

Space Propulsion - Company Evaluation Report, 2024

Market Report | 2025-08-01 | 150 pages | MarketsandMarkets

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Report description:

The Space Propulsion Market Companies Quadrant is a comprehensive industry analysis that provides valuable insights into the global market for Space Propulsion Market. This quadrant offers a detailed evaluation of key market players, technological advancements, product innovations, and emerging trends shaping the industry. MarketsandMarkets 360 Quadrants evaluated over 100 companies, of which the Top 15 Companies were categorized and recognized as the quadrant leaders.

Space propulsion refers to the technology used to generate thrust, enabling spacecraft to navigate and maneuver in outer space. It encompasses a range of systems, including chemical propulsion , which relies on chemical reactions to produce high-velocity exhaust; electric propulsion , which uses electric fields to accelerate ions; and emerging technologies, such as solar sails and nuclear propulsion. These systems are critical for achieving orbital insertion, station-keeping, interplanetary travel, and deorbiting. The components used in space propulsion systems include thrusters , propellant feed systems , rocket motors, nozzles, reactors, propulsion thermal control , and power processing units.

The global space propulsion market has witnessed significant growth, and this trend is expected to continue during the forecast period. The surge in demand for satellite deployment is a primary driving factor, fueled by increased investments in satellite-based Earth observation, defense, and weather monitoring. The inclination toward sustainable space technologies is further influencing propulsion market trends. Governments and space agencies are funding non-chemical propulsion systems such as solar sails, tether propulsion , and nuclear thermal propulsion to reduce dependence on traditional fuels and improve mission efficiency.

The 360 Quadrant maps the Space Propulsion Market companies based on criteria such as revenue, geographic presence, growth strategies, investments, and sales strategies for the market presence of the Space Propulsion Market quadrant. The top criteria for product footprint evaluation included by type (chemical propulsion and non-chemical propulsion) (wired and wireless.) By Platform (satellites, capsules/cargo, interplanetary spacecraft & probes, rovers/spacecraft landers , and launch vehicles.) By Component (thrusters , propellant feed systems , rocket motors, nozzles, propulsion thermal control , power processing units , and other components) By End User (commercial and government & defense) and support service (design, engineering, operation, and maintenance; hot firing and environmental test execution; and fueling, launch, and ground support.)

Key Players:

Key players operating in the Space Propulsion Market SAFRAN (France), IHI Corporation (Japan), SPACEX (US), Northrop Grumman

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(US), and L3Harris Technologies, Inc. (US)

SAFRAN

SAFRAN in France specializes in aerospace and defense, offering propulsion systems that include jet engines and rocket engines for commercial, military, and space applications. With subsidiaries like SAFRAN Aero Boosters, and partnerships for technological development, SAFRAN's product portfolio is extensive. Their focus on electric propulsion systems aligns with market trends toward sustainable solutions.

SPACEX

SPACEX, headquartered in the US, is a prominent player known for its innovative approach to space travel and satellite deployment. Its development of reusable rocket technologies has patented them as leaders in cost-efficient space travel. With a strong presence in both governmental and commercial domains, SPACEX continuously expands its market share through strategic launches and cutting-edge propulsion systems.

Northrop Grumman

Northrop Grumman's expertise lies in integrating complex space systems, benefiting its space propulsion segment. It collaborates with government entities like the US Department of Defense and broadens its market participation through innovation in space technologies. Northrop Grumman's strategic focus on research and development ensures it remains competitive, especially in defense-centric propulsion solutions.

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