

Space Propulsion - Company Evaluation Report, 2024

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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 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.

Table of Contents:

1 INTRODUCTION 12

1.1 MARKET DEFINITION 12

1.2 STAKEHOLDERS 12

2 EXECUTIVE SUMMARY 13

3 MARKET OVERVIEW 17

3.1 INTRODUCTION 17

3.2 MARKET DYNAMICS 17

3.2.1 DRIVERS 18

3.2.1.1 Growing deployment of satellites 18

3.2.1.2 Advancements in propulsion technologies 18

3.2.1.3 Expansion of deep-space missions 20

3.2.1.4 Need for advanced propellants for long-duration missions 20

3.2.2 RESTRAINTS 20

3.2.2.1 High development and manufacturing costs 20

3.2.2.2 Stringent regulatory and safety standards 21

3.2.3 OPPORTUNITIES 21

3.2.3.1 Increased government investments in space programs 21

3.2.3.2 Emergence of nuclear thermal and nuclear electric propulsion 22

3.2.3.3 Proliferation of LEO constellations 23

3.2.3.4 Surge in demand for reusable launch vehicles 23

3.2.4 CHALLENGES 23

3.2.4.1 Supply chain disruptions 23

3.2.4.2 Rise of space debris 24

3.3 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS 24

3.4 VALUE CHAIN ANALYSIS 25

3.5 ECOSYSTEM ANALYSIS 26

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3.5.1	PROMINENT COMPANIES	26
3.5.2	PRIVATE AND SMALL ENTERPRISES	26
3.5.3	END USERS	26
3.6	TECHNOLOGY ANALYSIS	27
3.6.1	KEY TECHNOLOGIES	27
3.6.1.1	Electric propulsion systems	27
3.6.1.2	Solar sails	28
3.6.1.3	Ion propulsion	28
3.6.2	COMPLEMENTARY TECHNOLOGIES	28
3.6.2.1	Heat management systems	28
3.6.2.2	Advanced propellant management	28
3.6.3	ADJACENT TECHNOLOGIES	29
3.6.3.1	Magnetoplasmadynamic thrusters	29
3.6.3.2	Autonomous propulsion	29
3.7	KEY CONFERENCES AND EVENTS, 2025	29
3.8	TECHNOLOGY ROADMAP	30
3.9	PROPULSION MAPPING OF SATELLITE CONSTELLATIONS	31
3.10	IMPACT OF GENERATIVE AI	32
3.10.1	INTRODUCTION	32
3.10.2	ADOPTION OF AI IN SPACE BY TOP COUNTRIES	33
3.10.3	IMPACT OF AI ON SPACE INDUSTRY	35
3.10.4	IMPACT OF AI ON SPACE PROPULSION MARKET	35
4	INDUSTRY TRENDS	37
4.1	INTRODUCTION	37
4.2	TECHNOLOGY TRENDS	37
4.2.1	HYBRID PROPULSION	37
4.2.2	NUCLEAR THERMAL PROPULSION AND NUCLEAR ELECTRIC PROPULSION	38
4.2.3	MICRO AND NANO PROPULSION	38
4.2.4	PLASMA PROPULSION	38
4.2.5	ADVANCED ELECTRIC THRUSTER	39
4.2.6	GREEN PROPULSION	39
4.3	IMPACT OF MEGA TRENDS	40
4.3.1	SPACE 4.0	40
4.3.2	ARTIFICIAL INTELLIGENCE	41
4.3.3	ADDITIVE MANUFACTURING	41
4.4	SUPPLY CHAIN ANALYSIS	42
4.5	PATENT ANALYSIS	43
5	COMPETITIVE LANDSCAPE	47
5.1	INTRODUCTION	47
5.2	KEY PLAYER STRATEGIES/RIGHT TO WIN, 2020-2024	47
5.3	REVENUE ANALYSIS, 2020-2023	50
5.4	MARKET SHARE ANALYSIS, 2023	50
5.5	COMPANY EVALUATION MATRIX: KEY PLAYERS, 2024	53
5.5.1	STARS	53
5.5.2	EMERGING LEADERS	53
5.5.3	PERVASIVE PLAYERS	53
5.5.4	PARTICIPANTS	54

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5.5.5	COMPANY FOOTPRINT	55
5.5.5.1	Company footprint	55
5.5.5.2	End user footprint	56
5.5.5.3	Propulsion footprint	57
5.5.5.4	Platform footprint	58
5.5.5.5	Region footprint	59
5.6	COMPANY EVALUATION MATRIX: START-UPS/SMES, 2024	60
5.6.1	PROGRESSIVE COMPANIES	60
5.6.2	RESPONSIVE COMPANIES	60
5.6.3	DYNAMIC COMPANIES	60
5.6.4	STARTING BLOCKS	60
5.6.5	COMPETITIVE BENCHMARKING	62
5.6.5.1	List of start-ups/SMEs	62
5.6.5.2	Competitive benchmarking of start-ups/SMEs	63
5.7	BRAND/PRODUCT COMPARISON	64
5.8	COMPANY VALUATION AND FINANCIAL METRICS	65
5.9	COMPETITIVE SCENARIO	66
5.9.1	PRODUCT LAUNCHES	66
5.9.2	DEALS	67
5.9.3	OTHERS	71
6	COMPANY PROFILES	79
6.1	KEY PLAYERS	79
6.1.1	SAFRAN	79
6.1.1.1	Business overview	79
6.1.1.2	Products offered	80
6.1.1.3	Recent developments	83
6.1.1.3.1	Deals	83
6.1.1.3.2	Others	83
6.1.1.4	MnM view	84
6.1.1.4.1	Key strengths	84
6.1.1.4.2	Strategic choices	84
6.1.1.4.3	Weaknesses and competitive threats	84
6.1.2	IHI CORPORATION	85
6.1.2.1	Business overview	85
6.1.2.2	Products offered	86
6.1.2.3	Recent developments	87
6.1.2.3.1	Deals	87
6.1.2.4	MnM view	88
6.1.2.4.1	Key strengths	88
6.1.2.4.2	Strategic choices	88
6.1.2.4.3	Weaknesses and competitive threats	88
6.1.3	SPACEX	89
6.1.3.1	Business overview	89
6.1.3.2	Products offered	89
6.1.3.3	Recent developments	90
6.1.3.3.1	Deals	90
6.1.3.3.2	Others	91

6.1.3.4	MnM view	92
6.1.3.4.1	Key strengths	92
6.1.3.4.2	Strategic choices	92
6.1.3.4.3	Weaknesses and competitive threats	92
6.1.4	NORTHROP GRUMMAN	93
6.1.4.1	Business overview	93
6.1.4.2	Products offered	94
6.1.4.3	Recent developments	96
6.1.4.3.1	Product launches	96
6.1.4.3.2	Others	97
6.1.4.4	MnM view	97
6.1.4.4.1	Key strengths	97
6.1.4.4.2	Strategic choices	97
6.1.4.4.3	Weaknesses and competitive threats	98
6.1.5	L3HARRIS TECHNOLOGIES, INC.	99
6.1.5.1	Business overview	99
6.1.5.2	Products offered	100
6.1.5.3	Recent developments	101
6.1.5.3.1	Deals	101
6.1.5.3.2	Others	102
6.1.5.4	MnM view	102
6.1.5.4.1	Key strengths	102
6.1.5.4.2	Strategic choices	102
6.1.5.4.3	Weaknesses and competitive threats	102
6.1.6	MOOG INC.	103
6.1.6.1	Business overview	103
6.1.6.2	Products offered	104
6.1.6.3	Recent developments	106
6.1.6.3.1	Deals	106
6.1.6.3.2	Others	107
6.1.7	RAFAEL ADVANCED DEFENSE SYSTEMS LTD.	108
6.1.7.1	Business overview	108
6.1.7.2	Products offered	108
6.1.8	LOCKHEED MARTIN CORPORATION	110
6.1.8.1	Business overview	110
6.1.8.2	Products offered	111
6.1.8.3	Recent developments	111
6.1.8.3.1	Deals	111
6.1.8.3.2	Others	111
?		
6.1.9	THALES	114
6.1.9.1	Business overview	114
6.1.9.2	Products offered	115
6.1.9.3	Recent developments	116
6.1.9.3.1	Deals	116
6.1.9.3.2	Others	116
6.1.10	OHB SE	118

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6.1.10.1	Business overview	118
6.1.10.2	Products offered	119
6.1.10.3	Recent developments	120
6.1.10.3.1	Product launches	120
6.1.10.3.2	Deals	120
6.1.10.3.3	Others	121
6.1.11	SIERRA NEVADA CORPORATION	122
6.1.11.1	Business overview	122
6.1.11.2	Products offered	122
6.1.11.3	Recent developments	123
6.1.11.3.1	Product launches	123
6.1.11.3.2	Others	123
6.1.12	AIRBUS	124
6.1.12.1	Business overview	124
6.1.12.2	Products offered	125
6.1.12.3	Recent developments	125
6.1.12.3.1	Deals	125
6.1.12.3.2	Others	125
6.1.13	VACCO INDUSTRIES	127
6.1.13.1	Business overview	127
6.1.13.2	Products offered	127
6.1.14	BLUE ORIGIN	129
6.1.14.1	Business overview	129
6.1.14.2	Products offered	129
6.1.14.3	Recent developments	130
6.1.14.3.1	Product launches	130
6.1.14.3.2	Deals	130
6.1.14.3.3	Others	130
6.1.15	EATON	132
6.1.15.1	Business overview	132
6.1.15.2	Products offered	133
6.1.15.3	Recent developments	134
6.1.15.3.1	Deals	134
6.1.15.3.2	Others	134
?		
6.2	OTHER PLAYERS	135
6.2.1	THRUSTME	135
6.2.2	URSA MAJOR TECHNOLOGIES INC	136
6.2.3	PHASEFOUR	137
6.2.4	EXOTRAIL	138
6.2.5	DAWN AEROSPACE	138
6.2.6	AST ADVANCED SPACE TECHNOLOGIES GMBH	139
6.2.7	STANFORD MU CORPORATION	140
6.2.8	MANASTU SPACE TECHNOLOGIES PRIVATE LIMITED	141
6.2.9	KREIOS SPACE	141
6.2.10	FIREFLY AEROSPACE	142
7	APPENDIX	143

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7.1	RESEARCH METHODOLOGY	143
7.1.1	RESEARCH DATA	143
7.1.1.1	Secondary data	143
7.1.1.2	Primary data	144
7.1.2	RESEARCH ASSUMPTIONS	145
7.1.3	RESEARCH LIMITATIONS	146
7.1.4	RISK ASSESSMENT	146
7.2	COMPANY EVALUATION MATRIX: METHODOLOGY	147
7.3	AUTHOR DETAILS	150

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