to convert refinery by-products into oxo-alcohols for use in producing plasticizers. **Pictured:** Air Products' Calvert City, Kentucky plant, where a wide range of industrial and specialty chemicals, including water-based emulsion polymers and surfactants, were produced.



Air Products leveraged its core building-blocks like oxygen and hydrogen to expand, while engineering expertise propelled it to global leadership in helium.

Pictured: Air Products' stock is listed on the New York Stock Exchange for the first time in 1962 as its sales pass \$100 million.



In 1962, the Company acquires the Houdry Process Company and its subsidiary, the Catalytic Construction Company. **Pictured:** The Houdry Laboratory in Linwood, Pennsylvania.



In the mid-60s, the Company widens its global presence with subsidiaries in Belgium, West Germany, and South Africa. **Pictured:** Kempton Park, South Africa.



Air Products develops a process for the recovery of helium from natural gas, along with the process to liquefy natural gas using a heat exchanger.

Pictured: Liberal. Kansas.



By the 1970s, nitrogen applications grew alongside oxygen, and the Company expanded into chemicals and electronics – reaching Fortune 500 status in 1978 with \$1 billion in sales. **Pictured:** Hometown, Pennsylvania Groundbreaking Ceremony, July 8, 1971.



The business further expands in the '70s with the acquisition of the chemicals and plastics business of Airco, Inc. Over the next 40 years, the polymer emulsions business becomes the U.S. market leader, generating nearly \$1 billion in revenues.



Early Cryo-Quick food freezing units helped revolutionize the American restaurant industry, enabling centralized food processing to ensure consistency.

Pictured: Freezing hamburger patties for McDonald's.



Air Products is awarded a 12-year \$287 million contract from NASA to supply liquid hydrogen to the United States' new space shuttle program.



The Company expanded globally through equity investments, strengthened its chemicals and electronics sectors, advanced into environmental and energy markets, and established a leading position in refinery hydrogen supply.

Pictured: With changing clean air regulations and growing fuel demand, our Port Arthur, Texas facility launched a JV with KTI (now Technip) to supply hydrogen processing equipment, making us the leading global provider for refinery hydrogen.



Air Products undertakes a strategic global expansion by taking minority positions in industrial gas companies in Korea, Japan, Malaysia, Hong Kong, China, Thailand, Taiwan, and Mexico. **Pictured:** Air Products San Fu in Taipei, Taiwan.



Air Products significantly expands the Company's emerging epoxy curing agents business and gains a manufacturing foothold in Europe.



In 1983, Air Products acquired Gardner Cryogenics, which continues today designing and manufacturing high-performance, highly reliable, long lasting storage tanks used to transport hydrogen and helium molecules for the industrial gas industry around the globe.



In the mid-80s, the Company forms an environmental and energy systems business to focus on power generation, air pollution control, and energy recovery from solid waste. **Pictured:** Stockton, California, cogeneration, facility.



Global expansion continued, as did the Company's dedication to the electronics industry. Earlier development work with the U.S. government paid dividends, catapulting the Company's electronics business to a worldwide leadership position. **Pictured:** Carburos plant, Tres Cantos (Madrid) in the 1990s, Air Products acquires a 49 percent interest in Sapio in Italy, and completes the acquisition of Carburos Metálicos in Spain and Korea Industrial Gas.



In Asia, the Company forms joint ventures with Japanese companies Daido Hoxan and Showa Denko to serve the growing electronics industry.



Air Products establishes a new company in Singapore, forms a joint venture in Indonesia, and opens new facilities at Tsukuba, Japan, to supply products to the Asia semiconductor market.



Nitrogen trifluoride—a material originally developed for laser weaponry in the 1960s—becomes the pre-eminent chamber cleaning material for the semiconductor industry. Air Products becomes the worldwide leader in production of this material. **Pictured:** The nitrogen trifluoride manufacturing facility in Hometown, Pennsylvania.



The Company acquires Permea, Inc., a leading supplier of membrane and adsorption gas separation systems. **Pictured:** Membrane fibers are manufactured at our Permea facility in St. Louis, Missouri for our noncryogenic gas supply systems.



The Company strengthens its worldwide leadership in natural gas liquefaction process technology by introducing a debottlenecking process that enables as much as a 60 percent capacity increase in production without sacrificing existing efficiency. **Pictured:** A main cryogenic heat exchanger which was part of Air Products' AP-X® liquefaction process technology.



Air Products builds on its surface science expertise by acquiring Tomah³ Products for industrial and institutional cleaning.



Air Products becomes the leading industrial gas supplier in central Europe by acquiring the industrial gas business of BOC Gazy.



In China, Air Products lands its two largest ASU orders ever, the first with Shanxi Future Energy Chemical Co., Ltd. (12,000 TPD of oxygen) and the second with Shanxi Lu'An Mining (Group) Co., Ltd., (10,000 TPD of oxygen). The ASUs are driven by large-scale coal gasification and petroleum projects throughout China.

Pictured: ASU pad for Lu'An coal gasification project in Shanxi Province, China.



Air Products acquires DuPont's interest in DuPont Air Products NanoMaterials LLC, the two companies' 50-50 joint venture serving the global semiconductor and wafer polishing industries.



In 2012, Air Products acquires a controlling stake in INDURA, the largest independent industrial gas company in South America at the time. The acquisition brings new sales and gives the Company a significant presence in a fourth region of the world.



Air Products acquires EPCO Carbon Dioxide Products, Inc. in 2013, adding liquid CO_2 to its North American offerings through EPCO's 12 CO_2 purification and liquefaction plants.



In 2015, Air Products is awarded a contract by Saudi Aramco under a JV of Air Products and ACWA Holding to build, own and operate the world's largest industrial gas complex to supply Saudi Aramco's refinery being built in Jazan, Saudi Arabia.



With world energy demands, the environment, and emerging markets always on its radar, Air Products begins engineering, building, owning and operating the world's largest industrial gas projects. Through gasification, the Company supplies syngas that enables customers and countries to convert plentiful, lower value materials into higher value products. **Pictured:** Air Products' gasification project supplies syngas and other industrial gases to Lu'An Clean Energy in Shanxi, China.



Executing on our strategic plan to become a pure-play industrial gas company, Air Products completes the separation of its Electronics Materials Division through the spin-off of Versum Materials, Inc. in 2016, and in 2017 with the sale of its Performance Materials Division to German specialty chemicals producer Evonik Industries AG.



In 2018, Air Products acquires the Rotoflow turboexpander business from Baker Hughes, a GE company.



Air Products' dual acquisitions of Shell and GE gasification technologies expand its technology portfolio, adding expertise in solid feedstocks and liquids gasification to its turnkey syngas solutions for chemicals, fuels, power and refining.



In 2018, Air Products inaugurated its new world-scale industrial gas complex within the Integrated Refinery Expansion Project (IREP) of the BPCL Refinery located in Kochi, India.

Air Products' Kochi Industrial Gas Complex, which generates hydrogen, nitrogen, oxygen, and steam, is an invaluable supplier of BPCL's IREP to manufacture autofuels complying with Euro-IV/Euro-V specifications.



Air Products demonstrates its culture and character as the Company stands in solidarity in the world's collective fight against COVID-19. Designated by governments around the world as a "critical industry," Air Products responds to the crisis by continuing to run its facilities safely, delivering critical products to customers, and winning new projects, all while keeping health and safety its top priority.



Air Products, ACWA Power and NEOM sign an agreement for a world-scale carbon-free hydrogen-based ammonia production facility powered by renewable energy. Once operational, the facility will export up to 1.2M tonnes of green ammonia annually, supporting global energy and decarbonization efforts.



Air Products completes construction of its new global corporate headquarters in 2021. Located just over one mile from its previous location in Allentown, the modern, sustainable facilities reflect the Company's culture as a world-leading industrial gas company. **Pictured:** Air Products' global corporate headquarters includes a ninestory office building, state-of-the-art technology center, and an enclosed parking structure.



In 2023, Air Products signed an agreement with the Government of the Republic of Uzbekistan and Uzbekneftegaz JSC ("UNG") to acquire, own and operate a natural gas-to-syngas processing facility in Qashqadaryo Province, Uzbekistan.



In January 2023, Air Products reached financial close and transfer of the second group of assets for the \$12 billion gasification and power JV in Jazan, Kingdom of Saudi Arabia.



Air Products completes the sale of its liquefied natural gas (LNG) process technology and equipment business to Honeywell in September 2024. The Company continues focus on its industrial gas business.



Air Products announces its then largest-ever investment in the U.S. in winning a long-term onsite business model supply agreement for a project with Gulf Coast Ammonia (GCA) in Texas City, Texas.

Air Products will build, own and operate (BOO) its largest-ever steam methane reformer to produce hydrogen; BOO an air separation unit (ASU) to supply nitrogen; and will own and operate a steam turbine generator to supply power and other utilities to GCA's new world-scale ammonia production plant.



Air Products announced that construction is underway in Edmonton on a transformative new hydrogen facility, which will deploy advanced technology and an innovative design to deliver net-zero emissions. The net-zero facility will connect to Air Products' existing 55-kilometer pipeline network in the Alberta Heartland to help refining and petrochemical customers reduce the carbon intensity of their operations and products.



The Louisiana Clean Energy Complex will produce low-carbon hydrogen and ammonia for Air Products' Gulf Coast pipeline customers and world markets, positioning Louisiana as a critical player and global leader in next-generation energy production.



In August 2025, Air Products announced it has successfully completed the first fill of the world's largest hydrogen sphere at the National Aeronautics and Space Administration's (NASA) Kennedy Space Center located on Merritt Island, Florida. NASA uses liquid hydrogen combined with liquid oxygen as fuel in cryogenic rocket engines.

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GENERATING A CLEANER FUTURE