Pneumatic Equipment - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2026 - 2031)

Market Report | 2026-01-16 | 137 pages | Mordor Intelligence

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Report description:

Pneumatic Equipment Market Analysis

The pneumatic equipment market size in 2026 is estimated at USD 37.41 billion, growing from 2025 value of USD 34.99 billion with 2031 projections showing USD 52.29 billion, growing at 6.93% CAGR over 2026-2031. Industrial automation upgrades, energy-efficient compressed-air retrofits, and the fusion of pneumatic hardware with IIoT diagnostics are the primary growth catalysts. Demand spikes from semiconductor clean rooms, electric-vehicle battery lines, and hygienic food plants underscore the sector's expanding application scope. Competitive intensity is rising as market leaders pair traditional pneumatics with digital monitoring to cut downtime and energy loss. At the same time, tightening efficiency rules in major economies are accelerating the shift toward hybrid electro-pneumatic solutions, giving suppliers a new avenue for differentiation.

Global Pneumatic Equipment Market Trends and Insights

Increasing Automation Across Industries

Mass-scale factory digitalization is reshaping pneumatic design, prompting suppliers to embed sensors and wireless modules that allow predictive analytics. SMC's EXW1 wireless node trims valve-manifold size by 86% and supports leading industrial Ethernet protocols, demonstrating how miniaturization and connectivity now converge in a single package. For plant managers, real-time health data on cylinders and valves translates into fewer unplanned stops and faster root-cause analysis. Adoption momentum is especially strong in electronics, automotive, and packaged-goods plants building greenfield "lights-out" lines. Compliance audits under ISO 11011 give added weight to solutions that quantify compressed-air baselines, making digitally enabled pneumatics a compelling investment. Suppliers able to prove measurable OEE gains are winning head-to-head bids against legacy offerings.

Demand for Energy-Efficient Compressed-Air Systems

Compressed air accounts for roughly 10% of industrial electricity load, and new U.S. DOE efficiency rules effective January 2025 are forcing upgrades across the installed base. Atlas Copco's hybrid compressor portfolio, which toggles between fixed-speed and VSD modes, can trim annual CO? output by 9 tons per unit while keeping pressure stability within ?0.1 bar. In Europe, ASHRAE 90.1-2022 inclusion of compressed air raises the bar for building designers as well. From a financial angle, leak rates often exceed 30% and cost individual factories tens of thousands of dollars in wasted power each year, incentivizing rapid payback retrofits. Enterprise sustainability officers now view leak-detection programs as low-hanging decarbonization wins, further accelerating demand for high-efficiency pneumatics.

High Lifetime Maintenance and Energy Costs

Total cost-of-ownership audits reveal that energy can make up 77% of compressor lifecycle expense, dwarfing capital outlay. Leak-fix programs cut consumption, yet they demand instrumentation and staff hours that smaller plants often lack. Government studies in Australia report average leakage at 30%, confirming a global inefficiency pattern. While IIoT sensors promise automated leak tracking, initial hardware and analytics subscriptions deter price-sensitive operators. The persistence of double-digit electricity inflation in parts of Europe amplifies scrutiny on pneumatic bills and nudges buyers toward alternative actuation modes when duty cycles permit.

Other drivers and restraints analyzed in the detailed report include:

Expansion of EV Manufacturing FacilitiesIIoT-Enabled Predictive Maintenance RetrofitsSubstitution by Electric Actuators in Precision Tasks

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Upswing Valves captured 33.02% of the pneumatic equipment market share in 2025, underscoring their central role in pressure and flow governance inside automated lines. Their dominance persists because every circuit, from pick-and-place robots to bulk conveyors, relies on directional and proportional valves to orchestrate motion sequences. Growth leans toward compact, protocol-agnostic manifolds that shorten installation time and align with smart-factory architectures.

Actuators are accelerating with a 7.46% CAGR, reflecting manufacturers' need for higher payload accuracy and faster cycle rates. Emerson's XV Series pushes 350 NL/min in a slim footprint, allowing designers to shrink cabinets without sacrificing throughput. Air preparation units and precision fittings round out the component mix as clean-air mandates intensify, while sensor accessories flourish thanks to predictive-maintenance adoption. As a result, the pneumatic equipment market continues to migrate from stand-alone parts to fully integrated, data-rich assemblies.

Motion control held 40.02% of 2025 demand across the pneumatic equipment market, reflecting its ubiquity in linear slides, rotary tables, and pressing stations. The segment benefits from pneumatics' favorable power-to-weight ratio and millisecond response, assets prized on high-speed assembly lines. Emphasis is now on feedback-ready cylinders that feed stroke data to MES platforms for traceability.

Material handling posts the swiftest 7.95% CAGR as e-commerce logistics fuels automated sortation centers. SMC's RMH grippers, certified for cobot collaboration, illustrate how soft-touch gripping opens new SKU handling capabilities. Fluid control retains a niche in process industries, while vacuum generation expands in semiconductor wafer transport. Convergence is evident: advanced manifolds are combining positioning, gripping, and vacuum logic in one node, fortifying supplier stickiness in the pneumatic equipment market.

The Pneumatic Equipment Market Report is Segmented by Component (Actuators, Valves, Air Preparation Units, Fittings and Tubing, and More), Function (Motion Control, Fluid Control, Material Handling, and More), End-User Industry (Automotive, Food and Beverage Processing and Packaging, Aerospace and Defense, and More), Pressure Range (Low, Medium, and High), and Geography. The Market Forecasts are Provided in Terms of Value (USD).

Geography Analysis

North America generated 34.21% of global 2025 revenue owing to mature aerospace, pharmaceutical, and automotive sectors that demand high-specification solutions. Siemens' USD 10 billion commitment to new Texas and California plants illustrates the region's ongoing reshoring trend, which lifts component orders for motion, valve, and compressor packages. Imminent DOE compressor rules are sparking retrofit waves that stabilize equipment replacement cycles.

Asia Pacific posts the steepest 7.66% CAGR and is set to narrow the gap by 2031 as China, India, and ASEAN states erect new fabs and battery plants. Atlas Copco's USD 46.5 million purchase of Korea-based Kyungwon Machinery signals strategic moves to localize supply and meet skyrocketing regional demand. Government incentives for semiconductor self-reliance in India and Vietnam add fresh pull for ultra-clean pneumatics.

Europe maintains a solid share, buoyed by stringent energy and sustainability directives. Bosch Rexroth's EUR 160 million plant in Mexico underscores European OEMs' split-market strategy: retain R&D at home while building cost-effective capacity near the U.S. customer base. Smaller but rising opportunities in South America and the Middle East hinge on petrochemical diversification projects that require rugged high-pressure pneumatic arrays, adding incremental volume to the pneumatic equipment market.

List of Companies Covered in this Report:

Festo SE and Co. KG Emerson Electric Co. SMC Corporation Parker-Hannifin Corporation Siemens AG Ingersoll Rand Inc. Atlas Copco AB Bosch Rexroth AG Norgren Ltd. (IMI plc) Airtac International Group CKD Corporation Camozzi Automation S.p.A. Danfoss A/S Honeywell International Inc. Eaton Corporation plc ROSS Operating Valve Co. Bimba Manufacturing LLC (IMI) Janatics India Pvt Ltd Chicago Pneumatic Tool Co. LLC Koki Holdings Co., Ltd. Yamaha Motor Co., Ltd. (Robotics)

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

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