

Vacuum Valve Market with COVID-19 Impact Analysis by Type (Pressure Control Valves, Isolation Valves, Transfer Valves), Pressure Range, Industry (Semiconductor, Flat-panel Display Manufacturing, Thin-film Coating), and Geography - Global Forecast to 2026

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Abstracts

The global vacuum valve market is projected to reach USD 1.8 billion by 2026 from an estimated USD 1.2 billion in 2021, at a CAGR of 8.5% from 2021 to 2026. The growth of the market is mainly driven by the increasing demand for high-end semiconductors, production of which involves vacuum-based manufacturing processes. Semiconductor manufacturing is a system-critical industry, and the demand for high-precision semiconductors is increasing. Manufacturing such semiconductors requires different fabrication processes in vacuum. This, in turn, drives the demand for vacuum valves.

“The transfer valves segment is expected to grow at the highest CAGR during the forecast period”

The above 200 lines/cm segment is expected to grow at the highest CAGR during the forecast period. The semiconductor, flat-panel display manufacturing, thin-film coatings, and solar manufacturing industries are at the forefront of driving the vacuum valve market. This, in turn, would boost the demand for transfer valves in the coming years.

“The high vacuum pressure range segment of the vacuum valve market is expected to grow at the highest CAGR during the forecast period”

Vacuum valves with high vacuum pressure range feature a low operating cost and

extended maintenance cycle. Industries witnessing significant growth, such as semiconductors, flat-panel display manufacturing, lightning, and solar, largely drive the demand for high-vacuum valves, as these valves find applications in sub-fab systems, thin-film coatings, display dry etching, solar thin film deposition, and lightning thin film deposition.

“The semiconductor segment is projected to grow at the highest CAGR during the forecast”

The semiconductor segment of the vacuum valve market is projected to grow at the highest CAGR during the forecast period. Semiconductor production involves rapidly evolving processes and increasing fabrication complexity. In semiconductor production, vacuum valves are used for process control & isolation and substrate transfer, and in sub-fab systems. In substrate transfer, transfer valves enable optimum production time and, subsequently, production yield, by moving substrates between different process chambers with fast opening as well as closing times and reliable sealing. Thus, transfer valves are a vital part of semiconductor production processes. The demand for vacuum valves in the semiconductor industry is largely driven by the steady reduction in semiconductor node sizes to get more processing power into a smaller space.

“Based on region, APAC is expected to account for the largest share of the vacuum valve market by 2026”

In 2026, APAC is projected to hold the largest share of the overall vacuum valve market. The vacuum valve market in APAC for the semiconductor and flat-panel display (FPD) production industry is growing at a significant rate, and a similar trend is likely to be observed in the coming years. Asia Pacific has become a world-class innovation-driven hub for the production of semiconductors and displays. The reasons behind this include the availability of low-priced skilled labor, business-friendly environment, and low production costs, coupled with the growing demand for electronic products and displays in different consumer and industrial applications worldwide. The growth in semiconductor and FPD industries has enabled the APAC vacuum valve market to grow at a significant rate.

In-depth interviews have been conducted with chief executive officers (CEOs), directors, and other executives from various key organizations operating in the vacuum valve marketplace.

By Company Type: Tier 1 – 50%, Tier 2 – 30%, and Tier 3 – 20%

By Designation: C-level Executives – 45%, Directors– 35%, and Others – 20%

By Region: North America – 30%, Europe – 25%, APAC – 35%, and RoW – 10%

VAT Group AG (Switzerland), MKS Instruments (US), CKD Corporation (Japan), V-TEX Corporation (Japan), ULVAC, Inc. (Japan), SMC Corporation (Japan), HVA LLC (US), Kitz SCT Corporation (Japan), Pfeiffer Vacuum (Germany), and Agilent Technologies (US); are some of the key players in the vacuum valve market.

The study includes an in-depth competitive analysis of these key players in the vacuum valve market, with their company profiles, recent developments, and key market strategies.

Research Coverage

The report defines, describes, and forecasts the vacuum valve market based on type, pressure range, industry, and region. It provides detailed information regarding factors such as drivers, restraints, opportunities, and challenges influencing the growth of the vacuum valve market. It also analyzes product launches, expansions, partnerships, collaborations, agreements, and acquisitions, carried out by the key players to grow in the market.

Key Benefits of Buying the Report

This report will help market leaders/new entrants in this industry with information on the closest approximations of the revenue numbers for the overall vacuum valve market and the subsegments. The report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report will also help stakeholders to understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

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